

Bridge Culvert Inspection				
Bridge File Number	70978 -1 Bridge Culvert		Form Type	CUL1
Year Built	1979		Lot No.	4
Bridge or Town Name	DOROTHY		Inspector Name	Jon Davies
Located Over	TRIBUTARY TO DEADHORSE CREEK, 15.1.1, WATERCRS-ST		Inspector Class	BR CLS B
Located On	564:08 C1 43.418		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	23-Jan-2012
Legal Land Location	SE SEC 6 TWP 26 RGE 19 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-112:38:27, 51:11:00		Data Entry Date	08-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	03-Feb-2012
Clear Roadway/Skew	11 / 0 deg.		Dept. Reviewer Name	Tim Davies
AADT/Year	150 / 2010 (A)		Dept. Review Date	11-Mar-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	6			

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2310	2560	SPE	38	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	IN SOUTH DITCH		Gas	
Power	TWO WIRE NORTH DITCH		Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	INTERSECT W/HWY 56 700 M EAST Farm entrance 75m West.
Vertical Alignment		9	8	
Roadway Width (m)	11.000			
Embankment		8	7	
Sideslope ( __:1)	3.0			
(Height of Cover(m) : 3)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component		Last	Now	Explanation of Condition
Direction				South
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	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	4	Minor settlement at bevel. Rock displaced at SE.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>4</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2310, Rise (mm): 2560, Type: SPE)				
Barrel Last Accessible Date	23-Jan-2012			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	Minor roof damage at construction. Dents at U/S and D/S
Measured Rise (mm)	2470			Estimate.
Measured At Ring No.	5			
Sag (mm)	90			
Percent Sag	4			
Sidewall		5	4	0.5 M LONG HORIZ RIP IN SIDEWALL AT 9:00. Now buckling 10mm - repaired with patch 300mm x 1m. No change.
Measured Span (mm)	2420			
Measured At Ring No.	4			
Deflection (mm)	110			
Percent Deflection	5			
Floor		N	N	(FEW BOLTS MISSING NEAR U/S END, FEW NUTS MISSING ON 3RD RING FROM D/S END.) 25-Nov-2008
Bulge (mm)	0			
Measured At Ring No.				Floor is ice covered.
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		4	4	Ring 4, E swall longit seam crk 4 bolt holes - 135 mm steel remaining Ring 2, W swall longit seam crk 3 bolt holes - 140mm steel remaining
Total No. of Cracked Rings	2			
Total No. of Rings with Two Cracked Seams	0			Lower side wall/ Floor longitudinal seam not visible.
Min. Remaining Steel Between Cracks (mm)	135			1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	5	WHITE ALKALI AT SIDEWALL AND ROOF.
Corrosion By Soil (Y/N)	Yes			Minor corrosion at waterline and below.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2310, Rise (mm): 2560, Type: SPE)				
Fish Passage Adequacy		4	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction				North
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		7	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
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		8	8	LOW FLAT BANKS
Bank Stability		8	8	
HWM (m below Top of Culvert)				NO HWM VISIBLE
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel General Rating</b>		<b>8</b>	<b>8</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>53.3/58.6</b>	Est. Repl. Yr	2020	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	William Reardon		Previous Assistant's Name				
Next Inspection Date	23-Apr-2015		Previous Inspection Date	25-Nov-2008			
Inspection Cycle (Default) (months)	39						
Comment							