Bridge Inspection

Bridge File Number	75694 -1 Bridge	Form Type	PSR PCS
Year Built/Year Supstr	1975/1975	Lot No.	4
		Inspector Name	Brian Pientsch
Bridge or Town Name	JEAN D PRAIR	Inspector Class	BR CLS A
Located Over	LAWRENCE RIVER, 8.10.12, WATERCRS-ST	Assistant Name	
		Assistant Class	
Located On	58:12 C1 0.009	Inspection Date	19-Jun-2012
Water Body Cl./Year		Data Entry By	Theresa Lacusta
Navigabil. Cl./Year		Data Entry Date	19-Nov-2012
Legal Land Location	SE SEC 31 TWP 110 RGE 7 W5M	Reviewer Name	Eric Carcoux
Longitude, Latitude	-115:09:24, 58:35:25	Review Date	01-Nov-2012
Road Authority	Alberta Transportation (AIT)	Dept. Reviewer Name	David Morrison
Contract Main. Area	CMA01	Dept. Review Date	11-Jan-2013
Clear Roadway/Skew	8.5 /	Follow-Up By	
AADT/Year	230 / 2011 (A)		
Road Classification	RAU-209-110		
Detour Length (km)	999		

Allowable Load (t):	Single	CS1 28	Semi	CS2 49	Train	CS3 62	---> On Critical Spans --->Critical Member
Design Loading:		HS25					---> Primary Span

Posting Information

Required Load Posting (t)			Single		Semi		Truck Train	
Posted Loading (t)			Single		Semi		Truck Train	
Posted:	Lane	EB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Posted:	Lane	WB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No
Remarks								

Hazard Marker At Bridge (Y/N)	Yes
Remarks	
Other Sign Types	Lawrence River.

Utilities (Located at)

Utility Attachments			
Telephone		Gas	
Power	3 wire @ edge of S. row.	Municipal	
Others		Problem (Y/N)	No
Remarks			

Approach Road

		Last	Now	Explanation of Condition
Horizontal Alignment		9	9	In long valley with good sight distance.
Vertical Alignment		7	7	
Roadway Width (m)	8.500			
Approach Bump		5	5	
Guardrail (Y/N)	Yes			Numerous minor dents. Insufficient posts near bridge.
Guardrail		5	5	
Length (m)	30.400			
Current Standard (Y/N)	No			
Termination Type	TURNED DOWN ENDS			
Drainage		7	7	
Approach Road General Rating		**7**	**7**	

Superstructure

Bridge Component		Last	Now	Explanation of Condition
(Primary Span : **VF, 3 Spans, Lengths(m): 9.1-32-9.1, A-Ident Number:**)				
Special Features				
Special Feature			7	
(Type : **EXT LATER POST TENS**)				
Special Feature			7	
(Type : **UNDERSLUNG DIAPHR**)				
Wearing Surface/Deck Top Detail Ratings				
	N (%) / 1 (%) / 2 (%) / 3 (%)			
Last	40 / 0 / 0 / 0			
Now				
Wearing Surface		7	7	fibre reinforced
(Material Type : **CONCRETE**)				
(Thickness(mm) : **50**)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	
Deck Rideability		8	8	
Deck Joints		7	7	Strip seal
Temperature (deg. C)	19			
(Expansion Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)				
(Fixed Type : **GLAND (WABO-MAUER, TRANSFLEX, ETC)**)				
Gap Size (mm)	Gap Location			
58	E ABUT			
25	E PIER			
70	W PIER			
64	W ABUT			
Deck Drainage		7	7	
Drains Clogged (Y/N)	No			
Curbs/Median		N	6	
(Curb Type : **Standard**)				
Scaling (Percent Area)	5			
Bridge Rail		4	4	Rail section on backwards - photo. Anchor bolts do not protrude high enough to completely thread nuts.
(Type : **GALVANIZED STEEL BRIDGE TUBE**)				
Bridge Rail Posts		4	4	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)				
Bridge Rail/Posts Coating		7	7	
(Type : **GALVANIZED**)				
Sidewalk		X	X	
Girder Detail Ratings				
	N (count) / 1 (count) / 2 (count) / 3 (count)			
Last	0 / 0 / 0 / 0			
Now				
Girders		5	5	Chips on bottom exterior of girders likely from hoe placing rock. Typical VF cracks in all girders.
Cracking (Y/N)	No			
Spalling (Percent Area)	1			
(Number Of Girders : **6**)				

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Primary Span : **VF, 3 Spans, Lengths(m): 9.1-32-9.1, A-Ident Number:**)				
Diaphragms/Cross Frame		5	5	All girders have cracks between diaphragm chamber and top slab, some repaired.
Bearings		7	7	As viewed from bank/headslope.
Temperature (deg. C)	19			
(Expansion Type : **REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL**)				
(Fixed Type : **NEOPRENE STRIP BEARING**)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		7	7	
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		**5**	**5**	

Superstructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
(Secondary Span : **VS**)				
Special Features				
Special Feature			X	
(Type :)				
Special Feature			X	
(Type :)				
Wearing Surface/Deck Top Detail Ratings				

	N (%)	1 (%)	2 (%)	3 (%)
Last	40	0	0	0
Now				

Wearing Surface		7	7	fibre reinforced
(Material Type : **CONCRETE**)				
(Thickness(mm) : **50**)				
Lateral Connection Problem (Y/N)	No			
Deck Top		N	N	
Deck Rideability		8	8	
Deck Joints		7	7	
Bump (Y/N)	No			
Deck Drainage		7	7	No drains.
Drains Clogged (Y/N)	No			
Curbs/Median		N	6	
(Curb Type : **Standard**)				
Scaling (Percent Area)	5			
Bridge Rail		4	5	Anchor bolts do not protrude high enough to completely thread nuts.
(Type : **GALVANIZED STEEL BRIDGE TUBE**)				
Bridge Rail Posts		4	4	
(Type : **GALVANIZED POST STEEL;GALVANIZED POST STEEL**)				
Bridge Rail/Posts Coating		7	7	
(Type : **GALVANIZED**)				

Superstructure						
Bridge Component					**Last**	**Now**	**Explanation of Condition**
(Secondary Span : **VS**)							
Sidewalk					X	X	
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now							
Girders					5	5	S3G8 150x50mm surface spall east end (photo).
Last Complete Inspection Date	19-Jun-2012						
Cracking (Y/N)	Yes						
Spalling (Percent Area)	1						
Lift or Connector Pocket Grouted (Y/N)	Yes						
(Number Of Girders : **16**)							
Span Alignment Problems							
Vertical (Y/N)	No						
Horizontal (Y/N)	No						
Superstructure General Rating					**5**	**5**	

Substructure						
Bridge Component					**Last**	**Now**	**Explanation of Condition**
Abutments							
(Extended Backwall Piles (Y/N) : **N**)							
(Extended Backwall Piles Spacing(mm) :)							
(Total Number of Caps/Corbels : **1:1**)							Neoprene bearings too thin.
Bearing Seats/Caps/Corbels Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now							
Bearing Seats/Caps/Corbels					5	5	
(Type : **CONCRETE**)							
(Depth(mm) : **1000**)							
(Width(mm) : **470**)							
Backwalls/Breastwalls					5	5	
Greatest Height (m)	1.50						
Wingwalls					5	5	
(Total Number of Bearing Piles : **0:0**)							
Piles Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	1	0	0	0			
Now	1						
Piles					N	N	
Paint/Coating					X	X	
Abutment Stability					7	7	

Substructure				
Bridge Component		**Last**	**Now**	**Explanation of Condition**
Scour/Erosion		7	7	
Piers/Bents				
(Type : **PIER-SOLID**)				
(Total Number of Caps/Corbels : **1:**)				
Bearing Seats/Caps/Corbels Detail Ratings				
	N (count)	1 (count)	2 (count)	3 (count)
Last	0	0	0	0
Now				
Bearing Seats/Caps/Corbels		7	4	
(Type : **CONCRETE**)				
(Total Number of Bearing Piles : **0:0**)				Medium horizontal crack at top of pier shaft in line with VF bearing seat - all 4 corners (Photo).
Piles Detail Ratings				
	N (count)	1 (count)	2 (count)	3 (count)
Last	0	0	0	0
Now				
Pier Shaft/Piles		4	4	
Greatest Height (m)	5.30			
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		8	8	
(Colour Description : **GREEN**)				
(Colour Code : **14090**)				
Pier Stability		5	5	
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		**4**	**4**	

Structure Usage				
		Last	**Now**	**Explanation of Condition**
Channel				
(U/S Direction : **N**)				
(D/S Direction : **S**)				
Alignment		7	7	
Bank Stability		4	4	Cut banks u/s of riprap and guide banks.
HWM (m below Top of Curb)				Hwm not visible.
Drift (Y/N)	Yes			
Slope Protection		7	7	
(Type :)				
Guidebank/Spurs		7	7	At NW corner.
Adequacy of Opening		7	7	
(Fish Compensation Measure 1 : **NONE**)				
(Fish Compensation Measure 2 : **NONE**)				

Structure Usage				
		Last	Now	Explanation of Condition
Channel General Rating		**4**	**4**	

Maintenance Recommendations

Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #
REPAIR/REPLACE BRIDGE RAIL						
GALVANIZE/PAINT BRIDGE RAIL						
SEAL CURBS						
PATCH DECK						
SEAL DECK						
OVERLAY DECK						
REPAIR/REPLACE DECK JOINTS						
RESET/ PAINT BEARINGS						
WASHING						
SHOTCRETE REPAIRS						
REPAIR ABUTMENT SCOUR/EROSION						
PLACE ADDITIONAL RIP RAP						
REMOVE DRIFT ACCUMULATION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						
OTHER ACTION						

Structural Condition Rating (Last/Now) (%)	**50.0/50.0**	**Sufficiency Rating (Last/Now) (%)**	**51.5/51.4**	Est. Repl. Yr	2033	Maint. Reqd. (Y/N)	No

Special Comments for Next Inspection	Monitor diaphragm crack, gieders with insufficient neoprene bearings. Monitor cracks at piers. Monitor bank erosion u/s of riprap.	Department Comments	

Maintenance Reviewed By		Date		Estimated Total	0
Proposed Long-Term Strategy					
On 3-Year Program (Y/N)					
Proposed Action					

Previous Inspector's Name	Brian Pientsch	Previous Assistant's Name	
Next Inspection Date	19-Mar-2014	Previous Inspection Date	06-Oct-2010
Inspection Cycle (Default) (months)	21		
Comment			