


	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12132021-5	
Date: 10/30/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-004 - WEST METCHIN RIVER BRIDGE		
Route:	500	Overall Length:	38.3 m
Year Built:	1996	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.:	3.4 m
Type of Structure:	08 - Steel Bridge	Max Depth of N.W.L.:	1.6 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	Span No.:	Length
Roadway Surface:	01 - Concrete	1	30
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	Span No.:	Length
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
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SUBSTRUCTURE			
Condition:	G - Good	Bearings:	G - Good
		Bearing Seat:	G - Good
Comments:	- Abutments, wingwalls and bearing pads, in good condition. - Northeast bearing seat not level and gaps visible under the bearing pad. Bearing seats otherwise in good condition.		
SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	P3 - Poor
Comments:	- Expansion joint seals broken and pushed through on the southeast side, and tops of all expansion joint embedded steel exposed throughout. - 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 in general, G. However, under the southeast broken expansion joint, paint is about 50-75% removed on the girders and braces with moderate to severe corrosion.		
DECK			

Condition:	G - Good	Curbs:	F2 - Fair
Hand Rail:	G - Good	Roadway Condition:	F2 - Fair
Approach Rail:	P3 - Poor		
Comments:	- Approach/exit rails have some damaged rail sections with several damaged/split/demolished posts, connected to end blocks, southeast and northwest hazard markers missing, southwest northeast hazard markers in place, and has collision dampening posts prior to end blocks. - End blocks have mild map cracking. - Asphalt in fair condition on the approach to the structure, wide transverse cracks at the joint between the approach slab and deck concrete. No asphalt over structure or approach slabs. - Deck concrete in good condition. Sand curb up against curbs. No deck drains, light ice buildup against curbs. West approach slab has a wide diagonal crack propagating from the expansion joint on the northwest corner. - Curbs in good condition with very light map cracking. Chaulking spilt on curb exteriors and causing rust staining on abutments below. - Structure handrail has a 1m rip in the north bottom rail, otherwise in good condition.		

HYDROLOGY

Water Velocity:	1 m/s	Ice Problem:	N - No Problem
Water Depth:	1 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Structure has good rip-rap positioning on both footings.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2022	Replacement Year:	2060
Antic. Rehab. Cost:	\$30,000	Replacement Cost:	\$1,800,000
Recommendations:	- 2022 - Replace bridge name sign. Replace missing hazard markers. Replace east expansion joint seal to prevent further corrosion to girders/braces below. - 2024 - Replace north bottom side handrail. Replace exterior curb chaulking. Fill approach slab cracks. Replace some guiderail posts.		

OBSERVATIONS

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

LEGEND:

Condition Definitions:

- 1 - *Good - [discontinued code].
- 2 - *Fair - [discontinued code].
- 3 - *Poor - [discontinued code].
- 4 - *Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

Problem Definitions:

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

Category Definitions:

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

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