

Bridge Culvert Inspection			
Bridge File Number	08672 -1 Bridge Culvert	Form Type	CUL1
Year Built	1983	Lot No.	3
Bridge or Town Name	HAY LAKES	Inspector Name	Dave Lam
Located Over	CAMROSE CREEK, 5.44, WATERCRS-ST	Inspector Class	BR CLS A
Located On	617:02 C1 4.855	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	11-Jul-2011
Legal Land Location	SE SEC 3 TWP 49 RGE 21 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-112:59:12, 53:11:33	Data Entry Date	16-Aug-2011
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA16	Review Date	27-Jul-2011
Clear Roadway/Skew	9.8 / 0 deg.	Dept. Reviewer Name	Andrew Smikles
AADT/Year	760 / 2010 (A)	Dept. Review Date	29-Aug-2011
Road Classification	RCU-210-110	Follow-Up By	
Detour Length (km)	6		

Bridge Culvert Information

Number of Culverts	1							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	3050	SP	36	152X51	3.0	ROUND
Special Features								
Special Features Comment								

Utilities (Located at)

Utility Attachments			
Telephone	South r/w	Gas	Approx. 50m W.
Power	3W 15m N r/w off c.l.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road / Embankment

	Last	Now	Explanation of Condition
Horizontal Alignment	8	8	Access road to E & W.
Vertical Alignment	7	7	Crest curve to E.
Roadway Width (m)	9.800		
Embankment	7	7	
Sideslope (_ :1)	3.0		
(Height of Cover(m) : 5.2)			
Guardrail (Y/N)	No		
Approach Road / Embankment General Rating	7	7	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	N		
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	6	Small tear in side of bevel-photo. Estimated.
Heaving (mm)	70			
Invert Above/Below Stream Bed	BELOW			Can't verify due to water.
Above/Below (mm)	750			
Scour Protection		8	5	Bevel projecting 1.0m from fill (photo).
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		8	5	
Beavers (Y/N)	No			
Upstream End General Rating		6	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 3050, Type: SP)				
Barrel Last Accessible Date	16-Mar-2004			Viewed from both ends, shape looks OK.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		N	N	(1.5m of water. 05Sep2010).
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	100			
Percent Sag				
Sidewall		N	N	1.5m of water in pipe.
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)	87			
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	N	
Separation (mm)	0			
Longitudinal Seams		N	N	IN
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	7	
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): 3050, Type: SP)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			(Under water. 05Sep2010).
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	N	GR was N from 05Sep2010.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
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)	120			Estimated.
Invert Above/Below Stream Bed	BELOW			Under water.
Above/Below (mm)	750			
Scour Protection		8	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		7	5	
Beavers (Y/N)	No			
Downstream End General Rating		7	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	Bends U/S of pip.
Bank Stability		7	7	
HWM (m below Top of Culvert)	1.4			(05Sep2010).
Drift (Y/N)	Yes			Drift caught on fenceline at S channel (photo).
Channel Bottom Degrading/Aggrading				Not visible.
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	At u/s bevel end.					
REMOVE DRIFT ACCUMULATION	2011	At S fenceline.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTOFF							
REPAIR SEAMS							
OTHER ACTION	2011	Reshape clay seal along u/s bevel & relocate rock.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	64.8/61.8	Est. Repl. Yr	2049	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	Glen Smith		Previous Assistant's Name				
Next Inspection Date	11-Oct-2014		Previous Inspection Date	05-Jun-2007			
Inspection Cycle (Default) (months)	39						
Comment							