

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12072021-1	
Date: 10/27/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-066 - ALEXIS RIVER BRIDGE		
Route:	510	Overall Length:	170 m
Year Built:	2001	Est: No	Overall Width: 10 m
Year Last Rehab.:		Est: No	Roadway Width: 7.35 m
Region:	LABRADOR		Sidewalk Width: 0 m
Jurisdiction:	Provincial		Clearance to R.D. or N.W.L.: 7 m
Type of Structure:	08 - Steel Bridge		Max Depth of N.W.L.: 10 m
Purpose of Structure:	04 - Over Non-Navigable Waters		Spans:
Type of Handrail:	04 - Steel Rail		<u>Span No.:</u> <u>Length</u> <u>Span No.:</u> <u>Length</u>
Roadway Surface:	04 - Steel	1	110 4 0
Alignment Vertical:	01 - Good	2	0 5 0
Alignment Horizontal:	02 - Adequate	3	0 6 0
Restrictions:	No		
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- Pot bearings in good condition with mild corrosion to anchorage bolts. - The southwest corner of the south abutment's back wall has a small spall against under angle which the expansion/slip plate slides on. Remaining abutment and wingwall concrete in good condition.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	F2 - Fair
Comments:	- Several of girder to stringer connective angles over the south abutment have gouges/cuts from grinder use, likely occurred during a previous bolt replacement. - Two bolts loose on the second stringer/girder connection from the west over the north abutment. - One bolt missing at a stringer to girder connection located at the node 8 line from the south side of the bridge, second stringer from the west. - Inspected all visible elements of the bridge walking across the deck looking through the grating, looking up at the top chord areas and using binoculars from below at the abutment level. All gusset plates/bolts/nuts/splice plates, stringer to girder connections, and the		

various types of members used were found to be in good condition unless noted otherwise above. Recent cold galvanization material applied to most bolts/nuts.

DECK

Condition:	F1 - Fair	Curbs:	I - Inapplicable
Hand Rail:	F2 - Fair	Roadway Condition:	F2 - Fair
Approach Rail:	F1 - Fair		
Comments:	- Approach asphalt in fair condition. - Approach/exit guiderails have isolated split posts, is connected to end blocks complete with hazard markers and collision dampening posts. End blocks have mild map cracking. - Steel decking has areas of isolated damage to sections of the grating. - Structure handrail in good condition.		

HYDROLOGY

Water Velocity:	0.5 m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- No comment.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2022	Replacement Year:	2080
Antic. Rehab. Cost:	\$10,000	Replacement Cost:	\$4,000,000
Recommendations:	- Tightening and replace missing bolts/nuts as indicated above. Remove gravels atop the bridge entry point stringers/girder. Remove and patch spall under expansion joint.		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Utilities attached to the east side of the structure. Traffic control needed for inspection. Hazards, traffic, slopes and working around water. Inspection limited below structure with use of binoculars at the waterline.		

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 P3, P1, P, or C
 - Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS