

Bridge Inspection							
Bridge File Number	08495 -1 Bridge			Form Type	SG		
Year Built/Year Supstr	1958/1958			Lot No.	1		
Bridge or Town Name	REDWATER			Inspector Name	Arnold Assenheimer		
Located Over	REDWATER RIVER, 6.63, WATERCRS-ST			Inspector Class	BR CLS A		
Located On	644:02 C1 2.489			Assistant Name	Wade Nanninga		
Water Body Cl./Year				Assistant Class	BR CLS B		
Navigabil. Cl./Year				Inspection Date	19-May-2011		
Legal Land Location	SE SEC 28 TWP 57 RGE 21 W4M			Data Entry By	Theresa Lacusta		
Longitude, Latitude	-113:03:43, 53:56:56			Data Entry Date	09-Jun-2011		
Road Authority	Alberta Transportation (AIT)			Reviewer Name	Stew Hagan		
Contract Main. Area	CMA07			Review Date	31-May-2011		
Clear Roadway/Skew	7.9 /			Dept. Reviewer Name	Brent Herrick		
AADT/Year	1,400 / 2010 (A)			Dept. Review Date	14-Jun-2011		
Road Classification	RCU-209-110			Follow-Up By			
Detour Length (km)	5						
Allowable Load (t):	Single	H 61 GIRDER	Semi	HS 78 GIRDER	Train	CS3 127 GIRDER	----> 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	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	Not required.							
Hazard Marker At Bridge (Y/N)	No							
Remarks	Not required.							
Other Sign Types								

Utilities (Located at)			
Utility Attachments			
Telephone	South r/w.		Gas
Power	7 wires North r/w. 3 wires crossing road 30m West of site.		Municipal
Others			Problem (Y/N) No
Remarks			

Approach Road				
		Last	Now	Explanation of Condition
Horizontal Alignment		7	7	Intersection to west.
Vertical Alignment		7	7	
Roadway Width (m)	9.000			Incorrect lap at existing ends. New timber blocking loose @ SW transition. Not thrie beam. 91.44m - NE; 36.2m - SE; 45.6m - NW & SW.
Approach Bump		3	4	
Guardrail (Y/N)	Yes			
Guardrail		4	4	
Length (m)	36.200			
Current Standard (Y/N)	No			Void under west approach - photo. Settlement of approach slab causing dip & cracking ACP.
Termination Type	Turned Down			
Drainage		3	4	
Approach Road General Rating		3	7	

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : RB, 3 Spans, Lengths(m): 15.2-15.2-15.2, A-Ident Number: A0297-01;A0297-02;A0297-03)					
Special Features					
Special Feature			7	Tension rods over bearings @ piers.	
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	5				
Now					
Wearing Surface			6	5	Chipseal over epoxy wearing surface on concrete. Tranverse cracks over pier where there is no joint. Loss of chipseal: <1%.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			3	3	Loose cover plate and 2 sheared bolts @ WBL at East end - photo. Paving lips are deteriorating.
Temperature (deg. C)		20			
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
82		East end			
87		West end			
Deck Drainage			6	6	Birdbath on centre span, South curb.-04-May-2009
Drains Clogged (Y/N)		No			
Curbs/Median			3	3	Wide crack on 50% of south curb face. Heavy scaling/delam @ bottom of vertical inside face, South side. Estimate 1m2 of delam.
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail			4	4	Double layer. Missing 4 bolts/splice, typical - photo. Insufficient thread on 1/3 of anchor bolts. Dirty.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			4	4	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder/Beam					
Cover Plate			3	3	There are 15 crack indications at ends of cover plates and 1 stitch weld cracked.-from UT report 04-May-2009 Minor sag in bottom flange of girders.
Flange			6	6	
Web			7	7	
Stiffeners			X	X	
Splice			X	X	
Weld			3	3	
Diaphragms/Cross Frame			3	3	There are 11 cracked welds attaching diaphragms to web.-from UT report 04-May-2009

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : RB, 3 Spans, Lengths(m): 15.2-15.2-15.2, A-Ident Number: A0297-01;A0297-02;A0297-03)				
Paint Condition		4	4	Diaphragms welded to girder. Top coat peeling. Bottom of girders beginning to spot rust, approx 2% of total surface area.
(Colour Description :)				
(Colour Code :)				
Touchup Required (Y/N)	No			
Bearings		4	4	Appears to be seized. Tie rods across pier negates expansion movements and are overexpanded 20mm. Bearing surfaces now pitted and poor.
Temperature (deg. C)	20			
(Expansion Type : SLIDING PLATE)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		4	4	Rebar chairs set to close to bottom form, now rust showing through S3G3/G4 - photo. Jackhammer spalls in S1G1/G2 - photo. Random medium crack, longitudinal & transverse.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		3	3	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		6	5	Light to heavy scaling on backwalls.
Wingwalls		4	4	Severe scaling on tops of all 4 wingwalls. Bridge plaques missing.
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		7	7	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		7	N	
Debris (Y/N)	No			
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : N)				
(D/S Direction : S)				
Alignment		8	8	
Bank Stability		8	8	
HWM (m below Top of Curb)				HWM not visible. Beaver dam 50m U/S.
Drift (Y/N)	No			
Slope Protection		6	6	Concrete bags partially covered by silt.
(Type : CONCRETE; CONCRETE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		8	6	

Proposed Long-Term Strategy			
On 3-Year Program (Y/N)			
Proposed Action			
Previous Inspector's Name	Randy Bredo	Previous Assistant's Name	Bryce Clayton
Next Inspection Date	19-Aug-2014	Previous Inspection Date	04-May-2009
Inspection Cycle (Default) (months)	39		
Comment			