

Bridge Culvert Inspection				
Bridge File Number	72078 -1 Bridge Culvert		Form Type	CUL1
Year Built	1981		Lot No.	4
Bridge or Town Name	GEM		Inspector Name	Tom Carey
Located Over	EID - IRRIGATION C, WATERCRS-IC		Inspector Class	BR CLS A
Located On	862:04 C1 10.552		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Feb-2010
Legal Land Location	NW SEC 35 TWP 23 RGE 16 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-112:08:41, 51:00:07		Data Entry Date	08-Mar-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	24-Feb-2010
Clear Roadway/Skew	8.2 / -45 deg. (LHF)		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	150 / 2008 (A)		Dept. Review Date	09-Mar-2010
Road Classification	RCU-210-110		Follow-Up By	
Detour Length (km)	8			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	3885	2490	RPE	36.6	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone			Gas	
Power	3-wire east		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Canal road on 3 sides
Vertical Alignment		8	8	
Roadway Width (m)	8.200			
Embankment		7	N	Snow
Sideslope (_ :1)	3.0			
(Height of Cover (m) : 2)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		West
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	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		7	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 200)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	N	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3885, Rise (mm): 2490, Type: RPE)				
Barrel Last Accessible Date	09-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Estimate
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	2			
Sidewall		7	7	INWARD
Measured Span (mm)	3840			
Measured At Ring No.	6			
Deflection (mm)	45			
Percent Deflection	1			
Floor		N	N	Ice Covered
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	7	
Separation (mm)				
Longitudinal Seams		7	7	
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)	Yes			
Coating		6	5	20mm soil corrosion spots all along both side walls
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			No perf or section loss
Ponding (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3885, Rise (mm): 2490, Type: RPE)				
Fish Passage Adequacy		X	X	
Baffle (Type :)		X	X	
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		East
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	50			
Invert Above/Below Stream Bed		BELOW		
Above/Below (mm)	500			
Scour Protection (Type : RIP RAP) (Avg. Rock Size (mm) : 200)		7	N	Snow
Scour/Erosion		7	N	
Beavers (Y/N)		No		
Downstream End General Rating		7	N	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	CURVES TO NW Trunout structure in the SW corner
Bank Stability		7	N	Snow
HWM (m below Top of Culvert)	0.6			
Drift (Y/N)		No		
Channel Bottom Degradation/Aggrading		AGGRADING		
Beavers (Y/N)		No		
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	GR carried forward

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	81.0/77.0	Est. Repl. Yr	2028	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	09-May-2013		Previous Inspection Date	30-Jan-2007			
Inspection Cycle (Default) (months)	39						
Comment							