

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B09102021-10</b>	
<b>Date:</b> 8/26/2021	<b>Inspected By:</b> Mike Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	1-067 - PETER'S RIVER BRIDGE		
<b>Route:</b>		<b>Overall Length:</b>	0 m
<b>Year Built:</b>	1969	<b>Est: No</b>	<b>Overall Width:</b> 9.5 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 8 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>	3 m
<b>Type of Structure:</b>	01 - AASH to Girder	<b>Max Depth of N.W.L.:</b>	1 m
<b>Purpose of Structure:</b>	04 - Over Non-Navigable Waters	<b>Spans:</b>	
<b>Type of Handrail:</b>	04 - Steel Rail	<b>Span No.:</b>	<b>Length</b>
<b>Roadway Surface:</b>	02 - Asphalt	<b>Span No.:</b>	<b>Length</b>
<b>Alignment Vertical:</b>	01 - Good	1	29.6
<b>Alignment Horizontal:</b>	01 - Good	2	0
<b>Restrictions:</b>	No	3	0
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	P1 - Poor	<b>Bearings:</b>	U - Uninspectable
		<b>Bearing Seat:</b>	P3 - Poor
<b>Comments:</b>	- All wingwalls have heavy cracking and efflorescence with medium spalling throughout. Southeast wingwall has severe cracking with efflorescence over an undermined/eroded section. Medium-large sized hole in road surface and has eroded under the wingwall, P1. Southwest similar but not as severe. - West abutment has medium-heavy horizontal/vertical cracks with efflorescence and small surface spalls. Northwest bearing area has a small spall with a crack propagating from it through an old patch to the abutment corner. - East abutment has medium alligator cracking (possible AAR) throughout the face of the abutment. Small spall on the southeast bearing area creating a hole along the CJ of a rehab patch. Spall starting to undermine the girder, P3. F1 interior bearing seats. Monitor exterior bearings for future spalls. Substructure P3.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Expansion Joints:</b>	P3 - Poor
	- South fascia & on the west half of the structure has med-severe spalling with cracks propagating from the spalls		

**Comments:** with efflorescence, P3. North fascia has medium wide cracks with efflorescence, P3. - Expansion joints not inspectable but evidence of leaking exists on west side. - Girders in fair condition, F1. - Cracking with efflorescence sporadically on the underside of the deck. Leakage with efflorescence at girder's top flange/deck connection on several girders as well. Above indicates deck is on the way out, F1 but monitor over the next couple of years. Suspect 5-8 years of deck life left.

**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>	F2 - Fair		
<b>Comments:</b>	- Curbs ok on surface, F1. See notes in "Superstructure" for fascia but classified there. Asphalt degrading around expansion joints and on south wingwalls, P1 otherwise F1. - Handrails ok. - Approach/exit rails ok, connected to end blocks, no hazard markers. - Deck is cracked with leakage paths due to evidence below. Monitor over next inspections, F1.		

**HYDROLOGY**

<b>Water Velocity:</b>	Tidal m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	Tidal m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	- No comment.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2024	<b>Replacement Year:</b>	2030
<b>Antic. Rehab. Cost:</b>	\$250000	<b>Replacement Cost:</b>	\$2000000
<b>Recommendations:</b>	- Replace gravels under southeast and southwest wingwalls and repair asphalt. - Curbs/fascia approaching a full replacement. - Wingwalls can be repaired superficially but with efflorescence on this scale it's likely the cracks are through the walls. - Expansion joint and associated concrete on west side likely need a replacement. - Abutments have medium-heave cracking and have been rehabbed before. - Evaluate for a replacement but a major rehab will extend the life of the structure, girders still in good condition.		

**OBSERVATIONS**

<b>Overall Condition:</b>	P3 - Poor	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- P3 exterior bearing seats, deck fascias, abutments, wingwalls. P1 erosion holes on southeast and southwest wingwalls. F1 girders and remainder. Monitor bearings for spalls undermining the girders, deck fascia and leakage through the deck on future inspections. Bridge ok at this time. Hazards, traffic and steep slopes.		

**LEGEND:**

<b>Condition Definitions:</b>			<b>Problem Definitions:</b>	<b>Category Definitions:</b>
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

**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**