

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B10192017-2</b>	
<b>Date:</b> 10/16/2017	<b>Inspected By:</b> AB	<b>Category:</b> Eng. - Engineering	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	2-049 - BARBOUR BRIDGE (CHARLESTON)		
<b>Route:</b>	230	<b>Overall Length:</b>	32.8 m
<b>Year Built:</b>	1971	<b>Est:</b> No	<b>Overall Width:</b> 13.2 m
<b>Year Last Rehab.:</b>	1985	<b>Est:</b> No	<b>Roadway Width:</b> 11 m
<b>Region:</b>	CENTRAL EAST	<b>Sidewalk Width:</b>	1.2 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	5 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>Type of Handrail:</b>	01 - Aluminum Rail	<b>Spans:</b>	
<b>Roadway Surface:</b>	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	14.8
<b>Alignment Horizontal:</b>	01 - Good	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>	F2 - Fair	<b>Bearings:</b>	U - Uninspectable
		<b>Bearing Seat:</b>	U - Uninspectable
<b>Comments:</b>	Concrete abutments and wing walls. Medium scaling and cracking of wing walls and abutments. Efflorescence. A few severe cracks. Staining on abutment walls from leaky expansion joints.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	F2 - Fair	<b>Expansion Joints:</b>	P1 - Poor
<b>Comments:</b>	AASHTO girders. Girders have areas of rust staining and efflorescence due to leaking deck soffit. Girder 6 middle has disintegration of the bottom flange with exposed rebar. Expansion joints are paved over and leaking. Girder #1 is spalling concrete. Girder #2 is spalling concrete and exposing steel.		
<b>DECK</b>			
<b>Condition:</b>	F2 - Fair	<b>Curbs:</b>	F2 - Fair

<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F2 - Fair
<b>Approach Rail:</b>	F2 - Fair		
<b>Comments:</b>	Deck soffit has cracking with efflorescence. Exterior soffit at expansion joints, all locations, poor condition, disintegration and spalling. Curbs and sidewalk have some scaling and spalling. Large section of the outside of curb at expansion joint 2 right side broken away (aprox 300mm dia.). Outside of curbs at expansion joint 1 left and right, have minor pcs missing (aprox 150mm dia.) Large spall in curb at abutment 2 right side at end block. Aluminum bridge rail with concrete end blocks. Asphalt deteriorated some areas and underlying deck showing signs of deterioration at these locations (acp potholes continue into the concrete deck). Bottom of deck between girders 1 and 2, 5 and 6 shows evidence of cracking, efflorescence around the girders. Approach #2 right has a missing hazard marker. There is a buildup of sand/salt under the approach rail.		

**HYDROLOGY**

<b>Water Velocity:</b>	1 m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	1 m	<b>Scour Problem:</b>	N - No Problem
<b>Waterway:</b>	01 - Adequate	<b>Debris Problem:</b>	N - No Problem
<b>Comments:</b>	Tidal. Hydraulic rip-rap at all corners.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2017	<b>Replacement Year:</b>	2017
<b>Antic. Rehab. Cost:</b>	\$0	<b>Replacement Cost:</b>	\$0
<b>Recommendations:</b>	Place on rehab list for superstructure/deck repairs. Replace hazard marker. Clean sand/salt from under the approach rail. Repair potholes in deck.		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>			

**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**