

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B03042025-1	
Date: 2/19/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-124 - NORTHEAST RIVER BRIDGE - R100			
SUBSTRUCTURE					
Condition:	F1 - Fair	Bearings:	U - Uninspectable		
		Bearing Seat:	P3 - Poor		
Comments:	- Both abutments, and pier have extensions built vertically and transversely. - All wingwalls have localized hairline cracks, F1. - Both abutment faces have mild efflorescence through the horizontal extension construction joint. The west abutment's south side has a small spall near the vertical/horizontal extension joints, P3. - Abutment exterior longitudinal faces, near the expansion gap, has hairline cracking with light efflorescence, F1. - Northeast abutment corner/double tee curtain wall/bearing seat area has a large wedge delamination with potential to spall and undermine the double tee. Perimeter of the delamination has severe disintegration. Monitor on future inspections, P3. - The original and extension pier concrete has isolated rust staining throughout with isolated wide cracks. Pier bearing seat perimeter has numerous small spalls undermining double tees. Plenty of bearing area remaining, P3. - The upstream pier bearing seat under the creep block/curtain wall has a small spall likely caused from the expansion joint leakage above. - Pier nose has a slender area of scour between the pier nose extension concrete and river bedrock. Concrete bond to bedrock during original construction likely poor, P3.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	P - Poor		
Comments:	- All expansion joints leaking, P. - Expansion joint/deck detail combined with a leaking joint over the pier has caused moderate to severe cracking/spalling/delamination to double tee curtain wall/creep block & vertical face of the curb, P3. - Double tees and pre-cast deck soffit have numerous shallow spalls due to low cover, P3 to F1. - Longitudinal joints between double tee precast sections visibly leaching efflorescent material near the near west abutment only, indicating the cast in place deck is cracked and no longer watertight, P1 to P3. F1 remainder. - Precast deck soffit has isolated longitudinal cracks with moderate efflorescent leachate near the west abutment, P3. - Double tees and deck soffit areas not mentioned above, F1.				
DECK					
Condition:	P3 - Poor	Curbs:	P3 - Poor		
Hand Rail:	P3 - Poor	Roadway Condition:	U - Uninspectable		
Approach Rail:	I - Inapplicable				
Comments:	*Assumed condition of deck top (covered in snow/gravels) based on condition of deck soffit below. - No asphalt on deck nor approaches. All surfaces covered in snow during inspection and not inspectable. Roadway surface did provide a smooth ride. - Structure rail is 3 rail aluminum system. Rail has various punctures, dents and scrapes on most ends. All end caps missing, P3. - No end blocks, hazard markers or approach/exit guiderail. - Curb caulking cracked in most locations. - Both exterior curb/fascias around the pier expansion joint have severe disintegration/spalling/delaminations with wide cracks, P3. Remainder of both exterior curbs/deck fascias in fair condition, F1.				
HYDROLOGY					
Water Velocity:	< 1 m/s	Ice Problem:	P - Possible Problem		
Water Depth:	< 1 m	Scour Problem:	K - Known Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		

Comments:	- No riprap around pier nose or on any abutment corners upstream. Downstream riprap and gabions in good condition and have good placement.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	
Antic. Rehab. Cost:	\$	Replacement Cost:	\$
Recommendations:	- Install guiderail structures on all four corners complete with hazard markers. Approach ditching high. High wingwalls near the road shoulder presenting fall hazard. - Replace curbs, & structure rails. - Caulk all expansion gaps. - Repair pier nose and west abutment north bearing area. - Replace expansion joints with asphaltic plug joints. - Complete deck repairs + waterproof. - Place hydraulic riprap as required.		
OBSERVATIONS			
Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	- Advancement of west abutment area deck soffit cracking/efflorescence. Continue to monitor west abutment north bearing area on future inspections.		

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2026.