16.1 m

7.8 **m**

7.1 m

 $0 \, \mathbf{m}$

4.5 m

0.7 m



GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

BRIDGE INSPECTION REPORT B06102019-3

Overall Length:

Overall Width:

Roadway Width:

Sidewalk Width:

N.W.L.:

Spans:

Clearance to R.D. or

Max Depth of N.W.L.:

Date: 1/17/2019 Inspected By: Pickett R Category: Eng. - Engineering

BRIDGE INFORMATION

Site: 1-289 - PICCO'S BROOK BRIDGE, FLATROCK

Route: 20-17

Year Built:1925Est: YesYear Last Rehab.:1965Est: Yes

Region: AVALON PENINSULA

Jurisdiction: Provincial

Type of Structure: 04 - Rigid Frame

Purpose of Structure: 04 - Over Non-Navigable Waters

02 - Concrete Rail Type of Handrail: Span No.: Length Span No.: Length 02 - Asphalt Roadway Surface: 1 4.5 4 01 - Good 2 0 5 0 Alignment Vertical: 3 0 6 0 02 - Adequate Alignment Horizontal:

Restrictions: No

BRIDGE PHOTOS





SUBSTRUCTURE

Condition: F2 - Fair Bearings: I - Inapplicable

Bearing Seat: I - Inapplicable

Comments: Original concrete arch extended 5m downstream with rigid frame. No footing on original concrete arch at down

stream rigid frame extension poured directly onto dowelled bed rock.

SUPERSTRUCTURE

Condition: P1 - Poor Expansion Joints: I - Inapplicable

Comments: Numerous wide horizontal vertical cracks with heavy efflor deposits in original arch abutments. Severe scouring at

bases of original arch frame leg extensions. Some deuteriations at all four corners of arch abutments and

extensions. Wingwalls have delamination and spalding, wide medium cracks with effloresce deposits.

DECK

Condition: F1 - Fair **Curbs:** F1 - Fair

Hand Rail: F2 - Fair F1 - Fair **Roadway Condition:**

Approach Rail: F1 - Fair

Medium numerous long transverse cracks with heavy effloresce deposits in original deck soffit. Numerous wide Comments:

> cracks in downstream fascia original arch. Medium efflor deposits/ medium cracks in upstream curb fascias exposed rebar on downstream deck soffit original structure along with medium spading. Severe delamination/ Spalding on most wingwalls. Erosion at South west wingwall. Damage to aluminum railing due to snowplow

impact. Damage to all approach and exit rail.

HYDROLOGY

Water Velocity: 0.6 m/s Ice Problem: P - Possible Problem

Water Depth: 0.8 m Scour Problem: P - Possible Problem

Waterway: 01 - Adequate **Debris Problem:** N - No Problem

Severe slope erosion at South East corner. Con erosion on remainder. Comments:

REPLACEMENT/REHABILITATION

2020 2030 Next Rehab. Date: Replacement Year:

\$300000 **Replacement Cost:** \$900000 Antic. Rehab. Cost:

Recommendations: Repair damage guide rail, handrails and install hazard markers. Fix slope erosion and concrete defects.

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

OBSERVATIONS

P3 - Poor Requires Further No **Overall Condition:**

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

Inspection:

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

Category Definitions: Maint. - Maintenance. Eng. - Engineering. Office - Bridge Office.

Additional Observations:

LEGEND:

Condition Definitions:

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

PHOTO GUIDELINES:

Inspection Photos:

Please provide photos using guidelines below:

App dem which in Spector rees should be accumented by photograph

All tems noted above as being 93, P1, P1, or C

Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS

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