

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-1575

Name: JOHNNY CAKE RD. OVER PATAPSCO

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 <input checked="" type="checkbox"/> | Eligibility Not Recommended <input type="checkbox"/> |
| Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D | Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> None |
| Comments: _____ | |
| | |
| Reviewer, OPS: <u>Anne E. Bruder</u> | Date: <u>3 April 2001</u> |
| Reviewer, NR Program: <u>Peter E. Kurtze</u> | Date: <u>3 April 2001</u> |

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

MHT No. BA-1575

SHA Bridge No. B-54 Bridge name Johnnycake Road over Patapsco River

LOCATION:

Street/Road name and number [facility carried] Johnnycake Road

City/town Hollofield Vicinity X

County Baltimore

This bridge projects over: Road Railway Water Land

Ownership: State County Municipal Other

HISTORIC STATUS:

Is bridge located within a designated historic district? Yes No

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

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 _____

DA-1575

DESCRIPTION:

Describe Setting:

Bridge No. B-54 built in 1934, carries two lanes of traffic on Johnnycake Road over the Patapsco River. The Baltimore County bridge is situated in the lush wooded area of the Patapsco Valley State Park in an east to west orientation. The bridge is located just north of I-70 with the B&O Railroad passing not more than 50 yards from the west abutment. The Patapsco River flows from north to south at this location.

Describe Superstructure and Substructure:

This bridge is a steel Parker through-truss consisting of seven 22'-103" panels for an overall span length of 159'-11". The distance between the centerline of the trusses is 22'-4". The floor system consists of I-shaped stringers which frame into floorbeams at each panel point of the truss. The steel grating deck has an overall width of 21'-0" and provides a 20'-0" clear roadway between curbs. The top chord is made from back to back channels, a riveted cover plate on top, and lattice on the bottom. The bottom chord is comprised of back to back channels stabilized by batten plates. The verticals and diagonals are I-shapes and angles, respectively. The portal bracing and bottom and top laterals are angles with lattice bracing. There is horizontal bracing running through the center three panels of each truss. All joints and member connections were made with rivets and gusset plates. The substructure consists of reinforced concrete abutments and wingwalls.

Discuss Major Alterations:

In 1978 the bridge was redecked, replacing only the steel grating. Other minor repairs have been made to the concrete abutments.

HISTORY:

WHEN was bridge built (actual date or date range) 1934, re-decked in 1978

This date is: Actual X **Estimated** _____

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

Plaque says built 1934, State Roads Commission.

WHY was bridge built? To provide a reliable crossing of Johnnycake Road over the Patapsco River, to meet local and regional transportation needs.

WHO was the designer _____

WHO was the builder _____

WHY was bridge altered? [check N/A _____ if not applicable] Re-decked as part of standard maintenance

Was bridge built as part of organized bridge-building campaign? Yes X No _____

This bridge was built under the aegis of the State Roads Commission as part of the Good Roads Movement.

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 bridge constructed in response to significant events in Maryland or local history? No Yes
If yes, what event?

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, solid construction reflects continuing advances in metal truss technology and fabrication early in the century, and the almost unyielding reliability of substantial trusses for major crossings. Such bridges were built throughout the state during the period, particularly in the early 1930s, as part of the Good Roads Movement promoted by the State Roads Commission. Many of them retain plaques indicating that they were built under the aegis of the Commission, even though they were designed by private bridge building firms.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area? No Yes If yes, what impact?

Because of their solidity and reliability, metal truss bridges with heavy members such as the Johnnycake Road bridge were often utilized in Maryland from the 1920s through the 1940s at long crossings. Multi-lane facilities carrying major thoroughfares, they had not only a significant impact on local growth, but facilitated regional residential, commercial, agricultural, and industrial development.

Is the bridge located in an area which may be eligible for historic designation? No Yes
Would the bridge add to or detract from historic & visual character of the possible district?

Is the bridge a significant example of its type? No Yes If yes, why? _____

Between 1840 and the Civil War, under the impetus of a rapidly expanding railroad system, the majority of early American metal truss bridge forms were patented and introduced. In Maryland, the earliest metal truss bridges carried rail lines, which required their great strength and reliability. From the War through the end of the century, metal truss technology was improved, steel began to replace iron, and the use of trusses was expanded to carry roads as well as rail lines.

Numerous metal truss bridges were erected in Baltimore, the original hub of the metal truss in the state, from the 1850s through the 1880s. From Baltimore, the use of the metal truss spread out to other parts of the state, particularly the Piedmont and Appalachian Plateau. Many bridge and iron works were established in the eastern United States to design and fabricate truss members, which were then shipped to sites in Maryland and elsewhere to be erected. More than 15 different bridge companies located in Maryland, Ohio, Pennsylvania, New York, Virginia, and Indiana are known to have shipped metal truss bridges to sites throughout Maryland. Bridges were first fabricated in Maryland, and shipped to sites within the state and beyond, by the companies of seminal bridge designer Wendel Bollman.

Early in the twentieth century, concrete bridges began to compete with metal truss bridges throughout the state at small to moderate crossings. With the development of uniform standards for concrete bridges by the State Roads Commission in the 1910s, the construction of smaller metal truss bridges significantly declined throughout the state. The metal truss still remained the bridge of choice for large crossings, however. In the 1920s, heavier members began to be used at these bridges. Reflecting even heavier load requirements and increased lengths, metal truss bridges erected in the state in the 1930s and 1940s were heavy and solid, rather than light and delicate like their late-nineteenth- and early-twentieth-century predecessors.

The Pratt truss bridge, Maryland's most common surviving early truss type, was patented in 1844 by Thomas and Caleb Pratt. The Pratt has diagonals extended across one panel in tension and verticals in compression, except for hip verticals immediately adjacent to the inclined end posts of the bridge. Between 1868 and 1871 a subtype, the Parker truss, was developed in a series of patents filed by C.H. Parker. The Parker truss is a Pratt truss with an inclined rather than horizontal top chord. It was popular for longer span bridges well into the twentieth century. Maryland examples include bridges 2054 (1935) in Anne Arundel County, B-54 (1934) in Baltimore County, and F-506 (1908) in Frederick County.

This bridge was erected during one of the three key periods (1840-1860, 1860-1900, and 1900-1960) of bridge construction in Maryland. Built in 1934, it falls within the period 1900-1960. During this era, metal truss highway bridges became increasingly standardized. Also during this period, smaller and

moderate length trusses were gradually replaced by reinforced concrete structures, and the modern metal girder bridge, which could easily be widened, replaced the metal truss bridge at all but the largest approaches and crossings. Built after 1930, it characterized by heavy solid members, rather than the relatively delicate members that characterized its late-nineteenth- and early-twentieth-century predecessors.

Does bridge retain integrity [in terms of National Register] of important elements described in Context Addendum? No Yes If no, why?

Is bridge a significant example of work of manufacturer, designer and/or engineer? No Yes If yes, why? Possibly

In the early twentieth century, metal truss bridges were largely supplanted in the state by concrete and, later, metal girder structures. The old metal fabricators disappeared during this period. They were replaced, in the 1920s and 1930s, by a new if less numerous generation of metal truss fabricators. Among the new bridge companies active in Maryland was the Roanoke Iron and Bridge Company, the McClintic-Marshall Company, and the American Bridge Company. Although this bridge bears a State Roads Commission plaque, it was likely built by one of these three companies or one of their competitors.

Should bridge be given further study before significance analysis is made? No Yes

It is believed that no further evaluation is necessary to determine the eligibility of this bridge for listing in the National Register. However, additional research, which could be conducted as part of any future National Register nomination prepared for the bridge, might provide further information about its history and environs.

BIBLIOGRAPHY:

Bridge inspection reports and files of the Baltimore County engineer's office.

County survey files of the Maryland Historical Trust.

Jackson, Donald H. *Great American Bridges and Dams*. Washington, D.C: The Preservation Press, 1968

P.A.C. Spero & Company and Louis Berger & Associates, Inc. *Historic Bridges in Maryland: Historic Context Report*. Prepared for the Maryland State Highway Administration, September, 1994.

Pennsylvania Historical and Museum Commission and Pennsylvania Department of Transportation. *Historic Highway Bridges in Pennsylvania*. Commonwealth of Pennsylvania, 1986.

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 1/24/95

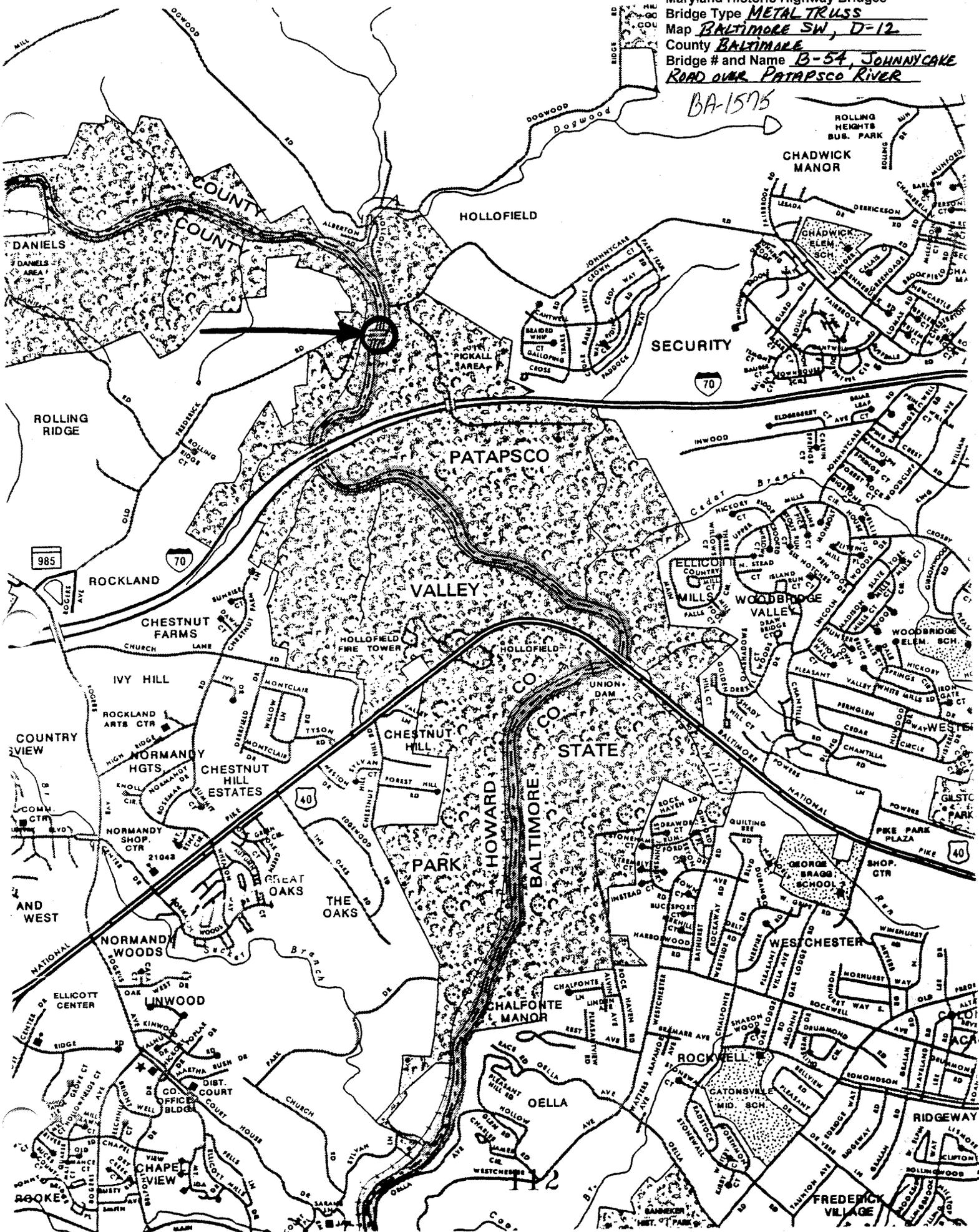
Name of surveyor David Diehl/Marvin Brown

Organization/Address GREINER, INC., 2219 York Road, Suite 200, Timonium, Maryland 21093-3111

Phone number 410-561-0100 FAX number 410-561-1150

Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map BALTIMORE SW, D-12
County BALTIMORE
Bridge # and Name B-54, JOHNNYCAKE
ROAD OVER PATAPSCO RIVER

BA-1576





Inventory # BA-1575

Name BOOSEY-JONNYCAKE RD OVER PATAPSCO RIVER

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SWA

Description NORTH APPROACH LOOKING

SOUTH

Number 125 of 296



Inventory # BA-1575

Name B0054-JANNYCAKE RD OVER PATAPSCO RIVER

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DEHL

Date 1/95

Location of Negative SHA

Description WEST ELEVATION LOOKING
SOUTHEAST

Number 2 of 396



Inventory # BA-1575

Name BOUSH - JOHNNY CAKE RD OVER PATAPSCO RIVER

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SJA

Description EAST ELEVATION LOOKING
WEST

Number 3 of 39 6



Inventory # BA-1575

Name B0254 - JOHNNYCAVE RD OVER PATAPSCO RIVER

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SWA

Description UNDERSIDE OF DECK LOOKING
SOUTH

Number 425 of 316

PATAPSCO RIVER BRIDGE
BUILT 1934
STATE ROADS COMMISSION
E. CLINTON UHL, CHAIRMAN,
E. BROOKE LEE, ROBERT LACY,
H. D. WILLIAMS, JR., CHIEF ENGINEER,
W. C. HOPKINS, BRIDGE ENGINEER.

Inventory # BA-1575

Name B0054-JANNYCAKE RD OVER PATAPSCO RIVER

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DEHL

Date 1/95

Location of Negative SHA

Description PLAQUE ON WEST TRUSS END
CHORD

Number 5 of 316



Inventory # BA-1575

Name B0054 - JOHNNYCAKE RD OVER PATASO RIVER

County/State BALTIMORE COUNTY/MO

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING
NORTH

Number 629 of 376

MARYLAND HISTORICAL TRUST

0315753817

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON

Hollofield Steel Truss Bridge

(B-54)

2 LOCATION

STREET & NUMBER

Carries Old Frederick Road over the Patapsco from Howard County to

CITY, TOWN

CONGRESSIONAL DISTRICT

Baltimore County

VICINITY OF

Hollofield

STATE

COUNTY

3 CLASSIFICATION

| CATEGORY | OWNERSHIP | STATUS | PRESENT USE |
|---|--|--|--|
| <input type="checkbox"/> DISTRICT | <input checked="" type="checkbox"/> PUBLIC | <input type="checkbox"/> OCCUPIED | <input type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM |
| <input type="checkbox"/> BUILDING(S) | <input type="checkbox"/> PRIVATE | <input type="checkbox"/> UNOCCUPIED | <input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK |
| <input checked="" type="checkbox"/> STRUCTURE | <input type="checkbox"/> BOTH | <input type="checkbox"/> WORK IN PROGRESS | <input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE |
| <input type="checkbox"/> SITE | PUBLIC ACQUISITION | ACCESSIBLE | <input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS |
| <input type="checkbox"/> OBJECT | <input type="checkbox"/> IN PROCESS | <input type="checkbox"/> YES: RESTRICTED | <input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC |
| | <input type="checkbox"/> BEING CONSIDERED | <input type="checkbox"/> YES: UNRESTRICTED | <input type="checkbox"/> INDUSTRIAL <input checked="" type="checkbox"/> TRANSPORTATION |
| | | <input type="checkbox"/> NO | <input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER: |

4 OWNER OF PROPERTY

NAME

Telephone #:

STREET & NUMBER

CITY, TOWN

VICINITY OF

STATE, zip code

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 LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

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 type="checkbox"/> GOOD | <input type="checkbox"/> RUINS | <input type="checkbox"/> ALTERED | <input type="checkbox"/> MOVED DATE _____ |
| <input type="checkbox"/> FAIR | <input type="checkbox"/> UNEXPOSED | | |

Recommendation DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Hollofield Bridge contributes to the character of its setting, and attempts to upgrade the road it carries should be discouraged from including bridge replacement.

Maintenance of the bridge is the responsibility of either Howard or Baltimore Counties or both.

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

John D. Hnedak, Historic Sites Survey Team Captain

ORGANIZATION

Maryland Historical Trust

DATE

1978-79

STREET & NUMBER

21 State Circle

TELEPHONE

269-2438

CITY OR TOWN

Annapolis

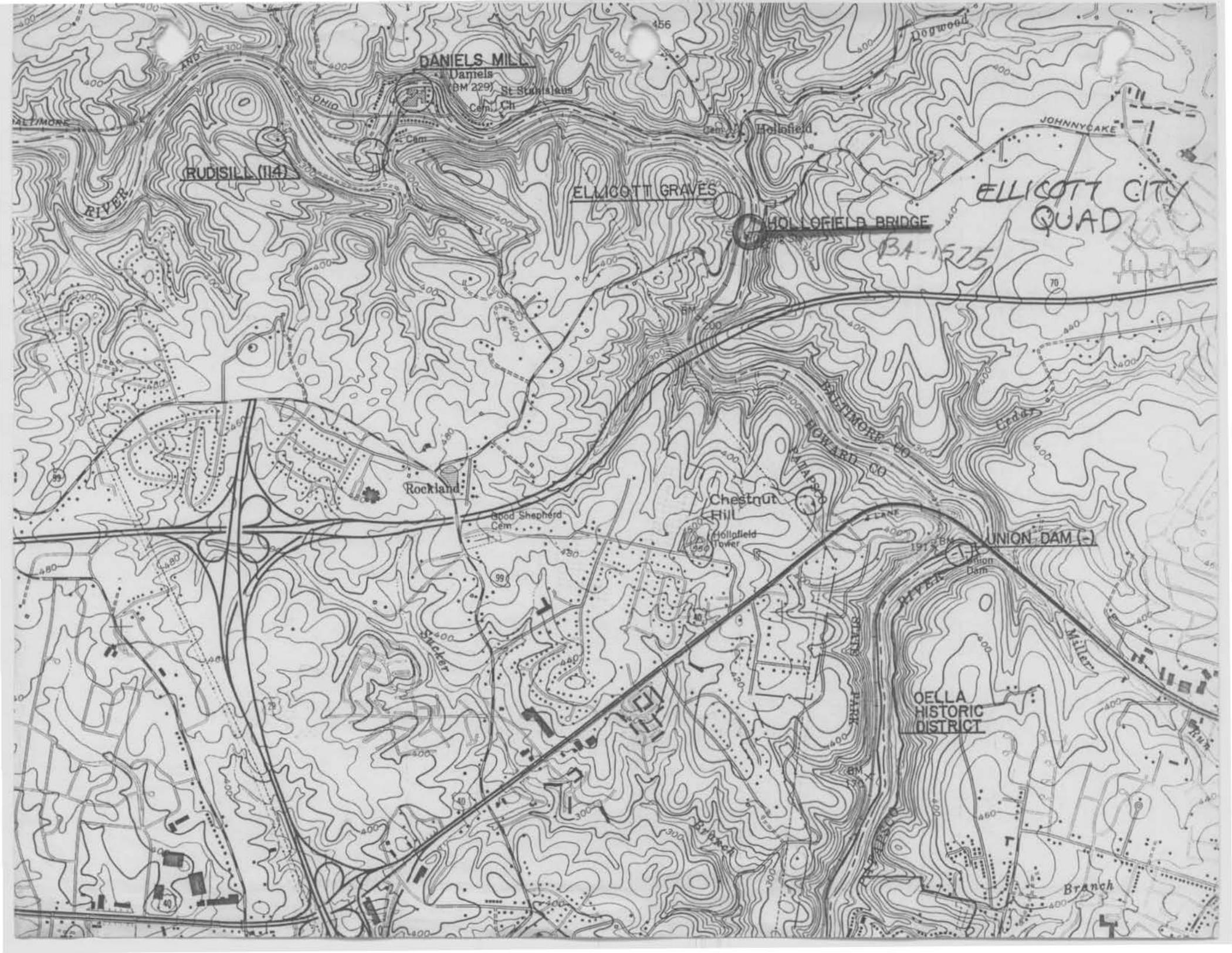
STATE

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



DANIELS MILL

Daniels
BM 229 St Stanislaus
Cem. Ch

RUDISILL (114)

ELICOTT GRAVES

HOLSFIELD BRIDGE

BA-1575

ELICOTT CITY
QUAD

Rockland

Chestnut
Hill

UNION DAM (-)

OELLA
HISTORIC
DISTRICT

Branch