

Bridge Culvert Inspection			
Bridge File Number	71064 -1 Bridge Culvert	Form Type	CUL1
Year Built	1978	Lot No.	4
Bridge or Town Name	SPIRIT RIVER	Inspector Name	Brian Pientsch
Located Over	TRIBUTARY TO SPIRIT RIVER, 8.10.72.6.3, WATERCRS-ST	Inspector Class	BR CLS A
Located On	731:02 C1 7.696	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	07-Jul-2011
Legal Land Location	NW SEC 10 TWP 77 RGE 6 W6M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-118:51:13, 55:39:41	Data Entry Date	12-Aug-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA05	Review Date	13-Jul-2011
Clear Roadway/Skew	10 / -6 deg. (LHF)	Dept. Reviewer Name	Steve Pasquan
AADT/Year	590 / 2010 (A)	Dept. Review Date	16-Nov-2011
Road Classification	RCU-209-110	Follow-Up By	
Detour Length (km)	10		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	2610	2877	SPE	54.9	152X51	3.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East r/w	Gas	
Power	1 o/h East	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	RR 772 150m North. No passing northbound. Crest curve 50m north
Vertical Alignment		6	6	
Roadway Width (m)	10.000			
Embankment		7	7	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		(West)
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	
Collar		7	7	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	300			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		4	4	Sloughing 600mm above concrete North and South sides.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		4	4	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Barrel Last Accessible Date	07-Jul-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	5	
Measured Rise (mm)	2720			
Measured At Ring No.	8			
Sag (mm)	157			
Percent Sag	6			
Sidewall		7	7	
Measured Span (mm)	2639			
Measured At Ring No.	8			
Deflection (mm)	29			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		7	7	Alkali building on bolts and seems.
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)	No			
Coating		N	N	(Pitting rust on floor 2002-07-15)
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 2610, Rise (mm): 2877, Type: SPE)				
Fish Passage Adequacy		X	5	Drop at outlet.
Baffle		X	X	
(Type :)				
Waterway Adequacy		N	5	Scour hole @ outlet. Drift at top of crown at u/s end.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel General Rating		7	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		(East)
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	4	Bevel unsupported for 2.0m.
Heaving (mm)	150			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	300			
Scour Protection		N	4	Scour hole at outlet and around bevel. 15 x 6 x 1m- 8-Feb-06
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	4	Could not inspect due to snow.
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)	3.0			(Drift at inlet - 98-11-11)
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		6	6	

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) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	76.1/53.6	Est. Repl. Yr	2023	Maint. Reqd. (Y/N)	No
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	Laurie McCarron		Previous Assistant's Name	Russel Vanderschaaf			
Next Inspection Date	07-Oct-2014		Previous Inspection Date	18-Dec-2008			
Inspection Cycle (Default) (months)	39						
Comment							