

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12142021-3	
Date: 10/31/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-033 - MOUNTAIN BROOK BRIDGE		
Route:	500	Overall Length:	31.4 m
Year Built:	1989	Est: No	Overall Width: 12.3 m
Year Last Rehab.:		Est: No	Roadway Width: 11.3 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4.2 m
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	1.2 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	01 - Concrete	1	16
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	<u>Span No.:</u>	<u>Length</u>
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	G - Good	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- Abutments, and wingwalls in good condition. - Bearing seats and bearings too high for inspection. Bearing seat edges have no spalls or cracks. Assumed to be in fair condition.		
SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	F1 - Fair
Comments:	- Expansion joints full of gravel. East abutment has rust stains from the bearing seat down over the face. Suspect leaking seals in the east expansion joint, assumed P3. Exterior curb expansion gaps have no chaulking. - Soffit and bottom of deck concrete in good condition. - Both fascia's have a visible cold joint. - Six girders have light to moderate surface corrosion. All braces are painted with small areas of flaking paint and light corrosion, G.		
DECK			

Condition:	F2 - Fair	Curbs:	F2 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	P3 - Poor
Approach Rail:	F1 - Fair		
Comments:	- Approach/exit rails have some damaged rail sections with several split posts on the southeast exit, rails are connected to end blocks, complete with hazard markers, and does not have collision dampening posts prior to end blocks. - End blocks have mild map cracking. - Asphalt in poor condition on west approach with numerous humps/bumps, P3. Joint with both approach slabs opening and foundering. No asphalt on deck or approach slabs. - Deck concrete in fair condition, aggregate colors showing throughout. Just east of the west expansion joint, concrete has numerous small surface delaminations, exposing rebar in one location. Approach slab joint with main deck opening on both sides of the bridge. - Curbs in fair condition. - Structure handrail has minor scrapes and dents throughout, F2.		

HYDROLOGY

Water Velocity:	1.5 m/s	Ice Problem:	N - No Problem
Water Depth:	Deep m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Both upstream footing corners have significant rip-rap migration. Still has good positioning. Footings poured on bedrock.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2024	Replacement Year:	2050
Antic. Rehab. Cost:	\$40,000	Replacement Cost:	\$1,800,000
Recommendations:	- Re-grade west approach subgrade and repave. Seal joint between asphalt and approach slab. Seal joints between approach slab and deck. Install collision dampening pots prior to end blocks. Install chaulking on exterior curb expansion gaps. Clean expansion joint seals and check for torn seals (east suspected for leakage).		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Hazards mild traffic, slopes and traversing rip-rap.		

LEGEND:

Condition Definitions:			Problem Definitions:	Category Definitions:
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