

Bridge Culvert Inspection				
Bridge File Number	81643 -1 Bridge Culvert		Form Type	CULM
Year Built	1991		Lot No.	4
Bridge or Town Name	TILLEY		Inspector Name	Tom Carey
Located Over	TRAIL-ANIMAL, OVER SP		Inspector Class	BR CLS A
Located On	1:18 R1 41.654;1:18 L1 41.676		Assistant Name	
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	10-Feb-2012
Legal Land Location	SE SEC 12 TWP 17 RGE 12 W4M		Data Entry By	Alyssa Boynton
Longitude, Latitude	-111:31:07, 50:25:05		Data Entry Date	26-Mar-2012
Road Authority	Alberta Transportation (AIT)		Reviewer Name	Garry Roberts
Contract Main. Area	CMA23		Review Date	27-Feb-2012
Clear Roadway/Skew	25 /		Dept. Reviewer Name	Tim Davies
AADT/Year	6,170 / 2011 (A)		Dept. Review Date	29-Mar-2012
Road Classification	RAD-412.4-120		Follow-Up By	
Detour Length (km)	1			

Bridge Culvert Information								
Number of Culverts	2							
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	PI./Slab Thickness	Shape
1	MAIN	-	2200	MP	68	125X26	2.8	ROUND
2	MAIN	-	2200	MP	68		2.8	ROUND
Special Features								
Special Features Comment								

Posting Information												
Required Vert. Clearance Posting (m)												
Posted Vertical Clearance (Y/N)			No									
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)	No	Lane	SB	On Bridge (m)		In Advance (Y/N)	No
Remarks	Not required											

Utilities (Located at)				
Utility Attachments				
Telephone	S ditch (N R/W fibre optic)		Gas	
Power	5 W N, 40 m FROM C.L.		Municipal	
Others	LIGHTING IN BARREL		Problem (Y/N)	No
Remarks	Electrical access pipe for plugging in lights at median.			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Farmer's access 50 m west. TURN OUT LANES OVER PIPE.
Vertical Alignment		9	9	
Roadway Width (m)	26.000			
Embankment		8	8	500mm cover @ median
Sideslope (__:1)	4.0			
(Height of Cover(m) : 1.4)				
Guardrail (Y/N)	Yes			
<b>Approach Road / Embankment General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End				
<b>Culvert Component</b>		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Direction		N		North end W. pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		8	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>200</b> )		7	7	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)</b>				
Barrel Last Accessible Date	10-Feb-2012			WEST PIPE.
<b>Special Features</b>				
Special Feature (Type : )				
Special Feature (Type : )				
Roof		7	7	Isolated 100 mm dent @ 1st SEAM.
Measured Rise (mm)	2240			
Measured At Ring No.	2			Est
Sag (mm)	0			
Percent Sag	1			
Sidewall		7	7	Inward
Measured Span (mm)	2160			
Measured At Ring No.	2			
Deflection (mm)	40			
Percent Deflection	1			
Floor		N	N	dirt COVERED.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	DISTORTION @ 1st SEAM - 100mm. at North end.
Separation (mm)	50			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)				
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		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		S		SOUTH END WEST PIPE.
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)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 200)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Upstream End					
Culvert Component		Last	Now	Explanation of Condition	
<b>(Pipe # : 2, Span Type: Secondary Span)</b>					
Direction		N		E. pipe, NORTH END.	
End Treatment (Concrete, Steel, Others, None)		STEEL			
Headwall		X	X		
Collar		X	X		
Wingwalls (Shape : )		X	X		
Cutoff Wall		X	X		
Bevel End		7	7	Superficial rust starting @ soil-line.	
Heaving (mm)		0			
Invert Above/Below Stream Bed		BELOW			
Above/Below (mm)		300			
Scour Protection (Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>200</b> )		7	7		
Scour/Erosion		7	7		
Beavers (Y/N)		No			
<b>Upstream End General Rating</b>		<b>7</b>	<b>7</b>		
Bridge Culvert Barrel					
Culvert Component		Last	Now	Explanation of Condition	
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)</b>					
Barrel Last Accessible Date		10-Feb-2012		East pipe	
<b>Special Features</b>					
Special Feature (Type : )					
Special Feature (Type : )					
Roof		7	7	Small hole torched 1m N. of mid to accomodate electrical cord.	
Measured Rise (mm)		2183			
Measured At Ring No.		3		Est.	
Sag (mm)		17			
Percent Sag		1			
Sidewall		7	7		
Measured Span (mm)		2200			
Measured At Ring No.		3			
Deflection (mm)		0			
Percent Deflection		0			
Floor		N	N	dirt COVERED	
Bulge (mm)					
Measured At Ring No.					
Abrasion (Y/N)					
Circumferential Seams		7	7		
Separation (mm)		20			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 2200, Type: MP)</b>				
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		5	5	SUPERFICIAL CORROSION @ BEVELS.
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		X	X	
Baffle (Type : )		X	X	
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>7</b>	<b>7</b>	
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Direction		S		South end - east pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	SUPERFICIAL CORROSION @ FLOOR OF BEVEL - seen at haunches.
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> ) (Avg. Rock Size(mm) : <b>200</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
<b>Downstream End General Rating</b>		<b>7</b>	<b>7</b>	

Structure Usage				
		Last	Now	Explanation of Condition
<b>Grade Separation</b>				
Road Alignment		X	X	
Roadway Surface		7	7	
(Type : )				
Icing (Y/N)	Yes			Ice at 3040 of floors.
Traffic Safety Features		X	X	
Type				
Lighting		6	6	Swallow nestst blocking lights Attached to roofs.
Barrel Leakage (Y/N)	No			
Drainage		7	5	
Structure In Use (Y/N)	Yes			
<b>Grade Separation General Rating</b>		<b>7</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>77.8/77.8</b>	<b>Sufficiency Rating (Last/Now) (%)</b>	<b>76.3/74.9</b>	Est. Repl. Yr	2040	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	Garry Roberts		Previous Assistant's Name				
Next Inspection Date	10-Nov-2013		Previous Inspection Date	15-Jul-2010			
Inspection Cycle (Default) (months)	21						
Comment							