

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B09052023-2	
Date: 8/22/2023	Inspected By: Darrell Avery	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	2-164 - GEORGE'S BROOK BRIDGE #1		
Route:	230A	Overall Length:	8 m
Year Built:	1962	Est: Yes	Overall Width: 8 m
Year Last Rehab.:		Est: No	Roadway Width: 7.4 m
Region:	CENTRAL EAST	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	1 m
Type of Structure:	03 - Reinforced Concrete Beam/Slab	Max Depth of N.W.L.:	0.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	06 - None	Span No.:	Length
Roadway Surface:	02 - Asphalt	Span No.:	Length
Alignment Vertical:	01 - Good	1	4.5
Alignment Horizontal:	01 - Good	2	0
Restrictions:	No	3	0
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P1 - Poor	Bearings:	I - Inapplicable
		Bearing Seat:	I - Inapplicable
Comments:	Previous inspection - West wingwalls have medium alligator cracking with efflorescence. - Southeast wingwall's top half is totally disintegrated and roadway gravels are washing into the brook below, P1. - Northeast wingwall top quarter also total disintegrated. Remainder portion is heavily cracked with efflorescence, P1. Wingwall has an overlay joint with the north abutment (likely from construction) that is heavily eroded and spalling. - South abutment in fair condition, with the exception of the southeast corner which has mild cracking with medium efflorescence. - North abutment in fair condition, mild concrete erosion on the upstream extension footing construction joint on the northwest side. - Construction joint between the upstream extension and old structure opened up and deteriorating with spalls and efflorescent leakage on both abutment faces, P3. New inspection - abutment #2 has a large vertical crack with spalling on right side - creating a separation with wingwall. Some undermining of abut. #1 - left side footing.		
SUPERSTRUCTURE			

Condition:	P1 - Poor	Expansion Joints:	I - Inapplicable
Comments:	Previous inspection - Both fascias have med-wide horizontal cracks throughout with light efflorescence. East fascia/curb inside the structure has medium-severe efflorescent leakage between it and deck, P3. - Construction joint between the upstream extension and old structure on the bottom of deck is heavily disintegrated forming a large spall exposing severely corroded reinforcement, P1. - Old exterior curb beam, now under the structure, totally disintegrated, holes through section with near all reinforcement exposed with extreme corrosion, P3. - Bottom of deck, unless noted above, in fair condition. New inspection - section of deck underside at curb beam also severely deteriorated.		
DECK			
Condition:	P3 - Poor	Curbs:	I - Inapplicable
Hand Rail:	P1 - Poor	Roadway Condition:	F2 - Fair
Approach Rail:	P1 - Poor		
Comments:	Previous inspection - Asphalt in fair condition. - Guiderail post bolts no longer in concrete. Guiderail is now free to flex over structure span, P1. - No end blocks, curbs or hazard markers. - Approach/exit rail has minor dents and scrapes with some post tipping away from the roadway, P3. New inspection - guiderail has more severe damage/deterioration.		
HYDROLOGY			
Water Velocity:	0.3 m/s	Ice Problem:	N - No Problem
Water Depth:	0.3 m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem
Comments:	previous inspection - Southeast corner has heavy erosion from roadway to brook. Wingwall disintegrated. New inspection - upstream brook was reported to have meandered more towards road - service pole is in brook. Gravel material built up under structure.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2024	Replacement Year:	
Antic. Rehab. Cost:	\$\$75,000	Replacement Cost:	\$\$500,000
Recommendations:	Previous inspection - Replace guiderail, east wingwalls, and repair/re-seal upstream extension construction joint. Consider replacing structure with a culvert.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	Previous inspection- P1 = upstream construction joint bottom of deck, east wingwalls, and guiderail. P3 = upstream construction joint abutment faces and approach rail. F1 = remainder. - Properties on south side of structure. New inspection - Trailway bridge 50-60m down stream.		

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