

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B02172025-4	
Date: 2/12/2025		Inspected By: T Upshall / M Button		Category: Eng. - Engineering	
BRIDGE INFORMATION					
Site:		1-159 - HEART'S CONTENT BRIDGE - R			
SUBSTRUCTURE					
Condition:	P3 - Poor	Bearings:	F1 - Fair		
		Bearing Seat:	F1 - Fair		
Comments:	- Western wingwalls have widespread hairline to narrow map cracks with light to moderate efflorescence, F1 to P3. - East wingwalls repaired/parged over. Area has light cracking with local efflorescence, F1. - Bearing seat perimeter has local spalls on the exterior of the keyway. South abutment keyway daylights from side to side. No caulking sealing bearing area & keyway. - Both abutments have light concrete erosion at the waterline, F1. - Strip bearing too high for inspection under the bridge. Visible exterior areas of the bearings have cracks throughout, F1 to P3.				
SUPERSTRUCTURE					
Condition:	P3 - Poor	Expansion Joints:	I - Inapplicable		
Comments:	- Longitudinal construction joint between the pre-cast and cast in place deck has opened 2-3mm and appears more like a wide crack given its geometry. No visible leachates through the joint on both sides of the structure. - Deck soffit has narrow cracks with moderate efflorescence at the midpoint towards the upstream side, P3. - Deck soffit has narrow cracks with light efflorescence at the midpoint on the downstream side where the soffit meets the fascia, F1. - Deck soffit F2 remainder with no observed defects. - Semi-integral structure, no expansion joints.				
DECK					
Condition:	P3 - Poor	Curbs:	P1 - Poor		
Hand Rail:	F2 - Fair	Roadway Condition:	P3 - Poor		
Approach Rail:	P3 - Poor				
Comments:	*Assumed condition of deck top (covered in asphalt) based on condition of deck soffit below. - Deck waterproofing assumed to be failed given the efflorescence visible on the deck soffit. - End blocks have isolated wide cracks throughout with isolated delaminations. Remainder of surface area has hairline map cracks with light efflorescence, P3. - All hazard markers in place. - Buried end impacted on southeast structure corner, P1. Remainder of guiderail in fair condition but not of type guiderail structures, F1. - Asphalt surface cracked and settled behind the ballast wall on both sides of the structure, P3. - Asphalt surface course has several potholes throughout the bridge deck. Several areas have been patched in the past, P3 to P1. - Curb tops covered in snow and not inspectable. Exterior curb on both sides has a very wide crack running the full length of the bridge in and around the double chamfer. Remaining vertical face area of the curbs have hairline cracks with efflorescence, P1.				
HYDROLOGY					
Water Velocity:	< 0.5 m/s	Ice Problem:	K - Known Problem		
Water Depth:	> 1 m	Scour Problem:	P - Possible Problem		
Waterway:	01 - Adequate	Debris Problem:	N - No Problem		
Comments:	- Area is tidal. Heavy icing on riprap from water level changes making inspections hazardous.				
REPLACEMENT/REHABILITATION					
2030		2065			

Next Rehab. Date:		Replacement Year:	
Antic. Rehab. Cost:	\$400,000	Replacement Cost:	\$3,000,000
Recommendations:	- Replace end blocks. - Upgrade to guiderail to "Guiderail Structures". - Remove asphalt & waterproofing and complete deck repairs. - Waterproof and repave structure. - Replace curbs & complete repairs to the deck soffit/fascia. - Inject longitudinal construction joint. - Repair west wingwalls. - Caulk all joints.		
OBSERVATIONS			
Overall Condition:	P3 - Poor	Requires Further Inspection:	No
Additional Observations:	- Water or sewer line attached to the east side of the structure.		

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