

Bridge Culvert Inspection				
Bridge File Number	74076 -1 Bridge Culvert		Form Type	CUL1
Year Built	1982		Lot No.	4
Bridge or Town Name	LACOMBE		Inspector Name	Jason Saly
Located Over	WOLF CREEK, 5.56, WATERCRS-ST		Inspector Class	BR CLS A
Located On	2A:20 C1 4.318		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	22-Nov-2011
Legal Land Location	SW SEC 4 TWP 41 RGE 26 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-113:41:54, 52:29:49		Data Entry Date	21-Dec-2011
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA19		Review Date	15-Dec-2011
Clear Roadway/Skew	13.2 /		Dept. Reviewer Name	Andrew Smikles
AADT/Year	6,570 / 2010 (A)		Dept. Review Date	09-Jan-2012
Road Classification	RAU-213.4-110		Follow-Up By	
Detour Length (km)	4			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	3495	3854	SPE	46.3	152X51	4.0	ELLIPSE
Special Features								
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone	East r/w.		Gas
Power	1 wire 20m West of c/l & 6 wire 20m East of c/l.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Box culvert 30m East under railway track. Approach 60m SW & 150m North.
Vertical Alignment		8	8	
Roadway Width (m)	13.000			Transverse crack in ACP width of road over pipe - sealed.
Embankment		7	7	(560mm road top to c/l. 10Feb2010). Snow along shoulders.
Sideslope (_ :1)	3.0			
(Height of Cover(m) : 4)				
Guardrail (Y/N)	Yes			
Approach Road / Embankment General Rating		7	7	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		E		
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Headwall		X	X	Snow covered.
Collar		N	N	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Bevel End		5	5	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		N	N	(Well vegetated. 20/Mar/2007). Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	
Beavers (Y/N)	No			
Upstream End General Rating		5	5	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3495, Rise (mm): 3854, Type: SPE)				
Barrel Last Accessible Date	22-Nov-2011			
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Type :)				
Roof		7	7	Not measured, ice.
Measured Rise (mm)	3720			
Measured At Ring No.	10			
Sag (mm)	134			
Percent Sag	4			(3.5%. 10Feb2010).
Sidewall		6	6	9 o'clock seam flattens R3-9, ok.
Measured Span (mm)	3632			
Measured At Ring No.	10			
Deflection (mm)	137			
Percent Deflection	4			3.9%
Floor		N	N	Ice.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	Leaking @ lower circ. seam bolts at all rings. Offset 4 corrugations at mid height.
Separation (mm)	0			
Longitudinal Seams		6	6	Leaking through bolt holes on lower S sidewall seam.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	No			
Coating		6	6	Soil side corrosion coming through lower bolt holes. Water side superficial.
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): 3495, Rise (mm): 3854, Type: SPE)				
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type :)				
Waterway Adequacy		9	8	(450mm @ midspan, gravel & clay. 03/09/04)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		6	6	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		W		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	7	
Heaving (mm)	100			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		N	N	(Pipe is 700mm protruding from embankment. 10Feb2010). (Little scour protection. 20/Mar/2007). Snow covered.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		N	N	(Minor scour hole @ D/S end. 20/Mar/2007) Snow covered.
Beavers (Y/N)	No			
Downstream End General Rating		5	5	From scour rating of 20/Mar/2007.
Structure Usage				
		Last	Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
Bank Stability		6	6	
HWM (m below Top of Culvert)				No HWM visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading	DEGRADING			
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							
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) (%)	66.7/66.7	Sufficiency Rating (Last/Now) (%)	70.8/67.0	Est. Repl. Yr	2040	Maint. Req. (Y/N)	No
Special Comments for Next Inspection	Check u/s bevel heaving.		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	Owen Salava		Previous Assistant's Name				
Next Inspection Date	22-Aug-2013		Previous Inspection Date	10-Feb-2010			
Inspection Cycle (Default) (months)	21						
Comment							