

Bridge Inspection										
Bridge File Number	01085 -1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1906/1973				Lot No.	2				
Bridge or Town Name	CONTENT BRDG				Inspector Name	Owen Salava				
Located Over	RED DEER RIVER, 3, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	21:18 C1 33.507				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	19-Sep-2012				
Legal Land Location	SW SEC 34 TWP 38 RGE 22 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:04:33, 52:18:20				Data Entry Date	02-Oct-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA20				Review Date	27-Sep-2012				
Clear Roadway/Skew	8.5 /				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	990 / 2011 (A)				Dept. Review Date	16-Oct-2012				
Road Classification	RAU-210-110				Follow-Up By					
Detour Length (km)	100									
Allowable Load (t):	Single	CS1 28		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	No posting required.									
Hazard Marker At Bridge (Y/N)	No									
Remarks										
Other Sign Types	River I.D, Slippery When Wet, 65 km/hr, No Fishing.									

Utilities (Located at)									
Utility Attachments	TELEPHONE UTILITIES-PHONE LINE								
Telephone	West curb.				Gas				
Power	2 wires 40m North.				Municipal				
Others	Fibreoptic E r/w.				Problem (Y/N)		No		
Remarks	Inside concrete West curb.								

Approach Road									
			Last	Now	Explanation of Condition				
Horizontal Alignment			5	5	Curve to the North and South.				
Vertical Alignment			5	5	Approach at NE & NW. Limited sight distance on grade.				
Roadway Width (m)		8.300			11.3m including turning lane.				
Approach Bump			6	6					
Guardrail (Y/N)		Yes			NW transition only connected by one bolt (photot). Is low enabling only top bolt to be connected.				
Guardrail			4	4	SE connection also missing lower bolt to bridgerail.				
Length (m)		38.000			Insufficient posts; not thrie beam.				
Current Standard (Y/N)		No							
Termination Type		TURNED DOWN							
Drainage			7	7	Void beside NW trough & below NW joint plumbing.				
Approach Road General Rating			5	5					

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : PO, 5 Spans, Lengths(m): 21.3-41.5-41.5-41.5-21.3, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			4	7	(Random narrow longitudinal cracks in concrete deck. 27Feb2009).
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			4	6	
Temperature (deg. C)		15			
(Expansion Type : FINGER PLATES)					
(Fixed Type :)					
Gap Size (mm)		Gap Location			
20		N. abut			
135		S. abut			
Deck Drainage			4	4	No drains on grade. Erosion along NW wingwall & at NE corner. Gutters have loose chips.
Drains Clogged (Y/N)		No			
Curbs/Median			4	4	Small local delam/corrosion spot in W curb face in S2 (photo).
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			7	7	14 posts A/B with insufficient bolt length at 4 post locations on E side & 7 post locations at W side. Superficial rusting @ base of posts.
(Type : GALVANIZED STEEL BRIDGE TUBE)					
Bridge Rail Posts		4	4		
(Type : GALVANIZED POST STEEL; GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating		6	6		
(Type : GALVANIZED)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	4	0	0	0	
Now	4	0	0	0	
Girders			4	4	Wide cracks @ S1G1,3 & 4 behind shoe plates. Honeycomb S2G2. 10% corroded. Corrosion @ S4G1 bottom flange & S5G4 top flange. S1G4 bottom flange spall near pier.
Cracking (Y/N)		Yes			
Spalling (Percent Area)		0			
(Number Of Girders : 20)					

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 5 Spans, Lengths(m): 21.3-41.5-41.5-41.5-21.3, A-Ident Number:)				
Diaphragms/Cross Frame		5	5	Abut diaphragms are corroding.
Bearings		4	4	Anchor pins have been bent towards stream due to excessive movement with cracked grout pads @ both abuts; 10mm @ N, 90mm @ S - photo. Spalls & cracks @ A1 bearing pads. Neoprene pads @ abuts. Pots @ piers. Teflon coming off guides @ P1 & 4 bearings. 10% superficial corrosion @ ext. A2 fully expanded at 15 deg. celsius.
Temperature (deg. C)	15			
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Minor corrosion stain @ exterior.
Stains (Percent Area)	2			
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		6	6	
(Type : CONCRETE)				
Backwalls/Breastwalls		5	5	Spalled @ NE abutment.
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		5	5	Cracking & peeling but sealed. Map cracking of wingwall coating.
Abutment Stability		7	7	
Scour/Erosion		6	6	Erosion gullies at all 4 corners, worst at NW & NE (photos).
Piers/Bents				
(Type : PIER-SOLID)				Several vertical cracks from top to bottom up to 5 mm wide @ P2 & P3.
Bearing Seats/Caps		6	5	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				Vertical spalls near base at P2,3.
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		7	7	
Paint/Coating		4	4	Superficial corrosion 75% at pier 2 & 3. Graffiti at P1 (photo).
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	6	Under water; minor scour at noses.
Debris (Y/N)	No			
Substructure General Rating		6	5	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		8	8	
Bank Stability		5	5	Steep cut at S.
HWM (m below Top of Curb)	6.0			27Feb2009 HWM not visible.
Drift (Y/N)	No			
Slope Protection		7	7	
(Type : NATURAL; NATURAL)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	8	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		7	7	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS	2013	At sealing program, patch delam in W curb S2.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS							
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION	2013	Repair gullies at hslp corners (NE & NW).					
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Upgrade approach guardrail to meet std. - raise at NW. Replace missing bolts at SE & NW connections.					
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	55.6/50.0	Sufficiency Rating (Last/Now) (%)	53.3/51.0	Est. Repl. Yr	2035	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder end cracking.		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	Dave Lam		Previous Assistant's Name				
Next Inspection Date	19-Jun-2014		Previous Inspection Date	09-Nov-2010			
Inspection Cycle (Default) (months)	21						
Comment							