



GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

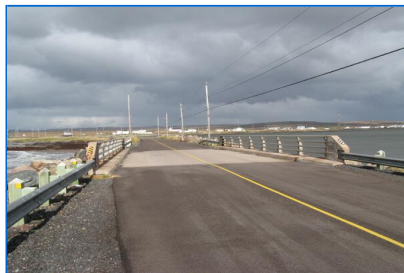
BRIDGE INSPECTION REPORT
B01302020-20

Date: 1/30/2020 Inspected By: Alex Ford Category: Eng. - Engineering

BRIDGE INFORMATION

Site:	2-079 - ALLAN'S ISLAND CAUSEWAY BRIDGE				
Route:	220-19	Overall Length:	26 m		
Year Built:	1986	Est: No	Overall Width:	10 m	
Year Last Rehab.:		Est: No	Roadway Width:	8.2 m	
Region:	CENTRAL EAST	Sidewalk Width:	0 m		
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1.5 m		
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	2.5 m		
Purpose of Structure:	03 - Over Navigable Waters	Spans:			
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	01 - Concrete	1	18.6	4	0
Alignment Vertical:	01 - Good	2	0	5	0
Alignment Horizontal:	01 - Good	3	0	6	0
Restrictions:	No				

BRIDGE PHOTOS



SUBSTRUCTURE

Condition:	F2 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair

Comments: Concrete abutments and wingwalls. Footing one has erosion with exposed rebar. Some cracking of abutment walls and wingwalls. Some bearing pads squat, exposed steel on pad three abutment two. Navigation channel

formed with sheet piles, mostly destroyed. Additional armor stone added in 2017.

SUPERSTRUCTURE

Condition: F2 - Fair **Expansion Joints:** P3 - Poor
Comments: 6 AASHTO girders, all have significant exposed rebar with rusting, staining and some delaminations and spalls. deck soffits between girder two and three has significant spalling with exposed rebar - heavy rusting. Expansion joints are leaking, significant deterioration around curb sections (fascia/soffit). Deterioration and exposed rebar on the back walls due to leaking joints.

DECK

Condition: F2 - Fair **Curbs:** F2 - Fair
Hand Rail: F2 - Fair **Roadway Condition:** F2 - Fair
Approach Rail: F2 - Fair
Comments: Concrete deck with asphalt wearing surface. 4-5 potholes in the deck surface with exposed rebar. Asphalt is potholed/patched with cracking on approaches. 4 rail aluminum system with concrete end blocks, anchor bolts rusting in places. All end blocks have some cracking and deterioration. Approach #2 left, rail is lapped incorrectly. Object markers poor. Expansion Joints have been patched with asphalt.

HYDROLOGY

Water Velocity: m/s **Ice Problem:** N - No Problem
Water Depth: m **Scour Problem:** N - No Problem
Waterway: 01 - Adequate **Debris Problem:** N - No Problem
Comments: Tidal. Depth and Velocity vary.

REPLACEMENT/REHABILITATION

Next Rehab. Date: **Replacement Year:**
Antic. Rehab. Cost: \$0 **Replacement Cost:** \$0
Recommendations: Rehab required - latex repairs, expansion joints, curbs, deck, endblocks, repave. Widespread exposed rebar should be addressed. Repair approach #2 left, rail lapping. Replace object markers. Repair broken posts on approach rail.

OBSERVATIONS

Overall Condition: F2 - Fair **Requires Further Inspection:** No
Additional Observations: Navigation lights destroyed. Conduit for fibre optic line attached to the left side curb. Marine environment is causing issues.

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