

		GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure		BRIDGE INSPECTION REPORT B07132022-1	
Date: 5/29/2022		Inspected By: M Button		Category: Office - Bridge Office	
BRIDGE INFORMATION					
Site:		1-125 - BLACKHEAD ROAD OVERPASS EAST - R2			
SUBSTRUCTURE					
Condition:	F1 - Fair	Bearings:	F1 - Fair		
		Bearing Seat:	F1 - Fair		
Comments:	- Substructure F1 overall with P3 areas. The north abutment has several moderate width cracks leaching rust. Isolated cracks transition into map cracking near the eastern corner. There is also a small amount of trash visible atop the bearing seat along with bird excrement and nests. The northwest ballast wall corner has severe disintegration likely caused from the gap between the east/west structures. - Some of the north abutment bearings have deformed into a trapezoidal shape, no visible cracks. Steel bearing plates embedded into the girders have severe corrosion. - Slope paving in fair condition. - The south abutment is lime green from algae build up. There is a large amount of trash visible atop the bearing seat along with bird excrement. The concrete overall appears to be in fair condition. The bearing and bearing seat are too high for inspection. - East wingwalls are in fair condition with moderate map cracking. - The pier is lime green from algae build up. There is a large amount of trash visible atop the bearing seat along with bird excrement. There are two small areas of delamination on the south face exposing reinforcement. - The pier bearings and bearing seat are too high for inspection.				
SUPERSTRUCTURE					
Condition:	F1 - Fair	Expansion Joints:	P3 - Poor		
Comments:	- Superstructure F1 overall with P3 areas. The surrounding concrete around the expansion gaps in east/west partition jersey barrier have moderate to severe spalling. The north expansion joint is leaking onto the bearing seat below. The south expansion joint is assumed to be leaking. - The girders are in fair condition overall. The east exterior girder has very small isolated areas of delaminations/spalls. Girder bearing points over the north abutment have isolated spalls and cracks on their ends. The west girder spanning between the south abutment and pier has an area of moderate spalling exposing reinforcement near the bearing seat. - Several diaphragms have areas of delamination with some spalling. - The deck soffit is in fair condition overall. The east exterior deck soffit has numerous small areas of delamination, many of the areas have spalled to reinforcement (low cover). There a full width transverse crack or construction joint leaching efflorescence near the mid-point of the deck between the pier and south abutment.				
DECK					
Condition:	F1 - Fair	Curbs:	I - Inapplicable		
Hand Rail:	F2 - Fair	Roadway Condition:	F1 - Fair		
Approach Rail:	F1 - Fair				
Comments:	- Asphalt in fair condition with light rutting. - Handrails and structure jersey barrier in fair condition, F2. Approach/exit jersey barrier has very severe cracking and delamination, P3. This will be addressed as part of the road work in a coming contract. - East approach guiderail does not have collision dampening posts prior to jersey barriers. Post spacing likely inadequate. Several posts are broken. No hazard markers. No rail on east exit. - No curbs.				
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:	- Not applicable.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2025	Replacement Year:	2045
Antic. Rehab. Cost:	\$200,000	Replacement Cost:	\$2,000,000
Recommendations:	- Bridge infested with pigeon feces. Before any rehabilitation works can be completed, the bridge will need an abatement contract. - Install pigeon protection/fencing. - Recommend to seal all vertical gaps between jersey barriers over structure. - Repair expansion gaps in east/west partition jersey barrier. - Replace both expansion joints. - Complete all concrete repairs. - Clean all bearing seats. - Replace broken guiderail posts.		
OBSERVATIONS			
Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Bridge F1 overall with P3 areas. Inspect bridge during highway cleanup. Sharp alignment on blackhead road below, use caution crossing road. Excessive pigeon feces. Lighting fixtures attached to pier caps; Utility lines attached to structure.		

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2024.