Bidge Fiel Number 77770 - Bridge Culver 1988 Bridge or Town Name COCHRANE 1988 Brid	Bridge Culvert Inspection															
Year Buil Ispace Town Manage Col No. 3 Bridge of Town Manage Col The Col Manage Garry Robens Empedor Alam Located On 4014 C1 32 677 Inspector Alam Garry Robens Empedor Alam Navigabil. CL/Year 43814 C1 Alam Assistant Name Assistant Name Assistant Name Logate Entry Dy Vear SE SEC 31 TW 27 REF 7 WM Assistant Name Inspector Date ZeMar 2013 Logate Alam Jocation SE SEC 31 TW 27 REF 7 WM Navigabil. CL/Year Assistant Name Ton Carey Rod Alam Jocation SE SEC 31 TW 27 REF 7 WM Navigabil. CL/Year Data Entry Dy Lauren Kore Logate Alam Jocation SE SEC 31 TW 27 REF 7 WM Navigabil. CL/Year Data Entry Dy Lauren Kore Rod Alam Jocation RAU-209-110 Entry Dy Lauren Kore Ton Carey Contract Main. Audu Martin Rule U 209-110 Dept. Review Name Tin Davies Special Features 1 Special Features Inspector Alam Kaster V Special Features 1 Special Features Inspector Alam Kaster V Special Features 1 Special Features Inspector Alam Kaster V Stelephone Inspector Alam Special Features Inspector Alam <t< td=""><td>Bridge File Num</td><td>nber</td><td>77770 -</td><td colspan="4">70 -1 Bridge Culvert</td><td colspan="3">Form Type</td><td colspan="5">CUL1</td></t<>	Bridge File Num	nber	77770 -	70 -1 Bridge Culvert				Form Type			CUL1					
Bridge or Town Name COCHRANE USER Inspector Name Gary Roberts Assistant Name CAS A Assistant Name Assistant Class BR CLS A Assistant Name Assistant Class BR CLS A Assistant Class BR CLS A Assistant Class BR CLS A Assistant Class Assistant Class BR CLS A Assistant Class Assistant Class BR CLS A Assistant BR CLS A	Year Built 19		1988					Lot No.		3						
Lacated Over kar La A.	Bridge or Town Name COCHRA			RANE				Inspector Name			Garry Roberts					
Located On / Varie ar Varie Varie Varia Varie Va	Located Over		TRIBUT 2.13.49.	ARY TO WAIPAROUS CREEK, .4.3, WATERCRS-ST				Inspector Class			BR CLS A					
Navigabile CL/YearNavigabile CL/YearNavigabile CL/YearNavigabile CL/YearCalculation CadaNavigabile CL/YearSE SEC 31 TWP 27 RGE 7 WSMData Entry Data	Located On 40:14 C			C1 32.677												
Navigabi. CL/Year and the set of	Water Body CI./	Year						Inspect	tion Date		26-Mar-2013					
Legal Land Location SE SEC 31 TWP 27 RGE 7 W5M Data Entry Data 114-047-2013 Longitude, Latitude 41458-03, 51:20.42 Review Rame Tom Carey Rook 704 Review Rame Tom Carey Rook 704 Review Rame 10-04/Pr.2013 Contract Main. Area CMA28 Clear Roadway/Ske 10.4 Clear Roadway/Ske 10.4 Clear Roadway/Ske 10.4 Clear Roadway/Ske 10.4 Follow-Up By Antonio Contract Name Roadway Ske 10.4 Potor Lengin (m) 20 Bridge Culvert Information Roube Data Entry Data Entry Data 10-04/Pr.2013 Data Entry Data Entry Data 10-04/Pr.2013 Data Entry Data 10-04/Pr.2013 Dat	Navigabil. CI./Ye	ear						Data Entry By			Lauren Korte					
International constraints of the second constraint of the second co	Legal Land Loca	ation	SE SEC	31 TWP 27 R	GE 7 W5	М		Data Entry Date			11-Anr-2013					
Read Authority Alberta Transportation (AT) Review Date 10 Apr-2013 Contract Main. Area CMA28 Popt. Reviewer Name Tim. Davies Contract Main. Area Standard Classification RAU-209-110 Dept. Reviewer Name OR-Any-2013 AADTYNear 380 / 2012 (A) U Dept. Reviewer Name OR-Any-2013 Main Length (km) 20 U Dept. Reviewer Name OR-Any-2013 Pripe # Barrel Span Rise (or Dia.) Type Length OR-Any-2013 Number of Calvert Information Number of Calvert Information Span Rise (or Dia.) Type Length Corr. Profile PL/Slab Shape 1 MAIN - 2438 SP 152X51 4.0 ROUND Special Features Span Rise (or Dia.) Type Mainicjat Corr. Profile PL/Slab Shape Telephone East West r/w Sa Movincjat Explandition of Condition Review Sa Sa<	Longitude, Latitu	ude	-114:58:	03, 51:20:42					Reviewer Name		Tom Carev					
Contract Main Area CMM28 Dop: Receive Name Tim Davies Clear Roadway/Skew 10.4 /	Road Authority		Alberta	Alberta Transportation (AIT)				Review Date		1011 Caley						
Clear Roadway/Skev 10.4 /	Contract Main.	Area	CMA28	MA28				Dept. Reviewer Name		Tim Davies						
AADT/vear and 2012 (A) with the second of t	Clear Roadway/	/Skew	10.4 /					Dept. Review Date		06-May-2013						
Rade ClosefficiationRAU-209-110Detour Length (m)20Detour Length (m)20Single CloseficiationSingle CloseficiationRise (or Dia,Type ICorr. ProfilePL/Slab ThicknessShapePipe #BarrelSpanRise (or Dia,Type ILengthCorr. ProfilePL/Slab ThicknessShape1MAIN-2438SPEShapeUtility AttachmentsSpecial FeaturesSpecial FeaturesSpeci	AADT/Year		380 / 20	12 (A)					Follow-Up By							
	Road Classificat	tion	RAU-20	9-110												
Bridge Culvert InformationNumber of CulvertsINumber of CulvertsINumber of CulvertsBarrelSpanRise (or Dia.)Type #LengthCorr. ProfilePl/SlabShape1MAIN-2438SP79.3152X514.0ROUNDSpecial FeaturesSecial	Detour Length (km)	20													
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1 MAIN - 2438 SP 79.3 152X51 4.0 ROUND Special Features Special Features <t< td=""><td>Pipe #</td><td>Barrel</td><td></td><td>Span</td><td>Rise (or</td><td>Dia.)</td><td>Туре</td><td></td><td colspan="2">Length</td><td>Corr. Profile</td><td>PI./Slab Thickness</td><td>Shape</td></t<>	Pipe #	Barrel		Span	Rise (or	Dia.)	Туре		Length		Corr. Profile	PI./Slab Thickness	Shape			
Special Features Villetes Special Features Villetes Special Features Villetes Special Features Villetes Telephone East & West r/w. Gas Power Villetes Municipal Others Villetes Villetes Power Villetes Villetes Others Villetes Villetes Remarks Villetes Villetes Vertical Alignment 6 6 Vertical Alignment 10.400 Limited sight distance in between 2 curves. Remarks Vertical Alignment 3 3 Sideslope (_:1) 2.0 Villetes Missing isolated splice bolts. Approach Road / Embankment Vertical Rating 6 6 6 Guardraii (Y/R) Yes New Explanation of Condition Intercet Component Last New Explanation of Condition Direction STEEL Villetes Villetes Explanation of Condition Collar Villetes X X X Villetes Collar </td <td>1</td> <td>MAIN</td> <td></td> <td>-</td> <td>2438</td> <td></td> <td>SP</td> <td></td> <td>79.3</td> <td></td> <td>152X51</td> <td>4.0</td> <td>ROUND</td>	1	MAIN		-	2438		SP		79.3		152X51	4.0	ROUND			
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Utilities (Located at) Utilities (Located at) Utilities (Located at) Power Sast & West r/w. Gas Power Municipal Municipal Others Municipal Municipal Remarks Froblem (Y/N) No Problem (Y/N) Vertical Alignment Cast Now Explanation of Condition Horizontal Alignment 6 6 6 Colspan="2">Roadway Width (m) 10.400 Erosion of embankment, 80m South of pipe, West side - erosion measures 15mx1mx1m dp cutting 400mm into Roadway and 1 post hanging. Sideslope (_:1) 2.0 Imbankment Erosion of embankment, 80m South of pipe, West side - erosion measures 15mx1mx1m dp cutting 400mm into Roadway and 1 post hanging. Height of Cover(m) : 15) Yes Explanation of Condition Guiver to cover(m) : 15) Cutver to mponent Last Now Explanation of Condition Direction W Yes K K Headwall STEEL X X K Wingwalls <td>Special Feature</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Special Feature															
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Power Municipal Others Problem (Y/N) No Remarks Image: Second Sec	Telephone Fast & West r/w Gas															
Others Problem (Y/N) No Remarks Image: State Sta	Power	wer						Munici	bal							
Approach Read / Embankment Approach Read / Embankment Horizontal Alignment Cast Now Explanation of Condition Horizontal Alignment 6 6 Limited sight distance in between 2 curves. Vertical Alignment 6 6 Limited sight distance in between 2 curves. Roadway Width (m) 10.400	Others	Others					Proble	m (Y/N)	No							
Approach Road / Embankment Now Explanation of Condition Horizontal Alignment 6 6 Limited sight distance in between 2 curves. Vertical Alignment 6 6 Limited sight distance in between 2 curves. Roadway Width (m) 10.400 Image: Sight distance in between 2 curves. Image: Sight distance in between 2 curves. Embankment 3 3 Erosion of embankment, 80m South of pipe, West side - erosion measures 15mx1mx1m dp cutting 400mm into Roadway and 1 post hanging. Guardrail (Y/N) Yes Image: Sight distance in between 2 curves. Approach Road / Embankment General Rating 6 6 Direction Image: Sight distance in between 2 curves. Image: Sight distance in between 2 curves. End Treatment (Concrete, Steel, Others, None) Yes Missing isolated splice bolts. Headwall X X X Collar X X X Wingwalls Now X X Vingwalls Now X X	Remarks															
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Harging.Guardrail (Y/N)YesImage: Colspan="2">Missing isolated splice bolts.Approach Road / Embankment General Rating666Upstream EndCulvert ComponentLastNowExplanation of ConditionDirectionWExplanation of ConditionDirectionWExplanation of ConditionHeadwallSTEELXXCollarXXWingwallsXXChapter :)XXCutoff WallXX	Sideslope (:1)			2.0				measures 15mx1mx1m dp cutting 400mm into Roadway and 1 post								
Guardrail (Y/N)YesIIMissing isolated splice bolts.Approach Road / Embankment General Rating666Culvert ComponentLastNowExplanation of ConditionDirectionWExplanation of ConditionMissing isolated splice bolts.DirectionWVExplanation of ConditionDirectionWVExplanation of ConditionDirectionWVEnd Treatment (Concrete, Steel, STEELSTEELXXHeadwallXXXCollarXXXWingwallsXXX(Shape :)XXXCutoff WallXXX	(Height of Cover(m) : 15)															
Approach Road / Embankment General Rating66General Rating66Culvert ComponentLastNowDirectionWEnd Treatment (Concrete, Steel, Others, None)STEELVHeadwallXXCollarXXWingwallsXX(Shape :)XXCutoff WallXX	Guardrail (Y/N)		Yes			Missing isolated splice bolts.										
Upstream End Culvert Component Last Now Explanation of Condition Direction W W Move Explanation of Condition Direction W W Move Move End Treatment (Concrete, Steel, Others, None) STEEL V V Headwall X X X Collar X X X Wingwalls X X X (Shape :) X X X Cutoff Wall X X X	Approach Road	d / Emb	ankmer	nt General Rat	ing	6	6									
Culvert ComponentLastNowExplanation of ConditionDirectionWEnd Treatment (Concrete, Steel, Others, None)STEELVHeadwallXXCollarXXWingwallsXX(Shape :)XXCutoff WallXX							Upstre	am End								
Direction W End Treatment (Concrete, Steel, STEEL X X Headwall X X Collar X X Wingwalls V X X (Shape :) X X X	Culvert Compo	nent				Last	Now	Explan	ation of	Condi	tion					
End Treatment (Concrete, Steel, STEEL Headwall X Collar X Wingwalls X (Shape :) X Cutoff Wall X	Direction				W											
Headwall X X Collar X X Wingwalls X X (Shape :) X X Cutoff Wall X X	End Treatment (Concrete, Steel, STEEL Others, None)					-										
Collar X X Wingwalls X X (Shape :) X X Cutoff Wall X X	Headwall				X	Х										
Wingwalls X X (Shape :) X X Cutoff Wall X X	Collar					X	Х									
(Shape :) Cutoff Wall X X	Wingwalls					X	X									
Cutoff Wall X X	(Shape :)							1								
	Cutoff Wall					X	Х									

Alberta Transportation

			Upstre	am End						
Culvert Component		Last	Now	Explanation of Condition						
Bevel End		7	N	Only top of bevel visible under ice. P.R 7.						
Heaving (mm)	0									
Invert Above/Below Stream Bed	BELOW			_						
Above/Below (mm)	350									
Scour Protection		8	N	P.R 8.						
(Type : RIP RAP)				_						
(Avg. Rock Size(mm) : 500)			-							
Scour/Erosion		8	N	P.R 8.						
Beavers (Y/N)	No									
Upstream End General Rating	1	7	N							
		Bric	lge Cu	Ivert Barrel						
Culvert Component		Last	Now	Explanation of Condition						
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Sp	an (mm):	, Rise (mm): 2438, Type: SP)						
Barrel Last Accessible Date	14-Jun-2011			Both bevels are buried under ice.						
Special Features	1									
Special Feature										
(Type:)			1							
Special Feature										
(Type:)										
Roof		8	N	P.R 8.						
Measured Rise (mm)	2380			_						
Measured At Ring No.	8			_						
Sag (mm)	58			_						
Percent Sag	2									
Sidewall		8	N	P.R 8.						
Measured Span (mm)	2480									
Measured At Ring No.	8			_						
Deflection (mm)	42			_						
Percent Deflection	1									
Floor		7	N	(Minor abrasions). P.R 7.						
Bulge (mm)	0									
Measured At Ring No.										
Abrasion (Y/N)	Yes									
Circumferential Seams		7	N	P.R 7.						
Separation (mm) 0										
Longitudinal Seams		8	N	P.R 8.						
Total No. of Cracked Rings	0									
Total No. of Rings with Two Cracked Seams	0									
Min. Remaining Steel Between Cracks (mm)	0			1N stagger.						
Proper Lap (Y/N)	Yes			1						
Longitudinal Stagger (Y/N)	Yes			1						
Coating		6	N	(Minor superficial corrosion at waterline and North sidewall at Ring						
Corrosion By Soil (Y/N)	No	-								
Corrosion By Water (Y/N)	Yes			ר.א ט.						
Camber POS/ZERO/NEG	ZERO									
Ponding (Y/N)	No									

Alberta Transportation

Bridge Inspection & Maintenance System (Web 2005)

77770 -1 Bridge Culvert

Bridge Culvert Barrel										
Culvert Component			Now	Explanation of Condition						
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm):	, Rise (mm): 2438, Type: SP)						
Fish Passage Adequacy		7	7							
Baffle		X	Х							
(Туре :)										
Waterway Adequacy		6	5	Buried in ice.						
Icing (Y/N)	Yes			300mm silt and rock at 4 D/S rings.						
Silting (Y/N)	Yes									
Drift (Y/N)	No									
Barrel General Rating		8	N							
Downstream End										
Culvert Component		Last Nov		Explanation of Condition						
Direction	1	E		East.						
End Treatment (Concrete, Steel, Others, None)	STEEL		1							
Headwall		X	X							
Collar		Х	X							
Wingwalls		X	X							
(Shape:)										
Cutoff Wall			Х							
Bevel End		7	N	Only top of bevel visible under ice. P.R 7.						
Heaving (mm)	0									
Invert Above/Below Stream Bed	BELOW			_						
Above/Below (mm)	300									
Scour Protection		8	N	P.R 8.						
(Type : RIP RAP)				-						
(Avg. Rock Size(mm) : 500)			1							
Scour/Erosion		8	N	P.R 8.						
Beavers (Y/N)	No									
Downstream End General Ratin	ng	7	N							
		S	tructu	re Usage						
		Last	Now	Explanation of Condition						
Channel (U/S and D/S)			1							
Alignment		7	7							
Bank Stability			6							
HWM (m below Top of Culvert)	1.2			No visible HWM.						
Drift (Y/N)	No									
Channel Bottom Degrading/Aggrading										
Beavers (Y/N) No										
(Fish Compensation Measure 1 :	NONE)									
(Fish Compensation Measure 2 :	NONE)		1							
Channel General Rating		7	7							

Alberta Transportation

77770 -1 Bridge Culvert

Maintenance Recommendations											
Inspector Recommendations	Year	r Inspector Comments			Department Cor	Target Year	Est. Cost	Cat #			
SHOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP	2013	West emb Place ripr	bankment- 15m ³ Cl.1 ap @ erosion.								
REMOVE DRIFT ACCUMULATION											
INSTALL CONCRETE/STEEL LINING	i										
INSTALL STRUTS											
INSTALL CONCRETE COLLAR/CUTO	DFF										
REPAIR SEAMS											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (Last/N (%)	ow) 88.9/5	5.6	Sufficiency Rating (Last/Now) (%)		78.0/56.1	Est. Re	st. Repl. Yr 2036		Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection					Department Comments						
Maintenance Reviewed By					Date			1	Estimated Total	I 0	
Proposed Long-Term Strategy											
On 3-Year Program (Y/N)											
Proposed Action											
Previous Inspector's Name	Garry Roberts			Previous /	vious Assistant's Name						
Next Inspection Date	26-Dec-2014			Previous I	nspection Date	14	Jun-2011				
Inspection Cycle (Default) (months)	21										
Comment											