Massachusetts Cultural Resource Information System

Scanned Record Cover Page

Inventory No: AMH.964

Historic Name: Fort River Lenticular Bridge

Common Name: Mill Lane - West Street Bridge over Fort River

Address: West St

City/Town: Amherst
Village/Neighborhood: Mill Valley

Local No:

Year Constructed: c 1880

Architect(s): Corrugated Metal Company; Douglas, William O.

Architectural Style(s): Truss Lenticular

Use(s): Other Engineering; Other Transportation

Significance: Engineering; Transportation

Area(s):

Designation(s):

Building Materials(s):



The Massachusetts Historical Commission (MHC) has converted this paper record to digital format as part of ongoing projects to scan records of the Inventory of Historic Assets of the Commonwealth and National Register of Historic Places nominations for Massachusetts. Efforts are ongoing and not all inventory or National Register records related to this resource may be available in digital format at this time.

The MACRIS database and scanned files are highly dynamic; new information is added daily and both database records and related scanned files may be updated as new information is incorporated into MHC files. Users should note that there may be a considerable lag time between the receipt of new or updated records by MHC and the appearance of related information in MACRIS. Users should also note that not all source materials for the MACRIS database are made available as scanned images. Users may consult the records, files and maps available in MHC's public research area at its offices at the State Archives Building, 220 Morrissey Boulevard, Boston, open M-F, 9-5.

Users of this digital material acknowledge that they have read and understood the MACRIS Information and Disclaimer (http://mhc-macris.net/macrisdisclaimer.htm)

Data available via the MACRIS web interface, and associated scanned files are for information purposes only. THE ACT OF CHECKING THIS DATABASE AND ASSOCIATED SCANNED FILES DOES NOT SUBSTITUTE FOR COMPLIANCE WITH APPLICABLE LOCAL, STATE OR FEDERAL LAWS AND REGULATIONS. IF YOU ARE REPRESENTING A DEVELOPER AND/OR A PROPOSED PROJECT THAT WILL REQUIRE A PERMIT, LICENSE OR FUNDING FROM ANY STATE OR FEDERAL AGENCY YOU MUST SUBMIT A PROJECT NOTIFICATION FORM TO MHC FOR MHC'S REVIEW AND COMMENT. You can obtain a copy of a PNF through the MHC web site (www.sec.state.ma.us/mhc) under the subject heading "MHC Forms."

Commonwealth of Massachusetts
Massachusetts Historical Commission
220 Morrissey Boulevard, Boston, Massachusetts 02125
www.sec.state.ma.us/mhc

This file was accessed on: Tuesday, June 2, 2020 at 1:00: PM

FORM F – STRUCTURE (BRIDGE)

MASSACHUSETTS HISTORICAL COMMISSION MASSACHUSETTS ARCHIVES BUILDING 220 Morrissey Boulevard BOSTON, MASSACHUSETTS 02125

Photograph



Locus Map



Lat/Long: 42.355583, -72.520639

Recorded by: Ben Haley

Organization: Massachusetts Historical Commission

Date (*month* / *year*): May 2019

17C-9 AMH.964 17C-58

Area(s)

Form Number

USGS Ouad

Town/Citv: Amherst

Assessor's Number

Place (neighborhood or village): Amherst (between South Amherst and Amherst Center)

Street/Route: Mill Lane/West Street (Rt. 116)

Carried over: Fort River

(Railroad, river, brook, canal or road)

Historic/Common name: Fort River Lenticular Bridge

Ownership: private (two owners)

(Name of state agency or municipality)

Mass. Highway bridge no.:

lenticular pony truss **Bridge type:**

Bridge typology code

Date of Construction: ca. 1880

Source: "Lenticular Iron Truss Bridges in Massachusetts."

Civil Engineering Practice, Spring/Summer 2005

Engineer/Designer: William O. Douglas

Bridge company/Contractor: Cor. Metal Co., East Berlin,

CT (precursor to Berlin Iron Bridge Co.)

Material (s): Iron

Alterations (with dates): paved surface and modern hand/guardrails, presumably dating to 1997 repurposing for pedestrian use.

Posted load limit (*if any*):

n/a

Condition: Good

Moved ⋈ no ☐ yes Date:

Acreage: less than one acre

Setting: The bridge formerly was the primary road crossing for Route 116 over the Fort River in Amherst. It now sits just to the east of a bridge erected in 1965. It can be accessed by crossing Rt. 116 from west to east or from Mill Lane, which heads east from Rt. 116. It is directly adjacent to a wooden building that once served as a mill and is now a private residence. The bridge is accessed from Mill Lane via a narrow right of way between the former mill and a parking area.

> RECEIVED **JUN 11 2019**

MASS. HIST. COMM.

AMHERST

RT. 116 (MILL LN)

AMH.964

Form No. Area(s)

MASSACHUSETTS HISTORICAL COMMISSION 220 Morrissey Boulevard, Boston, Massachusetts 02125

Superstru	ıcture:
-----------	---------

Deck width: 8 ft Overall length: ~60 ft Skew:

Main unit: No. of spans: Span length: Approaches: No. of spans: 0 Span length:

Substructure (*structure below deck*)

Height above feature spanned: Material of abutments or piers: stone

Recommended for listing in the National Register of Historic Places.

If checked, you must attach a completed National Register Criteria Statement form.

ENGINEERING/DESIGN ASSESSMENT

Describe important design features and evaluate in terms of other bridges within the community or region.

The lenticular pony truss bridge is about 60 feet long and the deck is 8 feet wide. A 2005 Civil Engineering Practice article ("Lenticular Iron Truss Bridges in Massachusetts," spring/summer 2005) notes that "vertical posts have parallel sides, which is an early configuration used by the manufacturer" and that this distinguishes it from all the other such bridges examined in Massachusetts for the article. According to the 2005 article, the bridge is the only surviving lenticular pony truss bridge in Massachusetts that has the plate stating it was built by the Corrugated Metal Company, the predecessor of the Berlin Iron Bridge Company.

HISTORICAL NARRATIVE

Explain the history of bridge and how it relates to the development of the community.

This lenticular pony truss bridge is one of a very small number surviving in Massachusetts. The 2005 Civil Engineering Practice article notes that there once about 100 lenticular iron truss bridges in Massachusetts built by the Corrugated Metal Company and Berlin Iron Bridge Company (the former being the precursor of the latter) between 1880 and 1900. The bridge was built ca. 1880 and served as the crossing of the Fort River at this location until sometime between 1916 and 1930. The 1916 Sanborn map shows the bridge as the only crossing of the Fort River, and the 1930 map shows a bridge in the location of the current road bridge. The 1930 map does not show the iron bridge, but an updated 1950 Sanborn map shows it.

As of the writing of that Civil Engineering Practice article, nine were known to still exist; three were currently open to vehicular traffic, two were closed; two had been restored and relocated for use as pedestrian/bikeway bridges; and two had been dismantled and put in storage for possible future use. The article goes on to note that "Like many other iron truss bridges of the day, these bridges were, in effect, mass produced since the components were built in a factory, sent to the site and then assembled."

Since the bridge in Amherst has been restored but not relocated, it seems to fall into the second category of the current status of surviving lenticular pony truss bridges as outlined in the Civil Engineering Practice article. According to that article, it was restored and rebuilt in 1997 to serve as a pedestrian bridge. The paving and pedestrian railings presumably date to this time.

BIBLIOGRAPHY and/or REFERENCES

"Lenticular Iron Truss Bridges in Massachusetts," Civil Engineering Practice, Spring/Summer 2005, pp. 53-74.

Victor Darnell, "Lenticular Bridges from East Berlin, Connecticut," The Journal of the Society for Industrial Archeology, Vol. 5, No. 1 (1979), pp. 19–32.

Sanborn Maps for 1916, 1930, and 1950.

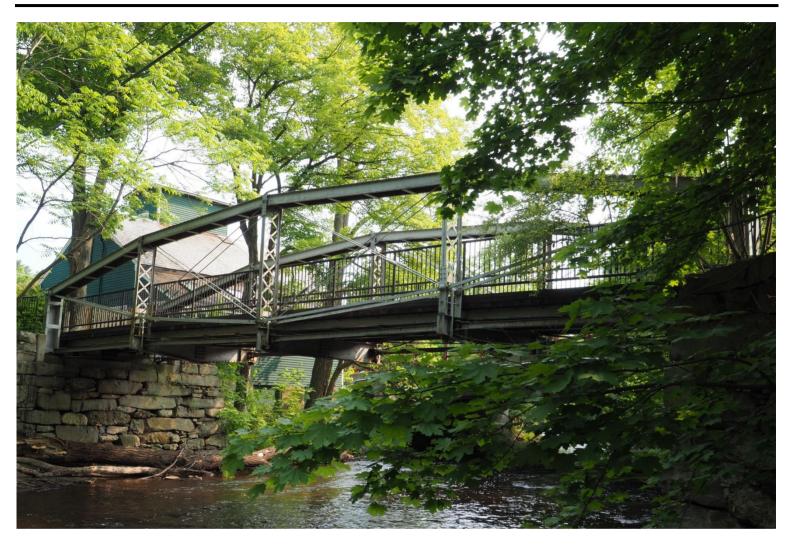
AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

AMH.964

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



Underside of the bridge, looking south/southwest. Old mill (AMH.___) in the background.

AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

AMH.964

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



Looking north/northwest, toward Route 116. Current road bridge, dating to 1965, can be seen at left.

AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

- -----

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

1 01111 1 101

AMH.964

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

AMH.964

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



Label on eastern lenticular truss.

AMHERST

RT. 116 (MILL LN)

Area(s) Form No.

AMH.964

MASSACHUSETTS HISTORICAL COMMISSION 220 MORRISSEY BOULEVARD, BOSTON, MASSACHUSETTS 02125



View of bridge from current road bridge. Looking east.