

Bridge Inspection									
Bridge File Number	75186 -1 Bridge				Form Type	PSR			
Year Built/Year Supstr	1960/1960				Lot No.	1			
Bridge or Town Name	BARRHEAD				Inspector Name	Eric Carcoux			
Located Over	PEMBINA RIVER, 8.11.84, WATERCRS-ST				Inspector Class	BR CLS A			
Located On	33:06 C1 0.044				Assistant Name	Wade Nanninga			
Water Body Cl./Year					Assistant Class	BR CLS B			
Navigabil. Cl./Year					Inspection Date	07-Sep-2011			
Legal Land Location	SE SEC 9 TWP 58 RGE 3 W5M				Data Entry By	Theresa Lacusta			
Longitude, Latitude	-114:23:04, 53:59:37				Data Entry Date	04-Oct-2011			
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Arnold Assenheimer			
Contract Main. Area	CMA10				Review Date	30-Sep-2011			
Clear Roadway/Skew	7.9 /				Dept. Reviewer Name	Brent Herrick			
AADT/Year	2,660 / 2010 (A)				Dept. Review Date	05-Oct-2011			
Road Classification	RAU-209-110				Follow-Up By				
Detour Length (km)	31								
Allowable Load (t):	Single	CS1 42 GIRDER	Semi	CS2 49	Train	CS3 62	----> On Critical Spans ---->Critical Member		
Design Loading:	HS20						----> Primary Span		

Posting Information									
Required Load Posting (t)	Single				Semi		Truck Train		
Posted Loading (t)	Single				Semi		Truck Train		
Posted:	Lane	NB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Posted:	Lane	SB	At Junction (Y/N)	No	In Advance (Y/N)	No	At Bridge (Y/N)	No	
Remarks	Not required.								
Hazard Marker At Bridge (Y/N)	No								
Remarks									
Other Sign Types	Information, Curve, Warning, Slippery When Wet, River ID @ NW corner only.								

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	West side of bridge.				Gas				
Power					Municipal				
Others					Problem (Y/N)	Yes			
Remarks	Conduit pulled apart, locations cable exposed, conduit corroded.								

Approach Road					
		Last	Now	Explanation of Condition	
Horizontal Alignment		5	5	Between 2 curves, limited sight distances, no passing.	
Vertical Alignment		6	6		
Roadway Width (m)	9.500				
Approach Bump		6	6		
Guardrail (Y/N)	Yes			SE - 110.2m; SW - 41.8m; NE - 45.6m; NW - 115.5m.	
Guardrail		4	6	Insufficient post spacing. No thrie beam	
Length (m)	42.000				
Current Standard (Y/N)	No				
Termination Type	Turned Down				
Drainage		4	4	NW approach down drain cracked, eroding underneath & down slope beside wingwall.	
Approach Road General Rating		5	5		

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PO, 4 Spans, Lengths(m): 30.5-30.5-30.5-30.5, A-Ident Number:)						
Special Features						
Special Feature			X			
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last						
Now						
Wearing Surface			5	5	Peeling chipseal over epoxy, few small spots. Typically adjacent to joints.	
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)						
(Thickness(mm) : 50)						
Lateral Connection Problem (Y/N)	No					
Deck Top			N	N		
Deck Rideability			6	5		
Deck Joints			5	3	Shaved bolt in N pier.-photo	
Temperature (deg. C)		15				
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
(Fixed Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))						
Gap Size (mm)		Gap Location				
65		N. abut				
75		N. pier				
75		C. pier				
70		S. pier				
60		S. abut				
Deck Drainage			7	7		
Drains Clogged (Y/N)		No				
Curbs/Median			N	4	Ext curb fascia on South span medium scaled. Plow scrapes. East side curb scaling on the top side S1. Outside of curb over piers concrete deteriorated, few spalls.	
(Curb Type : Standard)						
Scaling (Percent Area)		25				
Bridge Rail			3	3	There are 6 sections of bridgerail with bent vertical slats. One section West rail North span with broken verticals. Insufficient thread on 30% of A/B, 2 locations with either missing nut or sheared A/B's.	
(Type : GALVANIZED STEEL VERTICAL BAR)						
Bridge Rail Posts			N	3		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)						
Bridge Rail/Posts Coating			6	5		
(Type : GALVANIZED)						
Sidewalk			X	X		
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now	0	0	0	4		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 4 Spans, Lengths(m): 30.5-30.5-30.5-30.5, A-Ident Number:)				
Girders		4	3	Sides of girders at ends have spalling over piers and vertical cracks. Corroded rebar visible.
Cracking (Y/N)	Yes			
Spalling (Percent Area)				
(Number Of Girders : 20)				
Diaphragms/Cross Frame		6	6	5% rust.
Bearings		5	5	Bearings on the piers viewed with binoculars. Superficial rust on ext bearings. @ abutments. Pier top spall extends under East bearing, P3 North.
Temperature (deg. C)	15			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		5	5	Isolated construction spall between G4/G5 on South span.
Stains (Percent Area)	0			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	6	Cracking with staining South abut.
Wingwalls		7	6	Cracking @ construction joints.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		5	5	
Scour/Erosion		5	4	South headslope settled 200mm. Lower headslope scouring neat South pier.
Piers/Bents				
(Type : PIER-SOLID)				Cracked, stained, some ice scars.
Bearing Seats/Caps		4	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		5	5	
Bracing/Struts/Sheathing		X	X	
Nose Plate		6	6	
Paint/Coating		4	4	Rusting on nose plates.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	N	
Debris (Y/N)	Yes			Caught on center pier.

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Substructure General Rating		4	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		6	6	
HWM (m below Top of Curb)				HWM not visible. Some trees fallen into river North bank.
Drift (Y/N)	Yes			
Slope Protection		5	4	Concrete bags top South headslope-lower headslope scouring (Type : NATURAL; CONCRETE)
Guidebank/Spurs		X	X	
Adequacy of Opening		8	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL	2011	Replace sheared post A/B & install nuts where missing. Missing rail bolt.					
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	2011	Reinstall hazard markers to meet standard.					
OTHER ACTION	2011	Advise Telus of broken & corroded conduit & replace.					
OTHER ACTION	2011	Fill gap under South abutment.					
OTHER ACTION	2011	Patch exterior girders over piers.					
OTHER ACTION	2011	Patch NW drain trough.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/38.9	Sufficiency Rating (Last/Now) (%)	44.3/38.6	Est. Repl. Yr	2030	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection			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	Eric Carcoux		Previous Assistant's Name				
Next Inspection Date	07-Jun-2013		Previous Inspection Date	17-Dec-2009			
Inspection Cycle (Default) (months)	21						

Comment	
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