

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B10132021-7</b>	
<b>Date:</b> 10/6/2021	<b>Inspected By:</b> Mike Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	2-073 - CHAPEL ARM BRIDGE		
<b>Route:</b>	201-10	<b>Overall Length:</b>	20 m
<b>Year Built:</b>	1988	<b>Est:</b> No	<b>Overall Width:</b> 11 m
<b>Year Last Rehab.:</b>		<b>Est:</b> No	<b>Roadway Width:</b> 9.5 m
<b>Region:</b>	CENTRAL EAST	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	1.5 m
<b>Type of Structure:</b>	03 - Reinforced Concrete Beam/Slab	<b>Max Depth of N.W.L.:</b>	2 m
<b>Purpose of Structure:</b>	03 - Over Navigable Waters	<b>Spans:</b>	
<b>Type of Handrail:</b>	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
<b>Roadway Surface:</b>	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	12
<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>	F2 - Fair	<b>Bearings:</b>	P3 - Poor
		<b>Bearing Seat:</b>	F2 - Fair
<b>Comments:</b>	- Both abutment faces in fair condition, F2. Bearings appear small for structure, bearing seat in fair condition, F2. - Wingwalls in fair condition. - Trap/drain under beams against the back wall visibly draining water with efflorescence.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	P3 - Poor	<b>Expansion Joints:</b>	P3 - Poor
<b>Comments:</b>	- Soffit has medium cracking with efflorescence around expansion joints, in fair condition across structure otherwise. - Both north and south fascias in fair condition. - All beams exhibiting a combination of 45 degree shear cracks and random shrinkage/deterioration cracks over bearing seats. Northeast, and southeast beams also have efflorescence emerging from said cracks. Southwest beam end block disintegrating likely to due to shrinkage/freeze thaw cycles. - Beams otherwise have mild cracking throughout. - Bottom of deck in fair condition, sporadic areas have light cracking with effloresce. - Expansion joints leaking, and concrete around the		

embedded steel is likely cracked based on the efflorescence in locations below, P3. - All visible diaphragms have medium-wide cracks throughout.

**DECK**

<b>Condition:</b>	F1 - Fair	<b>Curbs:</b>	F2 - Fair
<b>Hand Rail:</b>	F2 - Fair	<b>Roadway Condition:</b>	F1 - Fair
<b>Approach Rail:</b>	F2 - Fair		
<b>Comments:</b>	- Curbs in fair condition, F2. - Approach/exit rails in fair condition, connected to end blocks complete with hazard markers. - Asphalt has many potholes along the centerline and cracked over approaches, F1. - Structural handrail in fair condition, F2.		

**HYDROLOGY**

<b>Water Velocity:</b>	Slow m/s	<b>Ice Problem:</b>	N - No Problem
<b>Water Depth:</b>	Deep 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>	2060
<b>Antic. Rehab. Cost:</b>	\$100,000	<b>Replacement Cost:</b>	\$2,000,000
<b>Recommendations:</b>	- Beam work TBD. - Replace expansion joints and repair disintegration on southwest beam over bearing area.		

**OBSERVATIONS**

<b>Overall Condition:</b>	F2 - Fair	<b>Requires Further Inspection:</b>	Yes
<b>Additional Observations:</b>	- Hazards, mild traffic, and slopes.		

**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**