

Bridge Culvert Inspection			
Bridge File Number	81142 -1 Bridge Culvert	Form Type	CULM
Year Built	1996	Lot No.	4
Bridge or Town Name	CYNTHIA	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO PEMBINA RIVER, 8.11.84.61, WATERCRS-ST	Inspector Class	BR CLS B
Located On	753:04 C1 5.323	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	24-Jan-2011
Legal Land Location	SE SEC 20 TWP 50 RGE 10 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:25:37, 53:19:33	Data Entry Date	15-Feb-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA11	Review Date	14-Feb-2011
Clear Roadway/Skew	9.6 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	620 / 2009 (A)	Dept. Review Date	22-Feb-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	35		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2400	MP	34.9	125X26	2.8	ROUND
2	MAIN	-	2400	MP	34.9	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West r/w.	Gas	
Power	3 lines East r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks	No BF tag installed on U/S roof.		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	9	9	
Vertical Alignment	8	8	
Roadway Width (m)	9.600		
Embankment	N	N	
Sideslope ( __:1)	5.0		
(Height of Cover(m) : 1.9)			
Guardrail (Y/N)	Yes		Creased but still functional.
<b>Approach Road / Embankment General Rating</b>	<b>8</b>	<b>8</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	W		South pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		X	X	
Bevel End		N	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Snow/ice covered.
Above/Below (mm)	800			
Scour Protection		N	N	1 panel silt fence torn. Snow/ice covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	Snow/ice covered.
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	G.R. carried forward but element not rated 16/Sept/2004 either.

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)</b>				
Barrel Last Accessible Date				Water/ice 2.3m deep. Barrels not visible due to snow.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
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)				

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)					
Camber POS/ZERO/NEG	ZERO				
Ponding (Y/N)	Yes			(Ponding 1.5m. 16/Sept/2004)	
Fish Passage Adequacy		8	8		
Baffle		N	N		
(Type : )					
Waterway Adequacy		4	4	Water 2.3m deep and standing.	
Icing (Y/N)	No			Snow/ice covered.	
Silting (Y/N)	No				
Drift (Y/N)	No				
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>		
Downstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 1, Span Type: Primary Span)					
Direction		E		South pipe.	
End Treatment (Concrete, Steel, Others, None)	STEEL			Water to within 100mm of crown.	
Headwall		X	X		
Collar		X	X		
Wingwalls (Shape : )		X	X		
Cutoff Wall		X	X		
Bevel End		N	N	Snow/ice covered.	
Heaving (mm)	0				
Invert Above/Below Stream Bed	BELOW			Snow/ice covered.	
Above/Below (mm)	800				
Scour Protection		N	N	Snow/ice covered.	
(Type : )					
(Avg. Rock Size(mm) : )					
Scour/Erosion		N	N		
Beavers (Y/N)		No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	G.R. carried forward but elements not rated on 16/Sept/2004 either.	
Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 2, Span Type: Secondary Span)					
Direction		W		North pipe.	
End Treatment (Concrete, Steel, Others, None)	STEEL			Water to within 100mm of crown.	
Headwall		X	X		
Collar		X	X		
Wingwalls (Shape : )		X	X		
Cutoff Wall		X	X		

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Bevel End		N	N	Snow/ice covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Snow/ice covered.
Above/Below (mm)	800			
Scour Protection		N	N	Snow/ice covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	G.R. carried forward but elements not rated 16/Sept/2004 either.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)</b>				
Barrel Last Accessible Date				
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
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)				
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Ponding (Y/N)	Yes			Ponding 1.5m.-16-Sep-2004
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type : )				
Waterway Adequacy		4	4	Water 2.3m deep and standing.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>N</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		North pipe. Water 2.3m deep.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		N	N	Snow/ice covered.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			Snow/ice covered.
Above/Below (mm)	800			
Scour Protection		N	N	Snow/ice covered.
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	G.R. carried forward but elements not rated 16/Sept/2004 either.
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>7</b>	<b>7</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>55.6/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>56.9/56.0</b>	Est. Repl. Yr	2046	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Pipes appear to be at full capacity always.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	24-Apr-2014		Previous Inspection Date	16-Dec-2007			
Inspection Cycle (Default) (months)	39						
Comment							