

**Bridge Inspection Report**

NBI Structure Number: 023200980011700

Sandown 098/117

Date of Inspection: 07/18/2017

Date Report Sent: 11/09/2017

Owner: Municipality

Bridge Inspection Group: D-Team

Bridge Maintenance Crew: OTHER

**FREMONT ROAD**

over

**EXETER RIVER****Recommended Postings:**Weight: **No Posting Required**☒ Weight Sign OKWidth: **Not Required**☒ Width Sign OKPrimary Height Sign Recommendation: *None*Optional Centerline Height Sign Rec: *None*

**Clearances:** Over: 99.99  
(Feet) Under: 0.00  
Route: 99.99

☒ Height Sign OK**Condition:**

Red List Status: Municipal Redlist

Deck: 8 Very Good

Superstructure: 8 Very Good

Substructure: 4 Poor

Culvert: N N/A (NBI)

Sufficiency Rating: 64 %

NBI Status: Not Applicable

Bridge Rail: Meets Standards

Rail Transition: Meets Standards

Bridge Approach Rail: Meets Standards

Approach Rail Ends: Meets Standards

**Structure Type and Materials:**

Number of Main Spans: 1

Number of Approach Spans: 0

**Main Span Material and Design Type**

Concrete Slab

NH Bridge Type: CS (Concrete Slab)

Deck Type: Concrete Precast Panel

Wearing Surface: Bituminous

Membrane: Other

Deck Protection: Epoxy Coated Reinforcing

Curb Reveal: 6 in

Plan Location: M1-11-2-2

Total Bridge Length: 16.5 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 27.0 ft

Median: No median

Bridge Skew: 0.00 °

Year Built/Rebuilt: 1980/2006

Detour Length: 1.0 mi

**Bridge Dimensions:**

Length Maximum Span: 13.9 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: 22.7 ft

Approach Roadway Width: 24.0 ft  
(W/Shoulders)

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### Bridge Service:

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: Not Applicable

AADT: 230

Percent Trucks: 4 %

Year of AADT: 2013

Future AADT: 340

Year of Future AADT: 2037

Federal or State Definition Bridge: NH-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Not Eligible

Traffic Direction: Two-way traffic

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## Element Details (see disclaimer below)

No.	Description	Material Notes and Condition Notes:
38	Reinforced Concrete Slab	3 PRECAST CONCRETE SLABS. 9' W x 16.5' L x 12 in.D. TORCH APPLIED MEMBRANE W/ 3 in. PAVEMENT.
L 520	Concrete Reinforcing Steel Protective System	CURBS- FINE CRACKS, MINOR SCALE. UNDERSIDE OF DECK SURFACE - NO SYMPTOMS OF DISTRESS.
215	Reinforced Concrete Abutment	ABUTMENTS- FINE CRACKS, MINOR SPALLS. TOEWALL AT EAST ABUTMENT. WEST ABUTMENT UNDERMINED 20' IN LENGTH WITH 1' TO 2' OF PENETRATION AND UP TO 1' IN HEIGHT. EROSION AT SOUTHEAST WING.
L 6000	Scour	WEST ABUTMENT UNDERMINED 20' IN LENGTH WITH 1' TO 2' OF PENETRATION AND UP TO 1' IN HEIGHT.
330	Metal Bridge Railing	**T-101** RAIL- FEW SCRAPES.

## Element States (see disclaimer below)

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
38	Reinforced Concrete Slab	446	sq.ft	100%	0%	0%	0%
L 520	Concrete Reinforcing Steel Protective System	---	---	100%	0%	0%	0%
215	Reinforced Concrete Abutment	121	ft	84%	0%	16%	0%
L 6000	Scour	20	ft	0%	0%	100%	0%
330	Metal Bridge Railing	43	ft	100%	0%	0%	0%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

## Bridge Notes:

ADDED TO MRL 7/13/11.  
NEW ASPHALT 12/21/2016.

## Inspection Notes: 07/18/2017

NJL inspection comments -  
DECK / SUPERSTRUCTURE: ASPHALT- LIGHT CRACKS AT DECK ENDS. CURBS- FINE CRACKS, MINOR SCALE. UNDERSIDE OF DECK SURFACE - NO SYMPTOMS OF DISTRESS. RAIL- FEW SCRAPES.  
SUBSTRUCTURE: FINE CRACKS, MINOR SPALLS. TOEWALL AT EAST ABUTMENT. EROSION AT SOUTHEAST WING. SCOUR- WEST ABUTMENT UNDERMINED 20' IN LENGTH WITH 1' TO 2' OF PENETRATION AND UP TO 1' IN HEIGHT.

## Previous Inspection Notes: 12/21/2016

MAS & BTB - inspection comments -  
DECK / SUPERSTRUCTURE: ASPHALT - NEW CONDITION, CRACKED AT DECK END. CURBS - FINE CRACKS AND MINOR SPALLS.  
RAIL - MINOR DAMAGE. SOFFIT - GOOD CONDITION.  
SUBSTRUCTURE: FINE CRACKS AND MINOR SPALLS. TOEWALL AT EAST ABUTMENT. WEST ABUTMENT ARE UNDERMINED FOR 20' LONG WITH 1' TO 2' OF PENETRATION AND UP TO 1' IN HEIGHT. UNABLE TO VERIFY SCOUR DO TO WATER DEPTH AND ICE 12/21/2016.

PICTURE: C563-  
22. WEST APPROACH, NEW ASPHALT.

## Approach and Roadway Notes:

APPROACH ASPHALT- FEW CRACKS. APPROACH W- BEAM RAIL - FEW SCRAPES, LIGHT DAMAGE ON NORTHEAST.

## Unusual or experimental features:

Issues finishing the abutment stabilization work.

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## Inspection History

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
07/18/2017	NJL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/21/2016	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/30/2015	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/16/2014	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/17/2013	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/13/2012	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/13/2011	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/21/2009	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	5	N	<input type="checkbox"/>	No Posting Req'd
06/27/2007	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	5	N	<input type="checkbox"/>	No Posting Req'd
01/25/2007	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	8	N	<input type="checkbox"/>	No Posting Req'd
08/23/2006	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
08/22/2005	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	N	<input checked="" type="checkbox"/>	Bridge Closed
10/04/2004	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
11/24/2003	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
08/28/2003	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
11/27/2002	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	3	4	N	<input checked="" type="checkbox"/>	3 Tons PCO
02/07/2002	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	3	5	N	<input checked="" type="checkbox"/>	3 Tons PCO
08/29/2001	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	3	5	N	<input checked="" type="checkbox"/>	3 Tons PCO
12/11/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	5	N	<input checked="" type="checkbox"/>	6 Tons
11/20/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1999	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1998		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
01/01/1997		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1996		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	4	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1994		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	4	5	N	<input checked="" type="checkbox"/>	6 Tons
08/01/1991		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	5	N	<input checked="" type="checkbox"/>	6 Tons

## Inspection Frequency (mo.)

NBI	Elem	FCM	U/W
16	16	N/A	N/A

**TOWN Sandown**

## BRIDGE CAPACITY SUMMARY

BRIDGE NUMBER 098/117


DESIGN METHOD LFD

EN LOAD HS25

RATED BY J3

DATE 12-10-2006

PLAN FILE -


CHECKED BY 

DATE 12/12/06

E Fremont Road

OVER Exeter River

RATED MEMBER	LONGITUDINAL EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY			AVAILABLE CAPACITY						
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES		MULTIPLE LANES LOADED			SINGLE LANE LOADED			
			SINGLE UNIT	MULTIPLE UNIT	INVENTORY	OPERATING	POSTING	INVENTORY	OPERATING	POSTING	
East Deck Panel (Incremental Capacity)	15'-2"	HS21.9	HS26.7	HS24.0	HS28.6	HS47.7	HS42.9	HS31.5	HS52.6	HS47.3	
					RATING METHOD 63. (Op) <u>    </u> LFD <u>    </u> 65. (Inv.) <u>    </u> LFD <u>    </u>		ENGLISH TONS 64. (Op) <u>    </u> 85.9 <u>    </u> 66. (Inv.) <u>    </u> 51.5 <u>    </u>		METRIC TONS 77.9 <u>    </u> 46.7 <u>    </u>		



STATE OF NEW HAMPSHIRE  
MATTHEW J. LOW

COMMENDED POSTING: No Posting Required

COMMENDED POSTING: No Posting Required

