Bridge Culvert Inspection

Bridge File Number	02279 -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, 5.51.2.2, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	53:08 C1 28.983	Assistant Class	
Water Body Cl./Year		Inspection Date	28-Nov-2012
Navigabil. Cl./Year		Data Entry By	Marcia Chavez
Legal Land Location	SE SEC 2 TWP 43 RGE 23 W4M	Data Entry Date	06-Dec-2012
Longitude, Latitude	-113:13:43, 52:40:02	Reviewer Name	John O'Brien
Road Authority	Alberta Transportation (AIT)	Review Date	04-Dec-2012
Contract Main. Area	CMA17	Dept. Reviewer Name	Andrew Smikles
Clear Roadway/Skew	8.2 / 28 deg. (RHF)	Dept. Review Date	10-Dec-2012
AADT/Year	830 / 2011 (A)	Follow-Up By	
Road Classification	RAU-209-110		
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	U/S	-	1800	MP	16	125X26	2.8	ROUND
1	MAIN	-	1800	MP	32.9	68X13	2.8	ROUND
1	D/S	-	1800	MP	9	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

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

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farm access North & South just to East. Hill to East. No passing.
Vertical Alignment		6	6	
Roadway Width (m)	9.500			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **4**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream 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 :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		**6**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	06-Feb-2003			Viewed from ends, ice to 0.6m of roof under road; shape and condition appear good.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)	1780			
Measured At Ring No.	2			
Sag (mm)	20			(1.1%. 06Feb2003).
Percent Sag	1			
Sidewall		N	N	
Measured Span (mm)	1810			
Measured At Ring No.	2			
Deflection (mm)	10			(0.6%. 06Feb2003).
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	15			
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		N	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1800, Type: MP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	6	
Icing (Y/N)	Yes			(500mm silt throughout. 28Aug2009).
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel Extension General Rating		**N**	**N**	GR was 7 from 28Aug2009.

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		N	6	
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered.
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **350**)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		**N**	**6**	

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)	0.4			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
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) (%)**	**59.4/60.4**	Est. Repl. Yr	2020	Maint. Reqd. (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					