

United States Department of the Interior
National Park Service

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National Register of Historic Places
Registration Form

NATIONAL
REGISTER

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name _____
other names/site number Medburyville Bridge

2. Location

street & number Town Highway 31 N/A not for publication
city, town Wilmington N/A vicinity
state Vermont code VT county Windham code 025 zip code 05363

3. Classification

<p>Ownership of Property</p> <input type="checkbox"/> private <input type="checkbox"/> public-local <input checked="" type="checkbox"/> public-State <input type="checkbox"/> public-Federal	<p>Category of Property</p> <input type="checkbox"/> building(s) <input type="checkbox"/> district <input type="checkbox"/> site <input checked="" type="checkbox"/> structure <input type="checkbox"/> object	<p>Number of Resources within Property</p> <table border="0"> <tr> <td>Contributing</td> <td>Noncontributing</td> </tr> <tr> <td>_____</td> <td>_____ buildings</td> </tr> <tr> <td><u>1</u></td> <td>_____ sites</td> </tr> <tr> <td>_____</td> <td>_____ structures</td> </tr> <tr> <td><u>1</u></td> <td>_____ objects</td> </tr> <tr> <td>_____</td> <td><u>0</u> Total</td> </tr> </table>	Contributing	Noncontributing	_____	_____ buildings	<u>1</u>	_____ sites	_____	_____ structures	<u>1</u>	_____ objects	_____	<u>0</u> Total
Contributing	Noncontributing													
_____	_____ buildings													
<u>1</u>	_____ sites													
_____	_____ structures													
<u>1</u>	_____ objects													
_____	<u>0</u> Total													

Name of related multiple property listing:
Metal Truss, Masonry & Concrete Bridges in Vermont

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 80. In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

[Signature] 10/3/90
Signature of certifying official Date
VERMONT
State or Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

Signature of commenting or other official Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

- entered in the National Register.
 See continuation sheet.
- determined eligible for the National Register. See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain): _____

*entered in the
National Register*

[Signature] 11/8/90

Signature of the Keeper Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

TRANSPORTATION/road-related

Current Functions (enter categories from instructions)

TRANSPORTATION/road-related

7. Description

Architectural Classification
(enter categories from instructions)

OTHER: Double-intersection Warren
through truss bridge

Materials (enter categories from instructions)

foundation stone

walls

roof

other Steel

Describe present and historic physical appearance.

See continuation sheet for description

See continuation sheet

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Located in a wooded valley in the small village of Medburyville in the town of Wilmington, Vermont, this bridge represents one of the various types of metal truss bridges constructed in Vermont in the late nineteenth and early twentieth centuries. This single-span, steel through truss, 97 feet long, appears to have been built in 1896, using both riveted and hairpin-bolt construction. The bridge is unusual for its use of a relatively rare truss type, particularly for its date and intended purpose. The bridge retains its integrity of location, setting, design, materials, workmanship, feeling and association.

The bridge is situated directly south of state highway 9, approximately 2.5 miles west of Wilmington, Vermont, in Windham County. It was built by the town of Wilmington to carry vehicular traffic across the Deerfield River, connecting state highway 9 with town highway 30. The bridge is a steel, double-intersection Warren through truss, consisting of a horizontal top chord with inclined end posts and overlapping angled subtruss to stiffen the structure. Originally part of town highway 31, the one-lane bridge is a single span, 97 feet long and 14.1 feet wide, carrying the roadway 17.5 feet above the Deerfield River. It has a portal clearance of 14.8 feet, and five panels with a truss depth of 22 feet.

The top chord of the truss consists of a box girder, six-by-twelve inches, with stay plates on the underside spaced approximately three feet apart. The bottom chord is made of paired channels, stayed at approximately eight foot intervals. The hip verticals and main diagonals of the truss are paired angles. Reverse diagonals consist of paired diagonals joined by lattice bars. Diagonal lattice girders form the top lateral bracing and the portal struts are cross braced with broad lattice work. The floor system consists of rolled I-section floor beams suspended from lower joints by hairpin bolts, and five I-beam stringers. The stringers appear to be re-used: they have cleats welded into the underside, holes in the web, and a thickened flange in the center. The bridge deck has been removed. Three rounded steel bars pass between the paired diagonals on either side of the bridge to form a railing. The abutments for the bridge consist of uncoursed rubble.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

nationally statewide locally

Applicable National Register Criteria A B C D

Criteria Considerations (Exceptions) A B C D E F G

Areas of Significance (enter categories from instructions)

Engineering

Transportation

Period of Significance

c.1896

Significant Dates

c.1896

Cultural Affiliation

NA

Significant Person

NA

Architect/Builder

Vermont Construction Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

See continuation sheet for statement of significance.

See continuation sheet

9. Major Bibliographical References

Wilmington, Vermont. Vermont Historic Sites and Structures Survey, Survey Number 1322-17. Vermont Division for Historic Preservation.

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

See continuation sheet

Primary location of additional data:

- State historic preservation office
- Other State agency
- Federal agency
- Local government
- University
- Other

Specify repository: _____

10. Geographical Data

Acreage of property Less than one acre.

UTM References

A

1	8
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6	6	9	9	0	0
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4	7	4	8	3	7	5
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Zone Easting Northing

C

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B

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Zone Easting Northing

D

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See continuation sheet

Verbal Boundary Description

The boundary for this property is the bridge and its abutments. The bridge crosses the Deerfield River in the village of Medburyville, town of Wilmington, at the UTM Reference Point: 18/669900/4748375. It is 97' in length and 14.1' in width.

See continuation sheet

Boundary Justification

This boundary includes all the land historically associated with this bridge.

See continuation sheet

11. Form Prepared By

name/title Jim Lindberg

organization Univ. of Vermont Historic Preservation Prog. date 5-6-90

street & number Wheeler House, Univ. of Vermont telephone 802-656-3180

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United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 1

The Medburyville bridge, built c. 1896, is significant as an example of late nineteenth-century bridge design and construction, and is one of two double-intersection Warren through trusses in the state. This stiffened truss design is particularly unusual in a bridge intended for vehicular rather than railroad traffic in the pre-automobile era. The bridge is also significant to Vermont's transportation history at the state and local level as part of the road, bridge, and railway network that increased inter-regional transport, trade, commerce and travel.

As part of a multiple property submission, this bridge is being nominated under the historic context "Metal Truss, Masonry, and Concrete Bridges in Vermont." The property type is metal truss bridges. This bridge meets the registration requirements for this property type: it is intact, with an identifiable, functioning truss system, and retains its historic integrity of site, design and construction.

The double-intersection Warren truss is based on the original Warren truss design, patented in 1848. The double-intersection design superimposes two triangular web support systems upon each other to provide improved rigidity. Although criticized for their loading indeterminacy and excessive use of metal over a simple truss, double-intersection Warren trusses were favored by some engineers in the nineteenth century for their superior rigidity. Except for railroad use, this design did not persist much past the early years of the twentieth century. The light proportions of the Medburyville design suggest that this bridge was not intended for heavy motor vehicle use. The relative lightness of design, combined with the use of hairpins and bolts to attach the floor beams, make this particular truss unusual.

The Medburyville bridge replaced an earlier wood bridge (built c. 1855) which crossed the Deerfield River near the point of the present truss. The new bridge allowed heavy vehicle access between a major east-west route across the state, now highway 9, and the south side of Medburyville. A number of houses as well as a school were located on the south side of the river near the bridge, and mountainous timber lands rose above the village further south.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

At the time this bridge was constructed, c. 1896, the state government was just beginning to organize Vermont's transportation system, and standardized designs for infrastructure such as bridges were still a few years off. The Medburyville bridge, therefore, was the responsibility of the Town of Wilmington. Although conclusive evidence pointing to the exact date of construction for this bridge is not yet available, town reports show that \$1,000.00 was paid to the Vermont Construction Company and another \$513.00 to an unspecified party(s) to build a bridge in Medburyville in 1896. Based in St. Albans, The Vermont Construction Company was the first metal bridge fabricator in Vermont, and a subsidiary of the R.F. Hawkins Iron Works of Springfield, Massachusetts, a company with a long tradition of metal truss bridge-making in America. Town reports also show expenses paid to the Vermont Construction Company and the Deerfield River Company for repairs to a Medburyville bridge in 1901 and 1902.

The bridge withstood the catastrophic 1927 flood, and continued to function as a town highway bridge until 1985, when it was taken out of service and traffic was rerouted over a new bridge built directly adjacent to the old truss. The old Medburyville bridge was deeded by the town of Wilmington to the Vermont Division for Historic Preservation in 1985, which maintains it as an historic site. The bridge remains closed to all traffic.