

Bridge Culvert Inspection				
Bridge File Number	75409 -1 Bridge Culvert		Form Type	CUL1
Year Built	1961		Lot No.	1
Bridge or Town Name	ASHMONT		Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO WHITEFISH CREEK, 7.25.2.6, WATERCRS-ST		Inspector Class	BR CLS B
Located On	28:15 C1 4.465		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	03-Apr-2013
Legal Land Location	NE SEC 35 TWP 59 RGE 11 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-111:31:55, 54:09:01		Data Entry Date	23-Apr-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA08		Review Date	17-Apr-2013
Clear Roadway/Skew	10.9 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	2,440 / 2012 (A)		Dept. Review Date	23-Apr-2013
Road Classification	RAU-211.8-110		Follow-Up By	
Detour Length (km)	18			

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	40.8	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w.	Gas	
Power	1 wire North r/w.	Municipal	
Others	BF tag installed on North end of bevel.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In middle of an 'S' curve.
Vertical Alignment		7	7	Slight grades up in both directions.
Roadway Width (m)	10.900			75mm dip in ACP over pipe
Embankment		7	7	
Sideslope ( :1)	3.0			
(Height of Cover(m) : 2.1)				
Guardrail (Y/N)	Yes			Both sides, plastic posts. Improper lap at NW TDE. SW terminal end is corroded/torn. 1 broken post along South rail.
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream 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	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	Floor of bevel silted over and vegetation growing. Approx. 1m of silt @ u/s end over 6m.
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		6	6	Well vegetated and stable.
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>6</b>	<b>6</b>	
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	03-Apr-2013			Barrel used for snowmobile & ATV crossing.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		6	6	Shape appears good. Rise not measured due to ice Missing bolts in R1 & R15 upper seam.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag	3			
Sidewall		2	2	Sidewall of ring #7 & 8 is cracked on 2 seams 3 & 9 o'clock.
Measured Span (mm)	3130			
Measured At Ring No.	8			
Deflection (mm)	80			
Percent Deflection	3			
Floor		N	N	Floor silt/ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Missing odd nut. Several bolts loose.
Separation (mm)	0			
Longitudinal Seams		2	2	Ring 7 and 8 has two seams cracked with 125 - 145 mm of steel left. These cracks are at 3 o'clock and 9 o'clock.  Crack in ring 9 at 3 o'clock. Visible cracks very small  1N stagger.
Total No. of Cracked Rings	3			
Total No. of Rings with Two Cracked Seams	2			
Min. Remaining Steel Between Cracks (mm)	125			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		4	4	Scaling and pitting in lower 30%.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	Yes			

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		4	4	About 1.5m above lake level.	
Baffle		X	X		
(Type : )					
Waterway Adequacy		8	8	Culvert serves as an equalizer between two parts of Mann Lake.	
Icing (Y/N)	No				
Silting (Y/N)	No				
Drift (Y/N)	No				
<b>Barrel General Rating</b>		<b>2</b>	<b>2</b>		
Downstream 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		
Bevel End		6	6	Silt along floor	
Heaving (mm)	150				
Invert Above/Below Stream Bed					
Above/Below (mm)					
Scour Protection		6	6	Grassed in.	
(Type : <b>NATURAL</b> )					
(Avg. Rock Size(mm) : )					
Scour/Erosion		6	6		
Beavers (Y/N)		No			
<b>Downstream End General Rating</b>		<b>6</b>	<b>6</b>		
Structure Usage					
		Last	Now	Explanation of Condition	
Channel (U/S and D/S)					
Alignment		8	8	Culvert does not appear to take any flow. Lake levels low. Standing water in culvert due to silt at both ends. Buried 200mm below natural ground at both ends.	
Bank Stability		7	7		
HWM (m below Top of Culvert)		1.1		HWM not visible	
Drift (Y/N)		No			
Channel Bottom Degrading/Aggrading		AGGRADING			
Beavers (Y/N)		No			
(Fish Compensation Measure 1 : <b>NONE</b> )					
(Fish Compensation Measure 2 : <b>NONE</b> )					
<b>Channel General Rating</b>		<b>8</b>	<b>8</b>		

Maintenance Recommendations										
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #				
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION	2013	Remove silt from bevels.								
INSTALL CONCRETE/STEEL LINING										
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUTOFF										
REPAIR SEAMS										
OTHER ACTION	2013	Repair guardrail, 1 post, 1 terminal end and relap.								
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OTHER ACTION										
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>22.2/22.2</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>42.3/42.2</b>	<b>Est. Repl. Yr</b>	<b>2020</b>	<b>Maint. Req. (Y/N)</b>	<b>Yes</b>			
Special Comments for Next Inspection	Monitor crack, deflection and corrosion. LRA issued 15-Apr-2013 to Jeff Zhang. Preliminary engineering report completed in Oct 2012, recommended continued monitoring of structure.		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	03-Apr-2014	Previous Inspection Date		10-Apr-2012						
Inspection Cycle (Modified) (months)	12									
Comment										

**Maintenance Recommendations**

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