

Bridge Culvert Inspection				
Bridge File Number	78592 -1 Bridge Culvert		Form Type	CULM
Year Built	1976		Lot No.	4
Bridge or Town Name	GRASSY LAKE		Inspector Name	Tom Carey
Located Over	SMR - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	3:12 C1 35.564		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Nov-2011
Legal Land Location	NW SEC 13 TWP 10 RGE 13 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-111:38:30, 49:49:40		Data Entry Date	07-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA24		Review Date	22-Nov-2011
Clear Roadway/Skew	13 /		Dept. Reviewer Name	Alvin Gale
AADT/Year	3,110 / 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	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	1829	1118	FP	75	68X13	4.2,4.2,4.2	ARCH
2	MAIN	1829	1118	FP	75	68X13	4.2,4.2,4.2	ARCH
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North ditch	Gas	
Power	North 25 m of c.l - 3 lines.	Municipal	
Others	Fibre optics @ South 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)	13.000		
Embankment	8	8	Berm at D/S end with 4:1 slope Level over culvert at U/S
Sideslope (__:1)	4.0		
(Height of Cover(m) : 1)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	9	9	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)			
Direction	S		East pipe, south end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		
Headwall	7	7	
Collar	X	X	Concrete lined canal.
Wingwalls	X	X	
(Shape :)			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	Concrete lined canal and banks. Most cracks foam sealed
(Type : CONCRETE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
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	19-Apr-2006			
Special Features				
Special Feature				East Pipe Entered 1/3 way from U/S - 400mm water at D/S half.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Estimate roof sag. Roof appears slightly flat 1/2 in from d/s Shape appears adequate. 1130 rise at 1/3 length.
Measured Rise (mm)	1068			
Measured At Ring No.	3			
Sag (mm)	28			
Percent Sag				
Sidewall		N	N	est 1850 span at 1/3 length.
Measured Span (mm)	1860			
Measured At Ring No.				
Deflection (mm)	30			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	TAR CAULKED
Separation (mm)	80			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(ASPHALT COATED Asphalt 25% worn OFF ROOF) 2006/04/19 Pitting at side walls.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			

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)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
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		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		East pipe, north end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Some vert cracks (minor).
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		West pipe, south end.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		7	7	Concrete lined canal Most cracks foam sealed
(Type : CONCRETE)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)				
Barrel Last Accessible Date	19-Apr-2006			
Special Features				
Special Feature				West Pipe Enter 1/3 way from U/S - 400mm deep water at D/S half.
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	Estimate roof sag. Roof appears slightly flat 1/4 in from d/s Shape appears adequate. 1100 rise at 1/3 length
Measured Rise (mm)	1090			
Measured At Ring No.	3			
Sag (mm)	28			
Percent Sag	4			
Sidewall		N	N	est 1850 soan at 1/3 length.
Measured Span (mm)	1870			
Measured At Ring No.	3			
Deflection (mm)	41			
Percent Deflection	2			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	(TAR CAULKED) 2006/04/19
Separation (mm)	80			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		N	N	(Asphalt coated Asphalt 25% worn off roof)2006/04/19 Pitting at side walls.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP)				
Ponding (Y/N)	No			(Corrosion with pitting at sidewalls.) 2006/04/19
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		N	N	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		North end, west pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		7	7	Minor spall at top of headwall at west.
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		X	X	
Heaving (mm)				
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	
Bank Stability		8	8	
HWM (m below Top of Culvert)	0.0			Water to the crown D/S at last inspection.
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) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	58.3/58.2	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	11-Aug-2013		Previous Inspection Date	25-Jun-2010			
Inspection Cycle (Default) (months)	21						
Comment							