

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B04282021-4	
Date: 4/20/2021	Inspected By: Butler	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	TCH-029 - MIDDLE BROOK BRIDGE (SQUARE POND)		
Route:	1	Overall Length:	28 m
Year Built:	1952	Est: Yes	Overall Width: 13.4 m
Year Last Rehab.:	1990	Est: No	Roadway Width: 12 m
Region:	CENTRAL EAST	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4 m
Type of Structure:	13 - Other	Max Depth of N.W.L.:	0.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters		
Type of Handrail:	01 - Aluminum Rail	Spans:	
Roadway Surface:	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
Alignment Vertical:	01 - Good	1	26
Alignment Horizontal:	01 - Good	2	0
Restrictions:	No	3	0
		<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	I - Inapplicable
		Bearing Seat:	I - Inapplicable
Comments:	Concrete abutments and wing walls. Abutment two has concrete erosion at the normal water line. Wing walls have light cracking, spalling and exposed rebar. Structure widened left and right for TCH widening. Gabion retaining walls all four corners. Gabion wall at abutment one left side is gone, gabion abutment 2 right side has no wire remaining in the basket below the high water line. There is a longitudinal crack along the middle of the entire structure at the construction joint, there are 3 other small cracks running parallel to this one. Abutment 2 right has scour. Abutment 2 left has concrete erosion/scour between the footing and abutment 150mm to 200mm deep, 3000mm long and 60mm wide.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	I - Inapplicable
Comments:	Arch rigid frame. Soffit in good condition, cracking along fascia.		

DECK			
Condition:	F2 - Fair	Curbs:	F2 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	F2 - Fair
Approach Rail:	P3 - Poor		
Comments:	Asphalt wearing surface resurfaced in 2016 has ponding over Abutment 2 left. Aluminum 4 rail system with concrete end blocks. Both right side end blocks have cracking, disintegration and exposed rebar. Left side end blocks have light cracking. Approach guide rail has no end shoes at end blocks and is not structural rail.		
HYDROLOGY			
Water Velocity:	1.5 m/s	Ice Problem:	N - No Problem
Water Depth:	.5 m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:			
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	
Antic. Rehab. Cost:	\$65000	Replacement Cost:	\$0
Recommendations:	Rehabilitate deck. Repair or replace right side end blocks. Replace all gabion walls. Replace guide rail with structural rail and end shoes. Repair scour below footing and abutment.		
OBSERVATIONS			
Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:			
LEGEND:			
Condition Definitions:		Problem Definitions:	
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.		Category Definitions:
			Maint. - Maintenance.
			Eng. - Engineering.
			Office - Bridge Office.
PHOTO GUIDELINES:			
Inspection Photos:			
Please provide photos using guidelines below:			
<ul style="list-style-type: none"> ● 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			