

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B06182021-8	
Date: 1/16/2020	Inspected By: Hunt R	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-027 - PETTY HARBOUR BRIDGE		
Route:		Overall Length:	39.7 m
Year Built:	1986	Est: No	Overall Width: 10.3 m
Year Last Rehab.:		Est: No	Roadway Width: 8.1 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	2.5 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	0.5 m
Purpose of Structure:	04 - Over Non-Navigable Waters		Spans:
Type of Handrail:	01 - Aluminum Rail		<u>Span No.:</u> <u>Length</u> <u>Span No.:</u> <u>Length</u>
Roadway Surface:	02 - Asphalt	1	26 4 0
Alignment Vertical:	01 - Good	2	0 5 0
Alignment Horizontal:	02 - Adequate	3	0 6 0
Restrictions:	No		
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	F1 - bottom of east abutment, F2 remainder. - Assumed condition of buried reinforced concrete abutment footings. - Severe to Medium erosion along bottom face of east abutment with light to medium corrosion to exposed rebar. - Abutments and wingwalls remain in fairly good condition.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	F2 - Fair
Comments:	- Medium horiz. cracks in bottom flanges of both exterior girders. - Medium spalling to bottom of stressing box-outat SE end of south exterior girder. - Medium abrasion to expansion joint dams. - No chalking in expansion joint gaps in deck/ curb fascia (west end). - End and intermediate diaphragms remain in fairly good condition.		
DECK			

Condition:	F2 - Fair	Curbs:	F2 - Fair
Hand Rail:	P1 - Poor	Roadway Condition:	F2 - Fair
Approach Rail:	P1 - Poor		
Comments:	Handrail P1 NE End - Medium trans./ long. cracks with light efflor. deposits indeck soffit. - Narrow vert. cracks with light efflor. deposits in deck/ curb fascia. - Damage to aluminum handrail and top rail missing, NE corner. - Light scrapes, dents, end caps and sleeve missing on remaining handrail. - Southwest and southeast guiderail has medium damage, tipping, and decaying posts. - Potholes in deck and approaches have been patched.		

HYDROLOGY

Water Velocity:	0.3 m/s	Ice Problem:	N - No Problem
Water Depth:	0.6 m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	P - Possible Problem
Comments:	- Type III rip-rap in front of abutments at south corner continues to migrate -Extra Hydraulic rip rap required along face of east abutment		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2022	Replacement Year:	2021
Antic. Rehab. Cost:	\$60000	Replacement Cost:	\$1800000
Recommendations:	- Clean out expansion joint seals, chalk expansion gaps in deck/ curb fascia. - Install missing hazard markers and clean out deck drains. - Install new app./ exit guiderail c/w hazard markers. - Repair damaged and missing handrail and install new rip-rap in front of abutments. - Resurface deck and west approach.		

OBSERVATIONS

Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 (aluminum handrail/ guiderail). - P3 (west approach/ deck asphalt). - F2 (remainder).		

LEGEND:

Condition Definitions:			Problem Definitions:	Category Definitions:
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.	Maint. - Maintenance.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.	Eng. - Engineering.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.	Office - Bridge Office.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.	
G - Good.	P - Poor.			

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