

Bridge Culvert Inspection			
Bridge File Number	73864 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1952/2008	Lot No.	4
Bridge or Town Name	RYCROFT	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO SPIRIT RIVER, 8.10.72.6.5, WATERCRS-ST	Inspector Class	BR CLS A
Located On	49:04 C1 33.859	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jul-2011
Legal Land Location	NE SEC 17 TWP 78 RGE 5 W6M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-118:43:58, 55:45:44	Data Entry Date	12-Aug-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	13-Jul-2011
Clear Roadway/Skew	12 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	2,390 / 2010 (A)	Dept. Review Date	16-Nov-2011
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
3	MAIN FULL LINER	-	1600	MP	34	125X26	3.5	ROUND
4	U/S	-	2000	MP	5.4	125X26	2.8	ROUND
4	MAIN	-	1829	SSP	23.2		12.7	ROUND
4	D/S	-	2000	MP	5.4	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South	Gas	
Power	3 o/h N	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Field access 50m west
Vertical Alignment		8	8	
Roadway Width (m)	12.000			
Embankment		9	9	
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : 2.3)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 3, Span Type: Primary Span)</b>				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 3, Span Type: Primary Span)</b>				
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	150			
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>300</b> )		9	9	
Scour/Erosion		9	9	
Beavers (Y/N)	Yes			2m high beaver dam 10m u/s
<b>Upstream End General Rating</b>		<b>9</b>	<b>9</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 3, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)</b>				
Barrel Last Accessible Date	27-Oct-2009			Not accessible. Viewed from ends
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		9	9	Shape looks good from ends
Measured Rise (mm)	1591			
Measured At Ring No.	3			
Sag (mm)	9			
Percent Sag	1			
Sidewall		9	9	
Measured Span (mm)	1615			
Measured At Ring No.	3			
Deflection (mm)	15			
Percent Deflection	1			
Floor		9	N	
Bulge (mm)	0			
Measured At Ring No.	9			
Abrasion (Y/N)	No			
Circumferential Seams		8	N	(At first coupler. 27 Oct 2009)
Separation (mm)	60			
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1600, Type: MP)				
Coating		9	9	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	7	(Inverts above streambed. 27 Oct 2009) Another dam d/s causing water backup
Baffle		X	X	
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>9</b>	<b>9</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Primary Span)				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		9	9	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		9	9	
Beavers (Y/N)	Yes			30m d/s
<b>Downstream End General Rating</b>		<b>9</b>	<b>9</b>	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Span Type: Secondary Span)				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 4, Span Type: Secondary Span)</b>				
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		9	9	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		9	9	
Beavers (Y/N)	Yes			2m dam 10m d/s
<b>Upstream End General Rating</b>		<b>9</b>	<b>9</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 4, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP)</b>				
Barrel Last Accessible Date	27-Oct-2009			Not accessible, viewed from ends
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		9	9	Shape looks good as viewed from ends (CL of CSP culvert @ u/s end. 27 Oct 2009)
Measured Rise (mm)	2026			
Measured At Ring No.				
Sag (mm)	26			
Percent Sag	1			
Sidewall		9	9	(CL of CSP culvert @ u/s end. 27 Oct 2009)
Measured Span (mm)	1958			
Measured At Ring No.				
Deflection (mm)	42			
Percent Deflection	2			
Floor		9	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		X	X	
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP)				
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>9</b>	<b>9</b>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP)				
Barrel Last Accessible Date	28-Oct-2009			Not accessible. Viewed from ends
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	7	
Measured Rise (mm)	1774			(CL of culvert SSP 27 Oct 2009)
Measured At Ring No.				
Sag (mm)	55			
Percent Sag	3			
Sidewall		8	8	
Measured Span (mm)	1839			(CL of culvert SSP 27 Oct 2009)
Measured At Ring No.				
Deflection (mm)	10			
Percent Deflection	1			
Floor		9	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		9	N	Rate welded seams.
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 4, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP)</b>				
Coating		N	X	No coating
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 4, Span Type: Secondary Span)</b>				
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	N	
<b>(Shape : )</b>				
Cutoff Wall		X	X	
Bevel End		9	9	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		9	9	
<b>(Type : RIP RAP)</b>				
<b>(Avg. Rock Size(mm) : 300)</b>				
Scour/Erosion		9	9	
Beavers (Y/N)	Yes			Dam 30m d/s
<b>Downstream End General Rating</b>		<b>9</b>	<b>9</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Two 90 degree bends u/s of inlets.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel 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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>85.8/85.8</b>	Est. Repl. Yr	2075	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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	07-Apr-2013		Previous Inspection Date	27-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							