

**CONNECTICUT RIVER BRIDGE
011 LEBANON – HARTFORD**

NH Bridge ID: Lebanon 058/127

CARRYING: Bridge Street, US 4
PRESENT NAME: Lebanon-Hartford Bridge
DATE BUILT: 1936
LAT/LONG: 43.634429,-72.328534

CROSSING CHRONOLOGY

- 1805 First toll bridge built
- 1836 Second span, covered bridge, constructed
- 1880 Freed of toll
- 1896 Covered bridge destroyed in flood
- 1897 Third bridge, pin-connected three-span Pratt truss
- 1936 Fourth bridge, two high Pratt truss spans and one low Warren truss span
- 2012 Bridge closed, temporary span erected on downstream side

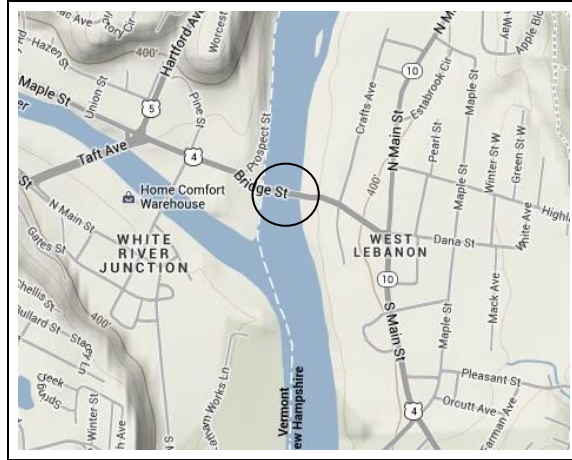


FIGURE 1: Lebanon-Hartford Bridge, built 1936. Upstream side. Note steel piers supporting temporary bridge on downstream side, erected to maintain traffic following closure of the bridge and during demolition and construction of new bridge 2013-2015 (Historic Documentation Company Inc. 2012).

CROSSING HISTORY

First bridge: Interest in constructing a toll bridge at this location emerged at a fairly early date. The Proprietors of the White River Falls Bridge obtained charters from New Hampshire in 1792 and Vermont in 1795. The project proved difficult, however; in deeds dated 1801 and 1803 the Proprietors sold their interest to Elias Lyman and Justin Lyman. The Walpole *Political Observer* reported in February 1805 that “Mr. Elias Lyman has erected a bridge across the Connecticut . . . Great advantages are promised from this bridge. Its construction is said to be excellent.” This initial span, known as Lyman’s Bridge, apparently was an open timber bridge.

Second bridge: The New Hampshire legislature chartered a new company, the Lyman’s Bridge Corporation, to take over the bridge crossing in 1836. In that year the company constructed a three-span covered bridge supported on rubble stone piers topped by wooden framework cribs. This bridge served until being washed away in a flood of 1896. In 1890, the towns of Lebanon and Hartford, VT, having bought out the owners, removed the toll.

Third bridge: In 1897 the towns of Lebanon and Hartford collaborated in funding construction of the new bridge, although Lebanon supplied nearly 80% of the needed money, \$32,288 as opposed to Hartford’s \$8,479. The proportions were probably based on the relative size of each community’s segment of the overall bridge. This sum enabled the creation of a substantial modern crossing. The 427-foot bridge was a three-span steel structure of Pratt truss design, fabricated and erected by the Berlin Iron Bridge Company. Robert Fletcher, an eminent authority on bridge design and head of the engineering faculty at Dartmouth College, acted as consulting engineer for the project. During March 16-18, 1936, a devastating flood hit the Connecticut Valley. The steel bridge stood against the torrent although it endured significant damage. The Highway Department closed the bridge and immediately inspected its condition. A single lane was opened to traffic on March 23, with the other lane closed for the remaining year or so of the bridge’s life.

Fourth bridge: The present bridge between West Lebanon and Hartford on Route 4 (058/127) is composed of two high Pratt spans and one low Warren span. It was built by the American Bridge Company in 1936. It stands on the substructure of 1897, although the bridge elevation was raised by the addition of concrete bridge seats atop the stone. The recorded span lengths of the bridge are 88'-0", 143'-6", and 148'-9". The Lebanon-Hartford Bridge was documented in 2011 for NHDOT by Historic Documentation Company Inc. of Portsmouth, RI, in accordance with the standards of the Historic American Engineering Record.

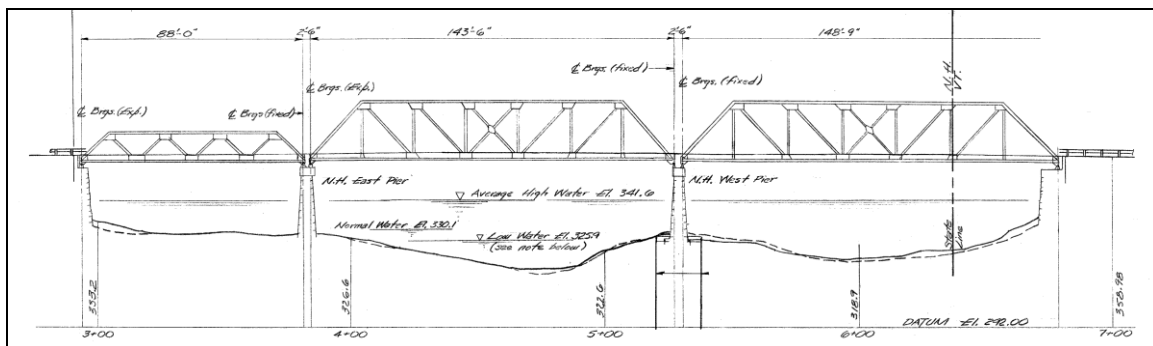


FIGURE 2: Lebanon -Hartford Bridge, elevation drawing from original bridge plans, showing two Pratt thru-truss spans and one Warren pony truss span (NHDOT 1935).

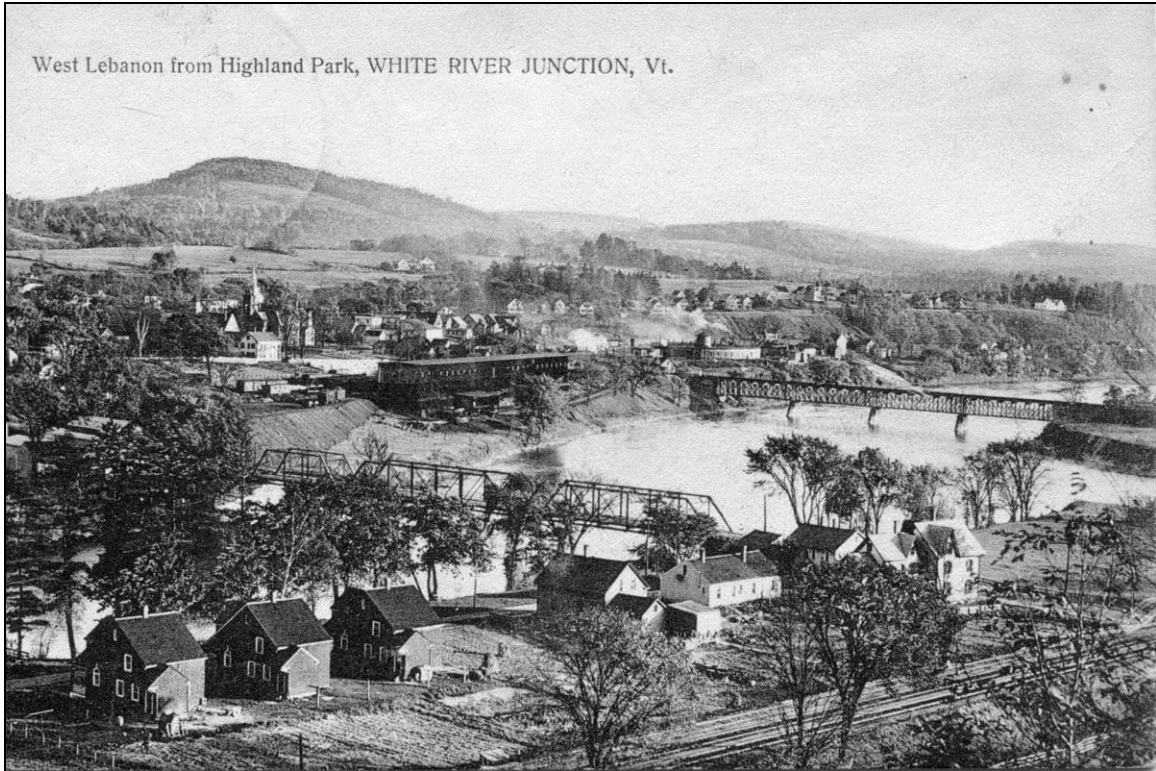


FIGURE 3: Lebanon-Hartford Bridge, early 20th century postcard view, from Vermont side, showing 3-span steel truss bridge built 1897, left of center. Note wood deck truss railroad bridge downstream, right of center (Lebanon Historical Society).



FIGURE 4: Lebanon-Hartford Bridge, built 1897, postcard view dated 1910 (Lebanon Historical Society).



FIGURE 5: Lebanon-Hartford Bridge, 1897, inundated during March 19, 1936 flood (Lebanon Historical Society).

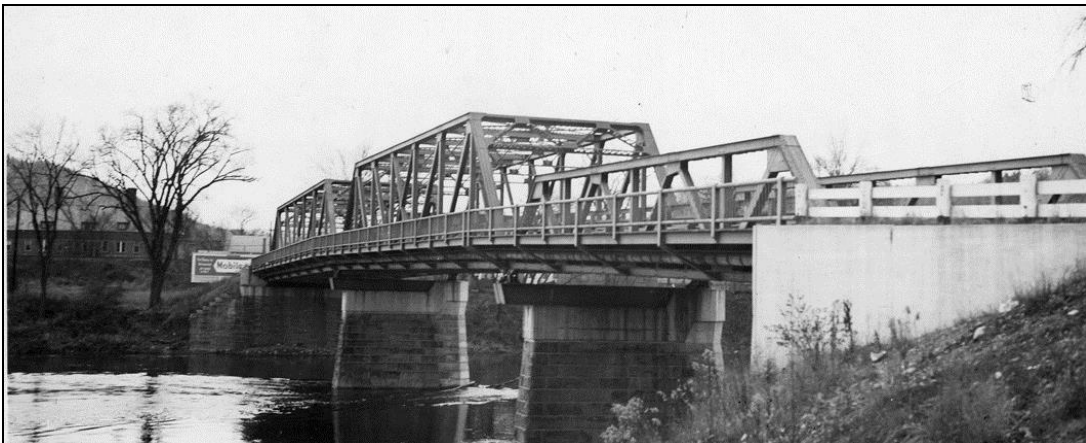


FIGURE 6: Lebanon-Hartford Bridge, 1936, showing downstream side from New Hampshire taken 1940 (NHDOT 1940).



FIGURE 7: Lebanon-Hartford Bridge, 1936, New Hampshire approach in 1940 (NHDOT 1940).



FIGURE 8: Lebanon-Hartford Bridge, 1936, upstream side from Vermont (Freiberg 2008).



FIGURE 9: Lebanon-Hartford Bridge, 1936, shown closed with temporary bridge open on downstream side (Historic Documentation Company Inc. 2012).



FIGURE 10: Temporary truss bridge erected along downstream side of 1936 Lebanon-Hartford Bridge, showing temporary steel piers anchored to 1897 stone piers (Historic Documentation Company Inc. 2012).

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