

Bridge Inspection													
Bridge File Number	79210 N-1 Bridge					Form Type	PSR						
Year Built/Year Supstr	1982/1982					Lot No.	2						
Bridge or Town Name	CALGARY - IVOR STRONG					Inspector Name	Garry Roberts						
Located Over	RAMP 4097-1 F;BOW RIVER, 2.13, WATERCRS-ST					Inspector Class	BR CLS A						
Located On	2:15 R1 19.919					Assistant Name							
Water Body Cl./Year						Assistant Class							
Navigabil. Cl./Year						Inspection Date	27-Jan-2013						
Legal Land Location	SW SEC 13 TWP 23 RGE 1 W5M					Data Entry By	Lauren Korte						
Longitude, Latitude	-114:01:07, 50:57:08					Data Entry Date	15-Feb-2013						
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Tom Carey						
Contract Main. Area	DEERFOOT/STONE Y					Review Date	30-Jan-2013						
Clear Roadway/Skew	10.5 /					Dept. Reviewer Name	Tim Davies						
AADT/Year	117,760 / 2011 (A)					Dept. Review Date	21-Feb-2013						
Road Classification	RFD-412.4-130					Follow-Up By							
Detour Length (km)	1												
Allowable Load (t):	Single	CS1 28			Semi	CS2 49			Train	CS3 62			----> On Critical Spans ---->Critical Member
Design Loading:	HS25												----> Primary Span
Posting Information													
Required Vert. Clearance Posting (m)	UNDER: 4097-1-F 4.5m												
Posted Vertical Clearance (Y/N)													
Posted:	Lane	NB	On Bridge (m)		In Advance (Y/N)		Lane	SB	On Bridge (m)		In Advance (Y/N)		
Remarks	Not required.												
Required Load Posting (t)	Single				Semi				Truck Train				
Posted Loading (t)	Single				Semi				Truck Train				
Posted:	Lane	NB	At Junction (Y/N)		In Advance (Y/N)				At Bridge (Y/N)				
Posted:	Lane	SB	At Junction (Y/N)		In Advance (Y/N)				At Bridge (Y/N)				
Remarks	Not Required.												
Hazard Marker At Bridge (Y/N)	No												
Remarks	Not required.												
Other Sign Types	Route Merge.												
Utilities (Located at)													
Utility Attachments	POWER UTILITIES-POWER LINE												
Telephone	In area.					Gas							
Power	Sub station to SW.					Municipal							
Others	Lights standards.					Problem (Y/N)			No				
Remarks	Conduits at deck underside - lighting at underside at North.												
Approach Road													
					Last	Now	Explanation of Condition						
Horizontal Alignment					7	7	Curves both ends B3121B						
Vertical Alignment					8	8							
Roadway Width (m)	13.000						Approach slabs cracked. Potholes in South approach slab patched with ACP.						
Approach Bump					4	4	Potholes at South approach A.C.P.						
Guardrail (Y/N)	Yes						Parapets.						
Guardrail					4	4	Spalling from low cover rebar @ SE and NE approach parapets.						
Length (m)	10.500												
Current Standard (Y/N)	No												
Termination Type	TURNDOWN												
Drainage					7	7							
Approach Road General Rating					7	7							

Superstructure						
Bridge Component		Last	Now	Explanation of Condition		
(Primary Span : PB, 5 Spans, Lengths(m): 35-48-48-48-35, A-Ident Number:)						
Special Features						
Special Feature			X	Access hatch to North roof slab at NE and SW wings.		
(Type :)						
Special Feature			X			
(Type :)						
Wearing Surface/Deck Top Detail Ratings						
	N (%)	1 (%)	2 (%)	3 (%)		
Last	0	0	0	0		
Now	20.0	0.0	0.0	0.0		
Wearing Surface			6	6	Deck viewed from 4-1/4 points. No visible problem.	
(Material Type :)						
(Thickness(mm) :)						
Lateral Connection Problem (Y/N)		No				
Deck Top			N	N		
Deck Rideability			7	7		
Deck Joints			3	3	Suspect leakage at both abuts from staining. North abut seal is out of extrusion near center for approx 2m. Open gap in South seal at center. 4 gland-all gaps @ 45mm at North abut. 3 gland joint 40mm-40mm-50mm at South abut. Surface spalls @ anchors. North joint bangs excessively loud and is loose at underside of joint at center line. South abutment joint makes noise also.	
Temperature (deg. C)		-7				
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))						
(Fixed Type :)						
Gap Size (mm)		Gap Location				
45		N abut				
50		S abut				
Deck Drainage			4	4	Suspect leakage at both abutments.	
Drains Clogged (Y/N)		No				
Curbs/Median			4	4	Isolated spalled areas - Worst at SE at S1. Spalled for 6m. New center parapet.	
(Curb Type : JERSEY/F SHAPE)						
Scaling (Percent Area)		2				
Bridge Rail			X	X		
(Type :)						
Bridge Rail Posts			X	X		
(Type :)						
Bridge Rail/Posts Coating			X	X		
(Type :)						
Sidewalk			X	X		
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last	0	0	0	0		
Now	0	0	0	0		
Girders			6	4	Narrow longitudinal cracks @ fascia. 2x 5 continuous. Delam cracks at pt grout of Sp.1-G2 over path.	
Cracking (Y/N)		Yes				
Spalling (Percent Area)		0				
(Number Of Girders : 2)						
Diaphragms/Cross Frame			7	7		

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PB, 5 Spans, Lengths(m): 35-48-48-48-35, A-Ident Number:)				
Bearings		5	6	Minor teflon displaced @ SW. 10% corrosion. 50% corrosion @ SW - bearing functions. ok - wear marks indicate movement.
Temperature (deg. C)	-7			
(Expansion Type : POT BEARING)				
(Fixed Type : POT BEARING)				
Coating Adequate (Y/N)	Yes			
Functioning (Y/N)	Yes			
Deck Underside		6	6	Corrosion stains @ parapet joints @ exteriors.
Stains (Percent Area)	1			
Span Alignment Problems				
Vertical (Y/N)	No			
Horizontal (Y/N)	No			
Superstructure General Rating		5	4	
Substructure				
Bridge Component		Last	Now	Explanation of Condition
Abutments				
Bearing Seats/Caps		8	8	New expanded metal to keep pigeons out is open at South abut.
(Type : CONCRETE)				
Backwalls/Breastwalls		5	6	
Wingwalls		7	7	
Piles		N	N	Buried.
Paint/Coating		4	4	Corrosion staining at abutments and cracks. Suspect leakage from deck joint.
Abutment Stability		7	8	
Scour/Erosion		7	7	
Piers/Bents				
(Type : PIER-SOLID)				
Bearing Seats/Caps		8	8	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0:0)				
Pier Shaft/Piles		8	8	
Bracing/Struts/Sheathing		X	X	
Nose Plate		N	N	Majority is Submerged.
Paint/Coating		5	5	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		N	N	Water is too deep.
Debris (Y/N)	No			
Substructure General Rating		7	7	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : E)				
(D/S Direction : W)				
Alignment		7	7	
Bank Stability		5	6	Steep cut @ West - Mechanically stabilized.
HWM (m below Top of Curb)				No Visible HWM.
Drift (Y/N)	No			
Slope Protection		5	5	Natural @ banks with class 1m @ North headslope. Cracked at SE.
(Type : CONCRETE; CONCRETE)				
Guidebank/Spurs		X	X	
Adequacy of Opening		8	7	
(Fish Compensation Measure 1 : NONE)				
(Fish Compensation Measure 2 : NONE)				
Channel General Rating		5	5	
Grade Separation				
Road Alignment		5	5	Local road under Sp.1. Pathway at Sp.2 and 5.
Traffic Safety Features		X	X	
Type				
Slope Protection		5	6	
(Type : CONCRETE; CONCRETE)				
Bank Stability		6	6	
Drainage		6	6	
Grade Separation General Rating		5	5	

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	Patch NE and SE approach parapets.					
PATCH DECK	2013	Seal cracks and patch potholes at both approaches.					
SEAL DECK							
OVERLAY DECK	2013	Replace North roof slab.					
REPAIR/REPLACE DECK JOINTS	2013	Replace gland @ North joint find why it bangs. May need steel shim btwn extrusions and bearing steel. Search noise at South joint-shim as required and leakage @ South abut. Or replace both abuts					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2013	Patch and coat breastwalls 5L capseal.					
OTHER ACTION	2013	Patch PT grout at Sp.1-G2.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	66.7/61.1	Sufficiency Rating (Last/Now) (%)	43.9/40.7	Est. Repl. Yr	2051	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	Tom Carey		Previous Assistant's Name				
Next Inspection Date	27-Oct-2014		Previous Inspection Date	22-Apr-2011			
Inspection Cycle (Default) (months)	21						
Comment							