

Bridge Culvert Inspection			
Bridge File Number	77102 -1 Bridge Culvert	Form Type	CUL1
Year Built	1910	Lot No.	4
Bridge or Town Name	IRON SPRINGS	Inspector Name	Garry Roberts
Located Over	LNI - IRRIGATION C, WATERCRS-IC	Inspector Class	BR CLS A
Located On	845:04 C1 24.415	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	21-Mar-2012
Legal Land Location	SW SEC 36 TWP 11 RGE 20 W4M	Data Entry By	Lauren Korte
Longitude, Latitude	-112:37:14, 49:56:46	Data Entry Date	12-Apr-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Tom Carey
Contract Main. Area	CMA25	Review Date	23-Mar-2012
Clear Roadway/Skew	17.5 /	Dept. Reviewer Name	Tim Davies
AADT/Year	1,030 / 2011 (A)	Dept. Review Date	17-Apr-2012
Road Classification	RCU-208-110	Follow-Up By	
Detour Length (km)	3		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1590	MP	24	68X13		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments								
Telephone	West ROW.			Gas	Crosses channel 50 m West.			
Power	West ROW and NE.			Municipal				
Others				Problem (Y/N)	No			
Remarks								

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	9	8	Jct. Hwy. 25 400 m North.
Vertical Alignment	9	9	
Roadway Width (m)	8.200		
Embankment	8	7	
Sideslope (:1)	2.5		
(Height of Cover(m) : 1.3)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	9	8	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		West invert.
End Treatment (Concrete, Steel, Others, None)	NONE		
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		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		7	7	
(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): 1590 , Type: MP)				
Barrel Last Accessible Date	21-Mar-2012			Design 1590 x 1590.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		5	5	
Measured Rise (mm)	1474			
Measured At Ring No.	3			
Sag (mm)	116			
Percent Sag	7			
Sidewall		5	5	Slight bend (alignment) of U/S section.
Measured Span (mm)	1710			
Measured At Ring No.	3			
Deflection (mm)	120			
Percent Deflection	7			
Floor		6	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	60			
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		5	4	Heavy corrosion with some pitting on sidewall and floor.
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): 1590, Type: MP)				
Fish Passage Adequacy		X	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Rating		6	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		9	9	Drop structure 20 m U/S. Control gate 100 m D/S. Small road ditch drain pipe NE.
Bank Stability		7	7	
HWM (m below Top of Culvert)	0.7			No visible HWM.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	NONE			
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) (%)	67.2/73.5	Est. Repl. Yr	2023	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	Glen Mikesh		Previous Assistant's Name	Bernie Roseke			
Next Inspection Date	21-Jun-2015		Previous Inspection Date	22-Apr-2009			
Inspection Cycle (Default) (months)	39						
Comment							