

Bridge Culvert Inspection				
Bridge File Number	73130 -1 Bridge Culvert		Form Type	CUL1
Year Built	1985		Lot No.	1
Bridge or Town Name	COUNTESS		Inspector Name	Jon Davies
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS B
Located On	1:16 L1 29.558;1:16 R1 29.592		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	11-Feb-2012
Legal Land Location	SW SEC 33 TWP 20 RGE 17 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-112:18:34, 50:43:56		Data Entry Date	18-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	27-Feb-2012
Clear Roadway/Skew	27.1 /		Dept. Reviewer Name	Tim Davies
AADT/Year	6,860 / 2010 (A)		Dept. Review Date	22-Mar-2012
Road Classification	RFD-412.4-130		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	3840	2450	RPE	75.6	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South & North r/w.	Gas	
Power	80 m South, 3-wire from C.L.	Municipal	
Others	F.O N R/W.	Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	On curve - superelevated.
Vertical Alignment	7	7	Limited sight distance.
Roadway Width (m)	27.100		
Embankment	7	7	5:1 North side.
Sideslope (___:1)	3.0		
(Height of Cover(m) : 2.5)			
Guardrail (Y/N)	Yes		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction			South.
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		N	6	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		7	7	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
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): 3840, Rise (mm): 2450, Type: RPE)				
Barrel Last Accessible Date	11-Feb-2012			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	3	Roof flattening @ U/S 1/3 of pipe.
Measured Rise (mm)	2090			Shape OK in remainder of pipe.
Measured At Ring No.	3			Est at U/S 1/3.
Sag (mm)	360			
Percent Sag	14			
Sidewall		N	5	
Measured Span (mm)	4042			
Measured At Ring No.	3			
Deflection (mm)	202			
Percent Deflection	5			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	6	
Separation (mm)	0			
Longitudinal Seams		N	5	In area of flat roof 3mm gap max between plates.
Total No. of Cracked Rings	0			Lower sidewall and floor not visible.
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	No			
Coating		N	6	Superficial corrosion below water line.
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): 3840, Rise (mm): 2450, Type: RPE)				
Fish Passage Adequacy		7	7	
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				North end.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		N	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		7	7	Ingrown.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 150)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Rating		N	6	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				No HWM visible.
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		7	7	

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	2012	Dewater & perform level II. Consider install of rise chord for roof sag measurement.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	33.3/33.3	Sufficiency Rating (Last/Now) (%)	53.8/54.8	Est. Repl. Yr	2012	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Roof sag was estimated. Appears stable. Confirmed location of worst sag and sidewall deflect. On from last barrel access date. Recommend actual rise measurement be confirmed in 2012 prior to estimate of year of replacement made.		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	Jason Rusu		Previous Assistant's Name				
Next Inspection Date	11-Nov-2013		Previous Inspection Date	08-Aug-2010			
Inspection Cycle (Default) (months)	21						
Comment							