

1525

United States Department of the Interior
National Park Service

SEP 29 1992

National Register of Historic Places
Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Bridgewater Corners Bridge

other names/site number _____

2. Location

street & number Vermont Route 100A over the Ottauquechee River N/A not for publication

city or town Bridgewater N/A vicinity

state Vermont code VT county Windsor code 027 zip code 05035

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, 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 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

Eric Sullivan Deputy State 9/25/92
Signature of certifying official/Title Date

Vermont State Historic Preservation Office
State of Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the 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:)

Signature of the Keeper

~~Entered in the~~
~~National Register~~

Date of Action

Delores Ryan 10/29/92

Bridgewater Corners Bridge
Name of Property

Windsor County, Vermont
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
		buildings
		sites
1		structures
		objects
1		Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

Metal Truss, Masonry, and Concrete Bridges of
Vermont

**Number of contributing resources previously listed
in the National Register**

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

TRANSPORTATION/road-related (vehicular)

Current Functions
(Enter categories from instructions)

TRANSPORTATION/road-related (vehicular)

7. Description

Architectural Classification
(Enter categories from instructions)

Other: Pratt Through Truss Bridge

Materials
(Enter categories from instructions)

foundation concrete

walls

roof

other steel

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

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 # _____

Areas of Significance

(Enter categories from instructions)

Transportation

Engineering

Period of Significance

1928

Significant Dates

1928

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

American Bridge Company

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 1

Bridgewater Corners Bridge
Bridgewater, Windsor County, Vermont

Located in a moderately developed, mixed agricultural and residential area of Bridgewater Corners in the town of Bridgewater, Vermont, this bridge represents the main type of metal truss bridge constructed in Vermont following the 1927 flood that destroyed many earlier bridges. This single span steel Pratt through truss, 111 feet long, was built in 1928 using riveted construction. This bridge is notable because it is shorter in length than the standard through truss and is built with relatively light members. The bridge retains its integrity of location, setting, design, materials, workmanship, feeling and association.

This bridge is located south of U.S. Highway 4 in Bridgewater Corners, Vermont in Windsor County. It was built by the American Bridge Company for the State of Vermont to carry vehicular traffic from U.S. Highway 4 across the Ottauquechee River on State Highway 100A. The bridge is a steel, Pratt through truss, consisting of horizontal top chords with inclined end posts and latticed underside. This two-lane bridge is a single span, 111 feet long and 21.6 feet wide, carrying the roadway 15 feet above the Ottauquechee River. The bridge has a portal clearance of 15.1 feet, and seven panels with a truss depth of approximately 18 feet.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 7 Page 2

Bridgewater Corners Bridge
Bridgewater, Windsor County, Vermont

The top chord of the truss consists of a box girder, 10 inches by 17 inches, with latticed underside. The bottom chord is made of paired channels joined by stay plates, placed approximately 4 feet apart, at the top and bottom. The hip verticals are I-beams. Other verticals and the first diagonal are built up I-sections with web of plates spaced 4 feet apart. Other diagonals are paired angles joined by stay plates. The top lateral bracing is formed by lattice girder struts (I-section) with angle-section cross-bracing and T-section knee braces. The portal is braced with four triangular truss panels and one central upright brace. The corrugated metal floor is supported by rolled I-section floor beams, five I-beam stringers and cross braced at the bottom in angle sections. The concrete curb has the bridge's construction date incised in the ends. A builder's plate, with the date and construction company, is also affixed to an inclined end. The two-rail guardrail on both sides of the bridge is built of angles and channels on T-section stanchions. The abutments for the bridge are rusticated poured concrete.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 1

Bridgewater Corners Bridge
Bridgewater, Windsor County, Vermont

The Bridgewater Corners bridge, built in 1928 by the American Bridge Company, is significant as an example of early 20th century standardized metal bridge design and construction. It is representative of the type of bridges mass produced and installed following the 1927 flood which destroyed a major portion of Vermont's bridges.

As part of the multiple property submission "Metal Truss, Masonry, and Concrete Bridges in Vermont," this single span, Pratt through-truss is a good example of a metal truss bridge. Under Criterion A, association with broad patterns of history, the Bridgewater Corners bridge is illustrative of trends in both transportation and construction. 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.

This single span Pratt through-truss is based on the original Pratt design, patented in 1844. The basic Pratt truss, as exemplified by this bridge, is distinguished by vertical members acting in compression and diagonals acting in tension thereby reducing the overall length of compression members, and inhibiting buckling and breaking. In addition, the Pratt truss was used extensively to replace bridges lost in Vermont's 1927 flood because of the design's ease of fabrication and construction.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 2

Bridgewater Corners Bridge
Bridgewater, Windsor County, Vermont

On November 3 and 4, 1926 record rainfall deluged northern New England. Approximately 4 billion tons of rain flooded Vermont. This massive amount of precipitation, following on the heels of a wet fall, filled Vermont's waterways beyond capacity. Statewide, more than 1,200 bridges were destroyed, including the one at Bridgewater Corners.

This disaster led to the state's taking control of local bridge and roadway construction and Vermont's first use of public debt for transportation development. The American Bridge Company, founded in 1900 by banker J.P. Morgan and in 1920 part of U.S. Steel, loaned the state a structural engineer to head the design team working on replacement bridges. This move placed the company in a superior position to profit from Vermont's misfortune.

The Bridgewater Corners bridge, which links two major Vermont roads – U.S. Route 4 and Vermont Highway 100, uses the standardized design that characterized Vermont's efforts to rebuild following the flood. Pratt through-trusses were used for nearly all spans between 110 and 150 feet. This bridge is notable mainly because of its short length that allows the use of relatively light members.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 / 10 Page 1

Bridgewater Corners Bridge
Bridgewater, Windsor County, Vermont

Verbal Boundary Description

The boundary for this property is the bridge and its abutments. The bridge crosses the Ottauquechee River in a residential area of Bridgewater Corners, town of Bridgewater, Vermont at the UTM Reference Point: 18/689150/4828430. It is approximately 113' in length and 21'6" in width.

Justification

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

Bibliography

State of Vermont, Division for Historic Preservation, "Historic Sites and Structures Survey."

Montpelier, VT: State of Vermont, Division for Historic Preservation, 1976.

State of Vermont, Division for Historic Preservation, "Metal Truss, Masonry, and Concrete Bridges in Vermont." Montpelier, VT: State of Vermont, Division for Historic Preservation, 1990.