

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B01282025-3	
Date: 1/23/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-314 - PENSTOCK BRIDGE, SEAL COVE - R			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	I - Inapplicable		
		Bearing Seat:	I - Inapplicable		
Comments:	- East and west structure extension frame legs have numerous areas of honeycombs from original construction. - East structure extension's south frame leg has a wide crack at the top at the joint to the arch structure. - Center arch span (likely original structure prior to extensions) has moderate to severe concrete erosion to the surface. South frame leg construction joint to the footing has severe concrete erosion. North frame leg has a local area of very severe erosion to the concrete surface. Area assumed to be a large pocket of aggregate and boulders during original construction that has eroded over time.				
SUPERSTRUCTURE					
Condition:	P1 - Poor	Expansion Joints:	I - Inapplicable		
Comments:	- East & west structure extension deck soffit's have numerous areas of honeycombs from original construction. Deck soffit adjacent to extension joints are wet throughout indicating water ingress from above, P3. - Center span arch east and west headwalls have large spalls and areas of very severe disintegration exposing reinforcement. - Center span arch deck soffit, adjacent to the headwalls on both sides have moderate map cracking with efflorescent deposits and areas of disintegration, P3. - Remaining area on center span arch (away from extension joints) has cracking throughout but remains in fair condition, F1.				
DECK					
Condition:	P1 - Poor	Curbs:	P - Poor		
Hand Rail:	P - Poor	Roadway Condition:	F2 - Fair		
Approach Rail:	P3 - Poor				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. P1 at structure extensions joints. P3 to F1 remainder. - Asphalt longitudinal joint starting to open. Asphalt in good condition overall, F1. - Guiderail not of type "Guiderail Structures". Guiderail appears low in most areas. Guiderail on southeast corner extends on a steep angle up the service road. Spacing not likely to stop an impact. - For rail aluminum system mounted to bridge curbs. Railing/posts have been impacted on the northeast corner and has caused the curb to spall/fail, P. Railing F1 remainder.				
HYDROLOGY					
Water Velocity:	n/a m/s	Ice Problem:	NA - Not Applicable		
Water Depth:	n/a m	Scour Problem:	NA - Not Applicable		
Waterway:	03 - Not Applicable	Debris Problem:	NA - Not Applicable		
Comments:	- Gabions in place on some structure corners. Corners without gabions have erosion behind the back of the frame leg up to the roadway. - Penstock structure, no active flowing water beneath. - Given the erosion to the concrete frame legs, it is assumed that water must have flown under this bridge prior to the penstock being installed.				
REPLACEMENT/REHABILITATION					
Next Rehab. Date:		Replacement Year:		2030	

Antic. Rehab. Cost:	\$N/A	Replacement Cost:	\$2,500,000
Recommendations:	- Replace structure		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- Replace structure - Sewer line attached to the structure on the west side.		

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