

Bridge Culvert Inspection				
Bridge File Number	73820 -1 Bridge Culvert		Form Type	CUL1
Year Built	1951		Lot No.	1
Bridge or Town Name	GLEICHEN		Inspector Name	Jon Davies
Located Over	WID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	1:14 R1 41.767;1:14 L1 41.761		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Feb-2012
Legal Land Location	SE SEC 18 TWP 22 RGE 21 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-112:53:60, 50:51:49		Data Entry Date	18-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA30		Review Date	27-Feb-2012
Clear Roadway/Skew	25.6 / -1 deg. (LHF)		Dept. Reviewer Name	Tim Davies
AADT/Year	6,650 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	1819	SP	82.9	152X51	3.0	ROUND
Special Features	STORM WATER DRAIN, CONC FLOOR							
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	North & South r/w.	Gas	
Power	North r/w 1 wire, 35m FROM C.L.	Municipal	
Others	Fibre optics @ North R/W.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	7	Intersection at East. Grade rises West.
Vertical Alignment	7	6	
Roadway Width (m)	25.600		
Embankment	7	7	
Sideslope (_ :1)	3.5		
(Height of Cover(m) : 3.5)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		North.
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape :)			
Cutoff Wall	X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		7	7	Concrete floor.
Heaving (mm)	75			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	7	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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): , Rise (mm): 1819 , Type: SP)				
Barrel Last Accessible Date	11-Feb-2012			
Special Features				
Special Feature		7	7	No concrete floor in liner.
(Type : STORM WATER DRAIN)				P.r 7- Ice covered throughout.
Special Feature		7	N	
(Type : CONC FLOOR)				
Roof		6	6	Pipe has been lined with a 1500mm CSP from rings 9-14. -No deflections.Estimated.
Measured Rise (mm)	1784			
Measured At Ring No.	6			Estimate.
Sag (mm)	35			
Percent Sag	1			
Sidewall		3	3	Isolated perforations in East sidewall of two rings D/S from liner.
Measured Span (mm)	1854			
Measured At Ring No.	6			
Deflection (mm)	35			
Percent Deflection	1			
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams		6	6	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		3	3	Alkali staining @ bolt holes. Isolated sidewall perforations.
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): 1819, Type: SP)				
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		3	3	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	Concrete floor.
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	500			
Scour Protection		5	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		5	5	6mx6mx0.5m deep scour hole-rock lined.
Beavers (Y/N)	No			
Downstream End General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		5	5	Curve at U/S end. Cut bank @ West 30m D/S.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
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		5	5	

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	2012	Extend liner to D/S end.					
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	52.6/52.6	Est. Repl. Yr	2024	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	11-Nov-2013		Previous Inspection Date	20-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							