

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B11122021-1	
Date: 10/19/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	1-083 - WESTERN BAY BROOK BRIDGE NO.1		
Route:		Overall Length:	25.8 m
Year Built:	1970	Est: No	Overall Width: 10.8 m
Year Last Rehab.:		Est: No	Roadway Width: 6.3 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	6 m
Type of Structure:	02 - Double Tee	Max Depth of N.W.L.:	1 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	04 - Steel Rail	Span No.:	Length
Roadway Surface:	02 - Asphalt	Span No.:	Length
Alignment Vertical:	01 - Good	1	10.6
Alignment Horizontal:	02 - Adequate	2	0
Restrictions:	No	3	0
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	U - Uninspectable
		Bearing Seat:	F1 - Fair
Comments:	- South abutment has light vertical cracks with efflorescence on the south exterior corners. Light vertical cracking evident throughout the abutment face. Water slamming into the southwest corner of the south footing, suspect scour in this location. Area needs rip-rap. - North abutment has light scour and concrete disintegration on the northeast corner of the structure. Area is currently out of water. - All wingwalls in fair condition, northeast wingwall has mild map cracking. - Bearing seats showing no signs of spalling or leakage.		
SUPERSTRUCTURE			
Condition:	F1 - Fair	Expansion Joints:	F1 - Fair
Comments:	- South side of bridge is fixed, and the north is the expansion end. - No visible leakage on abutment faces, asphalt is cracked above on both the fixed and expansion ends, F1. - Double tees in fair condition, stirrups exposed on all double tees due to low cover. In some locations, rebar is also exposed on the bottom of the double		

tee deck pre cast deck sections, F1. No leakage seen between pre-cast sections, indicating waterproofing and deck concrete above still in good condition.			
DECK			
Condition:	F1 - Fair	Curbs:	F1 - Fair
Hand Rail:	P3 - Poor	Roadway Condition:	F1 - Fair
Approach Rail:	F1 - Fair		
Comments:	- Asphalt has cracks over approaches, F1. - Guiderail has some split posts, rails are not connected to end blocks and all hazard markers are in place. No additional energy dampening posts at end blocks, F1. - Interior curbs have minor cracks throughout, especially around expansion joints, F1. - Exterior curb/fascia in also in fair condition. No chaulking over curb joint to structure. The east side has mild cracking with efflorescence near mid span. - Handrails have medium to severe corrosion throughout some minor denting/bends. Ends of rails are encased in end block concrete with rusty water slurry leaking from the encasement connection. Some rails are corroded through in this location P3. Some posts have also corroded through near the bottoms, P3.		
HYDROLOGY			
Water Velocity:	0.4 m/s	Ice Problem:	N - No Problem
Water Depth:	0.8 m	Scour Problem:	P - Possible Problem
Waterway:	02 - InAdequate	Debris Problem:	N - No Problem
Comments:	- Water is slamming into southwest corner of the south footing, scour is suspected. Structure is misaligned to river and seems narrow for the flow rate.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2024	Replacement Year:	2035
Antic. Rehab. Cost:	\$30,000	Replacement Cost:	\$1,300,000
Recommendations:	- Replace handrail and pour back areas where handrails are to be removed from end blocks. Place rip-rap on southwest corner, river slamming into area. Remove road sand/gravel from curbs. Reseal/chaulk curbs over the bearing seats.		
OBSERVATIONS			
Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Hazards, medium traffic and steep slopes.		

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2024.