

Bridge Culvert Inspection			
Bridge File Number	02098 -1 Bridge Culvert	Form Type	CUL1
Year Built	1984	Lot No.	4
Bridge or Town Name	THORSBY	Inspector Name	Todd Warshawski
Located Over	2ND ORDER TRIBUTARY TO STRAWBERRY CREEK, 6.112.4.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	622:02 C1 17.406	Assistant Class	
Water Body Cl./Year		Inspection Date	16-Mar-2012
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	SW SEC 33 TWP 49 RGE 1 W5M	Data Entry Date	18-Apr-2012
Longitude, Latitude	-114:05:23, 53:15:54	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	09-Apr-2012
Contract Main. Area	CMA11	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	9 / 30 deg. (RHF)	Dept. Review Date	04-May-2012
AADT/Year	650 / 2011 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1429	1575	SPE	113.4	152X51	2.8	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South ditch.	Gas	
Power	2 wires 19m north of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag on sidewall inside of S bevel		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Crests to E and W
Vertical Alignment		7	6	
Roadway Width (m)	9.300			
Embankment		N	4	(Erosion in SE ditch - photo (3m wide x 5m long x 2m deep). Erosion in NE ditch - photo (2m wide x 3m deep x 3m long). (There is a gabion mattress for a 300m U/S. There are also egg-crate & velmat lining the ditches coming down to U/S & D/S ends.
Sideslope (:1)	3.0			
(Height of Cover(m) : 15)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		3	6	

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	5	(Bevel slightly torn & bent, minor.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	(Erosion on east bank coming down from road ditch. 22/Sept/2005) Snow covered.
Beavers (Y/N)	No			
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): 1429, Rise (mm): 1575, Type: SPE)				
Barrel Last Accessible Date	16-Mar-2012			(This culvert is installed in a gradual curve - not a straight line.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	Pipe is elliptical, previous recorded measurements do not match site. Sag estimated at less than 5%
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	7	
Measured Span (mm)	1412			
Measured At Ring No.	13			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	Under water/ice
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	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		N	5	(Superficial rust along bottom 1/2 culvert. 22/Sept/2005) Corrosion on upper seams
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): 1429, Rise (mm): 1575, Type: SPE)				
Ponding (Y/N)	No			
Fish Passage Adequacy		4	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	6	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	7	
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	5	Minor dents.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		N	4	Bevel is protruding approx 1.0m - photo.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	4	(Erosion on downstream (scour).
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		N	4	Banks are eroded.
HWM (m below Top of Culvert)				(HWM was 2 metres above streambed on upstream end. 01/08/18)
Drift (Y/N)	Yes			(Deadfall in North channel. 22/Sept/2005)
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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) (%)	55.6/77.8	Sufficiency Rating (Last/Now) (%)	49.1/66.8	Est. Repl. Yr	2040	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor erosion on u/s and d/s end. Monitor bank/sideslope stability		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	Jacob Oresile		Previous Assistant's Name				
Next Inspection Date	16-Jun-2015		Previous Inspection Date	03-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							