Bridge Culvert Inspection

Bridge File Number	78801 -1 Bridge Culvert	Form Type	CUL1
Year Built	1976	Lot No.	1
Bridge or Town Name	SUNSET HOUSE	Inspector Name	Russel Vanderschaaf
Located Over	TRIBUTARY TO SWEATHOUSE CREEK, 8.10.58.7.25.4, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	747:01 C1 0.866	Assistant Class	
Water Body Cl./Year		Inspection Date	24-Aug-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NW SEC 16 TWP 69 RGE 19 W5M	Data Entry Date	07-Oct-2010
Longitude, Latitude	-116:50:55, 54:58:29	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	20-Sep-2010
Contract Main. Area	CMA03	Dept. Reviewer Name	David Morrison
Clear Roadway/Skew	9.2 /	Dept. Review Date	07-Mar-2012
AADT/Year	150 / 2010 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	31		

Bridge Culvert Information

Number of Culverts	1

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1524	MP	20.1	68X13	3.5	ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	Buried west r/w.	Gas	West side of road
Power	2 WIRE LINE 20 M E. OF C/L	Municipal	
Others	100M N. 2W LINE CROSSES ROAD	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	INTERSECT WITH SH 665, 800M SOUTH, land accesses west side 30m South & 200m north.
Vertical Alignment		8	8	
Roadway Width (m)	9.200			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : **2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		Water 75mm below crown.
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		N	N	Water above inlet.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		5	N	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**5**	GR carried forward.-08-Dec-1994

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP**)				
Barrel Last Accessible Date	08-Dec-1994			
Special Features				
Special Feature				Water 75mm below ends of pipe.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	(@ 11.8m from u/s end at 3:00 position deflection is out. - 08-Dec-1994)
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	16			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	(@ 15.3m from u/s end at 7:00 -08-Dec-1994)
Separation (mm)	25			
Longitudinal Seams		X	N	
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)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1524, Type: MP**)				
Fish Passage Adequacy		6	6	
Baffle		N	N	
(Type :)				
Waterway Adequacy		5	5	
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		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	Under water.
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		5	N	Under water.
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Under water.
Beavers (Y/N)	No			
Downstream End General Rating		**5**	**5**	GR carried forward.-08-Dec-1994

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.7			
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				stable
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				20m U/S end.
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**7**	

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	2010	Level 2 inspection				
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**57.1/57.1**	Est. Repl. Yr	2019	Maint. Reqd. (Y/N)	Yes

Special Comments for Next Inspection	Recommend a level 2 inspection as pipe has been inaccessible for 5 inspections.	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	Brian Pientsch	Previous Assistant's Name	Tim Miskiman
Next Inspection Date	24-Nov-2013	Previous Inspection Date	24-Jul-2007
Inspection Cycle (Default) (months)	39		
Comment			