

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. F-4-3

SHA Bridge No. F-312

Bridge name Mount Tabor Station Bridge

LOCATION:

Street/Road name and number [facility carried] Station Road over Frostown Branch

City/town Myersville

Vicinity X

County Frederick

This bridge projects over: Road Railway Water x Land

Ownership: State County X Municipal Other

HISTORIC STATUS:

Is the bridge located within a designated historic district? Yes No X
National Register-listed district National Register-determined-eligible district
Locally-designated district Other

Name of district

BRIDGE TYPE:

Timber Bridge :
Beam Bridge Truss -Covered Trestle Timber-And-Concrete

Stone Arch Bridge

Metal Truss Bridge X

Movable Bridge :
Swing Bascule Single Leaf Bascule Multiple Leaf
Vertical Lift Retractable Pontoon

Metal Girder :
Rolled Girder Rolled Girder Concrete Encased
Plate Girder Plate Girder Concrete Encased

Metal Suspension

Metal Arch

Metal Cantilever

Concrete :
Concrete Arch Concrete Slab Concrete Beam Rigid Frame
Other Type Name

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge F-312 carries Station Road over Frostown Branch approximately ½ mile west of Old Hagerstown Road. Station Road runs generally in a east-west direction in the area while Frostown Branch flows to the south. The bridge is situated in a valley in pasture land. The area is relatively undeveloped with one farm visible from the bridge.

Describe Superstructure and Substructure:

Bridge F-312 is a single span, Pratt pony truss measuring 60 feet in total length. It has 5 panels which are unequally spaced; the three central panels are 12'-4" long, while the two end panels are 11'-6"; the endposts are inclined. The top chord is a built-up section of two channels and a cover plate with lacing bars and is connected by pins. The bottom chord consists of two eye bars connected by pins. The floor system has steel stringers and floorbeams; there is a wood deck. The verticals consist of paired angles and lattice bars; the diagonals are paired eyebars and counters consist of cylindrical eyebars. All connections are pinned. The clear width of the roadway is 12'-9", and the distance from centerline of trusses is 15'-10". There is no sidewalk on the bridge and the truss members are protected by a 8" x 4" timber wheel guard, and lattice guardrail. The bridge is aligned 90 degrees to the streambed. The abutments are concrete, and the wingwalls are stone with concrete caps. The date "1928" is found on the concrete abutment.

Discuss Major Alterations:

According to a County engineer, at some time extra rolled sections were added at the midpoint of each panel and extended beyond the truss to the east and west to restore lateral stability to the bridge. A recent County inspection report shows 1992 plans indicating portions of some members to be replaced.

HISTORY:

WHEN was the bridge built truss c.1900, substructure 1928

This date is: Actual _____ Estimated X

Source of date: Plaque _____ Design plans _____ County bridge files/inspection form _____

Other (specify): stencil on concrete abutment

WHY was the bridge built?

To provide a reliable crossing for Station Road over Frostown Branch.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

The bridge was altered to add lateral stability.

Was this bridge built as part of an organized bridge-building campaign?

Bridge F-312 was not built as part of an organized bridge-building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

- A - Events X
- B- Person _____
- C- Engineering/architectural character _____

Was the bridge constructed in response to significant events in Maryland or local history?

This bridge was one of a large number of metal truss bridges built in Maryland in the late nineteenth and early twentieth centuries. Metal trusses built in the late nineteenth century were frequently of wrought iron construction and featured pinned connections. By the turn of the century, steel was the material of choice and connections were sometimes pinned and sometimes rivetted. By 1920, the truss type exhibited more heavily configured members and rivetted connections.

General Truss Bridge Trends

The first metal truss bridges in the United States were built to carry rail and canal traffic. A rapidly expanding railroad network, with needs for long spans, heavy load capacity and rapid construction, served as the impetus for advances in metal truss technology from the mid-nineteenth century to its close. The earliest metal truss forms of the United States were patented and introduced between 1830 and the Civil War, including the popular Pratt (1844) and Warren (1848) types.

From the Civil War through the end of the century metal truss technology improved in response to increasing loads and speeds, and new transportation needs; steel began to replace iron; numerous "bridge works" and "iron works" were established in the eastern U.S. for fabricating and shipping the truss components to the bridge site; and expanding road networks required a low cost, expedient bridge type.

General Trends in Maryland

In Maryland, the earliest metal truss bridges carried rail lines, including the Baltimore & Ohio (B&O) and the Baltimore and Susquehanna Railroads. As early as 1849, B&O Chief Engineer Benjamin H. Latrobe recommended the construction of metal truss bridges for "large crossings"; in 1850 he reported "much satisfaction" with the future of iron bridges after constructing the metal truss bridge at Savage.

Numerous metal truss bridges were manufactured in Baltimore, the early industrial hub of bridge building activity in the state, from the 1850s through the 1880s. Among the early bridge builders in the 1850s and 1860s were former B&O employees, B.H. Latrobe and Wendell Bollman, founders of competing Baltimore bridge building companies. Historical research identified more than twenty-five bridge companies that built truss bridges in the state between 1850 and 1920. Among these were the Wrought Iron Bridge Company, King Iron Bridge Company, Patapsco Bridge and Iron

Works, Baltimore Bridge Company, Pittsburg Bridge Company, Penn Bridge Company, Smith Bridge Company, Groton Bridge and Manufacturing Company, Roanoke Iron and Bridge Company, York Bridge Company, Vincennes Bridge Company, Bethlehem Steel Company, American Bridge Company.

The location of the Baltimore & Ohio Railroad, Baltimore bridge fabricators, and the urban needs of the city and its environs resulted in the erection of numerous early truss bridges in Baltimore and the surrounding area. Initially constructed for the railroads, their use quickly came to replace the earlier timber bridges on Baltimore roads.

From Baltimore, the use of the metal truss spread to other parts of the state, with County Commissioners in the Piedmont and Appalachian Plateau counties erecting numerous metal trusses from the 1870s to the early twentieth century. Frederick County erected numerous truss spans during that time. Records indicate that in the early twentieth century the York Bridge Company built a number of metal trusses there, primarily Pratt but also Warren and Parker trusses. In the same county, King Iron Bridge Manufacturing Company erected several bowstring pony truss bridges.

Frederick County Trends

In 1854, the weekly Frederick Examiner announced that wrought iron was being used as a bridge material and proved to be stronger than the wood truss construction that had been in general use. At that time it was hoped that such an iron bridge would soon be constructed in Frederick County.

It appears from the Frederick County Commissioners Minutes that iron truss bridges became popular in the area during the 1870s. Records show that a variety of companies, including Groton Manufacturing Company, Groton, New York; Wrought Iron Bridge Company, Canton Ohio; King Iron Bridge Company, Cleveland Ohio; and the Pittsburg Bridge Company, Pittsburgh, Pennsylvania, constructed bridges throughout the county. Iron truss bridges were an innovative step toward good bridge engineering design in the nineteenth century and were the pride of every community.

Truss bridges appear to have been the most popular form of bridge construction in Frederick County between the 1870s and 1930s. Large numbers were built to span small crossings, greatly facilitating vehicular movement and communications throughout the developing county. Frederick County once had scores of such bridges; however, as technology and use requirements have changed, they have been replaced at an increasing rate. According to information provided to the Maryland Historical Trust by Frederick County Department of Public Works, as reported in a prior Maryland Historical Trust survey form, 24 metal truss bridges remained on county roads.

Fifteen extant metal truss bridges were identified in Frederick County as a result of SHA's 1994-1995 historic bridge survey:

- F-312, single span Pratt pony truss built c. 1900
- F-405, single span Pratt through truss built in 1882
- F-407, single span Pratt through truss built in 1914
- F-506, single span Parker truss built in 1908
- F-508, single span Pratt pony truss built in 1908
- F-510, single span Pratt through truss built in 1914
- F-1202, single span Pratt pony truss built c. 1900-1910
- F-1624, single span Pratt pony truss built in 1918
- F-1701, single span Pratt through truss built c. 1890-1900

F-2203, single span, double intersection Pratt truss built 1878
 F-2204, single span Pratt through truss built c. 1910
 10017, eight span camelback truss built in 1939
 10018, a single span Pratt truss built in 1934
 10029, single span Camelback truss built in 1931
 10055, two Pratt through trusses built in 1932

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?

Metal truss bridges were reliable spans, providing safe crossings throughout the year in most weather conditions. In rural areas, such as this one, they served to facilitate local travel, and probably did not have a significant impact on the growth and development of the area.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?

The bridge is not located in an area which may be eligible for historic designation.

Is the bridge a significant example of its type?

This bridge is not a significant example of its type. However, Bridge F-312 represents an increasingly rare example of the small span structures that were once common throughout rural Maryland. It is unusually configured: oddly spaced panels, added rolled sections, and it is placed on later concrete abutments.

Does the bridge retain integrity of important elements described in Context Addendum?

This bridge retains integrity of location, setting, feeling and association. The truss components appear to be intact, and superstructure alterations (for lateral stability) may have taken place within the historic period. The substructure has been altered significantly.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?

It is not known if the bridge is a significant example of the work of a manufacturer, designer, and/or engineer. No plaque on the structure indicates the construction date or manufacturer. According to the prior MHT survey form, the bridge is similar to those built by the York Bridge Company in the early part of the twentieth century.

Should the bridge be given further study before an evaluation of its significance is made?

Bridge F-312 is listed in the Maryland Historical Trust's Inventory of historic sites. No further study is recommended.

BIBLIOGRAPHY:

County inspection/bridge files X SHA inspection/bridge files
Other (list):

County survey files of the Maryland Historical Trust

P.A.C. Spero & Company and Louis Berger & Associates, *Historic Highway Bridges in Maryland: Historic Context Report*. Prepared for the Maryland State Highway Administration.

SURVEYOR:

Date bridge recorded January 1996

Name of surveyor Paula Spero/Colin Farr

Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Suite 412, Baltimore, Maryland 21204

Phone number 410-296-1635

FAX number 410-296-1670





950041

INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Mount Tabor Station Bridge Survey Number: F-4-3

Project: Rehabilitation of Station Road Truss Agency: COE/Frederick County

Site visit by MHT Staff: no yes Name _____ Date _____

Eligibility recommended Eligibility not recommended

Criteria: A B C D Considerations: A B C D E F G None

Justification for decision: (Use continuation sheet if necessary and attach map)

The single span steel pony truss located on Station Road over the Catoctin Creek in the Middletown vicinity is thought to have been constructed circa 1920. Although its manufacturer is unknown, it is similar to those constructed by the York Bridge Company in the early part of the twentieth century. Under Criterion A, the bridge is significant for its association with the development of transportation in Frederick County. Metal truss bridges represent an important step in engineering design and a uniquely American achievement, the result of intensive experimentation in the 19th century. Relatively cheap and easy to build, these bridges were the most popular form of bridge construction in Frederick County between the 1870s and 1930s. Large numbers were built to span small crossings, greatly facilitating vehicular movement and communication throughout the developing County. Frederick County once had scores of such bridges; however, as technology and use requirements have changed, they have been replaced at an increasing rate. According to information provided to the Maryland Historical Trust by the Frederick County Department of Public Works, only 27 metal truss bridges remain on County roads today. A number of these are currently slated for replacement. Thus, the Mount Tabor Station Bridge is an increasing rare example of a type of modest structure once common throughout rural Maryland.

Documentation on the property/district is presented in: Inventory Form F-4-3, Project File

Prepared by: Cherilyn Widell

Elizabeth Hannold February 27, 1995
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable
J. Anderson 2.28.95
Reviewer, NR program Date

Jing

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

- Eastern Shore (all Eastern Shore counties, and Cecil)
- Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
- Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
- Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

- Paleo-Indian 10000-7500 B.C.
- Early Archaic 7500-6000 B.C.
- Middle Archaic 6000-4000 B.C.
- Late Archaic 4000-2000 B.C.
- Early Woodland 2000-500 B.C.
- Middle Woodland 500 B.C. - A.D. 900
- Late Woodland/Archaic A.D. 900-1600
- Contact and Settlement A.D. 1570-1750
- Rural Agrarian Intensification A.D. 1680-1815
- Agricultural-Industrial Transition A.D. 1815-1870
- Industrial/Urban Dominance A.D. 1870-1930
- Modern Period A.D. 1930-Present
- Unknown Period (prehistoric historic)

III. Prehistoric Period Themes:

- Subsistence
- Settlement
- Political
- Demographic
- Religion
- Technology
- Environmental Adaption

IV. Historic Period Themes:

- Agriculture
- Architecture, Landscape Architecture, and Community Planning
- Economic (Commercial and Industrial)
- Government/Law
- Military
- Religion
- Social/Educational/Cultural
- Transportation

V. Resource Type:

Category: structure

Historic Environment: rural

Historic Function(s) and Use(s): transportation, vehicular

Known Design Source: Unknown

F-4-3
Mount Tabor Station Bridge
Middletown
Public

The Mount Tabor Station Bridge is a single span steel pony truss bridge of pratt design with guardrail which spans Catoctin Creek near Middletown, Maryland. The single lane bridge is set upon random stone abutments and is approximately thirty feet in length and fifteen feet wide. Joints of the bridge are secured with pinned connections. No plaque on the structure indicates the construction date or manufacturer although, the bridge is similar to those built by the York Bridge Company in the early part of the twentieth century.

In 1854, the weekly Frederick Examiner announced that wrought iron was being used as a bridge material and proved to be stronger than the wood truss construction that had been in general use. At that time it was hoped that such an iron bridge would soon be constructed in Frederick County.

It appears from the Frederick County Commissioners Minutes that iron truss bridges became popular in the area during the 1870's. Records show that a variety of companies, including Groton Manufacturing Company, Groton, New York; Wrought Iron Bridge Company, Canton, Ohio; King Iron Bridge Company, Cleveland, Ohio; and the Pittsburgh Bridge Company, Pittsburgh, Pennsylvania, constructed bridges throughout the county. Iron truss bridges were an innovative step toward good bridge engineering design in the nineteenth century and were the pride of every community.

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC Mount Tabor Station Bridge

AND/OR COMMON

2 LOCATION

STREET & NUMBER

Mount Tabor Station Road over Catoctin Creek

CITY, TOWN

Middletown

VICINITY OF

CONGRESSIONAL DISTRICT

E.D. 3

STATE

Maryland

COUNTY

Frederick

3 CLASSIFICATION

CATEGORY

 DISTRICT BUILDING(S) STRUCTURE SITE OBJECT

OWNERSHIP

 PUBLIC PRIVATE BOTH

PUBLIC ACQUISITION

 IN PROCESS BEING CONSIDERED

STATUS

 OCCUPIED UNOCCUPIED WORK IN PROGRESS

ACCESSIBLE

 YES RESTRICTED YES UNRESTRICTED NO

PRESENT USE

 AGRICULTURE COMMERCIAL EDUCATIONAL ENTERTAINMENT GOVERNMENT INDUSTRIAL MILITARY MUSEUM PARK PRIVATE RESIDENCE RELIGIOUS SCIENTIFIC TRANSPORTATION OTHER**4 OWNER OF PROPERTY**

NAME Frederick County Roads Dept.

Telephone #:

STREET & NUMBER

Montevue Lane,

CITY, TOWN

Frederick

VICINITY OF

STATE, zip code

Maryland 21701

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,

REGISTRY OF DEEDS, ETC.

Liber #:

Folio #:

STREET & NUMBER

CITY, TOWN

STATE

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

 FEDERAL STATE COUNTY LOCALDEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

F-4-3

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The Mount Tabor Station Bridge is a single span steel pony truss bridge of pratt design with guardrail which spans Catoctin Creek near Middletown, Maryland.

The single lane bridge is set upon random stone abutments and is approximately thirty feet in length and fifteen feet wide. Joints of the bridge are secured with pinned connections. No plaque on the structure indicates the construction date or manufacturer although, the bridge is similar to those built by the York Bridge Company in the early part of the twentieth century.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

F-4-3

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION
1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE
500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input checked="" type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION
<input type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)
		<input type="checkbox"/> INVENTION		

SPECIFIC DATES

BUILDER/ARCHITECT York Bridge Co. (?)

STATEMENT OF SIGNIFICANCE

In 1854, the weekly Frederick Examiner announced that wrought iron was being used as a bridge material and proved to be stronger than the wood truss construction that had been in general use. At that time it was hoped that such an iron bridge would soon be constructed in Frederick County.

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CONTINUE ON SEPARATE SHEET IF NECESSARY

9 MAJOR BIBLIOGRAPHICAL REFERENCES

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE

COUNTY

STATE

COUNTY

11 FORM PREPARED BY

NAME / TITLE

Cherilyn Widell, Sites Analyst

ORGANIZATION

Frederick County Office of Historic Preservation

DATE

9/26/78

STREET & NUMBER

12 East Church St., Winchester Hall

TELEPHONE

694-1063

CITY OR TOWN

Frederick

STATE

Maryland

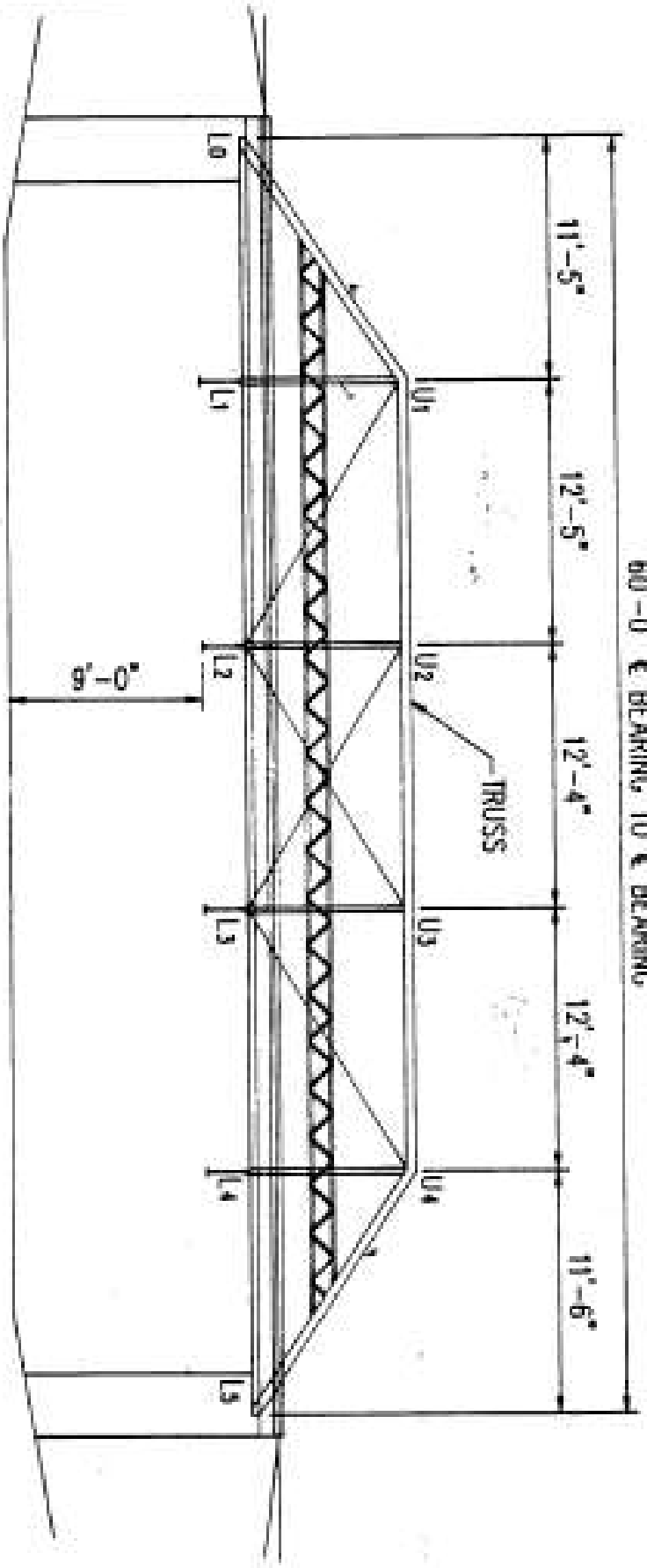
The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438

NO. 3 - BRIDGES
12-07-02 HAS

60'-0" ← BEARING TO ← BEARING



STRUCTURE NO. 03-12
STATION ROAD

PLATE NO. 1

DEC. 1992

ELEVATION
SCALE: 1/8" = 1'-0"

F-4-3