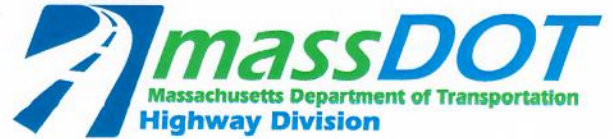




Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Stephanie Pollack, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



**The Board of Selectmen
Town Hall
381 Main Street
West Newbury, MA 01985**

May 10, 2019

Attention: Wayne S. Amaral, DPW Director

SUBJECT: BRIDGE INSPECTION REPORT (NON-NBIS)

N-11-007=W-20-001 (8BC) Plummer Spring / Artichoke River C/RI Dated: 06/11/18

Dear Members of the Board:

An inspection was performed on the referenced City/Town owned bridge. For your records, forwarded herewith is a copy of the bridge inspection report. A copy of this town line bridge report has also been sent to the City of Newburyport.

Repair, rehabilitation or reconstruction of any bridge to address the deficiencies reported is the owner/custodian's responsibility. Future inspections are not the responsibility of Massachusetts Department of Transportation – Highway Division.

Questions regarding the content of the reports may be directed to the District Bridge Inspection Engineer, Joseph Dideo, at (781) 674-2172.

Sincerely,

Paul D. Stedman
District Highway Director



JD / tl
cc: Brian Clang-BIE, D-4 DHD, D-4 DBIE
Enclosures

2-DIST 04 B.I.N. 8BC

STRUCTURES INSPECTION FIELD REPORT
CLOSED/REHABILITATION INSPECTION

BR. DEPT. NO.
 N-11-007=W-20-001

| | | | | |
|---|--|--|--|---|
| CITY/TOWN NEWBURYPORT=WEST NEWBURY | 8-STRUCTURE NO. N11007-8BC-MUN-BRI | 11-Kilo. POINT 000.000 | 90-ROUTINE INSP. DATE JUN 11, 2018 | 93*- INSPECTION DATE JUN 11, 2018 |
| 07-FACILITY CARRIED HWY PLMMR SPRNG | MEMORIAL NAME/LOCAL NAME | 27-YR BUILT 1900 | 106-YR REBUILT 0000 | YR REHAB'D (NON 106) 0000 |
| 06-FEATURES INTERSECTED WATER ARTICHOKE RIVER | 26-FUNCTIONAL CLASS Rural Local | DIST. BRIDGE INSPECTION ENGINEER D. J. Consentino | | |
| 43-STRUCTURE TYPE 811 : Masonry Arch - Deck | 22-OWNER Town Agency | 21-MAINTAINER Town Agency | TEAM LEADER M. Comeau | |
| 107-DECK TYPE N : Not applicable | WEATHER Clear | TEMP. (air) 19°C | TEAM MEMBERS Osama Moustafa | |

| ITEM 58 DECK | N | ITEM 41 STRUCTURE OPEN, POSTED OR CLOSED | K:CLOSED | Date : 06/11/2018 | | | | | | | | | | | | | | | | | | | |
|------------------------------------|----------|---|---|--------------------------|------|-----|-------------------|---|---|-----|----------------|---|---|-----|-----------------------|---|---|---|----------------------------|---|---|-----|----------------------|
| ITEM 59 SUPERSTRUCTURE | 5 | | | | | | | | | | | | | | | | | | | | | | |
| ITEM 60 SUBSTRUCTURE | 6 | ITEM 36 TRAFFIC SAFETY | TOTAL HOURS 8 | | | | | | | | | | | | | | | | | | | | |
| ITEM 60 - (From U/W Report) | N | <table border="1"> <thead> <tr> <th></th> <th>36</th> <th>COND</th> <th>DEF</th> </tr> </thead> <tbody> <tr> <td>A. Bridge Railing</td> <td>0</td> <td>0</td> <td>S-A</td> </tr> <tr> <td>B. Transitions</td> <td>0</td> <td>2</td> <td>S-A</td> </tr> <tr> <td>C. Approach Guardrail</td> <td>1</td> <td>6</td> <td>-</td> </tr> <tr> <td>D. Approach Guardrail Ends</td> <td>0</td> <td>2</td> <td>S-A</td> </tr> </tbody> </table> | | 36 | COND | DEF | A. Bridge Railing | 0 | 0 | S-A | B. Transitions | 0 | 2 | S-A | C. Approach Guardrail | 1 | 6 | - | D. Approach Guardrail Ends | 0 | 2 | S-A | PLANS (Y/N) N |
| | 36 | COND | DEF | | | | | | | | | | | | | | | | | | | | |
| A. Bridge Railing | 0 | 0 | S-A | | | | | | | | | | | | | | | | | | | | |
| B. Transitions | 0 | 2 | S-A | | | | | | | | | | | | | | | | | | | | |
| C. Approach Guardrail | 1 | 6 | - | | | | | | | | | | | | | | | | | | | | |
| D. Approach Guardrail Ends | 0 | 2 | S-A | | | | | | | | | | | | | | | | | | | | |
| ITEM 61 CHANNEL | 5 | | (V.C.R.) (Y/N) N | | | | | | | | | | | | | | | | | | | | |
| ITEM 61 - (From U/W Report) | N | | TAPE#: | | | | | | | | | | | | | | | | | | | | |
| ITEM 62 CULVERT | N | Pedestrian Access (If YES please explain) (Y/N) Y | Barricades In Place (Y/N) Y | | | | | | | | | | | | | | | | | | | | |
| ITEM 62 - (From U/W Report) | N | Roadway Abandoned (Y/N) N | TYPE: JERSEY BARRIERS W SNOW FENCE | | | | | | | | | | | | | | | | | | | | |

SIGNS *Not Applicable*

Legend: **Road Closed Signs, Detour Signs, Local Traffic/ Abutters Only Signs**

Signs In Place (Y=Yes, N=No, NR=Not Required)
 Legibility/ Visibility

| At bridge | | Advance | |
|-----------|---|---------|---|
| E | W | E | W |
| Y | Y | Y | Y |
| 1 | 1 | 1 | 1 |

To be filled out by District Bridge Inspection Engineer

1) This bridge is scheduled for:
 Replacement () Rehabilitation () Repair () Removal () Unknown ()

2) If under construction please answer the following:

| | | |
|------------------|--------------------|------------------|
| Contract Number: | Amount: | Completion Date: |
| Contractor: | Resident Engineer: | |
| Scope of Work: | | |
| Remarks: | | |

| | ACCESSIBILITY (Y/N) | |
|-----------------|---------------------|------|
| | Needed | Used |
| Lift Bucket | N | N |
| Ladder | N | N |
| Boat | Y | Y |
| Wader | N | N |
| Inspector 50 | N | N |
| Rigging | N | N |
| Staging | N | N |
| Traffic Control | N | N |
| RR Flagger | N | N |
| Police | N | N |
| Other: | N | N |

X=UNKNOWN N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE R=REMOVED

| | | | | |
|---------------------------------------|---------------|------------------------------------|--|---------------------------------|
| CITY/TOWN NEWBURYPORT=WEST NEWBURY | B.I.N. 8BC | BR. DEPT. NO. N-11-007=W-20-001 | 8.-STRUCTURE NO. N11007-8BC-MUN-BRI | INSPECTION DATE JUN 11, 2018 |
|---------------------------------------|---------------|------------------------------------|--|---------------------------------|

REMARKS

BRIDGE ORIENTATION

The approaches are east and west. The elevations are north and south. The Artichoke River flows from south to north.

GENERAL REMARKS

The bridge has been closed to vehicle traffic however pedestrian traffic is still being allowed at this time.

The bridge has been closed to vehicle traffic due to a failure in the spandrel wall at the southeast corner of the bridge. Jersey barriers with construction or snow fencing have been placed at the south side of the bridge preventing pedestrians from accessing the collapsed area. **See Photos 1-5.** Road closed and detour signs have been placed at intersections on both sides of the bridge about half a mile away in either direction. **See Photos 6 & 7.** Jersey barriers, traffic barrels and road closed signs have been installed at both ends of the bridge preventing vehicle access. **See Photos 8 & 9.**

Photo Log

- Photo 1 : Jersey barriers with construction/snow fencing blocking off the failure of the spandrel wall at the southeast corner of the bridge.
- Photo 2 : Failure of the spandrel wall at the southeast corner of the bridge.
- Photo 3 : Failure of the spandrel wall at the southeast corner of the bridge.
- Photo 4 : Heavy longitudinal cracking in the wearing surface due to settlement from adjacent collapsed spandrel wall.
- Photo 5 : Severe southeast wingwall displacement.
- Photo 6 : Road closed and detour signs at the intersection of Turkey Hill Road and Plummer Spring Road 1/2 mile east of the bridge.
- Photo 7 : Road closed and detour signs at the intersection of Middle Street and Garden Street about 1/2 mile west of the bridge.
- Photo 8 : Road closed signs and jersey barriers installed at the east end of the bridge preventing vehicle traffic.
- Photo 9 : Road closed signs and jersey barriers installed at the west end of the bridge preventing vehicle traffic.

| | | | | |
|---------------------------------------|---------------|------------------------------------|--|---------------------------------|
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PHOTOS

Photo 1: Jersey barriers with construction/snow fencing blocking off the failure of the spandrel wall at the southeast corner of the bridge.



Photo 2: Failure of the spandrel wall at the southeast corner of the bridge.

| | | | | |
|---------------------------------------|---------------|------------------------------------|--|---------------------------------|
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PHOTOS

Photo 3: Failure of the spandrel wall at the southeast corner of the bridge.

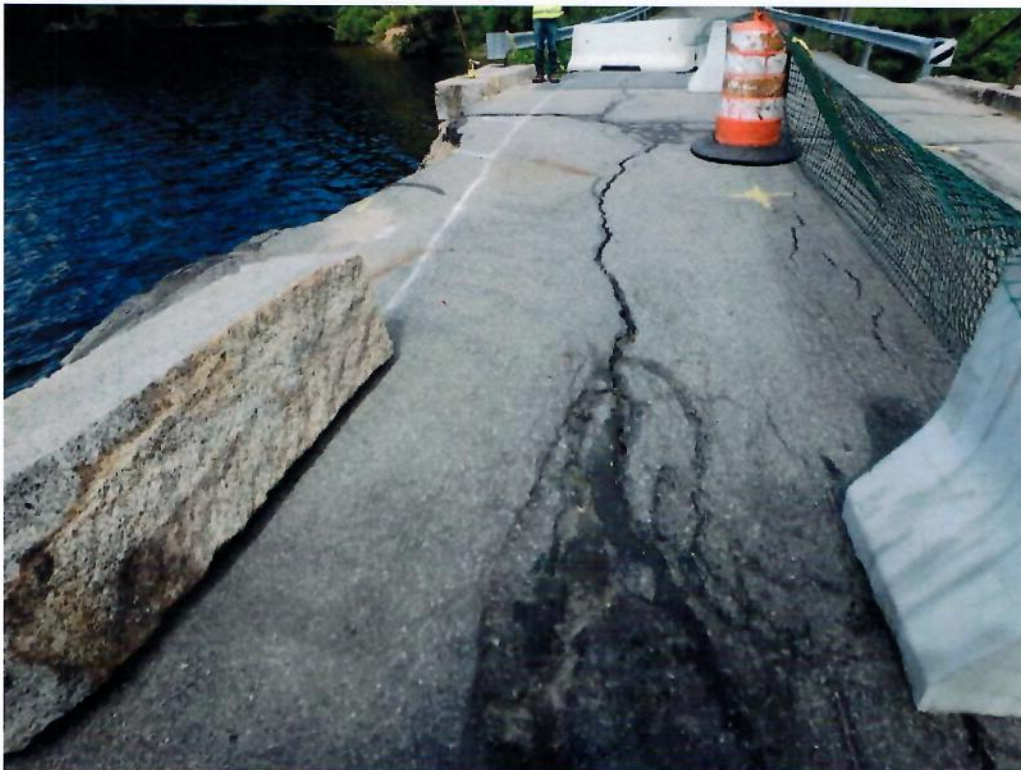


Photo 4: Heavy longitudinal cracking in the wearing surface due to settlement from adjacent collapsed spandrel wall.

| | | | | |
|---------------------------------------|---------------|------------------------------------|--|---------------------------------|
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PHOTOS

Photo 5: Severe southeast wingwall displacement.



Photo 6: Road closed and detour signs at the intersection of Turkey Hill Road and Plummer Spring Road 1/2 mile east of the bridge.

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|---------------------------------------|---------------|------------------------------------|--|---------------------------------|
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PHOTOS



Photo 7: Road closed and detour signs at the intersection of Middle Street and Garden Street about 1/2 mile west of the bridge.



Photo 8: Road closed signs and jersey barriers installed at the east end of the bridge preventing vehicle traffic.

| | | | | |
|---------------------------------------|----------------------|------------------------------------|---|--|
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|---------------------------------------|----------------------|------------------------------------|---|--|

PHOTOS

Photo 9: Road closed signs and jersey barriers installed at the west end of the bridge preventing vehicle traffic.