Bridge Culvert Inspection

Bridge File Number	71962 -1 Bridge Culvert	Form Type	CUL1
Year Built	1987	Lot No.	2
Bridge or Town Name	DIXONVILLE	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO WHITEMUD RIVER, 8.10.48.7, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	Clem Guenette
Located On	689:02 C1 1.457	Assistant Class	BR CLS B
Water Body Cl./Year		Inspection Date	19-Mar-2013
Navigabil. Cl./Year		Data Entry By	Lisa Fairhurst
Legal Land Location	SW SEC 18 TWP 87 RGE 25 W5M	Data Entry Date	08-Apr-2013
Longitude, Latitude	-117:58:37, 56:32:14	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	03-Apr-2013
Contract Main. Area	CMA04	Dept. Reviewer Name	
Clear Roadway/Skew	9.7 / -12 deg. (LHF)	Dept. Review Date	
AADT/Year	220 / 2012 (A)	Follow-Up By	
Road Classification	RCU-209-110		
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	-	1800	MP	31	125X26	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	2 wire O/H in North R/W	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		8	8	
Roadway Width (m)	9.700			
Embankment		7	7	
Sideslope (__:1)	4.0			
(Height of Cover(m) : **2.3**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

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		5	N	Snow covered Drift caught in u/s bevel - photo
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		4	N	
(Type : **NONE**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	N	(Bevel projecting 300 from fill, lower half. - 21Oct2009)
Beavers (Y/N)	No			
Upstream End General Rating		**4**	**4**	GR carried forward

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1800, Type: MP**)				
Barrel Last Accessible Date	19-Mar-2013			1451mm ice to crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	7	(est.-17-Aug-06) No rise measurements due to silt on floor
Measured Rise (mm)	1793			
Measured At Ring No.				
Sag (mm)	7			
Percent Sag				
Sidewall		N	7	@ centreline
Measured Span (mm)	1818			
Measured At Ring No.				
Deflection (mm)	18			
Percent Deflection	1			
Floor		N	N	Ice covered
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	5	
Separation (mm)	70			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	5	Pitting rust on lower 2/3
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): 1800, Type: MP**)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	N	Snow covered
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		5	N	Snow covered
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		5	N	Snow covered
Beavers (Y/N)	No			Snow covered
Downstream End General Rating		**5**	**5**	GR carried forward

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. Trees falling into channel downstream.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	NONE			
Beavers (Y/N)	No			
(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	2013	u/s bevel				
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) (%)**	**62.7/72.7**	Est. Repl. Yr	2023	Maint. Reqd. (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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	19-Jun-2016	Previous Inspection Date	21-Oct-2009		
Inspection Cycle (Default) (months)	39				
Comment					