

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B07242018-10	
Date: 5/10/2018	Inspected By: Chris Lyver	Category: Eng. - Engineering	
BRIDGE INFORMATION			
Site:	1-226 - MANUELS RIVER BRIDGE - CBS BYPASS (WEST)		
Route:		Overall Length:	31 m
Year Built:	1996	Est: No	Overall Width: 13 m
Year Last Rehab.:		Est: No	Roadway Width: 12.1 m
Region:	AVALON PENINSULA	Sidewalk Width:	0 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	9 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:	05 - Concrete Barrier	<u>Span No.:</u>	<u>Length</u>
Roadway Surface:	02 - Asphalt	<u>Span No.:</u>	<u>Length</u>
Alignment Vertical:	01 - Good	1	0
Alignment Horizontal:	01 - Good	2	0
Restrictions:	No	3	0
		4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F2 - Fair	Bearings:	F2 - Fair
		Bearing Seat:	F2 - Fair
Comments:	- Assumed condition of buried reinforced concrete abutment footings. - Hairline alligator cracks in wingwalls. - Light bulging in some bearing pads (access to bearings and seats restricted due to low clearance). - Medium/wide vert. cracks with light efflor. deposits in MSE wall panels at pin/ sleeve locations (medium spalling in some of these areas also).		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	F1 - Fair
Comments:	- Medium rusting to girder hold downs at bottom centers of all girders. - Exp. joint dams rutted and wearing with minor damage to assemblies. - Girders and diaphragms remain in fairly good condition. - Majority of pigeon screens along bottoms of girders and in front of bearing seats missing, remaining screens rusting heavily (pigeons nesting on girders and bearing seats).		

DECK			
Condition:	F2 - Fair	Curbs:	I - Inapplicable
Hand Rail:	F2 - Fair	Roadway Condition:	I - Inapplicable
Approach Rail:	P1 - Poor		
Comments:	- Approach rail: P1 (NW/SE exit), F2 (remainder). - Surface: P1 (deck and east app.), F2 (remainder). - No hazard markers at SE and NW ends. - Medium trans. crack in asphalt along edge of east app. slab. - Numerous hairline alligator/ pattern cracks in barrier walls. - No chalking in control joints in barrier walls. - Moderate damage to NW exit guiderail. Severe damage to SE exit guiderail. - Asphalt spalled off deck and approach slabs at various locations. - Asphalt rutted on deck and approaches.		
HYDROLOGY			
Water Velocity:	0.5 m/s	Ice Problem:	N - No Problem
Water Depth:	0.4 m	Scour Problem:	N - No Problem
Waterway:	01 - Adequate	Debris Problem:	N - No Problem
Comments:	- Moderate slope erosion at bottom of MSE wall (NE end). - Moderate slope erosion at bottom of NW slope on Rte. 2 (erosion undermining bottom of NW rock embedded gutter).		
REPLACEMENT/REHABILITATION			
Next Rehab. Date:	2021	Replacement Year:	2046
Antic. Rehab. Cost:	\$150	Replacement Cost:	\$1500
Recommendations:	- Install missing hazard markers and replace damaged guiderail. - Correct slop erosion at NW slope and bottom of east MSE wall. - Replace exp. joints (in the interim, clean out existing exp. joint seal). - Resurface deck and approaches. Re-waterproof deck. - Install new pigeon screens along bottoms of girders and in front of bearing seats. - Chalk control and exp. joints in barrier walls.		
OBSERVATIONS			
Overall Condition:	P1 - Poor	Requires Further Inspection:	No
Additional Observations:	- P1 (deck and east approach, NW and SE exit guiderail). - F2 (remainder). - Unchanged from 2011 inspection.		
LEGEND:			
Condition Definitions:		Problem Definitions:	
1 - *Good - [discontinued code].	F2 - Fair.	C - Unsafe (Closed to Public).	N - No Problem.
2 - *Fair - [discontinued code].	F1 - Fair.	U - Uninspectable.	P - Possible Problem.
3 - *Poor - [discontinued code].	P3 - Poor.	I - Inapplicable.	K - Known Problem.
4 - *Unsafe - [discontinued code].	P1 - Poor.		NA - Not Applicable.
G - Good.	P - Poor.		
Category Definitions:			
		Maint. - Maintenance.	
		Eng. - Engineering.	
		Office - Bridge Office.	
PHOTO GUIDELINES:			
Inspection Photos:			
Please provide photos using guidelines below:			
<ul style="list-style-type: none"> ● 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			