

Bridge Culvert Inspection			
Bridge File Number	07073 -1 Bridge Culvert	Form Type	CUL1
Year Built	1960	Lot No.	1
Bridge or Town Name	SUNNYBROOK	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO STRAWBERRY CREEK, 6.112.11, WATERCRS-ST	Inspector Class	BR CLS B
Located On	39:08 C1 13.408	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Jan-2013
Legal Land Location	SW SEC 5 TWP 49 RGE 2 W5M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-114:15:54, 53:11:33	Data Entry Date	17-Jan-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA11	Review Date	16-Jan-2013
Clear Roadway/Skew	11.2 /	Dept. Reviewer Name	Paul Catt
AADT/Year	2,800 / 2011 (A)	Dept. Review Date	18-Jan-2013
Road Classification	RAU-211.8-110	Follow-Up By	
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	2314	2552	SPE	58.5	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North and south r/w.	Gas	
Power	5 wires North r/w. 1 wire to west.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Entrances both sides.
Vertical Alignment	6	6	Sag curve, no passing in either direction.
Roadway Width (m)	11.200		
Embankment	7	7	
Sideslope (__:1)	3.0		
(Height of Cover(m) : 7.2)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	6	6	Strike damage, 2 sections at NE - photo

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		4	4	Bolts missing from longitudinal seams (30).
Heaving (mm)	300			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 200)		N	N	Snow covered
Scour/Erosion		N	N	(Piping for first 3 barrel sections. 2002/05/17) (Loss of fill along west side of bevel up to 400mm, settlement along east. -27-May-2009)
Beavers (Y/N)	Yes			1m high beaver dam 5m U/S.
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2314, Rise (mm): 2552, Type: SPE)				
Barrel Last Accessible Date	10-Jan-2013			Ice covering R19-23, seam not visible
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		5	5	(5.8% roof sag. 2002/05/07) Rise not measured due to ice
Measured Rise (mm)	2404			
Measured At Ring No.	11			
Sag (mm)	148			
Percent Sag	6			
Sidewall		2	2	Sidewall cracked less than 50mm steel.
Measured Span (mm)	2515			
Measured At Ring No.	11			
Deflection (mm)	201			
Percent Deflection	9			
Floor		N	N	1m ice in barrel
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	(Some water seepage apparent most seams. 2002/05/17) Lower 1/3 not rated
Separation (mm)	0			
Longitudinal Seams		2	2	Rings 2,3,4,5,6,7,8,10,11,12. Cracked East wall (15,16,17,18,19,20 and 21 cracked on East wall. 36mm metal between cracks, worst @ ring R18. R6,8,10,12,15,16,17,19 all with 50-100, steel, others listed have more thank 100mm. 1N stagger.
Total No. of Cracked Rings	18			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)	36			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	N	(Superficial on lower 1/2. 26/Jan/2006)
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): 2314, Rise (mm): 2552, Type: SPE)					
Ponding (Y/N)	No				
Fish Passage Adequacy		7	7		
Baffle		X	X		
(Type :)					
Waterway Adequacy		7	7	Minor drift at inlet	
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	Yes				
Barrel General Rating		2	2		
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		4	4	Bolts missing from longitudinal seams (30).	
Heaving (mm)	100				
Invert Above/Below Stream Bed	ABOVE				
Above/Below (mm)	200				
Scour Protection		N	N	Snow covered	
(Type : RIP RAP)					
(Avg. Rock Size(mm) : 200)					
Scour/Erosion		N	N)Loss of fill on West side 1m long, 0.5m wide, 0.2m deep.-27-May-2009)	
Beavers (Y/N)	Yes			Dam 20m D/S.	
Downstream End General Rating		4	4		
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		7	7		
Bank Stability		7	7		
HWM (m below Top of Culvert)				HWM not visible.	
Drift (Y/N)	No				
Channel Bottom Degrading/Aggrading				20m D/S there is a dam.	
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	2013	Bridge assessment.					
OTHER ACTION	2013	Repair guardrail (2 sections)					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	42.8/42.5	Est. Repl. Yr	2015	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	Monitor cracking in sidewall, deflection, scour. Low rating sent Jan 15/13 to R.Hussain & B. Herrick. Assessment underway. EDC 16 Jan/13		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	Wade Nanninga		Previous Assistant's Name				
Next Inspection Date	10-Oct-2014		Previous Inspection Date	26-Jan-2011			
Inspection Cycle (Default) (months)	21						
Comment							