

Bridge Culvert Inspection			
Bridge File Number	01906 -1 Bridge Culvert	Form Type	CUL1
Year Built	1972	Lot No.	4
Bridge or Town Name	BUCK LAKE	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO BUCKLAKE CREEK, 6.132.2.8, WATERCRS-ST	Inspector Class	BR CLS A
Located On	22:28 C1 14.515	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	25-Jun-2012
Legal Land Location	NW SEC 17 TWP 47 RGE 6 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:51:18, 53:03:35	Data Entry Date	15-Jul-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA17	Review Date	05-Jul-2012
Clear Roadway/Skew	11.1 / -10 deg. (LHF)	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,380 / 2011 (A)	Dept. Review Date	19-Jul-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	35		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	MP	43.3	65X13	3.5	ROUND
Special Features								
Special Features Comment	Weholite liner.							

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	4 wire o/h E r/w.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	
Vertical Alignment	8	8	
Roadway Width (m)	11.100		
Embankment	7	7	
Sideslope (:1)	4.0		
(Height of Cover(m) : 4.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	8	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	E		
End Treatment (Concrete, Steel, Others, None)	NONE		
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		N	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		5	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: MP)				
Barrel Last Accessible Date	15-Oct-1997			(Original barrel not accessible due to liner. Liner inspected as barrel. 30May2008) - Pipe almost completely submerged.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	100			
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	25			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	155			
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		X	X	Plastic liner.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	POS			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: MP)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	Capacity may be a concern.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		Submerged.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Turns 90 degree 7m d/s; enters after 90 deg. turn u/s.
Bank Stability		6	6	
HWM (m below Top of Culvert)				Assume pipe has run full.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	

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) (%)	66.5/67.4	Est. Repl. Yr	2044	Maint. Reqd. (Y/N)	No
Special Comments for Next Inspection	Recommend dewater/inspect again when water level low; several inaccessible to barrel since 1997.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2003.08.18 Refurbished culvert should be good until 2050.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	25-Mar-2014		Previous Inspection Date	02-Feb-2011			
Inspection Cycle (Default) (months)	21						
Comment							