

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B02202025-3	
Date: 2/13/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-161 - MALL BAY BRIDGE - R			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	I - Inapplicable		
		Bearing Seat:	I - Inapplicable		
Comments:	- Both the upstream and downstream headwalls have severe medium width cracks with moderate efflorescence, P3. - East frame leg has a local spall along a construction joint around the highwater mark, P3. - Frame leg faces have light concrete erosion between the high and low water marks, F1. - No bearings or bearing seat. Structure is a rigid frame.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	I - Inapplicable		
Comments:	- Deck soffit has 6 or 7 different locations somewhat regularly spaced near each frame leg with medium width longitudinal cracks with moderate to severe efflorescence, P3. - Deck soffit near mid span has hairline to narrow map cracks throughout with isolated pockets of light efflorescence, P3. - No expansion joints. Structure is a rigid frame.				
DECK					
Condition:	P3 - Poor	Curbs:	I - Inapplicable		
Hand Rail:	P3 - Poor	Roadway Condition:	F2 - Fair		
Approach Rail:	P3 - Poor				
Comments:	*Assumed condition of deck top (covered in fill) based on condition of deck soffit below. - No curbs. - Guiderail continues over the structure to form the structure rail as well. All guide rail has various dents and scrapes throughout. All posts heavily split and likely original, P3. - Hazard markers not applicable in this area given the rail setup. - No asphalt. Gravel road. Roadway in fair condition at the time of inspection.				
HYDROLOGY					
Water Velocity:	> 1 m/s	Ice Problem:	N - No Problem		
Water Depth:	> 3 m	Scour Problem:	P - Possible Problem		
Waterway:	02 - InAdequate	Debris Problem:	N - No Problem		
Comments:	- Fast flow water with vortexes along east frame leg. Potential for scour. - No scour on west frame leg. - River has poor alignment with the structure. Flow making close to a 90° turn at inlet.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:	2028	Replacement Year:	2050		
Antic. Rehab. Cost:	\$400,000	Replacement Cost:	\$2,500,000		
Recommendations:	- Diving inspection recommended on east frame leg. - Remove all fill/vegetation atop structure, complete deck repairs and waterproof. - Replace all guiderail. - Inject cracks on deck soffit. - Concrete repairs to headwalls, frame legs & deck soffit. - Structure life estimate contingent on a rehabilitation being completed within 5 years.				
OBSERVATIONS					
Overall Condition:	P3 - Poor	Requires Further Inspection:	No		
Additional Observations:					