

Bridge Culvert Inspection			
Bridge File Number	86266 -1 Bridge Culvert	Form Type	CULM
Year Built	1968	Lot No.	1
Bridge or Town Name	WATERCOURSE CULVERT ON HWY 33	Inspector Name	Russel Vanderschaaf
Located Over	2ND ORDER TRIBUTARY TO SWAN RIVER, 8.11.80.39.2.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	33:12 C1 12.239	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Feb-2013
Legal Land Location	NE SEC 9 TWP 67 RGE 9 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:18:10, 54:47:22	Data Entry Date	10-Apr-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA06	Review Date	07-Apr-2013
Clear Roadway/Skew	11.4 /	Dept. Reviewer Name	
AADT/Year	1,090 / 2012 (A)	Dept. Review Date	
Road Classification	RAU-212-110	Follow-Up By	
Detour Length (km)	12		

Bridge Culvert Information

Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1220	MP	73	68X13	2.8	ROUND
2	MAIN	-	810	MP	70	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	
Vertical Alignment		7	7	
Roadway Width (m)	11.400			
Embankment		N	N	Erosion gully @ SW: 40m long, 0.5m deep, 1m wide. One:20m long, 0.3m wide, 0.6m deep @ NW:20m long, 0.3m deep, 0.6m wide.-29-Oct-2010
Sideslope (__:1)	4.0			
(Height of Cover(m) : 9)				Under snow
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		E		Bevel end completely submerged in snow. South pipe
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Snow cover
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	N	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		N	N	GR 7 - 29-Oct-2010

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1220, Type: MP)				
Barrel Last Accessible Date	29-Oct-2010			Culvert completely submerged in snow.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	near cl-29-Oct-2010
Measured Rise (mm)	960			
Measured At Ring No.				
Sag (mm)	260			
Percent Sag	21			
Sidewall		N	N	near cl - 29-Oct-2010
Measured Span (mm)	1410			
Measured At Ring No.				
Deflection (mm)	190			
Percent Deflection	16			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	Rivettted seams - 29-Oct-2010
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1220, Type: MP)				
Coating		N	N	Superficial rust 5-7 o'clock. Superficial rust noted on exterior @ u/s end.-29-Oct-2010
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		N	N	Hanging outlet.- 29-Oct-2010
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	D/S scour. - 29-Oct-2010
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		2	2	GR carried fwd.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		W		North pipe
End Treatment (Concrete, Steel, Others, None)				
Headwall			X	
Collar			X	
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			N	Snow covered
Heaving (mm)				
Invert Above/Below Stream Bed				Snow covered
Above/Below (mm)				
Scour Protection			N	
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion			N	Snow covered
Beavers (Y/N)	No			
Downstream End General Rating			N	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		E		North pipe Snow covered
End Treatment (Concrete, Steel, Others, None)				
Headwall			X	
Collar			X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Wingwalls			X	
(Shape :)				
Cutoff Wall			X	
Bevel End			N	Snow covered
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection			N	Snow covered
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion			N	Snow covered
Beavers (Y/N)	No			
Upstream End General Rating			N	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 810, Type: MP)				
Barrel Last Accessible Date				Viewed from ends, shape looks adequate.-29-Oct-2010 Culvert completely submerged in snow.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 810, Type: MP)				
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG				
Ponding (Y/N)				
Fish Passage Adequacy		4	4	Hanging outlet-29-Oct-2009
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	N	D/S scour - 29-Oct-2010
Icing (Y/N)				
Siltting (Y/N)				
Drift (Y/N)				
Barrel General Rating		N	N	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		W		South pipe D/S ends completely submerged in snow.
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	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)				
Scour Protection		N	N	
(Type : NONE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	N	4x4 scour hole.-29-Oct-2010
Beavers (Y/N)	No			
Downstream End General Rating		3	3	GR carried fwd.

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		4	4	Flow impinges on banks d/s.
Bank Stability		5	5	
HWM (m below Top of Culvert)				
Drift (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading	DEGRADING			Couldn't tell due to snow.
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

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	2014	Replace					
OTHER ACTION	2013	Level 2					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	22.2/22.2	Sufficiency Rating (Last/Now) (%)	42.6/41.8	Est. Repl. Yr	2014	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Assessment being completed in 2010. Low Rating Advisory sent to Alan Saunders 06-Mar-2013. Barrel inaccessible last 2 inspections- Level 2 should be completed if pipe isn't replaced right away.		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	Brian Pientsch		Previous Assistant's Name	Lisbeth Medina			
Next Inspection Date	11-Nov-2014		Previous Inspection Date	05-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							