Bridge Culvert Inspection

Bridge File Number	79416 -1 Bridge Culvert	Form Type	CUL1
Year Built	1982	Lot No.	4
Bridge or Town Name	ARDMORE	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO MARIE CREEK, 7.7.3, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	892:04 C1 7.967	Assistant Class	
Water Body Cl./Year		Inspection Date	15-Dec-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	NE SEC 12 TWP 64 RGE 4 W4M	Data Entry Date	11-Jan-2012
Longitude, Latitude	-110:27:48, 54:31:26	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	30-Dec-2011
Contract Main. Area	CMA08	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	12 / 38 deg. (RHF)	Dept. Review Date	18-Jan-2012
AADT/Year	2,260 / 2010 (A)	Follow-Up By	
Road Classification	RCU-210-110		
Detour Length (km)	100		

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	43	68X13	2.8	ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	Along West ditch.	Gas	
Power	3 wires OH 25m East of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks	BF tag on East bevel.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	In curve.
Vertical Alignment		8	8	Numerous wide transverse ACP cracks over pipe. Roadway super elevated across pipe.
Roadway Width (m)	12.000			
Embankment		8	8	
Sideslope (__:1)	6.0			
(Height of Cover(m) : **2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**6**	**6**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Cutoff Wall		X	X	
Bevel End		N	6	Minor dents/tears
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)				
Scour Protection		N	6	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		N	6	
Beavers (Y/N)	No			
Upstream End General Rating		**7**	**7**	

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	15-Dec-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	4	Insulated dents/flattening. Sag est at less than 10%.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	5	Heavy scaling.
Measured Span (mm)	1852			Near center
Measured At Ring No.				
Deflection (mm)	52			
Percent Deflection	3			
Floor		N	N	Under ice/water.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	5	Dented seam at West end.
Separation (mm)	80			
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	4	(Heavy corrosion and pitting, loss of section below waterline. 2002/03/19)
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 1800, Type: MP**)				
Ponding (Y/N)	Yes			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**3**	**4**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **250**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		**7**	**6**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.0			Grass on fence wire.
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		**8**	**8**	

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) (%)	**33.3/44.4**	**Sufficiency Rating (Last/Now) (%)**	**45.8/50.2**	Est. Repl. Yr	2021	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	Dave Lam	Previous Assistant's Name			
Next Inspection Date	15-Mar-2015	Previous Inspection Date	14-Aug-2008		
Inspection Cycle (Default) (months)	39				
Comment					