

Bridge Culvert Inspection				
Bridge File Number	76129 S-1 Bridge Culvert		Form Type	CUL1
Year Built	1992		Lot No.	4
Bridge or Town Name	FT MCMURRAY		Inspector Name	Wade Nanninga
Located Over	2ND ORDER TRIBUTARY TO LITTLE HORSE CK, 8.11.40.2.2.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	63:08 C1 44.575;63:08 L1 PROPOSED		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	14-Nov-2011
Legal Land Location	SE SEC 25 TWP 84 RGE 11 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:35:36, 56:18:17		Data Entry Date	23-Nov-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA07		Review Date	23-Nov-2011
Clear Roadway/Skew	15.2 / -43 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year			Dept. Review Date	15-Dec-2011
Road Classification	RAU-213.4-120		Follow-Up By	
Detour Length (km)	250			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	115.8	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	Plowed in East ditch over culvert.		Gas	
Power	3 wires 50m East r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Passing / climbing lanes SB. No passing. Near km 190
Vertical Alignment		6	6	
Roadway Width (m)	13.200			
Embankment		5	5	Ditch gully @ NE (30m x 3m x 3m) and SE (100m x 1.0 x 1m). Armoured with riprap. Springs in area make embankment soft & wet constantly. Tension cracks on road ACP.
Sideslope (__:1)	2.5			
(Height of Cover(m) : <b>10.3</b> )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</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)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		6	5	Erosion along bevel- filled with rock
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		6	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Barrel Last Accessible Date	10-Mar-2010			(2825 x 2620 @ 3/5 L. 01/07/11). Barrel 1/3 full with ice. Viewed from ends-no change.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	5			Estimated.
Sidewall		4	4	
Measured Span (mm)	2825			
Measured At Ring No.	18			est
Deflection (mm)				
Percent Deflection	8			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Lower seams not visible.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	(Minor superficial rust, lower third. 17/Aug/2006)
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type : )				
Waterway Adequacy		7	7	(Within 600 mm of crown. 2003/03/13)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	GR carried fwd from March 2010.
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	BELOW			
Above/Below (mm)	1500			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>350</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		6	6	Turn North D/S.
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
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>6</b>	<b>6</b>	

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</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>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>57.8/54.9</b>	Est. Repl. Yr	2038	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor erosion around inlet.		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	14-Aug-2013		Previous Inspection Date	10-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							