

Bridge Culvert Inspection				
Bridge File Number	77619 -1 Bridge Culvert		Form Type	CUL1
Year Built	1997		Lot No.	4
Bridge or Town Name	ARMENA		Inspector Name	Owen Salava
Located Over	TRIBUTARY TO CAMROSE CREEK, 5.44.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	616:10 C1 35.283		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	06-Feb-2013
Legal Land Location	SW SEC 14 TWP 48 RGE 21 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-112:58:03, 53:08:03		Data Entry Date	18-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA16		Review Date	14-Feb-2013
Clear Roadway/Skew	12 /		Dept. Reviewer Name	Chris Black
AADT/Year	200 / 2011 (A)		Dept. Review Date	28-Mar-2013
Road Classification	RCU-210-110		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	-	2000	MP	29	125X26	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments				
Telephone	North r/w.		Gas	
Power	1 wire South r/w. Power crosses road 100m West.		Municipal	
Others			Problem (Y/N)	No
Remarks				

**Approach Road / Embankment**

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Junction with Hwy 21, 200m East.
Vertical Alignment		8	8	
Roadway Width (m)	12.000			
Embankment		8	8	Very flat over pipe.
Sideslope ( __:1)	5.0			
(Height of Cover(m) : 0.6)				
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		N		
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		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	700			
Scour Protection		N	N	Snow covered.
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		N	N	Snow covered.
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): , Rise (mm): 2000, Type: MP)				
Barrel Last Accessible Date	06-Feb-2013			
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		8	8	Unable to measure due to ice.
Measured Rise (mm)	2030			
Measured At Ring No.				
Sag (mm)	30			(1.5% upwards. 01Mar2010).
Percent Sag	2			
Sidewall		8	8	
Measured Span (mm)	2005			
Measured At Ring No.	2			
Deflection (mm)	5			0.3%
Percent Deflection	0			
Floor		8	N	(Some silt on floor. 01Mar2010) - Ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	8	
Separation (mm)	40			
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		7	7	Minor staining.
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): 2000, Type: MP)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type : )				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
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)	700			
Scour Protection		N	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>8</b>	<b>8</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		7	7	No obvious channel d/s.
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.6			Flow line.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
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>87.8/87.6</b>	Est. Repl. Yr	2048	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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	06-May-2016		Previous Inspection Date	01-Mar-2010			
Inspection Cycle (Default) (months)	39						
Comment							