					Brida	e Culve	ert Insp	ection					
Bridge File Nur	mber	13043 -	1 Bridge Culve	rt					CULM				
Year Built		2001					Lot No	•		4			
Bridge or Towr	n Name	MILLAR	RVILLE				Inspector Name		Garry Roberts				
Located Over			TARY TO THRE	EEPOINT	CREE	K,		tor Class		BR CLS A			
		2.13.27	.2.9.5, WATER	CRS-ST			Assistant Name						
Located On		22:12 C	1 33.412				Assistant Class						
Water Body CI	./Year							tion Date		15-Jun-2012			
Navigabil. Cl./	Year							ntry By		Erin Roberts			
Legal Land Loc	ongitude, Latitude -114:19:07, 50:45:13 Road Authority Alberta Transportation (AIT) Contract Main. Area CMA27 Clear Roadway/Skew 12 / 17 deg. (RHF) ADT/Year 3,140 / 2011 (A) Road Classification RAU-213.4-120 Detour Length (km) 10 Cridge Culvert Information Clumber of Culverts 3 Clear Roadway/Skew 12 / 17 deg. (RHF) Clear Roadway/Skew				/			ntry Date		16-Jul-2012			
Longitude, Lati	egal Land Location SW SEC 2 TWP 21 RGE 3 Wongitude, Latitude -114:19:07, 50:45:13 Load Authority Alberta Transportation (AIT) Contract Main. Area CMA27 Clear Roadway/Skew 12 / 17 deg. (RHF) ADT/Year 3,140 / 2011 (A) Load Classification RAU-213.4-120 Letour Length (km) 10 ridge Culvert Information Lumber of Culverts 3 Lipe # Barrel Span Rise (AMAIN - 3000 MAIN - 3000 MAIN - 3000							ver Name		Joel Wozney			
Road Authority	/	Alberta	Transportation	(AIT)			Review Date			27-Jun-2012			
Contract Main.								Reviewer I	Name	Tim Davies			
Clear Roadway	y/Skew	12 / 17	deg. (RHF)					Review Da		17-Jul-2012			
					Follow								
			3.4-120					. ,					
	1												
Pipe #	Barrel		Span Rise (or D		Dia.)	Type		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1	ΜΔΙΝΙ			3300		MP		42		125X26	3.5	ROUND	
2				1	MP			41.5		125X26	2.8	ROUND	
3								41.5		125X26	2.8	ROUND	
				3000		IVII		41.5		123/20	2.0	INCOME	
Utility Attachmo	ents				Uti	lities (L	_ocated	at)					
Telephone	West	r/w.					Gas		70m N	North			
Power	3W 2	5m West	of c/l & 1W 70	m North.			Munici	pal					
Others							Problem (Y/N) No						
Remarks													
				A	pproac	proach Road / Embankment							
					Last	Now	Explanation of Condition						
Horizontal Alig					7	7	Intersection with Hwy 549 400m South Hill to North.						
Vertical Alignm					6	6	1 1111 10 1	10 111.					
Roadway Widt	n (m)		12.000										
Embankment					6	6							
Sideslope (_	_:1)		3.0										
		: 2)											
(Height of Cover(m) : 2) Guardrail (Y/N) No													
Guardrail (Y/N))		140										
` '		bankmeı	nt General Rat	ing	6	6							
` '		bankmeı		ing			am Ene						
Approach Roa	ad / Eml	bankmei		ing		Upstre	am End		Condi	tion			
Approach Roa	ad / Eml		nt General Rat	ing		Upstre		nation of (Condi	tion			
Approach Roa Culvert Comp (Pipe # : 1, Sp	ad / Eml		nt General Rat	ing	Last	Upstre	Explar	nation of (tion			
Approach Roa	onent	e: Prima	nt General Rat			Upstre	Explar			tion			
Approach Roa Culvert Comp (Pipe # : 1, Sp Direction End Treatment	onent	e: Prima	nt General Rat		Last	Upstre	Explar	nation of (tion			

			Upstre	eam End
Culvert Component				Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)		1	
Wingwalls	- CP starty	Х	Х	
(Shape:)				
Cutoff Wall		N	N	Buried
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
		Brid	dge Cu	ilvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	an (mm	ı):	, Rise (mm): 3300, Type: MP)
Barrel Last Accessible Date	06-Oct-2010			South pipe. Water too deep to enter - viewed from both ends.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		8	N	PR 8
Measured Rise (mm)	3273			
Measured At Ring No.	3			
Sag (mm)	27			
Percent Sag	1			
Sidewall		8	N	(Inward) PR 8
Measured Span (mm)	3200			
Measured At Ring No.	3			
Deflection (mm)	100			
Percent Deflection	3			
Floor		7	N	PR 7
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	PR 8
Separation (mm)	30			
Longitudinal Seams		Х	Х	
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)				
Longitudinal Stagger (1/N)				

		Bric	lge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm):	, Rise (mm): 3300, Type: MP)
Coating		6	6	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
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	PR 8
				eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)			
Direction		E		East end South pipe.
End Treatment (Concrete, Steel, Others, None)	CONCRETE		_	
Headwall		8	8	
Collar		8	8	
Wingwalls		X	X	
(Shape:)				
Cutoff Wall		N	N	Buried
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	800			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			
Downstream End General Ratin	ng	8	8	
			Upstre	am End
Culvert Component				Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Direction	,	W		West end middle pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL	.,		,
Headwall		Х	Х	
Collar		Х	X	

				eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)		1	
Wingwalls		X	X	
(Shape:)			1	
Cutoff Wall		X	X	
Bevel End		5	5	North side of bevel pushed in 400mm from rock install
Heaving (mm)	200			Treature state of pastings in Treatment from Teeth install
Invert Above/Below Stream Bed				200mm heaving due to damage to bevel
Above/Below (mm)	500			
Scour Protection	1000	8	8	
(Type : RIP RAP)				-
(Avg. Rock Size(mm) : 300)				-
Scour/Erosion		8	8	
COGUITETOSION				
Beavers (Y/N)	No			
		_	1 _	
Upstream End General Rating		5	5	
		Bri	dae Cu	Ilvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MA			, Rise (mm): 3000, Type: MP)
Barrel Last Accessible Date	06-Oct-2010			Middle Pipe. Water too deep to enter.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		8	N	PR 8
Measured Rise (mm)	2940			
Measured At Ring No.	2			
Sag (mm)	60			
Percent Sag	2			
Sidewall		8	N	PR 8
Measured Span (mm)	3073			
Measured At Ring No.	3			
Deflection (mm)	73			
Percent Deflection	2			
Floor		7	N	PR 7
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	PR 8
Separation (mm)	50			1
Longitudinal Seams		Х	Х	
Total No. of Cracked Rings		, X		-
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Longitudinal Olagger (1714)				

		Bric	lge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 2, Secondary Span, Lo	cation Code: MAIN, S	Span (n	nm):	, Rise (mm): 3000, Type: MP)
Coating		6	N	PR 6
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
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	PR 8
		D		eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Direction		E		East end middle pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL		,	
Headwall		X	X	
Collar		Х	Х	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		Х	Х	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	500			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			
Downstream End General Ratio	ng	8	8	
			Unstre	am End
Culvert Component				Explanation of Condition
(Pipe # : 3, Span Type: Second	lary Span)			
Direction	. ,	W		North pipe, West End
End Treatment (Concrete, Steel, Others, None)	STEEL	.,		
Headwall		Х	Х	
Collar		Х	X	

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	ary Span)			
Wingwalls		Х	X	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		8	8	
(Type: RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
		Brid	dae Cu	Ilvert Barrel
Culvert Component		Last		Explanation of Condition
(Pipe # : 3, Secondary Span, Lo				, Rise (mm): 3000, Type: MP)
Barrel Last Accessible Date	06-Oct-2010			North pipe. Water too deep to enter.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		8	N	PR 8
Measured Rise (mm)	2933			
Measured At Ring No.	3			
Sag (mm)	67			
Percent Sag	2			
Sidewall		8	N	PR 8
Measured Span (mm)	3063			
Measured At Ring No.	3			
Deflection (mm)	63			
Percent Deflection	2			
Floor		7	N	PR 7
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		8	N	PR 8
Separation (mm)	40			
Longitudinal Seams		Х	Х	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				1
Longitudinal Stagger (Y/N)				1

		Brio	lge Cul	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Secondary Span, Lo	cation Code: MAIN, S	3pan (r	nm):	, Rise (mm): 3000, Type: MP)
Coating		6	N	PR 6
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		X	Х	
(Type:)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		8	N	PR 8
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 3, Span Type: Second	lary Span)			
Direction		Е		North pipe, east end
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	Х	
Collar		Х	Х	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	400			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)				
Scour/Erosion		8	8	
Beavers (Y/N)	Yes			
Downstream End General Ratio	ng	8	8	
		S	tructu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	No			

Structure Usage								
		Last	Now	Explanation of Condition				
Channel Bottom Degrading/Aggrading	AGGRADING			Tree's fallen in D/S channel				
Beavers (Y/N)	Yes							
(Fish Compensation Measure 1 :	NONE)							
(Fish Compensation Measure 2 :	NONE)							
Channel General Rating		7	7					

			Maintena	ance Recommen	dations					
Inspector Recommendations	Year	Inspecto	or Comments		Department Com	ments		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	3									
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUT	OFF									
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/N (%)	ow) 88.9/5	5.6	Sufficiency Rating (%)	Sufficiency Rating (Last/Now) %)		Est. Repl. Yr	2040	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection					Department Comments					
Maintenance Reviewed By					Date		Е	Estimated Tota	I 0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Garry Roberts	3		Previous	Assistant's Name					
Next Inspection Date	15-Mar-2014			Previous	Inspection Date	06-Oct-2010				
Inspection Cycle (Default) (months)	21									
Comment										