

New York State Department of Transportation
Yellow Flag 8B2305W029

By: Rajesh Narasimhan
Flag Date: October 02, 2023

Superseding Information:
This flag supersedes: YF 8B22VLW034

Structure Information

BIN: 3342250
Feature Carried: COUNTY ROAD 25A
Feature Crossed: KINDERHOOK CREEK
Orientation: 1 - NORTH
Region: 08 - POUGHKEEPSIE
County: COLUMBIA
Political Unit: Town of STUYVESANT
Approximate Year Built: 1899
Posted Load Matches Inventory : Yes
Bridge Load Posting (Tons) : 12
Primary Owner: 30 - County
Primary Maintenance Responsibility: 30 - County
Typical or Main Span Type: 3 - Steel, 10 - Truss - Thru
This Bridge is not a Ramp
Number of Spans: 1

Verbal Notification Information

Person Notified: Not Contacted
Date:
Of:

Signature Information

Signature: Rajesh Narasimhan, P.E. 092918-1
Date: October 06, 2023
Reviewed By: Thomas A. Barrell
Date: October 06, 2023

Attachments: 7

Flagged Elements

Parent Element	Element	Total Quantity	Unit
Span Number : 1			
	152 - Steel Floor Beam	675	ft

Flagged Condition Description

Yellow Flag 8B2305W029 issued (supersedes YF 8B22VLW034)

Subject: Section losses to Floorbeam FB0 Web at Right

2023: This is a historic pinned truss that has been rehabilitated with the addition of a suspended arch (Photo 1). The truss and arch function together. The original truss supports the original floorbeams and the arch supports the new floorbeams located between the original floorbeams (Photo 2). The panel points on the original truss have been used for the numbering convention, therefore the new floorbeams are labeled as X.5. Bridge is load posted for 12 Tons (Photo 3).

At the begin floorbeam (FB0) right side, there is heavy corrosion and section losses with perforations to the webs of both floorbeams, approximately 2' from the hanger rods (from the inside of the rods, directly under the deck). There are two floorbeams welded together with the top floorbeam being called a "sleeper" floorbeam. The top floorbeam web is 0.3" and the bottom floorbeam web is 0.378" thick. D-meter readings were taken on both the top and bottom floorbeams. The top "sleeper" floorbeam, has a perforation on the lower web measuring 16.5" L x 2" H (2022 – perforation was 16" L). The section losses calculated with the hole is 58% (2022 – was 50%). In addition, since the top "sleeper" floorbeam bears directly on the bottom floorbeam, the edge of the lower web adjacent to the hole is bent (crippled) 1/2" towards the end side. Although this is newly reported during this inspection, a slight bend or crippling can be seen in previous inspection photos. There is no loss of elevation to the deck. The bottom floorbeam has section loss readings at 64% (2022 - was 60%), with a 1/2 in diameter hole in the lower portion of the web (Photos 4 & 5).

NOTE: All existing pin connections have been retrofitted with two 1.5" diameter rods that are bolted to the floorbeam and to the existing vertical members above the floorbeams. These rods have section losses of 15% to 30%.

For Information Only:

The begin floorbeam (FB0) at left side also has corrosion and section losses. Readings were taken approximately 18" from the hanger rod (under the bridge). The top floorbeam web has 43% (2022 – was 40%) with perforations along the bottom of the web for an area of 1" x 1.5". The bottom floorbeam web section loss is 29% (2022 – was 30%) (Photo 6).

A yellow flag is issued due to the nature of this bridge and its configuration. This section loss at the floorbeam has gotten worst over the past several inspections. There are some minor changes since the last inspection; however, since the bridge is posted for 12 tons and is inspected annually, a red flag is not warranted at this time.

This hybrid bridge is unratable with NYSDOT's BrR software. A Level One load rating is strongly recommended to assess the significant deterioration which has occurred since the 1992 rehabilitation.

Flag Photographs

Photo Number: 1

Photo Filename: 001_2023_3342250_D1_312.jpg



Attachment Description: Right Elevation, Looking: Begin Left

Photo Number: 2

Photo Filename: 002_2023_3342250_D2_C2_22.jpg



Attachment Description: Framing, Looking: Up & End

Photo Number: 3

Photo Filename: 003_2023_3342250_D2_C1_153.jpg



Attachment Description: Begin Approach with Load Posting Sign, Looking: End

Photo Number: 4

Photo Filename: 004_2023_3342250_D2_C1_23.jpg



Attachment Description: Floorbeam FB0 at Right, Looking: Begin Right

Photo Number: 5

Photo Filename: 005_2023_3342250_D2_C1_19.jpg



Attachment Description: Floorbeam FB0 at Right, Looking: Begin Left

Photo Number: 6

Photo Filename: 006_2023_3342250_D2_C1_32.jpg



Attachment Description: Floorbeam FB0 at Left, Looking: Begin Left

Photo Number: 7

Photo Filename: 23_Flag Photo Location Plan_029.jpg

BIN: 3342250

DATE: 10/2/23

FEATURE CARRIED: COUNTY ROAD 25A

FEATURE CROSSED: KINDERHOOK CREEK

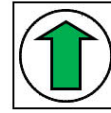
YELLOW FLAG 8B2305W029 LOCATION PLAN

PHOTO ABOVE DECK

xx

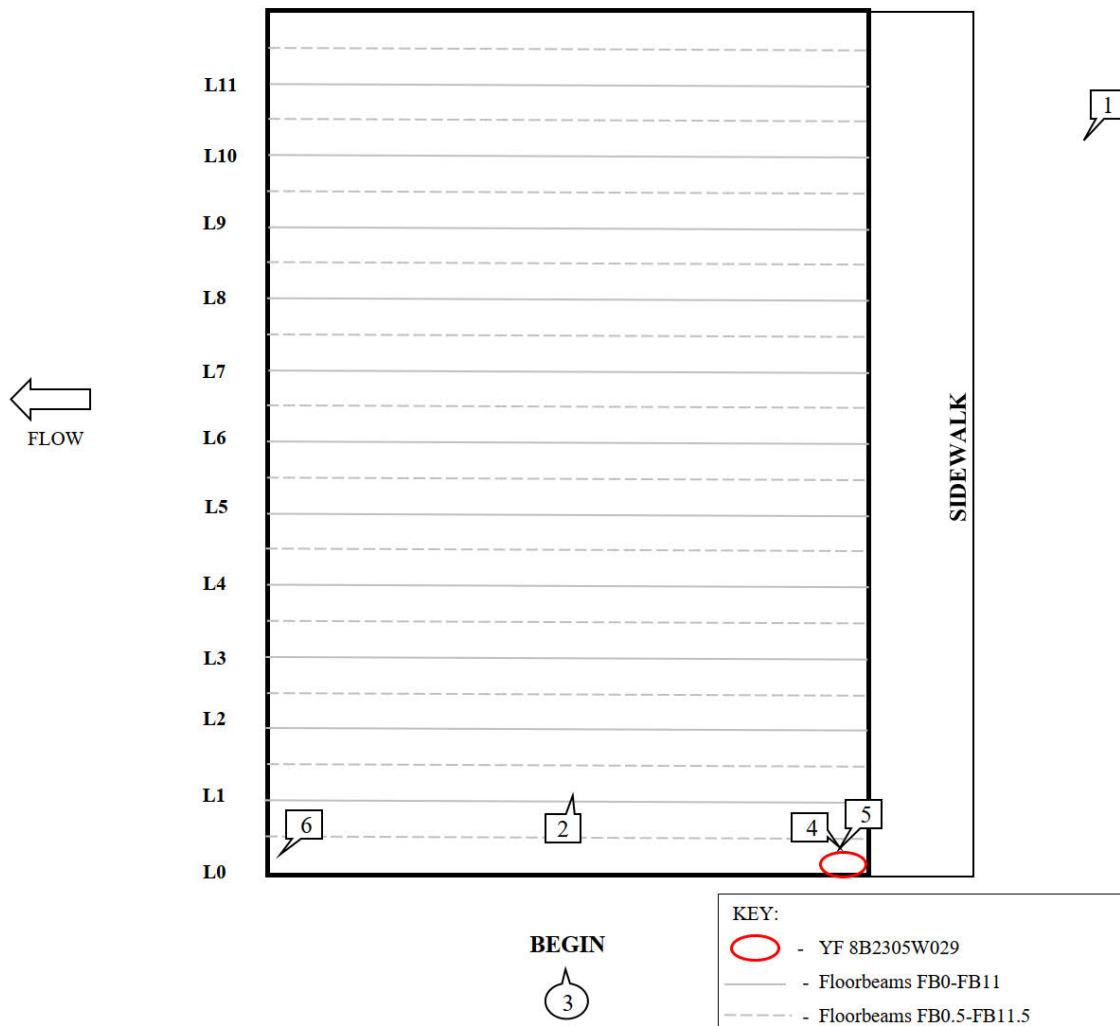
PHOTO BELOW DECK

xx



ORIENTATION

END

**Attachment Description: Flag Photo Location Plan**