

Bridge Inspection										
Bridge File Number	75338 N-1 Bridge				Form Type	PSR				
Year Built/Year Supstr	1962/1962				Lot No.	1				
Bridge or Town Name	BLACKFALDS				Inspector Name	Randy Bredo				
Located Over	BLINDMAN RIVER, 3.78, WATERCRS-ST				Inspector Class	BR CLS A				
Located On	2:26 R1 4.834				Assistant Name					
Water Body Cl./Year					Assistant Class					
Navigabil. Cl./Year					Inspection Date	18-Oct-2012				
Legal Land Location	NW SEC 16 TWP 39 RGE 27 W4M				Data Entry By	Marcia Chavez				
Longitude, Latitude	-113:50:07, 52:21:27				Data Entry Date	05-Nov-2012				
Road Authority	Alberta Transportation (AIT)				Reviewer Name	John O'Brien				
Contract Main. Area	CMA19				Review Date	01-Nov-2012				
Clear Roadway/Skew	12.2 / 15 deg. (RHF)				Dept. Reviewer Name	Andrew Smikles				
AADT/Year	35,980 / 2011 (A)				Dept. Review Date	19-Nov-2012				
Road Classification	RFD-412.4-130				Follow-Up By					
Detour Length (km)	1									
Allowable Load (t):	Single	CS1 44 GIRDER	Semi	CS2 55 GIRDER	Train	CS3 70 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)		In Advance (Y/N)		At Bridge (Y/N)		
Remarks	Not required.								
Hazard Marker At Bridge (Y/N)	Yes								
Remarks	On parapets.								
Other Sign Types									

Utilities (Located at)										
Utility Attachments										
Telephone	Yes - no marker.				Gas					
Power					Municipal					
Others					Problem (Y/N)	No				
Remarks										

Approach Road									
		Last	Now	Explanation of Condition					
Horizontal Alignment		9	9	Gradual sag curve.					
Vertical Alignment		7	7						
Roadway Width (m)	11.600								
Approach Bump		8	8	No rail @ N end.					
Guardrail (Y/N)	Yes								
Guardrail Length (m)	99.000	4	6						
Current Standard (Y/N)	No	Not quite a PL2.							
Termination Type	Turn Down								
Drainage		3	7	Repaired.					
Approach Road General Rating		7	7						

Superstructure							
Bridge Component		Last	Now	Explanation of Condition			
(Primary Span : PO, 4 Spans, Lengths(m): 18-20.1-27.4-22.9, 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			
(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			3	3			
Temperature (deg. C)		9		A1,2 & P1,3 jts leaking at gutters. P1 gland completely removed & left in grass at NE corner.			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))							
(Fixed Type : WATER STOP)							
Gap Size (mm)		Gap Location					
59		N. pier					
46		C. pier					
59		S. pier					
Deck Drainage			3	4			
Drains Clogged (Y/N)		No		Staining below P1 scaling cracking below P3 joints & staining under abt jnts.			
Curbs/Median			4	4			
(Curb Type : Standard)							
Scaling (Percent Area)		1		Few spalls on curbs where concrete cover too thin over rebar, minor @ span #3 West.			
Bridge Rail			7	6			
(Type : GALVANIZED STEEL VERTICAL BAR)							
Bridge Rail Posts			5	4			
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating			4	6			
(Type : GALVANIZED)							
Sidewalk			X	X			
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	1			
Now	0	0	0	1			
Girders			3	3			
Cracking (Y/N)		Yes		S4G2 at P3 has wide vertical end of girder crack btwn 50 - 100mm from end of girder. S1G5 has narrow intermittent, staggered crack starting in transition section. S3G3,6 have longit. cracks also 7 ext girders have shallow spalls & staining on fascias.			
Spalling (Percent Area)		0					
(Number Of Girders : 25)							

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 4 Spans, Lengths(m): 18-20.1-27.4-22.9, A-Ident Number:)				
Diaphragms/Cross Frame		5	5	1mm x 300 mm horizontal cracks @ ends, S2,3 W fascia. End diaphragms cracking from corroding rebar at S4G4-6.
Bearings		5	4	10% corrosion pitting on ext bearings. Corrosion stains in webs.
Temperature (deg. C)	9			
(Expansion Type : STEEL SLIDING PLATES WITH BRONZE PLATE IN BETWEEN)				
(Fixed Type : PINNED BEARING)				
Coating Adequate (Y/N)	No			
Functioning (Y/N)	Yes			
Deck Underside		6	5	Corrosion stains & spalling u/d deck, P2. Soffits at piers rust stained with shallow delams.
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		7	7	
Wingwalls		6	6	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		6	6	
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		4	4	P1, E end, has 2 spalls. Delam cracks at P2, NE corner, & P3, SW corner.
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		6	5	Nose plate appears that it could be higher.
Paint/Coating		4	4	90% corrosion with pitting on nose plate - monitor.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		7	7	
Debris (Y/N)	No			
Substructure General Rating		4	4	

Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		6	6	Bank slumped @ SE but not threatening bridge.
HWM (m below Top of Curb)				HWM just above base of piers.
Drift (Y/N)	Yes			
Slope Protection		6	6	
(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		6	6	

Maintenance Recommendations							
Inspector Recommendations	Year	Inspector Comments	Department Comments	Target Year	Est. Cost	Cat #	
REPAIR/REPLACE BRIDGE RAIL							
GALVANIZE/PAINT BRIDGE RAIL							
SEAL CURBS							
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Reinstall glands P1 & check if jnts leaking at gutters.					
RESET/ PAINT BEARINGS							
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION	2012	Remove old gland from shoulder.					
OTHER ACTION	2012	Patch delams.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	38.9/38.9	Sufficiency Rating (Last/Now) (%)	51.7/50.4	Est. Repl. Yr	2042	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	No action for r=3 girders; inspect at standard cycle.		Department Comments				
Maintenance Reviewed By			Date			Estimated Total	0
Proposed Long-Term Strategy	2008.01.29 Rehab or replace in 2040. QE2 six laning will probaly drive replacement/widening sooner.						
On 3-Year Program (Y/N)							
Proposed Action							
Previous Inspector's Name	Owen Salava	Previous Assistant's Name					
Next Inspection Date	18-Jul-2014	Previous Inspection Date	14-Sep-2011				
Inspection Cycle (Default) (months)	21						
Comment							