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|  |  | GOVERNMENT OF<br>NEWFOUNDLAND<br>AND LABRADOR<br>Department of Transportation and Infrastructure |                  | <b>BRIDGE INSPECTION REPORT</b><br><b>B01242023-8</b> |  |
| Date: 1/13/2023   |  | Inspected By: Trevor Upshall   |                  | Category: Eng. - Engineering                          |  |
| <b>BRIDGE INFORMATION</b>   |  |  |                  |   |  |
| Site:   |  | 1-035 - BIG BARACHOIS BROOK BRIDGE - R92   |                  |   |  |
| <b>SUBSTRUCTURE</b>   |  |  |                  |   |  |
| Condition:  | P3 - Poor  | Bearings:  | F1 - Fair        |   |  |
|   |  | Bearing Seat:  | F1 - Fair        |   |  |
| Comments:   | P3 Abutment Wing Walls, F1 Remainder Assumed condition of buried/submerged reinforced concrete abutments. Unable to inspect bearings/bearing seats due to height restrictions. Light erosion along bottom of east/west abutment face. Numerous medium-wide vertical/horizontal cracks with light deposits of efflorescence throughout abutment faces. Numerous medium-very wide horizontal/vertical/map cracking with medium delamination/spalling and severe efflorescence deposits in four abutment wing walls and exterior ballast walls (P3). The construction joint between the curb and wing wall is leaking causing efflorescence to accumulate on the concrete surface. Steel form ties exposed on abutment faces. |  |                  |   |  |
| <b>SUPERSTRUCTURE</b>   |  |  |                  |   |  |
| Condition:  | F1 - Fair  | Expansion Joints:  | F1 - Fair        |   |  |
| Comments:   | Severe delamination/spalling with exposed reinforcement to bottom flange of east interior girder. Medium horizontal cracks and narrow vertical cracks with efflorescence at numerous girder ends over bearing seat. Medium abrasion to expansion joint dams.   |  |                  |   |  |
| <b>DECK</b>   |  |  |                  |   |  |
| Condition:  | F1 - Fair  | Curbs:   | I - Inapplicable |   |  |
| Hand Rail:  | F1 - Fair  | Roadway Condition:   | F1 - Fair        |   |  |
| Approach Rail:  | F1 - Fair  |  |                  |   |  |
| Comments:   | Medium transverse/longitudinal cracks with medium efflorescence deposits on soffit near midspan including cantilever soffit. Medium transverse alligator cracks in asphalt along expansion joints. Medium longitudinal/transverse cracks and medium spalling/abrasion to exposed concrete deck. Medium spalling and abrasion to end blocks. Light abrasions with some end caps missing on aluminum handrails. Medium longitudinal cracks in asphalt at both approaches. NE approach rail damaged by snow plow. SE hazard marker missing.   |  |                  |   |  |
| <b>HYDROLOGY</b>  |  |  |                  |   |  |
| Water Velocity:   | 0.2 m/s  | Ice Problem:   | N - No Problem   |   |  |
| Water Depth:  | 0.5 m  | Scour Problem:   | N - No Problem   |   |  |
| Waterway:   | 01 - Adequate  | Debris Problem:  | N - No Problem   |   |  |
| Comments:   |  |  |                  |   |  |
| <b>REPLACEMENT/REHABILITATION</b>   |  |  |                  |   |  |
| Next Rehab. Date:   | 2025   | Replacement Year:  | 2035             |   |  |
| Antic. Rehab. Cost:   | \$0  | Replacement Cost:  | \$2,500,000.00   |   |  |
| Recommendations:  | Install missing hazard marker at SE corner. Clean out expansion joint seals. Repair all concrete defects. Install additional slope protection at four corners to reduce erosion. Repair NE approach rail.  |  |                  |   |  |
| <b>OBSERVATIONS</b>   |  |  |                  |   |  |
| Overall Condition:  | P3 - Poor  | Requires Further Inspection:   | No               |   |  |
| Additional Observations:  |  |  |                  |   |  |