

Bridge Culvert Inspection				
Bridge File Number	77637 S-1 Bridge Culvert		Form Type	CUL1
Year Built	1986		Lot No.	1
Bridge or Town Name	WANDERING RI		Inspector Name	Eric Carcoux
Located Over	TRIBUTARY TO WANDERING RIVER, 8.11.55.3.3, WATERCRS-ST		Inspector Class	BR CLS A
Located On	63:04 C1 5.509		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Jan-2012
Legal Land Location	SE SEC 24 TWP 73 RGE 17 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-112:28:18, 55:20:00		Data Entry Date	17-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA07		Review Date	16-Jan-2012
Clear Roadway/Skew	13.4 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	3,800 / 2010 (A)		Dept. Review Date	18-Jan-2012
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	100			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	42	125X26	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments							
Telephone	East r/w.			Gas	Sweet gas line to South.		
Power	3 wires East r/w.			Municipal			
Others				Problem (Y/N)	No		
Remarks							

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	
Vertical Alignment		8	8	
Roadway Width (m)	13.400			
Embankment		4	4	Minor ditch erosion at NE.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 1.1)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		4	4	Half of bevel has been cutoff.
Heaving (mm)	400			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	5	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Barrel Last Accessible Date	13-Jan-2012			1/3 full with ice.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	100mm bulge estimated.-10-Mar-2010 Floor ice covered.
Measured Rise (mm)	1865			
Measured At Ring No.				
Sag (mm)	335			At centerline.
Percent Sag	15			15.22%-29-Aug-2008
Sidewall		4	4	At centerline.
Measured Span (mm)	2405			
Measured At Ring No.				
Deflection (mm)	205			
Percent Deflection	9			
Floor		N	N	Sensed bulging between mid-barrel and D/S end. Bulging estimated at 100mm, lots of rubbish and gravel on floor.-10-Mar-2010
Bulge (mm)	100			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		4	4	
Separation (mm)	150			
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		4	4	Pitting above ice.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	(Iced to within 900mm at c/l. 2003/03/01)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>	GR carried fwd FROM 29-Aug-2008
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		5	5	Settlement up to 0.4m along North side of bevel. Grassed. Few rocks. Appears stable .
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>5</b>	<b>5</b>	
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)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<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>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>40.8/40.9</b>	Est. Repl. Yr	2015	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Low rating advisory previously sent -20-May-2008 and 15-Jan-2012 Scheduled for replacement as part of Hwy 63 twinning. Monitor sag until replacement.		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	13-Oct-2013		Previous Inspection Date	11-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							