Bridge Culvert Inspection													
Bridge File Num	Bridge File Number 13317 -1 Bridge Culvert				Form Type			CUL1					
Year Built 1982							Lot No			4			
Bridge or Town Name CARDSTON			STON	ON			Inspec	tor Name		Jason Rusu			
Located Over TRIBUTAR WATERCR			TARY TO LEE CREEK, 2.12.20.8.3,				•	tor Class		BR CLS A			
			C1 18.448					ant Name					
Water Body Cl./	Year	001.00	01 10.110					ant Class					
Navigabil. Cl./Ye								tion Date		09-Jun-2012			
Legal Land Loca		NW SE	C 25 TWP 2 R			ntry By		Kelsey Roberts					
Longitude, Latitu			1:16, 49:09:32				Data Entry Date 20-Jul-2012						
Road Authority	200		Transportation	(AIT)					er Name Garry Roberts				
Contract Main. A	Area	CMA25	•		Review Date 10-Jul-2012								
Clear Roadway/			deg. (LHF)				•	Dept. Reviewer Name Tim Davies					
AADT/Year			2011 (A)					Review Da	ate	30-Jul-2012			
Road Classificat	tion	RLU-20				Follow-Up By							
Detour Length (I	km)	4											
Bridge Culvert Information													
Number of Culve	erts		1										
Pipe #	Barrel		Span	Span Rise (or I		Dia.) Type		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1 [MAIN		5100	3200		RPE		32.3			4.0	ELLIPSE	
Special Features													
Special Features Comment													
					Uti	ilities (L	ocated	at)					
Utility Attachmer	nts					1111777		at)					
Telephone			Gas										
Power	South						Munici	pal					
Others									No				
Remarks													
Approach Road / Embankment													
Last Now Explanation of Condition													
Horizontal Alignment			5	5	IN A CURVE BUT 300m of sight distance both ways								
Vertical Alignment				7	7								
Roadway Width (m)		10.300	10.300										
Embankment					7	7							
Sideslope (:	:1)		3.0										
(Height of Cover(m) : 1.4)													
Guardrail (Y/N)			No										
Approach Road / Embankment General Ra		ent General Rat	ing	5	5								
						Upstre	am Enc						
Culvert Compo	nent				Last	Now		nation of	Condi	tion			
Direction													
End Treatment (Concrete, Steel, CONCRETE Others, None)													
Headwall				7	7								
Collar			7	7									
Wingwalls					Х	X							
(Shape:)													
Cutoff Wall				7	7								

				am End							
Culvert Component		Last	Now	Explanation of Condition							
Bevel End	I	7	7	Minor superficial rust on floor							
Heaving (mm)	0										
Invert Above/Below Stream Bed	BELOW			_							
Above/Below (mm)	500										
Scour Protection		7	7								
(Type : RIP RAP)											
(Avg. Rock Size(mm) : 350)											
Scour/Erosion		7	7								
Beavers (Y/N)	No										
Upstream End General Rating		7	7								
		Brid	dae Cu	Ilvert Barrel							
Culvert Component				Explanation of Condition							
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Sp			-							
Barrel Last Accessible Date	09-Jun-2012		•	Too large to measure. Shape looks good							
Special Features											
Special Feature											
(Type:)											
Special Feature											
(Type:)											
Roof		8	8								
Measured Rise (mm)	2306										
Measured At Ring No.	3			Est.							
Sag (mm)											
	137										
Percent Sag	4										
Sidewall	I	8	8								
Measured Span (mm)	5093										
Measured At Ring No.	3			Est.							
Deflection (mm)	7			_							
Percent Deflection	0										
Floor		7	7								
Bulge (mm)	0										
Measured At Ring No.											
Abrasion (Y/N)	No										
Circumferential Seams		8	8								
Separation (mm)	0										
Longitudinal Seams		8	8								
Total No. of Cracked Rings	0										
Total No. of Rings with Two Cracked Seams											
Min. Remaining Steel Between Cracks (mm)											
Proper Lap (Y/N)	No			1							
Longitudinal Stagger (Y/N)	No			1							
Coating	-	6	6	Minor superficial rust on floor							
Corrosion By Soil (Y/N)	No	0	- 5	Thin superioral rust on moor							
Corrosion By Water (Y/N)	Yes										
Camber POS/ZERO/NEG	ZERO										
Ponding (Y/N)	No										

Cutvert Component Cust Now Explanation of Condition	Bridge Culvert Barrel										
Fish Passage Adequacy	Culvert Component		Last	Now							
Materiary Adequacy	(Pipe #: 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm): 5100	, Rise (mm): 3200, Type: RPE)						
Type : Waterway Adequacy	Fish Passage Adequacy		7	7							
Type : a	Baffle		Х	Х							
Materway Adequacy											
Siling (Y/N)			8	8							
Silting (Y/N)		No									
Delite (Y/N)	• • •										
Barrel General Rating	-										
Culvert Component			8	8							
Culvert Component Last Now Explanation of Condition Direction STEEL STEEL North End Treatment (Concrete, Steel, Others, None) STEEL X X Collar X X X Collar Nove X X Wingwalls X X X (Shape:) Cutoff Wall X X Bevel End 8 X X Heaving (mm) 0 Impact Above/Below Stream Bed Impact Above/Below St											
Direction											
End Treatment (Concrete, Steel) Others, None) STEEL Others, None) X X Headwall X X Vingwalls X X (Shape:) V X Cutoff Wall X X Bevel End 8 8 Heaving (mm) 0 0 Invert Above/Below Stream Bed 0 V Above/Below (mm) 0 V Scour Protection 5 5 (Ays. Rock Size(mm): 300) V V Scour/Erosion 5 5 Beavers (Y/N) No Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Bank Stability 1.8 V Bank Stability No No Channel Bottom Degrading/Aggrading DEGRADING V Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) V No			Last	Now	•						
Others, None)					NORTH						
Collar	Others, None)	STEEL		1							
Mingwalls	Headwall		X	X							
Cutoff Wall	Collar		X	X							
Cutoff Wall X X X Bevel End 8 8 8 Heaving (mm) 0 0 0 Invert Above/Below Stream Bed Above/Below (mm) 0 0 0 Scour Protection 5 5 5 (Type : RIP RAP) (Avg. Rock Size(mm) : 300) 0 0 0 Scour/Erosion 5 5 5 0 Beavers (Y/N) No 5 5 5 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) 5 5 5 5 Alignment 5 5 5 5 5 5 Bank Stability 5 5 5 5 5 5 5 5 5 5 6 6 6 6 6 7 6 7 6 7 7 7 7 7 7 7 7 7 7	Wingwalls		Х	Х							
Bevel End	-										
Heaving (mm) 0	Cutoff Wall		Х	Х							
Invert Above/Below Stream Bed	Bevel End		8	8							
Above/Below (mm) 0 Scour Protection 5 5 (Type : RIP RAP) (Avg. Rock Size(mm) : 300) Scour/Erosion 5 5 Beavers (Y/N) No Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) 5 5 Alignment 5 5 Bank Stability 5 5 HWM (m below Top of Culvert) 1.8 No visible HWM Drift (Y/N) No No Channel Bottom Degrading/Aggrading DEGRADING No Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Heaving (mm)	0									
Scour Protection 5 5 (Type : RIP RAP) (Avg. Rock Size(mm) : 300) 5 5 Scour/Erosion 5 5 5 Beavers (Y/N) No Image: Now of Condition Image: Now of Condition Downstream End General Rating 5 5 5 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 5 Bank Stability 5 5 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 No visible HWM Drift (Y/N) No No Channel Bottom Degrading/Aggrading DEGRADING No Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Invert Above/Below Stream Bed										
Scour Protection 5 5 (Type : RIP RAP) (Avg. Rock Size(mm) : 300) 5 5 Scour/Erosion 5 5 5 Beavers (Y/N) No Image: Now of Condition Image: Now of Condition Downstream End General Rating 5 5 5 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 5 Bank Stability 5 5 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 No visible HWM Drift (Y/N) No No Channel Bottom Degrading/Aggrading DEGRADING No Beavers (Y/N) No No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Above/Below (mm)	0									
CAVG. Rock Size(mm) : 300 Scour/Erosion 5 5 5	Scour Protection		5	5							
Scour/Erosion 5 5 Beavers (Y/N) No Structure Usage Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Bank Stability 5 5 Bown Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 ✓ Drift (Y/N) No ✓ Channel Bottom Degrading/Aggrading DEGRADING ✓ Beavers (Y/N) No ✓ (Fish Compensation Measure 1 : NONE) In NONE (Fish Compensation Measure 2 : NONE)	(Type : RIP RAP)										
Beavers (Y/N)	(Avg. Rock Size(mm) : 300)										
Downstream End General Rating 5 5 Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) No Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 2 : NONE) Now Structure Usage Explanation of Condition Nov Explanation of Condition Nov Explanation of Condition Nov Some Erosion along the west bank downstream. No visible HWM No visible HWM (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Scour/Erosion		5	5							
Structure Usage Last Now Explanation of Condition	Beavers (Y/N) No										
Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Bank Stability 1.8 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 No visible HWM Drift (Y/N) No No Channel Bottom Degrading/Aggrading DEGRADING No Beavers (Y/N) No Image: Compensation Measure 1 : NoNE) (Fish Compensation Measure 2 : NONE) Image: Compensation Measure 2 : NoNE)	Downstream End General Ratir	ng	5	5							
Last Now Explanation of Condition Channel (U/S and D/S) Alignment 5 5 Bank Stability 5 5 Bank Stability 1.8 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 No visible HWM Drift (Y/N) No No Channel Bottom Degrading/Aggrading DEGRADING No Beavers (Y/N) No Image: Compensation Measure 1 : NoNE) (Fish Compensation Measure 2 : NONE) Image: Compensation Measure 2 : NoNE)			S	tructur	e Usane						
Channel (U/S and D/S) Alignment 5 5 5 Bank Stability 5 5 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 Drift (Y/N) No Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)											
Alignment 5 5 5 Bank Stability 5 5 Some Erosion along the west bank downstream. HWM (m below Top of Culvert) 1.8 Drift (Y/N) No Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Channel (U/S and D/S)			1							
HWM (m below Top of Culvert) Drift (Y/N) No Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)			5	5							
Drift (Y/N) No Channel Bottom DEGRADING Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Bank Stability		5	5	Some Erosion along the west bank downstream.						
Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	HWM (m below Top of Culvert) 1.8				No visible HWM						
Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Drift (Y/N) No										
(Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)											
(Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No									
	(Fish Compensation Measure 1 :	NONE)									
Channel General Rating 5 5	(Fish Compensation Measure 2 :	NONE)									
	Channel General Rating		5	5							

				Maintenance	Recommend	lations						
Inspector Recommendations	\	Year Inspector Comments				Department Com	ments	Target Year	Est. Cost	Cat #		
SHOTCRETE REPAIRS									3			
PLACE ADDITIONAL RIP RAP												
REMOVE DRIFT ACCUMULATION												
INSTALL CONCRETE/STEEL LINING	i											
INSTALL STRUTS												
INSTALL CONCRETE COLLAR/CUTO	OFF											
REPAIR SEAMS												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
Structural Condition Rating (Last/Now) (%)		88.9/88.9		Sufficiency Rating (Last/Now) (%)		32.5/82.6	Est. Repl. Yr 2046		Maint. Re	qd. (Y/N)	No	
Special Comments for Next Inspection Department Comments												
Maintenance Reviewed By						Date		i i	Estimated Tota	I 0		
Proposed Long-Term Strategy												
On 3-Year Program (Y/N)												
Proposed Action												
Previous Inspector's Name Ga		Garry Roberts Previous					s Assistant's Name					
Next Inspection Date 09		2015			Previous	Inspection Date	18-Jun-2009					
Inspection Cycle (Default) (months) 39												
Comment												