

Bridge Culvert Inspection			
Bridge File Number	79119 -1 Bridge Culvert	Form Type	CUL1
Year Built	1979	Lot No.	3
Bridge or Town Name	VIKING	Inspector Name	Jason Saly
Located Over	TRAIL-ANIMAL, OVER SP	Inspector Class	BR CLS A
Located On	36:18 C1 25.965	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	09-Jan-2013
Legal Land Location	SW SEC 24 TWP 50 RGE 13 W4M	Data Entry By	Marcia Chavez
Longitude, Latitude	-111:47:04, 53:19:36	Data Entry Date	12-Feb-2013
Road Authority	Alberta Transportation (AIT)	Reviewer Name	John O'Brien
Contract Main. Area	CMA14	Review Date	19-Jan-2013
Clear Roadway/Skew	12 /	Dept. Reviewer Name	Darron Ahlstedt
AADT/Year	1,150 / 2011 (A)	Dept. Review Date	13-Feb-2013
Road Classification	RAU-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	PI./Slab Thickness	Shape
1	MAIN	-	2134	MP	31.7	75X25	2.8	ROUND
Special Features								
Special Features Comment								

Posting Information

Required Vert. Clearance Posting (m)											
Posted Vertical Clearance (Y/N)	No										
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)		Lane	WB	On Bridge (m)		In Advance (Y/N)
Remarks	Not required - cattlepass.										

Utilities (Located at)

Utility Attachments											
Telephone	West r/w.					Gas					
Power	2 wire OH 30m East of c/l, E fenceline.					Municipal					
Others						Problem (Y/N)	No				
Remarks											

Approach Road / Embankment

		Last	Now	Explanation of Condition
Horizontal Alignment		8	8	Sag curve with no passing on crests to South.
Vertical Alignment		6	6	
Roadway Width (m)	12.000			Trans. crack in ACP S of pipe.
Embankment		7	7	
Sideslope (___:1)	3.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	Yes			2 split posts @ SW of pipe. (1 broken post & 1 split post in W rail over pipe (photo). 09Dec2010).
Approach Road / Embankment General Rating		6	6	

Upstream End

Culvert Component	Last	Now	Explanation of Condition
Direction	W		
End Treatment (Concrete, Steel, Others, None)	STEEL		
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		6	N	(Bevel buckled about 6 corrugations on North side. 30/May/2006).
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 250)		7	N	(Overgrown with vegetation. 09Dec2010) - Snow covered but no sign of problem.
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Upstream End General Rating		6	N	Previous GR was 6 from 09Dec2010 based on bevel rating.
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2134, Type: MP)				
Barrel Last Accessible Date	09-Jan-2013			
Special Features				
Special Feature (Type :)				
Special Feature (Type :)				
Roof		5	5	Upward cusping of barrel roof.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)	41			(Sag 1.9%, estimated. 30/May/2006)
Percent Sag	2			
Sidewall		6	6	Construction damage on R5 N wall 80mm x 40mm - no problem. Span at W end=2078=56mm Span at midpipe=2192=58mm=2.7% Span at E end=2082=52mm 2.7%
Measured Span (mm)	2192			
Measured At Ring No.				
Deflection (mm)	58			
Percent Deflection	3			
Floor		N	N	Covered with 75mm concrete floor & dirt.
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			(30May2006).
Circumferential Seams		5	5	Poor fit/alignment @ East section.
Separation (mm)	85			
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): 2134, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type :)				
Waterway Adequacy		X	X	
Icing (Y/N)	No			
Siltng (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	5	

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		6	N	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		7	N	Overgrown with vegetation. Snow covered but no sign of problem.
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		7	X	
Beavers (Y/N)	No			
Downstream End General Rating		6	N	GR was 6 from 09Dec2010.

Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	Cattle paths leading to both ends.
Roadway Surface		5	5	
(Type : CONCRETE)				
Icing (Y/N)	No			
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	900mm CSP"s to allow ditch drainage to pass.
Structure In Use (Y/N)	No			Could not confirm; fence in working order.
Grade Separation 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	2013	Replace split/broken post @ W side (4).					
OTHER ACTION	2013	Seal cracks in ACP S of pipe.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/55.6	Sufficiency Rating (Last/Now) (%)	70.5/68.6	Est. Repl. Yr	2034	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor upward cusping of barrel roof.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)	Y						
Proposed Action	2008.01.18 Review in two years time for continued usage. Brownlee & Associates						
Previous Inspector's Name	Dave Lam		Previous Assistant's Name				
Next Inspection Date	09-Oct-2014		Previous Inspection Date	09-Dec-2010			
Inspection Cycle (Default) (months)	21						
Comment							