Bridge Culvert Inspection

Bridge File Number	09777 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	COLINTON	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO PINE CREEK, 8.11.55.5.13, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	663:04 C1 19.919	Assistant Class	
Water Body Cl./Year		Inspection Date	08-Mar-2010
Navigabil. Cl./Year		Data Entry By	Janie Assenheimer
Legal Land Location	SW SEC 2 TWP 65 RGE 21 W4M	Data Entry Date	22-Mar-2010
Longitude, Latitude	-113:04:21, 54:35:14	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	11-Mar-2010
Contract Main. Area	CMA07	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	9 / 35 deg. (RHF)	Dept. Review Date	24-Mar-2010
AADT/Year	860 / 2008 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	8		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2100	MP	37	75X25	2.8	ROUND
Special Features								
Special Features Comment		BF tag on u/s bevel.						

Utilities (Located at)

Utility Attachments			
Telephone	South property line.	Gas	
Power	5 wires north property line.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Field approach 50 m east.
Vertical Alignment		8	8	
Roadway Width (m)	9.000			
Embankment		N	8	
Sideslope (__:1)	4.0			
(Height of Cover (m) : **1.6**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		N	6	
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	7	
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	Yes			Dam 10m south. Not interfering.
Upstream End General Rating		**7**	**6**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2100, Type: MP**)				
Barrel Last Accessible Date	08-Mar-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		4	4	Roof punched up near c/l, sidewalls pushed in. Roof and sidewall are damaged. Roof is cracked. This damage was done during construction, an extra collar was placed around the damaged area. Inward deflection
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	200			
Percent Sag				
Sidewall		4	4	Roof and sidewall ratings increased because damage was repaired with extra collar. Holes in sidewall 20 m from D/S end. Inward deflkection Span @ South end 2091 Span @ centreline 2024 Span @ North end 2065
Measured Span (mm)	2024			
Measured At Ring No.				
Deflection (mm)	76			
Percent Deflection	4			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	
Separation (mm)	120			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		5	5	Superficial rust on bottom 1/2.
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2100, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	5	Dam D/S.
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	(Silting on floor only 1/2 of the pipe. 2000/06/22)
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**4**	**4**	

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		N	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	150			
Scour Protection		N	7	
(Type : **NATURAL**)				
(Avg. Rock Size (mm) :)				
Scour/Erosion		N	7	
Beavers (Y/N)	Yes			Dam D/S.
Downstream End General Rating		**7**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		N	7	
HWM (m below Top of Culvert)				Not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : **NONE**)				
(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						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**44.4/44.4**	**Sufficiency Rating (Last/Now) (%)**	**54.1/52.6**	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor pipe deformations.	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	Jason Saly	Previous Assistant's Name			
Next Inspection Date	08-Jun-2013	Previous Inspection Date	04-Dec-2006		
Inspection Cycle (Default) (months)	39				
Comment					