						Bridg	e Culve	ert Insp	ection						
Bridge File Nur	nber	77034	-1 Bridge C	ulvert				Form T			CUL1				
Year Built 1970							Lot No			3					
Bridge or Towr	Name	MORLE	ΞΥ					Inspector Name			Garry Roberts				
Located Over		TRAIL;	TRAIL-ANI	MAL, OV	ER	SP		Inspector Class			BR CLS A				
Located On 1:04 R1 18.027;1:04 L1 18.063						Assista	int Name								
Water Body CI	./Year							Assistant Class							
Navigabil. Cl./\	/ear							Inspection Date			12-Feb-2012				
Legal Land Loc	cation	NE SE	C 19 TWP :	25 RGE 6	6 W5	М		Data Entry By			Lauren Korte				
Longitude, Lati	tude	-114:49	9:28, 51:08:	58				Data Entry Date			14-Mar-2012				
Road Authority	,	Alberta	Transporta	ation (AIT	)			Reviewer Name			Tom Carey				
Road Authority Contract Main. Area CMA28 Clear Roadway/Skew AADT/Year Road Classification RAD-412.4-120 Detour Length (km) Bridge Culvert Information Number of Culverts 1 Pipe # Barrel Span Rise 1 MAIN Special Features CONC FLOOR Special Features Comment  Required Vert. Clearance Posting (m) Posted Vertical Clearance (Y/N) Posted: Lane NB On Bridge (m) In / Remarks Utility Attachments						Review	/ Date		22-Feb-2012						
Clear Roadway	//Skew	24.8 /						Dept. Reviewer Name			Tim Davies				
AADT/Year 18,610 / 2010 (A)							Dept. F	Review Da	ate	22-Mar-2012					
Road Classifica	ation	RAD-4	12.4-120					Follow-	Up By						
Detour Length	(km)	1													
		ation													
	verts								I			1	1		
Pipe #	Barrel		Span	Rise	e (or	Dia.)	Туре		Length		Corr. Profile	PI./Slab Thickness	Shape		
1	MAIN		3800	315	0		RPP		67.7		152X51	4.0	PIPE ARCH		
Special Feature	es		CONC FLO	OOR											
Special Feature	es Comr	ment													
						Po	stina Ir	nformat	ion						
Required Vert.	Clearan	ice Post	ing (m)						<u> </u>						
-															
Posted: Lane	NB						Y/N)	L	ane SB	0	n Bridge (m)	In Advan	ice (Y/N)		
Remarks	Not re	quired.													
						Uti	ilities (L	ocated	at)						
Utility Attachme	ents														
Telephone	In Sou	uth ditch						Gas							
Power	50.0 n	n north	of c.l. 3 W.	MAIN TR	ANSI	MISSI	ON	Munici	oal						
Remarks Not required.  Utility Attachments  Telephone In South ditch.  Power 50.0 m north of c.l. 3 W. MAIN TRALINE.  Others Fibre Optics Cable @ North ditch.						Proble	m (Y/N)	No							
Remarks															
					Ap				ankment						
						Last	Now	Explan	ation of	Condi	tion				
Horizontal Alig						7	7	-							
Vertical Alignm						8	7								
Roadway Widt	h (m)		24.800												
Embankment						7	7								
Sideslope (:1) 5.0															
(Height of Co	ver(m) :	0.8)													
Guardrail (Y/N) Yes					3 broken and 2 split posts at South. Wrong lap at SE and NW.										
Approach Roa	ad / Emb	oankme	nt Genera	Rating		7	7		•						
							Upstre	am End							
<b>Culvert Comp</b>	onent					Last	Now	1	ation of	Condi	tion				
Direction						N		North.							
End Treatment (Concrete, Steel, Others, None)															
Others, None)  Headwall		el, STEEL													

Culver Component         Lase Now Explanation of Condition           Collar         X				Unstre	am End					
Managemails	Culvert Component									
Clare   Service   Servic										
Clare   Service   Servic										
Cutoff Wall			X	X						
Bewel End			1	1						
Heaving (mm)	Cutoff Wall		X	X						
Measured Name   Special Feature   Special Feature   Type : Name   Special Feature   Special Feature   Special Feature   Type : Name   Special Feature   Special Feature   Special Feature   Type : Name   Special Feature   Special Feature   Special Feature   Type : Name   Special Feature   Special Feature   Type : Name   Nam	Bevel End		4	4	Concrete floor extends into bevel.					
Above/Below (mm)   200   7	Heaving (mm)	0			Minor collision damage to NE bevel and roof pushed inward 400mm.					
Scour Protection	Invert Above/Below Stream Bed	BELOW								
(Type : RIP RAP)   (Avg. Rock Size(mm) : 250)   Sour/Errosion   7   7   7	Above/Below (mm)	200								
Avg. Rock Size(mm) : 250   Scourificosion   7   7	Scour Protection		7	7						
Avg. Rock Size(mm) : 250   Scourificosion   7   7	(Type : RIP RAP)									
Beavers (Y/N)										
Special Feature	Scour/Erosion		7	7						
Bridge Culvert Barrel   Last   Now   Explanation of Condition	Beavers (Y/N)	No								
Bridge Culvert Barrel   Last   Now   Explanation of Condition	Unstream End General Pating		4	1						
Culvert Component (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800.         Last Move (Pipe # : 1, Primary Span, Location Code: MAIN, Span (mm): 3800.         Rise (mm): 3150, Type: RPP)           Special Features Special Feature           X         6           Isolated wide cracks.           Special Feature (Type: CONC FLOOR)           Total No. of Rings with Two Cracked Rings (nm)         7         7         7         Rise N/A due to concrete floor.           Measured Rise (mm)         6         Inward.         Manual M	Opstream Life General Nating									
Primary Span, Location Code: MAIN, Span (mm): 3800, Rise (mm): 3150, Type: RPP)										
Barrel Last Accessible Date   12-Feb-2012										
Special Feature   X   6   Isolated wide cracks.			n (mm	): 3800	, Rise (mm): 3150, Type: RPP)					
Isolated wide cracks.	Barrel Last Accessible Date	12-Feb-2012								
Type : CONC FLOOR	Special Features									
Special Feature   (Type : )     (Type : )     (Type : )     (Type : )   (Typ	Special Feature		Х	6	Isolated wide cracks.					
Type :	(Type : CONC FLOOR)									
Roof	Special Feature									
Measured Rise (mm)         Measured At Ring No.           Sag (mm)         Fercent Sag           Sidewall         5         5         Inward.           Measured Span (mm)         3660         Minor 100mm construction hole in R11 East side.           Measured At Ring No.         4         Measured Deflection (mm)         140           Percent Deflection         3         N         N           Floor         N         N         N           Bulge (mm)         0         O         O           Measured At Ring No.         Abrasion (Y/N)         Abrasion (Y/N)         Abrasion (Y/N)           Circumferential Seams         8         8         8           Separation (mm)         0         Available of the second of the sec	(Type:)									
Measured At Ring No.   Sag (mm)   Percent Sag   Sidewall   S   5   Inward.   Minor 100mm construction hole in R11 East side.   Minor 100mm const	Roof		7	7	Rise N/A due to concrete floor.					
Sag (mm)	Measured Rise (mm)									
Sag (mm)	Measured At Ring No.									
Percent Sag  Sidewall  Measured Span (mm)  3660  Measured At Ring No.  Deflection (mm)  Percent Deflection  N  N  Measured At Ring No.  Bulge (mm)  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  Total No. of Cracked Rings  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  N  Minn Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  N  Inward.  Inward.  Minner 100mm construction hole in R11 East side.  Minor 100mm construction hole in R11 East side.										
Sidewall										
Measured Span (mm) 3660  Measured At Ring No. 4  Deflection (mm) 140  Percent Deflection 3  Floor N N N  Bulge (mm) 0  Measured At Ring No. 4  Abrasion (Y/N) 200 mm CONCRETE ON FLOOR.  Circumferential Seams 8  Separation (mm) 0  Longitudinal Seams 7 7  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) No			5	5	Inward.					
Measured At Ring No.       4         Deflection (mm)       140         Percent Deflection       3         Floor       N N N         Bulge (mm)       0         Measured At Ring No.       Abrasion (Y/N)         Circumferential Seams       8 8         Separation (mm)       0         Longitudinal Seams       7 7         Total No. of Cracked Rings       0         Total No. of Rings with Two Cracked Seams       4N stagger at roof only.         Min. Remaining Steel Between Cracks (mm)       Proper Lap (Y/N)         Proper Lap (Y/N)       No		3660			Minor 100mm construction hole in R11 East side.					
Deflection (mm)         140           Percent Deflection         3           Floor         N         N           Bulge (mm)         0           Measured At Ring No.         Abrasion (Y/N)           Circumferential Seams         8         8           Separation (mm)         0           Longitudinal Seams         7         7           Total No. of Cracked Rings         0           Total No. of Rings with Two Cracked Seams         4N stagger at roof only.           Min. Remaining Steel Between Cracks (mm)         Proper Lap (Y/N)         No										
Percent Deflection 3  Floor N N N Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N)  Circumferential Seams 8 8 Separation (mm) 0 Longitudinal Seams 7 7 Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) No		140								
Floor Bulge (mm) 0 Measured At Ring No. Abrasion (Y/N) Circumferential Seams 8 8 Separation (mm) 0 Longitudinal Seams 7 7 Total No. of Cracked Rings 0 Total No. of Rings with Two Cracked Seams Min. Remaining Steel Between Cracks (mm) Proper Lap (Y/N) No  200 mm CONCRETE ON FLOOR.  4N Stagger at roof only.										
Bulge (mm) 0  Measured At Ring No.  Abrasion (Y/N)  Circumferential Seams 8 8  Separation (mm) 0  Longitudinal Seams 7 7  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) No			N	N	200 mm CONCRETE ON FLOOR.					
Measured At Ring No. Abrasion (Y/N)  Circumferential Seams  Separation (mm)  Longitudinal Seams  7  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No		0								
Abrasion (Y/N)  Circumferential Seams  8 8  Separation (mm)  Longitudinal Seams  7 7  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No										
Circumferential Seams  Separation (mm)  Longitudinal Seams  7  Total No. of Cracked Rings  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No										
Separation (mm) 0  Longitudinal Seams 7 7  Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N) No			8	8						
Longitudinal Seams 7 7  Total No. of Cracked Rings 0  Total No. of Rings with Two 0 Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No		0								
Total No. of Cracked Rings 0  Total No. of Rings with Two Cracked Seams 4N stagger at roof only.  Min. Remaining Steel Between Cracks (mm) No			7	7						
Total No. of Rings with Two Cracked Seams  Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No  4N stagger at roof only.					4N stagger at roof only.					
Min. Remaining Steel Between Cracks (mm)  Proper Lap (Y/N)  No										
Proper Lap (Y/N) No	Min. Remaining Steel									
	` ,	No								
	Longitudinal Stagger (Y/N)	No								

		Brid	dge Cu	vert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm	): 3800	, Rise (mm): 3150, Type: RPP)
Coating		6	6	Minor alkalai stains @ bolt areas.
Corrosion By Soil (Y/N) Yes				
Corrosion By Water (Y/N) No				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			
Fish Passage Adequacy		Х	Х	
Baffle		Х	Х	
(Type:)		1	_	
Waterway Adequacy		7	7	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No		_	
Barrel General Rating		7	5	
		D	ownstr	eam End
Culvert Component		Last	Now	Explanation of Condition
Direction		S		South.
End Treatment (Concrete, Steel, Others, None)				
Headwall		Х	X	
Collar		Х	Х	
Wingwalls		Х	Х	
(Shape: )				
Cutoff Wall		Х	Х	
Bevel End		7	7	Concrete floor extends into bevel.
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : <b>RIP RAP</b> )				
(Avg. Rock Size(mm) : <b>250</b> )			_	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	7	7	
		S	Structur	re Usage
			Now	Explanation of Condition
Grade Separation				
Road Alignment		X	X	
Roadway Surface		6	6	
(Type : GRAVEL)				
Icing (Y/N)	No			
Traffic Safety Features		Х	Х	
Туре				

Structure Usage										
		Last	Now	Explanation of Condition						
Lighting			X							
Barrel Leakage (Y/N) No										
Drainage			7							
Structure In Use (Y/N) Yes			-							
Grade Separation General Rating			6							

77034 -1 Bridge Culvert

			Maintenance Re	commend	ations						
Inspector Recommendations	Yea	ar	Inspector Comments		Department Cor	mmen	ıts		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		12	Replace 5 GR Posts at SW. Correct laps at NW and SE.								
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (Last/N (%)	ow) 77.	) 77.8/55.6 Sufficiency Rating (L (%)		Now) 6	<b>69.9/58.2</b>		t. Repl. Yr	2027	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection					Department Comments						
Maintenance Reviewed By					Date				Estimated Tota	I 0	
Proposed Long-Term Strategy											
On 3-Year Program (Y/N)											
Proposed Action											
Previous Inspector's Name	Garry Robe	erts		Previous A	Assistant's Name						
Next Inspection Date	12-Nov-2013 Previ			Previous I	us Inspection Date 16-Sep-2010			)			
Inspection Cycle (Default) (months)	21										
Comment											