
	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B09162021-12	
Date: 9/2/2021	Inspected By: Mike Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	TCH-043 - ASPEN BROOK BRIDGE		
Route:		Overall Length:	19.3 m
Year Built:	1964	Est: No	Overall Width: 14 m
Year Last Rehab.:		Est: No	Roadway Width: 12.5 m
Region:	CENTRAL WEST	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	3 m
Type of Structure:	02 - Double Tee	Max Depth of N.W.L.:	1 m
Purpose of Structure:	04 - Over Non-Navigable Waters	Spans:	
Type of Handrail:	01 - Aluminum Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	11
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	Span No.:	Length
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	P1 - Poor	Bearings:	I - Inapplicable
		Bearing Seat:	P1 - Poor
Comments:	- East abutment face in fair condition with some waterline concrete erosion. Northeast bearing area has a medium spall which has undermined the exterior double tee. Abutment corner under the spall is cracked and about to spall. - West abutment face in fair condition. Northwest creep block detached from bearing area. Interior spalls nearing loss of bearing to double tees, P1. - Water visible running down the face of both abutments from the bearing area.		
SUPERSTRUCTURE			
Condition:	P1 - Poor	Expansion Joints:	P3 - Poor
Comments:	- Rebar grid either showing or outline can be seen in at least 50% of the areas under the deck. - Joints between all pre-cast double tee sections leaking with rust and efflorescent build up, indicating a cracked deck above, P3. - Most precast double tee sections exhibiting severe spalling and deterioration with potentially compromising damage. Particularly the pre-cast panel near the center line of the structure where both tees have exposed pre-		

stressing strands with one of the strands severed. Downstream precast panel has seen efforts to encase the tees, patches are cracked and spalling in some locations. - Area around downstream deck drain has exposed reinforcement with severe corrosion. - Both expansion joints leaking, P3.

DECK

Condition:	P3 - Poor	Curbs:	P3 - Poor
Hand Rail:	F1 - Fair	Roadway Condition:	P3 - Poor
Approach Rail:	F1 - Fair		
Comments:	- Handrail in fair condition, F1. - Asphalt in fair condition, pavement has medium cracking around expansion joints, F1. - Approach/exit rails in fair condition, F1. - Curbs have medium-wide cracking spanning over the expansion joints (possible settlement?), otherwise in fair condition.		

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:	N - No Problem
Comments:	- No comment.		

REPLACEMENT/REHABILITATION

Next Rehab. Date:		Replacement Year:	2022
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$1000000
Recommendations:	- Replace structure with box culvert.		

OBSERVATIONS

Overall Condition:	P1 - Poor	Requires Further Inspection:	Yes
Additional Observations:	- Structure in poor condition. Bridge inspected by Chief Bridge Engineer in early July. This was a follow up inspection. Speed limit reduced to 30km/hr with region 3 monitoring the structure until replacement.		

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