

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

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 Williams River Route 5 Bridge

other names/site number N/A

2. Location

street & number U.S. Route 5 over Williams River N/A not for publication

city, town Rockingham N/A vicinity

state Vermont code VT county Windham code 025 zip code 05101

3. Classification

Ownership of Property

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

Category of Property

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

Number of Resources within Property

Contributing	Noncontributing
_____	_____ buildings
_____	_____ sites
<u>1</u>	_____ structures
_____	_____ objects
<u>1</u>	_____ Total

Name of related multiple property listing:

Metal Truss, Masonry, and Concrete Bridges in Vermont 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 60. In my opinion, the property meets does not meet the National Register criteria. See continuation sheet.

[Signature]
Signature of certifying official

9/26/91
Date

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): _____

[Signature]

11-14-91

[Signature]
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)

Materials (enter categories from instructions)

Other: Warren deck truss bridge

foundation concrete

walls _____

roof _____

other steel

Describe present and historic physical appearance.

See continuation sheet for text.

See continuation sheet

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

1929

Significant Dates

1929

Cultural Affiliation

N/A

Significant Person

N/A

Architect/Builder

Unknown

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

See continuation sheet for text.

See continuation sheet

9. Major Bibliographical References

Rockingham Historic Sites and Structures Survey. State of Vermont, Division for Historic Preservation, Montpelier, Vermont, 1984.

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	7	0	6	4	2	0	4	7	8	4	0	0	0
Zone			Easting					Northing						

B

Zone			Easting					Northing						

C

Zone			Easting					Northing						

D

Zone			Easting					Northing						

See continuation sheet

Verbal Boundary Description

The boundary for this property is the bridge and its abutments. The bridge carries U.S. Route 5 over the Williams River in the town of Rockingham at the UTM reference point: 18/ 706420/ 4784000.

See continuation sheet

Boundary Justification

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

See continuation sheet

11. Form Prepared By

name/title Michele Praught
organization UVM Historic Preservation Program date April 15, 1991
street & number Wheeler House telephone (802) 656-3180
city or town Burlington state Vermont zip code 05405

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National Park Service

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Williams River Route 5 Bridge
Rockingham, Vermont

Located on U.S. Route 5, in the town of Rockingham, Windham County, Vermont, this steel Warren deck truss bridge with riveted construction was built in 1929 for vehicular traffic and stretches some 250 feet across the Williams River. Primarily surrounded by a residential and commercial area, it is located approximately two miles north of the junction of routes 103 and 5, and served as a primary north/south connector before the construction of Interstate 91, which parallels the bridge approximately 1/3 mile to the west.

The RT. 5 Williams River Bridge is a representative example of one of the metal truss bridges constructed following Vermont's monumental 1927 flood. Through the use of standard design and economical construction techniques, the rapid replacement of Vermont's bridges was made possible. Relatively unaltered, the bridge retains its integrity in all respects.

The three-span two-lane bridge is 24' wide and rises 24' above the river below. The 137' long deck truss with individual truss depths of 15' is supported by two 56' approach spans at either end. The upper chord and end diagonals of the spans consist of a box girder with a latticed top and bottom. The lower chord is made up of paired channels with stay plates placed about 3' apart. The vertical and diagonals of the truss are made of rolled I-beams. Full-depth crossed angles form the sway bracing, crossed bracing at the angle tops and bottoms and the I-beam lattice girder form the bottom struts. The bridge incorporates a concrete slab floor and curb with railings atop rolled steel floor I-beams. The guard rail is made of angles and channels with a latticed upper railing supported by T-section stanchions.

Each of the 56' x 24' approach spans is composed of two I-section plate-girders with angle stiffeners in the web and internal angle-section cross-bracing. The bridge is supported by two oblong, poured concrete piers which have a rusticated effect. The pier to the south is recessed in an embankment. The pier to the north at rivers edge was re-poured in 1971.

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Continuation SheetSection number 8 Page 1Williams River Route 5 Bridge
Rockingham, Vermont

The Williams River Route 5 Bridge is being nominated to the National Register under the Multiple Property Submission for Metal Truss, Masonry, and Concrete Bridges in Vermont. The bridge is an excellent example of a deck truss bridge. The bridge retains its original function and siting, is relatively unaltered, and meets all the necessary registration requirements for the property type of metal truss bridges. It is significant for its contribution to bridge engineering and construction, as well as being one of only four Warren deck truss bridges built during the reconstruction period, two of which are already listed on the National Register; the Gilead Brook Bridge, Bethel, VT. (10/1/90) and the Ottauquechee River Bridge, Hartland, VT. (10/1/90). The nearly identical (excepting for the number and size of approach spans) RT 5. Williams River Bridge attests to the simplicity and standardization of Warren deck truss design. The structure retains its integrity in all respects.

Spanning some 250' across the Williams River, the RT. 5 Williams River Bridge in the town of Rockingham, Windham County, Vermont is an integral part of eastern Vermont's major route, U.S. Route 5. Built in 1929, this bridge is a representative example of one of the many metal truss bridges constructed following Vermont's devastating 1927 flood. The flood, in which no part of Vermont escaped serious damage, was a monumental event in Vermont's 20th century history. The bridge reconstruction program that followed marks a particularly remarkable period of bridge engineering and assembly and was largely responsible for putting Vermont at the forefront of bridge technology and design. Using standardization in construction and design the state of Vermont was able to replace some 1200 destroyed bridges, within a relatively short period of time.

Deck trusses were favored for several reasons. First, they allowed an unobstructed roadway for greater overhead clearance. Additionally, due to the fact that Warren trusses extended well below the deck of the roadway, the expense of building tall piers and abutments was minimized. Deck truss designs such as this one, which require greater underneath clearance, were usually selected where the natural elevation of the roadway made it feasible.

The Warren deck truss with its simple and compact design of diagonal members, rolled I-beams, and on-site riveting assembly was extremely popular and tremendously versatile. The use of the Warren deck truss became standard in its application for the longest spans of 50'-400' built during the 1928-1930 reconstruction period and in fact, continues to be used by bridge engineers today.

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PROPERTY OWNER

Agency of Transportation
State of Vermont
Attn: William Sargent
Montpelier, Vermont 05602