

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B02242025-2	
Date: 2/19/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-278 - BEAVER FALLS BROOK BRIDGE - R100-10			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	P3 - Poor		
		Bearing Seat:	P3 - Poor		
Comments:	SE wingwall has mild horizontal cracking with efflorescence, F1. The SE side and corner of the abutment has mild spalling under the creep block with mild cracking with efflorescence throughout, F1. SW wingwall has severe map cracking with efflorescence and a large wide vertical crack appearing to have split the wingwall in half, P3. The construction joint with the abutment has a small corner spall near the top. The south abutment face is heavily leaking efflorescence through all extension construction joints and from the bearing seat above. Medium vertical cracking also exists throughout the face, P3. NE wingwall has severe cracking with efflorescence throughout with severe disintegration to the top of the wingwall, P3. The NE side and corner of the abutment has medium spalling undermining the creep block with visible leakage from above, P3. NW wingwall has very severe concrete disintegration and extreme map cracking with efflorescence on the remaining concrete, P1. The NW side and corner of the abutment has efflorescent deposits along the face but is in fair condition. The north abutment face has wide horizontal cracking with severe efflorescence throughout the face, P3. Both faces of the pier have wide arch like cracking with medium efflorescence throughout. Upstream and downstream extension joints are opening. The upstream corbel extension has severe disintegration throughout the nose face. The downstream corbel extension has severe spalling throughout the tail face with moderate to severe map cracking and disintegration with efflorescence. The bearing seat has various spalls along the exterior edge. Whole superstructure is in poor condition, P3. Severe erosion along NW abutment face. Extensive spalling along pier bearing seat.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	P3 - Poor		
Comments:	Hundreds of light spalls exposing stirrups in double tee beams due to low cover. Medium spall in double tee beam upstream south span adjacent to pier has prestressing strand visible P3. Medium horizontal cracks in two locations on downstream interior beam south span. No visible leakage between precast beam joints, F1. All expansion joints leaking, P3. Medium spalling in soffit at deck drain locations.				
DECK					
Condition:	F1 - Fair	Curbs:	U - Uninspectable		
Hand Rail:	P1 - Poor	Roadway Condition:	U - Uninspectable		
Approach Rail:	I - Inapplicable				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. Unable to inspect deck, approaches, or curbs due to snow accumulation. Very severe spalling and disintegration with exposed reinforcement to concrete handrail posts and ends of horizontal rail connection to post. Original concrete handrail has several spalls and heavy cracking to both the post and rail, P1. Due to the disintegration of the concrete handrails, numerous horizontal members are not secure to the post and are resting on deteriorated concrete. During the inspection the upstream handrail was nudged causing two sections of rail to fall into the river. No approach/exit guiderail or hazard markers. End blocks in fair condition with narrow pattern cracking and medium spalls. Both the upstream and downstream fascia are in fair condition with isolated locations of cracking and efflorescence.				
HYDROLOGY					

Water Velocity:	0 m/s	Ice Problem:	N - No Problem
Water Depth:	0 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	Structure does not contain rip rap at corners.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:		Replacement Year:	2026
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$0
Recommendations:	Substructure deterioration is extensive and not repairable. Recommend replacing the structure. Handrail should be fixed for safety reasons.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	Yes
Additional Observations:	Additional double tee precast beam remains at NW embankment protruding into river. Bridge office should consider further inspection of damaged/missing handrail as it has become a falling hazard.		

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