

Bridge Culvert Inspection				
Bridge File Number	73935 -1 Bridge Culvert		Form Type	CUL1
Year Built	1956		Lot No.	2
Bridge or Town Name	TRIANGLE		Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO STONY CK, 8.10.58.7.15.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	747:02 C1 25.989		Assistant Name	Lisbeth Medina
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	30-Nov-2010
Legal Land Location	NW SEC 9 TWP 73 RGE 19 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-116:52:23, 55:18:40		Data Entry Date	21-Dec-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA06		Review Date	20-Dec-2010
Clear Roadway/Skew	10 / -45 deg. (LHF)		Dept. Reviewer Name	David Morrison
AADT/Year	490 / 2009 (A)		Dept. Review Date	24-Feb-2011
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	26			

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	75.1	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	
Vertical Alignment		8	8	
Roadway Width (m)	10.000			
Embankment		8	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 6)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
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		5	5	Both bevel sides bent inwards. Approx 100mm.
Heaving (mm)	500			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	7	
Beavers (Y/N)	Yes			@ u/s end
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	30-Nov-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	Upward deflection.
Measured Rise (mm)	2228			
Measured At Ring No.	12			
Sag (mm)	2			
Percent Sag	1			
Sidewall		6	6	
Measured Span (mm)	2058			
Measured At Ring No.	12			
Deflection (mm)	39			
Percent Deflection	2			
Floor		6	6	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	4	Some bolts missing on east end-about 6 all together, all from different panels. 2nd ring - 2 missing nuts, 1 bolt and nut missing. 3rd ring 5 missing bolts.
Separation (mm)	5			
Longitudinal Seams		6	5	Ring 2 and 3 have missing nuts at 3 o'clock. (1N stagger, 4 rings only.)
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		5	4	Pitting rust, bottom third. Alkaline deposit through roof bolts.
Corrosion By Soil (Y/N)	Yes			
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): 2019, Rise (mm): 2226, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	5	
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		5	5	Both bevel sides pushing in approx 150mm.
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	HWM not visible.
Bank Stability		7	6	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			@ u/s channel
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	2010	Remove beaverdam at u/s end.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/55.6	Sufficiency Rating (Last/Now) (%)	64.6/60.1	Est. Repl. Yr	2012	Maint. Req. (Y/N)	Yes
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	Brian Pientsch		Previous Assistant's Name	Tim Miskiman			
Next Inspection Date	28-Feb-2014		Previous Inspection Date	24-Jul-2007			
Inspection Cycle (Default) (months)	39						
Comment							