

Bridge Culvert Inspection				
Bridge File Number	09641 -1 Bridge Culvert		Form Type	CUL1
Year Built	1989		Lot No.	4
Bridge or Town Name	SANDY LAKE		Inspector Name	Wade Nanninga
Located Over	WABASCA RIVER, 8.10.18, WATERCRS-ST		Inspector Class	BR CLS B
Located On	813:08 C1 13.493		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	07-Jan-2011
Legal Land Location	SE SEC 8 TWP 77 RGE 22 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:22:39, 55:39:18		Data Entry Date	02-Feb-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA06		Review Date	12-Jan-2011
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	520 / 2009 (A)		Dept. Review Date	08-Feb-2011
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	300			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2740	SP	75	152X51	3.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone			Gas	
Power			Municipal	
Others			Problem (Y/N)	No
Remarks	Outlet tagged			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	In bottom of long gradual sag.
Vertical Alignment		8	7	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope ( _ :1)	3.0			
(Height of Cover(m) : <b>7.2</b> )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>8</b>	<b>7</b>	

**Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	260			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	6	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2740, Type: SP)				
Barrel Last Accessible Date	09-Jan-2011			1m of ice in barrel
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	5	est
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	174			
Percent Sag	6			
Sidewall		N	5	
Measured Span (mm)	2900			
Measured At Ring No.	8			
Deflection (mm)	160			
Percent Deflection	6			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	only 2/3 visible
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial rust on lower.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
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): 2740, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		N	N	(Weirs are all in place. 14/July/2004)
(Type : WEIR)				
Waterway Adequacy		7	7	(Iced up to crown at inlet. 1.0m from crown at outlet. 2001/03/22)
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>N</b>	<b>5</b>	
Downstream 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	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	500			
Scour Protection		4	4	Hanging outlet-eroded 1.0m along bevel.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		4	4	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>4</b>	<b>4</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Drift & sediment cause sharp bend at U/S end.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)		Yes		
Channel Bottom Degrading/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>5</b>	<b>5</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>60.0/58.6</b>	Est. Repl. Yr	2034	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Monitor scour.		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	07-Apr-2014		Previous Inspection Date	09-Aug-2007			
Inspection Cycle (Default) (months)	39						
Comment							