Bridge Culvert Inspection

Bridge File Number	72875 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	GORDONDALE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO HENDERSON CREEK, 8.10.97.8.10, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Brian Cote
Located On	49:02 C1 31.250	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Jul-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 18 TWP 79 RGE 10 W6M	Data Entry Date	15-Aug-2011
Longitude, Latitude	-119:32:37, 55:50:23	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	13-Jul-2011
Contract Main. Area	CMA05	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	10.4 / -15 deg. (LHF)	Dept. Review Date	16-Nov-2011
AADT/Year	1,140 / 2010 (A)	Follow-Up By	
Road Classification	RAU-210-110		
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	MAIN	2019	2226	SPE	38.4	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ROW	Gas	
Power	3 o/h South ROW	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	FARM ENTRANCE ON BOTH SIDES- 35m EAST
Vertical Alignment		8	8	
Roadway Width (m)	10.400			
Embankment		8	8	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.7**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	Riprap and debris washing into bevel u/s.
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		5	5	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **450**)				
Scour/Erosion		5	5	
Beavers (Y/N)	Yes			Dam 5m U/S.
Upstream End General Rating		**5**	**5**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE**)				
Barrel Last Accessible Date	06-Jul-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	5	
Measured Rise (mm)	2130			
Measured At Ring No.	7			
Sag (mm)	130			
Percent Sag	6			
Sidewall		7	6	
Measured Span (mm)	2100			
Measured At Ring No.	7			
Deflection (mm)	81			
Percent Deflection	4			
Floor		7	5	Pitting and scaling on floor.
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)	No			
Longitudinal Stagger (Y/N)	No			
Coating		4	4	Pitting and scaling 800mm wide strip of floor.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			Riprap causing some ponding.

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 2019, Rise (mm): 2226, Type: SPE**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**7**	**5**	

Downstream 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 :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		6	6	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **200**)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Culvert)				Not visible
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			20m D/S OF ROCK APRONS STREAMBED IS DEGRADING - APPROX. 1m LOWER Causing scour hole
Beavers (Y/N)	Yes			
(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) (%)	**77.8/55.6**	**Sufficiency Rating (Last/Now) (%)**	**71.5/61.4**	Est. Repl. Yr	2022	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	Shane Hall	Previous Assistant's Name	
Next Inspection Date	06-Apr-2013	Previous Inspection Date	27-Oct-2009
Inspection Cycle (Default) (months)	21		
Comment			