

Bridge Culvert Inspection			
Bridge File Number	00462 -1 Bridge Culvert	Form Type	CUL1
Year Built	1993	Lot No.	4
Bridge or Town Name	CARDSTON	Inspector Name	Jason Rusu
Located Over	2ND ORDER TRIBUTARY TO BULLHORN COULEE, 2.12.22.12.3.1.1, WATERCRS-ST	Inspector Class	BR CLS A
Located On	5:02 C1 27.349	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	16-Oct-2011
Legal Land Location	SW SEC 5 TWP 3 RGE 26 W4M	Data Entry By	Alyssa Boynton
Longitude, Latitude	-113:28:31, 49:10:27	Data Entry Date	21-Nov-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA25	Review Date	09-Nov-2011
Clear Roadway/Skew	21.5 / -5 deg. (LHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	1,290 / 2010 (A)	Dept. Review Date	25-Nov-2011
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	-	2400	MP	115	125X26	3.5	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	South ditch	Gas	Crosses to west 100 m
Power	1 wire N., 1 wire X road E.	Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	At end of curve to the west.
Vertical Alignment	8	8	LRA int 30 m east. Crosses under local road-9 m WIDE
Roadway Width (m)	21.500		
Embankment	N	5	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 5)			
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	S		South
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	(150mm dia drain pipe @ W side of bevel
(Shape : )			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		N	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		N	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>N</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2400, Type: MP)				
Barrel Last Accessible Date	16-Oct-2011			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Pipe bends 37 deg NE 70 m from u/s end and continues 48 m.
Measured Rise (mm)	2400			
Measured At Ring No.	6			
Sag (mm)	0			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	2410			
Measured At Ring No.	6			
Deflection (mm)	10			
Percent Deflection	1			
Floor		N	7	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		7	7	
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		5	5	Superficial corrosion @ waterline @ u/s 1/4
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 2400, Type: MP)				
Fish Passage Adequacy		X	6	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)		No		
Siltting (Y/N)		No		
Drift (Y/N)		No		
<b>Barrel General Rating</b>		<b>8</b>	<b>8</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	7	
Heaving (mm)		0		
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)		200		
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		N	7	
Beavers (Y/N)		No		
<b>Downstream End General Rating</b>		<b>N</b>	<b>7</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	(RIPRAP PROTECTING W DITCH OF ROAD ALLOWANCE TO THE SOUTH - U/S END) Jan-25-2008  STREAM CURVES @ U/S & D/S
Bank Stability		6	6	
HWM (m below Top of Culvert)				None visible
Drift (Y/N)		No		
Channel Bottom Degrading/Aggrading		DEGRADING		
Beavers (Y/N)		No		
(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>88.9/88.9</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>79.8/83.9</b>	Est. Repl. Yr	2036	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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	16-Jul-2013		Previous Inspection Date	20-Dec-2009			
Inspection Cycle (Default) (months)	21						
Comment							