Maryland Historical Trust

Maryland Inventory of Historic Properties number: HA-1579

Name: Frost Road Bridge

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended __X__ Eligibility Not Recommended _____

Criteria: ___A ___B __X__C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: Anne E. Bruder Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze Date: 3 April 2001

MARYLAND INVENTORY OF HISTORIC BRIDGES MHT No. HA-1579
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

SHA Bridge No. 12033 **Bridge name** Priest Ford Road Pony Truss Bridge

LOCATION:
Street/Road name and number [facility carried] MD 136

City/town Trappe **Vicinity** __

County Harford

This bridge projects over: Road____ **Railway**_____ **Water** x **Land** ____

Ownership: State X **County** ____ **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 _____ **Retractile**_____ **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** _____

HA-1579

DESCRIPTION:
Setting: Urban _____ **Small town** _____ **Rural** X

Describe Setting:
Bridge 12033 carries Maryland Route 136 over Deer Creek approximately one mile south of the town of Trappe. Route 136 runs generally in a north/south direction in the area while Deer Creek flows to the east. The bridge is situated in a forested valley with pastures. The area is relatively undeveloped with few residential buildings around the bridge. Aberdeen Tank Proving Grounds is next to it.

Describe Superstructure and Substructure:
Bridge 12033 is a single span, Warren pony truss measuring 100 feet in total length. It has 8 panels measuring 12'-6" and inclined endposts. The top chord is a built-up section of channels with cover plates and lattice bars. The bottom chord is a built-up section of two channels connected with stay plates and lattice bars. The floor system comprises I-beam stringers and I-beam floorbeams. The verticals and diagonals are rolled sections. All connections are rivetted. The width of the roadway is 22'-8" between centerline of trusses. There is no sidewalk on the bridge and the truss members are protected by a steel railing. The bridge has a 90 degree alignment to the streambed. The abutments and wingwalls are concrete. There are no plaques on the bridge.

Discuss Major Alterations:
State Highway Administration inspection reports note that in 1950 severe floods undermined the abutments, which were then underpinned and concrete was added. In 1986, the deck was replaced, in 1987 new connections were added to the stringers and floorbeams, and in 1991 3 truss members were repaired.

HISTORY:
WHEN was the bridge built 1930
This date is: Actual X **Estimated** _____
Source of date: Plaque _____ **Design plans** ___ **County bridge files/inspection form** ____
Other (specify): State bridge files

WHY was the bridge built?
The bridge was built as part of an improvement on MD Route 136, to replace an existing truss bridge.

WHO was the designer?
State Roads Commission

WHO was the builder?
Unknown

WHY was the bridge altered?
Alterations were necessary to maintain the structural integrity of the substructure and to maintain the superstructure.

Was this bridge built as part of an organized bridge-building campaign?
It is not known whether Bridge 12033 was 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 ___X___

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

This bridge was one of a small but significant number of metal truss bridges erected in Maryland from the 1920s through the 1940s. Its heavy, solidly configured members and wider deck reflects continuing advances in metal truss construction in response to heavier loads. Thus configured, the metal truss bridge continued to be designed for major crossings. Such bridges were built throughout the state during the period, particularly in the 1930s.

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.

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 riveted connections.

Harford County Trends

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

H-1, single span Pratt through truss built in 1884
H-54, single span Pratt truss built c. 1889-1897
H-53, single span Pratt pony truss built c. 1885-1900
H-58, single span Pratt through truss built in 1886
H-94, single span Pratt through truss built c. 1885-1900
H-160, single span Pratt through truss built in 1883
12016, single span Pratt truss built in 1934
12033, single span Warren pony truss built c. 1930
12052, 2 Pratt spans built in 1927

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?

This metal truss bridge would have facilitated travel in this area of Harford County. The construction of two-lane highways and bridges in the 1920s and 1930s had a significant impact on local growth, as well as regional development.

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?

The bridge is a good example of a standardized twentieth century pony truss.

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

Bridge 12033 retains integrity of location, design, setting, materials, workmanship, feeling and association. Its components appear to be intact.

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

Unknown.

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

Bridge 12033 is listed in the Maryland Historical Trust's Inventory of historic sites. No further study is recommended.

HA-1579

BIBLIOGRAPHY:

County inspection/bridge files _ **SHA inspection/bridge files** X

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.

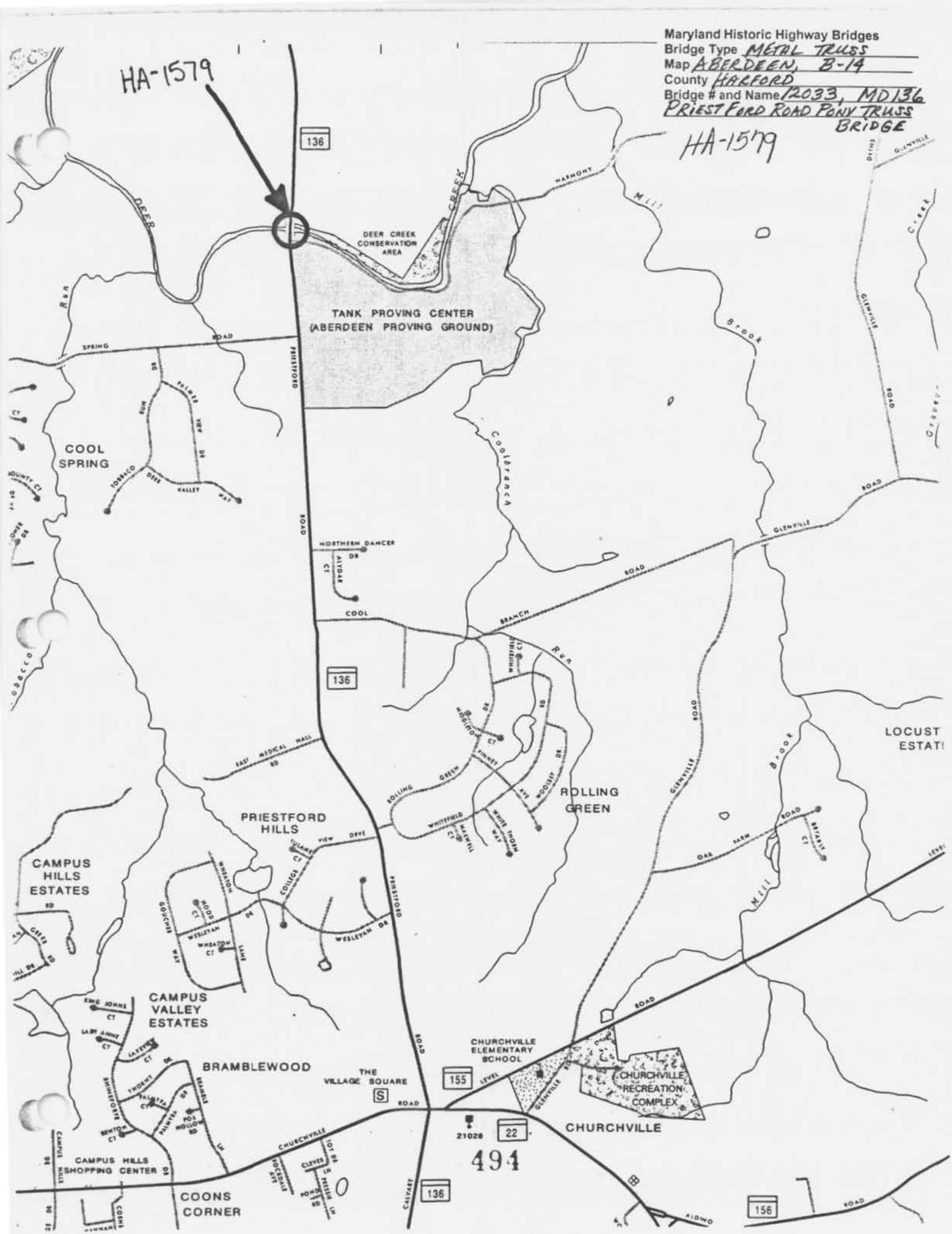
SURVEYOR:

Date bridge recorded February 1996

Name of surveyor P.A.C. 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


Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map ABERDEEN, B-14
County HARFORD
Bridge # and Name 2033, MD 136
PRIEST FORD ROAD PONY TRUSS BRIDGE
HA-1579
HA-1579
136
DEER CREEK CONSERVATION AREA
TANK PROVING CENTER (ABERDEEN PROVING GROUND)
SPRING ROAD
PRIESTFORD ROAD
COOL SPRING
COOLBRANCA
GLENVILLE ROAD
COOL BRANCH
ROLLING GREEN
PRIESTFORD HILLS
CAMPUS HILLS ESTATES
CAMPUS VALLEY ESTATES
BRAMBLEWOOD
THE VILLAGE SQUARE
CHURCHVILLE ELEMENTARY SCHOOL
CHURCHVILLE RECREATION COMPLEX
CHURCHVILLE
CAMPUS HILLS SHOPPING CENTER
COONS CORNER
LOCUST
155
22
21028
494
156

120?3 SOUTH APPROACH 25

1) [illegible]

2) [illegible] ford Pony Truss Bridge

3) Harford

4) Colin Farr

5) Feb, [illegible]

6) [illegible] Company, [illegible], MD [illegible]204

7) Priest Ford Pony Truss Bridge South approach

8) 1 of 7

13033 EAST ELEVATION 32

1) MA 1577

2) Pruet Ford Pony Truss Bridge

3) Harford

4) Colin Farr

5) Feb 1996

6) P.A.C. Spero + Company

7) [illegible] Bridge, east elevation

8) 2 of [illegible]

12033 ~~BOTTOM CHORD~~ 2L

1) HA-1979
2) Pratt Ford Pony Truss Bridge
3) Harford
4) Color Print
5) Feb 1996
6) P.A.C. Sport Company, Towson, MD 21204
7) Pratt Ford Pony Truss Bridge, east elevation
8) 3 of 7

12033 UNDER DECK

1) HA-1579
2) Pratt Ford Pony Truss Bridge
3) Hanford
4) Colin Faw
5) Feb 1996
6) P.A.C. Spero - Company, Conroe MD 21201
7) Pratt Ford Pony Truss Bridge, underdeck
8) 4 of 7

1) HH-107-4

2) Priest Ford Pony Truss Bridge

3) Harford

4) Colin Farr

5) Feb. 1996

6) R.A.C. Sperry Company, Towson, MD 21204

7) Priest Ford Pony Truss Bridge, Top Chord

8) 5 of 7

1) HA-1597
2) Priest Ford Pony Truss Bridge
3) Harford
4) Colin Barr
5) Feb 1996
6) P.A.C. Spero & Company, Towson MD 21204
7) Priest Ford Pony Truss Bridge upper connection
8) 6-17


12033

12033 ~~BRIDGE #~~ 36

railing

1) HA-1579
2) Priest Ford Pony Truss Bridge
3) Harford
4) Colin Jones
5) February 1996
6) P.A.C. Spero + Company, Towson, MD 21204
7) Priest Ford Pony Truss Bridge, railing
8) [illegible] of 9

HA-1579 1931
Priest Ford Road Pony Truss Bridge
Nobles Mill vicinity
public (unrestricted)

This bridge, which carries Maryland Route 36 over Deer Creek near Nobles Mill, is a single steel pony triangular truss, 100 feet in length. It carries a roadbed with a width of 20 feet.

The Priest Ford Road Pony Truss Bridge is significant as one of the few pony truss bridges which carry state roads. It is one of six historic truss bridges -- part of Maryland's state road system in Harford County, and one of 26 bridges of the same general structural type throughout the state road network -- identified by the Maryland Historical Trust for the Maryland Department of Transportation in a jointly conducted survey which took place during 1980-81.

H 12033

MARYLAND HISTORICAL TRUST HA-1579

MAGI # 1315413817

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON
Priest Ford Road Pony Truss Bridge

2 LOCATION

STREET & NUMBER

CITY, TOWN
South of Nobles Mill ___ VICINITY OF

CONGRESSIONAL DISTRICT
1st

STATE
Maryland

COUNTY
Harford

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
X STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	X TRANSPORTATION
		__NO	__MILITARY	__OTHER

4 OWNER OF PROPERTY

NAME
State Highway Administration DOT Survey Telephone #:

STREET & NUMBER
301 West Preston Street

CITY, TOWN
Baltimore ___ VICINITY OF

STATE, Zip code
Maryland 21201

5 LOCATION OF LEGAL DESCRIPTION

Liber #:
Folio #:

COURTHOUSE
REGISTRY OF DEEDS, ETC Harford County Courthouse

STREET & NUMBER

CITY, TOWN
Bel Air

STATE
Maryland

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

HA-1577

CONDITION		CHECK ONE	CHECK ONE
__EXCELLENT	__DETERIORATED	X UNALTERED	X ORIGINAL SITE
X GOOD	__RUINS	__ALTERED	__MOVED DATE_____
__FAIR	__UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

This bridge, which carries Maryland Route 36 over Deer Creek, is a single steel pony triangular truss, 100' in length. The road runs north and south, and is 20' wide as it crosses the bridge. All connections are riveted.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

NR-1077

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION	
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE	
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	__ART	X ENGINEERING	__MUSIC	__THEATER	
__1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	X TRANSPORTATION	
X 1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES 1931

BUILDER/ARCHITECT probably built according to in-house designs of the State Roads Commission.

STATEMENT OF SIGNIFICANCE

One of the few pony trusses which carry state roads. See also M/DOT general bridge significance, attached.

CONTINUE ON SEPARATE SHEET IF NECESSARY

HA-157

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Files of the Bureau of Bridge Design, State Highway Administration, 301 West Preston Street, Baltimore, Md.

Condit, Carl, American Building Art, 20th Century; New York, Oxford University Press, 1961.

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

Quadrangle Name: Belair, MD
Quadrangle Scale: 1:24 000
UTM References: 18.391800.4384070

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
John Hnedak/M/DOT Survey Manager

ORGANIZATION	DATE
Maryland Historical Trust	1980
STREET & NUMBER	TELEPHONE
21 State Circle	(301) 269-2438
CITY OR TOWN	STATE
Annapolis	Maryland 21401

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

GENERAL BRIDGE SIGNIFICANCE

The significance of bridges in Maryland is a difficult and subtle thing to gauge. The Modified significance criteria of the National Register, which are the standard for these judgements in Maryland, as in most states, must be broadly applied to allow for most of these structures, In particular the 50 year rule which specifies a minimum age for structures can be waived, and is more commonly done so for engineering structures than for others. Questions of uniqueness and typicality, exemplary types, etc., must set aside for now, because they presuppose a wider knowledge of the entire resources than is presently available. Indeed, this survey is an initial step toward understanding the extent to which Maryland's bridges are part of her cultural resources. Aesthetic considerations may have to be sidestepped entirely, for such structures as these are generally considered mundane and ordinary at best, and sometimes a negative landscape feature, by the layman. It does take a specialized aesthetic sense to appreciate such structures on visual grounds, but a case for visual significance can be made. The remaining criteria are those of historical associations. The relative youth of most of these structures precludes a strong likelihood of participation to events and lives of import. The best generalization can be made for most bridges is that they are built on site of early crossings, developing from fords and ferries through covered bridges and wooden trusses to their present state. This significance inheres in the site, however, and in most cases would not be diminished by the adsense of the present structure.

These criteria may also be addressed positively. The primary significance of these bridges, those which were built between the two World Wars, consists in their association with rapidly changing modes and trends in transportation in America during the period. The earliest of them saw the appearance of the automobile and its rise as the preëminent means of getting Americans from place to place. Roads were being improved for increased speeds and capacity, and bridges, as potential weak links on the system, became particularly important. The technology for producing them was not new, and would not change significantly during the period. Accordingly, great numbers of easily, quickly and relatively cheaply built concrete slab, beam and arch bridges were built to span the samll crossings, or were multiplied to cover longer crossings where height was no problem.

Truss bridges with major structural members of compound beams, of either the Warren or Pratt types, while more expensive and considered more intrusive on the landscape, were built to span the larger gaps.

With an aesthetic which allowed concrete slab bridges to have classical balustrades, or the application of a jazz-age concrete relief; with the considerable variety possible in the construction of medium sized metal trusses; and with the lack of nationwide standards for highway bridge design, the resulting body of structures displays considerable variety. The sameness of appearance of currently produced highway bridges leads one to believe this variety will not reappear. For that reason alone it is wise to keep watch over our existing bridges. Regardless of ones taste and aesthetic preference, one must be admitted that these older bridges add their variety and visual interest to the environment as a whole, and that it is often the case that their replacement by a standard highway bridge results in a visual hole in the landscape.

In situations requiring decisions of potential effect on these structures, they should receive some consideration. As the recording and subsequent understanding of Maryland's Cultural resources grows, they will be recognized as a significant part of that heritage.

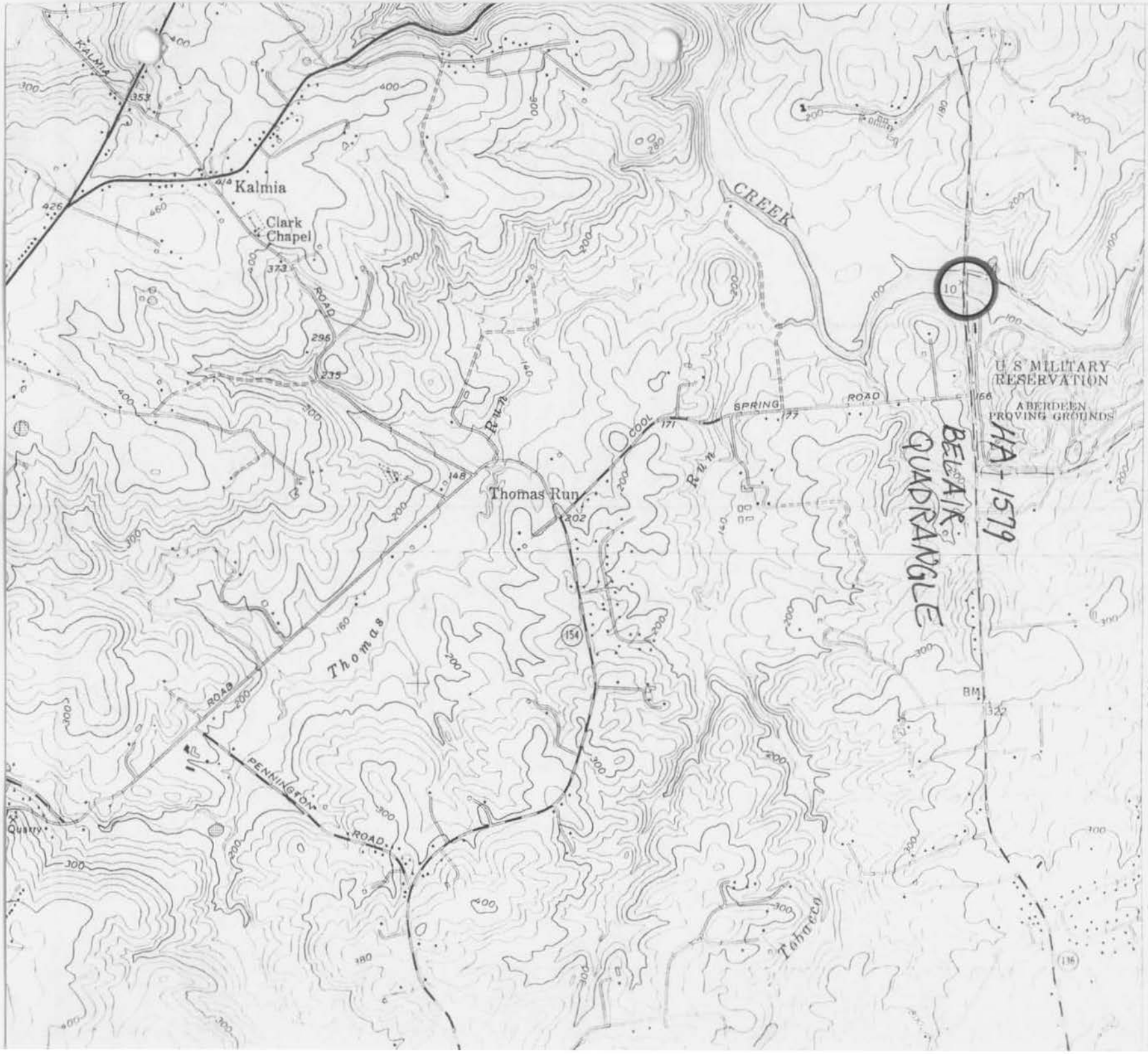
It should be noted that two non-negligible classes of structure have been omitted from this set. The first is the huge number of concrete slab or beam bridges of an average of twenty feet or less in length. These are so nearly ubiquitous and of such minor visual impact (they are often easy to drive across without noticing) that they were not inventoried. They are considered in the general recommendations section of the final report of this survey, however.

The second category is that of the "great" bridges, the huge steel crossings of the major waterways. While they are awesome and aesthetically appealing, they are not included in this inventory because they do not share the problems of their more modest counterparts. They do not lack for recognition, they have not been technologically outmoded, and are in no danger of disappearing through replacement. In a sense, they are not as rare; hundreds of

these great bridges are known nationally, and there is little doubt as to the position of any one bridge within national spectrum. There seems little point in including them with the larger inventory of bridges. From an arbitrary point of view, their dates are outside the 1935 limit which we set for the consideration of bridges. We have departed from that limit on occasion, but will not in this case. These bridges, too, will be considered in the final report.

Moveable bridges deserve a special note regarding their significance. They are rare, and all but the most recent of them have been listed by this survey by virtue of that fact alone. They are, by their nature as intermittent impediments to the smooth flow of traffic, threatened. We rarely tolerate disruptions to what we perceive as our progress. This has been demonstrated recently by the replacement of the drawbridge at Denton, on one of the major routes to the Atlantic Coast from the rest of Maryland.

However much we are inconvenienced by them, we must admit that moveable bridges contribute a share of interest to the landscape. As with significance judgements in general, we here enter a realm which is governed by taste and opinion. Some of us might not enjoy being forced to site back for a while to look at the surroundings which we would otherwise totally ignore, especially if the engine is in danger of boiling over. But there are those who are fascinated by the slow rise of a great chunk of roadway, moved by quit, often invisible machinery; who are amused by the tip of the mast which skims the top of the temporary wall; or who reflect on the nobility inherent in a river and the fact that we have not subdued every waterway with our autos, while knowing that we can if we want to.


Kalmia
Clark Chapel
ROAD
CREEK
Thomas Run
COOL
SPRING
ROAD
U S MILITARY RESERVATION
ABERDEEN PROVING GROUNDS
BEL AIR QUADRANGLE
HA + 1579
Thomas
ROAD
PENNINGTON
ROAD
Quarry
Tobacco
BM
4385
4384
4383
35'
4382
4381

HA-1579
Priest ford Bridge
M/DOT
Hnedak/Meyer
Winter 1980