

Bridge Culvert Inspection				
Bridge File Number	79659 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	3
Bridge or Town Name	SUNDRE		Inspector Name	Owen Salava
Located Over	JACKSON CREEK, 3.96, WATERCRS-ST		Inspector Class	BR CLS A
Located On	22:20 C1 7.739		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	19-Oct-2012
Legal Land Location	NW SEC 28 TWP 33 RGE 5 W5M		Data Entry By	Marcia Chavez
Longitude, Latitude	-114:39:47, 51:51:52		Data Entry Date	09-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA29		Review Date	30-Oct-2012
Clear Roadway/Skew	14 / 18 deg. (RHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,270 / 2011 (A)		Dept. Review Date	13-Nov-2012
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2438	SP	50	152X51		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	West r/w.		Gas
Power	3 wires located at West end.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	Climbing lane SB.
Vertical Alignment		8	8	
Roadway Width (m)	14.000			
Embankment		7	7	
Sideslope (_ :1)	2.5			
(Height of Cover(m) : 5.3)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		8	8	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
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		6	6	Drift at NW corner.
Heaving (mm)	250			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	6	Rocks in bevel, minor.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	6	
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: MAIN, Span (mm): , Rise (mm): 2438, Type: SP)				
Barrel Last Accessible Date	19-Oct-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	2308			
Measured At Ring No.	6			
Sag (mm)	130			5.3%
Percent Sag	5			
Sidewall		5	5	
Measured Span (mm)	2570			
Measured At Ring No.	6			
Deflection (mm)	132			5.4%
Percent Deflection	5			
Floor		N	5	Ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial rust, no pitting.
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): , Rise (mm): 2438, Type: SP)				
Fish Passage Adequacy		4	4	D/S end perched.
Baffle (Type :)		X	X	
Waterway Adequacy		6	6	(1800mm deep ice @ mid. Feb/25/2005).
Icing (Y/N)	Yes			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		5	5	Perched 0.3m above streambed.
Heaving (mm)	50			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	700			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 400)		N	4	
Scour/Erosion		N	4	Rock riprap has been rolled D/S forming a wall and ponding at basin of water 1.8m deep x 8.0m diag.
Beavers (Y/N)		No		
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		N	5	U/S flow impacts NW bank causing erosion - minor.
HWM (m below Top of Culvert)		-3.0		(05/Oct/2006) HWM not visible.
Drift (Y/N)		No		Drift caught on fence and logs 2.5m higher on sideslope - photo.
Channel Bottom Degrading/Aggrading		DEGRADING		D/S only.
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2013	Use good quality Class III rocks at D/S streambed area & spread out rocks @ D/S channel, if not yet done.					
REMOVE DRIFT ACCUMULATION	2013	Remove all drift from inlet area.					
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) (%)	49.9/51.8	Est. Repl. Yr	2028	Maint. Req. (Y/N)	Yes
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	19-Jul-2014	Previous Inspection Date	03-Feb-2011				
Inspection Cycle (Default) (months)	21						
Comment							