Bridge Culvert Inspection

Bridge File Number	79199 -1 Bridge Culvert	Form Type	CUL1
Year Built	1981	Lot No.	4
Bridge or Town Name	SUNDRE	Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	22:18 C1 14.584	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	22-Oct-2012
Legal Land Location	NW SEC 22 TWP 31 RGE 4 W5M	Data Entry By	Marcia Chavez
Longitude, Latitude	-114:29:52, 51:40:33	Data Entry Date	15-Nov-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA28	Review Date	30-Oct-2012
Clear Roadway/Skew	14.4 /	Dept. Reviewer Name	Andrew Smikles
AADT/Year	2,790 / 2011 (A)	Dept. Review Date	16-Nov-2012
Road Classification	RAU-211.8-110	Follow-Up By	
Detour Length (km)	19		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	25.1	125X26	3.0	ROUND
Special Features								
Special Features Comment		U/S extension is 4.1m long, same type of culvert.						

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)		No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required.										

Utilities (Located at)

Utility Attachments			
Telephone	West fence.	Gas	
Power	3 wire East fenceline.	Municipal	
Others	Fibre optic West r/w.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Hills North & South. No passing NB. Field access NW, NE & SW.
Vertical Alignment		7	7	Road is on a grade. Passing lane SB.
Roadway Width (m)	14.400			
Embankment		7	7	Transverse crack in roadway over pipe, previously sealed.
Sideslope (__:1)	3.0			
(Height of Cover(m) : **0.9**)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
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)	400			
Scour Protection		N	7	Newly shaped slopes, no vegetation yet.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	7	Takes minor flow from E.
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): , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	22-Oct-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	Damage @ roof ends, minor. 100mm bends. Unable to measure due to silt/clay.
Measured Rise (mm)	2200			
Measured At Ring No.	3			
Sag (mm)	0			
Percent Sag	0			
Sidewall		7	7	
Measured Span (mm)	2200			
Measured At Ring No.	2			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	100 - 200mm clay on floor.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	20			
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)				

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP**)				
Coating		6	6	At outside of roof @ E ends Superficial corrosion @ haunches.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
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)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Mower damage to roof.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		N	7	Takes some ditch drainage.
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Grade Separation				
Road Alignment		7	7	100 - 200mm deep clay on floor.
Roadway Surface		7	7	
(Type :)				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	None			

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Lighting		X	X	
Barrel Leakage (Y/N)	No			
Drainage		5	5	(100mm ice & water on floor. 1998/03/31)
Structure In Use (Y/N)	No			Fenced across r.o.w boundary to W.
Grade Separation 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) (%)**	**68.5/68.5**	Est. Repl. Yr	2033	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Recently extended with road widening.	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	22-Jul-2014	Previous Inspection Date	07-Feb-2011		
Inspection Cycle (Default) (months)	21				
Comment					