

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B03042025-3	
Date: 3/5/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-005 - ST. BRIDES BRIDGE - R100			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	I - Inapplicable		
		Bearing Seat:	I - Inapplicable		
Comments:	- Structure built in two rigid frame halves, extending upstream and downstream. - West/downstream headwall's north side has light isolated hairline cracks near the structure opening with light efflorescence, F1. The south side has moderate map cracking with light to moderate efflorescence, F1 to P3. - East/upstream headwall's north side has hairline cracks with moderate efflorescence throughout, F1 to P3. The south side has moderate to severe map cracking with widespread disintegration and severe efflorescence with rust leachate, P3. - Both frame legs have moderate erosion to waterline concrete. - South frame leg, downstream extension, at the 1/3 & 2/3 points, have a single crack each with moderate efflorescence, F1. - South frame leg, downstream extension, has a 45° cold joint near the structure extension joint extending approximately 5m downstream. - South frame leg, upstream extension, has a jagged cold joint over the full longitudinal length of the structure. - North frame leg, downstream extension, has a very jagged cold joint over the full longitudinal length of the structure. - North frame leg, upstream extension, has a wide crack at the transition to the deck. - Structure extension vertical joint between frame legs, on both sides, are visibly leaking forming ice. The first meter of concrete either side of the joints has narrow cracks with light efflorescence. - Overall, P3 Headwalls, leaking joint and north upstream extension crack. F1 remainder.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	I - Inapplicable		
Comments:	- Downstream half deck soffit, at the 1/3 point, has a single crack with moderate efflorescent leachate, F1. - Deck soffit extension joint between both structures, visibly leaking forming ice. Local area of honeycombs roughly 1m long by 0.5m wide. The first half meter of concrete either side of the joint has narrow cracks with light efflorescence. - Downstream extension deck soffit has isolated pockets of honeycombs from original construction. - Upstream extension deck soffit has two single narrow cracks with light efflorescence near the midpoint. - P3 leaking extension joint, deck soffit F1 remainder.				
DECK					
Condition:	F1 - Fair	Curbs:	I - Inapplicable		
Hand Rail:	P3 - Poor	Roadway Condition:	F1 - Fair		
Approach Rail:	P3 - Poor				
Comments:	*Assumed condition of deck top (covered in asphalt & fill) based on condition of deck soffit below. - No curbs. - Guiderail acting as both structure rail and approach/exit railing and is installed at the top of the structure's embankment. Condition will be applied to both the "Handrail" & "Approach Rail". Guiderail overgrown with Japanese knotweed. Posts tipped out of plumb and have various checks/splits with areas of rot. Rails have various dents and scrapes throughout, P3. - Asphalt surface over the structure has shallow potholes forming. Longitudinal seam opening between adjacent paving mats, F1. - No hazard markers, or end blocks.				
HYDROLOGY					
Water Velocity:	< 1 m/s	Ice Problem:	N - No Problem		
Water Depth:	~ 1 m	Scour Problem:	K - Known Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		

Comments:	- Scour repairs completed in 2011. - Local insignificant areas of scour in two locations on the north frame leg. - South frame leg has no scour on the areas inspected (roughly 36m out of 41m). The last ~5m towards the east side is too deep for inspection.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	Replacement Year:		
Antic. Rehab. Cost:	\$	Replacement Cost:	\$
Recommendations:	- Inject structure extension/control joint with multiurethane to prevent further water ingress/leaks. Complete concrete repairs around the joint after sealing. - Reface both headwalls. - Replace guiderail/structure rail. - Clear embankment vegetation (alders/Japanese knotweed) and hydroseed. - Other local concrete repairs.		
OBSERVATIONS			
Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Structure is a buried concrete rigid frame under approximately 5m of fill. - P3 extension joint leakage, headwalls, north upstream extension crack & guiderail/structure rail. Generally, F1 remainder.		

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