

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B12072021-3	
Date: 10/28/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	5-067 - SOUTH FEEDER BRIDGE		
Route:	500	Overall Length:	49.5 m
Year Built:	2004	Est: No	Overall Width: 12.3 m
Year Last Rehab.:		Est: No	Roadway Width: 11.1 m
Region:	LABRADOR	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	3.7 m
Type of Structure:	05 - Pre-stressed Concrete Slab	Max Depth of N.W.L.:	2 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	4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- Bearings and bearing seats too high for inspection but assumed to be in fair condition. Abutments have mild waterline erosion to the concrete surface, no scour. - Southeast wingwall has four small narrow vertical cracks with efflorescence directly under the curb spaces a meter or so apart.		
SUPERSTRUCTURE			
Condition:	G - Good	Expansion Joints:	F2 - Fair
Comments:	- Expansion joint seals full of gravel, no visible leakage below. Tops of all expansion embedded steel exposed with light corrosion. - Six girders have moderate corrosion to all surfaces and no missing bolts to full moment connections/splices viewing from abutment corners. Bottom of deck concrete in excellent condition. Superstructure G.		
DECK			

Condition:	F2 - Fair	Curbs:	G - Good
Hand Rail:	F2 - Fair	Roadway Condition:	G - Good
Approach Rail:	F2 - Fair		
Comments:	- Approach/exit rails in fair condition, northeast hazard marker is missing remainder are in place, connected to end blocks and do not have collision dampening posts prior to end blocks. - End blocks have spalls along the top sloped section, likely flyer damage. - Crack between asphalt approach and concrete deck recently sealed with tar. Concrete deck is not paved and in fair condition with exposed aggregate sporadically throughout. - Curbs in good condition. - Handrails have minor dents/scrapes from the flyer.		

HYDROLOGY

Water Velocity:	0.3 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:	- Recommend rip-rap placement on abutment waterside face.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2030	Replacement Year:	2070
Antic. Rehab. Cost:	\$30,000	Replacement Cost:	\$1,800,000
Recommendations:	- Install deck drains. Recommend rip-rap placement on abutment waterside face. Clean expansion joint seals (2022). Install northeast hazard marker (2022).		

OBSERVATIONS

Overall Condition:	G - Good	Requires Further Inspection:	No
Additional Observations:	- Hazards steep slopes, and light traffic. No access under the bridge. Bridge in good condition.		

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