78688 -1 Bridge Culvert

Bridge Culvert Inspection												
Bridge File Number	78688 -1	Bridge Culve	rt		Form Type			CUL1				
Year Built	1976					Lot No.			3			
Bridge or Town Name	e LETHBR	LETHBRIDGE				Inspector Name			Garry Roberts			
Located Over		RIGATION C	, WATER	CRS-I	C	Inspector Class			BR CLS A			
Located On	512:02 C					Assista	nt Name					
Water Body Cl./Year						Assistant Class						
Navigabil. Cl./Year						Inspection Date		19-Mar-2012				
Legal Land Location	SW SEC	5 TWP 9 RGI	E 20 W4N	1		Data Entry By		Lauren Korte				
Longitude, Latitude	-112:40:4	46, 49:41:53				Data Entry Date 12-Apr-2012						
Road Authority	Alberta T	ransportation	(AIT)				Reviewer Name Tom Carey					
Contract Main. Area	CMA25	·				Review	Review Date 23-Mar-2012					
Clear Roadway/Skew	v 8.5 / -45	deg. (LHF)				Dept. Reviewer Name		Tim Davies				
AADT/Year	1,290 / 2	011 (A)		Dept. Review Date			ate	17-Apr-2012				
Road Classification	RCU-209	9-110				Follow-Up By						
Detour Length (km)	3											
Bridge Culvert Infor	mation											
Number of Culverts	1											
Pipe # Barre	el S	Span	Rise (or	Dia.)	ia.) Type		Length		Corr. Profile	Pl./Slab Thickness	Shape	
1 MAIN	l 1	829	1118		FP	47.3			68X13	4.2,4.2,4.2	ARCH	
Special Features												
Special Features Cor	mment											
Living Ave I				Uti	lities (L	ocated	at)					
Utility Attachments									1. 1.50	0)4/		
Telephone	0 11 11					Gas Crosses channel 50m SW.						
	es South di	tch.				Municipal Problem (Y/N) No						
Others						Problei	m (Y/N)	No				
Remarks			Α.		l. Dans	l / E.s.b						
			A	Last	Now	1	ankment ation of		tion			
Horizontal Alignment				9	8	LAPIAII	ation or	Condi				
Vertical Alignment				6	6	-						
Roadway Width (m) 8.500		0										
Embankment	Embankment			7	7							
Sideslope (:1)		3.0		'	'	1						
(Height of Cover(m) : 3.6)					1							
Guardrail (Y/N)) . 3.0)	No										
Approach Road / Er	nbankmen	t General Rat	ing	6	6							
					Unstre	am End						
Culvert Component			Last	Now	Explanation of Condition							
•			s	<u>'</u>	South.							
End Treatment (Cond Others, None)	crete, Steel,	STEEL										
Headwall			Х	Х								
Collar			Х	Х								
Wingwalls			Х	Х								
(Shape:)					1							
Cutoff Wall			Х	X								

Upstream End										
Culvert Component		Last	Now	Explanation of Condition						
Bevel End		5	6	Drift is blocking bevel.						
Heaving (mm)	0	J	0	Drift is blocking bevel.						
Invert Above/Below Stream Bed	0									
	0			-						
Above/Below (mm) Scour Protection	0	7	7							
		/	7							
(Type : RIP RAP)										
(Avg. Rock Size(mm) : 300)		7	T -							
Scour/Erosion		7	7							
Beavers (Y/N)	No									
Upstream End General Rating		5	6							
Only and On the second				Ivert Barrel						
Culvert Component	Cara Carlar MAINI (Explanation of Condition						
(Pipe # : 1, Primary Span, Loca		opan (mm	ı): 1829	o, Kise (mm): 1118, Type: FP)						
Barrel Last Accessible Date	19-Mar-2009									
Special Features										
Special Feature										
(Type:)										
Special Feature										
(Type:)										
Roof		4	4	Ice. Rating based on previous measurement.						
Measured Rise (mm)	1010	· ·	-	100. Nating based on provious measurement.						
Measured At Ring No.	1010									
Sag (mm)	108									
Percent Sag	9									
Sidewall	3	5	5							
Measured Span (mm)	1915		J							
Measured At Ring No.	3									
Deflection (mm)	86			-						
Percent Deflection	5									
	5		T							
Floor	0	5	N	Ice.						
Bulge (mm)	0									
Measured At Ring No.	\\\									
Abrasion (Y/N)	Yes			lating the company of						
Circumferential Seams	1.15	4	4	Minor dirt infiltration D/S seam only.						
Separation (mm)	115									
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		4	4	Floor is rusting & slight scaling & pitting.						
Corrosion By Soil (Y/N)	Yes			Slight soil alkali.						
Corrosion By Water (Y/N)	Yes									
Camber POS/ZERO/NEG	ZERO									
Ponding (Y/N)	No									

(Pipe # 11, Primary Span, Location Code: MAIN, Span (mm): 1829, Rise (mm): 1118, Type: FP) Fish Passage Adequacy X 7 Baffie X X X (Type :) Waterway Adequacy 8 7 At U/S barrel. Using (YN) No No At U/S barrel. At U/S barrel. Stifting (YN) No Downstream End Downstream End Downstream End Culver Component Last Now Explanation of Condition North. North. Direction N North. North. North. Coller X X X Wingwalls X X X (Shape:) X X Cutoff Wall X X X Bevel End 5 6 Heaving (mm) 50 Soouth Protection 6 6 Grype: RIP RAP) (Avg. Rock Size(mm): 300) Soouth Protection 6 6 Geavers (Y/N) No Downstream End General Rating 5 6 <tr< th=""><th colspan="8">Bridge Culvert Barrel</th></tr<>	Bridge Culvert Barrel							
Settle	Culvert Component		Last	Now	Explanation of Condition			
Baffle	(Pipe #: 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm): 1829	, Rise (mm): 1118, Type: FP)			
Type :	Fish Passage Adequacy		Х	7				
	Baffle		Х	Х				
Icing (Y/N)	(Type:)							
Icing (Y/N)	Waterway Adequacy		8	7				
Silting (Y/N)		No			At II/S harral			
Drift (Y/N) Yes Sarrel General Rating 4		No			At 0/3 parter.			
Barrel General Rating								
Culvert Component	Barrel General Rating		4	4				
Culvert Component Last Now Explanation of Condition Direction N North. End Treatment (Concrete, Steel, Others, None) STEEL North. Feadwall X X Collar X X Wingwalls X X (Shape:) Cutoff Wall X X Bevel End 5 6 Heaving (mm) 50 Invert Above/Below Stream Bed BELOW February February Above/Below (mm) 50 February February Scour/Protection 6 6 6 (Avg. Rock Size(mm): 300) Sour/Erosion 6 6 Beavers (Y/N) No Extructure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 7 HWM (m below Top of Culvert) 0.7 No visible HWM. Drift at U/S bevel and barrel.								
Direction			1					
End Treatment (Concrete, Steel, Others, None) X				Now				
Chers, None			N		North.			
Collar	Others, None)	STEEL						
Value	Headwall		X	X				
Cutoff Wall	Collar		X	X				
Sevel End	Wingwalls		X	X				
Bevel End	(Shape :)							
Heaving (mm) 50	Cutoff Wall		Х	X				
Invert Above/Below Stream Bed	Bevel End		5	6				
Above/Below (mm) 50	Heaving (mm)	50						
Scour Protection	Invert Above/Below Stream Bed	BELOW						
Crype : RIP RAP (Avg. Rock Size(mm) : 300) Scour/Erosion 6 6	Above/Below (mm)	50						
(Avg. Rock Size(mm) : 300)			6	6				
Scour/Erosion 6 6	(Type : RIP RAP)							
Beavers (Y/N) Downstream End General Rating Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 HWM (m below Top of Culvert) O.7 No visible HWM. Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	(Avg. Rock Size(mm) : 300)							
Downstream End General Rating Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 HWM (m below Top of Culvert) 0.7 Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Scour/Erosion		6	6				
Structure Usage Last Now Explanation of Condition Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 HWM (m below Top of Culvert) 0.7 Drift (Y/N) Yes NONE Degrading/Aggrading NONE Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No						
Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7	Downstream End General Ratio	ng	5	6				
Channel (U/S and D/S) Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)			s	tructur	re Usage			
Alignment 8 7 600mm pipe 9m U/S from West. 450mm pipe 3m U/S from East. Both are road ditch drainage. Bank Stability 7 7 HWM (m below Top of Culvert) 0.7 Drift (Y/N) Yes NONE Degrading/Aggrading Peavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)			Last	Now	Explanation of Condition			
450mm pipe 3m U/S from East. Both are road ditch drainage. Pank Stability 7 This is a stability 7 To state the policy of Culverty To state the policy of Culver	Channel (U/S and D/S)							
Bank Stability 7 7 HWM (m below Top of Culvert) Drift (Y/N) Yes Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Alignment		8	7	450mm pipe 3m U/S from East.			
Drift (Y/N) Yes Drift at U/S bevel and barrel. Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Bank Stability		7	7				
Drift (Y/N) Yes Drift at U/S bevel and barrel. Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	HWM (m below Top of Culvert)	0.7			No visible HWM.			
Channel Bottom Degrading/Aggrading Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)					Drift at U/S bevel and barrel.			
Beavers (Y/N) No (Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Channel Bottom NONE							
(Fish Compensation Measure 1 : NONE) (Fish Compensation Measure 2 : NONE)	Beavers (Y/N)	No						
(Fish Compensation Measure 2 : NONE)		NONE)						
	· ·							
	· · · · · · · · · · · · · · · · · · ·		8	7				

		Maintenance P	ecommendations				
Inspector Recommendations	Year	Inspector Comments	Department Com	ments	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS	1 oui	moposter commente	Dopartment com	monto	Targot Toar	Lot. Cool	- Out II
PLACE ADDITIONAL RIP RAP							1
REMOVE DRIFT ACCUMULATION	2012	At U/S bevel and barrel.					
INSTALL CONCRETE/STEEL LINING							
INSTALL STRUTS							
INSTALL CONCRETE COLLAR/CUTO	OFF						
REPAIR SEAMS							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/No. (%)	ow) 44.4/44	.4 Sufficiency Rating (Last/	Now) 60.7/59.0	Est. Repl. Yr 2020	Maint. Re	qd. (Y/N)	Yes
Special Comments for Next Inspection			Department Comments				
Maintenance Reviewed By			Date		Estimated Tota	1 0	
Proposed Long-Term Strategy							
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Glen Mikesh		Previous Assistant's Name	Bernie Roseke			
Next Inspection Date	19-Jun-2015		Previous Inspection Date	22-Apr-2009			
Inspection Cycle (Default) (months)	39						
Comment							