

Bridge Culvert Inspection				
Bridge File Number	76195 -1 Bridge Culvert		Form Type	CUL1
Year Built	1966		Lot No.	4
Bridge or Town Name	SLAVE LAKE		Inspector Name	Wade Nanninga
Located Over	EATING CREEK, 8.11.80.24.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2:46 C1 53.280		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Mar-2013
Legal Land Location	NE SEC 16 TWP 72 RGE 5 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:41:59, 55:14:27		Data Entry Date	17-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06		Review Date	12-Apr-2013
Clear Roadway/Skew	11 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	5,430 / 2012 (A)		Dept. Review Date	23-Apr-2013
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	200			

**Bridge Culvert Information**

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	4300	SP	47.5	152X51	3.0,5.0	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	North r/w.		Gas	
Power	1 wire to North		Municipal	
Others	Streets lights to NE.		Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Local road intersection 150 m east. Crest curve to the west limiting sight distance. Road widens to incorp passing & accelerator lanes. No passing both directions. Truck turning loop to South.
Vertical Alignment		6	6	
Roadway Width (m)	10.500			
Embankment		3	6	
Sideslope ( :1)	4.0			
(Height of Cover(m) : 2.6)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>3</b>	<b>6</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		4	4	Shoulder slab beside collar has few wide tranverse cracks and dropped 230mm at top. Wide cracks in collar, every 300mm.
Wingwalls		X	X	
(Shape : )				

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		6	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
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): 4300, Type: SP)				
Barrel Last Accessible Date	28-Mar-2013			Ice/water 1.5m
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	4	Last ring deformed @ crown.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				est
Percent Sag	1			
Sidewall		N	7	
Measured Span (mm)	4240			
Measured At Ring No.	8			
Deflection (mm)	60			ward.
Percent Deflection	2			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		N	7	
Separation (mm)				
Longitudinal Seams		N	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				1N Stagger
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	7	Lower 1/4 has superficial rust.
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): 4300, Type: SP)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	Drift on crown and at guardrail.Jul,2011
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>N</b>	<b>4</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
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		5	5	Top of bevel bending inwards 150mm.
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		4	4	Scour 20m long, 15m wide.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
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
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		5	4	Sloughing of banks D/S and U/S. Vertical cut banks.
HWM (m below Top of Culvert)	1.0			Water level marker in U/S channel.
Drift (Y/N)	Yes			Road overtopped in 2011.
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>5</b>	<b>4</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>55.6/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>36.7/41.4</b>	Est. Repl. Yr	2018	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Assessment completed March 2005 by MPA. Monitor roof @ downstream end.		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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	28-Dec-2014		Previous Inspection Date	13-Jul-2011			
Inspection Cycle (Default) (months)	21						
Comment							