

**United States Department of the Interior
National Park Service**

**National Register of Historic Places
Continuation Sheet**

Section number _____ Page _____

SUPPLEMENTARY LISTING RECORD

NRIS Reference Number: 02001510 Date Listed: 12/12/2002

Property Name: Hollow Brook Road Bridge County: Hunterdon State: NJ

Multiple Name

This property is listed in the National Register of Historic Places in accordance with the attached nomination documentation subject to the following exceptions, exclusions, or amendments, notwithstanding the National Park Service certification included in the nomination documentation.

Patricia Andrus
Signature of the Keeper

12/12/2002
Date of Action

=====
Amended Items in Nomination:

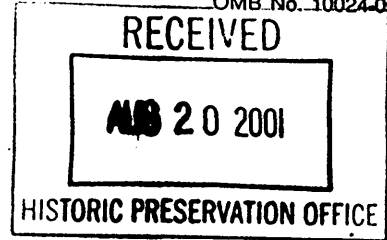
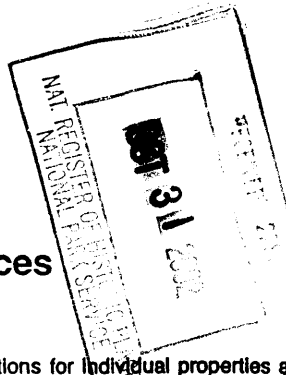
This SLR is issued to make two technical corrections to the form. Section 3 of the form was not fully completed. The NJ SHPO has confirmed that the property is being nominated at the Local level of significance. The form did not include a UTM point; the SHPO informed us that the UTM is: Zone 18 522253 4507184. The form is officially amended to add this information

DISTRIBUTION:

- National Register property file**
- Nominating Authority (without nomination attachment)**

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 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 Hollow Brook Road Bridge over tributary of the Lamington River
other names/site number Hunterdon County Bridge #T-22

2. Location

street & number Hollow Brook Road approx. 700' west of not for publication
Homestead Road.
city or town Tewksbury Township vicinity
state New Jersey code NJ county Hunterdon code 019 zip code 07830

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.)

Signature of certifying official/Title

Date

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

Date of Action

Patrick Andrus

12/12/2002

Hollow Brook Road Bridge
Name of Property

Hunterdon County, NJ
County and State

5. Classification

Ownership of Property
(Check as many boxes as apply)

Category of Property
(Check only one box)

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

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

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

Contributing	Noncontributing	
_____	_____	buildings
_____	_____	sites
<u>1</u>	<u>0</u>	structures
_____	_____	objects
<u>1</u>	<u>0</u>	Total

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

Number of contributing resources previously listed
in the National Register

Historic Bridges of Tewksbury Township

0

6. Function or Use

Historic Functions
(Enter categories from instructions)

Current Functions
(Enter categories from instructions)

Transportation: road-related
(vehicular)

Transportation: road-related
(vehicular)

7. Description

Architectural Classification
(Enter categories from instructions)

Materials
(Enter categories from instructions)

Other: truss bridge

foundation Stone: granite

walls N/A

roof N/A

other Metal: steel

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

Flow Brook Road Bridge
Name of Property

Hunterdon County, NJ
County and State

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.

Areas of Significance
(Enter categories from instructions)

Transportation

Engineering

Period of Significance

ca. 1880 - 1910

Significant Dates

ca. 1880

Significant Person
(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

N/A

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

Major Bibliographical References

Bibliography

(List 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 # _____

Primary location of additional data:

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

Name of repository:

County Engineer

Hollow Brook Road Bridge
Name of Property

Hunterdon County, NJ
County and State

10. Geographical Data

Acreage of Property Less than one acre

UTM References

(Place additional UTM references on a continuation sheet.)

1	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing
2	<input type="text"/>	<input type="text"/>	<input type="text"/>

3	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Zone	Easting	Northing
4	<input type="text"/>	<input type="text"/>	<input type="text"/>

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.)

11. Form Prepared By

name/title Stacy E. Spies, Architectural historian

organization ARCH2, Inc. date May, 2001

street & number 395 Main Street Suite 8 telephone 732-906-8203

city or town Metuchen state NJ zip code 08840

Additional Documentation

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)

Property Owner

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

name Hunterdon County Roads, Bridges and Engineering Department

street & number Route 12 County Complex telephone (908) 788-1102

city or town Flemington state NJ zip code 08822

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 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 Projects (1024-0018), Washington, DC 20503.

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 7 Page 1

Hollow Brook Road Bridge over tributary of the Lamington River

Description

The Hollow Brook Road Bridge is a single-span, steel pony truss bridge that carries a single lane of a rural road over a tributary of the Lamington River (Photograph #1). Located approximately 750 feet west of the intersection of Hollow Brook Road and Homestead Road, the Fink-like bridge is 33 feet long and 16.5 feet wide. The bridge, identified by the County as "T-22," carries a narrow country road over the waterway (Photograph #2). Located in a wooded location beside a late-nineteenth-century farmstead (Photograph #3), the two-panel skewed bridge continues to function as a vehicular bridge with only minor alterations to its original design.

This pin-connected bridge is a variation of a Bollman or Fink truss. The bridge's floor beams are hung from the diagonals, which, in turn, are supported by pairs of loop forged eye bars. The diagonals have a turnbuckle for adjustment (Photograph #4). The following description is taken from the New Jersey Department of Transportation's *Historic Bridge Survey*:

The trusses consist of vertical end posts, each consisting of a pair of channels with a full-height cover plate on the approach roadway face and a top and bottom batten plate on the span face. The top chord is made up of a pair of channels with a top cover plate and bottom batten plates. [The top chord extends] beyond the end post by approximately 8 inches and is finished with a decorative cast cover. The top chord is a compression strut that holds the supporting columns (end posts) from falling in to the middle. There are no bottom chord elements. The vertical is a pair of channels with top and bottom battens... The vertical is a "dummy" member that serves only to halve the unsupported length of the top chord. The rolled I-section floor beam is supported on an inverted U-hanger, which passes over the pin connecting the diagonals.

The end posts are set on plates that rest on the bridge seat. The abutments are constructed of rubble granite with roughly-dressed stones as quoins.

The bridge retains its integrity of location, design, setting, materials, workmanship, feeling and association. The top chord, end posts, and one vertical appear to be original members (Photograph #3 and #5). The vertical on the upstream (north) side is a modern

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 7 Page 2

replacement (Photograph #4). The open steel grid deck was replaced in 1962. Four striped reflective signs have been welded on (Photograph #1), outriggers have been added, and only a few minor repairs have been made, possibly in 1962, but all these do not substantially detract from the structure's overall integrity.

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 8 Page 1

Hollow Brook Road Bridge over tributary of the Lamington River

Statement of Significance

The Hollow Brook Road Bridge is significant under National Register Criterion C because it embodies the distinctive characteristics of a type, period, and method of construction and it is the sole known example of its type in Hunterdon County, New Jersey.

The modern network of smaller roads in Hunterdon County, including those in Tewksbury, was largely in place by the mid-nineteenth century. Hollow Brook Road follows an east-west route that connects Pottersville to Lower Fairmount, and continues as Farmersville Road west to Farmersville. Pottersville and Fairmount were among the earliest settled areas in Tewksbury due to their proximity to watercourses. No documentary evidence has been located that can verify with certainty the date of construction for the road or bridge. Freeholders' minutes of the period are inconclusive with regard to construction of specific bridges and no road returns exist for this route.

In contrast to the wooded quiet that characterizes Hollow Brook Road today, this road between Lower Fairmount and Pottersville appears to have been a heavily-traveled route by the nineteenth century. A stage line from White House to Pottersville via New Germantown (Oldwick) facilitated daily mail delivery to Pottersville beginning in 1840. Residents of Lower Fairmount/Fox Hill traveled what is now called Hollow Brook Road to Pottersville to pick up their mail (Hamilton:32). The road was laid out between 1860 and 1870, based on county maps. It has been reported that during the 1870s and 1880s Hollow Brook Road was used as the route farmers used to take their grain to Morristown and to access Sutton Auble's saw mill, which was located approximately 4/5 mile west of the present-day bridge crossing (Hamilton: 58). The sawmill property is depicted as belonging to "S. Abel" on the 1851 map and as belonging to the "Potter Bros" on the 1873 map. The mill property was presumably gone by 1902, as it is not depicted on the 1902 or 1905 maps.

The heavy use of this route is also indicated by the existence of services to serve nineteenth-century travelers of the road. Reference has been made to a house that served as a "place of refreshment" during the tenure of James Barker. A public watering trough

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 8 Page 2

had been previously established at the location beside a spring, and Mr. Barker established "a sort of restaurant or store... in which he had for sale cigars, soft drinks, and oysters in season (Hamilton: 58)." Barker's house was located "at the foot of the 'Louisa Peer' hill (Hamilton: 57-58)." The house of a "Mrs. Pier" is depicted approximately midway along the route in the 1873 map. The relatively heavy use of this route during the second half of the nineteenth century would be a contributing factor to the presumed replacement ca. 1880 of a bridge at this crossing.

The Hollow Brook Road Bridge is most significant for its technology under National Register Criterion C as a rare example of a variation of a Fink or Bollman truss type "where the floor beams are supported by a pair of diagonals that span from end of span to end of span" (Lichtenstein 1992; np). The bridge does not clearly fit the Fink or Bollman types; as stated in the Bridge Survey, the bridge "is not developed enough to indicate which diagonal pattern [either Fink or Bollman,] it would have been had it been more than two panels long" (Lichtenstein 1992; np). The bridge is the only one of the Fink or Bollman type in Hunterdon County. As stated in the Bridge Survey, the bridge is "historically and technologically significant as a rare and fairly complete survivor of the pre-Civil War bridge technology" (Lichtenstein 1992; np).

The Bollman truss, named for Wendell Bollman, was patented in 1852 and increased the overall span length of bridge crossings. The Fink truss, named for Albert Fink, was patented in 1854. Both designs were the result of early attempts to construct all-metal bridges. In both Bollman and Fink trusses, the verticals are in compression and the diagonals are in tension. In a Bollman truss, the diagonals run from the end posts to each panel point. In a Fink truss, the diagonals run from the end posts to the center panel points. Both types were no longer in favor by 1880 when rigid trusses made with riveted rather than pinned joints became the standard due to two factors. One, was the post Civil War advance in engineering education that brought about the application of scientific theory and experimentation to bridge construction (Lichtenstein, 45). The second being the invention of the development of the portable pneumatic riveting systems that allowed for rigid truss construction (Jackson; 29).

While the Hunterdon County Engineer's records contain one inspection note dated 1947 recording a construction date of 1930 for this structure, this date is inaccurate and perhaps reflects the estimated date of a previous road project. Based on its method of construction and stylistic features, especially the use of pin connections instead of the riveted connections that would be more appropriate to a 1930 date, the bridge appears to

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 8 Page 3

have been constructed ca. 1880 (Lichtenstein form). In addition, while the Bollman/Fink truss type dates from the mid-nineteenth century, the use of steel dates it solidly from ca. 1880. The first all-steel bridge in the United States was constructed in 1878 (Mallery: 47). As the only bridge of its type in the county, the Hollow Brook Road Bridge is unusual in both type and location. The presence of this uncommon bridge is even more notable that it was constructed in such a remote rural location. It is a representative example of a type that is noteworthy for its scarcity in Hunterdon County.

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 9 Page 1

Hollow Brook Road Bridge over tributary of the Lamington River

Bibliography

- A.G. Lichtenstein & Associates, Inc. *New Jersey Historic Bridge Survey*. 1992.
- A.G. Lichtenstein & Associates, Inc. *Stone Arch Bridge Inventory, Phase I, Hunterdon County, New Jersey*. June, 1995.
- Boothby, Thomas E., et al. *Stone Arch Bridge Inventory, Phase II, Hunterdon County, New Jersey*. The Pennsylvania State University, November 12, 1998.
- Bridge Records, Hunterdon County Engineers' Office.
- Comp, T. Allen and Jackson, Donald. *Bridge Truss Types: a guide to dating and identifying*. American Association for State and Local History, Nashville, Tennessee, 1977.
- DeLony, Eric. *Landmark American Bridges-part two*. Little Brown & Co., Boston, 1993.
- Hamilton, Jim, ed. *Historic Notes on Fairmount, New Jersey*. Bound Brook, NJ: 1982. (reprint of work by Freeman Leigh, originally published in 1928)
- Jackson, Donald C. *Great American Bridges and Dams*. New York: John Wiley & Sons, Inc., 1988.
- Mallery, Paul. *Bridge and Trestle Handbook*. Newton, NJ: Carstens Publishing, Inc., 1992.

Maps and Atlases

- Beers, F. W. *County Atlas of Hunterdon, New Jersey*. New York: F.W. Beers & Co., 1873.
- Cornell, Samuel C. *Map of Hunterdon County, New Jersey*. Philadelphia: S.C. Cornell and Lloyd Vanderveer, 1851.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 9 Page 2

D.J. Lake, S.N. Beers, and others. *Map of the Vicinity of Philadelphia and Trenton.*
Philadelphia: C.K. Stone and A. Pomeroy, 1860.

Pugh and Downing, *Map of Hunterdon County, New Jersey.* 1902.

Survey Map Co. *Map of Hunterdon County, New Jersey.* New York: Survey Map Co.,
1905.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number 10 Page 1

VERBAL BOUNDARY DESCRIPTION

The property being nominated includes the road right-of-way of Hollow Brook Road to a distance of ten feet beyond the east and west ends of the bridge, and also extends five feet to the north and south of the bridge.

BOUNDARY JUSTIFICATION

The nominated property includes the bridge and ten feet in each direction of the approach roads.

National Register of Historic Places Continuation Sheet

Historic Bridges of Tewksbury
Township, Hunterdon County,
New Jersey

Section number Photos Page 1

PHOTOGRAPHS Hollow Brook Road Bridge over tributary of the Lamington River

For all photographs:

Property Name: Hollow Brook Road Bridge

Property Location: Hollow Brook Road
Tewksbury Township,
Hunterdon County, NJ

Location of
Original negatives: ARCH², Inc.
395 Main Street Suite 8
Metuchen, NJ 08840

Photographer: Stacy E. Spies

Date: May, 2001

Photograph #1 of 5:

View: Through view looking northeast toward Homestead Road. The yard of a nineteenth-century farmstead is visible in the background.

Photograph #2 of 5:

View: Through view looking southwest along Hollow Brook Road.

Photograph #3 of 5:

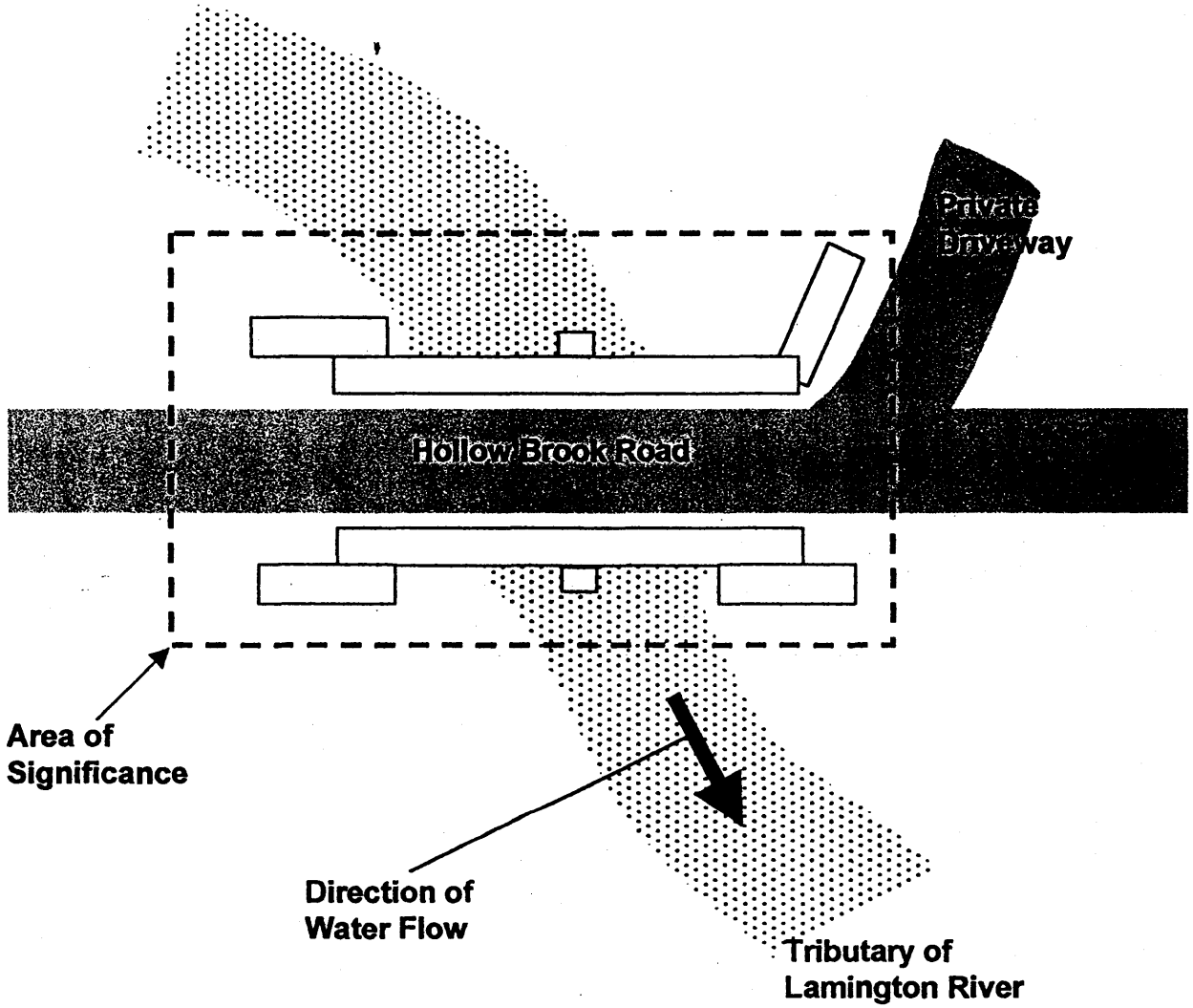
View: Looking north of the southeast side of the bridge. The yard of a nineteenth-century farmstead is visible in the background.

Photograph #4 of 5:

View: Looking south of the northwest side of the bridge.

Photograph #5 of 5:

View: Detail view looking north of truss elements.



10 feet