

Bridge Culvert Inspection			
Bridge File Number	73664 -1 Bridge Culvert	Form Type	CUL1
Year Built	1961	Lot No.	4
Bridge or Town Name	ARDMORE	Inspector Name	Wade Nanninga
Located Over	TRIBUTARY TO MURIEL CREEK, 7.5.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	28:20 C1 8.087	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Apr-2012
Legal Land Location	NE SEC 10 TWP 62 RGE 3 W4M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-110:21:45, 54:21:06	Data Entry Date	25-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08	Review Date	25-Apr-2012
Clear Roadway/Skew	11 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	3,980 / 2011 (A)	Dept. Review Date	04-May-2012
Road Classification	RAU-211.8-110	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	29.3	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment	BF tag on N crown							

**Utilities (Located at)**

Utility Attachments			
Telephone		Gas	
Power	3 wires OH South r/w.	Municipal	
Others	Fibre optics South r/w.	Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Field entrances each way.
Vertical Alignment		9	9	
Roadway Width (m)	11.200			
Embankment		8	8	
Sideslope ( :1)	3.0			
(Height of Cover(m) : <b>0.8</b> )				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		X	X	
Bevel End		4	4	Crown at inlet damaged by mower.-
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			(19/Apr/2005)
Above/Below (mm)	150			
Scour Protection		5	5	(All grown in with grass and willows. 19/Apr/2005) Buried by dam. No evidence of erosion problem.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Drift accumulated @ opening - Beaver dam partially removed
<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	14-Jul-2010			Water 0.3 - 0.6m from crown. Viewed from ends looks good
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		7	N	
Measured Rise (mm)	1899			
Measured At Ring No.	7			
Sag (mm)	2			
Percent Sag				
Sidewall		7	N	
Measured Span (mm)	1725			
Measured At Ring No.	7			
Deflection (mm)				
Percent Deflection				
Floor		5	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	N	
Separation (mm)	0			
Longitudinal Seams		6	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			1N stagger.
Longitudinal Stagger (Y/N)	Yes			
Coating		4	N	(Pitting / scaling rust on lower 1/3. )- 14Jul10
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): 1724, Rise (mm): 1901, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		4	4	U/S end hampered by drift accumulation at opening. Backing up water in channel.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>6</b>	<b>N</b>	GR 6 from 14Jul10
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		6	N	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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		5	5	Follows south ditch 80 m from East before turning 90 degrees right to enter culvert. Smooth bend.
Bank Stability		8	8	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	Yes			
(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>66.7/55.6</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>53.2/48.2</b>	Est. Repl. Yr	2015	Maint. Req. (Y/N)	No
Special Comments for Next Inspection			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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	09-Jan-2014		Previous Inspection Date	14-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							