

Bridge Inspection										
Bridge File Number	07802 -1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1955/1955				Lot No.	1				
Bridge or Town Name	REDWATER				Inspector Name	Kris Bosters				
Located Over	REDWATER RIVER, 6.63, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	28:04 C1 25.262				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	27-Mar-2012				
Legal Land Location	NW SEC 1 TWP 58 RGE 22 W4M				Data Entry By	Theresa Lacusta				
Longitude, Latitude	-113:08:57, 53:59:17				Data Entry Date	04-Apr-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	Eric Carcoux				
Contract Main. Area	CMA07				Review Date	04-Apr-2012				
Clear Roadway/Skew	11 /				Dept. Reviewer Name	Brent Herrick				
AADT/Year	4,540 / 2011 (A)				Dept. Review Date	11-Apr-2012				
Road Classification	RAU-209-110				Follow-Up By					
Detour Length (km)	3									
Allowable Load (t):	Single	CS1 36 GIRDER	Semi	CS2 54 GIRDER	Train	CS3 77 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	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 req'd.								
Hazard Marker At Bridge (Y/N)	No								
Remarks									
Other Sign Types	Bridge Ices								

Utilities (Located at)										
Utility Attachments										
Telephone	E r/w				Gas	High pressure W r/w.				
Power	3 wire NE				Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			6	6	Approaches East & West.				
Vertical Alignment			8	6	Hill to south with limited sight distance. No passing SB. NE type VI, continuous at NE, SE & SW. Not long enough at NE for primary highway, and not Thriebeam transition.				
Roadway Width (m)		9.800			NE corner of approach has settled 100mm creating a bump. ACP cracked and ravelled along joints.-photo				
Approach Bump			5	4					
Guardrail (Y/N)		Yes			NE type VI, continuous at NE, SE & SW.				
Guardrail			4	4	Not long enough at NE for primary highway, and not Thriebeam transition.				
Length (m)		8.500			SE - 94.9m, SW - 56.1m, NE - 33.3m, NW - 8.5m.				
Current Standard (Y/N)		No			NE G/R damaged (photo).				
Termination Type		Turned Down							
Drainage			4	4	Appro drainage causing erosion at SW and SE headslope (photo).				
Approach Road General Rating			6	6					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 3 Spans, Lengths(m): 12.2-18.3-12.2, 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	Chipseal over epoxy on concrete.
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)	No				
Deck Top			N	N	
Deck Rideability			4	4	Rough ride over bridge, bump over all joints due to increased w/s thickness from numerous O/Ls.
Deck Joints			5	3	(Joint is leaking material sitting on abutment seats - photo. North abutment wet. 12/Apr/2005) Missing bolt NE cover plate. Gland is torn at SE approach.-photo All 4 joints are leaking and is evident by moisture and deterioration of abutment and pier caps.
Temperature (deg. C)		2			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
60		North abutment			
60		North pier			
55		South pier			
55		South abutment			
Deck Drainage			7	3	Leaking joints. No deck drains.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	delams - Curb face spalls every 2m from lack of cover on rebar.- photo
(Curb Type : Standard)					
Scaling (Percent Area)		5			
Bridge Rail			6	5	Double layer. Incorrect splice. Approx 25% of anchor bolts have insufficient thread (photo). 2 A/B missing SP2E. 6 A/B sheared off W side.-photos Rust spots.
(Type : GALVANIZED STEEL FLEX BEAM)					
Bridge Rail Posts			3	3	
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			4	4	
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last					
Now					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 3 Spans, Lengths(m): 12.2-18.3-12.2, A-Ident Number:)				
Girders		4	4	Patch over girder ends. Cracked S3G10 and over P2 (photo). failing patch.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	1			
(Number Of Girders : 30)				
Diaphragms/Cross Frame		4	4	Concrete end diaphragms delam/spall with exposed rebar Span 1 G1 at pier, S3G10 at pier.-photo
Bearings		N	N	End diaphragms cast over bearings not visible.
Temperature (deg. C)	2			
(Expansion Type :)				
(Fixed Type :)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		4	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		4	4	Delam cracks both abutments.-photos
(Type : CONCRETE)				
Backwalls/Breastwalls		5	4	Heavy scaling at NW. PRevious patch is failing.-photo
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		4	4	Erosion gully @ SW.-photo
Piers/Bents				
(Type : PIER-COLUMN)				Pier cap & columns patched. Water and salt stains and spalls under G8 & 9 pier 1 & 2.-photo
Bearing Seats/Caps		5	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 5:5)				Concrete column/pier. Wide vertical cracks in columns. West side of pier 1 pile 1 has wide delam cracks and spalls. 600x600 spall near top of pile.-photo Pile 5 & 2 on pier 2 also have delam crack, spalls.
Pier Shaft/Piles		X	3	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		X	X	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	5	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		5	5	
Debris (Y/N)	No			
Substructure General Rating		4	3	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		5	5	
HWM (m below Top of Curb)				HWM not visible.
Drift (Y/N)	No			
Slope Protection		4	4	Bagged concrete deteriorating. Erosion gully SW.-photo
(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		4	4	

Proposed Action			
Previous Inspector's Name	Arnold Assenheimer	Previous Assistant's Name	
Next Inspection Date	27-Dec-2013	Previous Inspection Date	22-Jun-2010
Inspection Cycle (Default) (months)	21		
Comment			