



GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

BRIDGE INSPECTION REPORT
B02032020-8

Date: 2/3/2020

Inspected By: Alex Ford

Category: Eng. - Engineering

BRIDGE INFORMATION

| | | | | | |
|-----------------------|------------------------------------|------------------------------|----------------|------------------|---------------|
| Site: | 2-010 - BIG SALMONIER RIVER BRIDGE | | | | |
| Route: | 220 | Overall Length: | 25 m | | |
| Year Built: | 1970 | Est: No | Overall Width: | 13 m | |
| Year Last Rehab.: | 2006 | Est: No | Roadway Width: | 12 m | |
| Region: | CENTRAL EAST | Sidewalk Width: | 0 m | | |
| Jurisdiction: | Provincial | Clearance to R.D. or N.W.L.: | 6 m | | |
| Type of Structure: | 04 - Rigid Frame | Max Depth of N.W.L.: | 1 m | | |
| Purpose of Structure: | 04 - Over Non-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: | 02 - Asphalt | 1 | 20 | 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: | I - Inapplicable |
| | | Bearing Seat: | I - Inapplicable |
| Comments: | Concrete abutments and wingwalls. Cracking throughout abutment walls, worse in old (left side) section. Extensive cracking with efflorescence on all wingwalls, some separation at the corner connections to the abutments. Abutment two left wingwall top 1/3 tipped out, Abutment two right wingwall top 2/3 tipped out. Minor erosion of concrete footings. | | |

SUPERSTRUCTURE

| | | | |
|-------------------|---|--------------------------|------------------|
| Condition: | P3 - Poor | Expansion Joints: | I - Inapplicable |
| Comments: | Arched rigid frame deck. Significant cracking with efflorescence with significant disintegration along deck edges and the centre joint between old and new sections with heavy efflorescence. Heavy leaking with active wet areas around the centre longitudinal joint. | | |

DECK

| | | | |
|-----------------------|--|---------------------------|-----------|
| Condition: | P3 - Poor | Curbs: | F2 - Fair |
| Hand Rail: | F2 - Fair | Roadway Condition: | F2 - Fair |
| Approach Rail: | P3 - Poor | | |
| Comments: | Concrete deck with asphalt wearing surface. Significant leakage through deck at joints. Some asphalt cracking at approaches, large potholes near road centreline at ends (patched). Approach rail is slightly low and has post rot. Minor cracking of curbs, small spalls right side. There is a buildup of sand under the rail with alders growing around it. | | |

HYDROLOGY

| | | | |
|------------------------|---|------------------------|-------------------|
| Water Velocity: | 1.0 m/s | Ice Problem: | N - No Problem |
| Water Depth: | 1.0 m | Scour Problem: | K - Known Problem |
| Waterway: | 01 - Adequate | Debris Problem: | N - No Problem |
| Comments: | Minor scour along right wingwall abutment one which extends under abutment one footing, approximately 0.4m max depth. No issues now but needs repair/protection soon. | | |

REPLACEMENT/REHABILITATION

| | | | |
|----------------------------|--|--------------------------|-----|
| Next Rehab. Date: | | Replacement Year: | |
| Antic. Rehab. Cost: | \$0 | Replacement Cost: | \$0 |
| Recommendations: | Rehab. Extensive latex repairs, deck repairs, asphalt repairs, scour repairs, replace approach rail. | | |

OBSERVATIONS

| | | | |
|---------------------------|-----------|-------------------------------------|----|
| Overall Condition: | P3 - Poor | Requires Further Inspection: | No |
|---------------------------|-----------|-------------------------------------|----|

Additional Observations:

LEGEND:

Condition Definitions: _____ Problem Definitions: _____ Category 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.

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

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

PHOTO GUIDELINES:

Inspection Photos:

- Please provide photos using guidelines below:
- Any item which inspector sees 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

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.