

Bridge Culvert Inspection				
Bridge File Number	72079 -1 Bridge Culvert		Form Type	CUL1
Year Built	1986		Lot No.	1
Bridge or Town Name	GEM		Inspector Name	Tom Carey
Located Over	2ND ORDER TRIBUTARY TO MATZHIWIN CREEK, 3.14.3.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	862:04 C1 13.560		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	09-Feb-2010
Legal Land Location	SW SEC 1 TWP 24 RGE 16 W4M		Data Entry By	Erin Roberts
Longitude, Latitude	-112:06:45, 51:00:31		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	8.5 /		Dept. Reviewer Name	Lorenz Bohnert
AADT/Year	110 / 2008 (A)		Dept. Review Date	09-Mar-2010
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	10			

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2200	MP	25	125X26		ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	south		Gas	
Power	2-wire N., 3-wire X's road W.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	
Vertical Alignment		7	7	
Roadway Width (m)	8.720			
Embankment		7	N	Snow
Sideslope (__:1)	3.0			
(Height of Cover (m) : 1.5)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		N		NORTH END
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		4	4	rusty & roof bent/DAMAGED pitting- perforations at West
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		6	N	(SMALL RIPRAP)
(Type : RIP RAP)				Snow
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): -, Rise (mm): 2200, Type: MP)				
Barrel Last Accessible Date	09-Feb-2010			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Est
Measured Rise (mm)	2150			
Measured At Ring No.				
Sag (mm)	50			
Percent Sag	2			
Sidewall		7	3	Scaling and pitting corrosion
Measured Span (mm)	2250			2 perforations 20mm dia. seen at East side
Measured At Ring No.	1			
Deflection (mm)	50			
Percent Deflection	2			
Floor		N	N	ice covered- IMPD
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	5	At U/S seam
Separation (mm)	90			
Longitudinal Seams		X	X	
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)				
Longitudinal Stagger (Y/N)				
Coating		4	3	Heavy pitted and flaing rust- all along sidewall
Corrosion By Soil (Y/N)	No			2- 20mm dia. perforations at East side
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): 2200, Type: MP)				
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	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		4	4	Heavy pitting & Flaking
Heaving (mm)				
Invert Above/Below Stream Bed	BELOW			Ice
Above/Below (mm)	800			
Scour Protection		6	N	Snow
(Type : RIP RAP)				
(Avg. Rock Size (mm) : 150)				
Scour/Erosion		6	N	
Beavers (Y/N)	No			
Downstream End General Rating		4	4	
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 visible HWM
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	AGGRADING			
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	2015	or 2020: Plan for a liner in 5-10 years					
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	77.8/33.3	Sufficiency Rating (Last/Now) (%)	71.9/52.2	Est. Repl. Yr	2018	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	Tim Davies		Previous Assistant's Name				
Next Inspection Date	09-May-2013		Previous Inspection Date	30-Jan-2007			
Inspection Cycle (Default) (months)	39						
Comment							