

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B10082021-5	
Date: 10/5/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	TCH-023 - PORT BLANDFORD CNR OVERPASS EXTNSN		
Route:	1	Overall Length:	23 m
Year Built:	1965	Est: No	Overall Width: 21.5 m
Year Last Rehab.:		Est: No	Roadway Width: 14 m
Region:	CENTRAL EAST	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	6.9 m
Type of Structure:	04 - Rigid Frame	Max Depth of N.W.L.:	0 m
Purpose of Structure:	02 - Highway Railway Separation	Spans:	
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	10
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	F1 - Fair
		Bearing Seat:	F1 - Fair
Comments:	Extensions (North and South) - Pier caps have medium cracking throughout. - Wide-flange steel concrete encased column/piles have medium longitudinal cracks at the half-way point on each face, likely indicating no reinforcement prior to casting. - Concrete retaining structures have medium-severe alligator cracking throughout with mild efflorescence. Timber retaining structure atop the concrete wingwalls in fair condition, not tipping or failure present. Northwest wingwall has heavy cracking with efflorescence. - Bearings ok on pier caps. Original (Middle Structure) - Southwest wingwall has an erosion runoff hole. - Concrete has mild-medium map cracking throughout with efflorescence. - West abutment in fair condition with light map cracking throughout with medium rust staining down the face on the southwest corner. - East abutment in fair condition with a medium-wide vertical crack at the mid-way point (between Josh Penney Graffiti). - No bearings, rigid frame.		
SUPERSTRUCTURE			
Condition:	P3 - Poor	Expansion Joints:	I - Inapplicable

Comments: Extensions (North and South) - Possible shear or shrinkage cracks in arched slab over the pier caps. Cracks very are wide, tracing the shape of the arch and flatten over the pier cap, P3. - Fascias/exterior curb have medium longitudinal cracking along the length of the structure. Drip bead along the soffit has medium efflorescence throughout, P3. Northwest corner has a medium spall below the end block. - Bottom of deck in fair condition, F1. Original (Middle Structure) - Construction joint between the original and south extension has mild efflorescent leakage from the west to east wingwall, P3. Construction joint between the original and north extension has medium efflorescent leakage from the west to east wingwall, P3. - Bottom of deck in fair condition, F1.

DECK

Condition:	P3 - Poor	Curbs:	P3 - Poor
Hand Rail:	F1 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	P3 - Poor		
Comments:	- Asphalt has settlement cracks over approaches, F1. - Approach/exit rail needs extra posts near all end blocks, P3, otherwise F1. - End blocks have relatively large spalls and wide cracks, P3. - Northwest hazard marker missing. - Structural handrail in fair condition. - Curbs have medium-large spalls, longitudinal cracks across the length of the structure and areas of near total disintegration, P3. - Waterproofing likely worn at the joints between extensions due to leakage below, P3. Rest of deck likely, F1.		

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:	- CNR trail below.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2025	Replacement Year:	2040
Antic. Rehab. Cost:	\$250,000	Replacement Cost:	\$2,000,000
Recommendations:	- Highly recommend crack injections over piers to prevent freeze-thaw/corrosion to rebar. - Re-seal joints between main structure and extensions if possible. - Salvage structure handrail and replace curbs. - Replace end blocks.		

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Various leaks, cracks and curb, P3. F1 remainder. Hazards, heavy traffic, steep slopes and leading edges of retaining structures.		

LEGEND:

Condition Definitions:

- 1 - *Good - [discontinued code].
- 2 - *Fair - [discontinued code].
- 3 - *Poor - [discontinued code].
- 4 - *Unsafe - [discontinued code].
- G - Good.

- F2 - Fair.
- F1 - Fair.
- P3 - Poor.
- P1 - Poor.
- P - Poor.

- C - Unsafe (Closed to Public).
- U - Uninspectable.
- I - Inapplicable.

Problem Definitions:

- N - No Problem.
- P - Possible Problem.
- K - Known Problem.
- NA - Not Applicable.

Category Definitions:

- Maint. - Maintenance.
- Eng. - Engineering.
- Office - Bridge Office.

PHOTO GUIDELINES:

Inspection Photos:

- Please provide photos using guidelines below:
- Any item which inspector feels should be documented by photograph
 - All items noted above as being P3, P1, P, or C
 - Any evidence of known ice, scour, debris, waterway problems

INSPECTION PHOTOS