

Bridge Culvert Inspection			
Bridge File Number	73928 -1 Bridge Culvert	Form Type	CUL1
Year Built	1992	Lot No.	2
Bridge or Town Name	SPIRIT RIVER	Inspector Name	Brian Pientsch
Located Over	HOWARD CREEK, 8.10.82.2, WATERCRS-ST	Inspector Class	BR CLS A
Located On	49:04 C1 6.165	Assistant Name	Brian Cote
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	06-Jul-2011
Legal Land Location	SE SEC 34 TWP 78 RGE 8 W6M	Data Entry By	Lisa Fairhurst
Longitude, Latitude	-119:08:58, 55:48:03	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	11 /	Dept. Reviewer Name	Steve Pasquan
AADT/Year	1,650 / 2010 (A)	Dept. Review Date	18-Nov-2011
Road Classification	RAU-210-110	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	-	4115	SP	70	152X51	4.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	East&West r/w.	Gas	250m North
Power	50m W. of c/l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Gabion wall at u/s end.
Vertical Alignment		7	7	
Roadway Width (m)	11.000			
Embankment		3	3	Large scour hole 8 x 6 x 1.5m deep @ NW corner-photo. Hole is 8m west of gabion wall.-photo
Sideslope (__:1)	3.0			
(Height of Cover(m) : 10)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	3	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		7	5	Narrow cracking midway down
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	7	
Beavers (Y/N)	Yes			1.8m high beaver dam 5m u/s.
Upstream End General Rating		7	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1 , Primary Span, Location Code: MAIN , Span (mm): , Rise (mm): 4115 , Type: SP)				
Barrel Last Accessible Date	27-Oct-2009			Not accessible due to depth of water.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Viewed from ends and looks good.
Measured Rise (mm)	3969			
Measured At Ring No.	11			
Sag (mm)	146			
Percent Sag	4			
Sidewall		7	7	
Measured Span (mm)	4206			
Measured At Ring No.	11			
Deflection (mm)	91			
Percent Deflection	2			
Floor		N	N	(Silt on floor. 27 Oct 2009)
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		7	N	
Separation (mm)	0			
Longitudinal Seams		7	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				2N stagger.
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	
Corrosion By Soil (Y/N)	No			
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): 4115, Type: SP)				
Fish Passage Adequacy		8	8	
Baffle		6	N	
(Type :)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	No			
Barrel General Rating		7	N	Previously rated 7 (27 Oct 2009)
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	N	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		5	5	Bevel sides have been pushed in est 300 mm due to fill pressure.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	4	Signs of scour d/s of apron.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		7	4	Scour d/s of apron.
Beavers (Y/N)	No			
Downstream End General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		6	5	Some vertical banks d/s
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading	DEGRADING			u/s
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	8	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2011	Place 30m3 rock riprap @ NW ditch.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Repair ditch erosion at NW corner.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/55.6	Sufficiency Rating (Last/Now) (%)	76.8/51.4	Est. Repl. Yr	2042	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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	06-Apr-2013		Previous Inspection Date	27-Oct-2009			
Inspection Cycle (Default) (months)	21						
Comment							