Bridge File Number						Brida	e Culve	rt Inspe	ction					
Year Built	Bridge File Nur	nber	71612 -1	I Bridge Culve	rt						CULM			
Located Over									71 -					
Located Over	Bridge or Town Name HANNA						Inspector Name			Owen Salava				
Located On 9:08 C1 52.491					ATERC	RS-ST	•							
Navigabil Cl./Year Legal Land Location SE SEC 7 TWP 31 RGE 14 W4M Data Entry Bate 28-Nov-2011														
Navigabil Cl./Year Legal Land Location SE SEC 7 TWP 31 RGE 14 W4M Data Entry Bate 28-Nov-2011	Water Body Cl./Year													
Longitude, Lalitude								Inspect	ion Date		02-Nov-2011			
Review Name	Legal Land Loc	ation	SE SEC	7 TWP 31 RG	E 14 W4	М								
Contract Main. Area CMA21	Longitude, Latit	tude	-111:58:	02, 51:38:10				Data Er	Data Entry Date 28-Nov-2011					
Clear Roadway/Skew 12.8 / 16 deg. (RHF) Dept. Reviewer Name Andrew Smikles	Road Authority Alberta Transportation (AIT)						Review							
AADT/Year 2,620 / 2010 (A) Dept. Review Date O2-Dec-2011	Contract Main.	Area	CMA21					Review Date 14-Nov-2011						
Road Classification RAU-211.8-110 7 7 7 7 7 7 7 7 7	Clear Roadway	/Skew	12.8 / 16	deg. (RHF)				Dept. R	eviewer Na	me	Andrew Smikle	es		
Detour Length (km) 7	AADT/Year		2,620 / 2	2010 (A)				Dept. R	eview Date		02-Dec-2011			
Spring Culvert Information Number of Culverts 2	Road Classifica	ation	RAU-21	1.8-110				Follow-	Uр Ву					
Number of Culvers 2	Detour Length	(km)	7											
Pipe # Barrel	Bridge Culvert	Inform	ation											
MAIN	Number of Culv	/erts		2										
2	Pipe #	Barrel		Span	Rise (or	Dia.)	Туре		Length		Corr. Profile		Shape	
Utility Attachments	1	MAIN	-			MP		32.2		125X26	3.5	ROUND		
Utility Attachments	2	MAIN	-		3000		MP		32.2		125X26	3.5	ROUND	
Utility Attachments	Special Feature	es												
Utility Attachment South r/w. South r/w. Gas Municipal	Special Feature	es Comi	ment											
Utility Attachment South r/w. South r/w. Gas Municipal						114	U!4!aa /I		~4 \					
Telephone	Litility Attachme	nto				Uτ	iities (L	ocated	at)					
Power			~/··					Coo						
Telegraph.				h of DD trooks					and .					
Remarks				II OI KK II acks	•									
Approach Road / Embankment Explanation of Condition		Tolog	ιαριι.					T TODICIT	11 (1/14) 140					
Horizontal Alignment	Nomano				A	oproac	ch Road	l / Emba	nkment					
Vertical Alignment 8 8 Roadway Width (m) 12.800 Image: Control of the cont														
Roadway Width (m) 12.800	Horizontal Align	nment				7	7	Gentle curve to East.						
Embankment 7 7 7 Sideslope (_:1) 4.0 (Height of Cover(m): 0.9) Guardrail (Y/N) Yes Guardrail in good condition. Approach Road / Embankment General Rating 7 7 Approach Road / Embankment General Rating 7 7 Culvert Component Last Now Explanation of Condition (Pipe #: 1, Span Type: Primary Span) Direction S West pipe. End Treatment (Concrete, Steel, Others, None) Headwall 8 8 Collar 8 8 Wingwalls X X	Vertical Alignm	ent				8	8							
Sideslope (_:1)	Roadway Width	n (m)		12.800										
Culvert Component Last Now Explanation of Condition	Embankment					7	7	North s	ide measure	ed.				
Guardrail (Y/N) Approach Road / Embankment General Rating T T Upstream End Culvert Component	Sideslope (_:1)		4.0										
Approach Road / Embankment General Rating 7 7 Upstream End Culvert Component Last Now Explanation of Condition (Pipe # : 1, Span Type: Primary Span) Direction S West pipe. End Treatment (Concrete, Steel, Others, None) Headwall 8 8 Collar 8 8 Wingwalls X X X	(Height of Co	ver(m):	0.9)											
Culvert Component Last Now Explanation of Condition (Pipe # : 1, Span Type: Primary Span) Direction S West pipe. End Treatment (Concrete, Steel, Others, None) Headwall 8 8 Collar 8 8 Wingwalls X X X	Guardrail (Y/N)			Yes				Guardrail in good condition.						
Culvert Component Last Now Explanation of Condition (Pipe # : 1, Span Type: Primary Span) S West pipe. Direction S West pipe. End Treatment (Concrete, Steel, Others, None) CONCRETE S Headwall 8 8 Collar 8 8 Wingwalls X X	Approach Roa	d / Eml	bankmen	t General Rat	ing	7	7							
(Pipe # : 1, Span Type: Primary Span) Direction S West pipe. End Treatment (Concrete, Steel, Others, None) CONCRETE 8 Headwall 8 8 Collar 8 8 Wingwalls X X							Upstre	am End						
Direction S West pipe. End Treatment (Concrete, Steel, Others, None) Headwall 8 8 Collar 8 8 Wingwalls X X	Culvert Compo	onent							ation of Co	ndi	tion			
End Treatment (Concrete, Steel, Others, None) Headwall Collar 8 8 Wingwalls CONCRETE X X	(Pipe # : 1, Sp	an Type	e: Primar	y Span)										
Others, None) 8 8 Headwall 8 8 Collar 8 8 Wingwalls X X	Direction					S		West pi	pe.					
Collar 8 8 Wingwalls X X	End Treatment Others, None)	(Concre	ete, Steel	, CONCRETE										
Wingwalls X X	Headwall					8	8							
	Collar					8	8							
(Shape:)	Wingwalls					Х	X							
,	(Shape:)													

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Span Type: Primary	/ Span)			
Cutoff Wall		N	N	
Bevel End		8	8	
(Pipe # : 1, Span Type: Primary Span) Cutoff Wall Bevel End Heaving (mm) 0 Invert Above/Below Stream Bed BELOW Above/Below (mm) 600 Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300) Scour/Erosion Beavers (Y/N) No Upstream End General Rating Culvert Component (Pipe # : 1, Primary Span, Location Code: MAIN, Sp Barrel Last Accessible Date 11-Mar-2010 Special Features Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) 3059 Measured At Ring No. 2 Sag (mm) 59 Percent Sag 2 Sidewall Measured Span (mm) 2982				
(Pipe # : 1, Span Type: Primary Span) Cutoff Wall Bevel End Heaving (mm) Invert Above/Below Stream Bed Above/Below (mm) Scour Protection (Type : RIP RAP) (Avg. Rock Size(mm) : 300) Scour/Erosion Beavers (Y/N) No Upstream End General Rating Culvert Component (Pipe # : 1, Primary Span, Location Code: MAIN, Sp Barrel Last Accessible Date 11-Mar-2010 Special Features Special Feature (Type :) Special Feature (Type :) Special Feature (Type :) Roof Measured Rise (mm) Measured At Ring No. 2 Sag (mm) Percent Sag Sidewall Measured Span (mm) Measured At Ring No. Deflection (mm) 18 Percent Deflection 1 Floor Bulge (mm) Measured At Ring No. Abrasion (Y/N) No Circumferential Seams				
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm): 300)				
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Upstream End General Rating		8	8	
		Brid	dge Cu	lvert Barrel
Culvert Component		Last Nov		Explanation of Condition
(Pipe #: 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm	ı):	, Rise (mm): 3000, Type: MP)
Barrel Last Accessible Date	11-Mar-2010			West pipe. Thin ice; viewed from ends, shape looks good.
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		7	N	(Could not measure rise due to ice. 11Mar2010).
Measured Rise (mm)	3059			
Measured At Ring No.	2			Llavonda
Sag (mm)	59			Upwards. (-59mm. 20/Aug/2003)
Percent Sag	2			
Sidewall		7	N	(Span measured @ North end = 2998mm, 2mm. 11Mar2010).
Measured Span (mm)	2982			(At mid point. 11Mar2010).
Measured At Ring No.				
Deflection (mm)	18			(Inwards. 0.6%. 11Mar2010).
Percent Deflection	1			
Floor		N	N	Ice covered.
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	N	(1st seam from D/S end. Coupler intact. 11Mar2010).
Separation (mm)	35			
Longitudinal Seams		X	X	
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			6	
Corrosion By Soil (Y/N)	No			
Corresion By Water (V/N)	Vec			

		Brid	dge Cu	lvert Barrel				
Culvert Component			Now	Explanation of Condition				
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm):	, Rise (mm): 3000, Type: MP)				
Camber POS/ZERO/NEG	NEG							
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		7	N	GR was 7 from 11Mar2010.				
				ream End				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 1, Span Type: Primary	/ Span)							
Direction End Treatment (Concrete, Steel,	STEEL	N		West pipe.				
Others, None) Headwall		X	Х					
		X	X					
Collar								
		X	X					
Wingwalls (Shape:) Cutoff Wall		Х	Х					
Bevel End	I	8	8					
Heaving (mm)	0							
	BELOW							
Above/Below (mm)	600							
Scour Protection		8	8					
(Type : RIP RAP)								
(Avg. Rock Size(mm) : 300)								
Scour/Erosion	T	N	8					
Beavers (Y/N)	No							
Downstream End General Ratio	ng	8	8					
				am End				
Culvert Component		Last	Now	Explanation of Condition				
(Pipe # : 2, Span Type: Second	lary Span)							
Direction		S		East pipe.				
End Treatment (Concrete, Steel, Others, None)	CONCRETE							
Headwall		8	8					
Collar		8	8					
Wingwalls		Х	Х					
(Shape:)								
Cutoff Wall		N	N					

		Unstre	eam End
			Explanation of Condition
arv Span)	Luot	111011	Explanation of Condition
<i>y</i>	8	8	
n			
600	0	0	
	0	0	
	IN IN	8	
No			
	8	8	
	Brid	dge Cu	ilvert Barrel
	Last	Now	Explanation of Condition
cation Code: MAIN	, Span (r		, Rise (mm): 3000, Type: MP)
11-Mar-2010		į	East pipe.
			Thin ice; viewed from ends, shape looks good.
	5	N	(Hole punched in roof by rock during backfill. Does not seem to be a
3059			problem. 1/4 L from U/S end. Could not measure rise due to ice. 11Mar2010).
			· ·
			(-59mm upwards. 20/Aug/2003)
	7	N	(Span measured @ mid point = 2976mm, 24mm. 11Mar2010).
2962	- '		
2302			(At North end. 11Mar2010).
38			-
			_ (Inwards. _ 1.3%. 11Mar2010).
1	NI	NI	Ice covered.
	IN	111	ioe covered.
No			
INU	-		(4-1
25	5	N	(1st seam from D/S end. Coupler intact. 11Mar2010).
33			
	X	X	
			_
	6	6	
No			
Yes			
ZERO			
	2962 38 1 No No Yes	Last ary Span 8 0	Section Sect

		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 2, Secondary Span, Lo	cation Code: MAIN, S	Span (r	nm):	, Rise (mm): 3000, Type: MP)
Ponding (Y/N)	No			
Fish Passage Adequacy		7	7	
Baffle		Х	X	
(Type:)				
Waterway Adequacy		8	8	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating		5	N	GR was 5 from 11Mar2010.
		D	ownstr	ream End
Culvert Component		1	1	Explanation of Condition
(Pipe # : 2, Span Type: Second	ary Span)			
Direction		N		East pipe.
End Treatment (Concrete, Steel, Others, None)	STEEL			
Headwall		X	X	
Headwall Collar Wingwalls (Shape:)		Х	Х	
Wingwalls		Х	Х	
(Shape:)			_	
Cutoff Wall		Х	X	
Bevel End		8	8	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	600			
Scour Protection		8	8	
(Type : RIP RAP)				
(Avg. Rock Size(mm) : 300)		l	Ι.	
Scour/Erosion		N	8	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	8	8	
		S	Structu	re Usage
			Now	Explanation of Condition
Channel (U/S and D/S)				
Alignment		8	8	
Bank Stability		8	8	
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)			
Channel General Rating		8	8	

			Maintena	ance Recommen	dations					
Inspector Recommendations	Yea	r Inspect	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 (%)	low) 55.6	55.6/55.6 Sufficiency Rating (Last/			69.3/69.3	Est. Repl. Yr	2048	Maint. Re	qd. (Y/N)	No
Special Comments for Next Inspection					Department Comments					
Maintenance Reviewed By					Date		E	stimated Tota	1 0	
Proposed Long-Term Strategy										
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Jason Saly			Previous	ous Assistant's Name					
Next Inspection Date	02-Aug-201	13		Previous	Inspection Date	11-Mar-2010				
Inspection Cycle (Default) (months)	21			'		,				
Comment										