					Brida	e Culve	ert Insp	ection						
Bridge File Number 00254 -1 Bridge Culvert					Form Type			CUL1						
Year Built 1988						Lot No.		3						
Bridge or Town Name JOFFRE						Inspector Name		Jason Saly						
Located Over JONES CREEK, 3.71, WA			WATERC	ATERCRS-ST			Inspector Class		BR CLS A					
Located On 11:16 C1 1.33							Assistant Name							
Water Body Cl./Year						Assista	nt Class							
Navigabil. Cl./Ye							Inspection Date		13-Feb-2012					
Legal Land Loca		SE SEC	28 TWP 38 R	RGE 25 W4M			Data Entry By		Marcia Chavez					
Longitude, Latit		-113:30	:43, 52:17:19	19			Data Entry Date		08-Mar-2012					
Road Authority		Alberta					Reviewer Name			John O'Brien				
Contract Main.	Area	CMA19					Review Date		28-Feb-2012					
Clear Roadway	/Skew	11.8 / 0					Dept. Reviewer Name							
AADT/Year		2,420 / 2					Dept. Review Date		09-Mar-2012					
Road Classifica	tion	RAU-21	1.8-110				Follow-Up By							
Detour Length (	km)	3												
Bridge Culvert	Inform	ation												
Number of Culv	erts		1											
Pipe #	Barrel		Span	Rise (or	Dia.)	Туре		Length		Corr. Profile	PI./Slab Thickness	Shape		
1	MAIN		-	4920		SP		46.9		152X51	4.0	ROUND		
Special Feature	s													
Special Feature	s Comr	ment												
					114	U:4:00 /I		<b>-4</b> \						
Utility Attachme	nto				Οt	iities (L	_ocated	at)						
	T	r/w					Gas							
Telephone North r/w.  Power 2 line crossing 350m East.						Municipal								
Others	2 11116	Crossing	550III Last.					Problem (Y/N) No						
Remarks							1 TODIC	111 (1/14)	110					
rtomarto				Ar	oproac	ch Road	l / Emb	ankment						
					Last	Now		ation of		tion				
Horizontal Align	ment				7	7	Field access 60m East & West. Sharp curve 100m West.							
Vertical Alignme	ent				7	7								
Roadway Width	(m)		13.100				Wide transverse ACP crack over pipe, sealed.							
Embankment					5	5								
Sideslope (	:1)		3.0				1							
(Height of Cov	ver(m) :	1.4)												
Guardrail (Y/N)	,	,	Yes				Split post on SW corner.							
Approach Road	d / Emb	oankmer	nt General Rat	ing	7	7								
						Upstre	am End							
Culvert Component			Last	Now	Explanation of Condition									
Direction			N											
End Treatment (Concrete, Steel, CONCRETE Others, None)														
Headwall			4	4	Stream cover 8	face @	NE cor nsolida	ner honeycomb ition. Minor crad	with exposed cking.	rebar due to low				
Collar			7	7	Cracks									
Wingwalls			Х	X										
(Shape: )				,	1									
Cutoff Wall			N	N										

00254 -1 Bridge Culvert

Last   Now   Explanation of Condition   Bewel End   8   8   8   8   8   8   8   8   8				Upstre	eam End
Heaving (nmm)   100   Invert Above/Below Stream Bed BLOW	Culvert Component		Last	Now	Explanation of Condition
Invert Above/Below (mm)	Bevel End		8	8	
Above/Below (mm)	Heaving (mm)	100			
Scour Protection   5   5   5   Embankment settled @ 0.7m with respect to collar.	Invert Above/Below Stream Bed	BELOW			
(Type : RIP RAP)	Above/Below (mm)	400			
Avg. Rock Size(mm): 300    ScourFresion   5   5     Beavers (Y/N)   No	Scour Protection		5	5	Embankment settled @ 0.7m with respect to collar.
Scour/Erosion   5   5   5	(Type: RIP RAP)				
Beavers (Y/N)	(Avg. Rock Size(mm) : 300)			_	
Stridge Culvert Barrol   Last   Now   Explanation of Condition	Scour/Erosion		5	5	
Stridge Culvert Barrol   Last   Now   Explanation of Condition	Reguere (V/N)	No			
Bridge Cuvert Barrel   Last   Now   Explanation of Condition   Rise (mm): 4920, Type: SP)	Deavers (1/14)	INO			
Culvert Component   Last   Now   Explanation of Condition	Upstream End General Rating		4	4	
Culvert Component   Last   Now   Explanation of Condition			Brio	dge Cu	Ilvert Barrel
Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm):   Rise (mm): 4920, Type: SP)	Culvert Component		1		
Special Features         Special Feature (Type : )           Special Feature (Type : )         Special Feature (Type : )           Roof         N 7 Could not measure rise due to ice.           Measured Rise (mm)         Measured Rise (mm)           Measured At Ring No.         Sag (mm)         77 (Est. 1.6% sag. 30/11/03).           Percent Sag         2         Could not measure span accurately due to dia. of pipe.           Measured Span (mm)         4997         4997           Measured At Ring No.         (1.6% deflection. 30/11/03).           Deflection (mm)         77         (1.6% deflection. 30/11/03).           Percent Deflection         2         Pioor           Bulge (mm)         N N         Ice covered.           Bulge (mm)         Nature of the pion		tion Code: MAIN, Spa	n (mm	ı):	
Special Feature   Common   C	Barrel Last Accessible Date	13-Feb-2012			
Special Feature   Common   C	Special Features				
Type :   Special Feature					
Special Feature   (Type : )					
Type :   Roof					
Roof	•				
Measured Rise (mm) Measured At Ring No. Sag (mm) Percent Sag 2 Sidewall N 7 Measured Span (mm) Measured At Ring No. Deflection (mm) Percent Deflection 2 Floor N N N Measured At Ring No. Abrasion (Y/N) Circumferential Seams Total No. of Cracked Rings Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Proper Lap (Y/N) Coating Corrosion By Soil (Y/N) Yes Corrosion By Water (Y/N) Yes Corrosion By Water (Y/N)  (Est. 1.6% sag. 30/11/03). (Est. 1.6% sag. 30/11/03).  (Est. 1.6% sag. 30/11/03).  (Est. 1.6% sag. 30/11/03).  (Est. 1.6% sag. 30/11/03).  (Leaking through lower seam bolt holes with some rust staining. 30/11/03)			NI.	7	Cauld not receive view due to ice
Measured At Ring No.   Sag (mm)   77   (Est. 1.6% sag. 30/11/03).			IN	/	Could not measure rise due to ice.
Sag (mm)					
Percent Sag   2					
Sidewall N 7 Could not measure span accurately due to dia. of pipe.  Measured Span (mm) 4997  Measured At Ring No.  Deflection (mm) 77  Percent Deflection 2  Floor N N N  Bulge (mm)  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams N 7  Separation (mm) 0  Longitudinal Seams N 6 (Leaking through lower seam bolt holes with some rust staining. 30/11/03)  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  Corrosion By Soil (Y/N) Yes  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No					(Est. 1.6% sag. 30/11/03).
Measured Span (mm) 4997  Measured At Ring No.  Deflection (mm) 77  Percent Deflection 2  Floor N N Ice covered.  Bulge (mm)  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams N 7  Separation (mm) 0  Longitudinal Seams N 6  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  Corrosion By Soil (Y/N) Yes  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No	<u> </u>	2	NI	7	Could not macoure open accurately due to die of nine
Measured At Ring No. Deflection (mm) 77 Percent Deflection 2  Floor N N N Bulge (mm)		4007	IN		Could not measure span accurately due to dia. of pipe.
Deflection (mm) 77 Percent Deflection 2  Floor N N N Measured At Ring No. Abrasion (Y/N)  Circumferential Seams N 7 Separation (mm) 0  Longitudinal Seams N 6 Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  Coating 7 6 Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No		4997			
Percent Deflection 2 Floor		77			(1.6% deflection. 30/11/03).
Floor Bulge (mm)  Measured At Ring No. Abrasion (Y/N)  Circumferential Seams Separation (mm)  Longitudinal Seams Total No. of Cracked Rings Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Proper Lap (Y/N) Coating Total Soil (Y/N) Coating Total Soil (Y/N) Total No. of Rings with Two Cracked Seams Total No. of Rings with Two Total No. of Ring					
Bulge (mm)  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  Proper Lap (Y/N)  Coating  7 6  Corrosion By Soil (Y/N)  Corrosion By Water (Y/N)  No  N 7  Circumferential Seams  N 7  (Leaking through lower seam bolt holes with some rust staining.  30/11/03)  1N  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  Yes  1N		<u> </u>			
Measured At Ring No. Abrasion (Y/N)  Circumferential Seams Separation (mm)  Longitudinal Seams N 6  Circumferential Seams N 6  Longitudinal Seams N 6  Circumferential Seams N 6  Leaking through lower seam bolt holes with some rust staining. 30/11/03)  Total No. of Cracked Rings O  Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  1N  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No			N	N	Ice covered.
Abrasion (Y/N)  Circumferential Seams Separation (mm)  Longitudinal Seams N 6 Longitudinal Seams N 6 Longitudinal Seams N 6 Circumferential Seams N 6 Longitudinal Seams N 6 Circumferential Seams N 6 Longitudinal Seams N 6 Circumferential Seams N 7 6 Corrosion By Soil (Y/N) Yes The Coating T 6 Corrosion By Soil (Y/N) No					
Circumferential Seams Separation (mm)  Longitudinal Seams N 6 Longitudinal Seams N 6 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) Yes Corrosion By Soil (Y/N) Yes Corrosion By Water (Y/N) No  N 6 (Leaking through lower seam bolt holes with some rust staining. 30/11/03)  1N					
Separation (mm) 0  Longitudinal Seams N 6  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  Corrosion By Soil (Y/N) No  (Leaking through lower seam bolt holes with some rust staining. 30/11/03)  10  (Leaking through lower seam bolt holes with some rust staining. 30/11/03)					
Longitudinal Seams  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)  Coating  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  Yes  IN  Coating  Total No. of Cracked Rings  O  In  In  In  In  In  In  In  In  In			N	/	
Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No		U			
Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  Longitudinal Stagger (Y/N)  Coating  7 6  Corrosion By Soil (Y/N)  Yes  Corrosion By Water (Y/N)  No			N	6	(Leaking through lower seam bolt holes with some rust staining.
Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) Yes  Longitudinal Stagger (Y/N) Yes  1N  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No		0			
Between Cracks (mm) Proper Lap (Y/N) Longitudinal Stagger (Y/N) Yes  1N  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No	Cracked Seams				
Longitudinal Stagger (Y/N) Yes  1N  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No	Min. Remaining Steel Between Cracks (mm)				
Longitudinal Stagger (Y/N) Yes  1N  Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No	, ,	Yes			
Coating 7 6  Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No		Yes			1 <sub>N</sub>
Corrosion By Soil (Y/N) Yes  Corrosion By Water (Y/N) No	Coating		7	6	
Corrosion By Water (Y/N) No		Yes			1
					1

00254 -1 Bridge Culvert

	Bridge Culvert Barrel									
Culvert Component				Explanation of Condition						
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm	):	, Rise (mm): 4920, Type: SP)						
Ponding (Y/N)	No									
Fish Passage Adequacy		7	7							
Baffle		Х	Х							
(Type:)										
Waterway Adequacy		8	8							
Icing (Y/N)	No									
Silting (Y/N)	No									
Drift (Y/N)	No									
Barrel General Rating		N	6							
		D	ownstr	ream End						
Culvert Component		Last	Now	Explanation of Condition						
Direction		S								
End Treatment (Concrete, Steel, Others, None)	CONCRETE									
Headwall		6	6	Honeycomb on South face, minor.						
Collar		7	6	Cracking every 1 to 1.2m.						
Wingwalls		Х	Х							
(Shape: )										
Cutoff Wall		N	N							
Bevel End		8	8							
Heaving (mm)	50									
Invert Above/Below Stream Bed	BELOW									
Above/Below (mm)	400									
Scour Protection		6	6	Some settlement next to collars.						
(Type : RIP RAP)										
(Avg. Rock Size(mm) : 300)										
Scour/Erosion		6	6							
Beavers (Y/N)	No									
Downstream End General Ratin	ng	6	6							
		S	tructu	re Usage						
			Now	Explanation of Condition						
Channel (U/S and D/S)			1							
Alignment		8	8							
Bank Stability		5	5	U/S bank eroding approx 50m U/S.						
HWM (m below Top of Culvert)				HWM not visible.						
Drift (Y/N) No										
Channel Bottom Degrading/Aggrading				Unknown.						
Beavers (Y/N)	No									
(Fish Compensation Measure 1 :										
(Fish Compensation Measure 2 :	NONE)		1							
Channel General Rating		8	8							

		Maintenan	ce Recommend	lations					
Inspector Recommendations	Year	Inspector Comments		Department Comm	Target Year	Est. Cost	Cat #		
SHOTCRETE REPAIRS	1 55						ger rea		
PLACE ADDITIONAL RIP RAP									
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LINING									
INSTALL STRUTS	2012	Replace split guardrail post @	SW corner.						
INSTALL CONCRETE COLLAR/CUTO	OFF								
REPAIR SEAMS									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/N (%)	ow) 55.6/66	55.6/66.7 Sufficiency Rating (Last		64.8/69.9	Est. Repl. Yr	2039 Maint. Re		qd. (Y/N)	Yes
Special Comments for Next Inspection				Department Comments					
Maintenance Reviewed By				Date		E	stimated Total	1 0	
Proposed Long-Term Strategy								_	
On 3-Year Program (Y/N)									
Proposed Action									
Previous Inspector's Name	Owen Salava		Previous	Assistant's Name					
Next Inspection Date	13-Nov-2013		Previous	s Inspection Date 29-Mar-2010					
Inspection Cycle (Default) (months)	21								
Comment									