

Bridge Culvert Inspection				
Bridge File Number	02354 -1 Bridge Culvert		Form Type	CUL1
Year Built	1987		Lot No.	4
Bridge or Town Name	HOLDEN		Inspector Name	Jason Saly
Located Over	2ND ORDER TRIBUTARY TO VERMILION RIVER, 6.5.44.1, WATERCRS-ST		Inspector Class	BR CLS A
Located On	855:12 C1 13.632		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	03-Jun-2010
Legal Land Location	SW SEC 14 TWP 48 RGE 16 W4M		Data Entry By	Jill Potts
Longitude, Latitude	-112:14:44, 53:08:24		Data Entry Date	01-Jul-2010
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA16		Review Date	23-Jun-2010
Clear Roadway/Skew	12 / 34 deg. (RHF)		Dept. Reviewer Name	Chris Black
AADT/Year	520 / 2009 (A)		Dept. Review Date	06-Jul-2010
Road Classification	RCU-209-110		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	-	3670	SP	80.5	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments				
Telephone	West r/w.		Gas	
Power	1 wire 25m east r/w.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Approach 60m SE.
Vertical Alignment		8	7	
Roadway Width (m)	12.000			
Embankment		N	5	Minor ditch erosion @ all 4 corners. Minor embankment erosion over pipe, worst at SE ditch & over East embankment.
Sideslope (__:1)	3.0			
(Height of Cover(m) : 7.8)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End

Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1100			
Scour Protection		N	6	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	6	
Beavers (Y/N)	Yes			
Upstream End General Rating		8	6	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP)				
Barrel Last Accessible Date	22-Mar-2007			Water 1.5m deep in pipe. Viewed from ends.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		8	N	
Measured Rise (mm)	3670			
Measured At Ring No.	8			
Sag (mm)	0			
Percent Sag	0			
Sidewall		8	N	
Measured Span (mm)	3665			
Measured At Ring No.	8			
Deflection (mm)	5			0.1%
Percent Deflection	0			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	
Separation (mm)	0			
Longitudinal Seams		8	N	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		7	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			(2.245m clear, ice to roof @ mid span. 22/Mar/2007)

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3670, Type: SP)				
Fish Passage Adequacy		9	9	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	9	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	Previous G.R. was "8" from 22/Mar/2007.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1100			
Scour Protection		N	4	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		N	4	Ditch scour @ SE corner worst.
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		N	6	
HWM (m below Top of Culvert)				HWM not visible. Minor.
Drift (Y/N)	Yes			
Channel Bottom Degrading/Aggrading				Unknown.
Beavers (Y/N)	Yes			
(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							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	88.9/55.6	Sufficiency Rating (Last/Now) (%)	86.7/69.4	Est. Repl. Yr	2041	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Monitor ditch erosion.		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	03-Sep-2013		Previous Inspection Date	22-Mar-2007			
Inspection Cycle (Default) (months)	39						
Comment							