

Bridge Culvert Inspection			
Bridge File Number	74372 -1 Bridge Culvert	Form Type	CULM
Year Built	1975	Lot No.	2
Bridge or Town Name	PEERS	Inspector Name	Todd Warshawski
Located Over	TRIBUTARY TO JANUARY CREEK, 8.11.107.22.1, WATERCRS-ST	Inspector Class	BR CLS B
Located On	16:08 R1 1.146;16:08 L1 1.135	Assistant Name	
Water Body Cl./Year		Assistant Class	
Navigabil. Cl./Year		Inspection Date	10-Aug-2012
Legal Land Location	SE SEC 26 TWP 53 RGE 14 W5M	Data Entry By	Theresa Lacusta
Longitude, Latitude	-115:57:04, 53:36:12	Data Entry Date	27-Aug-2012
Road Authority	Alberta Transportation (AIT)	Reviewer Name	Eric Carcoux
Contract Main. Area	CMA12	Review Date	27-Aug-2012
Clear Roadway/Skew	25 /	Dept. Reviewer Name	Brent Herrick
AADT/Year	6,840 / 2011 (A)	Dept. Review Date	30-Aug-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	Pl./Slab Thickness	Shape
1	MAIN	-	1200	MP	88	68X13	2.8	ROUND
2	MAIN	-	1200	MP	85.1	68X13	2.8	ROUND
Special Features								
Special Features Comment								

**Utilities (Located at)**

Utility Attachments			
Telephone	North r/w.	Gas	
Power		Municipal	
Others		Problem (Y/N)	No
Remarks	File tag West pipe (South).		

**Approach Road / Embankment**

	Last	Now	Explanation of Condition
Horizontal Alignment	7	7	Intersection 80m East. Long crest east.
Vertical Alignment	7	7	
Roadway Width (m)	25.000		EBL 12.5m, WBL 12.5m.
Embankment	7	7	
Sideslope (__:1)	4.0		
(Height of Cover(m) : 3)			
Guardrail (Y/N)	No		
<b>Approach Road / Embankment General Rating</b>	<b>7</b>	<b>7</b>	

**Upstream End**

Culvert Component	Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>			
Direction	S		West pipe
End Treatment (Concrete, Steel, Others, None)	STEEL		
Headwall	X	X	
Collar	X	X	
Wingwalls	X	X	
(Shape : )			

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Span Type: Primary Span)</b>				
Cutoff Wall		X	X	
Bevel End		N	X	
Heaving (mm)	150			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>4</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)</b>				
Barrel Last Accessible Date	20-Jul-2005			West culvert. Not accessible due to water levels.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	
Measured Rise (mm)	1220			
Measured At Ring No.				
Sag (mm)	20			
Percent Sag	2			
Sidewall		N	N	Separation on circumferential seams. Minor dent East wall, 10m from U/S end.-20-Nov-2008
Measured Span (mm)	1160			
Measured At Ring No.				
Deflection (mm)	40			
Percent Deflection	3			
Floor		N	N	(D/S half of floor covered with silt. 20/July/2005)
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	2nd seam U/S 180mm separation. No infiltration but fill is exposed. Previously grouted circumferential seams. Void beside grouted seam. -20-Nov-2008
Separation (mm)	180			
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		N	N	Deep pitting in floor. -20-Nov-2008
Corrosion By Soil (Y/N)	No			
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): 1200, Type: MP)				
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Due to d/s beaver dams.
Fish Passage Adequacy		5	5	
Baffle		X	X	
(Type : )				
Waterway Adequacy		5	5	(Old section has 300 mm silt and rock. 20/July/2005)
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	GR carried forward-20-Jul-2005
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary Span)				
Direction		N		West pipe.-submerged.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	Upper portion severely corroded.-20-Nov-2008
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	850			
Scour Protection		N	N	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			
<b>Downstream End General Rating</b>		<b>N</b>	<b>N</b>	
Upstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		S		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	

Upstream End				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Span Type: Secondary Span)</b>				
Bevel End		N	6	Minor dent top.
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	100			
Scour Protection		N	5	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 250)				
Scour/Erosion		N	5	
Beavers (Y/N)	No			
<b>Upstream End General Rating</b>		<b>N</b>	<b>5</b>	
Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
<b>(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)</b>				
Barrel Last Accessible Date				East pipe NOT accessible due to water level.
<b>Special Features</b>				
Special Feature				
(Type : )				
Special Feature				
(Type : )				
Roof		N	N	1205, 5m from U/S - 1163, D/S ice - no apparent problem D/S.-20-Nov-2008
Measured Rise (mm)	1082			
Measured At Ring No.				
Sag (mm)	118			
Percent Sag	10			
Sidewall		N	N	U/S - 1145, 5m from U/S - 1125, D/S ice - no problem observed D/S.-20-Nov-2008
Measured Span (mm)	1318			
Measured At Ring No.				
Deflection (mm)	118			
Percent Deflection	10			
Floor		N	N	Pitting and scaling.-20-Nov-2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
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		N	N	Scaling & pitting on floor especially second barrel.-20-Nov-2008
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			

Bridge Culvert Barrel				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Location Code: MAIN, Span (mm): , Rise (mm): 1200, Type: MP)				
Ponding (Y/N)	Yes			Due to d/s beaver dams.
Fish Passage Adequacy		7	7	
Baffle		X	X	
(Type : )				
Waterway Adequacy		4	5	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
<b>Barrel General Rating</b>		<b>4</b>	<b>4</b>	G.R. carried forward from 20/July/2005.
Downstream End				
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Secondary Span)				
Direction		N		East pipe Completely submerged due to beaver dam.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		X	X	
Wingwalls		X	X	
(Shape : )				
Cutoff Wall		X	X	
Bevel End		N	N	
Heaving (mm)	100			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		N	N	
(Type : )				
(Avg. Rock Size(mm) : )				
Scour/Erosion		N	N	
Beavers (Y/N)	Yes			
<b>Downstream End General Rating</b>		<b>N</b>	<b>N</b>	
Structure Usage				
		Last	Now	Explanation of Condition
<b>Channel (U/S and D/S)</b>				
Alignment		5	5	Channel makes turn to enter pipe.
Bank Stability		6	6	
HWM (m below Top of Culvert)				HWM not visible.
Drift (Y/N)	No			
Channel Bottom Degrading/Aggrading				Large beaver dams on d/s end.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
<b>Channel 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	2012	Remove d/s beaverdams.					
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>45.5/49.4</b>	Est. Repl. Yr	2020	Maint. Reqd. (Y/N)	Yes
Special Comments for Next Inspection	As this structure has not been accessed for 2 or more cycles, a Level 2 inspection is required as per Bim Manual Section 13.9.1.5 Based on observed site evaluations we are recommending that this be deferred to a later date.		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	Todd Warshawski		Previous Assistant's Name				
Next Inspection Date	10-May-2014		Previous Inspection Date	16-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							