

Bridge Culvert Inspection				
Bridge File Number	00198 -1 Bridge Culvert		Form Type	CUL1
Year Built	1999		Lot No.	4
Bridge or Town Name	FORT SASK		Inspector Name	Shane Hall
Located Over	TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.71, WATERCRS-ST		Inspector Class	BR CLS A
Located On	15:04 C1 0.260		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	13-Dec-2011
Legal Land Location	NW SEC 26 TWP 54 RGE 23 W4M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-113:17:31, 53:42:02		Data Entry Date	29-Jan-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Eric Carcoux
Contract Main. Area	CMA09		Review Date	19-Jan-2012
Clear Roadway/Skew	13.5 /		Dept. Reviewer Name	Brent Herrick
AADT/Year	8,790 / 2010 (A)		Dept. Review Date	02-Feb-2012
Road Classification	RAU-213.4-120		Follow-Up By	
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	-	3360	SP	74.4	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East & West r/w.	Gas	
Power	4 wires West r/w.	Municipal	Waterline 80m East
Others	File tag U/S end (W).	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Driveway directly North.
Vertical Alignment	6	6	Located in slight sag. No passing northbound.
Roadway Width (m)	13.500		Slight erosion channels over pipe in East sideslopes, grassed. On the East side there is a 3:1 sideslope followed by a 6:1 berm and ended with a 1:1 slope at the culvert D/S bevel end.
Embankment	5	5	Slight erosion channels over pipe in East sideslopes, grassed. On the East side there is a 3:1 sideslope followed by a 6:1 berm and ended with a 1:1 slope at the culvert D/S bevel end. (Erosion gully @ SE from ditch runoff.-photo-16-Mar-2010)
Sideslope (:1)	3.0		
(Height of Cover(m) : 8.5)			
Guardrail (Y/N)	Yes		West side only. Appears to be grassed and stable.
Approach Road / Embankment General Rating	6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	8	8	
Collar	8	8	
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall		N	N	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 350)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 3360 , Type: SP)				
Barrel Last Accessible Date	16-Sep-2006			Viewed from ends, looks good. Could not access due to unsafe ice.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	Could not measure due to ice on floor. Rating based on visula inspection fom ends.
Measured Rise (mm)	3385			
Measured At Ring No.	3			
Sag (mm)	25			
Percent Sag	1			
Sidewall		8	N	(Near centerline at ring #9, 3371mm span, 0.3%. 16/Sept/2006) (Could not reach ring #9 due to yielding silt & deep flow. Ring #7 - 3358.-16-Mar-2010) Rating based on visula inspection from ends.
Measured Span (mm)	3293			
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	Covered with water and silt approx 700mm at U/S.-Sept 16, 2006 Covered with ice.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	7	
Corrosion By Soil (Y/N)	Yes			
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): 3360, Type: SP)				
Ponding (Y/N)	Yes			Standing water in barrel, 1.5m at D/S.
Fish Passage Adequacy		6	6	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		N	N	GR was 8-Sept 16,2006
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	250			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Concrete bridge 7.0 m U/S and a SPCSP downstream.
Bank Stability		7	7	
HWM (m below Top of Culvert)				
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	Yes			
(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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	61.4/61.4	Est. Repl. Yr	2050	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor erosion gully.		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	Arnold Assenheimer		Previous Assistant's Name				
Next Inspection Date	13-Sep-2013		Previous Inspection Date	16-Mar-2010			
Inspection Cycle (Default) (months)	21						
Comment							