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|    | GOVERNMENT OF<br>NEWFOUNDLAND<br>AND LABRADOR<br>Department of Transportation and Infrastructure   | <b>BRIDGE INSPECTION REPORT</b><br><b>B01152018-4</b>                                |                              |
| <b>Date:</b> 1/12/2018  | <b>Inspected By:</b> Rodger Hussey   | <b>Category:</b> Eng. - Engineering  |                              |
| <b>BRIDGE INFORMATION</b>   |  |  |                              |
| <b>Site:</b>  | 1-190 - FRESHWATER POND BROOK BRIDGE   |  |                              |
| <b>Route:</b>   |  | <b>Overall Length:</b>   | 18.8 m                       |
| <b>Year Built:</b>  | 1941   | <b>Est: Yes</b>  | <b>Overall Width:</b> 12.4 m |
| <b>Year Last Rehab.:</b>  |  | <b>Est: No</b>   | <b>Roadway Width:</b> 10.4 m |
| <b>Region:</b>  | AVALON PENINSULA   | <b>Sidewalk Width:</b>   | 0 m                          |
| <b>Jurisdiction:</b>  | Provincial   | <b>Clearance to R.D. or N.W.L.:</b>  | 5.2 m                        |
| <b>Type of Structure:</b>   | 04 - Rigid Frame   | <b>Max Depth of N.W.L.:</b>  | 0.2 m                        |
| <b>Purpose of Structure:</b>  | 04 - Over Non-Navigable Waters   |  |                              |
| <b>Type of Handrail:</b>  | 02 - Concrete Rail   | <b>Spans:</b>  |                              |
| <b>Roadway Surface:</b>   | 02 - Asphalt   | <u>Span No.:</u>   | <u>Length</u>                |
| <b>Alignment Vertical:</b>  | 02 - Adequate  | 1  | 5.6                          |
| <b>Alignment Horizontal:</b>  | 02 - Adequate  | 2  | 0                            |
| <b>Restrictions:</b>  | No   | 3  | 0                            |
|   |  | <u>Span No.:</u>   | <u>Length</u>                |
|   |  | 4  | 0                            |
|   |  | 5  | 0                            |
|   |  | 6  | 0                            |
| <b>BRIDGE PHOTOS</b>  |  |  |                              |
|  |  |  |                              |
| <b>SUBSTRUCTURE</b>   |  |  |                              |
| <b>Condition:</b>   | P1 - Poor  | <b>Bearings:</b>   | I - Inapplicable             |
|   |  | <b>Bearing Seat:</b>   | I - Inapplicable             |
| <b>Comments:</b>  | - Footings only exist on original north frame leg and extension south frame leg and extension poured on bedrock - Very severe erosion/disintegration to top and face of footing on orig. north frame leg. Med. erosion to top and face of footing on north frame leg extension.  |  |                              |
| <b>SUPERSTRUCTURE</b>   |  |  |                              |
| <b>Condition:</b>   | P1 - Poor  | <b>Expansion Joints:</b>   | I - Inapplicable             |
| <b>Comments:</b>  | - Very severe delamn/spalling/disintegration continues to corners of orig. frame legs and u/s wingwalls (severe AAR) - Severe spalling to faces of orig. south frame leg below 4 weep holes - Extensive map cracking with medium efflor deposits in faces of orig. frame legs - Very severe delamin/spalling/disintegration continues to vert. const joints in frame legs between orig. struct and extensions - Narrow horiz/vert cracks with light spalling and light efflor deposits to frame leg faces/wingwalls on extension - Large portion of northeast wingwall has failed and cracked off (2.0m x 1.0m). |  |                              |

|  |   |                                     |                       |
|--|---|-------------------------------------|-----------------------|
| <b>DECK</b>  |   |                                     |                       |
| <b>Condition:</b>  | P1 - Poor   | <b>Curbs:</b>                       | F1 - Fair             |
| <b>Hand Rail:</b>  | F2 - Fair   | <b>Roadway Condition:</b>           | F1 - Fair             |
| <b>Approach Rail:</b>  | P1 - Poor   |                                     |                       |
| <b>Comments:</b>   | - Severe delamin/spalling/disintertg with med. corrosion continues to u/s deck edge and fascia very severe delamin/spalling/disintertg with med. corrosion to exposed reinf. continues to const. joint in deck soffit between orig. struct. and extension - Narrow longit cracks in deck soffit on extension - Severe damage to term end guiderail at NE exit guiderail; minor scrapes, dents, deformation and upended post at last section of exit. guiderail<br>- Asphalt remains in fairly good condition - Narrow horizontal/vertical cracks and medium spalling to conc. Handrails |                                     |                       |
| <b>HYDROLOGY</b>   |   |                                     |                       |
| <b>Water Velocity:</b>   | 0.3 m/s   | <b>Ice Problem:</b>                 | N - No Problem        |
| <b>Water Depth:</b>  | 0.3 m   | <b>Scour Problem:</b>               | P - Possible Problem  |
| <b>Waterway:</b>   | 01 - Adequate   | <b>Debris Problem:</b>              | N - No Problem        |
| <b>Comments:</b>   | - Medium erosion under SE P.T. crib retaining wall  |                                     |                       |
| <b>REPLACEMENT/REHABILITATION</b>  |   |                                     |                       |
| <b>Next Rehab. Date:</b>   | 2018  | <b>Replacement Year:</b>            | 2018                  |
| <b>Antic. Rehab. Cost:</b>   | \$0   | <b>Replacement Cost:</b>            | \$500000              |
| <b>Recommendations:</b>  | - Replace with bottomless arch - In the interim, repair/replace damaged NE guiderail and install 4 new hazard markers (maint.)  |                                     |                       |
| <b>OBSERVATIONS</b>  |   |                                     |                       |
| <b>Overall Condition:</b>  | P1 - Poor   | <b>Requires Further Inspection:</b> | No                    |
| <b>Additional Observations:</b>  | P1: Original F1: Extension  |                                     |                       |
| <b>LEGEND:</b>   |   |                                     |                       |
| <b>Condition Definitions:</b>  |   | <b>Problem Definitions:</b>         |                       |
| 1 - *Good - [discontinued code].   | F2 - Fair.  | C - Unsafe (Closed to Public).      | N - No Problem.       |
| 2 - *Fair - [discontinued code].   | F1 - Fair.  | U - Uninspectable.                  | P - Possible Problem. |
| 3 - *Poor - [discontinued code].   | P3 - Poor.  | I - Inapplicable.                   | K - Known Problem.    |
| 4 - *Unsafe - [discontinued code].   | P1 - Poor.  |                                     | NA - Not Applicable.  |
| G - Good.  | P - Poor.   |                                     |                       |
|  |   | <b>Category Definitions:</b>        |                       |
|  |   | Maint. - Maintenance.               |                       |
|  |   | Eng. - Engineering.                 |                       |
|  |   | Office - Bridge Office.             |                       |
| <b>PHOTO GUIDELINES:</b>   |   |                                     |                       |
| <b>Inspection Photos:</b>  |   |                                     |                       |
| Please provide photos using guidelines below:  |   |                                     |                       |
| <ul style="list-style-type: none"> <li>● Any item which inspector feels should be documented by photograph</li> <li>● All items noted above as being P3, P1, P, or C</li> <li>● Any evidence of known ice, scour, debris, waterway problems</li> </ul> |   |                                     |                       |
| <b>INSPECTION PHOTOS</b>   |   |                                     |                       |