

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B08162023-7	
Date: 11/1/2022	Inspected By: M Button	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	4-039 - PORTLAND CREEK BRIDGE		
Route:		Overall Length:	92 m
Year Built:	1968	Est: No	Overall Width: 10.6 m
Year Last Rehab.:	2006	Est: No	Roadway Width: 9.2 m
Region:	WEST COAST/NORTHERN		Sidewalk Width: 0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	8.4 m
Type of Structure:	01 - AASH to Girder	Max Depth of N.W.L.:	0 m
Purpose of Structure:	03 - Over Navigable Waters	Spans:	
Type of Handrail:	02 - Concrete Rail	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	1	28.2
Alignment Vertical:	01 - Good	2	28.6
Alignment Horizontal:	01 - Good	3	28.4
Restrictions:	No	4	0
		5	0
		6	0
BRIDGE PHOTOS			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	P3 - Poor
		Bearing Seat:	F1 - Fair
Comments:	- North abutment has a large spall under the east exterior girder. The spall is exposing corroded rebar. There are two medium cracks propagating out of the spalled area. The concrete surface around the cracks is delaminating. The face of the abutment has light disintegration throughout. One exterior corner has medium map cracking with efflorescence, F1. - South abutment – There is efflorescence leaching from construction joints onto the abutment wall. The concrete under the efflorescence has medium to severe deterioration running from the top of the wall to the base. Areas of rehabbed concrete appear to be delaminating. There are narrow cracks in local areas, F1 to P3. - Wing walls have light disintegration throughout. There are light spalls in local areas. Three wing walls have light to medium map cracking. One wing wall has efflorescence leaching from cracks and a construction joint, F1. - Piers have light to medium map cracking on the faces. There is light erosion along the base of both piers. The base of one pier has medium vertical cracks propagating up. The pier caps have light map cracking on the exterior corners, F1. - Ballast wall has light to severe disintegration throughout. There is efflorescence leaching onto areas of the ballast wall from expansion joint. Areas of corroded reinforcement are exposed from disintegration. The exterior corners of the wall have light map cracking. The North ballast wall has a large spall behind one exterior girder, P3. - Abutment bearings have wide cracks on all surfaces and are severely bulging. Pier bearings are too high to inspect, P3. - Bearing seats have light to medium disintegration throughout. North bearing seat has a large area of delaminated concrete, F1.		
SUPERSTRUCTURE			
Condition:	P3 - Poor	Expansion Joints:	P3 - Poor
Comments:	- Girders have small to medium spalls on the side and underside surfaces. The spalls are exposing severely corroded rebar. There are narrow to wide longitudinal cracks along the bottom flange and underside of girder. Areas around some of the cracks are delaminating. The North and South ends of some girders have delaminating		

and spalled concrete. One of the exterior girders has severe efflorescence leaching onto the outer surface, F1 to P3. - Diaphragms are in overall fair condition. Some diaphragms have light disintegration throughout. There are small spalls in local areas. The spalls are exposing corroded rebar, F1. - Underside of deck is in fair condition with several areas of concrete pop outs, exposed rebar with severe corrosion, F1. - Deck soffit has large spalls along the span. The spalls are exposing severely corroded rebar. The concrete surface around the spalls is stained from the corroded steel. There are medium to wide cracks in local areas, P3. - Expansion joints – The concrete around the joints has light to medium disintegration throughout. The joints are covered with sand and debris, P3

DECK

Condition:	F1 - Fair	Curbs:	F1 - Fair
Hand Rail:	F1 - Fair	Roadway Condition:	F1 - Fair
Approach Rail:	F1 - Fair		
Comments:	- Roadway is in fair condition. There are several areas of asphalt patching resulting in an uneven driving surface. Asphalt around the expansion joints is heavily cracked, F1. - Curbs are in fair condition. There are narrow cracks along the interior and exterior surfaces of the curb. The exterior concrete surface around the expansion joint is delaminating and starting to spall. The top surface has light disintegration, F1. - End blocks are in fair condition. All end blocks have light disintegration throughout. Three of the end blocks have light spalls, F1. - Handrails are in fair condition, F1. - Guiderails are in fair condition. There are light cracks in some of the posts. All rails are connected to end blocks. The guiderail has all hazard markers and regulation post spacing, F1.		

HYDROLOGY

Water Velocity:	0 m/s	Ice Problem:	P - Possible Problem
Water Depth:	0 m	Scour Problem:	P - Possible Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	Water was too deep to check for scour around piers		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2028	Replacement Year:	2043
Antic. Rehab. Cost:	\$0	Replacement Cost:	\$0
Recommendations:	Recommended to rehab girders, abutment walls, and underside of deck.		

OBSERVATIONS

Overall Condition:	F1 - Fair	Requires Further Inspection:	No
Additional Observations:	- Bridge is in overall fair condition, F1 with P3 areas.		

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