

Bridge Culvert Inspection			
Bridge File Number	82140 -1 Bridge Culvert	Form Type	CUL1
Year Built	1999	Lot No.	4
Bridge or Town Name	WARNER	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO VERDIGRIS COULEE, 1.12.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	4:02 R1 31.653;4:02 L1 31.792	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	23-Mar-2013
Legal Land Location	SW SEC 30 TWP 3 RGE 16 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-112:09:26, 49:14:07	Data Entry Date	11-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Garry Roberts
Contract Main. Area	CMA24	Review Date	07-Apr-2013
Clear Roadway/Skew	24.8 / 5 deg. (RHF)	Dept. Reviewer Name	Tim Davies
AADT/Year	2,840 / 2012 (A)	Dept. Review Date	22-Apr-2013
Road Classification	RFD-412.4-130	Follow-Up By	
Detour Length (km)	1		

**Bridge Culvert Information**

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	4238	2800	RPE	75.6	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	West and East Row.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Located approx. 1km South of Twp. Road 34
Vertical Alignment	8	8	
Roadway Width (m)	24.800		
Embankment	8	8	
Sideslope ( __:1)	5.0		
(Height of Cover(m) : 1.1)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>8</b>	<b>8</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	8	8	
Wingwalls	X	X	
(Shape : )			
Cutoff Wall	N	N	Buried.

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>8</b>	<b>8</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 4238, Rise (mm): 2800, Type: RPE)				
Barrel Last Accessible Date	23-Mar-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	(From past inspection) 17-Oct-2007 Too much silt to get measurement.
Measured Rise (mm)	2730			
Measured At Ring No.	10			Estimate.
Sag (mm)	70			
Percent Sag	2			
Sidewall		8	8	Inward.
Measured Span (mm)	4220			
Measured At Ring No.	10			
Deflection (mm)	18			
Percent Deflection	0			
Floor		N	N	Average 600mm deep silt on floor.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		8	8	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			4N stagger.
Coating		5	5	
Corrosion By Soil (Y/N)	No			Superficial corrosion @ U/S haunches.
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): 4238, Rise (mm): 2800, Type: RPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	600mm silt.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
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		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Triple CSP below railway 15m U/S.
Bank Stability		8	8	
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>7</b>	<b>7</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>84.1/84.0</b>	Est. Repl. Yr	2053	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	23-Dec-2014		Previous Inspection Date	17-Jun-2011			
Inspection Cycle (Default) (months)	21						
Comment							