Bridge Culvert Inspection

Bridge File Number	74691 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	1
Bridge or Town Name	ROSEMARY	Inspector Name	Tom Carey
Located Over	TRIBUTARY TO MATZHIWIN CREEK, 3.15.6, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	862:02 C1 1.527	Assistant Class	
Water Body Cl./Year		Inspection Date	10-Feb-2010
Navigabil. Cl./Year		Data Entry By	Erin Roberts
Legal Land Location	NW SEC 13 TWP 21 RGE 17 W4M	Data Entry Date	08-Mar-2010
Longitude, Latitude	-112:14:37, 50:47:25	Reviewer Name	Garry Roberts
Road Authority	Alberta Transportation (AIT)	Review Date	24-Feb-2010
Contract Main. Area	CMA23	Dept. Reviewer Name	Lorenz Bohnert
Clear Roadway/Skew	8.5 /	Dept. Review Date	09-Mar-2010
AADT/Year	240 / 2008 (A)	Follow-Up By	
Road Classification	RCU-208-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	26	68X13	4.2,4.2,4.2	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	west ditch	Gas	
Power	3 wire E ditch 15 m FROM C.L.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	3:1 @ EAST
Vertical Alignment		8	8	
Roadway Width (m)	8.500			
Embankment		7	N	Snow
Sideslope (__:1)	2.0			
(Height of Cover (m) : **2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**8**	**8**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		5	N	(Extensive surface rust) Ice and snow cover
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		6	N	Ice and snow cover
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **150**)				
Scour/Erosion		6	N	Ice and snow cover
Beavers (Y/N)	No			
Upstream End General Rating		**5**	**N**	

Bridge Culvert Barrel				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
(Pipe # : **1, Primary Span, Location Code: MAIN, Span (mm): - , Rise (mm): 2200, Type: MP**)				
Barrel Last Accessible Date	10-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		3	3	ESTIMATE ROOF Ice 700mm from roof at midpoint
Measured Rise (mm)				
Measured At Ring No.				GR carried
Sag (mm)	250			
Percent Sag	11			
Sidewall		3	3	Unable to get measurement of span @ widest point due to ice depth
Measured Span (mm)	2450			GR carried- sag appears as last inspec.
Measured At Ring No.	2			
Deflection (mm)	250			
Percent Deflection	11			
Floor		N	N	Ice Covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		4	4	250mm horiz separation d/s seam (small void behind n.side)
Separation (mm)	250			MID SEAM 130 mm SEPARATION.
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		5	N	(SURFACE RUST @ SIDEWALL @ WATERLINE) ice
Corrosion By Soil (Y/N)				
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): 2200, Type: MP**)				
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	(600 mm OF SILT ACCUMULATED ON FLOOR SHOULD FLUSH IN FLOOD.) 24/06/03
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		**3**	**3**	GR carried forward

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		E		e.end
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	Ice and snow cover
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		6	N	Ice and snow cover
(Type : **RIP RAP**)				
(Avg. Rock Size (mm) : **150**)				
Scour/Erosion		6	N	Ice and snow cover
Beavers (Y/N)	No			
Downstream End General Rating		**6**	**N**	Ice and snow cover

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		5	5	45 degree angle u/s
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)				
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			Snow
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				
Channel General Rating		**5**	**5**	GR carried forward

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) (%)	**33.3/33.3**	**Sufficiency Rating (Last/Now) (%)**	**53.4/52.5**	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Unable to measure barrel due to ice depths. Appears about same deflection as last inspec.	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	Tim Davies	Previous Assistant's Name			
Next Inspection Date	10-May-2013	Previous Inspection Date	02-Feb-2007		
Inspection Cycle (Default) (months)	39				
Comment					