					Brida	e Culve	ert Insp	ection					
Bridge File Nur	nber	78093 -	-1 Bridge Culve		<b>11</b> 1		Form Type		CULE				
Year Built	11001	1975	1 Briage Carre			Lot No.		-		4			
Bridge or Town	Name		OT CREEK					tor Name		Todd Warshawski			
Located Over	i i tairio		TARY TO CARE	ROT CREE			Inspector Class		BR CLS B				
Locatoa Ovoi			7.20.1, WATER		-1			Assistant Name		DIX CLO B			
Located On		16:08 F	R1 7.188;16:08 I	L1 7.178			Assistant Class						
Water Body Cl.								tion Date		10-Aug-2012			
Navigabil. Cl./Y								Data Entry By		Theresa Lacu	sta		
Legal Land Loc	cation	NW SE	C 28 TWP 53 R	TMD 53 DCE 13 M/5M				Data Entry Date		04-Sep-2012			
Longitude, Lati	tude		·40 53·36·32					Reviewer Name		Eric Carcoux			
			Transportation	ransportation (AIT)				Review Date		27-Aug-2012			
Contract Main. Area CMA12							Dept. I	Reviewer	Name	Brent Herrick			
Clear Roadway	//Skew	24.2 / 3	0 deg. (RHF)					Review Da		18-Sep-2012			
AADT/Year		6,840 /	2011 (A)				Follow						
Road Classifica	ation	RAD-4	12.4-120					. ,					
Detour Length	(km)	3											
Bridge Culver		ation											
	Number of Culverts 2									I			
Pipe #	Barrel		Span Rise (or I		ia.)	Туре		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1	U/S		-	1600		MP		43.9		68X13	2.8	ROUND	
1	MAIN		-	1450 I		MP		57.6		68X13	2.8	ROUND	
2	U/S		-			MP		44.8		68X13	2.8	ROUND	
2	MAIN		- 1200			MP		52		68X13	2.8	ROUND	
Special Feature	es		VERT STEEL S	STRUTS									
Utility Attachme	ents				Uti	lities (L	ocated	at)	N RO	NA/			
Power							Munici	nal	IN INO	VV			
Others								m (Y/N)	No				
Remarks	File ta	a U/S W	Vest pipe (South	າ).			1 10010	( 1 / 1 4 /	1110				
rtomanto		.g 0,0 .		·	proac	h Road	d / Emb	ankment					
					Last	Now		nation of		tion			
Horizontal Aligi	nment				7	7			200m	East, Hwy cur	ves 300m to W	est.	
Vertical Alignm	ent				8 7 Crest to West.								
Roadway Widtl	h (m)		24.200				EBL 12	EBL 12.4m, WBL 11.8m.					
Embankment					6	6	3:1 on	south side	e.				
Sideslope (	_:1)		2.0										
(Height of Co		6.3)											
Guardrail (Y/N)	)		No										
Approach Road / Embankment General Rating		ing	7	7									
						□ Ups <u>tre</u>	am End						
Culvert Comp	onent							nation of	Condi	tion			
(Pipe # : 1, Sp	an Typ	e: Prima	ary Span)										
Direction					S		West s	pan.					
End Treatment Others, None)	(Concre	ete, Stee	el, STEEL										
Headwall					Х	Х							
Collar			Х	Х									

Cutvert Component				Upstre	am End
Wingwalls	<b>Culvert Component</b>		Last	Now	Explanation of Condition
Shape:   Cutoff Wall   X	(Pipe #: 1, Span Type: Primary	/ Span)			
Shape:   Cutoff Wall   X	Wingwalls		Х	X	
Bevel End	(Shape: )				
Heaving (mm)	Cutoff Wall		Х	Х	
Invert Above/Below (Imm)	Bevel End		5	5	Minor dents from riprap install.
Above/Below (mm)	Heaving (mm)	100			
Scour Protection   6   6   6	Invert Above/Below Stream Bed	BELOW			
Crype : RIP RAP    (Arg, Rock Size(mm) : 300)   Scour/Erosion   6   6     Beavers (Y/N)   No	Above/Below (mm)	100			
(Avg. Rock Size(mm): 300)   Scour/Erosion   6   6	Scour Protection		6	6	
Scour/Erosion   6   6   6	(Type: RIP RAP)				
Beavers (Y/N)	(Avg. Rock Size(mm): 300)				
Upstream End General Rating    Britigle Culvert Component   Last   Now   Explanation of Condition	Scour/Erosion		6	6	
Bridge Culvert Barrel Culvert Component (Pipe #: 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1600, Type: MP)  Barrel Last Accessible Date	Beavers (Y/N)	No			
Bridge Culvert Barrel Culvert Component (Pipe #: 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1600, Type: MP)  Barrel Last Accessible Date	Upstream End General Rating		5	5	
Last   Now   Explanation of Condition	3				
Pripa # : 1, Primary Span, Location Code: U/S, Span (mm): , Rise (mm): 1600, Type: MP)					
Barrel Last Accessible Date   10-Aug-2012					
Special Feature  (Type :) Special Feature  (			(mm):	,	Rise (mm): 1600, Type: MP)
Special Feature   Company   Compan	Barrel Last Accessible Date	10-Aug-2012			
Type :   Special Feature	Special Features				
Special Feature   Crype :	Special Feature				
Type :   Roof	(Type:)				
Roof	Special Feature				
Measured Rise (mm) 1462  Measured At Ring No. 1 Sag (mm) 108 Percent Sag 7  Sidewall 4 4 Flattening limited to bevel + 1st sections. Pipe has good shape past this point.  Measured At Ring No. 1 Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Corrosion of outer couplerphoto  Longitudinal Seams X X Total No. of Cracked Rings Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N)	(Type:)				
Measured At Ring No. 1 Sag (mm) 108 Percent Sag 7  Sidewall 4 4 Flattening limited to bevel + 1st sections.  Measured Span (mm) 1730 Pipe has good shape past this point.  Measured At Ring No. 1 Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Separation (mm) 205  Longitudinal Seams X 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)	Roof		5	5	Flattening limited to bevel + 1st section.
Sag (mm) 108 Percent Sag 7  Sidewall 4 4 Flattening limited to bevel + 1st sections.  Measured Span (mm) 1730 Pipe has good shape past this point.  Measured At Ring No. 1 Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Corrosion of outer couplerphoto  Longitudinal Seams X 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)	Measured Rise (mm)	1462			
Percent Sag 7  Sidewall 4 4 Flattening limited to bevel + 1st sections.  Measured Span (mm) 1730 Pipe has good shape past this point.  Measured At Ring No. 1  Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Rust with pitting.  Bulge (mm) 0 Measured At Ring No.  Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced.  Separation (mm) 205 Corrosion of outer couplerphoto  Longitudinal Seams X X X  Total No. of Cracked Rings Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N)	Measured At Ring No.	1			
Sidewall  Measured Span (mm)  Measured At Ring No.  Deflection (mm)  Percent Deflection  Bulge (mm)  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  Pipe has good shape past this point.  Plattening limited to bevel + 1st sections.  Pipe has good shape past this point.	Sag (mm)	108			
Measured Span (mm) 1730 Pipe has good shape past this point.  Measured At Ring No. 1 Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Corrosion of outer couplerphoto  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)	Percent Sag	7			
Measured At Ring No. 1 Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Separation (mm) 205  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)	Sidewall		4	4	Flattening limited to bevel + 1st sections.
Deflection (mm) 130 Percent Deflection 8  Floor 5 5 5 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 4 Separation (mm) 205  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)	Measured Span (mm)	1730			Pipe has good shape past this point.
Percent Deflection 8  Floor 5 5 5  Bulge (mm) 0  Measured At Ring No.  Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Corrosion of outer couplerphoto  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)	Measured At Ring No.	1			
Floor Bulge (mm) O Measured At Ring No. Abrasion (Y/N) Circumferential Seams Separation (mm) Longitudinal Seams Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N)  Rust with pitting.	Deflection (mm)	130			
Bulge (mm) 0  Measured At Ring No. Abrasion (Y/N) No  Circumferential Seams 4 4 First and 2nd seam couplers displaced. Corrosion of outer couplerphoto  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)	Percent Deflection	8			
Measured At Ring No. Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Floor		5	5	Rust with pitting.
Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Bulge (mm)	0			
Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Measured At Ring No.				
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)	Abrasion (Y/N)	No			
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)	Circumferential Seams		4	4	First and 2nd seam couplers displaced.
Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Separation (mm)	205			Corrosion of outer couplerphoto
Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Longitudinal Seams		Х	X	
Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Total No. of Cracked Rings				
Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)	Total No. of Rings with Two Cracked Seams				
Proper Lap (Y/N)	Min. Remaining Steel				
	, ,				
	Longitudinal Stagger (Y/N)				

		Brid	lge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: U/S, Span	(mm):	, F	Rise (mm): 1600, Type: MP)
Coating		5	5	
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	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	Drift caught on struts.
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	Yes			
Barrel Extension General Ratin	ıg	4	4	
		Brid	dae Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa			, Rise (mm): 1450, Type: MP)
Barrel Last Accessible Date	01-Oct-2007			Viewed from end, previous comments are for upstream 1600 section.
Special Features				
Special Feature		7	7	Partial struts thru 1600-1450 transition.
(Type : VERT STEEL STRUTS)				
Special Feature				
(Type:)				
Roof		N	N	
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	Superficial rust but no pitting20-Nov-2008
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	
Separation (mm)				
Longitudinal Seams		Х	Х	
Total No. of Cracked Rings				1
Total No. of Rings with Two				
Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

		Bric	lge Cul	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm	<u>):</u>	, Rise (mm): 1450, Type: MP)
Coating		N	N	
Corrosion By Soil (Y/N)	Yes			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		4	4	Drift caught on struts. just before 1450mm dia main pipe.
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel General Rating		N	N	G.R. was "5" from 01/Oct/2007.
		D	ownstr	ream End
Culvert Component				Explanation of Condition
(Pipe #: 1, Span Type: Primary	(Span)			
Direction		N		West pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		Х	Х	
Wingwalls		X	Х	
(Shape: )				
Cutoff Wall		Х	X	
Bevel End		5	5	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		5	5	
(Type : NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		5	5	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	5	5	
			Upstre	am End
Culvert Component				Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Wingwalls		Х	X	
(Shape: )				
Cutoff Wall		Х	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type: RIP RAP)				
(Avg. Rock Size(mm): 300)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Upstream End General Rating		6	6	
		Brid	dae Cu	llvert Barrel
Culvert Component		1	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: U/S. Sp			, Rise (mm): 1200, Type: MP)
Barrel Last Accessible Date	20-Nov-2008		,	Viewed from ends, shape and condition appear ok.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		N	N	(Rise @ South end of pipe, 1230. Rise @ North end of pipe, 1244.
Measured Rise (mm)	1125			Rise @ 1/4 from South end, 1209. 01/Oct/2007)
Measured At Ring No.				
Sag (mm)	75			
Percent Sag	6			
Sidewall		N	N	(Span @ South end, 1280. Span @ North end, 1200. Span @ 1/4
Measured Span (mm)	1301			from South end, 1301. 01/Oct/2007)
Measured At Ring No.				
Deflection (mm)	101			
Percent Deflection	8			
Floor		N	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		N	N	200mm separation with ingress approx 7m from South end. At
Separation (mm)	200			couplerNov, 2008
Longitudinal Seams		Х	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)				1

		Brio	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	ocation Code: U/S, Sp	an (mr	n):	, Rise (mm): 1200, Type: MP)
Coating		N	N	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Ponding North half of pipe.
Fish Passage Adequacy		Х	Х	Overflow pipe
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	5	
Icing (Y/N)	No			
Silting (Y/N)	Yes			
Drift (Y/N)	Yes			
Barrel Extension General Ratir	ıg	4	4	G.R. was "4" carried forward from 01/Oct/2007.
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Direction		N		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	
Wingwalls		X	Х	
(Shape: )				
Cutoff Wall		X	X	
Bevel End		6	6	Mostly covered by vegetation.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		6	6	
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	6	6	
		9	Structu	re Usage
				Explanation of Condition
Channel (U/S and D/S)				
Alignment		6	6	
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 :	NONE)							
(Fish Compensation Measure 2 :	NONE)							
Channel General Rating			6					

		Maintenance	Recommendations						
Inspector Recommendations	Year	Inspector Comments		Department Comments					
SHOTCRETE REPAIRS		·							
PLACE ADDITIONAL RIP RAP									
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LININ	G								
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CU	ΓOFF								
REPAIR SEAMS									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/	Now) 44.4/44	.4 Sufficiency Rating (La (%)	st/Now) 46.4/46.2	Est. Repl. Yr 2025	Maint. Re	qd. (Y/N)	No		
Special Monitor deflection Monitor corrosion		st section.	Department Comments						
Maintenance Reviewed By			Date		Estimated Tota	1 0			
Proposed Long-Term Strategy									
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Todd Warshaw	ski	Previous Assistant's Name	Assistant's Name					
Next Inspection Date	10-May-2014		Previous Inspection Date	Inspection Date 16-Sep-2010					
Inspection Cycle (Default) (months)	21								
Comment									