

Bridge Culvert Inspection			
Bridge File Number	74722 -2 Bridge Culvert	Form Type	CUL1
Year Built	2002	Lot No.	1
Bridge or Town Name	DRAYTON VALL	Inspector Name	Wade Nanninga
Located Over	2ND ORDER TRIBUTARY TO NORTH SASKATCHEWAN RIVER, 6.142.1, WATERCRS-ST	Inspector Class	BR CLS A
		Assistant Name	
Located On	22:30 C1 10.397	Assistant Class	
Water Body Cl./Year		Inspection Date	18-Oct-2011
Navigabil. Cl./Year		Data Entry By	Theresa Lacusta
Legal Land Location	SE SEC 5 TWP 49 RGE 7 W5M	Data Entry Date	25-Oct-2011
Longitude, Latitude	-114:59:20, 53:11:43	Reviewer Name	Eric Carcoux
Road Authority	Alberta Transportation (AIT)	Review Date	25-Oct-2011
Contract Main. Area	CMA11	Dept. Reviewer Name	Brent Herrick
Clear Roadway/Skew	11.4 / 11 deg. (RHF)	Dept. Review Date	26-Oct-2011
AADT/Year	6,540 / 2010 (A)	Follow-Up By	
Road Classification	RAU-211.8-110		
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	3050	SP	96.317	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	South r/w.	Gas		
Power	4 lines OH South r/w.	Municipal		
Others	Tag @ North end.	Problem (Y/N)	No	
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Near major intersection. Private access 100m East. Acceleration lane to West with limited sight distance. Grade to West.
Vertical Alignment		6	6	
Roadway Width (m)	11.400			
Embankment		6	5	Large slide (20m x 15m) North embankment over pipe.
Sideslope (:1)	3.0			
(Height of Cover(m) : 9.5)				
Guardrail (Y/N)	Yes			One section along South rail torn. Minor creasing, but still functional.
Approach Road / Embankment General Rating		6	3	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		9	9	
Collar		9	N	Covered with silt.
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	750			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			@ inlet
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): 3050, Type: SP)				
Barrel Last Accessible Date	18-Oct-2011			Silt/gravel 2m from crown
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	5	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				est
Percent Sag	5			
Sidewall		N	5	
Measured Span (mm)	3200			5m from u/s end
Measured At Ring No.				
Deflection (mm)	150			
Percent Deflection	5			
Floor		N	N	Covered with gravel & silt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings	0			Lower 1/3 not visible
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
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			
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): 3050, Type: SP)				
Fish Passage Adequacy		7	5	Large amount of silt - dam at opening.
Baffle		N	N	Buried under gravel & silt. (Minor drift caught by baffles. 27/June/2006)
(Type : SPOILER)				
Waterway Adequacy		7	4	1M
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		N	5	
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		8	8	
Heaving (mm)	200			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	750			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)		Yes		
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.1			05-Nov-2009 Drift across crown of U/S bevel.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading		AGGRADING		at u/s
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	2011	At inlet					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Repair N embankment slide					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	64.8/43.0	Est. Repl. Yr	2054	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	Kris Bosters		Previous Assistant's Name	Sara Wadlow			
Next Inspection Date	18-Jul-2013		Previous Inspection Date	05-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							