Bridge Culvert Inspection

Bridge File Number	72820 -1 Bridge Culvert	Form Type	CULE
Year Built	1952	Lot No.	4
Bridge or Town Name	DUNMORE	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO ROSS CREEK, 2.7.3, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	1:22 R1 14.649;1:22 L1 14.631	Assistant Class	
Water Body Cl./Year		Inspection Date	08-Feb-2012
Navigabil. Cl./Year		Data Entry By	Lauren Korte
Legal Land Location	NE SEC 11 TWP 12 RGE 4 W4M	Data Entry Date	26-Mar-2012
Longitude, Latitude	-110:26:30, 49:58:58	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	26-Feb-2012
Contract Main. Area	CMA23	Dept. Reviewer Name	Tim Davies
Clear Roadway/Skew	25.6 /	Dept. Review Date	29-Mar-2012
AADT/Year	6,360 / 2011 (A)	Follow-Up By	
Road Classification	RAD-412.4-120		
Detour Length (km)	1		

Bridge Culvert Information

Number of Culverts	1

Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	U/S	-	1200	MP	52			ROUND
1	MAIN	1525	1525	BP	30.5			RECTANGLE
1	D/S	-	1200	MP	13			ROUND

Special Features	
Special Features Comment	

Utilities (Located at)

Utility Attachments			
Telephone	North side.	Gas	
Power	South side, 3-wire; 40m FROM C.L.	Municipal	
Others		Problem (Y/N)	No
Remarks	U/S barrel located 75m West of AMA odometer test section sign. 3km test sign going East.		

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Gradual curve 200 m West.
Vertical Alignment		9	9	
Roadway Width (m)	25.600			
Embankment		7	7	North side is 6:1.
Sideslope (__:1)	4.0			
(Height of Cover(m) : **1.8**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction				CSP. South. Difficult to locate this culvert.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed				At stream bed ditch line.
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
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: U/S, Span (mm): , Rise (mm): 1200, Type: MP**)				
Barrel Last Accessible Date	16-Jun-2008			Water too deep to enter.
Special Features				
Special Feature				Went in to section #4 before ice depth made it to small to enter. Viewed from end- appears adequate.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(1100 @ Sections South of (CSP/BOX joint most likely install damage. Large dents, roof sag)).
Measured Rise (mm)	1165			
Measured At Ring No.	4			
Sag (mm)	35			
Percent Sag	3			
Sidewall		N	N	
Measured Span (mm)	1220			
Measured At Ring No.	4			
Deflection (mm)	20			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(Separation grouted)16-June-2008
Separation (mm)	60			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1200, Type: MP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	5	Flow is controlled by 900 mm RR pipe.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Rating		**N**	**N**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1525, Rise (mm): 1525, Type: BP**)				
Barrel Last Accessible Date	16-Jun-2008			
Special Features				
Special Feature				Ice 1m deep. Viewed from ends U/S and D/S- appears adequate.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(1100 @ Sections South of CSP/BOX Joint most likely install damage. Large dents, roof sag)
Measured Rise (mm)	1165			
Measured At Ring No.				(Sag measured @ bevel section) 16-June-2008
Sag (mm)	35			
Percent Sag	3			
Sidewall		N	N	
Measured Span (mm)	1220			
Measured At Ring No.				
Deflection (mm)	20			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(Separation grouted)16-June-2008
Separation (mm)	60			
Longitudinal Seams		X	X	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): 1525, Rise (mm): 1525, Type: BP**)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	5	Flow is controlled by 900 mm RR pipe.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**N**	**N**	

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction				North.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	N	Half full of ice.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	50			
Scour Protection		N	7	
(Type : **RIP RAP**)				
(Avg. Rock Size(mm) : **300**)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Downstream End General Rating		**N**	**N**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	Carries ditch drainage.
HWM (m below Top of Culvert)	0.0			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	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) (%)	**55.6/55.6**	**Sufficiency Rating (Last/Now) (%)**	**69.6/57.0**	Est. Repl. Yr	2020	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	Jason Rusu	Previous Assistant's Name			
Next Inspection Date	08-Nov-2013	Previous Inspection Date	07-Aug-2010		
Inspection Cycle (Default) (months)	21				
Comment					