Bridge Culvert Inspection

Bridge File Number	79550 -1 Bridge Culvert	Form Type	CUL1
Year Built	1955	Lot No.	2
Bridge or Town Name	DEBOLT	Inspector Name	Russel Vanderschaaf
Located Over	2ND ORDER TRIBUTARY TO LITTLE SMOKY RIVER, 8.10.58.7.1.2, WATERCRS-ST	Inspector Class	BR CLS B
		Assistant Name	
Located On	676:02 C1 21.711	Assistant Class	
Water Body Cl./Year		Inspection Date	16-Sep-2010
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 5 TWP 75 RGE 24 W5M	Data Entry Date	04-Oct-2010
Longitude, Latitude	-117:40:40, 55:27:42	Reviewer Name	Arnold Assenheimer
Road Authority	Alberta Transportation (AIT)	Review Date	29-Sep-2010
Contract Main. Area	CMA03	Dept. Reviewer Name	Steve Pasquan
Clear Roadway/Skew	12.1 / -29 deg. (LHF)	Dept. Review Date	19-Nov-2010
AADT/Year	120 / 2009 (A)	Follow-Up By	
Road Classification	RCU-209-110		
Detour Length (km)	999		

Bridge Culvert Information

Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	SP	40.2	152X51	3.5	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North r/w	Gas	
Power	North r/w - 2 wire	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	T-intersect. 200m E. of culvert
Vertical Alignment		9	9	
Roadway Width (m)	12.100			
Embankment		8	8	
Sideslope (__:1)	5.0			
(Height of Cover(m) : **1.2**)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		**7**	**7**	

Upstream 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	

Upstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Bevel End		7	7	
Heaving (mm)	25			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
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: MAIN, Span (mm): , Rise (mm): 2200, Type: SP**)				
Barrel Last Accessible Date	16-Sep-2010			Silt 1.4m from crown u/s. Silt 1.0m from crown d/s.
Special Features				
Special Feature				Could get to ring 6 due to silt, shape looks ok.
(Type :)				
Special Feature				
(Type :)				
Roof		6	6	@ 16.4M FROM U/S END 50MM X 50MM HOLE-28-Oct-2000
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		6	6	N.side, 1 bolt missing @ corner of plates, both side-28-Oct-2000)
Measured Span (mm)	2072			
Measured At Ring No.	4			
Deflection (mm)	128			
Percent Deflection	6			
Floor		N	N	(7 rings in from u/s rust @ rock inden tations, 3 location, E. side - 2000/10/28)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		N	5	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
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): , Rise (mm): 2200, Type: SP**)				
Fish Passage Adequacy		X	6	
Baffle		N	N	
(Type :)				
Waterway Adequacy		X	4	(Completely full - 2004/02/25)
Icing (Y/N)	Yes			Silted 1/2 dia of pipe. 400mm dia long and smaller drift at u/s.-photo
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		**6**	**N**	G.R. 6.-28-OCT-2000

Downstream End				
Culvert Component		**Last**	**Now**	**Explanation of Condition**
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	7	
(Type : **NATURAL**)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		8	7	
Beavers (Y/N)	No			
Downstream End General Rating		**8**	**7**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel (U/S and D/S)				
Alignment		7	7	HWM NOT VISIBLE Banks sloughing.
Bank Stability		7	7	
HWM (m below Top of Culvert)				
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		**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) (%)	**66.7/55.6**	**Sufficiency Rating (Last/Now) (%)**	**78.2/54.5**	Est. Repl. Yr	2015	Maint. Reqd. (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	Eric Carcoux	Previous Assistant's Name			
Next Inspection Date	16-Dec-2013	Previous Inspection Date	28-May-2007		
Inspection Cycle (Default) (months)	39				
Comment					