

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B11232021-1	
Date: 10/26/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-009 - FORTEAU BROOK BRIDGE		
Route:		Overall Length:	61.3 m
Year Built:	1969	Est: No	Overall Width: 8 m
Year Last Rehab.:	2005	Est: No	Roadway Width: 7.6 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4.9 m
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	0 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	04 - Steel Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	03 - Timber	1	61.3
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	G - Good	Bearings:	U - Uninspectable
		Bearing Seat:	U - Uninspectable
Comments:	- Both abutments have hairline map cracking throughout and are in good condition, G. - Bearing seats have a heavy accumulation of gravel and have vegetation growth coming from the material. Bearings not entirely inspectable due to gravels.		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	F1 - Fair
Comments:	- Southwest interior truss member (start of bridge) has two moderate dents/impacts in two different above/below locations, F1. - Under the bridge, both stringers on either side of the centerline and the mid-point of the girders have light to moderate corrosion to the member (especially the top flanges that contact the timber deck) all connective bolts and severe corrosion to the 6x6 transverse timber deck beam clips. - Transverse stringer braces and its connections also have light to moderate corrosion to connective angles and bolts. Condition of members/components in the previous statements are in slightly worse condition at structure entrances which is to		

be expected. - Main top and bottom chord members, nodes and gusset plates visually inspected and in good condition with no bolts observed to be missing. - From the second bottom node from the east approach on the north side of the bridge, both branching members have minor dents likely from the flyer, F1.

DECK

Condition:	P3 - Poor	Curbs:	F2 - Fair
Hand Rail:	P3 - Poor	Roadway Condition:	P3 - Poor
Approach Rail:	F2 - Fair		

Comments: - Approach asphalt in fair condition, with mild cracking/potholes at the abutment asphalt joint. - Structure handrail in good condition overall but some posts appear to have rotten cores, P3. - Approach/exit guiderails in fair condition complete with extra energy dampening posts prior to the trusses and hazard markers. - Timber wearing surface has mild-medium deterioration to centerline timbers. Many timbers are cracked/split and have sections missing, P3. - Transverse 6x6 creosote timbers have moderate to severe splitting are worn out, especially on the east section of the deck, P3. Most timbers have been replaced elsewhere with 6x6 pressure treated lumber.

HYDROLOGY

Water Velocity:	0 m/s	Ice Problem:	N - No Problem
Water Depth:	0 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem

Comments:

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2023	Replacement Year:	2040
Antic. Rehab. Cost:	\$30,000	Replacement Cost:	\$3,000,000

Recommendations: - Remove all materials from the bearing seats to remove the concrete and steel. - Replace wearing surface timbers as required, select members along the center line. - Replace 6x6 creosote timbers supporting the wearing surface. - Replace clips to girders/stringers as 6x6 decking is replaced. - Replace various handrail posts on the structure.

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
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Additional Observations: - Crew on site day of inspection replacing various sections of the structures handrail. - Traffic control needed for inspection. - Hazards mild slopes and traffic. - Inspection under the bridge limited to binoculars from each abutment under the bridge.

LEGEND:

Condition Definitions:

1 - *Good - [discontinued code].
 2 - *Fair - [discontinued code].
 3 - *Poor - [discontinued code].
 4 - *Unsafe - [discontinued code].
 G - Good.

F2 - Fair.
 F1 - Fair.
 P3 - Poor.
 P1 - Poor.
 P - Poor.

C - Unsafe (Closed to Public).
 U - Uninspectable.
 I - Inapplicable.

Problem Definitions:

N - No Problem.
 P - Possible Problem.
 K - Known Problem.
 NA - Not Applicable.

Category Definitions:

Maint. - Maintenance.
 Eng. - Engineering.
 Office - Bridge Office.

PHOTO GUIDELINES:

Inspection Photos:

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
 - All items noted above as being F3, P4, P, or C
 - Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS