					Rrida	е Сију	ert Inspes	tion					
Bridge File Nur	mher	73539 -	1 Bridge Culve	rt	Billug	Bridge Culvert Inspection Form Type			CULM				
Year Built	TIDEI	1967	- Driage Guive				Lot No.	P-0		1			
Bridge or Town	n Name		JG					Inspector Name		Jon Davies			
Located Over	TTALLIC		LE CREEK, 2.	12 20 2 V	VATER	RCRS-	Inspector Class		BR CLS B				
		ST		12.20.2, v	V/ (   L			Assistant Name		DIX OLO D			
Located On		5:06 C1	3.963				Assistant	t Class					
Water Body Cl.							Inspectio	n Date		28-Sep-2011			
Navigabil. Cl./Y							Data Ent	ry By		Alyssa Boynto	n		
Legal Land Loc			C 7 TWP 6 RG	E 21 W4N	/		Data Ent	ry Date		13-Oct-2011			
Longitude, Lati			:44, 49:27:07				Reviewe	r Name		Garry Roberts			
Road Authority			Transportation	(AIT)			Review D	Date		03-Oct-2011			
Contract Main.		CMA25					Dept. Re	viewer	Name	Tim Davies			
Clear Roadway/Skew 12 / -15 deg. (LHF)					Dept. Re	eview Da	ate	28-Oct-2011					
AADT/Year 4,540 / 2010 (A)					Follow-U	Ір Ву							
	Road Classification RAU-213-120												
Detour Length (km) 5  Bridge Culvert Information													
			2										
Number of Cul			Dic \	Tym-		on att		Corr. Profile	Pl./Slab	Chana			
Pipe #	Barrel	rrel Span Rise (or Di		טומ.)	Туре	L	-ength		Con. Profile	Thickness	Shape		
1	MAIN		3500	3880		SPE		17.5		152X51	3.5,3.5,3.5	ELLIPSE	
2	MAIN		3500	3880		SPE	4	17.5		152X51	3.5,3.5,3.5	ELLIPSE	
3	MAIN	AIN 3500 3880 SPE		SPE	46.3		152X51	3.5,3.5,3.5	ELLIPSE				
Special Feature	es		VERT TIMBER	STRUTS	3							·	
Special Feature	es Comi	ment											
	.				Uti	lities (L	_ocated at	t)					
Utility Attachme	ents												
Telephone							Gas	.1					
Power							Municipal Problem (Y/N) No						
Others Remarks	Eibro	optics @	C D/M			T TODIETTI (17			INO				
Remarks	Shaw	and sup	ernet S R/W										
				A	oproac	ch Road	d / Emban	nkment					
					Last	Now	Explanat	Explanation of Condition					
Horizontal Aligi	nment				6	6	In sag curve with limited sight						
Vertical Alignm	nent				6	6	distance.						
Roadway Widtl	h (m)		12.000										
Embankment					6	6	3:1 to a 4	3:1 to a 4.0 m berm then 2:1 on both					
Sideslope (_	:1)		2.0				sides.						
	· ·	2.2)					1						
(Height of Cover(m) : <b>2.2</b> )  Guardrail (Y/N)  Yes			Yes										
Guardiali (1/N)	oual and in (1711)												
` ,		an lere e	ot Conord D-1	ina									
Approach Roa		oankmer	nt General Rat	ing	6	6							
` ,		oankmer	nt General Rat	ing			am End						
` ,	ad / Emi	oankmer	nt General Rat	ing		Upstre	am End Explanat	tion of	Condi	tion			
Approach Roa	ad / Eml			ing		Upstre		tion of	Condi	tion			
Approach Roa	ad / Eml			ing		Upstre				tion			
Approach Roa  Culvert Comp (Pipe # : 1, Sp Direction End Treatment	onent	e: Prima	ry Span)		Last	Upstre	Explanat			tion			
Approach Roa  Culvert Comp (Pipe # : 1, Sp Direction	onent	e: Prima	ry Span)		Last	Upstre	Explanat			tion			

Alberta Transportation

			Lingter	om End
Culvert Component		Loot		eam End Explanation of Condition
(Pipe # : 1, Span Type: Primary	v Snan)	Last	INOM	Explanation of Condition
	y Span)		V	
Wingwalls		N	X	
(Shape: )			l NI	
Cutoff Wall		N	N	
Bevel End		5	4	Water entering through lower bolt holes.
Heaving (mm)	150			
Invert Above/Below Stream Bed				
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		7	7	
23041/21001011		·		
Beavers (Y/N)	No			
Upstream End General Rating	·	4	4	
		Bri	dae Cu	llvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN S			· •
Barrel Last Accessible Date	28-Sep-2011	parr (min	1). 0000	Middle pipe - barrel
Dairei Last Accessible Date	20-3ep-2011			Receives most flow.
Special Features				
Special Feature		7	6	
(Type: VERT TIMBER STRUTS	)			
Special Feature				
(Type:)				
Roof		4	4	Confirmed sag
Measured Rise (mm)	3580			
Measured At Ring No.	9			
Sag (mm)	300			
Percent Sag	8			
Sidewall		2	2	35mm remaining steel @ Ring 7
Measured Span (mm)	3683		_	30mm remaining steel @ ring 13.
Measured At Ring No.	9			_
Deflection (mm)	183			
Percent Deflection	5			
Floor	-	N	N	600mm deep water- unable to rate.
Bulge (mm)	0	14	14	South adop water anable to fate.
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams	100	6	6	
Separation (mm)	0	0	0	
	U	2		45 mm STEEL @ DING #44 (20 mm STEEL @ DING #7 ALL AT
Longitudinal Seams  Total No. of Cracked Bings	11	2	2	45 mm STEEL @ RING #11, (30 mm STEEL @ RING #7 - ALL AT EAST SIDEWALL. No change jan 08 insp) 31-Jan-2008
Total No. of Cracked Rings	11			
Total No. of Rings with Two Cracked Seams	6			35mm steel @ Ring # 7 east sidewall unable to confirm 30mm remaining steel @ ring 7 due to water depth.
Min. Remaining Steel Between Cracks (mm)	30			30mm remaining steel @ ring 13. 1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			

		Bric	dge Cul	lvert Barrel				
Culvert Component		Last Now		Explanation of Condition				
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm	): 3500	, Rise (mm): 3880, Type: SPE)				
Coating		4	4	ABRASION ALONG LOWER SIDEWALL WITH SOME PITTING				
Corrosion By Soil (Y/N)	Yes							
Corrosion By Water (Y/N)	Yes							
Camber POS/ZERO/NEG	NEG							
Ponding (Y/N)	No							
Fish Passage Adequacy		6	6					
Baffle		Х	Х					
(Type:)								
Waterway Adequacy		6	6					
Icing (Y/N)	No							
Silting (Y/N)	No							
Drift (Y/N)	No							
Barrel General Rating		3	3	Struts functioning, raised GR to reflect stable conditions. But permanant measured reference undetermined.				
		D	ownstr	ream End				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 1, Span Type: Primary	/ Span)							
Direction		N		Middle pipe, north end.				
End Treatment (Concrete, Steel, Others, None)	STEEL			madio pipo, nortal ondi				
Headwall		Х	Х					
Collar		Х	Х					
Wingwalls		Х	Х					
(Shape: )								
Cutoff Wall		Х	Х					
Bevel End		5	5					
Heaving (mm)	300							
Invert Above/Below Stream Bed	ABOVE							
Above/Below (mm)	300							
Scour Protection		6	6					
(Type : RIP RAP)								
(Avg. Rock Size(mm) : <b>600</b> )								
Scour/Erosion		6	6					
Beavers (Y/N)	No							
Downstream End General Ratio	ng	5	5					
			Upstre	am End				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 2, Span Type: Second	lary Span)							
Direction	. ,	s		East pipe, south end.				
End Treatment (Concrete, Steel, Others, None)	CONCRETE							
Headwall		Х	Х					
Collar		N	4	GOOD AROUND, BUT BROKEN NEAR BOTTOM.				

			Unetre	oom End
Culvert Component				eam End Explanation of Condition
(Pipe # : 2, Span Type: Second	dary Snan)	Last	IAOM	Explanation of Condition
	Jary Spari)	NI NI	V	
Wingwalls		N	X	
(Shape: ) Cutoff Wall		N.	l NI	
Cuton wan		N	N	
Bevel End		5	4	SUPERFICIAL RUST.
Heaving (mm)	150			WATER ENTERING THRU LOWER BOLT HOLES
Invert Above/Below Stream Bed				
Above/Below (mm)	400			
Scour Protection		7	7	Some class 2 @ toe @ both E & W pipes
(Type : RIP RAP)				
(Avg. Rock Size(mm) : <b>300</b> )				
Scour/Erosion		7	7	
Coddi/Erosion		,		
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
Code cont Common and				Ilvert Barrel
Culvert Component	anting Code, MAII		Now	· •
		N, Span (I	mm): 3	500, Rise (mm): 3880, Type: SPE)
Barrel Last Accessible Date	28-Sep-2011			East pipe
Special Features				
Special Feature		7	5	Struts not in place rings 2-5.
(Type: VERT TIMBER STRUTS	5)		_	
Special Feature				
(Type:)				
Roof		5	5	Rise measurement actually measured @ Ring 9, 3660mm
Measured Rise (mm)	3660			
Measured At Ring No.	9			
Sag (mm)	220			
Percent Sag	6			
Sidewall		2	2	33mm remaining steel @ Ring 12.
Measured Span (mm)	3615			
Measured At Ring No.	9			
Deflection (mm)	115			
Percent Deflection	3			1
Floor	1-	N	N	400mm deep water
Bulge (mm)	0	IN	114	100mm doop water
Measured At Ring No.				
Abrasion (Y/N)	Yes			
	162			
Circumferential Seams	0	6	6	-
Separation (mm)	0			(00 OTES! @ DINO (10) 01 1 0000 11 0 0000
Longitudinal Seams		2	2	(30 mm STEEL @ RING #13) 31-Jan-2008 ,44 mm STEEL @ RING #11, 45 mm STEEL @ RING #7 - ALL AT EAST SIDEWALL. No
Total No. of Cracked Rings	11			change.
Total No. of Rings with Two Cracked Seams	3			Unable to confirm 30mm steel and 4 rings with 2 ckd seams due to water depth.  N1
Min. Remaining Steel Between Cracks (mm)	33			
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			

		Brid	dge Cu	Ivert Barrel				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 2, Secondary Span, Lo	ocation Code: MAIN, S	Span (r	nm): 3	500, Rise (mm): 3880, Type: SPE)				
Coating		4	4	(ABRASION ALONG LOWER SIDEWALL WITH SOME PITTING,				
Corrosion By Soil (Y/N)	Yes			SOIL ALSO) 31-Jan-2008				
Corrosion By Water (Y/N)	Yes							
Camber POS/ZERO/NEG	NEG							
Ponding (Y/N)	No							
Fish Passage Adequacy		6	6					
Baffle		Х	Х					
(Type:)			1					
Waterway Adequacy		7	7	Damana drift at 11/0				
Icing (Y/N)	No			Remove drift at U/S				
Silting (Y/N)	No							
Drift (Y/N)	Yes							
Barrel General Rating		3	3	Struts functioning, raised GR to reflect stable conditions. But permant reference point not determined.				
		D	ownstr	ream End				
<b>Culvert Component</b>		Last	Now	Explanation of Condition				
(Pipe # : 2, Span Type: Second	lary Span)							
Direction		N		East pipe, north end.				
End Treatment (Concrete, Steel, Others, None)	STEEL							
Headwall		Х	Х					
Collar		Х	Х					
Wingwalls		Х	Х					
(Shape: )								
Cutoff Wall		Х	Х					
Bevel End		6	6					
Heaving (mm)	150							
Invert Above/Below Stream Bed	ABOVE							
Above/Below (mm)	300							
Scour Protection		7	7	Some class 2 & 3 @ NE bank				
(Type : RIP RAP)								
(Avg. Rock Size(mm) : <b>600</b> )								
Scour/Erosion		7	7					
Beavers (Y/N)	No							
Downstream End General Ratio	ng	6	6					
			Upstre	am End				
Culvert Component			Now	Explanation of Condition				
(Pipe #: 3, Span Type: Second	lary Span)							
Direction		S		West pipe - S End				
End Treatment (Concrete, Steel, Others, None)	CONCRETE							
Headwall		Х	Х					
Collar		4	4	Broken concrete at lower sides				

			Unstre	eam End
Culvert Component				Explanation of Condition
(Pipe # : 3, Span Type: Second	larv Span)	12001	1	
Wingwalls	,	Х	Х	
(Shape: )				
Cutoff Wall		X	X	
Bevel End	I	5	5	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			_
Above/Below (mm)	400			
Scour Protection		7	7	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		4	4	
9				
			T	ılvert Barrel
Culvert Component			Now	· ·
		, Span (ı	mm): 3	500, Rise (mm): 3880, Type: SPE)
Barrel Last Accessible Date	28-Sep-2011			West pipe barrel
Special Features				
Special Feature		7	6	
(Type: VERT TIMBER STRUTS	)			
Special Feature				
(Type:)				
Roof		7	N	Unable to confirm due to silt. Ring 11 rise 3845mm.
Measured Rise (mm)	3755			
Measured At Ring No.	13			
Sag (mm)	125			
Percent Sag	3			
Sidewall		2	2	Bolts pulling through 35mm remaining steel @ Ring 2.
Measured Span (mm)	3620			10 CRACKED RINGS SEEN, 0 OF WHICH ARE CRACKED @
Measured At Ring No.	11			BOTH SIDEWALLS
Deflection (mm)	120			
Percent Deflection	2			
Floor		N	N	600mm deep water
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	Yes			
Circumferential Seams		6	6	
Separation (mm)	0			
Longitudinal Seams		2	2	
Total No. of Cracked Rings	10			Bolts punching through @ ring 1,2,3 Unable to confirm 4 rings with 2 cracked seams @ Ring 1- East
Total No. of Rings with Two Cracked Seams	0			sidewallNov 28 2009 35mm remaining at Ring 2.
Min. Remaining Steel Between Cracks (mm)	35			1N stagger.
Proper Lap (Y/N)	No			
Longitudinal Stagger (Y/N)	Yes			

		Bric	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Secondary Span, Lo	ocation Code: MAIN, S	Span (n	nm): 3	500, Rise (mm): 3880, Type: SPE)
Coating	·	4	4	ABRASION ALONG LOWER SIDEWALL WITH SOME PITTING,
	Yes			SOIL ALSO
Cambon Co/Zerco/Nec	1120			
Coating Corrosion By Soil (Y/N) Corrosion By Water (Y/N) Camber POS/ZERO/NEG Ponding (Y/N) Camber Pos/ZERO/NEG Ponding (Y/N) No Camber Pos/ZERO/NEG Ponding (Y/N) No Camber Pos/ZERO/NEG Ponding (Y/N) Camber Pos/ZERO/NEG Ponding (Y/N) Camber Pos/ZERO/NEG No Camber No Called Camber Secondary Camber Pos/Zero/Neg No Camber Pos/Zero/Neg Neg Camber Pos/Zero/Neg No No Camber Pos/Zero/Neg No No Camber Pos/Zero/Neg No No Camber Pos/Zero/N				
Fish Passage Adequacy		6	6	
Baffle		Х	Х	
(Type:)				
		7	7	
	No			
	140	3	3	Struts functioning, raised GR to reflect stable conditions but
Barrer General Rating		_ 3	3	permanent reference point undetermined.
				ream End
		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Second	lary Span)			
Direction		N		West Pipe - N end
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		Х	Х	
Collar		Х	X	
Wingwalls		Х	Х	
(Shape: )				
Cutoff Wall		Х	Х	
Bevel End		6	6	
Heaving (mm)	150			
Invert Above/Below Stream Bed				
Above/Below (mm)	300			
Scour Protection	1000	7	7	
(Type : RIP RAP)		'		
(Avg. Rock Size(mm) : <b>600</b> )				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	6	6	
			tructu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)		Last	1104	Explanation of Condition
Alignment		7	7	
,g			<u></u>	
Bank Stability		5	5	
HWM (m below Top of Culvert)				No visible HWM.
Drift (Y/N)	Yes			East Barrel
, ,				at the state of th

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

Bridge Inspection & Maintenance System (Web 2005)

		Maintenance Re	commendations						
Inspector Recommendations	Year	Inspector Comments		rtment Comme	ents		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS					· · · ·		9		
PLACE ADDITIONAL RIP RAP									
REMOVE DRIFT ACCUMULATION	2012	@ U/S end of east pipe.							
INSTALL CONCRETE/STEEL LINING	ì								
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUT	OFF								
REPAIR SEAMS									
OTHER ACTION	2012	Complete replacement assessment.							
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/N (%)	ow) 33.3/33	Sufficiency Rating (Last/l	Now) 44.0/43	.8 E	st. Repl. Yr	2016	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection			Depa	rtment nents					
Maintenance Reviewed By			Date			E	stimated Tota	I 0	
Proposed Long-Term Strategy								·	
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Jason Rusu		Previous Assista	nt's Name					
Next Inspection Date	28-Jun-2013		Previous Inspect	ion Date	28-Nov-2009				
Inspection Cycle (Default) (months)	21								
Comment									