

GOVERNMENT OF
NEWFOUNDLAND
AND LABRADOR
Department of Transportation and Infrastructure

BRIDGE INSPECTION REPORT B08202021-7

Date: 8/12/2021 Inspected By: Mike Button Category: Office - Bridge Office

BRIDGE INFORMATION

Site: 1-040 - HARBOUR GRACE BRIDGE, RIVERHEAD

Route: 70

Year Built: 1968 Est: No
Year Last Rehab.: Est: No

Region: AVALON PENINSULA

Jurisdiction: Provincial

Type of Structure: 02 - Double Tee

Purpose of Structure: 04 - Over Non-Navigable Waters

Type of Handrail: 02 - Concrete Rail

Roadway Surface: 02 - Asphalt

Alignment Vertical: 01 - Good

Alignment Horizontal: 01 - Good

Restrictions: No

Overall Length:

25 **m**

Overall Width: 10.9 m Roadway Width: 8.5 m

Sidewalk Width: 1.5 m

Clearance to R.D. or

2.8 **m**

Max Depth of N.W.L.: 0.9 m

Spans:

N.W.L.:

 Span No.:
 Length
 Span No.:
 Length

 1
 14.9
 4
 0

 2
 0
 5
 0

 3
 0
 6
 0

BRIDGE PHOTOS





SUBSTRUCTURE

Condition: P3 - Poor **Bearings:** U - Uninspectable

Bearing Seat: F2 - Fair

Comments: - All exterior creep block and bearing area repairs from 2016 rehab have medium cracking with efflorescence, no

evidence of spalls. – Interior bearing seats, creep blocks in good condition. - North abutment has evidence of scour on the northwest corner with medium-severe deterioration to waterline concrete (P3), two wide-vertical cracks at the mid-way point, medium horizontal cracks at the northwest corner, a spall starting at the northeast corner at waterline level and some possible AAR on the northeast riverside face. - South abutment is out of water,

and has a couple medium-wide vertical cracks.- P3 SW corner, F1 remainder.

SUPERSTRUCTURE

Condition: F2 - Fair **Expansion Joints:** U - Uninspectable

Comments: - Expansion joints chaulked through curbs. - Double tees and underside of deck are in good condition with some

minor areas of spall and rust staining. - Deck drains extended below structure.

DECK			
Condition:	F1 - Fair	Curbs:	F1 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	F2 - Fair		
Comments:	- Handrails, end blocks, approach/exit rails, and hazard markers, in good condition Curbs have small spalls and medium cracks in all directions Asphalt has cracking starting over the expansion joints Both fascia's are weathered and have evidence of a cold joint.		
HYDROLOGY			
Water Velocity:	Tidal m/s	Ice Problem:	N - No Problem
Water Depth:	Tidal m	Scour Problem:	K - Known Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Rip-rap at 4 corners of structure still has good placement.		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2030	Replacement Year:	2040
Antic. Rehab. Cost:	\$100000	Replacement Cost:	\$2000000
Recommendations:	- Repair all concrete defects especially the northwest corner of the north abutment at the waterline Rehabbed in 2016.		
OBSERVATIONS			
Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Hazards: A lot of traffic, steep slopes around structure, and deep water on west side.		
LEGEND: Condition Definitions: 1 - 'Good - [discontinued code]. 2 - *Fair - [discontinued code]. 3 - *Poor - [discontinued code]. 4 - *Unsafe - [discontinued code]. G - Good. PHOTO GUIDELINES: Inspection Photos: Please provide photos using guideling and the provide photos using guideling and the provide photos as building and the providence of known ice	F2 - Fair. C - Unsafe (Closed F1 - Fair. U - Uninspectable. P3 - Poor. I - Inapplicable. P1 - Poor. P - Poor. ees spould be documented by pnotograph eing P3, P1, P, or C secur, debris, waterway problems	to Public). N - No P - Po K - Kı	lem Definitions: o Problem. ossible Problem. nown Problem. Not Applicable. Category Definitions: Maint Maintenance. Eng Engineering. Office - Bridge Office.
INSPECTION PHOTOS			

Department of Transportation and Infrastructure, Government of Newfoundland and Labrador 2021.