

Bridge Culvert Inspection				
Bridge File Number	81846 -1 Bridge Culvert		Form Type	CUL1
Year Built	1993		Lot No.	4
Bridge or Town Name	VIKING		Inspector Name	Owen Salava
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	619:02 C1 13.858		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	07-Nov-2012
Legal Land Location	SW SEC 32 TWP 47 RGE 11 W4M		Data Entry By	Marcia Chavez
Longitude, Latitude	-111:34:57, 53:05:34		Data Entry Date	21-Nov-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	John O'Brien
Contract Main. Area	CMA16		Review Date	15-Nov-2012
Clear Roadway/Skew	8.6 / -5 deg. (LHF)		Dept. Reviewer Name	Andrew Smikles
AADT/Year	740 / 2011 (A)		Dept. Review Date	26-Nov-2012
Road Classification	RCU-209-110		Follow-Up By	
Detour Length (km)	2			

Bridge Culvert Information								
Number of Culverts		1						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	2550	MP	38.7	68X13	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information											
Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)											
Posted:	Lane	NB	On Bridge (m)	In Advance (Y/N)	No	Lane	SB	On Bridge (m)	In Advance (Y/N)	No	
Remarks											

Utilities (Located at)			
Utility Attachments			
Telephone	Along south ditch.		Gas
Power	2 wire O/H 18m South of c/l.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	Roadway curves across pipe on superelevation. Long sag curve with limited sight distance to the North. No passing.
Vertical Alignment		6	6	
Roadway Width (m)	8.600			
Embankment		7	7	4:1 @ North.
Sideslope (___:1)	3.0			
(Height of Cover(m) : 2.7)				
Guardrail (Y/N)	No			
Approach Road / Embankment General Rating		6	6	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		N		
End Treatment (Concrete, Steel, Others, None)		NONE		
Headwall		X	X	
Collar		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
Wingwalls (Shape :)		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	Protrudes from fill 6m.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection (Type : NATURAL) (Avg. Rock Size(mm) :)		X	7	
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2550, Type: MP)				
Barrel Last Accessible Date	07-Nov-2012			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		7	7	Roof sag est at 4.3%.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	110			
Percent Sag				
Sidewall		7	7	
Measured Span (mm)	2660			@ mid.
Measured At Ring No.	2			
Deflection (mm)	110			4.3%
Percent Deflection	4			
Floor		N	N	Covered with gravel.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	Barrel extended on both ends with a grouted connection. 100mm gap @ South circumferential seam, no infiltration.
Separation (mm)	100			
Longitudinal Seams		X	X	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		8	8	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2550, Type: MP)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	

Downstream End				
Culvert Component		Last	Now	Explanation of Condition
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		X	X	Barrel protrudes from fill 5m.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		X	7	
(Type : NATURAL)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		X	X	
Beavers (Y/N)	No			
Downstream End General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Roadway Surface		8	8	
(Type :)				
Icing (Y/N)	No			Gravel.
Traffic Safety Features		X	X	
Type	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

Structure Usage				
		Last	Now	Explanation of Condition
Drainage		8	8	
Structure In Use (Y/N)	Yes			Fences in good condition.
Grade Separation General Rating		8	8	

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) (%)	77.8/77.8	Sufficiency Rating (Last/Now) (%)	83.8/84.0	Est. Repl. Yr	2043	Maint. Req. (Y/N)	No
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)	Y						
Proposed Action	2007.12.29 Check for safety in respect to lack of guardrails. Brownlee & Associates						
Previous Inspector's Name	Owen Salava		Previous Assistant's Name				
Next Inspection Date	07-Feb-2016		Previous Inspection Date	27-Jan-2010			
Inspection Cycle (Default) (months)	39						
Comment							