Bridge Inspection & Maintenance System (Web 2005)

Bridge File Number 75907 - 1 Bridge Culver com Type CULN Unit <				ction	ert Insp	e Culve	Brida					
Year Built/Lined 1965/1988 Lot No. 1 Bridge or Town Name FT MCMURAY Inspector Name Wade Nanninga Located On Located On 63:10 C1 16.732 Inspector Name R CLS A Assistant Name Assistant Name Mater Body CLYear Inspector Name R CLS A Assistant Name Data Entry By Theresa Locata Mater Body CLYear Data Entry By Theresa Locata Data Entry By Theresa Locata <t< td=""><td></td><td></td><td>CULM</td><td></td><td></td><td>o ourre</td><td>Bridg</td><td>ert</td><td>Bridae Culve</td><td>75907 -1</td><td>nber</td><td>Bridae File Nur</td></t<>			CULM			o ourre	Bridg	ert	Bridae Culve	75907 -1	nber	Bridae File Nur
Bridge or Town Name FT MCMURRAY Mark FOUNDER NV ER, 8.11.39.1 Inspector Name Made Naminga Located Or MAINE FOR SAT MATEROALS TO Name BR CLS A Assistant Class BR CLS A Assistant Class Assistant Class Assistant Class Data Entry Py Theresa Lacusta Located Or MAINE FOR SAT MANTARA Assistant Class Data Entry Py Theresa Lacusta Data Entry Py Theresa Lacusta Logaluda, Latitude 111:22:30, 56:25:07 Kerker Name Brent Herrick Data Entry Data Salvo-2011 Located Naminy Alberta Transportation (AIT) Review Rame Brent Clarsca Brent Herrick Clear Road-Withorty Alberta Transportation (AIT) Review Rame Brent Herrick Dept. Review Data Brent Herrick Clear Road-Withorty Alberta Transportation (AIT) Review Rame Brent Herrick Dept. Review Data Brent Herrick Road Authorty Alberta Transportation (AIT) Maine (Maine Foundation (AIT) Brent Herrick Dept. Review Rame Brent Herrick Road Authorty Road Authorty Span Rise (or Dia) Type Length Corr. Profile PL/Slab Rod Road Authorty Maine (Maine Foundation (AIT) Span Rod Span Rod <td< td=""><td></td><td></td><td><u>, , , , , , , , , , , , , , , , , , , </u></td><td></td><td colspan="3"></td><td></td><td></td></td<>			<u>, , , , , , , , , , , , , , , , , , , </u>									
Located OverHANGINGSTONE RIVER, 8.11.39.1Massistant NameBR CLS ALocated Over63:10 C1 16.732		or Name							-			
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Water Body CI./Year Assistant Class Assis		•					.00.1,	LIX, 0.11.				
Inspectation Late with the set of							/			Located On		
Navigabil: CL/Year Protes C 33 TWP 85 RG 9 W4M Data Entry By I Theresa Lacusta Legal Land Location NMY 25 \ST 75 T Review Name Eric Carcoux Image: State Stat							ly Cl./Year			Water Body Cl.		
Legal Land Location NW SEC 33 TWP 85 RGE 9 W4M Data Entry Date 23-Nov-2011 Test Carcoux											'ear	Navigabil. Cl./Y
Longitude Latitude -111:22:30, 56:25:07 Review Iam Review Name Eric Carcoux Road Authority Alberta Transportation (AIT) Review Name Berth Herrick Isoconcurve Isoconcurve Dept. Review Name Brent Herrick Isoconcurve <		510					4M	RGE 9 W4	33 TWP 85 F	NW SEC	ation	Legal Land Loo
Read Authority Alberta Transportation (AIT) Review Date 23-Nov-2011 Contract Main. Area CMAOT Ferritoria Brent Herrick Image: Second Secon									30, 56:25:07	-111:22:3	tude	Longitude, Lati
Contract Main. Area CMA07 Brent Herrick Dept. Review Name Brent Herrick Clear Roadway/New 33.07 / 2010 (A) IS-2000							Poad Authority Alberta Transportation (AIT)					
Clear Roadway//skew 13.2 / 2010 (A) Dept. Review Date 16-Dec-2011 AAD T/Year 3.910 / 2010 (A) Follow-Up By 16-Dec-2011 Bad Classification RAU / 213.4-120 Follow-Up By 16-Dec-2011 Bridge Cuivert Information 250 Follow-Up By 16-Dec-2011 Pipe # Barrel Span Rise (or Dia.) Type Length Corr. Profile Pl./Slab Ri 3 MAIN FUL Span 3900 SP 62.2 152X51 Ri Ri Special Features Special Features<										CMA07	Area	Contract Main.
AADT/Year 3,910 / 2010 (A) Follow-Up By 1920622011 Road Classification RAU-213.4-120 Follow-Up By Follow-Up By Detour Length (km) 250 Follow-Up By Follow-Up By Stridge Cluverts 2 Follow-Up By Follow-Up By Number of Culverts 2 Follow-Up By Follow-Up By 3 MAIN FULL 2 Follow-Up By Follow-Up By 4 MAIN FULL 3900 SP 62.2 152X51 RC 5 Special Features Special Features Special Features RC RC Special Features Swires OH 75 m East. Utilities (Located at) Municipal RC Utility Attachments Telephone East & West r/w. Gas Special Features Special Features Votiers Remarks Swires OH 75 m East. Municipal Municipal Special Features					· · · ·					13.2 /	/Skew	Clear Roadway
Road Classification RAU-2:13.4-120 Image Classification RAU-2:13.4-120 Detour Length (km) 250 Image Classification Recent Classification <td< td=""><td></td><td></td><td>15-Dec-2011</td><td></td><td>· · · ·</td><td></td><td></td><td></td><td>010 (A)</td><td>3,910/2</td><td></td><td></td></td<>			15-Dec-2011		· · · ·				010 (A)	3,910/2		
Detour Length (km)250Bridge Cutverts2Vumber of Cutverts2Pipe #BarrelSpanRise (or Dia.)TypeLengthCorr. ProfilePL/Slab ThicknessSh3MAIN FULL LINER-3900SP62.2152X51RCRC4MAIN FULL LINER-3900SP62.2152X51RCRCSpecial FeaturesSpecial FeaturesUtility AttachmentsTelephoneEast & West r/w.GasSpecial FeaturesMunicipalOthersSpecial FeaturesOthersSpecial FeaturesUtility AttachmentsEndemoneEast & West r/w.Corr. ProfileProblem KimentVertical AlignmentI 6.900EndCoreased, still functional.Align colspan="4">Coreased, still functional.Approach KimentUtility of Cover(m) : 5.4)Gard align mentYesCoreased, still functional.Approach KimentEndemond ConticonCoreased		Follow-Up By							3.4-120	RAU-213	ation	Road Classifica
Bridge Culve: INFORMATION PLANE 2 Yeige # Span Rise (or Jan 1000000000000000000000000000000000000					-						(km)	Detour Lenath
Number of Ci/Fer 2 Pipe # Barrel Span Rise (or Dia.) Type // Span Cor. Profile Pl/Slab Sh 3 MAIN FULL - 3900 ·/ S SP ·/ S 62.2 ·/ State 152X51 Indext of State RC 4 MAIN FULL - 3900 ·/ S SP ·/ S 62.2 ·/ State 152X51 Indext of State RC Special Features Secial Features			1							1		
Pipe # Barrel Span Rise (or Dia.) Type Length Corr. Profile PL/Slab Sh 3 MAIN FULL LINER - 3900 ·· SP ·· 62.2 ·· 152X51 0.00 ·· RC 4 MAIN FULL LINER - 3900 ·· SP ·· 62.2 ·· 152X51 0.00 ·· RC Special Features - 3900 ·· SP ·· 62.2 ·· 152X51 0.00 ·· RC Special Features - - SP ·· 62.2 ·· 152X51 0.00 ·· RC Special Features - - SP ·· 62.2 ·· 152X51 0.00 ·· RC Special Features - - - - Set ·· Set ·· Set ·· RC Special Features - - - - Set ·· Set ·· Set ·· RC Special Features - - - - Set ·· Set ··<									2			
3MAIN FULL INNER-3900SP62.2152X51RC4MAIN FULL INNER-3900SP62.2152X51RCSpecial Features Special Features Special Features Special Features Special Features 	Shape		Corr. Profile	Length		Туре	Dia.)	Rise (or	Span	5	Barrel	Pipe #
4 MAIN FULL LINER - 3900 SP 62.2 152X51 RC Special Features Special Features Special Features Special Features VIIIIES Located at) Utilities (Located at) Utilities (Located at) Utilities (Located at) Utilities (Located at) Vertices Colspan="6">Municipal Power 3 wires OH 75 m East. Others Proteor Tool (V/N) Remarks In both of fong sag curve. Long uphill grade in both dired	ROUND		152X51	62.2		SP		3900		-ULL -		3
Special Features Utilities (Located at) Utilities (Located at) Utility Attachments Telephone East & West r/w. Gas Power 3 wires OH 75 m East. Municipal Others Power Special Features (V/N) No Remarks Approach Road / Embankment Telephone East & West r/w. Gas Power Gas Problem (Y/N) No Remarks Embankment Telephone East & West r/w. Problem (Y/N) No Now Embankment Telephone Fault / Embankment Your Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2">Colspan="2" Upstream End	ROUND		152X51	62.2		SP	3900 SP			-ULL -		4
Special Features constrained on the second						I						Special Feature
Power 3 wires OH 75 m East. Municipal Others Problem (Y/N) No Remarks Problem (Y/N) No Horizontal Alignment Cast Now Explanation of Condition Horizontal Alignment 7 7 7 In bottom of long sag curve. Long uphill grade in both dire Limited sight distance. No passing. Passing lane to both of the Limited sight distance. No passing.				at)		ilities (L	Uti			R Moot r/u		•
Others Problem (Y/N) No Remarks Approach Road / Embankment General Rating Find and a context of the contex												
Approach Road / Embankment Last Now Explanation of Condition Horizontal Alignment 7 7 Vertical Alignment 6 6 6 Roadway Width (m) 16.900 Embankment 7 7 7 Sideslope (_:1) 2.0 (Height of Cover(m) : 5.4) Yes Creased, still functional. Approach Road / Embankment General Rating 6 6 Upstream End Creased method Creased method							s OH 75 m East.					
Approach Road / Embankment Last Now Explanation of Condition Horizontal Alignment 7 7 In bottom of long sag curve. Long uphill grade in both dire Vertical Alignment 6 6 Imited sight distance. No passing. Passing lane to both of condition Roadway Width (m) 16.900				i (Y/N) No	Proble							
Image: style s												Remarks
Horizontal Alignment 7 7 7 In bottom of long sag curve. Long uphill grade in both dire limited sight distance. No passing. Passing lane to both of limited								A				
Vertical Alignment 6 6 Limited sight distance. No passing. Passing lane to both c Roadway Width (m) 16.900 - - Embankment 7 7 Sideslope (_:1) 2.0 - (Height of Cover(m) : 5.4) - - Guardrail (Y/N) Yes - Creased, still functional. Approach Road / Embankment General Rating 6 6					· · ·							
Embankment 7 7 Sideslope (:1) 2.0 (Height of Cover(m) : 5.4) 2.0 Guardrail (Y/N) Yes Approach Road / Embankment General Rating 6 6 6	In bottom of long sag curve. Long uphill grade in both directions. Limited sight distance. No passing. Passing lane to both directions.											
Sideslope (:1) 2.0 (Height of Cover(m) : 5.4) Guardrail (Y/N) Yes Creased, still functional. Approach Road / Embankment General Rating 6 6 Upstream End						_			16.900		n (m)	Roadway Widtl
(Height of Cover(m) : 5.4) Guardrail (Y/N) Yes Creased, still functional. Approach Road / Embankment General Rating 6 6 Upstream End						7	7					Embankment
(Height of Cover(m) : 5.4) Yes Creased, still functional. Guardrail (Y/N) Yes Creased, still functional. Approach Road / Embankment General Rating 6 6 Upstream End									2.0		_:1)	Sideslope (
Guardrail (Y/N) Yes Creased, still functional. Approach Road / Embankment General Rating 6 6 Upstream End Creased (Still Functional)										5.4)		
Approach Road / Embankment General Rating 6 6 Upstream End			l.	l, still functiona	Crease				Yes	,		- · · · · ·
Upstream End						6	6	ting	t General Rat	bankmen		
					am End	Unstre						
			tion	tion of Condit			Last				onent	Culvert Comp
(Pipe # : 3, Span Type: Secondary Span)							Luot		dary Span)	e: Second		
Direction E North pipe.				ne	North		F					
End Treatment (Concrete, Steel, CONCRETE CONCRETE				μα.				Ξ	, CONCRETE	ete, Steel,	(Concre	End Treatment
Headwall X X						Х	X					· · · · · · · · · · · · · · · · · · ·

			Unstre	am End
Culvert Component		Last		Explanation of Condition
(Pipe # : 3, Span Type: Seco	ondary Span)			
Collar		4	4	SE corner spalled exposing rebar. Void under NE collar.
			· ·	
Wingwalls		X	X	
(Shape :)				
Cutoff Wall		N	N	
			-	
Bevel End	000	6	6	
Heaving (mm)	200			
Invert Above/Below Stream B				-
Above/Below (mm)	0			
Scour Protection		4	4	Scour along both NE/SE sides- next to collar.
(Type : RIP RAP)				-
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		4	4	
Beavers (Y/N)	No			
Upstream End General Ration	ng	4	4	
		Dut		
Culvert Component			Now	Ivert Barrel Explanation of Condition
(Pipe # : 3, Secondary Span	Location Code: MA			, Rise (mm): 3900, Type: SP)
Barrel Last Accessible Date	10-Mar-2010		<u></u>	Barrel 1/3 full with ice/water - viewed from ends-looks ok.
Darrei Last Accessible Date	10-1011-2010			Barrel 1/3 full with ice/water - viewed from ends-looks ok.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		4	4	Dents/deformations from construction.
Measured Rise (mm)				
Measured At Ring No.				
Sag (mm)				Est 7% sag
Percent Sag	7			_ LSt 7 /0 Sag
Sidewall		5	N	
Measured Span (mm)	4141			
Measured At Ring No.				- @ cl
Deflection (mm)	240			1
Percent Deflection	7			1
Floor		N	N	
Bulge (mm)		IN	IN	
Measured At Ring No.				(Minor. 17/Aug/2006)
Abrasion (Y/N)	Yes			
Circumferential Seams	100	-	N	
	0	6	IN	
Separation (mm)	U	0	NI	
Longitudinal Seams		6	N	-
Total No. of Cracked Rings				-
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				1N for half of barrel10-Mar-2010
Proper Lap (Y/N)	No			
				1

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

75907 -1 Bridge Culvert

		Bri	dge Cu	Ivert Barrel
Culvert Component		Last		Explanation of Condition
(Pipe # : 3, Secondary Span, Lo	cation Code: MAIN,	Span (mm):	, Rise (mm): 3900, Type: SP)
Coating		6	N	Superficial corrosion10-Mar-2010
Corrosion By Soil (Y/N)	Yes			-
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No		_	
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		4	4	GR carried fwd from 10-Mar-2010
		D	ownsti	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 3, Span Type: Second	ary Span)			
Direction		W		North pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	Х	
Collar		Х	Х	
Wingwalls		X	Х	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		6	6	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		6	6	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 400)				
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	6	6	
	1			am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 4, Span Type: Second	ary Span)			
Direction		E		South pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		_	
Headwall		X	Х	
Collar		4	4	Scour next to collar (NE) exposing rebar.

Last X N 6 6		am End Explanation of Condition
N	X	
N	X	
	X	
6	6	
0	0	
		-
4	4	
4	4	
		-
4	4	
4	4	
		Dam 20m U/S .
4	4	
Bri	dqe Cu	lvert Barrel
Last	Now	Explanation of Condition
MAIN, Span (I	nm):	, Rise (mm): 3900, Type: SP)
		Barrel 1/3 full with ice/water, viewed from ends - looks ok.
3	N	200mm deformations - cusping of plates (photo). Possible
		construction damage from grouting pressure10-Mar-2010
5	N	
		@ cl
N	N	
		1
		1
6	N	
		1
6	N	
		1
		1
		1N stagger for 1/2 of barrel length10-Mar-2010
	Bri Last MAIN, Span (1 	Image: state structure Image: state structure Image: state structu

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

75907 -1 Bridge Culvert

	Bridge Culvert Barrel									
Culvert Component		1		Explanation of Condition						
(Pipe # : 4, Secondary Span, Lo	ocation Code: MAIN,	Span (r	nm):	, Rise (mm): 3900, Type: SP)						
Coating		6	N	(Superficial on lower 1/4. 17/Aug/2006)						
Corrosion By Soil (Y/N)	Yes									
Corrosion By Water (Y/N)	Yes									
Camber POS/ZERO/NEG	NEG									
Ponding (Y/N)	Yes			Natural earth dam backs water into pipe .						
Fish Passage Adequacy		6	6							
Baffle		N	N							
(Туре :)										
Waterway Adequacy		4	5							
Icing (Y/N)	No			Earth dam ponding water.						
Silting (Y/N)	No									
Drift (Y/N)	No									
Barrel General Rating		3	3	GR carried fwd from 10-Mar-2010						
		D	ownstr	eam End						
Culvert Component		Last		Explanation of Condition						
(Pipe # : 4, Span Type: Second	lary Span)									
Direction		W		South pipe.						
End Treatment (Concrete, Steel, Others, None)	STEEL									
Headwall		X	Х							
Collar		X	Х							
Wingwalls		X	Х							
(Shape :)										
Cutoff Wall		X	Х							
Bevel End		6	6							
Heaving (mm)	0									
Invert Above/Below Stream Bed										
Above/Below (mm)	0									
Scour Protection		5	5	Settlement approx 1m. Stabilized with rocks.						
(Type : RIP RAP)										
(Avg. Rock Size(mm) : 400)										
Scour/Erosion		5	5							
Beavers (Y/N)	No		1							
Downstream End General Rati	ng	5	5							
		s	Structu	re Usage						
		Last	Now	Explanation of Condition						
Channel (U/S and D/S)										
Alignment		7	7							
Bank Stability		4	4	Sloughing banks u/s and d/s.						
HWM (m below Top of Culvert)				HWM not visible						
Drift (Y/N)	Yes			caught on sheet piling d/s.						

Bridge Inspection & Maintenance System (Web 2005)

Structure Usage							
		Last	Explanation of Condition				
Channel Bottom Degrading/Aggrading	DEGRADING			u/s and d/s.			
Beavers (Y/N)	Yes						
(Fish Compensation Measure 1 :	NONE)						
(Fish Compensation Measure 2 :	NONE)						
Channel General Rating			4				

Maintenance Recommendations												
Inspector Recommendations		Year	Inspector Comments		Department Comr	nents		Target Year	Est. Cost	Cat #		
SHOTCRETE REPAIRS	HOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP												
REMOVE DRIFT ACCUMULATION												
INSTALL CONCRETE/STEEL LINING												
INSTALL STRUTS												
INSTALL CONCRETE COLLAR/CUTC	DFF											
REPAIR SEAMS												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
OTHER ACTION												
Structural Condition Rating (Last/Now)33.3/33.3Sufficiency (%)				ow) 3	34.5/37.7	Est. Repl. Yr	2038	Maint. Red	qd. (Y/N)	No		
Special Monitor deflections. Comments for Next Inspection					Department Comments							
Maintenance Reviewed By					Date		E	Estimated Total	0			
Proposed Long-Term Strategy												
On 3-Year Program (Y/N)												
Proposed Action												
Previous Inspector's Name Wade Nanninga Previous			Previous A	Assistant's Name								
			Previous I	nspection Date	10-Mar-2010							
Inspection Cycle (Default) (months)	21		· · · · · · · · · · · · · · · · · · ·									
Comment												