

Bridge Culvert Inspection			
Bridge File Number	71934 -1 Bridge Culvert	Form Type	CUL1
Year Built	1991	Lot No.	4
Bridge or Town Name	DEBOLT	Inspector Name	Russel Vanderschaaf
Located Over	2ND ORDER TRIBUTARY TO DEBOLT CREEK, 8.10.58.17.2.1.1.1.1, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	43:04 L1 49.052	Assistant Class	
		Inspection Date	03-Dec-2012
Water Body Cl./Year		Data Entry By	Theresa Lacusta
Navigabil. Cl./Year		Data Entry Date	20-Jan-2013
Legal Land Location	NE SEC 3 TWP 72 RGE 1 W6M	Reviewer Name	Eric Carcoux
Longitude, Latitude	-118:03:37, 55:12:51	Review Date	09-Jan-2013
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	David Morrison
Contract Main. Area	CMA05	Dept. Review Date	20-Mar-2013
Clear Roadway/Skew	26.5 / -1 deg. (LHF)	Follow-Up By	
AADT/Year	5,550 / 2011 (A)		
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	MAIN	-	2700	MP	40.7	125X26	2.8	ROUND
1	D/S	-	2700	MP	46	125X26	2.8	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	7w o/h South r/w	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	RR 12 500m East.
Vertical Alignment		9	9	
Roadway Width (m)	26.500			WB Lane 12.3, EB Lane 14.2
Embankment		4	N	N. shoulder EBL has settled about 100mm each side of pipe-04-May-2009
Sideslope (_ :1)	5.0			
(Height of Cover(m) : 1.2)				Snow covered. N guardrail has collision damage in 2 locations.-photo
Guardrail (Y/N)	Yes			S. side only EBL, N. side only WBL.
Approach Road / Embankment General Rating		7	7	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		N	N	0.5m3 rock washed into barrel. Snow covered.
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2700, Type: MP)				
Barrel Last Accessible Date	03-Dec-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	Estimated due to ice.
Measured Rise (mm)	2675			Ice on floor R5-12.
Measured At Ring No.				
Sag (mm)	58			
Percent Sag	2			
Sidewall		7	7	
Measured Span (mm)	2758			
Measured At Ring No.				
Deflection (mm)	58			
Percent Deflection	2			
Floor		N	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		4	4	Piping at R516 seam. 08-Mar-2011
Separation (mm)	40			
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		4	4	Pitting rust on floor 1m wide, U/S half.
Corrosion By Soil (Y/N)	No			
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): , Rise (mm): 2700, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
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		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		8	8	

Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)				Hwm not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Stable
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		7	7	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	76.4/76.3	Est. Repl. Yr	2034	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor settlement in EBL and piping at R516.		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	03-Sep-2014		Previous Inspection Date	08-Mar-2011			
Inspection Cycle (Default) (months)	21						
Comment							