

Bridge Culvert Inspection				
Bridge File Number	73361 -2 Bridge Culvert		Form Type	CULM
Year Built	2001		Lot No.	4
Bridge or Town Name	LISBURN		Inspector Name	Eric Carcoux
Located Over	2ND ORDER TRIBUTARY TO PEMBINA RIVER, 8.11.84.41.2, WATERCRS-ST		Inspector Class	BR CLS A
Located On	43:18 R1 23.193;43:18 L1 23.190		Assistant Name	Brian Cote
Water Body Cl./Year			Assistant Class	
Navigabil. Cl./Year			Inspection Date	26-Aug-2011
Legal Land Location	SE SEC 28 TWP 56 RGE 6 W5M		Data Entry By	Theresa Lacusta
Longitude, Latitude	-114:49:46, 53:52:01		Data Entry Date	28-Sep-2011
Road Authority	Alberta Transportation (AIT);Canadian National Railways		Reviewer Name	Arnold Assenheimer
Contract Main. Area	CMA12		Review Date	26-Sep-2011
Clear Roadway/Skew	12.5 / -17 deg. (LHF)		Dept. Reviewer Name	Brent Herrick
AADT/Year	6,280 / 2010 (A)		Dept. Review Date	28-Sep-2011
Road Classification	RFD-412.4-130		Follow-Up By	
Detour Length (km)	3			

Bridge Culvert Information								
Number of Culverts		2						
Pipe #	Barrel	Span	Rise (or Dia.)	Type	Length	Corr. Profile	Pl./Slab Thickness	Shape
1	MAIN	-	1500	SP	104.24	152X51	3.0,3.0,3.0	ROUND
2	MAIN	-	1070	MP	27.4			ROUND
Special Features		DROP STRUCTURE, BARREL ELBOW						
Special Features Comment								

Utilities (Located at)			
Utility Attachments			
Telephone		Gas	
Power	1 OH W r/w	Municipal	
Others		Problem (Y/N)	
Remarks			

Approach Road / Embankment				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	North side measured.
Vertical Alignment		8	8	
Roadway Width (m)	24.800			EB & WB, 12.4 each.
Embankment		8	8	
Sideslope (__:1)	3.0			
(Height of Cover(m) : 8.5)				
Guardrail (Y/N)	No			
<b>Approach Road / Embankment General Rating</b>		<b>8</b>	<b>7</b>	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: )				
Direction		S		
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: )				
Collar		X	X	
Wingwalls (Shape : )		X	X	
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300)		5	5	
Scour/Erosion		5	5	Animal den ~ 5m d/s from inlet
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>5</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)				
Barrel Last Accessible Date	11-Nov-2009			Only d/s end of barrel accessible
<b>Special Features</b>				
Special Feature (Type : DROP STRUCTURE)		7	N	Concrete bulkhead. Connector to railway pipe.-11-Nov-2009
Special Feature (Type : )				
Roof		8	8	
Measured Rise (mm)	1490			10th ring from d/s
Measured At Ring No.				
Sag (mm)	10			
Percent Sag	1			
Sidewall		8	8	
Measured Span (mm)	1500			10th ring from d/s
Measured At Ring No.				
Deflection (mm)				
Percent Deflection	0			
Floor		8	8	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		8	8	
Separation (mm)	0			
Longitudinal Seams		7	7	
Total No. of Cracked Rings	0			
Total No. of Rings with Two Cracked Seams	0			
Min. Remaining Steel Between Cracks (mm)				1N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1500, Type: SP)</b>				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		6	6	
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>	

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1070, Type: MP)</b>				
Barrel Last Accessible Date	11-Nov-2009			NOt accessible
<b>Special Features</b>				
Special Feature		X	X	
(Type : <b>BARREL ELBOW</b> )				
Special Feature				
(Type : )				
Roof		7	N	
Measured Rise (mm)	1047			
Measured At Ring No.	2			
Sag (mm)	23			
Percent Sag	2			
Sidewall		7	N	
Measured Span (mm)	1082			
Measured At Ring No.	2			
Deflection (mm)	12			
Percent Deflection	1			
Floor		7	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		7	N	
Separation (mm)				
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)				

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1070, Type: MP)				
Coating		5	N	Superficial rust lower 1/2.-11-Nov-2009
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	N	
Baffle		X	X	
(Type : )				
Waterway Adequacy		7	N	Object in pipe approx 5m from South end.-11-Nov-2009
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
<b>Barrel General Rating</b>		<b>7</b>	<b>N</b>	Last rated 7 -11-Nov-2009
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: )				
Direction		N		
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)				
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	350			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
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>Channel (U/S and D/S)</b>				
Alignment		7	7	
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	Yes			

Structure Usage				
		Last	Now	Explanation of Condition
Channel Bottom Degrading/Aggrading				
Beavers (Y/N)	No			
(Fish Compensation Measure 1 : <b>NONE</b> )				
(Fish Compensation Measure 2 : <b>NONE</b> )				
<b>Channel General Rating</b>		<b>6</b>	<b>6</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>71.5/71.5</b>	Est. Repl. Yr	2055	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	Melanie Johnson		Previous Assistant's Name				
Next Inspection Date	26-May-2013		Previous Inspection Date	11-Nov-2009			
Inspection Cycle (Default) (months)	21						
Comment							