Bridge Culvert Inspection												
Bridge File Number	70887 -1	Bridge Culve	rt			Form T			CULM			
Year Built	1953		<u> </u>			Lot No.	• •		1			
Bridge or Town Name		 Т					tor Name		Garry Roberts			
Located Over		DGE CREEK	. 2.12.28	3.			Inspector Class BR CLS A					
	WATERC	RS-ST	.,	,			nt Name					
Located On	3:06 C1 2	3:06 C1 26.270				Assistant Class						
Water Body Cl./Year							ion Date		27-Nov-2011			
Navigabil. Cl./Year						Data Entry By			Alyssa Boynton			
Legal Land Location	NE SEC 3	32 TWP 7 RG	E 27 W4	M			Data Entry Date 16-Dec-2011					
Longitude, Latitude	-113:37:3	4, 49:36:39				Reviewer Name			Tom Carey			
Road Authority	Alberta Tr	ansportation	(AIT)			Review Date			07-Dec-2011			
Contract Main. Area	CMA26					Dept. F	Reviewer	Name	Tim Davies			
Clear Roadway/Skew	13 /						Review Da		10-Jan-2012			
AADT/Year	4,420 / 20					Follow-						
Road Classification	RAU-213-	-130										
Detour Length (km)	3											
Bridge Culvert Inform												
Number of Culverts	1		l				l			I	1	
Pipe # Barrel	Sı	pan	Rise (or	Dia.)	Type		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1 MAIN	99	900	2440		BP		36			771101111000	RECTANGLE	
Special Features											1112017111022	
Special Features Com	ment											
,												
				Uti	lities (L	ocated.	at)					
Utility Attachments												
Telephone South	r/w						Gas East 200 m					
Power							unicipal (A/A)					
Others							Problem (Y/N) No					
Remarks Alta e	nv water g	uage at NE c										
			A	Last	1		ankment	Candi	ion			
Horizontal Alignment					6	Explanation of Condition At bottom of sag curve.						
Vertical Alignment				5	5	Road allowance 80m E						
Roadway Width (m)		13.000		J	<u> </u>							
Troadway Width (III)		13.000										
Embankment				5	5	Some minor erosion on slope above pipe						
Sideslope (:1)		3.0										
(Height of Cover(m) :	4)											
Guardrail (Y/N)		Yes										
Approach Road / Emi	- ankmant	Canaral Bat	lna									
Approach Road / Emi	oankment	General Rat	ing	5	5							
					Upstre	am End						
Culvert Component				Last	Now	Explan	ation of	Condi	tion			
Direction				S		South 6	end, west	pipe.				
End Treatment (Concre Others, None)	ete, Steel,	CONCRETE										
Headwall				5	5	Some	ebar sho	wing -	minor			
Collar				Х	Х							
Wingwalls				6	6							
(Shape:)						1						
Cutoff Wall				N	N	Buried						

			Upstre	eam End
Culvert Component		Last	Now	Explanation of Condition
Bevel End		X	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed	ABOVE			
Above/Below (mm)	100			
Scour Protection		5	3	
(Type : NATURAL)				
(Avg. Rock Size(mm):)			1	
Scour/Erosion		5	3	Moderate erosion forming at SW
Beavers (Y/N)	Yes			Beaverdam 30m U/S
Upstream End General Rating		5	3	
		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	n (mm): 1980), Rise (mm): 2440, Type: BP, Cell Sequence: 1)
Barrel Last Accessible Date	27-Nov-2011			West barrel - currently handling flow
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		6	6	Medium width vertical cracks vertical and diagonal
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection			1	
Floor		6	6	MED. SCALING @ MIDSPAN-4m2 AREA.
Bulge (mm)	0			
Measured At Ring No.	1			
Abrasion (Y/N)	No		1	
Circumferential Seams	T	6	6	2 seams
Separation (mm)	40		_	
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		X	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Bri	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm): 1980	, Rise (mm): 2440, Type: BP, Cell Sequence: 1)
Fish Passage Adequacy		6	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	5	
Icing (Y/N)	No			
Silting (Y/N)	No			Minor drift across U/S end.
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
		Bri	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	ın (mm): 1980	, Rise (mm): 2440, Type: BP, Cell Sequence: 2)
Barrel Last Accessible Date	27-Nov-2011			2nd from west
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	Leakage @ roof @ midspan box 2 from W
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag				
Sidewall		5	5	medium vertical cracks. Numerous
Measured Span (mm)	1980			sidewall patches.
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		5	5	Silt and rock covering 40% - 400mm
Bulge (mm)	0			
Measured At Ring No.				
Abrasion (Y/N)	No			
Circumferential Seams		5	5	Spall patches at R2
Separation (mm)	40			
Longitudinal Seams		Х	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		Х	Х	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Bri	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	ation Code: MAIN, Sp	an (mm	n): 1980), Rise (mm): 2440, Type: BP, Cell Sequence: 2)
Fish Passage Adequacy		6	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		5	4	400mm of silt and rock
Icing (Y/N)	No			
Silting (Y/N)	Yes			30% blocked by drift at U/S.
Drift (Y/N)	Yes			
Barrel General Rating		5	5	
		Brid	dge Cu	Ivert Barrel
Culvert Component			Now	
(Pipe # : 1, Primary Span, Loca	ation Code: MAIN, Sp	an (mm	n): 1980), Rise (mm): 2440, Type: BP, Cell Sequence: 3)
Barrel Last Accessible Date	27-Nov-2011			3rd cell from west
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)				
Percent Sag				
Sidewall		6	6	Medium width vertical cracks
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection				
Floor		N	N	600mm of silt and rock in 2/3 of cell - visable areas at ends appear
Bulge (mm)				good.
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	40			
Longitudinal Seams		Х	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		Х	X	
Corrosion By Soil (Y/N)				1
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe # : 1, Primary Span, Loca	tion Code: MAIN, Spa	an (mm): 1980	, Rise (mm): 2440, Type: BP, Cell Sequence: 3)
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		7	2	600mm of silt of silt and rock in 2/3 of cell
Icing (Y/N)	No			90% blocked by drift across U/S end.
Silting (Y/N)	Yes			3070 blooked by drift doloss 670 chd.
Drift (Y/N)	Yes			
Barrel General Rating		6	2	
		Brid	dge Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
(Pipe #: 1, Primary Span, Loca	tion Code: MAIN, Spa	an (mm): 1980	, Rise (mm): 2440, Type: BP, Cell Sequence: 4)
Barrel Last Accessible Date	27-Nov-2011			4th from the west
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	medium with vertical cracks
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	600mm of silt and rock in 2/3 of cell
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	40			
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		Х	Х	
Corrosion By Soil (Y/N)				1
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Bri	dae Cu	Ivert Barrel
Culvert Component		Last	Now	Explanation of Condition
•	tion Code: MAIN, Sp), Rise (mm): 2440, Type: BP, Cell Sequence: 4)
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type:)				
Waterway Adequacy		6	3	
Icing (Y/N)	No			600mm silt and rock
Silting (Y/N)	Yes			50% blockage at U/S end.
Drift (Y/N)				
Barrel General Rating		6	6	
		Bri	dae Cu	lvert Barrel
Culvert Component		Last	Now	Explanation of Condition
	tion Code: MAIN. Sp:			D, Rise (mm): 2440, Type: BP, Cell Sequence: 5)
Barrel Last Accessible Date	27-Nov-2011		,	east cell
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type:)				
Roof		6	6	
Measured Rise (mm)	2440			
Measured At Ring No.	1			
Sag (mm)	0			
Percent Sag	0			
Sidewall		6	6	medium width vertical cracks
Measured Span (mm)	1980			
Measured At Ring No.	1			
Deflection (mm)	0			
Percent Deflection	0			
Floor		N	N	400mm of silt and rock on 2/3
Bulge (mm)				
Measured At Ring No.				
Abrasion (Y/N)				
Circumferential Seams		6	6	
Separation (mm)	40			
Longitudinal Seams		Х	Х	
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		N	X	
Corrosion By Soil (Y/N)				
Corrosion By Water (Y/N)				
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Brio	dae Cu	lvert Barrel
Culvert Component		Last		Explanation of Condition
-	tion Code: MAIN, Spa	n (mm		, Rise (mm): 2440, Type: BP, Cell Sequence: 5)
Fish Passage Adequacy		5	5	
Baffle		Х	Х	
(Type :)				
Waterway Adequacy		6	3	
Icing (Y/N)	No			400mm of silt and rock in 2/3 of the cell. 50% blocked by drift across U/S end.
Silting (Y/N)	Yes			State of the state
Drift (Y/N)	Yes			
Barrel General Rating		6	6	
		D	ownstr	eam End
Culvert Component		Last	Now	Explanation of Condition
Direction		N		North end
End Treatment (Concrete, Steel, Others, None)	CONCRETE			
Culvert Component Direction End Treatment (Concrete, Steel, Others, None) Headwall Collar Wingwalls (Shape:) Cutoff Wall Bevel End Heaving (mm) Invert Above/Below Stream Bed Above/Below (mm) Scour Protection		6	6	Some hairline cracks
Collar		Х	X	
Wingwalls		7	7	
(Shape :)				
Cutoff Wall		N	N	Buried
Bevel End		Х	X	
Heaving (mm)	0			
Invert Above/Below Stream Bed				
Above/Below (mm)	0			
Scour Protection		6	6	
(Type : NATURAL)				
(Avg. Rock Size(mm):)			1	
Scour/Erosion		6	6	
Beavers (Y/N)	No			
Downstream End General Ratin	ng	6	6	
		s	tructu	re Usage
		Last	Now	Explanation of Condition
Channel (U/S and D/S)			1	
Alignment		4	4	CREEK CURRENT LOCATION ALIGNED WITH WEST CELL.
Bank Stability		5	3	Steep cut bank eroded 2m deep x 8 m at southwest at u/s.
HWM (m below Top of Culvert)				HWM not visible
Drift (Y/N)	Yes			Drift blocking 4 of 5 cells.
Channel Bottom Degrading/Aggrading	AGGRADING			Beaverdam 30m U/S.
Beavers (Y/N)	Yes			
(Fish Compensation Measure 1 :	NONE)			
(Fish Compensation Measure 2 :	NONE)			
Channel General Rating		4	3	

		Maintenance	Recommend	dations					
Inspector Recommendations	Year	Inspector Comments	recomment.	Department Comr	nents	Target Year	Est. Cost	Cat #	
SHOTCRETE REPAIRS							3		
PLACE ADDITIONAL RIP RAP	2011	Repair U/S scour 50m3 Cl.2.							
REMOVE DRIFT ACCUMULATION									
INSTALL CONCRETE/STEEL LINING	i	At U/S prior to spring run-off.							
INSTALL STRUTS									
INSTALL CONCRETE COLLAR/CUTO	OFF								
REPAIR SEAMS									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
OTHER ACTION									
Structural Condition Rating (Last/N (%)	ow) 55.6/22	.2 Sufficiency Rating (Las	t/Now)	52.3/25.4	Est. Repl. Yr	2030	2030 Maint. Re		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	Garry Roberts		Previous	Assistant's Name					
Next Inspection Date	27-Aug-2013		Previous	Inspection Date	19-May-2010				
Inspection Cycle (Default) (months)	21								
Comment									