I-470, Wheeling, WV 26003, United States

District - 6

## **BRIDGE INSPECTION REPORT**

**Type of Inspections Performed:** 

Fracture Critical, Inspection and Report



FIELD INSPECTED BY:

Signature **STRUCTURAL EVALUATION BY:** 

**REVIEWED AND APPROVED BY:** 

#### THE WEST VIRGINIA DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS**

**Inspection Types** 

**NBI 90 (Routine) Date:** 07/18/2012 Frequency: 12

Signature

(LAST DAY)

Periodic In-Depth □

**Interim-Condition** ⊠

| Fracture Critical ⊠                       | Required:Y                   | Item 93A Date: 07/18/2012          | Frequency: 24 |
|---|------------------------------|------------------------------------|---------------|
| <b>Underwater</b> □                       | Required:N                   | Item 93B Date:                     | Frequency:    |
|   | <b>Underwater Equipment:</b> |                                    |               |
| Other Special $\Box$                      |                              | Item 93C Date:                     | Frequency:    |
|   | Special Code:                |                                    |               |
| Inventory $\Box$                          |                              | Inspection Date:                   |               |
| Interim □                                 |                              | Inspection Date:                   |               |
| Damage/Special □                          |                              | <b>Inspection Date:</b> 05/01/1993 |               |
| Closure $\Box$                            |                              | Inspection Date:                   | Frequency:    |
| UB Inspection Required □ Inspection Date: |                              | Frequency:                         |               |

**UB Inspection Vehicle:** 



# **West Virginia Division of Highways**

Marshall version 1.0

**BARS No.:** 035A123 **Date:** 07/05/2021

### **Procedure**

Information for this inspection report was obtained June 29, 30, July 3, 5, 6, 12, 18, 2021 The inspector in charge was R. Johnson assisted by: Irene Song on June 29, 30, July 3, 5, 6, 12, 18, Jane Smith on June 29, July 3, 5, 6, 12, 16, 18, 24, 25, Anders Carter on June 29, July 3, 5, 6, 13 Florence Moore on June 30, and Stella Clark on July 18. The level of inspection forming the basis for this report was general visual observation, beginning with the substructure units at the ground and waterlines, ending with the upper chords of Span Two. The underside was observed from the ground and by use of ladders and a swinging scaffold, providing all areas hands on inspection. Orientation of the structure units is in compliance with the plans and straightline survey. A Periodic Inspection, made June 12, 2019 by L. Nelson, rated the general overall condition of the structure poor.

### **Summary & Recommendations**

The structure, in general, is in poor condition. The most serious deficiencies observed, along with our recommendations, are as follows: 1. Various truss members, floor system members, truss connections, and laterals exhibit section loss which should be repaired. 2. The fractured lower chord pin nuts in Spans One and Three should be repaired or replaced. 3. Damaged and loose sections of the two-line guardrail should be repaired. 4. Stringer Two at Abutment Two should be raised and the expansion seal at this location replaced. 5. Span One's Downstream Truss should be monitored during each future inspection. 6. Replacement of the frozen roller nests over Pier One and any deteriorated bearing plates is recommended. 7. The cracked and spalled areas of the substructure units should be repaired. 8. All loose truss members should be tightened and the entire structure cleaned and painted. 9. Despite, effective retrofits and maintenance over the years. The structure is fracture critical and in a general state of decline. The structure has been in service for 85 years and soon will be requiring extensive repairs to items that were previously retrofitted; we recommend prompt replacement of the structure. A WORK ORDER DATED 8/2/2012 WAS SUBMITTED FOLLOWING THIS INSPECTION.