					Brida	e Culve	ert Insp	ection						
Bridge File Nur	nber	71345 -	-1 Bridge Culve		Bridg	C Guive	Form Type			CULE				
Year Built/Line		1952/20	-				Lot No			3				
Bridge or Town								tor Name		Owen Salava				
Located Over	ITTALLIC		MEAT CREEK,	5.40 WA	TERC	RS-ST	Inspector Class			BR CLS A				
Located On			C1 32.475	0.10, 1171	I LIKO		Assistant Name			DIX OLG A				
Water Body Cl.	/Year	10.12	71 02.170				Assistant Class							
Navigabil. Cl./Y							Inspection Date			28-Jun-2012				
Legal Land Loc		SW SE	C 18 TWP 45 R	GF 16 W	4M		Data Entry By				7			
Longitude, Lati			9:22, 52:52:45	OL 10 W	TIVI		Data Entry Date							
Road Authority	luuc		Transportation	(ΔΙΤ)	Reviewer Name John O'Brien									
Contract Main.	Δrea	CMA16	•	(/ (1 1)			Review		·	05-Jul-2012				
Clear Roadway/Skew 8.8 / 20 c									Name		26			
AADT/Year 2,380 / 20							· ·	Review Da		19-Jul-2012				
Road Classification RAU-209							Follow		ato	13 001 2012	en Salava CLS A Jun-2012 cia Chavez Jul-2012 n O'Brien Jul-2012 rew Smikles Jul-2012 T. Profile Pl./Slab Shape Thickness X26 3.5 ROUND X26 3.5 ROUND 12.7 ROUND			
Detour Length		2	00 110				lonow	OP Dy						
Bridge Culvert	` /													
Number of Culv			2											
Pipe #	Barrel	Span Rise (or I			Dia.)	Туре		Length		Corr. Profile		Shape		
2	MAIN F LINER	ULL	-	1500		MP		36.2		125X26		ROUND		
3	U/S		-	2000		MP		7.6		125X26	3.5	ROUND		
3	MAIN		-	1829		SSP		24.4			12.7	ROUND		
3			-	2000		MP		8		125X26	3.5	ROUND		
Special Feature	es													
Special Feature Utility Attachme					Uti	lities (L	ocated	at)						
Telephone	10m N	North c/l.					Gas							
Power							Municipal							
Others							Proble	m (Y/N)	No					
Remarks														
				Ap	ı i			ankment						
					Last	Now		ation of						
Horizontal Align					8	8	Interse	ction @ 2	200m V	Vest.				
Vertical Alignm					8	8								
Roadway Width	n (m)		8.800											
Embankment					7	7		measured		· leaning N· 7 broken blocks: 1 broken post				
Sideslope (1.5				IN SILLE	in side impact damage, leaning in, 7 broken blocks; i broken p				i pioveli hogi.		
(Height of Co		4)												
Guardrail (Y/N)			Yes											
Approach Roa	d / Eml	oankme	nt General Rat	ing	8	8								
						Upstre	am End							
Culvert Compo					Last	Now	Explar	ation of	Condi	tion				
(Pipe # : 2, Sp	an Type	e: Prima	ary Span)											
Direction End Treatment (Concrete, Steel, Others, None)		N		E pipe. Rail road bridge within 10m north										
Headwall					Х	Х								
Collar			Х	X										

Last Now Explanation of Condition (Pipe #: 2, Span Type: Primary Span)				Upstre	am End
Wingwalls	Culvert Component		Last	Now	Explanation of Condition
Cutoff Wall	(Pipe # : 2, Span Type: Primary	/ Span)			
Cutoff Wall	Wingwalls		X	X	
Bevel End	(Shape:)				
Heaving (mm)	Cutoff Wall		Х	X	
Invert Above/Below (mm)	Bevel End		7	7	
Above/Below (mm) 200 8	Heaving (mm)	0			
Scour Protection	Invert Above/Below Stream Bed	BELOW			
Crype : RIP RAP (Avg. Rock Size(mm) : 500) 8	Above/Below (mm)	200			
CAvg. Rock Size(mm): 500) Scour/Erosion 8 8 8	Scour Protection		8	8	
Scour/Erosion	(Type: RIP RAP)				
Deavers (Y/N)	(Avg. Rock Size(mm): 500)				
Upstream End General Rating	Scour/Erosion		8	8	
Bridge Culvert Barrel	Beavers (Y/N)	No			
Culvert Component (Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1500, Type: MP) Explanation of Condition Rise (mm): 1500, Type: MP) Barrel Last Accessible Date 28-Jun-2012 Special Features Special Feature (Type:) (Type:) 8 Special Feature (Type:) Roof 8 Measured Rise (mm) 1470 Measured At Ring No. 3 Sag (mm) 30 Percent Sag 2 Sidewall 8 Measured Span (mm) 1480 Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 7 Longitudinal Seams X X Total No. of Cracked Rings 7 7	Upstream End General Rating		7	7	
Culvert Component (Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1500, Type: MP) Explanation of Condition Rise (mm): 1500, Type: MP) Barrel Last Accessible Date 28-Jun-2012 Special Features Special Feature (Type:) (Type:) 8 Special Feature (Type:) Roof 8 Measured Rise (mm) 1470 Measured At Ring No. 3 Sag (mm) 30 Percent Sag 2 Sidewall 8 Measured Span (mm) 1480 Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Cracked Seams			Brid	dae Cu	Ivert Barre
Pipe # : 2, Primary Span, Location Code: MAIN, Span (mm): Rise (mm): 1500, Type: MP)	Culvert Component				
Special Features Special Feature (Type:) Special F		tion Code: MAIN. Spa			
Special Feature Crype: Special Feature S				<i>,</i>	
Special Feature Crype: Special Feature S	Special Features				
Type : Special Feature					
Type :) Roof					
Roof 1470	Special Feature				
Roof 1470	(Type:)				
Measured At Ring No. 3 Sag (mm) 30 Percent Sag 2 Sidewall 8 8 Measured Span (mm) 1480 Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams			8	8	
Sag (mm) 30 Percent Sag 2 Sidewall 8 8 8 Measured Span (mm) 1480 Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Measured Rise (mm)	1470			
Percent Sag 2	Measured At Ring No.	3			
Percent Sag 2	Sag (mm)	30			
Measured Span (mm) 1480 Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 7 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams X		2			
Measured At Ring No. 2 Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 X Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams Total No. of Rings with Two Cracked Seams	Sidewall		8	8	Grout pump nipples left in roof
Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 X Longitudinal Seams X X Total No. of Cracked Rings X X Total No. of Rings with Two Cracked Seams Cracked Seams X X	Measured Span (mm)	1480			
Deflection (mm) 20 Percent Deflection 1 Floor 7 7 Bulge (mm) 0 0 Measured At Ring No. 0 0 Abrasion (Y/N) No 0 Circumferential Seams 7 7 Separation (mm) 70 0 Longitudinal Seams X X Total No. of Cracked Rings 0 0 Total No. of Rings with Two Cracked Seams 0 0	Measured At Ring No.	2			
Floor 7 7 Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Deflection (mm)	20			
Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Percent Deflection	1			
Measured At Ring No. Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Floor		7	7	
Abrasion (Y/N) No Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams		0			
Circumferential Seams 7 7 Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Measured At Ring No.				
Separation (mm) 70 Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Abrasion (Y/N)	No			
Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Circumferential Seams		7	7	
Longitudinal Seams X X Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams	Separation (mm)	70			
Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams			Х	Х	
Total No. of Rings with Two Cracked Seams					
Detwoon oracks (IIIII)					
Proper Lap (Y/N)					
Longitudinal Stagger (Y/N)					

		Brio	lge Cul	Ivert Barrel
Culvert Component		1	Now	Explanation of Condition
(Pipe # : 2, Primary Span, Local	tion Code: MAIN, Spa	n (mm):	, Rise (mm): 1500, Type: MP)
Coating		7	7	
Corrosion By Soil (Y/N)	No			Light floor corrosion.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		Х	X	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		7	7	
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Primary	(Span)			
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	
Wingwalls		Х	X	
(Shape:)				
Cutoff Wall		Х	Х	
Bevel End		7	7	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm): 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	7	7	
			Upstre	am End
Culvert Component		Last		Explanation of Condition
(Pipe #: 3, Span Type: Second	ary Span)			
Direction		N		W pipe
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	Х	

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	lary Span)			
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		7	7	CSP extention to steel pipe barrel
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		Brid	dao Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	cation Code: U/S. Sp			, Rise (mm): 2000, Type: MP)
Barrel Last Accessible Date	30-Aug-2010	un (mn	,.	0.8m water; viewed from ends, shape looks OK.
Chariel Factures				
Special Feature			1	
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof Measured Rise (mm)		8	N	
· ,				
Measured At Ring No.				
Sag (mm) Percent Sag				
		0	l NI	
Sidewall Street (com)		8	N	
Measured Span (mm)				
Measured At Ring No. Deflection (mm)				
Percent Deflection				
		7		
Floor	0	7	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		X	N	
Separation (mm)	0			
Longitudinal Seams	I	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)				

		Brid	lge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	ocation Code: U/S, Sp	an (mn	n):	, Rise (mm): 2000, Type: MP)
Coating		5	N	(Moderate corrosion at floor. 30Aug2010).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel Extension General Ratin	ng	7	N	GR was 7 from 30Aug2010.
		Brid	lae Cu	ilvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	ocation Code: MAIN, S	span (r	nm):	, Rise (mm): 1829, Type: SSP)
Barrel Last Accessible Date	30-Aug-2010			0.8m water in barrel; viewed from ends, shape looks OK.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		8	N	Main barrel is 1829 steel pipe
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				
Percent Sag				
Sidewall		8	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		7	N	
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		Х	Х	
Separation (mm)	0			
Longitudinal Seams		Х	Х	
Total No. of Cracked Rings				1
Total No. of Rings with Two				1
Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				

		Brio	lge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Secondary Span, Lo	cation Code: MAIN, S	Span (n	nm):	, Rise (mm): 1829, Type: SSP)
Coating		5	N	(Moderate corrosion at floor. 30Aug2010).
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	GR was 8 from 30Aug2010.
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	lary Span)			
Direction		S		
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Collar		Х	X	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		7	7	CSP extension to steel barrel
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm): 500)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	7	7	
		S	tructu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	Train bridge 10m U/S.
Bank Stability		6	6	
HWM (m below Top of Culvert)	0.2			0.15 - Flowline on pipe 1.
Drift (Y/N)	Yes			Minor drift at inlet. '

Structure Usage									
		Last	Now	Explanation of Condition					
Channel Bottom Degrading/Aggrading				Unknown					
Beavers (Y/N)	No								
(Fish Compensation Measure 1 :	NONE)								
(Fish Compensation Measure 2 :	NONE)								
Channel General Rating		7	7						

			Maintena	nce Recommen	dations					
Inspector Recommendations	Y	ear	Inspector Comments		Department Com	ments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	G									
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUT	OFF									
REPAIR SEAMS										
OTHER ACTION		012	Guardrail - replace 1 post, 7 brail.	olocks; reset N						
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/N	Now) 7	7.8/77.8	Sufficiency Rating (%)	(Last/Now)	75.8/75.8	Est. Repl. Yr	2040	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection					Department Comments					
Maintenance Reviewed By					Date		E	Estimated Tota	1 0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)	Υ									
Proposed Action	2007.10. 2003.07.	10 Ten 14 Rep	dered. On spot program for 20 lace as spot improvement by 2	07. 2010. Consider a	dding to hwy 13:12	work, 71346&7134	17 tentativ	ely scheduled f	or 2008.	
Previous Inspector's Name	Owen Sa	ılava		Previous	Assistant's Name					
Next Inspection Date	28-Mar-2	014		Previous	Inspection Date	30-Aug-2010				
Inspection Cycle (Default) (months)	21									
Comment										