

Bridge Culvert Inspection				
Bridge File Number	81999 -1 Bridge Culvert		Form Type	CUL1
Year Built	1997		Lot No.	4
Bridge or Town Name	OKOTOKS		Inspector Name	Jason Rusu
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	552:02 C1 11.955		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	02-Mar-2013
Legal Land Location	NE SEC 16 TWP 21 RGE 28 W4M		Data Entry By	Lauren Korte
Longitude, Latitude	-113:49:29, 50:47:17		Data Entry Date	22-Mar-2013
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA27		Review Date	07-Mar-2013
Clear Roadway/Skew	8.5 /		Dept. Reviewer Name	Tim Davies
AADT/Year	3,300 / 2011 (A)		Dept. Review Date	25-Mar-2013
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	PI./Slab Thickness	Shape
1	MAIN	-	1899	MP	20.1	68X13	2.0	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)	Lane	SB	On Bridge (m)	In Advance (Y/N)	
Remarks	Not required.								

Utilities (Located at)				
Utility Attachments				
Telephone	West R/W.		Gas	30 m East.
Power	90 m South.		Municipal	
Others			Problem (Y/N)	No
Remarks				

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		6	6	On curve-poor sight distance to South. Hill to North & South.
Vertical Alignment		6	6	
Roadway Width (m)	8.500			
Embankment		7	7	
Sideslope (___:1)	4.0			
(Height of Cover(m) : 1)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>6</b>	<b>6</b>	

Upstream End				
<b>Culvert Component</b>		Last	Now	Explanation of Condition
Direction		E		
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		7	6	Gravel in invert from road surfacing.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection (Type : <b>NATURAL</b> ) (Avg. Rock Size(mm) : )		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>6</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1899, Type: MP)				
Barrel Last Accessible Date	02-Mar-2013			
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		7	7	
Measured Rise (mm)	1872			
Measured At Ring No.	2			
Sag (mm)	27			
Percent Sag	1			
Sidewall		4	4	Inward. West sidewall flat in this area.
Measured Span (mm)	1720			
Measured At Ring No.	2			
Deflection (mm)	179			
Percent Deflection	9			
Floor		6	5	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		6	6	
Separation (mm)	80			
Longitudinal Seams		8	7	Riveted Seams.
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)	0			
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			
Coating		5	4	
Corrosion By Soil (Y/N)	No			Corrosion @ Haunch @ floor.
Corrosion By Water (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1899, 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			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	

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	6	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			Dirt and gravel in invert from road surfacing.
Above/Below (mm)	50			
Scour Protection		7	7	
(Type : <b>NATURAL</b> )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>6</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		5	X	
Roadway Surface		5	5	
(Type : )				
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Type	NONE			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

<b>Structure Usage</b>				
		<b>Last</b>	<b>Now</b>	<b>Explanation of Condition</b>
Drainage		5	5	
Structure In Use (Y/N)	No			
<b>Grade Separation General Rating</b>		<b>5</b>	<b>5</b>	

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							
<b>Structural Condition Rating (Last/Now) (%)</b>	<b>44.4/44.4</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>64.7/62.7</b>	Est. Repl. Yr	2020	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)							
Proposed Action							
Previous Inspector's Name	Rex Davidson		Previous Assistant's Name				
Next Inspection Date	02-Jun-2016		Previous Inspection Date	19-Nov-2009			
Inspection Cycle (Default) (months)	39						
Comment							