

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B07262021-4	
Date: 7/23/2021	Inspected By: Michael Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	1-274 - RATTLING BROOK BRIDGE - MT. CARMEL		
Route:	93	Overall Length:	8 m
Year Built:	1960	Est: Yes	Overall Width: 10.3 m
Year Last Rehab.:	1975	Est: Yes	Roadway Width: 6.3 m
Region:	AVALON PENINSULA		Sidewalk Width: 0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1.4 m
Type of Structure:	03 - Reinforced Concrete Beam/Slab		Max Depth of N.W.L.: 0.3 m
Purpose of Structure:	04 - Over Non-Navigable Waters		Spans:
Type of Handrail:	02 - Concrete Rail		
Roadway Surface:	02 - Asphalt	Span No.:	Length
Alignment Vertical:	01 - Good	Span No.:	Length
Alignment Horizontal:	01 - Good	Span No.:	Length
Restrictions:	No		
BRIDGE PHOTOS			
SUBSTRUCTURE			
Condition:	P3 - Poor	Bearings:	I - Inapplicable
		Bearing Seat:	P3 - Poor
Comments:	- Mild concrete erosion at footing connection. - Abutments have heavy map cracking leading to disintegration. - Bearing seat is used to simple support of the deck atop the frame legs. Joint leaking and showing heavy efflorescent build up on the upstream frame leg face, P3. Downstream joint in fair condition with no evidence of efflorescence.		
SUPERSTRUCTURE			
Condition:	P1 - Poor	Expansion Joints:	I - Inapplicable
Comments:	- Severe cracking and stalactite efflorescence build up on upstream half of structure, indicating many leaking cracks and deterioration of the deck (P1).		
DECK			
Condition:	P3 - Poor	Curbs:	I - Inapplicable
Hand Rail:	P3 - Poor	Roadway Condition:	P3 - Poor
Approach Rail:	P3 - Poor		
Comments:	- Upstream fascia has heavy deterioration, showing river rock aggregates. Embedded beams visible on upstream face with total loss of encasement in some locations. Downstream side of structure in fair condition (F1). - Original concrete rails have been replaced with modern post and guiderail which are worn and need replacement. - Road gravels placed atop structure and then paved over, helping to trap moisture and road salts. - Asphalt wearing surface deteriorating with map cracking throughout.		

HYDROLOGY			
Water Velocity:	medium m/s	Ice Problem:	N - No Problem
Water Depth:	0.3 m	Scour Problem:	P - Possible Problem
Waterway:	02 - InAdequate	Debris Problem:	N - No Problem
Comments:	- Suspect water gets to the top of the structure during high flow events. - Restrained on new design by approach geometry & adjacent properties.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	2023
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$1000000
Recommendations:	Replace Structure		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	Yes
Additional Observations:	Bridge on road bend, not great visibility for traffic. Low traffic speeds observed. Were able to see under all 4 corners. hazards: traffic, slipping, loose rock.		
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 F, P, I, or C ● Any evidence of known ice, scour, debris, waterway problems 			
INSPECTION PHOTOS			

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.