

	GOVERNMENT OF NEWFOUNDLAND AND LABRADOR Department of Transportation and Infrastructure	BRIDGE INSPECTION REPORT B01172024-1	
Date: 9/26/2023	Inspected By: M Button/S Walsh	Category: Office - Bridge Office	
BRIDGE INFORMATION			
Site:	TCH-199 - WHITBOURNE UNDERPASS TCH		
Route:	80	Overall Length:	53.5 m
Year Built:	2001	Est: No	Overall Width: 15.7 m
Year Last Rehab.:		Est: No	Roadway Width: 13.4 m
Region:	AVALON PENINSULA	Sidewalk Width:	1.5 m
Jurisdiction:	Provincial	Clearance to R.D. or N.W.L.:	5 m
Type of Structure:	05 - Pre-stressed Concrete Slab	Max Depth of N.W.L.:	0 m
Purpose of Structure:	01 - Highway Grade Separation	Spans:	
Type of Handrail:	01 - Aluminum Rail	Span No.:	Length
Roadway Surface:	01 - Concrete	1	24
Alignment Vertical:	01 - Good	2	0
Alignment Horizontal:	01 - Good	3	0
Restrictions:	No	4	0
		5	0
		6	0
BRIDGE PHOTOS			
			
SUBSTRUCTURE			
Condition:	F1 - Fair	Bearings:	P3 - Poor
		Bearing Seat:	F2 - Fair
Comments:	- South Abutment has hairline map cracks in isolated locations with a narrow vertical crack between eastern pot bearings. Isolated vertical cracks in the ballast wall. - Pier columns have hairline map cracks throughout. Suspected to be caused by salt spray. - North abutment ballast wall has rust staining on the east side. Abutment face has isolated map and vertical cracking. - Deck plinths all have hairline maps cracks. - Wingwalls in fair condition with no observed defects. - Abutment and pier bearings have moderate corrosion. Slip surfaces in fair condition. - Bearings seats in fair condition overall.		
SUPERSTRUCTURE			
Condition:	F2 - Fair	Expansion Joints:	F1 - Fair
Comments:	- South expansion joint full of gravels/silt. Some minor damage visible to armoring. End dams have a polishing effect from traffic wear. - North expansion joint full of gravels/silt. Armoring in fair condition. End dams have a		

polishing effect from traffic wear and has isolated spalls. - Deck area under south expansion joint has some efflorescent deposits. - Deck soffit in good condition overall. Deck soffit 2m either side of the pier and along the pier line has roughly 10 hairline transverse cracks. There were no cracks reflected onto the top of the deck's surface. North span has hairline longitudinal cracks in line with the slab voids and drains.

DECK

Condition:	F1 - Fair	Curbs:	F2 - Fair
Hand Rail:	F2 - Fair	Roadway Condition:	F2 - Fair
Approach Rail:	F1 - Fair		
Comments:	- Approach posts have isolated locations of rot. Checks and splits throughout F1 to P3. Flex rail connected to end blocks and in fair to good condition. Hazard markers missing. - End blocks in fair condition with hairline map cracks and light scaling. - Exposed concrete deck in fair condition overall. Surface is polished exposing aggregates and suspect some areas to have delaminations. - Curb and sidewalk in fair condition with no observed decks. - Structure rail in fair condition.		

HYDROLOGY

Water Velocity:	n/a m/s	Ice Problem:	NA - Not Applicable
Water Depth:	n/a m	Scour Problem:	NA - Not Applicable
Waterway:	03 - Not Applicable	Debris Problem:	NA - Not Applicable
Comments:	N/A		

REPLACEMENT/REHABILITATION

Next Rehab. Date:	2030	Replacement Year:	2070
Antic. Rehab. Cost:	\$250,000	Replacement Cost:	\$7,000,000
Recommendations:	- Clean the bridge deck adjacent to curbs. - Blast clean and paint pot bearings. - Investigate cracks on the deck soffit around the piers. - Replace hazard markers. - Complete isolated deck repairs. - Raise elevation of expansion joints, waterproof and pave structure.		

OBSERVATIONS

Overall Condition:	F2 - Fair	Requires Further Inspection:	No
Additional Observations:	- Bridge overall F2 to F1. Soffit cracks need investigation.		