

Bridge Culvert Inspection			
Bridge File Number	13467 -1 Bridge Culvert	Form Type	CUL1
Year Built	1966	Lot No.	4
Bridge or Town Name	MAYERTHORPE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO LITTLE PADDLE RIVER, 8.11.84.30.19.5, WATERCRS-ST	Inspector Class	BR CLS A
Located On	22:32 C1 42.166	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	03-Oct-2011
Legal Land Location	SW SEC 33 TWP 57 RGE 8 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:08:32, 53:58:01	Data Entry Date	25-Oct-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA10	Review Date	25-Oct-2011
Clear Roadway/Skew	7.6 / -10 deg. (LHF)	Dept. Reviewer Name	Brent Herrick
AADT/Year	880 / 2010 (A)	Dept. Review Date	26-Oct-2011
Road Classification	RAU-209-110	Follow-Up By	
Detour Length (km)	3		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1724	1901	SPE	51.2	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	East r/w.	Gas	30m south.
Power	2 wires East r/w.	Municipal	
Others	Tag at West end of pipe.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	No passing.
Vertical Alignment	5	5	At the bottom of short sag curve with blinding crest curves both sides.
Roadway Width (m)	7.600		No shoulders.
Embankment	6	6	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 6)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>5</b>	<b>5</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		5	4	
Heaving (mm)	300			
Invert Above/Below Stream Bed	BELOW			Perforations in floor
Above/Below (mm)	100			
Scour Protection		4	4	
(Type : <b>NONE</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		4	4	0.5m vertical channel banks. 0.2m high x 0.5m long x 2m wide scour hole at bevel.
Beavers (Y/N)	Yes			Log across bevel.
<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): 1724, Rise (mm): 1901, Type: SPE)				
Barrel Last Accessible Date	03-Oct-2011			600mm deep water along floor
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		4	5	
Measured Rise (mm)	1800			
Measured At Ring No.	8			
Sag (mm)	101			
Percent Sag	5			
Sidewall		4	5	
Measured Span (mm)	1830			
Measured At Ring No.	8			
Deflection (mm)	106			
Percent Deflection	6			
Floor		N	N	Silt & water covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		6	6	
Total No. of Cracked Rings	0			Only 1/2 visible
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				Last 4 rings not lapped properly. 1N.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Extensive corrosion and pitting rust near waterline.
Corrosion By Soil (Y/N)	Yes			
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): 1724, Rise (mm): 1901, Type: SPE)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		4	4	Outlet above (hanging) SB by 500mm.
Baffle		X	X	
(Type : )				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>5</b>	
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		4	4	Bevel bent to the south.
Heaving (mm)	400			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	600			
Scour Protection		4	4	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		4	4	Scour hole, 8m x 10m x 1m. Material lost from around bevel.
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		4	4	Channel makes an "S" before entering.
Bank Stability		4	4	Vertical sloughing banks U/S & D/S.
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			Beaver activity downstream.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>4</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>44.4/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>44.5/49.5</b>	Est. Repl. Yr	2019	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor scour and barrel deflections.		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	Kris Bosters		Previous Assistant's Name	Sara Wadlow			
Next Inspection Date	03-Jul-2013		Previous Inspection Date	19-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							