

NPS Form 10-900
(Rev. 10-90)

OMB No. 1024-0018

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 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 any 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.

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1. Name of Property

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historic name **Pineground Bridge**

other names/site number **Depot Road Bridge (preferred); Thunder Bridge**

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2. Location

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street & number **.15 Miles East of Rt. 28 on Depot Road** NA not for publication
city or town **Chichester** NA vicinity _____
state **New Hampshire** code **NH** county **Merrimack** zip code **03258**

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3. State/Federal Agency Certification

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As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this x 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 x meets _____ does not meet the National Register Criteria. I recommend that this property be considered significant _____ nationally _____ statewide x locally. (_____ See continuation sheet for additional comments.)

James McConaha
Signature of certifying official

1/26/04
Date

NEW HAMPSHIRE
State or 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 commenting or other official

Date

State or Federal agency and bureau

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4. National Park Service Certification

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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): _____

Elson H. Ball 3/10/04

for

Signature of Keeper

Date
of Action

=====

5. Classification

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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

Contributing

Noncontributing

_____ buildings
_____ sites

1 structures
 objects
 1 0 Total

Number of contributing resources previously listed in the National Register 0

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

N/A _____

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6. Function or Use

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Historic Functions (Enter categories from instructions)

Cat: **TRANSPORTATION** _____ Sub: **Road-related** _____

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Current Functions (Enter categories from instructions)

Cat: **TRANSPORTATION** _____ Sub: **Pedestrian-related** _____

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

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7. Description

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Architectural Classification (Enter categories from instructions)

Other: **Lenticular (parabolic) Through Truss** _____

Materials (Enter categories from instructions)

foundation **STONE** _____

roof **n/a** _____

walls n/a

other METAL/iron truss
WOOD Roadway

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

See continuation form

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8. Statement of Significance

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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.)

- ☐ a owned by a religious institution or used for religious purposes.
- ☐ b removed from its original location.
- ☐ c a birthplace or a 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.

Areas of Significance (Enter categories from instructions)

Engineering

Period of Significance **1887** _____ Significant Dates **1887** _____

Significant Person

(Complete if Criterion B is marked above) **n/a** _____

Cultural Affiliation **n/a** _____

Architect/Builder **Berlin Iron Bridge Company; Douglas, William O.**

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

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9. Major Bibliographical References

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

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 # _____

Primary Location of Additional Data

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

___ Other

Name of repository: _____

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10. Geographical Data

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Acreage of Property **Less than one acre**

UTM References (Place additional UTM references on a continuation sheet)

	Zone	Easting	Northing	Zone	Easting	Northing
1	19	307618	4791900	3	___	___
2	___	___	___	4	___	___

___ See continuation sheet.

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet.)

Boundary Justification (Explain why the boundaries were selected on a continuation sheet.)

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11. Form Prepared By

=====

name/title **Carol Hooper/Architectural Historian** _____

organization **(for)Chichester Historical Society**_____ date **December 2003** _____

street & number **51 Main Street**_____ telephone **603 746-3903**_____

city or town **Chichester**_____ state **NH**_ zip code **03258**_____

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Additional Documentation

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Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.
A sketch map for historic districts and properties having large acreage
or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items (Check with the SHPO or FPO for any additional items)

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Property Owner

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(Complete this item at the request of the SHPO or FPO.)

name **Town of Chichester, NH**_____

street & number **54 Main Street**_____ telephone **603 798-5350**_____

city or town **Chichester**_____ state **NH**__ zip code **03258**_____

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Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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**NATIONAL REGISTER OF HISTORIC PLACES
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Section 7 Page 1

Depot Road Bridge
name of property
Merrimack County, New Hampshire
county and State

(Section 7)

The 1887 Depot Road Bridge is a lenticular truss (through) bridge that spans the Suncook River in Chichester, New Hampshire. The bridge is located off of two-lane town-owned Depot Road which runs east from Rt. 28, providing access to Epsom from Chichester. The Suncook River forms the eastern boundary of the town of Chichester which has two main clusters of development. These were historically referred to as Chichester Center and an area today called North Chichester and historically called the Pinegrounds. Chichester Center is today the town center and includes the town offices. North Chichester, where the Depot Road Bridge is located, is a rural area with scattered houses a few miles north and east of the town center. It is closer to both the Suncook River and the former depot for the Concord & Montreal Railroad east of the bridge. Today the area has a concentration of houses and includes a general store, a campground, a cemetery, a school, the town highway department sheds, a chapel, a park, and several small businesses along Route 28 and Depot Road.

The Depot Road Bridge is 96 feet long and 16 feet wide with a road bed approximately 15 feet above the river. The bridge is constructed largely of wrought iron with finials of cast iron, and bridge deck and railings of wood. It is supported by unmortared ashlar (granite) piers which are part of the river bank abutments. These abutments were constructed for an earlier, wood, bridge.

The Depot Road Bridge is a so-called "through" bridge. In this type of bridge the road deck is located at or below the bottom arches versus a "half-through" (where the road is between the top and bottom arch) or a "deck" bridge (where the road is above the top chord). "Pony truss" bridges, those that had no overhead cross bracing between the arches, were usually used for smaller spans.

The Depot Road span consists of six panels or sections, each 16 feet long. The roadway is suspended from the hangers (web posts) below the bottom chord. The truss panels and end posts are connected by 3-inch diameter threaded pins which are secured with nuts. A few connections, including the railings, finials, plaque and spike ornamentation are bolted; most however, are riveted.

The top (or compression) chords of the trusses carry the weight in this type of bridge. They are three-sided box girders- roughly 14 inches wide and 7 ½ inches deep. The under side of the girder is open, but covered with flat bar stock

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placed diagonally in a laced fashion. The lower (or tension) chords, consist of two 3-inch by 1-inch flat "eye" bars (bars having openings to accommodate pins).

Connecting the top and lower chords are trusses divided into six sections by posts (or hangers). The posts are 8-inch wide latticed double-flanged members. The trusses are braced diagonally with 1 1/8-inch diameter rods with turnbuckles to assure angular trueness in the structure. On the two interior panels, additional support is provided by longitudinal rods which roughly bisect the truss.

The top chords are also supported by overhead braces between the trusses at three interior panel points. These are similar in shape to the hangers but are only five inches deep. Due to overhead road clearance, there are no braces at the endposts; instead portals, located one panel in from each end of the bridge, are used as braces. These consist of tapered lattice trusses with curved corners. The west portal features a decorative metal casting running the width of the bridge and a 48-inch by 41-inch plaque that states:

Built by the Berlin Iron Bridge Co. East Berlin, Conn.
Douglas & Jarvis Pat Apl 16, 1878 and Apl 7, 1885.
Noah G. Edmunds. F.E. Towle, George W. Murdough
Selectmen.

The endposts of the bridge feature cast iron orb finials. These consists of an 8-inch sphere supported by a 6-inch half sphere on a square bottom plate. The southwest corner post is missing its finial.

The floor beams, running perpendicular to the chords, are hung from the bottom chord pins by square looped rods. Floor beams are tapered from 33 inches at the center to 13 inches at each end. They are reinforced with double angles around the perimeter. Perpendicular to the floor beams, evenly placed 9 inch deep I-beams at the interior panels and 9-inch deep channels (a later replacement) at the end panels, support the road bed. As in the other parts of the bridge, diagonal cross bracing of one-inch round bars with turnbuckles brace the floor panels. The road bed itself is composed of 4 by 12-inch loosely laid wooden planking. The ends of the boards are held by spikes to curb boards (single-

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width boards laid longitudinally which run the length of the bridge at each side).

A two-line wooden railing, constructed from 2-inch by 6-inch boards, is attached to the hangers and end post at each side of the bridge. The top rail uses two boards arranged in a T-shape and the mid rails are a single board. The are attached by bolted brackets to the hangers and end posts.

Alterations

Early alterations to the bridge appear to be minimal. Prior to 1981, a ball finial from the endpost and the decorative casting and plaque from the east side of the bridge were removed or fell off. All of the finials are missing cylindrical pins which, according to historic photographs, topped the globes. In 1981-82, when a replacement bridge was constructed, minor restoration work was done to permit pedestrian, bicycle and snowmobile use. This included the replacement of five I-beam stringers with nine-inch channel section. At that time also the deck timbers were removed and replaced with 4-inch by 12-inch treated Douglas fir timber. The structure was sandblasted and painted and minor work was done to the timber rail. Finally, certain pieces of ornamentation were welded to prevent further loss.

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(Section 8)

Summary Statement of Significance

The Depot Road Bridge qualifies for the National Register of Historic Places under Criterion C for significance in Engineering. It is the only surviving through-type lenticular truss bridge in New Hampshire and one of only four lenticular truss bridges in the state. As a lenticular truss bridge, it is a rare example of an important bridge design that once was widespread in the state and throughout the country. Manufactured between 1878 and 1900 exclusively by the Berlin Iron Bridge Company of East Berlin, Connecticut, lenticular truss bridges were also characteristic of an important innovative period in bridge design before greater standardization occurred around 1890. The bridge is also significant as one of very few remaining pin-connected bridges and one of an ever-diminishing number of iron bridges in New Hampshire. The Depot Road Bridge retains integrity of location, design, setting, materials, workmanship, feeling, and association for the year 1887 when it was erected.

Engineering Significance

The Depot Road Bridge is significant as a lenticular truss bridge. Lenticular truss bridges consist of two chords (or arches) which intersect to form a lens or cats-eye shape. The weight of the road bed is carried by these chords through hangers (or web posts) which separate the panels of the bridge. Lenticular bridges were of pinned construction. This type of construction, which is unique to bridges of this era, permitted the component pieces to move slightly to accommodate the forces of the bridge and the weight of its traffic. For this reason, the pin-connected truss has been called "the purest and least compromised form of bridge design." (Garvin, 1995,2)

Lenticular truss bridges came into popularity during, and were an example of, an important period of innovation in truss designs in the 1870s and 1880s. This period of innovation occurred largely as a result of two factors: the perfection of the use of pins, rather than rivets, to attach the components of the bridge and developments in the use of wrought iron. Pins permitted bridges to be shipped in pre-assembled pieces simply and inexpensively and could be put together on site relatively easily. Wrought iron had a far greater flexibility than cast iron and for this reason was superior for bridge construction.

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Although the first use of lenticular trusses dates to mid-19th century Europe, William O. Douglas of the Berlin Iron Bridge Company was able to secure patent number 202,526 on April 16, 1878 for an improved lenticular truss design. With only one major exception, lenticular bridges in the United States from this point on were constructed by the Berlin Company.¹

The design proved extremely popular and from 1878 to 1888, according to company literature, the Company constructed 90% of the iron highway bridges in New York and New England (Darnell 1979:19). Nearly all of these bridges were lenticular in design and the design helped make the Berlin Company one of the largest structural fabricators in New England. The lenticular design was sold by the company's representatives as being particularly strong, long lasting, and competitive in price. While it is not clear that the design was superior in any of these categories, its unusual appearance may have fostered a feeling of greater safety among town officials. The success of the design also coincided with the general turn-of-the-century effort among state and local road officials to improve roads and bridges, in what has been termed the "good roads movement." This movement focused on improving roads and bridges to, in part, permit easier movement of goods from the rural countryside to the city. In any case, the lenticular design appears to have been the right bridge at the right price at the right time.

The popularity of the lenticular design was not long lived however. Like its beginnings, the end of the line for the lenticular truss was a function of innovations in both materials and technology. The move to steel construction in the main took off around 1890 when the open-hearth process of steel manufacturing was perfected and bridge components such as bars, plates, angles and I-beams became readily available in steel. Bridge designers, once suspicious of the use of steel, moved as a whole to steel construction, which was roughly twice the strength of wrought iron in certain uses. At the same time, changes in technology, in particular pneumatic riveting, permitted easier construction in the field. With these innovations the industry was quickly transformed and by the early 20th century the steel, rivet-connected Pratt or Warren truss bridges

¹ In 1883, Gustav Lindenthal used a lenticular truss for the well-known Smithfield Street Bridge in Pittsburgh. Perhaps wary of patent infringements, when asked, he stated that he had used a Pauli Truss, named for the German engineer who constructed a bridge using the design in 1857. (Darnell 1979:19)

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dominated bridge design.

In the 20th century, with changes in the number, weights, and types of vehicles using bridges, most lenticular truss bridges were torn down and replaced. It has been estimated that only 5% of the 600-1000 lenticular bridges constructed in the country remain standing today (Darnell 1971;27). In New Hampshire, of the 56 lenticular bridges built by the Berlin company between 1878 and 1898² there are only four standing according to the New Hampshire Department of Transportation's inventory of bridges. The three other New Hampshire lenticular truss bridges are: the 1885 Campton Bridge, a double span lenticular(deck) truss bridge now partially collapsed and in a severely deteriorated condition; the 1889 Dow Avenue Bridge in Franconia which was rebuilt in the 1940s and substantially "restored/rehabilitated" in 1991; and the 1889 Delage Farm Road Bridge, also a single span lenticular (pony) truss bridge that has been taken apart and moved to a park in the Town of Franconia. None of these have been listed on the National Register and in the case of at least two of the bridges it is not clear as to whether they retain sufficient integrity to qualify for listing.³

Historical Background

It is not clear exactly when the first bridge was constructed at the "pine ground" in Chichester.⁴ Based on maps and town records, the original bridge

²The numbers however, are not exactly clear. An October 1898 advertising piece by the Company listed a total of 43 "parabolic" truss bridges in New Hampshire that it had constructed. (At this time the design was commonly referred to as parabolic or elliptical, rather than lenticular.) (Berlin Iron Bridge Company 1898;106,107)

³There are approximately 30 Berlin Iron Bridge Company bridges listed on the National Register. (Since a number are located within historic districts, it is not possible to know how many of these are lenticular bridges.) Most (18) are located in Connecticut, with 2 in Massachusetts, 5 in New York, one in Pennsylvania, 5 in Vermont.

⁴Variations on the term "Pineground" (or "pine ground") for the area appear as far back as 1783. At that time the area was

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appears to date from between 1830 (when it does not appear on the Carrigain map) and 1849 when there is mention of it in town records. (Town of Gilmanton 1849) In November, 1852, the town voted to "widen the highway leading from the Gilmanton road, so called, near Henry Robys to the pine ground bridge, so called...." (New Hampshire Highway Department: ND). At this time the road was expanded to three rods wide.

Linked, perhaps, to the 1852 widening was the establishment of the Ordway Mill on the east side of the river at the pine ground. In 1855, Chichester granted the privilege of building a grist and saw mill at the pine ground to Eneas Ordway. In March of that year, the town of Chichester at their annual meeting granted "said Mill privilege together with the Mills and adjoining thereto, said privilege being situate in said Chichester on Suncook River northerly of the bridge and road leading from the pineground road, so called to Epsom." The process, however, was a lengthy one, and Ordway apparently was still working on it in 1860 as the town kept granting additional years to complete the mill. The grist mill was located partially or wholly in the river near its east bank and fourteen feet above the bridge. (Chase & Streeter 1886) With two turbines, the mill could grind grain as well as operate as a saw mill producing boards, shingles and clapboard. Ordway was involved in the founding of the relatively short-lived Advent Society in Chichester and helped in the 1864 construction of a chapel, with the lumber coming from his mill. The chapel, which was located on Gilmanton Road (now Route 28), in 1885 came into use as a carriage manufacturing business and later was given to the Ladies Benevolent Society. Ordway died in 1884 and two years later the mill was still operating, but it is unknown how long thereafter the mill remained open. Today there are few remnants of the mill, although as late as the 1960s parts of the dam were evident. It was one of the handful of industries in Chichester in the post-civil war era and was part of a vast number of diverse, small water-run industries that were located along the Suncook River in Gilmanton, Barnstead, Pittsfield, Epsom and Pembroke.

Whatever the original date of the Pinegrounds crossing, by 1864 the bridge was in poor enough condition that the town voted to replace the bridge, "upon the old spot," and to raise a thousand dollars toward building the new bridge. (Town of Chichester, 1864) Given that significant work was done on the bridge

referred to as the pinebushes. (Chichester History Committee 1977;24) The area apparently was simply an area with many pines.

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five years later, it is possible, however, that this major rebuilding of the bridge did not take place at this time.

In 1869, the depot for the Suncook Valley Railroad was constructed slightly east of the Depot Road Bridge on what became known as Depot Road. Although actually located in Epsom, the depot was known as the Chichester Depot, and it lent its name to the road and bridge. Likely to accommodate increased traffic to the depot, in 1871 and 1872, major work was done at the Pineground bridge site and to widen the road. (Town of Chichester 1871,1872) The fact that town records indicate major expenditures for lumber and stone, and labor both for "building abutments" and "building bridge," would suggest that at that time an entire new bridge was constructed. The work was phased. In 1871, work was done constructing the abutments and piers. That year a total of \$983 was spent mostly for stone for the abutments (99 14-25 perch stone), the transportation of the stone, and labor for the construction of the abutments. The next year, work progressed in the construction of the bridge. A total of \$720 was expended mostly for labor and lumber (19,318 feet) for the bridge. According to one source this bridge was located 16 feet south of the earlier bridge. (Chase & Streeter 1886:2)

There is no indication in the record as to why the wood 1869 Pineground Bridge had to be replaced and the current bridge constructed. Whether due to increased traffic, the effects of ice or flooding, or just a desire to modernize, in September 1887 the Berlin Iron Bridge Company submitted a bid of \$1950 to "furnish all material and erect complete and ready for travel the superstructure of a wrought Iron Truss Bridge." According to the proposal:

Said price to include all lumber for bridge and shall complete bridge ready for travel. Bridge to have a floor capacity of 100# per square foot and shall be in extreme length 96 feet and shall have a clear roadway of 16 feet. All material and workmanship to be first class in every respect and built to the entire satisfaction of the selectmen. (Berlin Iron Bridge Company: 1887)

It is not clear how the Berlin Company was selected to bid on the project. The origins of the firm went back to the early days of tin and metal working in Connecticut. By the mid-1870's its predecessor, the Corrugated Metal Company of East Berlin, was making roof trusses, iron shutters, and metal ceilings, siding and roofing materials. In 1877, the company was apparently close to bankruptcy

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when the focus of the company changed with the hiring of William O. Douglas and the adoption of his lenticular truss design. Douglas, born in Cortlandville, New York on December 26, 1841 had a military background and was a partner in a wholesale hardware business in Binghamton, New York until 1877 when he went to what was then the Corrugated Metal Company as Treasurer and Executive Manager. In 1878 Douglas received his patent for the elliptical truss bridge and the firm secured exclusive rights to the patent. At this time the company changed its name and began billing itself as bridge engineers and contractors. This work quickly overshadowed its previous metal building materials business and the business rapidly expanded, eventually employing some 400 people. The company's 1888 promotional material listed at least 600 bridges which it had built and it later claimed to have constructed 1,000 bridges. (Darnell 1979:24) As discussed above, the lenticular design was extremely popular throughout New England, and was its major seller. Part of the success of the Company and its lenticular design appears to be attributable to good salesmanship. The company had local salesmen who were successful in promoting its work through a plan book that illustrated the designs of 126 parabolic bridges. It is likely that this too was the means by which the Berlin Company came to construct the Depot Road Bridge.⁵

The Chichester town records of 1887 show a payment to the Agent of the Berlin Bridge Company of \$1,950 for a "new iron bridge." Town labor and materials to construct it amounted to an additional \$330. In addition to the construction of the bridge itself, work was done at the time on the abutments, on lumber railings, and on grading. Following the general pattern, the components for the bridge, after manufacture in Connecticut, would have been shipped, via the New York, New Haven & Hartford Railroad (a branch of which was close to the plant) to the Chichester Railroad Station. From there the quite heavy components would have been taken to the site by horse and wagon.

⁵The Company was taken over in 1900 by the American Bridge Company, controlled by J. P. Morgan. The transaction was part of a period of major consolidation in the steel industry. In its first year the American Bridge Company purchased 24 bridge companies, representing half of the country's fabricating capacity. (Vermont 1990:E8) In 1901 American Bridge was itself acquired by U.S. Steel. Three of the BIBC's upper echelon staff left to form the Berlin Construction Company which made structural steel bridges and buildings.

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Through the years, the Depot Road bridge received heavy use as the main route to the Chichester railway station, and a route to Epsom. By the 1930's the bridge came to be known locally as Thunder Bridge. The moniker was due to noise created by the planks of the bridge as motor vehicles went over them; it was so noisy it was said to sound like thunder in the distance. Through the years it was an important component of daily life in Chichester. A swimming beach was established nearby in 1940.

Originally designed for lighter loads, the carrying capacity of the bridge eventually became inadequate due to heavier vehicular traffic. In the 1960s, the bridge was posted for a maximum six-ton limit. In 1978, with deteriorated stringers and floorbeams, the bridge was closed and plans were begun for a new bridge. Soon thereafter, the New Hampshire Division of Historical Resources made a determination that the bridge retained sufficient integrity and met the criteria for listing on the National Register of Historic Places. Under the aegis of Section 106 of the National Historic Preservation Act and Section 4(f) of the Department of Transportation Act, the New Hampshire Department of Transportation and the New Hampshire Division of Historic Resources reached agreement that a new bridge would be built 50 feet downstream from the existing bridge and that funds that would have been used in the demolition of the old bridge would be put towards its restoration. At the time of the construction of the new bridge (1981-82), the alignment of Depot Road was also changed to meet up with the new bridge. Minor repairs (at a cost of \$15,000) were done to the bridge to permit use by pedestrians, bicycles, and snowmobiles.

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Berlin Iron Bridge Company.

1887 Proposal for the Selectmen of the Town of Chichester for the construction of a Wrought Iron Truss Bridge in the Amount of \$1950. (Chichester Historical Society Files)

Berlin Iron Bridge Company.

1898 "Berlin Bridges and Buildings" Volume 1, number 7 October 1898 (List of New Hampshire Berlin Bridges, available at NHDHR)

Chase, William and Frank Streeter.

1886 Legal Opinion Sent to the Selectmen of Chichester. (Chichester Historical Society Files)

Chichester History Committee.

1977 A History of Chichester. Town of Chichester New Hampshire.

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Town of Chichester

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United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section q Page 12

Depot Road Bridge
name of property
Merrimack County, New Hampshire
county and State

- =====
- 1857 Annual Report of the Receipts and Expenditures of the Town of Chichester for the Fiscal Year Ending March 3, 1857.
- 1860 Annual Report of the Receipts and Expenditures of the Town of Chichester for the Fiscal Year Ending March 3, 1860.
- 1864 Annual Report of the Receipts and Expenditures of the Town of Chichester for the Fiscal Year Ending March 3, 1864.
- 1871 Report of the Treasurer of the Town of Chichester for the Fiscal Year Ending March 1, 1871.
- 1872 Report of the Treasurer of the Town of Chichester for the Fiscal Year Ending March 1, 1872.
- 1878 Reports of the Treasurer and Selectmen of the Town of Chichester for the year ending March 1, 1878.
- 1880 Reports of the Selectmen and Treasurer of the Town of Chichester, for the Year Ending March 1, 1880.
- 1885 Report of the Financial Affairs of the Town of Chichester... for the Year Ending March 1, 1885.
- 1887 Report of the Financial Affairs of the Town of Chichester... for the Year Ending March 1, 1887.
- 1888 Annual Report of the Financial Affairs of the Town of Chichester for the year ending March 1, 1888.
- 1889 Annual Report of the Financial Affairs of the Town of Chichester for the year ending March 1, 1889.
- 1890 Annual Report of the Financial Affairs of the Town of Chichester for the year ending March 1, 1890. (Chichester Historical Society Files)

Vermont State Historic Preservation Office (?)

- 1990 National Register of Historic Places Multiple Property Documentation Form.
"Metal Truss, Masonry, and Concrete Bridges in Vermont."

Maps

Carrigan, Philip

- 1830 Map of New Hampshire (Chichester Historical Society)

Lane, Joshua

- 1805 Plan of the Town of Chichester (Chichester Historical Society)

Anonymous

- 1892 Map of Chichester Merrimack County (Chichester Historical Society)

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 9 Page 13

Depot Road Bridge _____
name of property
Merrimack County, New Hampshire _____
county and State

=====

Smith, H and C.T.
1858 Map of Chichester and Parade.

Interviews

2003 David Powelson, PE, Chief, Existing Bridge Section Design, New Hampshire
Department of Transportation (with Lucille Noel).
2003 Sally Small of the Franconia Historical Society (with Lucille Noel).

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section 10 Page 14

Depot Road Bridge
name of property
Merrimack County, New Hampshire
county and State

(Section 10)

Verbal Boundary Description

The nominated property is limited to the bridge and its abutments (see attached sketch map).

Boundary Justification

The boundary has been selected to include all elements directly associated with the 1887 bridge.

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section _____ Page_15____

Depot Road Bridge _____
name of property
Merrimack County, New Hampshire _____
county and State

=====

Photographs

Depot Road Bridge
Merrimack County, New Hampshire

All photographs were taken by Carol Hooper in March 2003.
All negatives are located at the Chichester Historical Society, Chichester, New Hampshire.

Photograph 1
West side of Bridge, looking northeast

Photograph 2
West side of Bridge, looking north

Photograph 3
East side of Bridge, looking northwest

Photograph 4
West side of Bridge, looking northwest and showing 1981 bridge

Photograph 5
Depot Road looking northwest

Photograph 6
South Portal of Bridge

Photograph 7
North Portal of Bridge

Photograph 8
Detail, Portal Plaque

Photograph 9
Undated Historical Photograph of Depot Road Bridge
(Chichester Historical Society)

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

Section _____ Page_16____

Depot Road Bridge _____
name of property
Merrimack County, New Hampshire _____
county and State

=====

Photograph 10
Undated Historical Photograph of Depot Road Bridge Showing Ordway Mill
(Chichester Historical Society)

United States Department of the Interior
National Park Service

**NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET**

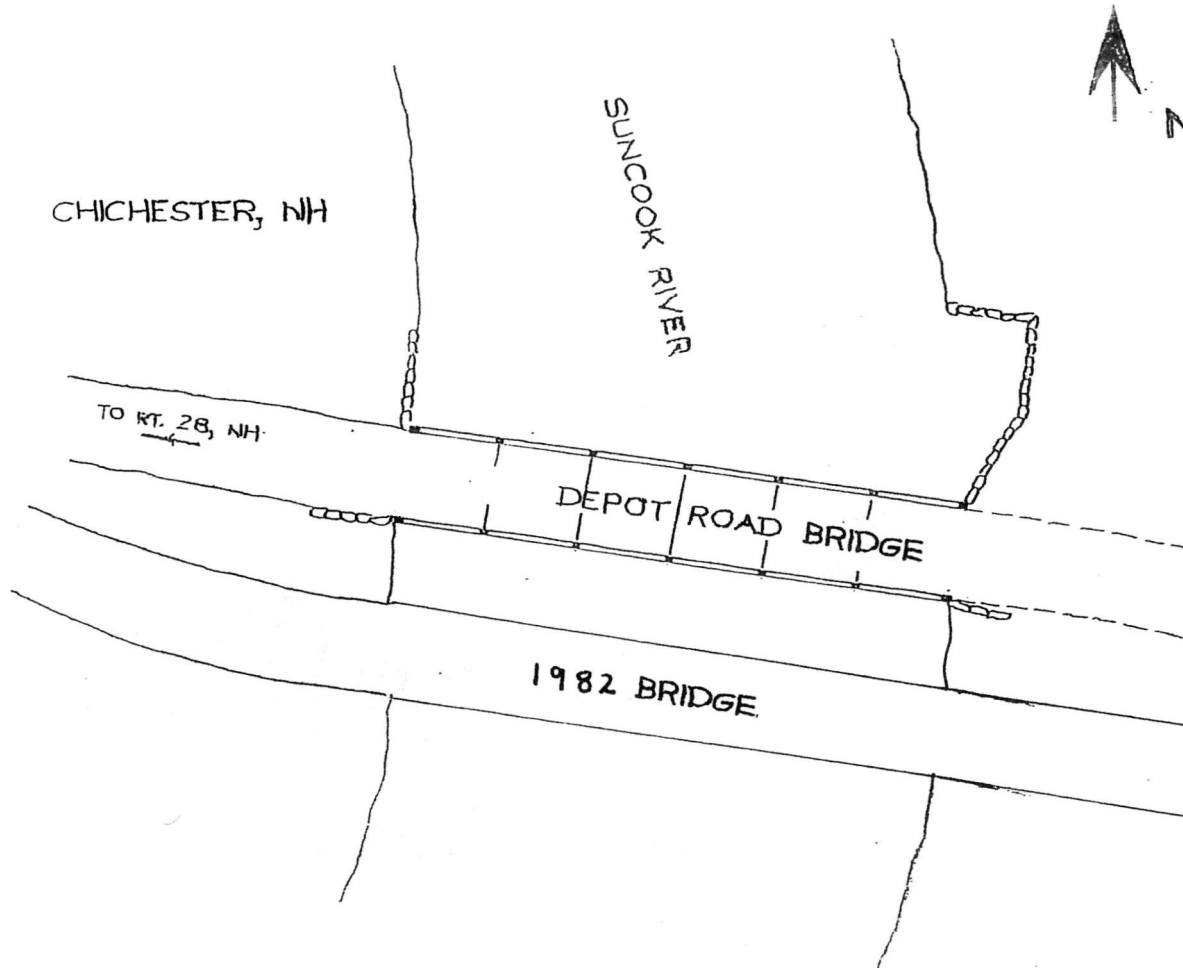
Section _____ Page 17

Depot Road Bridge _____
name of property
Merrimack County, New Hampshire _____
county and State

=====

SKETCH PLAN

DEPOT ROAD BRIDGE, MERRIMACK COUNTY, NH



10 0 10 20 30 40 50 FEET

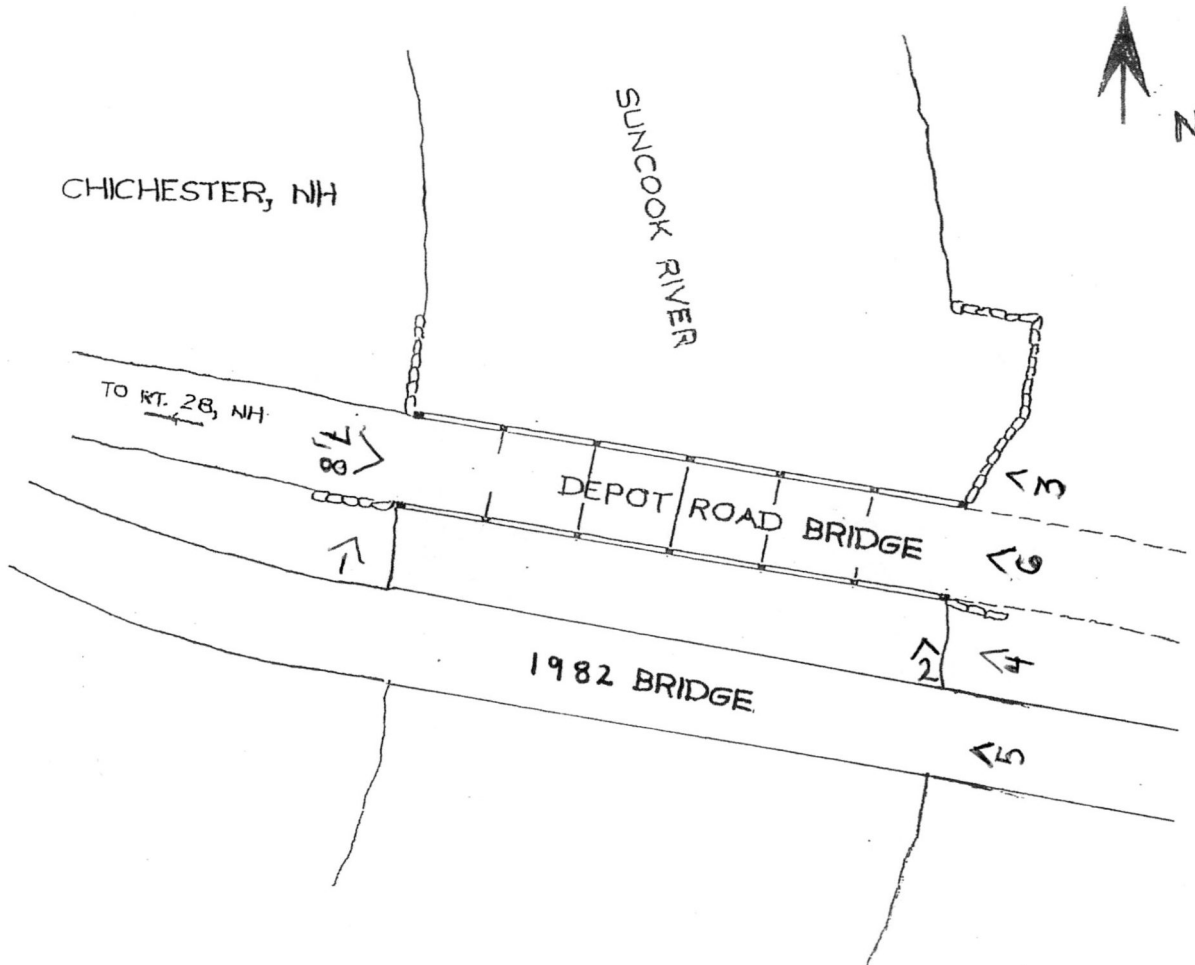
NATIONAL REGISTER OF HISTORIC PLACES
CONTINUATION SHEET

Section _____ Page 18 _____

Depot Road Bridge _____
name of property
Merrimack County, New Hampshire _____
county and State

PHOTO KEY

DEPOT ROAD BRIDGE, MERRIMACK COUNTY, NH



10 0 10 20 30 40 50 FEET

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Pineground Bridge
NAME:

MULTIPLE
NAME:

STATE & COUNTY: NEW HAMPSHIRE, Merrimack

DATE RECEIVED: 1/27/04 DATE OF PENDING LIST: 2/13/04
DATE OF 16TH DAY: 2/28/04 DATE OF 45TH DAY: 3/11/04
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 04000149

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N
OTHER: N PDIL: N PERIOD: N PROGRAM UNAPPROVED: N
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

☒ ACCEPT ☐ RETURN ☐ REJECT 3/9/04 DATE

ABSTRACT/SUMMARY COMMENTS:

Entered in the
National Register

RECOM./CRITERIA _____

REVIEWER _____ DISCIPLINE _____

TELEPHONE _____ DATE _____

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.



DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH [Merrimack Co.]
Photo #1



DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo # 2

AUG. 2003

AUG. 2003 FRK

AUG. 2003 FRK



DEPT ROAD BRIDGE

(Pineground Bridge)
Chichester, NH - Merrimack Co
Photo #3

AUG. 2003 FRK

AUG. 2003 FRK

UG. 2003 FRK



DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo #4

AUG. 2003 FRK

AUG. 2003 FRK

FRK



DEADT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co
Photo # 5



DEPT ROAD BRIDGE

(Pineground Bridge)

Chichester, NH - Merrimack Co.

Photo #6

AUG. 2003 FRK

AUG. 2003 FRK

AUG. 2003 FRK



DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo # 7

AUG. 2003 FRK

AUG. 2003 FRK

2003 FRK



1887

BUILT BY
THE
BERLIN IRON BRIDGE CO.

EAST BERLIN CONN.

PAT. APR. 10, 1883 & APR. 7, 1884

NOAH G. EDWARDS.

R. E. TOWLE.

SKELTON.

GEORGE HURDOUGH.

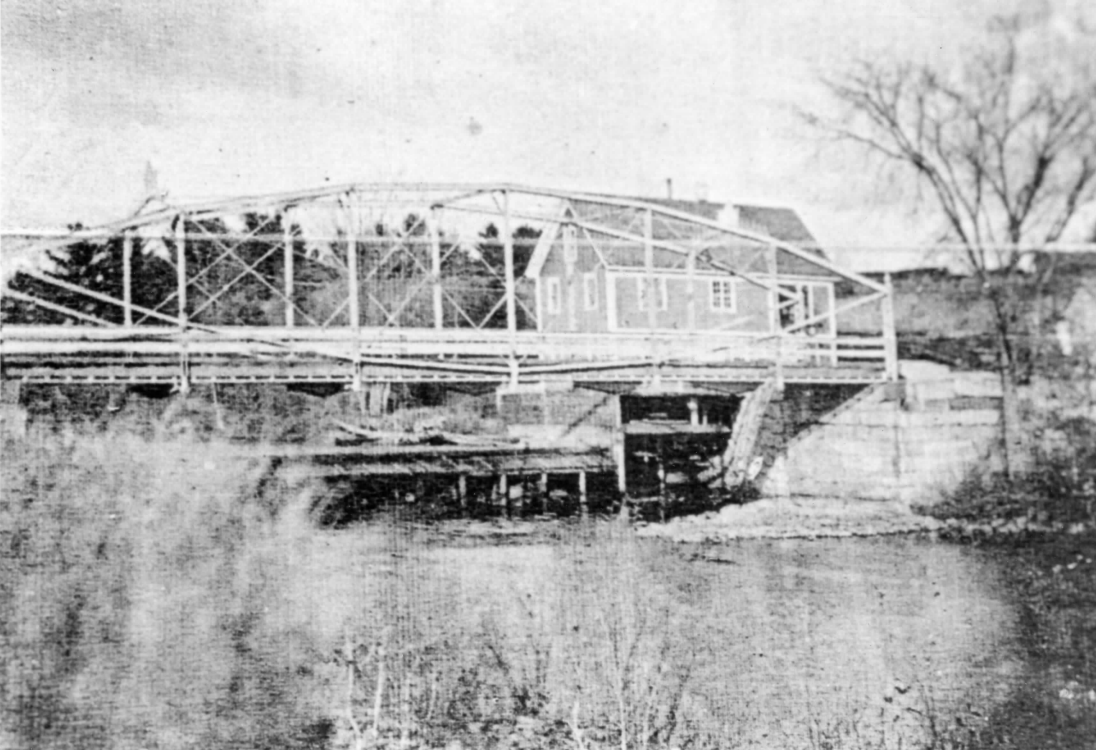
DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo # 8



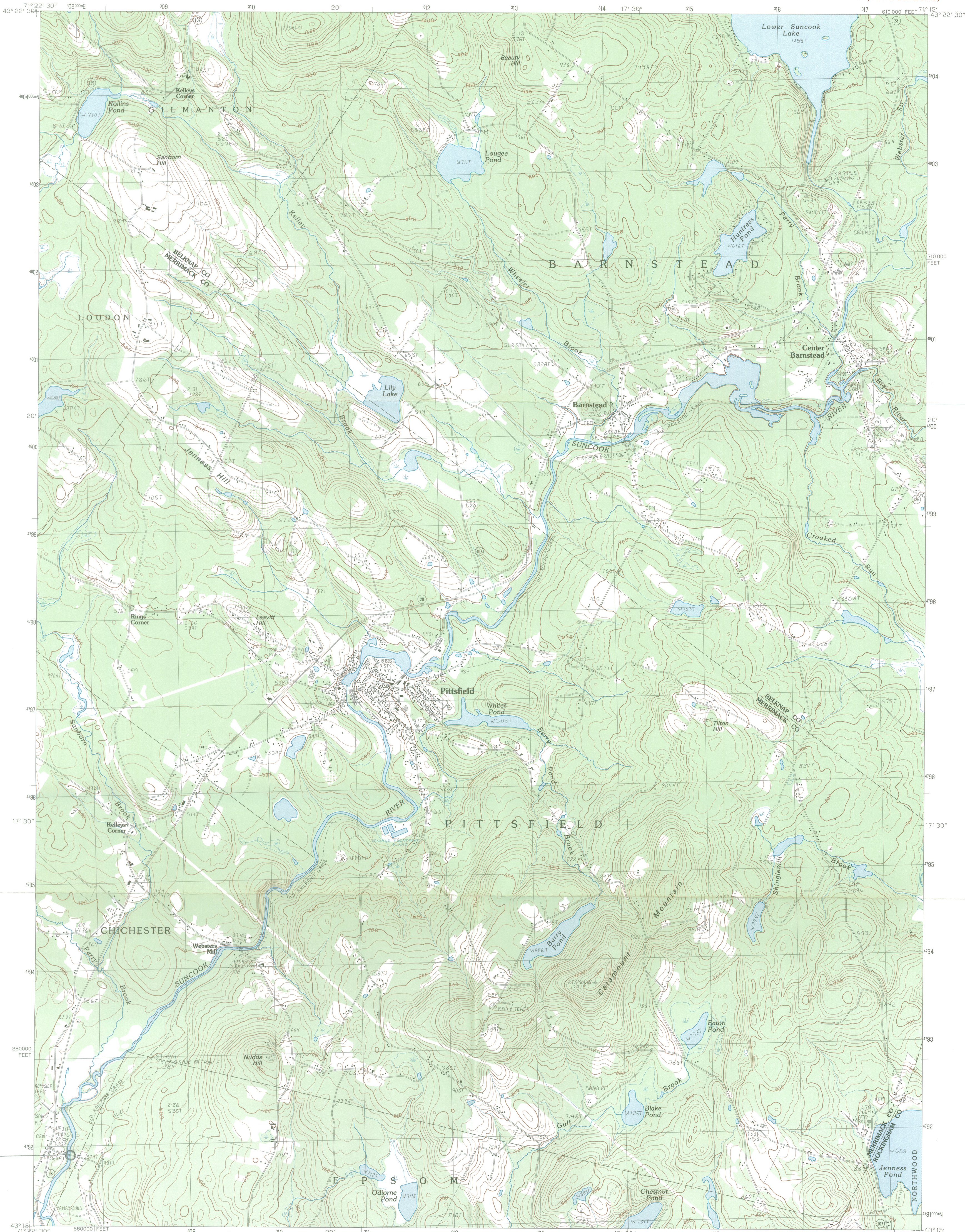
DEPOT ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo # 9

AUG. 2003 FRK

AUG. 2003 FRK



DEAD ROAD BRIDGE
(Pineground Bridge)
Chichester, NH - Merrimack Co.
Photo #10



DEPT ROAD BRIDGE
Pinegrounds Bridge
Chichester, Merrimack
County, NH
UTM References:
19 307618 4791900

PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY USGS, NOS/NOAA,
AND NEW HAMPSHIRE GEODETIC SURVEY
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN 1981
FIELD CHECKED 1983 MAP EDITED 1987
PROJECTION TRANSVERSE MERCATOR
GRID: 1000-METER UNIVERSAL TRANSVERSE MERCATOR ZONE 19
1000-FOOT STATE GRID TICKS NEW HAMPSHIRE
UTM GRID DECLINATION 1°35' WEST
1987 MAGNETIC NORTH DECLINATION 16°00' WEST
VERTICAL DATUM NATIONAL GEODETIC VERTICAL DATUM OF 1929
HORIZONTAL DATUM 1927 NORTH AMERICAN DATUM
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(5 meters south and 40 meters west)
There may be private inholdings within the boundaries of any
Federal and State reservations shown on this map
No distinction made between houses, barns, and other buildings

PROVISIONAL MAP
Produced from original
manuscript drawings. Information
shown as of date of
photography.

SCALE 1:24 000
1 000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
MILES
1 000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10 000
FEET
KILOMETERS
METERS
CONTOUR INTERVAL 20 FEET
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 FOOT
OTHER ELEVATIONS SHOWN TO THE NEAREST FOOT
To convert feet to meters multiply by .3048
To convert meters to feet multiply by 3.2808
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

1	2	3	1 Belmont
			2 Gilmanton Ironworks
			3 Alton
4		5	4 Loudon
			5 Parker Mountain
			6 Suncook
			7 Goswille
6	7	8	8 Northwood

QUADRANGLE LOCATION

ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route U. S. Route State Route

PITTSFIELD, NEW HAMPSHIRE
PROVISIONAL EDITION 1987

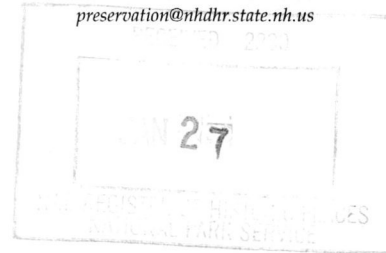
43071-C3-TF-024



NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES

State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, P. O. Box 2043, Concord NH 03302-2043
Voice / TTY RELAY ACCESS 1-800-735-2964
<http://www.state.nh.us/nhdhr>

603-271-3483
603-271-3558
FAX 603-271-3433
preservation@nhdhr.state.nh.us



January 26, 2004

Carol D. Shull
National Park Service
1201 Eye Street NW
6th Floor (Org Code 2255)
Washington DC 20005

Dear Ms. Shull;

As New Hampshire State Historic Preservation Officer, I am pleased to nominate the following properties to the National Register of Historic Places:

Depot Road Bridge, Chichester N.H.
Roger Sullivan Sullivan House, Manchester N.H.

The National Register Inventory-Nomination forms have been reviewed and approved by the New Hampshire State Historical Resources Council. The owners and officials have been notified and any comments received are enclosed.

Sincerely,

James McConaha
New Hampshire State Historic Preservation Officer

JM:cef

cc: Chichester Board of Selectmen
Chichester Planning Board
Chichester Conservation Commission
Chichester Historical Society
Merrimack County Commissioners
Carol Hooper
Brian and Laurie Lawrence
Mayor Baines and Board of Aldermen
Manchester Planning Department
Manchester Conservation Commission
Manchester Historical Association
Hillsborough County Commissioners
Lisa Mausolf

