Bridge File Number   73488 + 1 Bridge Culvert   Form Type   CUL1						Brida	ie Culve	ert Insn	ection						
Year Built	Bridge File Num	nber	73488 -1	Bridge Culve	rt	1100					CUL1				
Bridge or Town Name											1				
Located Over		Name	NORDEC	 3G							Owen Salava				
Located On   11:04 C1 37.375   Assistant Name   Marter Body CL/Year   Marter Body CL/Year   Assistant Class   Assistant Class   Manvagabit. CJ/Year   Assistant Class   Marcia Chavez   Mar					I, WATER	RCRS-	ST								
Marcia Body CI / Year   Navigabl   Na	Located On				,										
Navigabil. CL/Year   Legal Land Location   Navigabil. CL/Year   Legal Land Location   Navigabil. CL/Year   Navig	Water Body Cl./	Year													
Legal Land Location   MW SEC 11 TMP 40 RGE 16 W5M											07-Feb-2012				
Conjude   Latitude			NW SEC	11 TWP 40 F	RGE 16 W	/5M									
Road Authority															
Contract Main. Area   CMA18					(AIT)										
Clear Roadway  Skew    3		Area			,										
AADT/Year   Rad   2010 (A)   Rout   State   Pollow-Up By   Rout   Rout			13 /					<del>                                     </del>		Name					
Roule   Roul			840 / 201	0 (A)				<u> </u>							
Detour Length   Km   300								i i		21-Wat-2012					
Special Features								OP -)							
Number of Culverts   1															
MAIN   2314   2552   SP   45.1   152X51   3.5   ELLIPSE	_														
Special Features   Special Features Comment	Pipe #	Barrel	S	Span	Rise (or Dia.) Typ		Туре		Length		Corr. Profile		Shape		
Special Features Coment   Special Features	1	MAIN	2	314	2552		SP		45.1		152X51	3.5	ELLIPSE		
Utility Attachments															
Utility Attachments	·		ment												
Villity Attachment   Villit	•														
Telephone						Ut	ilities (L	ocated	at)						
Power   Others   Problem (Y/N)   No   No										ı					
Now   Now		North	r/w.												
Remarks   Road   Fembankment   Fembankment	Power	_													
Approach   Road   Embankment   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation access 60m SW. Curve to west & crest to east within 1/2   Recreation a		-						Proble	m (Y/N)	No					
Last Now Explanation of Condition           Horizontal Alignment         6         6         6         Recreation access 60m SW. Curve to west & crest to east within 1/2 km from pipe. No passing.           Vertical Alignment         13.000         Image: Imag															
Horizontal Alignment         6         6         Recreation access 60m SW. Curve to west & crest to east within 1/2 km from pipe. No passing.           Vertical Alignment         13.000         Image: state of the content of the					A										
Vertical Alignment         6         6         6         km from pipe. No passing.           Roadway Width (m)         13.000         T         T           Embankment Sideslope (_:1)         3.0         T           Sideslope (_:1)         3.0         T           (Height of Cover(m): 2.1)         T         T           Guardrail (Y/N)         Yes         T           Upstream End           Culvert Component         Last         Now         Explanation of Condition           Direction         N         T         T           End Treatment (Concrete, Steel, Others, None)         STEEL         X         X           Headwall         X         X         X           Collar         X         X         X           Wingwalls         X         X         X           (Shape: )         T         T         T	11												t within 4/0		
Roadway Width (m)												o east within 1/2			
Sideslope (_:1)   3.0				13.000		6	6			•					
Sideslope (_:1)   3.0							Τ_								
Culvert Component   Concrete, Steel, Others, None)   STEEL   Culvert Concrete Steel Stee		4)				/	/								
Guardrail (Y/N)         Yes           Upstream End           Culvert Component         Last         Now         Explanation of Condition           Direction         N         STEEL           End Treatment (Concrete, Steel, Others, None)         STEEL         X         X           Headwall         X         X         X           Collar         X         X         X           Wingwalls         X         X         X           (Shape: )         X         X         X				3.0				-							
Approach Road / Embankment General Rating         6         6         Culverteam End           Culvert Component         Last         Now         Explanation of Condition           Direction         N         STEEL           End Treatment (Concrete, Steel, Others, None)         STEEL         X           Headwall         X         X           Collar         X         X           Wingwalls         X         X           (Shape: )		ver(m) :	2.1)	Vec											
Culvert Component					-										
Culvert Component         Last         Now         Explanation of Condition           Direction         N         Image: Contract Concrete Concrete Contract Concrete Contract Cont	Approach Roa	d / Emi	oankment	t General Rat	ing	6	6								
Direction         N           End Treatment (Concrete, Steel, Others, None)         STEEL           Headwall         X         X           Collar         X         X           Wingwalls         X         X           (Shape:)         X         X															
End Treatment (Concrete, Steel, Others, None)	Culvert Compo	nent				Last	Now	Explan	ation of	Condi	tion				
Others, None) Headwall  Collar  X  X  Wingwalls  (Shape:)						N									
Collar X X Wingwalls X X (Shape: )	End Treatment Others, None)	(Concre	ete, Steel,	STEEL											
Wingwalls X X (Shape: )	Headwall					X	X								
(Shape: )	Collar					Х	Х								
	Wingwalls					Х	X								
Cutoff Wall X X	(Shape: )														
	Cutoff Wall					X	X								

73488 -1 Bridge Culvert

			Upstre	am End
Culvert Component		Last	Now	Explanation of Condition
Bevel End		6	6	
Heaving (mm)	200			
Invert Above/Below Stream Bed	BELOW			
Above/Below (mm)	200			
Scour Protection		4	N	(Scour along sides of bevel causing piping to R2 - photo.
(Type : NONE)				04May2010). Snow covered.
(Avg. Rock Size(mm):)				Show covered.
Scour/Erosion		4	N	
	1			
Beavers (Y/N)	No			
Upstream End General Rating	1	4	4	GR carried over from 04May2010.
		D.:	des Ou	,
Culvert Component			Now	Explanation of Condition
•	tion Code: MAIN			· ·
(Pipe # : 1, Primary Span, Loca		Span (mir	1): 2314	, Rise (min): 2552, Type: SP)
Barrel Last Accessible Date	07-Feb-2012			
Special Features				
Special Feature				
(Type:)				
Special Feature				
(Type : )		'		
Roof		6	6	Unable to measure due to ice.
Measured Rise (mm)	2462			
Measured At Ring No.	3			
Sag (mm)	90			
Percent Sag	3			
Sidewall		2	2	(Piping to end R2 @ W. 04May2010).
Measured Span (mm)	2420			Due to longitudinal seams.
Measured At Ring No.	3			
Deflection (mm)	106			
Percent Deflection	4			
	4		l NI	les severed
Floor		5	N	Ice covered.
Bulge (mm)	0			
Measured At Ring No.	V			
Abrasion (Y/N)	Yes		_	
Circumferential Seams		7	7	
Separation (mm)	0			
Longitudinal Seams	I	2	2	12-95mm @ 9 o'clock. 13-125mm @ 9 o'clock.
Total No. of Cracked Rings	3			R3 cracked seams - 117mm @ 3 o'clock - photo, 129mm @ 9 o'cloc
Total No. of Rings with Two Cracked Seams	1			- photo. Crack gap was 134mm on 31/May/2007.
Min. Remaining Steel Between Cracks (mm)	95			No growth of other cracks since 2007. Holes drilled at crack ends at 9 o'clock cracks not 3 o'clock.
Proper Lap (Y/N)	No			Stagger 1N.
Longitudinal Stagger (Y/N)	Yes			
Coating		6	6	Minor superficial rust.
Corrosion By Soil (Y/N)	No		U	Initial superious rust.
Corrosion By Water (Y/N)	Yes			
Camber POS/ZERO/NEG	ZERO			
Ponding (Y/N)	No			

		Brid	lge Cu	Ivert Barrel						
Culvert Component		Last	Now	Explanation of Condition						
(Pipe # : 1, Primary Span, Locat	tion Code: MAIN, Spa	n (mm	): 2314	, Rise (mm): 2552, Type: SP)						
Fish Passage Adequacy		5	5							
Baffle		Х	Х							
(Type:)										
Waterway Adequacy		7	7							
Icing (Y/N)	No									
Silting (Y/N)	No									
Drift (Y/N)	No									
Barrel General Rating		2	2							
		D	ownstr	ream End						
Culvert Component		Last	Now	Explanation of Condition						
Direction		S								
End Treatment (Concrete, Steel, Others, None)	STEEL									
Headwall		Х	X							
(Shape : ) Cutoff Wall  Bevel End Heaving (mm) 0		Х	X							
Wingwalls		X	X							
(Shape: )										
Cutoff Wall		X	X							
Bevel End		5	5	Bevel slightly bent out at east side.						
Heaving (mm)	0									
Invert Above/Below Stream Bed				At streambed. Bevel hanging 0.5m - photo.						
Above/Below (mm)	0									
Scour Protection		4	4	Crushed.						
(Type : RIP RAP)										
(Avg. Rock Size(mm) : 300)										
Scour/Erosion		4	4	7m x 10m x 1m scour - photo. Scour alogn shoulder.						
Beavers (Y/N)	No									
Downstream End General Ratin	ng	4	4							
		S	tructu	re Usage						
			Now	Explanation of Condition						
Channel (U/S and D/S)										
Alignment		5	5	30 degree bend 15m U/S.						
Bank Stability		5	5	Erosion, slumping D/S of culvert.						
HWM (m below Top of Culvert)				HWM not visible.						
Drift (Y/N)	No									
Channel Bottom Degrading/Aggrading	DEGRADING									
Beavers (Y/N)	No									
(Fish Compensation Measure 1 :	NONE)									
(Fish Compensation Measure 2 :	NONE)									
Channel General Rating		5	5							

Alberta Transportation

			Maintenance Recommendations	ations				
Inspector Recommendations	Year	Inspector Comments		Department Comments	ients	Target Year	Est. Cost	Cat #
SHOTCRETE REPAIRS								
PLACE ADDITIONAL RIP RAP	2012	15m3 @ D/S, 10m3	@ U/S, class 1.					
REMOVE DRIFT ACCUMULATION								
INSTALL CONCRETE/STEEL LINING								
INSTALL STRUTS								
INSTALL CONCRETE COLLAR/CUTOFF	)FF							
REPAIR SEAMS								
OTHER ACTION	2012	Replace U/S clay se	al 15m3.					
OTHER ACTION								
OTHER ACTION								
OTHER ACTION								
Structural Condition Rating (Last/Now) (%)	ow) 22.2/22.2		Sufficiency Rating (Last/Now) 4 (%)	40.0/40.0	Est. Repl. Yr 2020	Maint. Re	Maint. Reqd. (Y/N)	Yes
Special There is lots of steel left & thick wall & low cover.  Comments for Monitor crack growth or check capacity if in doubt.  Next Inspection	il left & thick wal	ll & low cover. acity if in doubt.		Department Comments				
Maintenance Reviewed By				Date		Estimated Total	0 1	
Proposed Long-Term Strategy	Culvert should	Culvert should be good until at least 2	2020. RS					
On 3-Year Program (Y/N)	>							
Proposed Action	Drill 10mm hole	e at the end of each cr	Drill 10mm hole at the end of each crack to stop propagation. Continue to monitor cracks on regular BIM Cycle. CB	ontinue to monitor cr	acks on regular BIM Cyc	ile. CB		
Previous Inspector's Name	Owen Salava		Previous A	Previous Assistant's Name				
Next Inspection Date	07-Nov-2013		Previous II	Previous Inspection Date	04-May-2010			
Inspection Cycle (Default) (months)	21							
Comment								

				Mainten	ance Recomn	nenda	tions						
Inspector Recommendations	,	Year	Inspecto	r Comments		Department Comments						Est. Cost	Cat #
SHOTCRETE REPAIRS													
PLACE ADDITIONAL RIP RAP	2	2012	15m3 @	D/S, 10m3 @ U/S	, class 1.	[	Defer, replace	ement	programmed		2015		
REMOVE DRIFT ACCUMULATION													
INSTALL CONCRETE/STEEL LINII	NG												
INSTALL STRUTS													
INSTALL CONCRETE COLLAR/CU	TOFF												
REPAIR SEAMS													
OTHER ACTION		2012	2 Replace U/S clay seal 15m3.			Defer, replacement programmed					2015		
OTHER ACTION													
OTHER ACTION													
OTHER ACTION													
Structural Condition Rating (Last/Now) (%)		22.2/22	2/22.2 Sufficiency Rating (Last (%)		ng (Last/Now)	40	0.0/40.0	Est. Repl. Yr 202		2020	Maint. Reqd. (Y/N)		Yes
Special Comments for Next Inspection There is lots of steel left Monitor crack growth or							Department Comments	Repla	acement curren	tly progra	ammed for 201	5.	
Maintenance Reviewed By	Andrew	Smikle	s				Date	31-0	ct-2012		Estimated Tota	al 0	
		Culvert should be good until at least 2020. RS											
On 3-Year Program (Y/N)	Υ												
		Drill 10mm hole at the end of each crack to stop propagation					pagation. Continue to monitor cracks on regular BIM Cycle. CB						
Previous Inspector's Name Owe		Owen Salava Previou					ssistant's Nan	ne					
Next Inspection Date	07-Nov-	-2013			Previ	ious In	spection Date	<del></del>	04-May-2010	)			
Inspection Cycle (Default) (months)	21												
Comment													