Bridge Culvert Inspection

Bridge File Number	71223 -2 Bridge Culvert	Form Type	CUL1
Year Built	2007	Lot No.	4
Bridge or Town Name	ALSIKE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO LITTLE STRAWBERRY CREEK, 6.112.16.3, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	39:08 C1 2.622	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Jan-2013
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	SE SEC 6 TWP 49 RGE 3 W5M	Data Entry Date	22-Jan-2013
Longitude, Latitude	-114:25:33, 53:11:39	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	17-Jan-2013
Contract Main. Area	CMA11	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	10.2 / -45 deg. (LHF)	Dept. Review Date	23-Jan-2013
AADT/Year	2,850 / 2011 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
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	-	3050	SP	52.43	152X51	3.0	ROUND
Special Features								
Special Features Comment		BF tag not found						

Utilities (Located at)

Utility Attachments			
Telephone	North & South r/w.	Gas	
Power	3 wires 20m from c/l. North r/w.	Municipal	
Others	Major transmission lines 100m West.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Curve to East, limited sight distance. No passing WB due to hill to West.
Vertical Alignment		6	6	
Roadway Width (m)	11.000			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.5**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Form holes not filled
Collar		7	N	Snow covered
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		8	8	Floor not rated
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		**8**	**7**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP**)				
Barrel Last Accessible Date	10-Jan-2013			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Rise not measured due to ice
Measured Rise (mm)				
Measured At Ring No.				est
Sag (mm)	50			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	3090			
Measured At Ring No.	7			
Deflection (mm)	60			
Percent Deflection	2			
Floor		N	N	1m+ silt/ice
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	Lower 1/3 not rated
Separation (mm)	0			
Longitudinal Seams		8	8	Lower 1/3 not rated
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				2N stagger
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		8	6	Superficial rust lower 1/2
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): 3050, Type: SP**)				
Fish Passage Adequacy		9	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		9	7	
Icing (Y/N)	No			1m+ silt in barrel
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		**7**	**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		8	8	Floor not rated
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	Snow covered
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**8**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	Sharp turn at outlet
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**6**	**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) (%)	**77.8/77.8**	**Sufficiency Rating (Last/Now) (%)**	**83.5/74.9**	Est. Repl. Yr	2058	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	Wade Nanninga	Previous Assistant's Name			
Next Inspection Date	10-Oct-2014	Previous Inspection Date	25-Jan-2011		
Inspection Cycle (Default) (months)	21				
Comment					