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|  |                                                                                                                                                                                                                                                                                                                                                                      | GOVERNMENT OF<br>NEWFOUNDLAND<br>AND LABRADOR<br>Department of Transportation and Infrastructure |                      | <b>BRIDGE INSPECTION REPORT</b><br><b>B02052025-8</b> |  |
| <b>Date:</b> 1/29/2025                                                            |                                                                                                                                                                                                                                                                                                                                                                      | <b>Inspected By:</b> T Upshall / M Button                                                        |                      | <b>Category:</b> Eng. - Engineering                   |  |
| <b>BRIDGE INFORMATION</b>                                                         |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Site:</b>                                                                      |                                                                                                                                                                                                                                                                                                                                                                      | 1-218 - BEAVER BROOK BRIDGE - R72                                                                |                      |                                                       |  |
| <b>SUBSTRUCTURE</b>                                                               |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Condition:</b>                                                                 | P3 - Poor                                                                                                                                                                                                                                                                                                                                                            | <b>Bearings:</b>                                                                                 | F1 - Fair            |                                                       |  |
|                                                                                   |                                                                                                                                                                                                                                                                                                                                                                      | <b>Bearing Seat:</b>                                                                             | P3 - Poor            |                                                       |  |
| <b>Comments:</b>                                                                  | Very severe disintegration, spalling, and delamination to top of SW and SE wingwalls P3. Medium erosion along abutment footings. Very wide vertical crack in NE and NW deck/wingwall intersection. Very severe spall to SE corner of deck/wingwall. Corners of wingwalls/frame legs showing signs of deterioration from leaking defective superstructure components. |                                                                                                  |                      |                                                       |  |
| <b>SUPERSTRUCTURE</b>                                                             |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Condition:</b>                                                                 | F2 - Fair                                                                                                                                                                                                                                                                                                                                                            | <b>Expansion Joints:</b>                                                                         | U - Uninspectable    |                                                       |  |
| <b>Comments:</b>                                                                  | Wide vertical crack in south frame leg continuing into exposed footing. Expansion joints paved over and not visible during inspection. Medium to severe honeycombing with hairline pattern cracks in deck soffit.                                                                                                                                                    |                                                                                                  |                      |                                                       |  |
| <b>DECK</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Condition:</b>                                                                 | F2 - Fair                                                                                                                                                                                                                                                                                                                                                            | <b>Curbs:</b>                                                                                    | I - Inapplicable     |                                                       |  |
| <b>Hand Rail:</b>                                                                 | P3 - Poor                                                                                                                                                                                                                                                                                                                                                            | <b>Roadway Condition:</b>                                                                        | F2 - Fair            |                                                       |  |
| <b>Approach Rail:</b>                                                             | I - Inapplicable                                                                                                                                                                                                                                                                                                                                                     |                                                                                                  |                      |                                                       |  |
| <b>Comments:</b>                                                                  | *Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. Structure does not have end blocks, approach/exit rail, or hazard markers. Wide horizontal/vertical cracks and medium spalling exposing reinforcement to handrails. Downstream horizontal rail missing replaced with wood rail.                                         |                                                                                                  |                      |                                                       |  |
| <b>HYDROLOGY</b>                                                                  |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Water Velocity:</b>                                                            | 0 m/s                                                                                                                                                                                                                                                                                                                                                                | <b>Ice Problem:</b>                                                                              | N - No Problem       |                                                       |  |
| <b>Water Depth:</b>                                                               | 0 m                                                                                                                                                                                                                                                                                                                                                                  | <b>Scour Problem:</b>                                                                            | P - Possible Problem |                                                       |  |
| <b>Waterway:</b>                                                                  | 01 - Adequate                                                                                                                                                                                                                                                                                                                                                        | <b>Debris Problem:</b>                                                                           | N - No Problem       |                                                       |  |
| <b>Comments:</b>                                                                  | Minor scour under west footing. Debris accumulating at inlet causing a partial blockage.                                                                                                                                                                                                                                                                             |                                                                                                  |                      |                                                       |  |
| <b>REPLACEMENT/REHABILITATION</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Next Rehab. Date:</b>                                                          | 2026                                                                                                                                                                                                                                                                                                                                                                 | <b>Replacement Year:</b>                                                                         | 2035                 |                                                       |  |
| <b>Antic. Rehab. Cost:</b>                                                        | \$0                                                                                                                                                                                                                                                                                                                                                                  | <b>Replacement Cost:</b>                                                                         | \$0                  |                                                       |  |
| <b>Recommendations:</b>                                                           | Install new aluminum handrails and approach/exit rails with hazard markers. Repair concrete deterioration to wingwalls and deck. Install rip-rap at upstream of structure.                                                                                                                                                                                           |                                                                                                  |                      |                                                       |  |
| <b>OBSERVATIONS</b>                                                               |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |
| <b>Overall Condition:</b>                                                         | P3 - Poor                                                                                                                                                                                                                                                                                                                                                            | <b>Requires Further Inspection:</b>                                                              | No                   |                                                       |  |
| <b>Additional Observations:</b>                                                   |                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                  |                      |                                                       |  |