Bridge Culvert Inspection

Bridge File Number	81673 -1 Bridge Culvert	Form Type	CUL1
Year Built	1996	Lot No.	4
Bridge or Town Name	VULCAN	Inspector Name	Jason Rusu
Located Over	TRIBUTARY TO SNAKE CREEK, 12.2.4, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	534:02 C1 23.279	Assistant Class	
Water Body Cl./Year		Inspection Date	06-Mar-2010
Navigabil. Cl./Year		Data Entry By	Kelsey Roberts
Legal Land Location	SW SEC 1 TWP 17 RGE 24 W4M	Data Entry Date	25-Mar-2010
Longitude, Latitude	-113:10:48, 50:23:51	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	12-Mar-2010
Contract Main. Area	CMA25	Dept. Reviewer Name	Lorenz Bohnert
Clear Roadway/Skew	12 / -25 deg. (LHF)	Dept. Review Date	26-Mar-2010
AADT/Year	760 / 2008 (A)	Follow-Up By	
Road Classification	RLU-209G-90		
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	-	2200	MP	44			ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch	Gas	
Power	1 wire-north	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	8	
Vertical Alignment		8	8	
Roadway Width (m)	9.000			
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover (m) : **3.3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		south
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **250**)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**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**)				
Barrel Last Accessible Date	06-Mar-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	8	estimated sag of 1% not measured. shape is good.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	0			
Percent Sag				
Sidewall		8	8	Section #3 from U/S.
Measured Span (mm)	2180			
Measured At Ring No.	3			
Deflection (mm)	20			
Percent Deflection	1			
Floor		N	N	700mm of silt.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	30			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
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): 2200, Type: MP**)				
Fish Passage Adequacy		8	8	
Baffle		X	X	
(Type :)				
Waterway Adequacy		8	8	Silting but not causing ponding.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**8**	**8**	

Downstream 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	
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **250**)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**N**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	6	Channel enters u/s apron @ 45 deg
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.5			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**7**	**6**	

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) (%)	**88.9/88.9**	**Sufficiency Rating (Last/Now) (%)**	**84.8/80.0**	Est. Repl. Yr	2043	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	06-Jun-2013	Previous Inspection Date	26-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					