

Bridge Inspection										
Bridge File Number	75338 S-2 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 L1 4.841				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	-113:50:08, 52:21:27				Data Entry Date	13-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)		In Advance (Y/N)		At Bridge (Y/N)		
Posted:	Lane	SB	At Junction (Y/N)		No	In Advance (Y/N)	No	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					Gas					
Power					Municipal					
Others	Shaw fibre optics West r/w.				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)	11.300								
Approach Bump		7	7						
Guardrail (Y/N)		Yes							
Guardrail		6	6						
Length (m)	99.000								
Current Standard (Y/N)		No		None @ SE; not quite a PL2 standard.					
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): 18.3-23.8-27.4-26.5, 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			
(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		P3 W end leaking @ SE corner onto pier seat. No joints at either abutment. Jnts leak above all gutters. P1 jnt missing gland & left at NW sideslope.			
(Expansion Type : GLAND (WABO-MAUER, TRANSFLEX, ETC))							
(Fixed Type : WATER STOP)							
Gap Size (mm)		Gap Location					
62		N. pier					
57		Center					
64		S. pier					
Deck Drainage			3	3			
Drains Clogged (Y/N)		No		Jnts leak onto girders, substructure & bearings. Minor erosion channels down hspls.			
Curbs/Median			4	4			
(Curb Type : Standard)							
Scaling (Percent Area)		1		Delam spall with rust staining SW curb. Heavy scaling East side South span. Spalls E curb, S1 - minor.			
Bridge Rail			6	6			
(Type : GALVANIZED STEEL VERTICAL BAR)							
Bridge Rail Posts			5	5			
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating			5	5			
(Type : GALVANIZED)							
Sidewalk			X	X			
Girder Detail Ratings							
	N (count)	1 (count)	2 (count)	3 (count)			
Last	0	0	0	0			
Now	0	0	0	1			

Superstructure				
Bridge Component		Last	Now	Explanation of Condition
(Primary Span : PO, 4 Spans, Lengths(m): 18.3-23.8-27.4-26.5, A-Ident Number:)				
Girders		4	3	S4G6 has narrow longit. cracks from transition section to web 1.8m long (staggered intermittent). Fascia girder ends have rust stains & some shallow delam cracks.
Cracking (Y/N)	Yes			
Spalling (Percent Area)	1			
(Number Of Girders : 26)				
Diaphragms/Cross Frame		4	3	18 bolts & spacer plates missing at mids on diaphragms. 20% superficial corrosion. Diaphragm spall at G3G4 above P1.
Bearings		4	4	Bent A/B at S3/S4 G1 over P3. Some minor chipping at shoe plates - monitor both. Corrosion pitting on ext abutment bearings & pier bearings 90%.
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)	No			
Deck Underside		7	7	Form work from patching left attached S2.
Stains (Percent Area)	0			
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				
Bearing Seats/Caps		7	7	
(Type : CONCRETE)				
Backwalls/Breastwalls		7	7	
Wingwalls		7	7	
Piles		N	N	
Paint/Coating		X	X	
Abutment Stability		7	7	
Scour/Erosion		3	5	Erosion gully at SE has been filled but still subject to erosion & settlement.
Piers/Bents				
(Type : PIER-COLUMN)				Corrosion stains, surface spalls & delamination cracks on North pier cap & center pier cap, minor. Vertical cracks in center & South pier base 1 to 1.5mm wide.
Bearing Seats/Caps		5	4	
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0:0)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		5	5	
Paint/Coating		4	4	90% corrosion with pitting on nose plate - monitor.
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Scour		5	6	
Debris (Y/N)	Yes			Drift on P1 & 2 base.
Substructure General Rating		5	4	
Structure Usage				
		Last	Now	Explanation of Condition
Channel				
(U/S Direction : W)				
(D/S Direction : E)				
Alignment		7	7	
Bank Stability		7	7	
HWM (m below Top of Curb)				HWM above nose plates. Large drift on P1-2 bases.
Drift (Y/N)	Yes			
Slope Protection		6	6	Riprap at NW bank @ pier only, Class 1/2.
(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	2012	Patch spalled areas, SE curb.					
PATCH DECK							
SEAL DECK							
OVERLAY DECK							
REPAIR/REPLACE DECK JOINTS	2012	Reinstall gland in P1. Investigate which glands are actively leaking & repair.					
RESET/ PAINT BEARINGS	2012	Paint bearings.					
WASHING							
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION	2012	Remove drift.					
OTHER ACTION	2012	Remove glands from sideslope.					
OTHER ACTION	2012	Repair delams & spalls.					
OTHER ACTION	2012	Add bolts & spacer plates at diaphragms.					
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	50.0/38.9	Sufficiency Rating (Last/Now) (%)	57.4/50.4	Est. Repl. Yr	2042	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Monitor girder cracking with measurements. Hslps previously repaired with drains added at each corner to address deck drainage issues.		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							