				Brid	ge Culve	ert Inspect	tion				
Bridge File Nu	mber	09643 -	1 Bridge Culve	rt		Form Type		CULM			
Year Built		1989						4			
Bridge or Towr	n Name	SANDY	LAKE			Inspector Name		Wade Nanninga			
Located Over			ARY TO WAB			Inspector Class		BR CLS B	•		
8.10.18.31, WATERCRS-ST				RS-ST		Assistant Name					
Located On 813:08 C1 31.176						Assistant	t Class				
Water Body Cl						Inspection Date		07-Jan-2011			
Navigabil. Cl./						Data Enti	try By	Theresa Lacu	sta		
Legal Land Lo		NE SEC	2 36 TWP 78 R	GE 23 W4M		Data Enti	try Date	02-Feb-2011			
Longitude, Lati			:43, 55:48:12			Reviewer Name		Arnold Assent	heimer		
Road Authority			Transportation	(AIT)		Review Date		12-Jan-2011			
Contract Main.	. Area	CMA06				Dept. Rev	viewer Name	Brent Herrick			
Clear Roadway	y/Skew	12 /					view Date	02-Feb-2011			
AADT/Year		520 / 20	009 (A)			Follow-U					
Road Classific	ation	RCU-2	0-110			-	. ,				
Detour Length	(km)	240									
Bridge Culver	rt Inform										
Number of Cul	lverts		2								
Pipe #	Barrel		Span	Rise (or Dia.)	Туре	L	ength	Corr. Profile	PI./Slab Thickness	Shape	
1	MAIN		-	4610	SP	3	33.5	152X51	3.0	ROUND	
2	MAIN		-	4610	SP	3	33.5	152X51	3.0	ROUND	
Special Featur	res										
Special Featur	res Comi	ment									
•	res Comi	ment									
Special Featur		ment		U	tilities (l	Located at	t)				
•		ment		U	tilities (l	Located at	t)				
Special Featur				U	tilities (l	Located at Gas	t)				
Special Featur Utility Attachm Telephone Power	ients			U	tilities (l	Gas Municipa	al				
Special Featur Utility Attachm Telephone Power Others	West	r/w				Gas Municipa Problem	al				
Special Featur Utility Attachm Telephone Power	West	r/w	d on top of Sou	uth pipe, West I	neadwall	Gas Municipa Problem	al (Y/N) No				
Special Featur Utility Attachm Telephone Power Others	West	r/w	d on top of Sou	uth pipe, West h	neadwall	Gas Municipa Problem	al (Y/N) No hkment				
Special Featur Utility Attachm Telephone Power Others Remarks	BF tag	r/w	d on top of Sou	uth pipe, West H Approa	neadwall Ich Road	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi				
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig	BF tag	r/w	d on top of Sou	uth pipe, West H Approz Last 7	neadwall Ich Roar Now 7	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi	tion	irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks	BF tag	r/w	d on top of Sou	uth pipe, West H Approa	neadwall Ich Road	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm	Inents West West BF tag	r/w		uth pipe, West H Approz Last 7	neadwall Ich Roar Now 7	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt	Inents West West BF tag	r/w	d on top of Sou	uth pipe, West H Approz Last 7 8	neadwall ch Roat Now 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment	INTERING INTERIOR INTERIOR INTERITOR INTERIORI INTERITOR INTERIORI INTERIO INTER	r/w	12.000	uth pipe, West H Approz Last 7	neadwall Ich Roar Now 7	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (_	BF tag	r/w g installe		uth pipe, West H Approz Last 7 8	neadwall ch Roat Now 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (BF tag	r/w g installe	12.000	uth pipe, West H Approz Last 7 8	neadwall ch Roat Now 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (_	BF tag	r/w g installe	12.000	uth pipe, West H Approz Last 7 8	neadwall ch Roat Now 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (BF tag	r/w g installe 1.8)	12.000	uth pipe, West H Approz Last 7 8 8	neadwall ch Roat Now 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (BF tag	r/w g installe 1.8)	12.000 2.0 No	uth pipe, West H Approz Last 7 8 8	neadwall ch Roat Now 7 8 8 8 7 8	Gas Municipa Problem d / Emban Explanat	al (Y/N) No hkment tion of Condi		irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (ents West BF tag gnment nent th (m) :1) over(m) : l) ad / Eml	r/w g installe 1.8)	12.000 2.0 No	uth pipe, West H Approz Last 7 8 8	neadwall ich Roar Now 7 8 8 8 7 Vpstre	Gas Municipa Problem T T T T T T T T T T T T T	al (Y/N) No hkment tion of Condi	listance both di	irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (Image: second	r/w g installe 1.8) pankme	12.000 2.0 No nt General Rat	uth pipe, West H Approz Last 7 8 8 8 8	neadwall ich Roar Now 7 8 8 8 7 Vpstre	Gas Municipa Problem I. Explanat In curve,	al (Y/N) No hkment tion of Condi limited sight of	listance both di	irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (Image: second	r/w g installe 1.8) pankme	12.000 2.0 No nt General Rat	uth pipe, West H Approz Last 7 8 8 8 8 1 8 1 1 1 1 1 1 1 1 1 1 1 1 1	neadwall ich Roar Now 7 8 8 8 7 Vpstre	Gas Municipa Problem d / Emban Explanat In curve,	al (Y/N) No hkment tion of Condi limited sight o	listance both di	irections. No pr	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (BF tag	r/w g installe 1.8) pankme e: Prima	12.000 2.0 No nt General Rat	uth pipe, West H Approz Last 7 8 8 8 8 8 8 1 8 1 8 1 7 8 1 8 1 8 1 1 8 1 1 1 1	neadwall ich Roar Now 7 8 8 8 7 Vpstre	Gas Municipa Problem I. Explanat In curve,	al (Y/N) No hkment tion of Condi limited sight o	listance both di	irections. No pa	assing.	
Special Featur Utility Attachm Telephone Power Others Remarks Horizontal Alig Vertical Alignm Roadway Widt Embankment Sideslope (BF tag	r/w g installe 1.8) pankme e: Prima	12.000 2.0 No nt General Rat	uth pipe, West H Approz Last 7 8 8 8 8 8 8 1 8 1 8 1 7 8 1 8 1 8 1 1 8 1 1 1 1	neadwall ich Roar Now 7 8 8 8 7 Vpstre	Gas Municipa Problem d / Emban Explanat In curve,	al (Y/N) No hkment tion of Condi limited sight o	listance both di	irections. No pa	assing.	

Alberta Transportation

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Span Type: Primary	/ Span)			
Wingwalls		X	Х	
(Shape :)				
Cutoff Wall		N	N	
Bevel End		7	N	Ice 1.5m from crown.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	N	Vegetation covering rock riprap09-Aug-2007
(Туре :)				SNow covered.
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried fwd.
		Bri	dge Cu	Ivert Barrel
Culvert Component		Last		Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Sp	oan (mm	ı):	, Rise (mm): 4610, Type: SP)
Barrel Last Accessible Date	07-Jan-2010			Ice 1.5m from crown.
Special Features				
Special Feature				
(Type :)				
Special Feature				
(Туре :)				
Roof		N	4	
Measured Rise (mm)				est
Measured At Ring No.				
Sag (mm)	400			
Percent Sag	9			
Sidewall		N	N	
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				
Percent Deflection				
Floor		N	N	
Bulge (mm)			-1	1
Measured At Ring No.				1
Abrasion (Y/N)				1
Circumferential Seams		N	7	
Separation (mm)	0		1	1
Longitudinal Seams		N	7	
Total No. of Cracked Rings				
Total No. of Rings with Two Cracked Seams				- Only 1/3 visible
Min. Remaining Steel Between Cracks (mm)				- 3N stagger.
Proper Lap (Y/N)	Yes			-
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Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

09643 -1 Bridge Culvert

Culvert Component		Last	Now	Explanation of Condition			
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa			, Rise (mm): 4610, Type: SP)			
Coating		5	4	Pitting rust at ice level.			
Corrosion By Soil (Y/N)	Yes		. ·				
Corrosion By Water (Y/N)	Yes						
Camber POS/ZERO/NEG	NEG						
Ponding (Y/N)	Yes			Approx. 1m.			
Fish Passage Adequacy		8	8				
Baffle		N	N				
(Type :)							
Waterway Adequacy		7	7				
Icing (Y/N)	No		,				
Silting (Y/N)	No						
Drift (Y/N)	No						
Barrel General Rating	1	N	4				
		D	ownstr	ream End			
Culvert Component		Last		Explanation of Condition			
(Pipe # : 1, Span Type: Primary	/ Span)						
Direction		E					
End Treatment (Concrete, Steel, Others, None)	STEEL						
Headwall		X	X				
Collar		Х	Х				
Wingwalls		X	Х				
(Shape :)							
Cutoff Wall		X	X				
Bevel End		7	N	Ice/snow covered.			
Heaving (mm)	50						
Invert Above/Below Stream Bed	BELOW			-			
Above/Below (mm)	100						
Scour Protection		7	N				
(Type:)				-			
(Avg. Rock Size(mm) :)							
Scour/Erosion		7	N				
Beavers (Y/N)	No						
Downstream End General Ration	ng	7	7	GR carried fwd.			
			Upstre	am End			
Culvert Component		Last	Now	Explanation of Condition			
(Pipe # : 2, Span Type: Second	lary Span)						
Direction		W		North culvert.			
End Treatment (Concrete, Steel, Others, None)	CONCRETE						
Headwall		7	7				
Collar		7	7				

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Wingwalls		X	X	_
(Shape :)			_	
Cutoff Wall		N	Ν	
Bevel End		7	N	Snow/ice covered.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			_
Above/Below (mm)	1000			
Scour Protection		7	N	_
(Туре :)				_
(Avg. Rock Size(mm) :)			_	
Scour/Erosion		7	Ν	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	GR carried fwd.
		Bri	dge Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	ocation Code: MAIN,	Span (mm):	, Rise (mm): 4610, Type: SP)
Barrel Last Accessible Date	07-Jan-2010			Ice 1.5m from crown.
Special Features			_	
Special Feature				_
(Туре :)			_	_
Special Feature				_
(Туре :)				
Roof		N	N	
Measured Rise (mm)				_
Measured At Ring No.				est
Sag (mm)				_
Percent Sag	7			
Sidewall		N	N	_
Measured Span (mm)				
Measured At Ring No.				
Deflection (mm)				_
Percent Deflection				
Floor		N	N	
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		N	7	
Separation (mm)	0			
Longitudinal Seams		N	7	
Total No. of Cracked Rings				Only 1/3 visible
Total No. of Rings with Two Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				3N stagger.
Proper Lap (Y/N)	Yes			
Longitudinal Stagger (Y/N)	Yes			

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

09643 -1 Bridge Culvert

		Brid	dae Cu	Ivert Barrel
Culvert Component		1		Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	ocation Code: MAIN,			, Rise (mm): 4610, Type: SP)
Coating		5	4	Pitting rust at ice level.
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	Yes			Approx. 1m.
Fish Passage Adequacy		8	8	
Baffle		N	N	
(Type :)				
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		N	5	
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Span Type: Second	lary Span)			
Direction		E		North culvert.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		X	X	
Collar		X	X	
Wingwalls		Х	Х	
(Shape :)				
Cutoff Wall		X	X	
Bevel End		7	N	Ice/snow covered.
Heaving (mm)	50			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	1000			
Scour Protection		7	N	
(Type :)				
(Avg. Rock Size(mm) :)				
Scour/Erosion		7	N	
Beavers (Y/N)	No			
Downstream End General Rati	ng	7	7	GR carried fwd.
		s	Structu	re Usage
		Last	Now	Explanation of Condition
Channel (U/S and D/S)			_	
Alignment		7	7	
Bank Stability		8	8	
HWM (m below Top of Culvert)			1	HWM not visible.
Drift (Y/N)	No			
			Page	5 of 7

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		7	7				

			Maintenance Re	commend	lations					
Inspector Recommendations		Year	Inspector Comments		Department Com		Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING										
INSTALL STRUTS										
INSTALL CONCRETE COLLAR/CUTC)FF									
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/No (%)	ow)	55.6/44.	4 Sufficiency Rating (Last/N (%)	low) (64.5/58.6	Est. Repl. Yr	2029	Maint. Re	qd. (Y/N)	No
Special 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	Dave L	.am		Previous Assistant's Name						
Next Inspection Date	07-Apr	-2014		Previous Inspection Date 09-Aug-2007						
· · · · · · · · · · · · · · · · · · ·	39									
Comment										