

Bridge Culvert Inspection			
Bridge File Number	07282 -1 Bridge Culvert	Form Type	CUL1
Year Built	1954	Lot No.	2
Bridge or Town Name	DELIA	Inspector Name	Owen Salava
Located Over	TRIBUTARY TO MICHICHI CREEK, 3.35.6, WATERCRS-ST	Inspector Class	BR CLS A
Located On	851:04 C1 15.953	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	28-Jan-2011
Legal Land Location	NW SEC 29 TWP 30 RGE 17 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:22:21, 51:35:57	Data Entry Date	03-Mar-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA21	Review Date	03-Feb-2011
Clear Roadway/Skew	9.8 /	Dept. Reviewer Name	Chris Black
AADT/Year	340 / 2009 (A)	Dept. Review Date	04-Mar-2011
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	5		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	37.2	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	W r/w.	Gas	
Power	E r/w 3 lines O/H.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Approach North end
Vertical Alignment		8	8	
Roadway Width (m)	9.800			
Embankment		8	8	
Sideslope (__:1)	2.7			
(Height of Cover(m) : 3.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		8	8	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		E		Covered by snow drift.
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		6	N	Snow drift covered.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	N	Snow covered.
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	Snow covered.
Beavers (Y/N)	No			
Upstream End General Rating		6	6	GR carried forward from 17Feb2009.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Barrel Last Accessible Date	17-Feb-2009			Pipe closed off by snow drifts.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	
Measured Rise (mm)	1480			
Measured At Ring No.	6			
Sag (mm)	20			
Percent Sag	1			
Sidewall		7	N	
Measured Span (mm)	1530			
Measured At Ring No.	6			
Deflection (mm)	30			
Percent Deflection	2			
Floor		3	N	(R2 & R4-5 have perforations in valleys on floor. 17Feb2009).
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	N	(Missing 10 bolts @ seam where extended. Very slight separations on 2 rings. 17Feb2009).
Separation (mm)	0			
Longitudinal Seams		6	N	(1 N Stagger. 17Feb2009).
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			
Coating		3	N	(Perforations in floor R2-5, others not far behind with deep pitting. 17Feb2009).
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
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): 1500, Type: SP)				
Fish Passage Adequacy		5	5	(Rating carried forward).
Baffle		X	X	
(Type :)				
Waterway Adequacy		6	N	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	GR carried forward from 17Feb2009.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		Snow drift covered.
End Treatment (Concrete, Steel, Others, None)		STEEL		
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		4	N	(Damaged, abrasion present. Hole N side. Perforations on bottom of bevel end. 17Feb2009).
Heaving (mm)	100			
Invert Above/Below Stream Bed		ABOVE		
Above/Below (mm)	200			
Scour Protection		3	N	(Rip on S side. 17Feb2009).
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		3	N	(Rip-rap and natural grass. Scour hole @ end of invert 6m x 8m x 1.5 - photo. 17Feb2009).
Beavers (Y/N)		No		
Downstream End General Rating		3	3	GR carried forward from 17Feb2009.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not 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		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							
PLACE ADDITIONAL RIP RAP	2011	Approx 50 m3 C1 @ D/S, if not yet done.					
REMOVE DRIFT ACCUMULATION							
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Install concrete floor, if not yet done.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/44.4	Sufficiency Rating (Last/Now) (%)	53.6/63.1	Est. Repl. Yr	2030	Maint. Req'd. (Y/N)	Yes
Special Comments for Next Inspection	Maintenance carried forward, unable to confirm.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2003.08.18 Replace culvert in 2020.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	28-Apr-2014		Previous Inspection Date	17-Feb-2009			
Inspection Cycle (Default) (months)	39						
Comment							