

Bridge Inspection											
Bridge File Number	02427 -1 Bridge				Form Type	PCS					
Year Built/Year Supstr	1964/1964				Lot No.	2					
Bridge or Town Name	BRUCE				Inspector Name	Owen Salava					
Located Over	VERMILION RIVER, 6.5, WATERCRS-ST				Inspector Class	BR CLS A					
Located On	857:02 C1 10.562				Assistant Name						
Water Body Cl./Year					Assistant Class						
Navigabil. Cl./Year					Inspection Date	14-Jul-2011					
Legal Land Location	SW SEC 31 TWP 49 RGE 14 W4M				Data Entry By	Marcia Chavez					
Longitude, Latitude	-112:03:03, 53:16:07				Data Entry Date	25-Aug-2011					
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien					
Contract Main. Area	CMA14				Review Date	19-Jul-2011					
Clear Roadway/Skew	9.1 /				Dept. Reviewer Name	Andrew Smikles					
AADT/Year	320 / 2010 (A)				Dept. Review Date	29-Aug-2011					
Road Classification	RCU-209-110				Follow-Up By						
Detour Length (km)	8										
Allowable Load (t):	Single	CS1 30 GIRDER			Semi	CS2 52 GIRDER			Train	CS3 75 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 required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	NW too low - NE, SE & SW mounted on post in grd @ 1st guardrail post off bridge.								
Other Sign Types									

Utilities (Located at)										
Utility Attachments										
Telephone	Conduit on west side.				Gas					
Power					Municipal					
Others					Problem (Y/N)	Yes				
Remarks	Cable exposed @ end of conduit.									

Approach Road											
			Last	Now	Explanation of Condition						
Horizontal Alignment			8	8	No passing.						
Vertical Alignment			6	6	Sag curve with limited sight distanc						
Roadway Width (m)	9.600		2 trans. ACP cracks at S approach/abut.								
Approach Bump			4	5	Minor settlement at NW/NE corners at shoulders.						
Guardrail (Y/N)	Yes		Not thriebeam.								
Guardrail										6	6
Length (m)	19.300										
Current Standard (Y/N)	No										
Termination Type	TURNDOWN										
Drainage			7	7							
Approach Road General Rating			6	6							

Superstructure					
Bridge Component		Last	Now	Explanation of Condition	
(Primary Span : HC, 3 Spans, Lengths(m): 8.5-8.5-8.5, A-Ident Number:)					
Special Features					
Special Feature			X		
(Type :)					
Special Feature			X		
(Type :)					
Wearing Surface/Deck Top Detail Ratings					
	N (%)	1 (%)	2 (%)	3 (%)	
Last	0	0	0	0	
Now	0.0	0.0	0.0	0.0	
Wearing Surface			7	7	4 lines of narrow longit cracks in asphalt.
(Material Type : ACP)					
(Thickness(mm) : 50)					
Lateral Connection Problem (Y/N)		No			
Deck Top			N	N	
Deck Rideability			7	7	
Deck Joints			N	N	Buffer angles. Paved over.
Bump (Y/N)		No			
Deck Drainage			7	7	
Drains Clogged (Y/N)		No			
Curbs/Median			5	5	S1 W curb fascia with narrow longit crack & spot rusting.
(Curb Type : Standard)					
Scaling (Percent Area)		0			
Bridge Rail			5	5	Single layer with splice between posts -not ideal, improper splice detail.
(Type : FLEX BEAM)					
Bridge Rail Posts			7	7	
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)					
Bridge Rail/Posts Coating			7	7	
(Type :)					
Sidewalk			X	X	
Girder Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	1	
Girders			4	3	S3G5 spall 1 leg at A2 AZ (photo). S3G11 spalls midspan. Not visible.
Last Complete Inspection Date		14-Jul-2011			
Cracking (Y/N)		Yes			
Spalling (Percent Area)		1			
Lift or Connector Pocket Grouted (Y/N)					
(Number Of Girders : 33)					
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					
(Extended Backwall Piles (Y/N) : N)					
(Extended Backwall Piles Spacing(mm) :)					
(Total Number of Caps/Corbels : 3:3)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Bearing Seats/Caps/Corbels			7	7	
(Type : TREATED TIMBER)					
(Depth(mm) : 350)					
(Width(mm) : 300)					
Backwalls/Breastwalls			7	7	
Greatest Height (m)		1.40			
Wingwalls			4	4	
Broken planks at ends at SW/SE. Planks & nailing strip loose at NW (photo).					
(Total Number of Bearing Piles : 8:8)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Piles			4	5	
Paint/Coating			X	X	
Abutment Stability			7	7	
Scour/Erosion			3	4	
N hslp with minor sloughing; appears mostly stable (photo).					
Piers/Bents					
(Type : PIER-COLUMN)					
(Total Number of Caps/Corbels : 3:3)					
Bearing Seats/Caps/Corbels Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Bearing Seats/Caps/Corbels			7	7	
(Type : TREATED TIMBER)					
(Depth(mm) : 350)					
(Width(mm) : 300)					
(Total Number of Bearing Piles : 8:8)					
Piles Detail Ratings					
	N (count)	1 (count)	2 (count)	3 (count)	
Last	0	0	0	0	
Now	0	0	0	0	
Pier Shaft/Piles			5	5	
Greatest Height (m)		5.00			
Bracing/Struts/Sheathing			7	7	
Nose Plate			X	X	
Paint/Coating			X	X	
(Colour Description :)					
(Colour Code :)					
Some pile checkin.					

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Pier Stability		6	6	
Scour		X	5	
Debris (Y/N)	No			
Substructure General Rating		5	5	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				Slight skew to U/S channel. Old bridge abut 40m d/s narrows channel. Channel has eroded to 5.8m from top of curb.
(D/S Direction : W)				
Alignment		6	6	
Bank Stability		5	5	
HWM (m below Top of Curb)	3.2			Minor drift.
Drift (Y/N)	Yes			
Slope Protection		4	4	Limited vegetation on hslps ineffective. Some erosion at both toes.
(Type : NONE; NONE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		9	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		4	4	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
OVERLAY DECK							
STRAIGHTEN/REPLACE MEMBERS							
WASHING							
SHOTCRETE REPAIRS							
CORE TIMBER CAPS/CORBELS							
REPAIR/REPLACE TIMBER CAPS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP	2012	Add 30m3 CL 1 at toe of N slope.					
REMOVE DRIFT ACCUMULATION							
INSTALL STRUTS							
OTHER ACTION	2012	Repair backslope at North abutment.					
OTHER ACTION	2012	Remount all HMs to meet std.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/44.4	Sufficiency Rating (Last/Now) (%)	64.5/61.7	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	No action for r=3 girders.		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	Glen Smith		Previous Assistant's Name				
Next Inspection Date	14-Oct-2014		Previous Inspection Date	06-Jun-2007			
Inspection Cycle (Default) (months)	39						
Comment							