


	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	<b>BRIDGE INSPECTION REPORT</b> <b>B12102021-5</b>	
<b>Date:</b> 10/30/2021	<b>Inspected By:</b> Mike Button	<b>Category:</b> Office - Bridge Office	
<b>BRIDGE INFORMATION</b>			
<b>Site:</b>	5-043 - CACHE RIVER BRIDGE		
<b>Route:</b>	500	<b>Overall Length:</b>	51.8 m
<b>Year Built:</b>	1992	<b>Est: No</b>	<b>Overall Width:</b> 11.8 m
<b>Year Last Rehab.:</b>		<b>Est: No</b>	<b>Roadway Width:</b> 10.8 m
<b>Region:</b>	LABRADOR	<b>Sidewalk Width:</b>	0 m
<b>Jurisdiction:</b>	Provincial	<b>Clearance to R.D. or N.W.L.:</b>	3.6 m
<b>Type of Structure:</b>	08 - Steel Bridge	<b>Max Depth of N.W.L.:</b>	0.9 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>	01 - Concrete	<u>Span No.:</u>	<u>Length</u>
<b>Alignment Vertical:</b>	01 - Good	1	40
<b>Alignment Horizontal:</b>	01 - Good	2	0
<b>Restrictions:</b>	No	3	0
		4	0
		5	0
		6	0
<b>BRIDGE PHOTOS</b>			
<div style="display: flex; justify-content: space-around;">    </div>			
<b>SUBSTRUCTURE</b>			
<b>Condition:</b>	G - Good	<b>Bearings:</b>	G - Good
		<b>Bearing Seat:</b>	G - Good
<b>Comments:</b>	- Abutments, wingwalls, bearings and bearing seats in good condition.		
<b>SUPERSTRUCTURE</b>			
<b>Condition:</b>	G - Good	<b>Expansion Joints:</b>	F1 - Fair
<b>Comments:</b>	- Expansion joint seals possibly split and gap is full of gravel. - Exterior curb/soffit and bottom of deck concrete in good condition. - Six girders and their braces have light to moderate surface corrosion. Bearing end of girders and braces painted with small areas of flaking paint and light corrosion, G.		
<b>DECK</b>			
<b>Condition:</b>	G - Good	<b>Curbs:</b>	G - Good

<b>Hand Rail:</b>	F1 - Fair	<b>Roadway Condition:</b>	F1 - Fair
<b>Approach Rail:</b>	F1 - Fair		
<b>Comments:</b>	- Approach/exit rails have some damage rail sections with some damaged/split posts, all bolts missing (never drilled) to connect rails to end blocks, all hazard markers damaged or missing, and have collision dampening posts. - End blocks in fair condition with light map cracking. - Asphalt in fair condition overall, moderate cracking/gap at the expansion joint termination, and a wide transverse crack at the entrance to each approach slab. No asphalt over structure. - Deck concrete in good condition with aggregate colors exposed throughout. No deck drains. - Curbs in good condition, chaulking starting to wear. - Structure handrail has scrapes and dents throughout, F1. One post severely twisted and bent, separated from the rail, P3.		

**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>	- Abutment footings out of water. Fair rip-rap placement along footings with some loss into the channel on the northeast corner.		

**REPLACEMENT/REHABILITATION**

<b>Next Rehab. Date:</b>	2024	<b>Replacement Year:</b>	2060
<b>Antic. Rehab. Cost:</b>	\$15,000	<b>Replacement Cost:</b>	\$1,800,000
<b>Recommendations:</b>	- 2022 - Replace hazard markers. Clean expansion joint and replace seals if required. Seal transverse cracks at the entrance to each approach slab. - 2024 - Connect guide rail to end blocks. Rail has been extended and end block has the blackout to accommodate but was never secured in place. Replace one handrail post. Replace curb chaulking.		

**OBSERVATIONS**

<b>Overall Condition:</b>	G - Good	<b>Requires Further Inspection:</b>	No
<b>Additional Observations:</b>	- Hazards, fast moving traffic, and moderate steep slopes.		

**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**