

United States Department of the Interior
National Park Service

National Register of Historic Places
Registration Form



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This form is for use in nominating or requesting determinations of eligibility for individual properties or 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 listed in 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 Bardwell's Ferry Bridge
other names/site number _____

2. Location

street & number Bardwell's Ferry Road over the Deerfield River not for publication
city or town Conway/Shelburne vicinity
state Massachusetts code MA county Franklin code 011 zip code 01370-S
01341-C

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I 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.
Judith B. McDonough 1/4/2000
Signature of certifying official/Title Date
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 certifying official/Title Date
State or Federal agency and bureau

4. 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): _____

Edson H. Beall 2/10/00
Signature of the Keeper Date of Action

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.)	
<input type="checkbox"/> private	<input type="checkbox"/> building(s)	Contributing	Noncontributing
<input checked="" type="checkbox"/> public-local	<input type="checkbox"/> district	<u>0</u>	<u>0</u> buildings
<input type="checkbox"/> public-State	<input type="checkbox"/> site	<u>0</u>	<u>0</u> sites
<input type="checkbox"/> public-Federal	<input checked="" type="checkbox"/> structure	<u>1</u>	<u>0</u> structures
	<input type="checkbox"/> object	<u>0</u>	<u>0</u> 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.)
N/A

Number of contributing resources previously listed in the National Register
0

6. Function or Use

Historic Functions (Enter categories from instructions)	Current Functions (Enter categories from instructions)
<u>TRANSPORTATION, Road-related</u>	<u>TRANSPORTATION, Road-related</u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>
<u> </u>	<u> </u>

7. Description

Architectural Classification (Enter categories from instructions)	Materials (Enter categories from instructions)
<u>NO STYLE</u>	foundation <u> </u>
<u> </u>	walls <u> </u>
<u> </u>	roof <u> </u>
	other <u>METAL: cast and wrought iron</u>

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

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Conway/Shelburne (Franklin Co.), Mass.Section number 7 Page 1

7. DESCRIPTION

The Bardwell's Ferry Bridge is a lenticular-truss metal bridge constructed in 1882, that spans the Deerfield River on Bardwell's Ferry Road, linking the Franklin County towns of Conway and Shelburne, Massachusetts. It is located in a sparsely populated, rural area within the western uplands of the Connecticut River Valley and the foothills of the Green Mountains. The crossing replaced a ferry operated by the Bardwell family, for whom the bridge is named. On the Conway (west) side, Bardwell's Ferry Road forks off Shelburne Road approximately one mile north of town and after winding in a northeasterly direction through the hills for another two miles, approaches the bridge from the southeast. Before reaching the bridge the road runs parallel to the Deerfield River and makes a 90-degree turn northeast to make the crossing. In Shelburne, the road turns sharply northwest and then turns back on itself as it winds up the steep embankment on that side of the river. Along its route it crosses a railroad that follows the river on the Shelburne side. A small community of dwellings on this side of the river has been known as Bardwell since that family initiated ferry service in the late 18th century. Once the road reaches the plateau above the riverbanks, it turns northwest once more and heads towards the town of Shelburne, two miles distant.

The Bardwell's Ferry Bridge has a 198-foot span carrying the road 40 feet above the Deerfield. The span is supported by lenticular trusses on the sides of the deck. These trusses are regarded as "lenticular" because of the lens shape of their convex chords; however, in the 19th century, they were more commonly known as "parabolic" or, in the words of the patent holder of the type, "elliptical." All the parts for the bridge were fabricated in iron cast or wrought in standardized forms and dimensions. Truss elements, such as the top chord segments, posts and lateral struts were assembled from iron plates riveted or bolted together to form three-dimensional girders. To reduce weight, narrow diagonal braces in a lattice pattern were used in place of plates to create elements producing the skeletal appearance characteristic of these bridges. This was the result of the influence of structural engineering principles on the design of metal bridges in the late 19th century.

The top or compressive chords of the trusses carried most of the bridge's load and were the sturdiest element of the bridge structure. On the Bardwell's Ferry Bridge, these are Box girders fabricated with iron palates forming the top and sides; the bottom of the beams were left mostly open with small plates riveted to the sides at intervals to complete the box. Here, the top chords take the form of a smooth, single arc, but in other parabolic trusses, the top chords could be hipped; that is, broken into a series of angular segments.

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The lower chords form a reverse parabolic arc and are joined to the top chords at the ends forming the distinctive lens shape of the truss. The lower chords are in tension to resist the downward thrust of the top chords. As a result, they are comprised of four flat iron bars. As designed, the trusses are divided into segments by a series of posts tying the top and bottom chords together. Diagonal tension rods cross the spaces between the posts, each with a turnbuckle to adjust the rigidity of the system. Further bracing is provided by longitudinal rods running the length of the truss mid-section. In the case of the Bardwell's Ferry Bridge, there are 12 posts within each truss, creating panels 15 feet 2 1/2 inches wide. The posts were made with iron lattice panels and are attached to the chords by pins. On top they are pinned through the sides of the box beam. On the bottom, the pin junction is more complex. Here the pin joins two segments of the bottom chord (four eye-bars each) along with the post, four diagonal tension rods, and a hanger for the floor beam.

The trusses are connected across the top by lateral lattice struts similar in construction to the posts. They are attached to the pins joining to top chords and the vertical struts. Diagonal tension rods cross the space between the top struts; four intermediate cross-struts midway up the posts provide additional lateral support. The bridge's deck is supported by iron floor beams suspended on hangers looped over pin connectors in the lower chords. Lattice edge beams running parallel to the chords are bolted to the floor beams to enclose floor structure segments, which like the other truss panels, are braced by diagonal tension rods beneath the deck. The wood plank deck or roadway is nailed to wood stringers that span the space between the iron floor beams. Though suspended, the floor structure ties the bottom chords of the trusses together and completes the three-dimensional structural system of the bridge.

The entire truss system is supported by portal structures at the ends of the bridge. The portals are iron archways fabricated of box girder and lattice beam elements like the rest of the bridge that are mounted on stone abutments. The ends of the parabolic chords are pinned together and to the tops of the posts of these portals. The floor structure is also pinned to the bases of these posts. The east portal of Bardwell's Ferry Bridge is supported by a stone masonry abutment in the steep banks on that side of the river. The west portal rests on a freestanding stone pier at the river's edge. The river bank is not as abrupt here and a short, plate girder bridge spans the remaining distance across the shoreline to an abutment at road level.

The Bardwell's Ferry Bridge is remarkably intact in its historic structural design and

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materials. The road deck has been replaced, but few other alterations are evident. The abutment on the west side of the bridge has been reinforced with concrete, but the other stone bases are essentially in original condition. As one of ten surviving lenticular truss bridges in Massachusetts and of less than fifty nationally, this bridge is a rare and particularly instructive specimen of this unusual 19th century bridge technology.

Archaeological Description

No prehistoric sites are recorded in the area of the bridge abutments or in the general locale (within one mile). While the bridge is located adjacent to the Deerfield River, excessively sloped land surfaces and impacts resulting from construction of an earlier bridge and Bardwell's Ferry Road indicate a low potential for the presence or survival of prehistoric resources.

There is a moderate potential for locating historic archaeological resources at the site of the Bardwell's Ferry Bridge. Unidentified resources may survive in the area from the ferry operated by the Bardwell Family in 1778. Structural evidence might also survive in the river or in the areas of the existing bridge abutments from an earlier bridge built in 1868. Structural evidence could include portions of earlier bridge abutments and their builder's trenches. Construction features may also exist from the extant bridge.

(end)

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 # MA-98

Areas of Significance

(Enter categories from instructions)

ENGINEERING

TRANSPORTATION

Period of Significance

1882-1949

Significant Dates

1882

Significant Person

(Complete if Criterion B is marked above)

Cultural Affiliation

N/A

Architect/Builder

William O. Douglas, designer/patentee

Berlin Iron Bridge Co., East Berlin, CT, builder

Primary location of additional data

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

Name of repository:

Massachusetts Highway Dept., bridge #C-20-17

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Conway/Shelburne (Franklin Co.), Mass.Section number 8 Page 1**8. STATEMENT OF SIGNIFICANCE**

The 1882 Bardwell's Ferry Bridge is a rare and remarkably unaltered example of a lenticular truss metal bridge, one of the more unusual examples of progressive highway bridge engineering and design to emerge during the late 19th century. With fewer than fifty bridges of this tress type identified as surviving in the United States, and only ten remaining in Massachusetts, the Bardwell's Ferry Bridge is a particularly significant artifact. The lenticular (lens shaped) truss, also known as a parabolic or an elliptical truss, was used in bridge construction in Europe a decade before the first American patents were issued for such a design in the 1850s. It was William O. Douglas' "elliptical bridge truss," patented in 1878, that was employed in the Bardwell's Ferry Bridge. Sole rights to the Douglas patent were owned by the Berlin Iron Bridge Co., of which Douglas was an officer. The company received hundreds of contracts throughout the Northeast and became identified with this bridge type. The iron Bardwell's Ferry Bridge replaced a wood truss bridge that had been built in 1868. Prior to that point, the crossing had been made by a ferry operated by the Bardwell family since 1778, from whom the place name derived. After the old wood bridge had been damaged in a storm, an iron replacement was chosen to accommodate the increased traffic on the road, which linked Conway with a newly opened railroad station on the Shelburne side. Bardwell's Ferry Bridge retains integrity of design, materials, workmanship, feeling and association, and fulfills criteria A and C of the National Register of Historic Places.

THE LENTICULAR TRUSS BRIDGE

The lenticular truss was an innovative development in bridge engineering that combined advantages of the arch, cable suspension and the truss in a single structural system. The top chord functioned as an arch, with the load of the bridge transmitted to it via vertical posts. The bottom chord resisted the thrust of the arch, but it also functioned as a cable in suspension from which the road deck was hung. The load on the lower chord was resisted by the top chord at the ends as well as via the posts. Together, the two chords with their posts and diagonal tension rods comprised a parabolic truss system. With three distinct systems at work, both independently and in concert, the designers argued safety through redundancy. In reality, this combination of systems did not improve the structural strength of the bridge over any one system. This visual and conceptual complexity gave the appearance of fail-safe construction that artfully belied simplicity of design and economy of materials. The result was a bridge of enormous popularity.

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The "elliptical" truss design employed in the Bardwell's Ferry Bridge was patented by William O. Douglas of Binghamton, New York in 1878. The system was not original to Douglas. (Obtaining patents for "improved" truss designs allowed bridge builders to avoid the costs of purchasing the rights to use previously patented designs.) The lenticular truss design reputedly originated with a German engineer named Laves with the construction of a bridge c. 1839. British engineer Isambard Kingdom Brunel learned of this truss and used it in the design of the Royal Albert Bridge over the River Tamar at Saltash, England in 1859. This structure is considered by bridge historians to be the first and most important lenticular-truss bridge constructed. Patents for bridges employing versions of the lenticular truss were issued in the United States as early as 1851; however, with Douglas' patent the Berlin Iron Bridge Company emerged as the sole American manufacturer, and aside from Gustav Lindenthal's Smithfield Street Bridge in Pittsburgh, all surviving American bridges of this type were the products of the Connecticut company.

The Bardwell's Ferry Bridge is clearly documented in company records, town contracts and newspaper reports as being manufactured and erected by the Corrugated Metal Company, the precursor to the Berlin Iron Bridge Company. Built in 1882, the bridge was an early example of the lenticular truss, coming less than three years after Douglas obtained his patent and before the company changed its name and began a frenzy of bridge construction. In the company's roster, the Bardwell's Ferry Bridge ranks high on the list of hundreds of lenticular-truss bridges that the Berlin Iron Bridge Company would make over the next two decades. The bridge exhibits all the characteristic structural components and connectors of the lenticular-truss system, plus a number of unexpected details, such as open endposts, four-bar lower chord sections, and posts that connect to the outside of the top chord.

THE BERLIN IRON BRIDGE COMPANY

Because of the success of their patented parabolic truss design, the Berlin Iron Bridge Company of East Berlin, Connecticut, emerged as one of the most prolific bridge fabricating firms in the late 19th century.

The Corrugated Metal Company originated as a manufacturer of roof trusses and corrugated roofing in East Berlin, Connecticut, a major New England metal manufacturing center. The business first organized under the partnership of Roys &

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Wilcox, which specialized in tinner's tools and sheet metal fabricating machinery. In 1868 they incorporated as the American Corrugated Iron Company indicating a shift to the production of building products. Three years later, the name of the business was changed again; this time to the Metallic Corrugated Shingle Company. The business changed names once more in 1873 becoming known as the Corrugated Metal Company, advertising roof trusses, corrugated iron shutters, roofing, ceiling and siding, as well as general iron construction. It was reputedly on the verge of bankruptcy in 1877 when Company president S.C. Wilcox shifted its attention to metal bridge construction. He employed William O. Douglas of Binghamton, New York, as treasurer and executive manager. The following year Douglas was granted a patent for an elliptical truss bridge, and the firm began promoting itself as "Engineers and Contractors for Douglas Patent Wrought Iron Bridge." Advertisements in this period included a crude illustration of an elliptical truss bridge.

The Company obtained exclusive rights to Douglas' bridge patent. In his application, Douglas stated that the elliptical truss design would "improve the construction and efficiency of truss-bridges by combining as far as possible the maximum of strength with the minimum of cost." Clearly, this was a selling point for the bridge. The firm built more than 600 lenticular spans over the next twenty years. Its success was the result of effective salesmanship and much as good engineering. Agents would use the redundant truss design and the unusual, "advanced" appearance of the bridge to impress town officials of the merits of the bridge over their competitor's models. The remarkable design of the bridge and its coincidence with state and local highway improvement programs to replace aging wooden bridges extended its popularity, even as steel was adopted as the preferred structural material. By 1900 the elliptical truss bridge was no longer marketable, and the company turned from bridge manufacture to pioneer the construction of steel-frame industrial buildings. The bridge company was absorbed in Andrew Carnegie's American Bridge Company.

THE BARDWELL'S FERRY BRIDGE

The site known as Bardwell's Ferry is located in the southernmost section of the town of Shelburne on the Deerfield River. It was an important crossing on the road between the towns of Conway and Shelburne, and one of few river crossings between the major towns of Shelburne Falls and Greenfield. Before the first bridge was erected, the Bardwell family had operated a ferry service in this location for nearly 85 years. The importance

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of this crossing within the local transportation network is documented in the preservation of the family name at the crossing, with roads connecting to the ferry, and the present bridge itself. Gideon Bardwell settled near the Deerfield River in Shelburne around 1778 and began the ferry shortly thereafter. The first documentary reference to "Gideon Bardwell's Ferry" is made in town records in 1784. Subsequent records, local histories and maps all refer to the crossing as "Bardwell's Ferry" and/or the ferryman as being Gideon Bardwell, his son Joel and grandson Orasmus O. Bardwell.

Orasmus O. Bardwell was a leader in petitioning the towns of Conway and Shelburne to erect a bridge at the crossing at the time that the Troy & Greenfield Railroad was being built through his land and along the Deerfield River in the 1860s. By the summer of 1867, work on the railroad was nearing completion. A bridge to carry the railroad across the Deerfield just north of Bardwell's Ferry was in construction and track had been laid within two or three miles of the ferry. In anticipation of accommodating the increased road traffic a train stop plan on the Shelburne side of the river was expected to generate, as well as capitalizing on the economic opportunities it presented to the two towns, Bardwell led a petition movement to upgrade the road leading to the crossing as well as erecting a bridge there. The Franklin County Commissioners agreed and directed the towns to undertake the improvements. Both communities followed suit and on November 6, 1867, they entered into a contract with Hartwell & Sprague of Northampton "to construct, erect and complete in a thorough and workmanlike manner, a substantial Bridge of the 'Howe pattern,' so called, across the Deerfield River."

The completed bridge was a constant source of dispute between the towns over shared responsibilities and maintenance costs. Although the bridge connected Conway and Shelburne, it lay wholly within the latter, the town boundary being the west side of the river at that time. On that basis Conway refused to pay for repairs; Shelburne officials argued that the bridge was used mostly by Conway residents travelling to and from Shelburne. Finally, in 1875 the town of Shelburne was forced to petition the Massachusetts legislature to compel the town of Conway to pay their share (half) of bridge maintenance costs. A few years after this issue was resolved, on January 27, 1882, the bridge was blown off its abutments in a storm. In the following month, both towns voted to rebuild the bridge; in Shelburne, at least, a replacement bridge of iron was favored.

On March 9, 1882, selectmen of both towns contracted with the Corrugated Metal Company of East Berlin, Connecticut, "to build, paint, and make complete, and have

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ready for use by the 20th day of May, 1882, ... a Wrought Iron Parabolic Truss Bridge." The contract specified that the bridge was to be 198 feet long with a 16 foot wide roadway. The \$7,000 cost was to be split equally by the towns. Shelburne stonemason George G. Merrill was contracted to build an abutment and pier. The *Greenfield Gazette and Courier* reported on May 29th that their new iron bridge had arrived but had not yet been taken off the railroad cars. Six weeks later, on July 17th, the paper announced: "The Bardwell's Ferry bridge is completed and proves to be a fine looking structure."

The Massachusetts Department of Public Works' Historic Bridge Inventory identified the Bardwell's Ferry Bridge as one of only ten lenticular-truss bridges remaining in the state. Additionally, the bridge is a very early example of the type, coming only four years following the issuance of Douglas' patent, as well as being unusually long, measuring 198 feet, making it one of the longest documented lenticular spans in the United States. And, that is essentially unaltered from its as-built design and materials provides added significance and distinguishes the bridge as an important engineering and historical landmark in Franklin County and the State of Massachusetts.

Archaeological Significance

Historic archaeological resources described above have the potential to help reconstruct an important crossing of the Deerfield River between the towns of Conway and Shelburne. Archaeological evidence may be present that identifies actual components of the ferry that established the crossing in 1778. Structural evidence from abutments and archaeological features associated with the 1868 wooden bridge that replaced the ferry may also survive. These resources might help reconstruct the form and actual location of the earlier bridge. Archaeological features associated with the existing and earlier bridge might also help identify and understand construction techniques used in bridge construction. Identification of structural remains and features associated with both bridges may also indicate the extent to which the existing bridge incorporated portions of the earlier bridge in its construction.

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BARDWELL'S FERRY BRIDGE
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(end)



Bardwell's Bridge

Franklin Co., MA

Name of Property

County, State

10. Geographical Data

Acreage of Property less than one acre

UTM References See continuation sheet.

(Place additional UTM references on a continuation sheet)

1. 18	690620	4713870		3.		
Zone	Easting	Northing	Zone	Easting	Northing	
2.			4.			
Zone	Easting	Northing	Zone	Easting	Northing	

_ 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 researched by Frederick Kreitner; Neil Larson, consultant, with Betsy Friedberg, NR Director, MHC

organization Massachusetts Historical Commission date January 2000

street & number 220 Morrissey Boulevard telephone 617-727-8470

city or town Boston state MA zip code 02125

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 the SHPO or FPO.)

name jointly by the Towns of Conway and Shelburne, MA

street & number 32 Main Street (Conway), 51 Bridge St. (Shelburne) telephone _____

city or town Conway, Shelburne state MA zip code 01341 (Conway) 01370 (Shelburne)

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.

United States Department of the Interior
National Park Service

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BARDWELL'S FERRY BRIDGE
Conway/Shelburne (Franklin Co.), Mass.

10. GEOGRAPHICAL DATA

Verbal Boundary Description

The boundaries of the bridge are attached on town assessor's maps from Conway and Shelburne.

Boundary Justification

The nominated property consists only of the bridge and its abutments; it is only the area that has been historically associated with the bridge.

(end)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Bardwell's Ferry Bridge

MULTIPLE NAME:

STATE & COUNTY: MASSACHUSETTS, Franklin

DATE RECEIVED: 1/11/00 DATE OF PENDING LIST: 1/24/00
DATE OF 16TH DAY: 2/09/00 DATE OF 45TH DAY: 2/25/00
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 00000076

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 2/10/00 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



BARDWELL'S FERRY BRIDGE
TOWNS OF SHELBURNE AND CONWAY
FRANKLIN COUNTY MASSACHUSETTS

PHOTOGRAPHER: DAVID HARRIS-FRIED
JULY 7, 1994

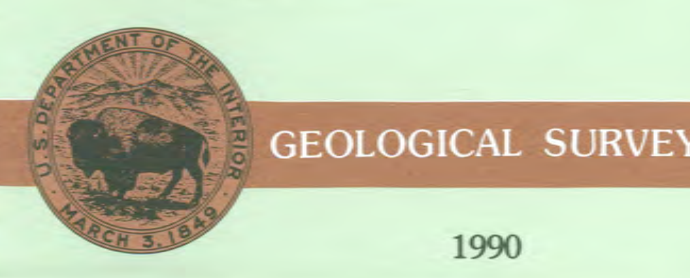
VIEW NORTH FROM CONWAY TO SHELBURNE

Greenfield MASSACHUSETTS

1:25 000-scale metric topographic map
CONWAY/SHELburnE (FRANKLIN Co.) MA



- 7.5 X 15 MINUTE QUADRANGLE SHOWING
- Contours and elevations in meters
 - Highways, roads and other manmade structures
 - Water features
 - Woodland areas
 - Geographic names



Produced by the United States Geological Survey
Control by USGS, NOS/NOAA, and Commonwealth of Massachusetts agencies
Compiled by photogrammetric methods from aerial photographs taken 1981. Field checked 1984. Map edited 1990
Supersedes Greenfield 1979 and Shelburne Falls 1978 1:25,000-scale maps
Projection and 1000-meter grid, zone 18, Universal Transverse Mercator
10,000-foot grid ticks based on Massachusetts coordinate system, mainland zone. 1927 North American Datum
To place on the predicted North American Datum 1983, move the projection lines 5 meters south and 38 meters west as shown by dashed corner ticks
There may be private inholdings within the boundaries of the National or State reservations shown on this map

CONTOUR INTERVAL 6 METERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
CONTROL ELEVATIONS SHOWN TO THE NEAREST 0.1 METER
OTHER ELEVATIONS SHOWN TO THE NEAREST METER

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS FOR SALE BY U.S. GEOLOGICAL SURVEY DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092

CONVERSION TABLE		DECLINATION DIAGRAM		ADJOINING MAPS	
Meters	Feet	15'	30'	1	2 3 4 5 6 7 8
1	3.2808			1	Rowe
2	6.5617			2	Barnardston
3	9.8425			3	Northfield
4	13.1234			4	Andover
5	16.4042			5	Orange
6	19.6850			6	Concord
7	22.9659			7	Williamsburg
8	26.2467			8	Shutesbury
9	29.5275				
10	32.8084				

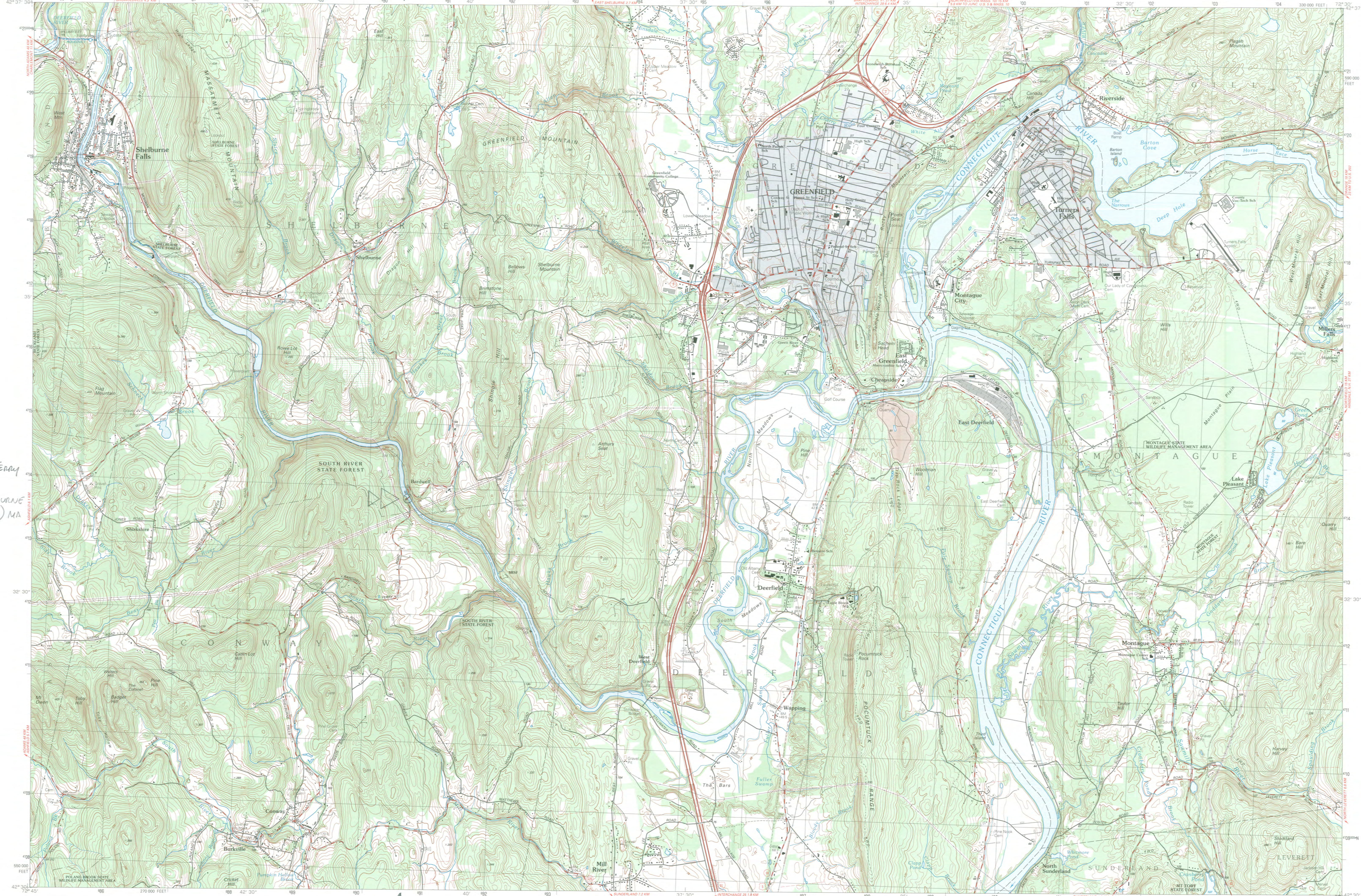
To convert meters to feet multiply by 3.2808
To convert feet to meters multiply by 0.3048
UTM grid convergence (M) at center of map
Diagram is approximate



Topographic Map Symbols

- Primary highway, hard surface
- Secondary highway, hard surface
- Light-duty road, hard or improved surface
- Unimproved road, trail
- Route marker: Interstate, U. S., State
- Railroad: standard gauge, narrow gauge
- Bridge: drawbridge
- Footbridge; overpass; underpass
- Bull-rope area: only selected landmark buildings shown
- Houses; barn; church; school; large structure
- Boundary:
 - National, with monument
 - State
 - County, parish
 - Civil township, precinct, district
 - Incorporated city, village, town
 - National or State reservation, small park
 - Land grant with monument; found section corner
 - U. S. public lands survey: range, township, section
 - Range, township, section line: location approximate
- Fence or field line
- Power transmission line, located tower
- Dam; dam with lock
- Cemetery; grave
- Campground; picnic area; U. S. location monument
- Windmill; water well; spring
- Mine shaft; prospect; adit or mine
- Control: horizontal station; vertical station; spot elevation
- Contours: index; intermediate; supplementary; depression
- Distorted surface: strip mine, lava, sand
- Sounding: depth curve
- Parential lake and stream; intermittent lake and stream
- Rapids, large and small; falls, large and small
- Swamp; marsh
- Salinized marsh; land subject to saltwater inundation
- Woodland; scattered trees
- Scrub; mangrove
- Orchard; vineyard

A pamphlet describing topographic maps is available on request



BARDWELL'S FERRY BRIDGE
CONWAY/SHELburnE (FRANKLIN Co.) MA



BARDWELL'S FERRY BRIDGE
CONWAY/SHELburne, MA
(FRANKLIN CO.)

THIS MAP IS FOR ASSESSMENT PURPOSES. IT IS NOT VALID FOR LEGAL DESCRIPTION OR CONVEYANCE.
THE HORIZONTAL DATUM IS THE MASSACHUSETTS STATE PLANE COORDINATE SYSTEM.
PHOTOGRAPHY DATE : APRIL 13, 1988
COMPLETION DATE : JULY 31, 1989

PRODUCED BY
CARTOGRAPHIC ASSOCIATES, INC.
MUNICIPAL MAPPING CONSULTANTS
P.O. BOX 267 LITTLETON, NH 03561

LEGEND
 AREA CALCULATED AC
 AREA SURVEYED AC
 COMMON OWNERSHIP OR
 EXEMPT PROPERTY (E)
 MATCH LINE -W-
 RECORD DIMENSION 100'
 RIGHT OF WAY R/W
 SCALED DIMENSION 100'S
 SUBDIVISION LOT NO. (2)
 WETLANDS

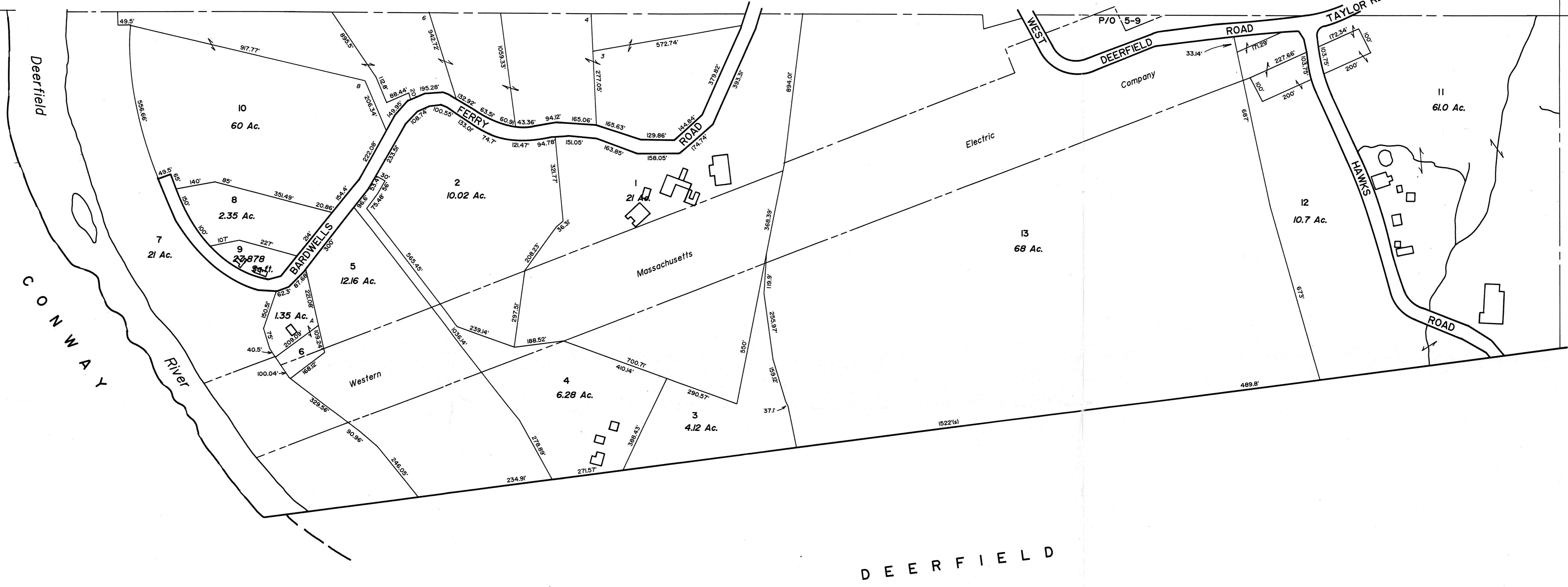
SCALE 1" = 400'
 FEET 0 400 800 1200
 METERS 0 121.92 243.84 365.76
 REVISED TO :

PROPERTY MAPS
CONWAY
MASSACHUSETTS

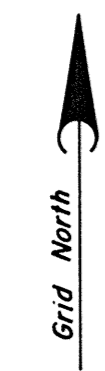
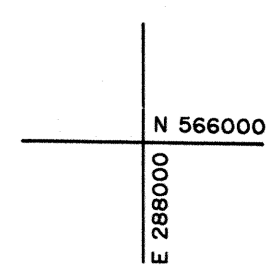
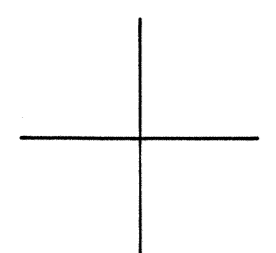
INDEX DIAGRAM
 401
 404
 407 406

MAP NO.
405

N 570000
E 282000



BARDWELL'S FERRY BRIDGE
CONWAY / SHELBUANE MA
(FRANKLIN CO.)



LEGEND
 PARCEL NUMBERS 2
 MATCH LINE

DATE OF AERIAL PHOTOGRAPHY	4-19-86
DATE OF COMPLETION	1-1-87
DATE OF REVISIONS	

For Assessment Purposes
Not to be used for Conveyances

TAX MAP
TOWN OF SHELBUENE
 FRANKLIN COUNTY, MASSACHUSETTS
 PREPARED BY
JAMES W. SEWALL COMPANY, OLD TOWN, MAINE
 SCALE: 1 INCH = 200 FEET

5	
MAP NUMBER	
1	2

11/20/86 3:07 PM

NR file BF

TOWN OF SHELBURNE

INCORPORATED JUNE 21, 1768
OFFICE OF CLERK, TREASURER, SELECTMEN,
ASSESSORS AND TAX COLLECTOR
51 BRIDGE STREET
SHELBURNE FALLS, MASSACHUSETTS 01370-1181
TELEPHONE 413-625-0300
FAX 413-625-0303

RECEIVED

OCT 28 1999

MASS. HIST. COMM

October 26, 1999

Judith B. McDonough, Executive Director
State Historic Preservation Officer
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

Dear Ms. McDonough,

It is with great pleasure to have received notice that the Bardwell's Ferry Bridge in Shelburne and Conway, Massachusetts will be considered by the Massachusetts Historical Commission for nomination to the National Register of Historic Places.

Although it is unclear at this time whether or not a member of our Board will be present for the December 8th meeting in Dorchester, MA, we wanted to express our support for the proposed nomination of the Bardwells Ferry Bridge. We believe that this bridge is an important historic asset for the towns of Shelburne and Conway, and is totally deserving of the National Historic designation. Thank you for your consideration.

Sincerely,

Angus "Terry" Dun, Chairman

Joseph J. Judd

Christine R. Baronas
Board of Selectmen

Cc: Frederick J. Kreitner, Conway

NR file BF



Town of CONWAY, Massachusetts

5 Academy Hill Road - Telephone: (413) 369-4773 and
32 Main Street - Telephone: (413) 369-4235 - Fax: (413) 369-4237
P.O. Box 240 - Conway, Massachusetts 01341-0240

March 30, 1999

RECEIVED

MAR 31 1999

MASS. HIST. COMM.

Betsy Friedberg
National Register Director
Massachusetts Historical Commission
220 Morrissey Blvd.
Boston, MA 02125

Dear Director Friedberg:

Mr. Frederick Kreitner of the Conway Historical Commission shared your letter to him dated 3/18/99 with the Board of Selectmen.

The purpose of this letter is to advise you that the Board of Selectmen wholeheartedly support the Historical Commission's application for listing Bardwells Ferry Bridge in the National Register of Historic places.

Should you require any additional information, please do not hesitate to contact me.

Sincerely yours,

Sharon C. Gorman
Administrative Aide

C: Mr. Fred Kreitner



The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

January 6, 2000

Ms. Carol Shull
National Register of Historic Places
Department of the Interior
National Park Service
Mail Stop 2280, Suite 400
1849 C Street, NW
Washington, DC 20240

Dear Ms. Shull:

Enclosed please find the following nomination form:

Bardwell's Ferry Bridge, Conway/Shelburne (Franklin Co.), MA

The nomination has been voted eligible by the State Review Board and has been signed by the State Historic Preservation Officer. The owners of the property were notified of pending State Review Board consideration 30 to 45 days before the meeting and were afforded the opportunity to comment.

Two letters of support have been received, from the Boards of Selectmen in each community.

Sincerely,

A handwritten signature in cursive script that reads "Betsy Friedberg".

Betsy Friedberg
National Register Director
Massachusetts Historical Commission

enclosure

cc: Frederick Kreitner, Conway Historical Commission
Jack Ramey, Chair, Conway Historical Commission
Anthony Jewell, Chair, Shelburne Historical Commission
Thomas Ward, Chair, Conway Board of Selectmen
Terry Dunn III, Chair, Shelburne Board of Selectmen
Brock Cutting, Shelburne Planning Board
Matthew Amorello, Commr., Massachusetts Highway Department
Ross Dindio, District 1, Massachusetts Highway Department

220 Morrissey Boulevard, Boston, Massachusetts 02125 · (617) 727-8470

Fax: (617) 727-5128 · TDD: 1-800-392-6090

www.state.ma.us/sec/mbc