



GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

**BRIDGE INSPECTION REPORT
B12132021-4**

Date: 10/30/2021 Inspected By: Mike Button Category: Office - Bridge Office

BRIDGE INFORMATION

Site:	5-005 - EAST METCHIN RIVER BRIDGE				
Route:	500	Overall Length:	39.5 m		
Year Built:	1993	Est: No	Overall Width:	11.8 m	
Year Last Rehab.:		Est: No	Roadway Width:	10.8 m	
Region:	LABRADOR	Sidewalk Width:	0 m		
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	4.6 m		
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	3.1 m		
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:			
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	01 - Concrete	1	27	4	0
Alignment Vertical:	01 - Good	2	0	5	0
Alignment Horizontal:	01 - Good	3	0	6	0
Restrictions:	No				

BRIDGE PHOTOS



SUBSTRUCTURE

Condition:	G - Good	Bearings:	G - Good
		Bearing Seat:	G - Good
Comments:	- Abutments, wingwalls, bearings and bearing seats in good condition. Abutment footings poured on bedrock.		

SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	F2 - Fair
Comments:	- Expansion joint seals 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.		
DECK			
Condition:	F2 - Fair	Curbs:	F2 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	P3 - Poor
Approach Rail:	P3 - Poor		
Comments:	- Deck concrete in fair condition, F2, aggregate colors showing throughout. Moderate to severe map cracking on west approach slab, P3. No deck drains. Gravel build up against curbs. - Approach/exit rails have some damaged rail sections with multiple damaged/split/demolished posts, P3 northwest, are connected to end blocks but have several bolts missing, west hazard markers are missing, east hazard markers are in place, and have collision dampening posts. - End blocks have mild map cracking. - Asphalt in fair condition on the approach to structure. Wide transverse cracks in asphalt at the joint to the east approach slab. Wide transverse cracks in asphalt ~1m to the west of the west approach slab entrance. Asphalt to approach slab joint opened up on both sides, P3. No asphalt over structure or west approach slab. - Curbs in fair condition with minor spalls to reinforcement on structure corners. - Structure handrail has minor scrapes and dents throughout, F2.		
HYDROLOGY			
Water Velocity:	1 m/s	Ice Problem:	N - No Problem
Water Depth:	0.5 m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Abutment footings poured on bedrock. Rip-rap side slope protection in good position. Deep water hole on southwest corner of west footing. Possible undermining here.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2024	Replacement Year:	2060
Antic. Rehab. Cost:	\$15,000	Replacement Cost:	\$0
Recommendations:	- 2022 - Replace northeast exit guide rail posts. Clean expansion joint seals. - 2024 - Fill asphalt cracks at joints to approach slab and to deck concrete. Fill concrete cracks on the west approach slab.		
OBSERVATIONS			
Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Hazards mild traffic, slopes and traversing rip-rap.		
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, P4, P, or C ● Any evidence of known ice, scour, debris, waterway problems 			
INSPECTION PHOTOS			