

Bridge Culvert Inspection				
Bridge File Number	02452 -1 Bridge Culvert		Form Type	CUL1
Year Built	1954		Lot No.	4
Bridge or Town Name	PONOKA		Inspector Name	Owen Salava
Located Over	2ND ORDER TRIBUTARY TO BATTLE RIVER, 5.51.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	53:08 C1 27.505		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	28-Nov-2012
Legal Land Location	SE SEC 3 TWP 43 RGE 23 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:15:02, 52:40:02		Data Entry Date	06-Dec-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA17		Review Date	04-Dec-2012
Clear Roadway/Skew	8.3 / -35 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	830 / 2011 (A)		Dept. Review Date	10-Dec-2012
Road Classification	RAU-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	1724	1901	SPE	54.6	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South r/w.		Gas	
Power	3 wire on North r/w bdry.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Grade starts 100m West with limited sight distance. No passing WB.
Vertical Alignment		6	6	
Roadway Width (m)	9.400			
Embankment		6	6	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 3.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		Barrel rotated 15 degree counter clockwise.
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	7	U/S appears to have been extended by one section.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
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	28-Nov-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	6	Unable to measure due to ice.
Measured Rise (mm)	1880			
Measured At Ring No.	10			
Sag (mm)	21			(1.1%. 28Aug2009).
Percent Sag	1			
Sidewall		N	6	
Measured Span (mm)	1720			
Measured At Ring No.	10			
Deflection (mm)	4			
Percent Deflection	0			
Floor		N	N	Ice
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	All circumferential seams in original pipe are missing 1 top bolt.
Separation (mm)	0			
Longitudinal Seams		N	5	Arch of plates appears incorrect creating gaps at seams up to 3mm. Missing 1 bolt at R2, E side at 4:00.
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			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	5	Superficial rust below waterline. Alkaline stains through seams. (Perforations R4 at low waterline due to interrupting spring. 28Aug2009).
Corrosion By Soil (Y/N)	Yes			
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): 1724, Rise (mm): 1901, Type: SPE)				
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	
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		5	5	(Bevel is unsupported for 1.5m. 28Aug2009) - Unable to verify due to snow in channel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	950			
Scour Protection		7	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	60.4/60.4	Est. Repl. Yr	2030	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	28-Aug-2014		Previous Inspection Date	13-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							