

Bridge Culvert Inspection				
Bridge File Number	78642 -1 Bridge Culvert		Form Type	CUL1
Year Built	1976		Lot No.	4
Bridge or Town Name	PURPLE SPRIN		Inspector Name	Tom Carey
Located Over	TID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	3:12 C1 12.654		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	12-Nov-2011
Legal Land Location	SW SEC 15 TWP 10 RGE 15 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-111:57:28, 49:48:54		Data Entry Date	07-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	21-Nov-2011
Clear Roadway/Skew	13 /		Dept. Reviewer Name	Alvin Gale
AADT/Year	3,650 / 2010 (A)		Dept. Review Date	12-Jan-2012
Road Classification	RAU-213-130		Follow-Up By	
Detour Length (km)	5			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	1829	1118	FP	54.9	68X13	2.8	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power	Multiple lines north r/w 25 m from c.l - also E & W.		Municipal	
Others	Fibre optics at North R/W.		Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		9	9	
Roadway Width (m)	13.400			
Embankment		9	9	Level over culvert. Berm at South end
Sideslope (_ :1)	6.0			
(Height of Cover(m) : 1.8)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		9	9	

Upstream End

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

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	8	
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): 1829, Rise (mm): 1118, Type: FP)				
Barrel Last Accessible Date	12-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	5	
Measured Rise (mm)	1060			
Measured At Ring No.	1			
Sag (mm)	58			
Percent Sag	5			
Sidewall		7	5	
Measured Span (mm)	1860			
Measured At Ring No.	1			
Deflection (mm)	31			
Percent Deflection	1			
Floor		N	6	Average 50mm deep water Scaling corrosion.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)	30			
Longitudinal Seams		7	7	Riveted plate
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		4	4	Surface corrosion at top of pipe ends Scaling corrosion at floor. Scaling with pitting at sidewalls.
Corrosion By Soil (Y/N)				
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): 1829, Rise (mm): 1118, Type: FP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	X	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Rating		8	8	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	Drop structure in upstream 20m D/S and 2m at U/S
Bank Stability		9	9	
HWM (m below Top of Culvert)	0.3			
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		9	9	

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) (%)	69.6/58.5	Est. Repl. Yr	2020	Maint. Req. (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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	12-Aug-2013		Previous Inspection Date	25-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							