

## BRIDGE NO. 03903

34250 - GROTON  
MOSHER STREET  
over  
AMTRAK RAILROAD

Special Inspection

2/15/2019

Inspected by: Team 4



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**Form: Location**

**Inspection type:** Special

**Inspection Date:** 2/15/2019

**Inspected by:** Team 4

**Bridge No:** 03903

**Town:** GROTON

**Carried:** MOSHER STREET

**Crossed:** AMTRAK RAILROAD

**Inventory Route:** Non-NHS



Location Map # 1

Form: BRI-19, Rev. 2/15  
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## STRUCTURE INVENTORY & APPRAISAL

### INSPECTION

Structurally Deficient  Functionally Obsolete   
Sufficiency Rating   
(90) Inspection Date  (91) Frequency   
Indepth Insp  Proposed next Indepth Year   
Deck Survey Date  Class   
Access  Flagman   

	Frequency	Date	Type
Fracture	<input type="text" value="24"/>	<input type="text"/>	D Two Girder System, riveted / bolted plate girders
Underwater	<input type="text"/>	<input type="text"/>	
Special	<input type="text" value="12"/>	<input type="text" value="02/15/2019"/>	J Corrosion / Section loss

### IDENTIFICATION

Bridge Name   
Town Code - Name   
(5) Inventory Route  
(A) Record Type   
(B) Signing Prefix   
(C) Level of Service   
(D) Route Number.   
(E) Dir Suffix   
(6A) Featured Intersected   
(6B) Critical Facility Indicator   
(7) Facility Carried   
(9) Location   
(11) Mile Post  Miles  
(16) Latitude  Deg.  Min.  Sec.  
(17) Longitude  Deg.  Min.  Sec.  
(98) Border Bridge  
(A) State Code  (B) Percent Responsibility  %  
(C) Border Town Name   
(99) Border Bridge Structure No.

### STRUCTURE TYPE & MATERIALS

(43) Structure Type, Main  
A) Material   
B) Design Type   
(44) Structure Type, Approach  
A) Material   
B) Design Type   
(45) Number of Spans, Main Unit   
(46) Number of Approach Spans   
(107) Deck Structure Type   
(108) Wearing Surface/Protection Systems  
A) Type of Wearing Surface   
B) Type of Membrane   
C) Type of Deck Protection   
Substructure  
A) Material   
B) Design Type   
Paint  
Type   
Year   
Comment

### GEOMETRIC DATA

(48) Length of Maximum Span  ft.  
(49) Structure Length  ft.  
(50) Curb or Sidewalk Widths  
A) Left  ft.  in. B) Right  ft.  in.  
(51) Bridge Roadway Width Curb to Curb  ft.  in.  
(52) Deck Width, Out to Out  ft.  in.  
(32) Approach Roadway Width  ft.

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(33) Bridge Median   
Deck Area  sq. ft.  
(34) Skew Angle  deg.  
(35) Structure Flared   
(10) Inv. Rte. Min. Vert. Clearance  ft.  in.  
(47) Inv. Rte. Total Horiz. Clr.  ft.  in.  
Log Inv. Rte. Total Horiz. Clr.  ft.  in.  
RLog Inv. Rte. Total Horiz. Clr.  ft.  in.  
(53) Min. Vert. Clearance Over Bridge  ft.  in.  
(54) Log-Min. Vert. Underclearance  ref.  ft.  in.  
(55) Min. Lat Underclearance on Right  ref.  ft.  in.  
(56) Min. Lat Underclearance on Left  ft.  in.

**CONDITION**

(58) Deck   
(59) Superstructure   
(60) Substructure   
(61) Channel & Channel Protections   
(62) Culverts   
(36) Traffic Safety Features  
A) Bridge Railings   
B) Transitions   
C) Approach Guardrail   
D) Approach Guardrail Ends

**WATERWAY**

Drainage Basin Waterway   
(38) Navigation Control   
(39) Navigation Vertical Clearance  ft.  
(40) Navigation Horiz. Clr.  ft.  
(111) Pier/Abutment Navigation

**AGE AND SERVICE**

Year Built  (106) Year Reconstructed   
(42) Type of Service  
A) On   
B) Under   
(28) Number of Lanes  
A) On  B) Under   
(29) Average Daily Traffic   
Is Above Half ADT?   
(109) Percent Truck  %  
(30) Years of ADT   
(19) Bypass, Detour Length  Miles

**APPRAISALS**

(67) Structural Evaluation   
(68) Deck Geometry   
(69) Underclearances, Vert. & Horiz.   
(71) Waterway Adequacy   
(72) Approach Roadway Alignment   
(113) Scour Critical

**COMMENTS**

- Bridge is logged from west to east with girder G1 at the north face.  
- ADT based on 1% increase per year for local roads.  
- 55' high rail used for inspection.  
- Re-evaluation is recommended due to section loss.  
- A re-evaluation of LR analysis is recommended till the inspection of the rehab project # 058-0336 with an advertisement date 4/17/19.

**CLASSIFICATION**

(112) NBIS Bridge Length   
(104) Highway System   
(26) Functional Class   
(100) Defense Highway   
(101) Parallel Structure

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(116) Vert-Lift Brg Nav Min

ft.

In.

(102) Direction of Traffic

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(103) Temporary Structure   
(110) Designated National Network   
(20) Toll   
(21) Maintain   
(22) Owner   
Report Class   
(37) Historical Significance

**POSTED SIGNS**

Other Posted Sign 1   
Other Posted Sign 2

	Actual	Recomended	
Posted Load Single Unit Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load Semi-Trailer Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 4 Axle Truck	<input type="text"/>	<input type="text"/>	tons
Posted Load 3S2 Truck	<input type="text"/>	<input type="text"/>	tons
All Vehicles	<input type="text"/>	<input type="text"/>	tons
Posted Vert. Clearance on Bridge	<input type="text"/> ft.	<input type="text"/> in.	
Posted Vert. Underclearance	<input type="text"/> ft.	<input type="text"/> in.	
Posted Speed Limit on Bridge	<input type="text" value="25"/> m.p.h.		

**OTHER FEATURES**

Fence Required   
Fence Present   
Fence Type   
Fence Height   
Fence Material   
Fence Top Type   
Barrel Ladders   
Stand Pipes   
Catwalks   
Moveable Inspection System   
Haunches Present over Roadway   
Utilities

**PROPOSED IMPROVEMENTS**

(75A) Type of Work Proposed   
(75B) Work Done By   
(76) Length of Structure Improvement  ft.  
(94) Bridge Improvement Cost \$   
(95) Roadway Improvement Cost \$   
(96) Total Project Cost \$   
(97) Year of Improvement Estimate   
(114) Future ADT   
(115) Year of Future ADT   
DOT Bridge Program List No   
Project No   
Advertised Date

**LOAD RATING & POSTING**

(31) Design Load   
(63) Operating Rating Type   
(64) Operating Rating   
(65) Inventory Rating Type   
(66) Inventory Rating   
Evaluation Code   
Year of Evaluation   
(70) Bridge Posting   
(41) Structure Status

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**INSPECTOR'S SIGNATURES:**

1)   
Date: 02/15/2019

Mike Holdridge

P.E. SIGNATURE:

Date:

2)   
Date: 02/15/2019

P.E. #

Reviewed By:

Date: 02/19/2019

3) \_\_\_\_\_  
Date:

  
William Freeman, Jr.

4) \_\_\_\_\_  
Date:



**Form: BRI-20, Rev. 1/14**  
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## SPECIAL INSPECTION

<b>Inspectors:</b>		<b>Visits:</b>			
Lead Inspector:	Michael Holdridge	Visit Date:	Temp:	Start Time:	End Time:
Inspector:	Task:	02/15/2019	45	10:20 AM	11:10 AM
Freeman Jr., William	BSE - TE3				
Holdridge, Michael	BSE - Inspector				
LaLima, Zachary	BSE - Inspector				

**Special Inspection Type:** J Corrosion / Section loss  
**Inspection Description:** Check condition of north side sidewalk, rails and fence from top side and from abutments without fouling tracks.

**Feature Inspected:**  
-Top side of north sidewalk, rails and fence.  
-Cantilevered sidewalk supports for loose concrete and section loss.

**Inspection Results:**  
-Rotted and disconnected section of wood (safety) fence at the east end of the north sidewalk.  
  
Note: Visual inspection only from abutments of cantilevered sidewalk supports.  
  
-Concrete appears punky with possible potential spalls at the ends of random supports over tracks.  
  
-Perforations in webs of sidewalk supports # 4,# 5 and # 6 appear unchanged as best can be determined.

**Action To Be Taken:**  
Continue to monitor until construction starts.  
  
Open Work Items; sidewalk supports, bearings, underside deck exposed rebar and rivet heads section loss, will be addressed on Project #58-336 with an estimated Advertising Date of 9-18-19  
  
Work Item#03903-2019-0007 submitted wood safety fence

**Form: Asset Photos**  
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Photo Number: 1

Photo Taken: 02/15/2019

North elevation.



Photo Number: 2

Photo Taken: 02/15/2019

General view of north sidewalk.

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Photo Number: 3

Photo Taken: 02/15/2019

Rotted and disconnected section of (safety) fence at the east end of north sidewalk.



Photo Number: 4

Photo Taken: 02/15/2019

General view of north sidewalk cantilever supports.