

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B09102021-3</b>	
<b>Date:</b> 8/26/2021	<b>Inspected By:</b> Michael Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-051 - MOBILE RIVER BRIDGE		
<b>Route:</b>		<b>Overall Length:</b>	20.4 m
<b>Year Built:</b>	1967	<b>Est:</b> Yes	<b>Overall Width:</b> 9.4 m
<b>Year Last Rehab.:</b>	2000	<b>Est:</b> Yes	<b>Roadway Width:</b> 0 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> 0 m
<b>Type of Structure:</b>	02 - Double Tee		<b>Max Depth of N.W.L.:</b> 0 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters		<b>Spans:</b>
<b>Type of Handrail:</b>	01 - Aluminum Rail		
<b>Roadway Surface:</b>	02 - Asphalt		
<b>Alignment Vertical:</b>	02 - Adequate		
<b>Alignment Horizontal:</b>	02 - Adequate		
<b>Restrictions:</b>	No		
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Bearings:</b>	P3 - Poor
		<b>Bearing Seat:</b>	F1 - Fair
<b>Comments:</b>	- Northwest wingwall has undermining from erosion, P3. - Northwest bearing seat has a large wide crack propagating to the expansion joint with efflorescent deposits, P3. - Both abutment have some mild cracking. North abutment has very mild scour. - Only southeast and northwest bearing plates could be viewed due to diaphragms. Plates severely corroded, assuming rest of bearings are in similar condition, P3. - Suspect leaking through both expansion joints from water on abutments below in some locations.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Expansion Joints:</b>	U - Uninspectable
<b>Comments:</b>	- Rust and efflorescence leakage evident between all precast double tee panel joints, P3. This leakage is accelerating deterioration even on interior double tees. First two interior double tee pre-cast panels have large spalls and large cracks about to become spalls with exposed stressing strands with med corrosion. Cables still intact. - Underside of deck between pre-cast tees, F1. - Northwest double tee has a med to large spall with an		

exposed stressing strand with severe corrosion. - Heavy efflorescent leakage on exterior downstream double tee at mid-span.

**DECK**

<b>Condition:</b>	F1 - Fair	<b>Curbs:</b>	F1 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F1 - Fair
<b>Approach Rail:</b>	P3 - Poor		
<b>Comments:</b>	- Both the upstream and downstream fascias have light weathering, F2. - Approach and exit rails are connected to end blocks and have hazard markers. However, they have some impact damage, P3. - Numerous deck drains patched over with rust-stain leakage showing around patches. - Southeast end block has medium deterioration. - Concerns over condition of the deck under the asphalt. There is a lot of leakage between pre-cast panels.		

**HYDROLOGY**

<b>Water Velocity:</b>	0.7 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>	- Very mild scour to north abutment		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>		<b>Replacement Year:</b>	2026
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$1000000
<b>Recommendations:</b>	- Evaluate a replacement. Spalls around strands difficult/impossible to fix. Abutments are ok but have been rehabbed. Double tees, bearings and possibly the deck are on the way out.		

**OBSERVATIONS**

<b>Overall Condition:</b>	P3 - Poor	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- P3 double tees impacted. F1 remainder. Downstream side of structure has a waterline attached to it. - Hazards are slippery rocks, steep slopes, and traffic. Leakage between pre-cast sections indicates cracking in the deck.		

**LEGEND:**

**Condition 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.

**Problem Definitions:**

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

**Category Definitions:**

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

**PHOTO GUIDELINES:**

**Inspection Photos:**

Please provide photos using guidelines below:

- Any item which inspector feels 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**