				D.:		(](!						
Daides Eile Ness	-1	04400	1 Duides Outes		ige Cuiv	ert Inspection		OLUL 4				
Bridge File Nun	nber		1 Bridge Culve	Π		Form Type		CUL1				
Year Built	.	1988				Lot No.		1				
Bridge or Town	Name	DUHAM				Inspector Name		Owen Salava				
Located Over			NIMAL, OVER	R SP		Inspector Class		BR CLS A				
Located On	n.,	21:22 C	1 31.133			Assistant Name	-					
Water Body Cl.						Assistant Class		_				
Navigabil. Cl./Y						Inspection Date	9	20-Sep-2012				
Legal Land Loc			27 TWP 45 R	GE 21 W4M		Data Entry By		Marcia Chavez	Z			
Longitude, Latit	tude		56, 52:54:45			Data Entry Date		03-Oct-2012				
Road Authority			Transportation	(AIT)		Reviewer Name		John O'Brien				
Contract Main.		CMA16				Review Date		27-Sep-2012				
Clear Roadway/Skew 13 /						Dept. Reviewer	r Name	Andrew Smikle	es			
AADT/Year 2,570 / 2011 (A)						Dept. Review D	Date	19-Nov-2012				
Road Classification RAU-213.4-120						Follow-Up By						
Detour Length	(km)	3										
Bridge Culvert	Inform	ation										
Number of Culv	/erts		1									
Pipe #	Barrel		Span	Rise (or Dia.)	Туре	e Length Corr. Profile PI./Slab Thicknet				Shape		
1	MAIN	-		2200	MP	27		125X26	2.8	ROUND		
Special Feature	es											
Required Vert.	Clearan	nce Postir	ng (m)	F	osting I	nformation						
Posted Vertical	Cleara	nce (Y/N)) No									
Posted: Lane	NB	0 0										
		On B	Bridge (m)	In Advance	(Y/N)	Lane SE	3 0	n Bridge (m)	In Advar	nce (Y/N)		
Remarks			sridge (m)	In Advance	e (Y/N)	Lane SE	3 0	n Bridge (m)	In Advar	nce (Y/N)		
Remarks		On Bequired.	Bridge (m)	'			3 0	n Bridge (m)	In Advar	nce (Y/N)		
	Not re		Bridge (m)	'		Lane SE	3 0	n Bridge (m)	In Advar	nce (Y/N)		
Utility Attachme	Not re	equired.	tridge (m)	'			70 m s		In Advar	nce (Y/N)		
	Not re	equired.	tridge (m)	'		Located at)			In Advar	nce (Y/N)		
Utility Attachme	Not re	equired.		'		Cased at) Gas Municipal			In Advar	nce (Y/N)		
Utility Attachme Telephone Power Others	Not re	equired.		'		Located at)	70 m		In Advar	nce (Y/N)		
Utility Attachme Telephone Power	Not re	equired.		L	Itilities (I	Gas Municipal Problem (Y/N)	70 m :		In Advar	nce (Y/N)		
Utility Attachme Telephone Power Others	Not re	equired.		L	Itilities (I	Cased at) Gas Municipal	70 m s	South.	In Advar	nce (Y/N)		
Utility Attachme Telephone Power Others	Not reents West	equired.		Appro	Itilities (I	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks	Not reents West	equired.		Appro Las	ach Roat Now	Gas Municipal Problem (Y/N) d / Embankment Explanation of	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Aligr	Not reents West Fibre	equired.		Appro Las	ach Roat Now	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Align Vertical Alignme	Not reents West Fibre	equired.	w.	Appro Las	ach Roat Now	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Align Vertical Alignm Roadway Width	Not reents West Fibre mment ent n (m)	equired.	w.	Appro Las 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Align Vertical Alignm Roadway Width Embankment Sideslope (Not reents West Fibre of the ment ent ent ent (m)	r/w.	13.000	Appro Las 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	70 m s	South.	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Aligr Vertical Alignm Roadway Width	Not reents West Fibre mment ent n (m) :1) ver(m):	r/w.	13.000	Appro Las 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve	No No f Condite, approae to hill.	South. ion aches to field a Superelevated	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Align Vertical Alignm Roadway Width Embankment Sideslope (Not reents West Fibre mment ent n (m) :1) ver(m):	r/w. optic E r/*	13.000 3.0 Yes	Appro Las	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankmen Explanation of Built over curve passing NB due	No No f Condite, approae to hill.	South. ion aches to field a Superelevated	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Aligr Vertical Alignm Roadway Width Embankment Sideslope ((Height of Co	Not reents West Fibre mment ent n (m) :1) ver(m):	r/w. optic E r/*	13.000 3.0 Yes	Appro Las	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve passing NB due	No No f Condite, approae to hill.	South. ion aches to field a Superelevated	ccess on Sout			
Utility Attachmed Telephone Power Others Remarks Horizontal Align Vertical Alignmand Roadway Width Embankment Sideslope (Not reents West Fibre mment ent n (m)	r/w. optic E r/*	13.000 3.0 Yes	Appro Las 6 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve passing NB due Approx. 450mm	70 m s No t f Condit e, approa e to hill.	South. Eion aches to field a Superelevated	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Align Vertical Alignm Roadway Width Embankment Sideslope (Not reents West Fibre mment ent n (m)	r/w. optic E r/*	13.000 3.0 Yes	Appro Las 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve passing NB due	70 m s No t f Condit e, approa e to hill.	South. Eion aches to field a Superelevated	ccess on Sout			
Utility Attachme Telephone Power Others Remarks Horizontal Aligr Vertical Alignm Roadway Width Embankment Sideslope (Not reents West Fibre mment ent n (m) :1) ver(m):	r/w. optic E r/*	13.000 3.0 Yes At General Rate	Appro Las 6 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve passing NB due Approx. 450mm	70 m s No t f Condit e, approa e to hill.	South. Eion aches to field a Superelevated	ccess on Sout			
Utility Attachmed Telephone Power Others Remarks Horizontal Alignmy Vertical Alignmy Vertical Alignmy Roadway Width Embankment Sideslope (Not reents West Fibre mment ent n (m) :1) ver(m):	r/w. optic E r/*	13.000 3.0 Yes At General Rate	Appro Las 6	ach Roat Now 6 6	Gas Municipal Problem (Y/N) d / Embankment Explanation of Built over curve passing NB due Approx. 450mm	70 m s No t f Condit e, approa e to hill.	South. Eion aches to field a Superelevated	ccess on Sout			

				eam End
Culvert Component		Last	Now	Explanation of Condition
Wingwalls		X	X	
(Shape:)		1		
Cutoff Wall		X	X	
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		7	7	
(Type : NATURAL)				
(Avg. Rock Size(mm):)			_	
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Upstream End General Rating		7	7	
		_Bri	dae Cu	lvert Barrel
Culvert Component			Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN. Spa			, Rise (mm): 2200, Type: MP)
Barrel Last Accessible Date	20-Sep-2012		,-	,,,,,,
Special Features				
Special Feature				
(Type:)			-	
Special Feature				
(Type:)				
Roof		4	3	1750 to floor.
Measured Rise (mm)				1700 to 11001.
Measured At Ring No.	2			
Sag (mm)	250			Est. deflection.
Percent Sag	11			11.4%
Sidewall		3	3	Barrel shape still has some arching ability -photo.
Measured Span (mm)	2510	3		Darrer shape still has some arching ability -photo.
Measured At Ring No.	2			
Deflection (mm)	310			14.1%
Percent Deflection	14			
Floor	17	N	N	Covered with concrete floor, mud.
Bulge (mm)	0	IN	IN	Overed with concrete hoof, fillid.
Measured At Ring No.				
Abrasion (Y/N)	No			
	INU	5		1st soom from E and social with expanding from
Circumferential Seams	100	5	5	1st seam from E end, sealed with expanding foam.
Separation (mm)	100	V	V	
Longitudinal Seams Total No. of Cracked Rings		X	X	
Total No. of Rings with Two	-			
Cracked Seams				
Min. Remaining Steel Between Cracks (mm)				
Proper Lap (Y/N)				
Longitudinal Stagger (Y/N)				
Coating		7	7	
Corrosion By Soil (Y/N)	No			
Corrosion By Water (Y/N)	No			2 of 5

		Brid	dge Cu	Ivert Barrel
Culvert Component				Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm	1):	, Rise (mm): 2200, Type: MP)
Camber POS/ZERO/NEG	NEG			
Ponding (Y/N)	No			
Fish Passage Adequacy		Х	X	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		Х	Х	
Icing (Y/N)	No			
Silting (Y/N)	No			
Drift (Y/N)	No			
Barrel General Rating			3	
		D	ownstr	ream End
Culvert Component		Last	Now	Explanation of Condition
Direction		Е		2400 MP extended 2.7m.
End Treatment (Concrete, Steel, Others, None)	NONE			
Headwall		Х	X	
Collar			X	
Wingwalls		Х	Х	
(Shape:)				
Cutoff Wall		X	X	
Bevel End		Х	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	300			
Scour Protection		7	7	
(Type: NATURAL)				
(Avg. Rock Size(mm):)				
Scour/Erosion		7	7	
Beavers (Y/N)	No			
Downstream End General Ratio	ng	7	7	
				re Usage
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		7	7	
Roadway Surface		7	7	
(Type : CONCRETE)	T			
Icing (Y/N)	No			
Traffic Safety Features		X	X	
Туре	None			
Lighting		X	X	
Barrel Leakage (Y/N)	No			

		S	tructu	re Usage
		Last	Now	Explanation of Condition
Drainage		7	7	
Structure In Use (Y/N)	Yes			
Grade Separation General R	ating	7	7	

Alberta Transportation

			Maintenance Recommendations	commenda	tions					
Inspector Recommendations	Year	Inspecto	Inspector Comments		Department Comments	ments	•	Target Year	Est. Cost	Cat#
SHOTCRETE REPAIRS										
PLACE ADDITIONAL RIP RAP										
REMOVE DRIFT ACCUMULATION										
INSTALL CONCRETE/STEEL LINING	5 S									
INSTALL STRUTS	2012	Install struts.	ruts.							
INSTALL CONCRETE COLLAR/CUTOFF	TOFF									
REPAIR SEAMS										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
OTHER ACTION										
Structural Condition Rating (Last/Now) (%)	Now) 33.3/33.3	13.3	Sufficiency Rating (Last/Now) (%)		61.0/60.9	Est. Repl. Yr	2035	Maint. Reqd. (Y/N)		Yes
Special Consider raising guardrail to meet std height. Comments for Deflection increase of 65mm or 3% since 08Nov2010; at Next Inspection next cycle.	guardrail to meet se of 65mm or 3%	std height. % since 08N	ov2010; at that rate could be r=2 in		Department Comments					
Maintenance Reviewed By					Date		Ě	Estimated Total	0	
Proposed Long-Term Strategy	Cattle pass be bridge work re	eing used. V equired with	Cattle pass being used. Water ponds in culvert. Has sagged but appears ok. Repair joint separation with foam. Should be OK until 2038. No bridge work required with overlay. RS	agged but a	appears ok. Repa	ir joint separation wi	ith foam. S	Should be OK u	ıntil 2038. N	0
On 3-Year Program (Y/N)										
Proposed Action										
Previous Inspector's Name	Dave Lam			Previous A	Previous Assistant's Name					
Next Inspection Date	20-Jun-2014			Previous In	Previous Inspection Date	08-Nov-2010				
Inspection Cycle (Default) (months)	21									
Comment										

			Maintenance Rec	ommend	lations						
Inspector Recommendations		Year	Inspector Comments		Department C	ommer	nts		Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS											
PLACE ADDITIONAL RIP RAP											
REMOVE DRIFT ACCUMULATION											
INSTALL CONCRETE/STEEL LININ	G										
INSTALL STRUTS		2012	Install struts.		Department to	monito	or every 6 mor	nths			
INSTALL CONCRETE COLLAR/CUTOFF											
REPAIR SEAMS											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
OTHER ACTION											
Structural Condition Rating (Last/Now)		33.3/33.3 Sufficiency Rating (Last/N (%)		low)	61.0/60.9	Est	. Repl. Yr	2035	Maint. Reqd. (Y/N)		Yes
Special Consider raising guardrail to meet std height. Comments for Next Inspection Consider raising guardrail to meet std height. Deflection increase of 65mm or 3% since 08Nov2010; at that rate could be r=2 in next cycle.			oe r=2 in	Department Comments	Replace record	ement progra sag every 6 r	immed fo nonths.	or 2022. Departi	ment to revi	ew and	
Maintenance Reviewed By Ar		v Smikle	S		Date	10-Dec	c-2012		Estimated Tota	I 0	
Proposed Long-Term Strategy C		oass bei work red	ng used. Water ponds in culvert. Has s quired with overlay. RS	sagged b	ut appears ok.	Repair j	ioint separatic	on with fo	am. Should be	OK until 20	38. No
On 3-Year Program (Y/N)											
Proposed Action											
Previous Inspector's Name	Dave L	am_	F	Previous	Assistant's Nan	ne					
Next Inspection Date	20-Jun-	-2014	F	Previous	Inspection Date)	08-Nov-2010				
Inspection Cycle (Default) (months)	21		·								
Comment											