

Bridge Culvert Inspection			
Bridge File Number	79290 -1 Bridge Culvert	Form Type	CULE
Year Built/Lined	1982/2008	Lot No.	4
Bridge or Town Name	CANYON CREEK	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO LESSER SLAVE RIVER, 8.11.80.37, WATERCRS-ST	Inspector Class	BR CLS A
Located On	2:48 C1 28.617	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	27-Mar-2013
Legal Land Location	NW SEC 28 TWP 73 RGE 8 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:10:24, 55:21:10	Data Entry Date	17-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06	Review Date	11-Apr-2013
Clear Roadway/Skew	10.3 / 5 deg. (RHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	3,030 / 2012 (A)	Dept. Review Date	23-Apr-2013
Road Classification	RAU-210-110	Follow-Up By	
Detour Length (km)	200		

**Bridge Culvert Information**

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
2	MAIN FULL LINER	-	1219	SSP	35.7		12.7	ROUND
3	U/S	-	2000	MP	7.7	125X26	2.8	ROUND
3	MAIN	-	1829	SSP	18.3		15.9	ROUND
3	D/S	-	2000	MP	9.7	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South r/w.	Gas	
Power	6 wires North r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	No passing WBL.
Vertical Alignment	7	7	
Roadway Width (m)	10.300		
Embankment	8	8	
Sideslope ( _ :1)	6.0		
(Height of Cover(m) : 1.4)			
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
(Pipe # : 2, Span Type: )			
Direction	S		
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: )				
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		7	N	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			400mm above S/B on the 1219 mm WSP.
Above/Below (mm)	1000			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		7	N	
Scour/Erosion		7	N	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	GR carried fwd.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: SSP)				
Barrel Last Accessible Date	09-Jun-2011			Ice to roof - not visible, carry fwd all notes.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		9	N	Near c/l.
Measured Rise (mm)	1197			
Measured At Ring No.				
Sag (mm)	22			
Percent Sag	2			
Sidewall		9	N	near L
Measured Span (mm)	1193			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		9	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		9	N	There are two welded joints.
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 # : 2, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1219, Type: SSP)</b>				
Coating		5	N	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		4	4	Inlet perched above S.B.
Baffle		X	X	
<b>(Type : )</b>				
Waterway Adequacy		7	N	0.2m silt in middle of barrier
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>9</b>	<b>N</b>	GR previously '9'

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
<b>(Pipe # : 3, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP)</b>					
Barrel Last Accessible Date	09-Jun-2011			Rating is for U/S and D/S sections. Ice to roof	
<b>Special Features</b>					
Special Feature				Roof and sidewall measurements for U/S barrel section. D/S CSP section measurements are better - U/S governs	
<b>(Type : )</b>					
Special Feature					
<b>(Type : )</b>					
Roof		9	N		
Measured Rise (mm)	1982				
Measured At Ring No.					
Sag (mm)	18				
Percent Sag	1				
Sidewall		9	N		
Measured Span (mm)	1993				
Measured At Ring No.					
Deflection (mm)	0				
Percent Deflection	0				
Floor		9	N		
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)					
Circumferential Seams		9	N		
Separation (mm)	0				
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, Secondary Span, Location Code: U/S, Span (mm): , Rise (mm): 2000, Type: MP)				
Coating		5	N	Superficial rust lower 1/3.
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	
(Type : )				
Waterway Adequacy		7	N	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel Extension General Rating</b>		<b>9</b>	<b>N</b>	GR previously "9"

Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
(Pipe # : 3, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP)					
Barrel Last Accessible Date	09-Jun-2011			Ice to roof	
<b>Special Features</b>					
Special Feature					
(Type : )					
Special Feature					
(Type : )					
Roof		8	N	Measure at road L	
Measured Rise (mm)	1886				
Measured At Ring No.					
Sag (mm)	63				
Percent Sag	3				
Sidewall		8	N	Measure at road L	
Measured Span (mm)	1824				
Measured At Ring No.					
Deflection (mm)	0				
Percent Deflection	0				
Floor		9	N		
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)					
Circumferential Seams		X	X		
Separation (mm)					
Longitudinal Seams		X	N		
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, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1829, Type: SSP)				
Coating		5	N	No coating. Superficial rust on lower 1/3
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	
(Type : )				
Waterway Adequacy		7	N	0.2m silt in barrel
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>8</b>	<b>N</b>	GR previously "9"
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: )				
Direction		N		Ratings apply to both culverts
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		7	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		7	N	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 450)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	GR carried fwd.
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			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(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>88.9/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>74.3/63.8</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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	27-Dec-2014		Previous Inspection Date	09-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							