

Bridge Culvert Inspection				
Bridge File Number	76987 -2 Bridge Culvert		Form Type	CUL1
Year Built	2003		Lot No.	2
Bridge or Town Name	BLUEBERRY MTN		Inspector Name	Russel Vanderschaaf
Located Over	HAMELIN CREEK, 8.10.83, WATERCRS-ST		Inspector Class	BR CLS B
Located On	725:02 C1 17.378		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	06-Mar-2012
Legal Land Location	NW SEC 5 TWP 81 RGE 8 W6M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-119:13:00, 55:59:36		Data Entry Date	27-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA05		Review Date	22-Mar-2012
Clear Roadway/Skew	9.6 / 0 deg.		Dept. Reviewer Name	David Morrison
AADT/Year	390 / 2011 (A)		Dept. Review Date	18-Oct-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	61			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	10000	6200	CPA	129			ARCH
Special Features		CONC THRUST BEAM						
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone			Gas
Power	2 wire o/h East r/w		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Sag curve and settlement in pavement over top of centreline of pipe.- photo
Vertical Alignment		4	4	
Roadway Width (m)	9.600			
Embankment		3	N	Sloughing at multiple areas on West embankment. Snow covered.
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 17.6)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		3	4	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	Approx. 76m of cracks injected with polyurethane.
Collar		X	X	
Wingwalls		7	7	
(Shape : FLARE)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	2000			
Scour Protection		N	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 1000)				
Scour/Erosion		N	7	
Beavers (Y/N)	No			
Upstream End General Rating		5	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 10000, Rise (mm): 6200, Type: CPA)				
Barrel Last Accessible Date	01-Apr-2010			Too much ice/water to measure rise or span.
Special Features				
Special Feature				Approx 235m of cracks injected with polyurethane on u/s end. Grout on NE corner of panel spalling out from 10-11:00 approx. 300 deep.-photo Steel plate R22-R23
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	estimated
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		7	7	estimated
Measured Span (mm)	9909			
Measured At Ring No.				
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	ice covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		5	5	
Separation (mm)	45			
Longitudinal Seams		7	7	Grout key in roof.
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
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): 10000, Rise (mm): 6200, Type: CPA)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : WEIR)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		X	X	
Wingwalls		9	9	
(Shape : RIGHT ANGLE)				
Cutoff Wall		N	N	
Bevel End		9	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 1000)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		4	6	Two creeks come around sharp corners before inlet-riprap placed.
Bank Stability		3	4	Vertical banks u/s and d/s. Slough on NE embankment directly d/s of d/s riprap.
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		3	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	2012	Fill gap between steel plate and panel 23.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	58.0/62.8	Est. Repl. Yr	2056	Maint. Req. (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	Russel Vanderschaaf		Previous Assistant's Name				
Next Inspection Date	06-Jun-2015		Previous Inspection Date	01-Apr-2010			
Inspection Cycle (Default) (months)	39						
Comment							