

Bridge Inspection												
Bridge File Number	75760 N-1 Bridge					Form Type	PSR					
Year Built/Year Supstr	1967/1967					Lot No.	2					
Bridge or Town Name	BREMNER					Inspector Name	Shane Hall					
Located Over	16:20 R1 0.012;16:20 L1 0.012					Inspector Class	BR CLS A					
Located On	21:28 R1 13.700					Assistant Name						
Water Body Cl./Year						Assistant Class						
Navigabil. Cl./Year						Inspection Date	04-Jan-2013					
Legal Land Location	NW SEC 7 TWP 53 RGE 22 W4M					Data Entry By	Theresa Lacusta					
Longitude, Latitude	-113:14:46, 53:34:11					Data Entry Date	16-Jan-2013					
Road Authority	Alberta Transportation (AIT)					Reviewer Name	Eric Carcoux					
Contract Main. Area	CMA09					Review Date	10-Jan-2013					
Clear Roadway/Skew	14.2 / 2 deg. (RHF)					Dept. Reviewer Name	Brent Herrick					
AADT/Year	10,770 / 2011 (A)					Dept. Review Date	22-Jan-2013					
Road Classification	RAD-412.4-120					Follow-Up By						
Detour Length (km)	1											
Allowable Load (t):	Single	CS1 42 GIRDER			Semi	CS2 50 GIRDER			Train	CS3 62 GIRDER		----> On Critical Spans ---->Critical Member
Design Loading:	HS20										----> Primary Span	

Posting Information												
Required Vert. Clearance Posting (m)		UNDER: 16 L1 5.3m, 16 R1 5.3m										
Posted Vertical Clearance (Y/N)												
Posted:	Lane	EB	On Bridge (m)		In Advance (Y/N)		Lane	WB	On Bridge (m)	5.3	In Advance (Y/N)	Yes
Remarks		EB clearance posted on Southbound structure.										
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 req'd										
Hazard Marker At Bridge (Y/N)		Yes										
Remarks		Installed on interlocking barriers.										
Other Sign Types												

Utilities (Located at)												
Utility Attachments		POWER UTILITIES-POWER LINE										
Telephone	NW & South, interchange r/w.					Gas	North about 100 m.					
Power	Street light.					Municipal						
Others	Lights under bridge.					Problem (Y/N)	No					
Remarks												

Approach Road														
				Last	Now	Explanation of Condition								
Horizontal Alignment				7	7	Merge lanes on/off ramps. Typical grade separation.								
Vertical Alignment				7	7									
Roadway Width (m)		14.300												
Approach Bump					4	6								
Guardrail (Y/N)		Yes			Concrete interlocking barriers currently installed. Snow covered									
Guardrail													7	N
Length (m)		42.000												
Current Standard (Y/N)		Yes												
Termination Type		Turned Down												
Drainage				3	N	Water ponding @ NE corner of deck-28mx1.5m9photo) Water ponding @ SE corner-photo-23-Sep-2010								

Approach Road							
			Last	Now	Explanation of Condition		
Approach Road General Rating			4	7			
Superstructure							
Bridge Component			Last	Now	Explanation of Condition		
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)							
Special Features							
Special Feature			7	7	Delams along steel plate surfaces has resulted in spalling.		
(Type : EXT LATER POST TENS)							
Hinge			4	4			
(Hinge Type : CONC)							
Wearing Surface/Deck Top Detail Ratings							
			N (%)	1 (%)	2 (%)	3 (%)	2m width for full length of bridge is concrete to grade otherwise is chipseal.
Last							
Now							
Wearing Surface			5	5	Approx 2% of chipseal failed. Cracking between girders in East lane of Span 1 and 2. thickness 20		
(Material Type : CONCRETE - CONVENTIONAL CHIP SEAL COAT)							
(Thickness(mm) : 50)							
Lateral Connection Problem (Y/N)		Yes					
Deck Top			N	N			
Deck Rideability			6	6			
Deck Joints			3	4	(Observed leaking @ 2 piers & North abutment. 03/Nov/2005) No leaks evident at this time. P2 & P1 all CP bolts missing.sheared.-photo Cover plates at P1 & P2 appear temporary. Gaps at piers not measurable due to different plate widths.-photo Joint replacement at abutment in progress.-photo		
Temperature (deg. C)		2					
(Expansion Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))							
(Fixed Type : ARMoured GLAND (WABO UNDER FINGER OR SLIDING PLATES))							
Gap Size (mm)		Gap Location					
84		S. abut					
105		S. pier					
92		N. pier					
78		N. abut					
Deck Drainage			4	N	Ponding along East curb-photo. -23-Sep-2010 Leakage with stains at S3 between G7-G8.-23-Sep-2010 Snow/ice covered.		
Drains Clogged (Y/N)		Yes					
Curbs/Median			7	N	New exterior curbs. Snow covered.		
(Curb Type : Standard)							
Scaling (Percent Area)		0					
Bridge Rail			8	N	Insufficient thread on 2 bolts @ 2 posts in West rail.-photo--23-Sep-2010		
(Type : GALVANIZED STEEL BRIDGE TUBE)							
Bridge Rail Posts			4	N	Snow covered.		
(Type : GALVANIZED POST STEEL;GALVANIZED POST STEEL)							
Bridge Rail/Posts Coating			8	N			
(Type : GALVANIZED)							
Sidewalk			X	X			

Superstructure						
Bridge Component				Last	Now	Explanation of Condition
(Primary Span : FC, 3 Spans, Lengths(m): 29-16.2-29, A-Ident Number:)						
Girder Detail Ratings						
	N (count)	1 (count)	2 (count)	3 (count)		
Last						
Now						
Girders				4	4	Span 1 girders appear to have approx. 50mm of Neg. camber possibly due to snow loads. Hinged connections have delams along steel plates. No structural cracks. H.L.D outside leg S1G15 & S1G1-photo N end of S2G1 spalled due to low cover with rebar exposed.-photo S end of S2G1 has wide vertical crack with 200mm long delam.-photo S2G15 has delams.spalls at both ends with rust staining.-photo Approx 15% of girders have cracks in leg extending from shoe plates. (Active leakage between G7-G8 on S3.-05-Dec-2008) 15/Span. Most girders have typical FC cracks. South end of S1G2 has exposed rebar due to low cover.-photo Delamination in W leg of S1G1 at South end above bearing.-photo continued below
Cracking (Y/N)		Yes				
Spalling (Percent Area)		1				
(Number Of Girders : 15)						
Diaphragms/Cross Frame				5	5	Wide crack 500mm long @ underside of E leg at N end if S1G15.-photo Diagonal sheer cracks at N end of S3G1 & S3G15-photo Wide long crack in bottom leg of S3G2.-photo Several delaminated bottoms with stains.
Bearings				5	5	
Temperature (deg. C)		2				
(Expansion Type : REINFORCED NEOPRENE BEARING WITH TEFLON AND STAINLESS STEEL)						
(Fixed Type : REINFORCED PAD BEARING)						
Coating Adequate (Y/N)		Yes				
Functioning (Y/N)		Yes				
Deck Underside				5	5	Old stains @ weep holes.
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				4	6	
(Type : CONCRETE)						
Backwalls/Breastwalls				7	7	
Wingwalls				4	6	
Piles				N	N	
Paint/Coating				7	7	
Abutment Stability				7	7	
Scour/Erosion				7	7	

Substructure				
Bridge Component		Last	Now	Explanation of Condition
Piers/Bents				
(Type : PIER-COLUMN)				
Bearing Seats/Caps		6	6	8 columns, possibly 2 piles per column. Pigmented sealer.
(Type : CONCRETE)				
(Total Number of Bearing Piles : 0:0)				
Pier Shaft/Piles		6	6	
Bracing/Struts/Sheathing		X	X	
Nose Plate		X	X	
Paint/Coating		7	7	
(Colour Description :)				
(Colour Code :)				
Pier Stability		7	7	
Scour		X	X	
Debris (Y/N)	No			
Substructure General Rating		4	6	
Structure Usage				
		Last	Now	Explanation of Condition
Grade Separation				
Road Alignment		8	8	
Traffic Safety Features		6	6	
Type	Guardrail/Lighting			
Slope Protection		8	8	
(Type : CONCRETE; CONCRETE)				
Bank Stability		8	8	
Drainage		8	8	
Grade Separation General Rating		8	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	2013	Repair loose plates & missing bolts.					
RESET/ PAINT BEARINGS							
WASHING	2015	Clean dirt and cons. debris off of shoulders of bridge.					
SHOTCRETE REPAIRS							
REPAIR ABUTMENT SCOUR/EROSION							
PLACE ADDITIONAL RIP RAP							
REMOVE DRIFT ACCUMULATION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
OTHER ACTION							
Structural Condition Rating (Last/Now) (%)	44.4/55.6	Sufficiency Rating (Last/Now) (%)	45.4/54.2	Est. Repl. Yr	2024	Maint. Req. (Y/N)	Yes
Special Comments for Next Inspection	Rehabilitation underway, re-inspect once repairs completed.		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	Shane Hall		Previous Assistant's Name				
Next Inspection Date	04-Oct-2014		Previous Inspection Date	23-Sep-2010			
Inspection Cycle (Default) (months)	21						
Comment							