

Maryland Historical Trust

Maryland Inventory of Historic Properties number: HA-1863

Name: 12013/MD132 OVER SWAN CREEK

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 _____ | Eligibility Not Recommended <u>X</u> |
| Criteria: <u> </u> A <u> </u> B <u> </u> C <u> </u> D | Considerations: <u> </u> A <u> </u> B <u> </u> C <u> </u> D <u> </u> E <u> </u> F <u> </u> G <u> </u> 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> |

Handwritten mark

MARYLAND INVENTORY OF HISTORIC PROPERTIES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST

MHT NO. HA-1863

NAME AND SHA NO.: 12013

LOCATION

Road Name and Number: MD 132 over Swan Creek

City/Town: Aberdeen vicinity

County: Harford

Ownership: State County Municipal Other

Bridge projects over: Road Railway Water Land

Is bridge located within designated district?: yes no
 NR listed district NR determined eligible district
 locally designated other
Name of District

BRIDGE TYPE

- Timber Bridge
 Beam Bridge Truss-Covered Trestle Timber-and-Concrete
- Stone Arch Bridge
- Metal Truss Bridge
- Moveable 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

Describe the Setting:

Bridge 12013 carries MD 132 over Swan Creek in Harford County. MD 132 runs in an east-west direction at this location; Swan Creek flows north-south. The creek is situated in a relatively rural area, and several residential structures are located nearby. Bridge 12013 lies within the Piedmont physiographic province which is characterized by variegated terrain created by rivers and streams cutting through the valleys.

**Describe the Superstructure and Substructure:
(Discuss points identified in Context Addendum, Section C)**

Bridge 12013 is a single-span concrete girder structure with a clear span length of 37' and total bridge length of 40'. The 22' wide clear roadway, paved with asphalt, carries two lanes of traffic. The solid concrete parapet features two rectangular panels on each side. Double W-beam steel guardrails are attached to the ends of the parapets. The substructure consists of concrete abutments and slightly flared concrete wing walls. This bridge closely matches the 1912 standard plan.

A 1959 inspection report states that this structure, "a very old bridge," was in fair condition. Reports from the 1970s indicate that the bridge showed signs of deteriorating concrete and spalling and cracking in the abutments and wing walls. By 1980, deterioration had worsened and new defects, such as heavy deterioration of the end girders, a missing balustrade, and a 10 percent bearing loss of the wings were noted. Recent photographs depict repair efforts as well as cracking and spalling of the eastern parapet.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

Discuss major alterations:

As-built drawings dated 1986 illustrated proposed replacement of the wing walls to alleviate the severe deterioration and undermining. Recent inspection reports confirm that repairs were made to the northeast and northwest wing walls in 1987. Further work was undertaken in 1993 to patch the parapets and repair undermining of the southeast wing wall. According to photographs of the bridge dated January 1995, it appears that the northeast wing wall has been replaced and the caps on the parapets have been extensively patched .

HISTORY

When Built: c. 1912 - c. 1930

Why Built: Statewide road improvements and local transportation needs

Who Built: Unknown

Who Designed: Unknown

Why Altered: Deterioration

Was this bridge built as part of an organized bridge building campaign?: No

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

SURVEYOR ANALYSIS

This bridge may have NR significance for association with:

A (Events) B (Person) C (Engineering/Architectural Character)

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

The improvement of Harford County roads most likely resulted from several events that occurred during the first three decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes through the state as well as connecting roads between counties. A later impact of this crusade included the widening, straightening, and grading of secondary roads, and construction of new bridges to carry these rebuilt roads. Further, the rapid increase of automobile, truck, and bus traffic prompted the replacement of the existing narrow and weak bridges with new, wider, and stronger concrete structures. As time, labor, and money-saving plans created by the State Roads Commission (SRC), the establishment of district engineering offices during the 1910s and the development of standardized bridge designs also aided in the construction of modern bridges throughout the state. During the 1920s, emphasis of the SRC was on improving safety and comfort of main routes while building up the secondary roads and the farm-to-market network of feeder roads. By the 1930s, bridges believed to be adequate when initial road reconstruction was undertaken became unacceptable for modern traffic and many new structures were constructed.

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?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Harford County.

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

No, this bridge is not located within an area which is eligible for historic district designation.

Is the bridge a significant example of its type?

No, due to replacement of the northeast wing wall and its deteriorating condition, this bridge does not stand as a significant example of its type.

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

No, this bridge does not retain integrity of its character defining elements. Recent reports indicate that the structure exhibits signs of severe age and wear, including cracking and spalling of the parapets, abutments, and wing walls. Further, some of these character defining elements have been replaced.

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

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

Should this bridge be given further study before significance analysis is made, and why?

No, this bridge should not receive further study.

BIBLIOGRAPHY

- Crosby, Walter Wilson
1906 *First Report on State Highway Construction (May 1905-January 1906)*. The Johns Hopkins Press, Baltimore.
- 1908 *Second Report on State Highway Construction (January 1906-January 1908)*. The Johns Hopkins Press, Baltimore.

**MARYLAND INVENTORY OF HISTORIC PROPERTIES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION
MARYLAND HISTORICAL TRUST**

MHT NO. HA-1863

Johnson, A.N.

1903 *Third Report on the Highways of Maryland (1902-1903)*. The Johns Hopkins Press, Baltimore.

LeViness, Charles T.

1958 *A History of Road Building in Maryland*. State Roads Commission of Maryland, Baltimore.

Maryland State Highway Administration

1986 As-built drawings. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

1987-93 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.

1994 *Historic Bridges in Maryland: Historic Context Report*. Prepared for Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore.

State Roads Commission of Maryland

1930 *Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929, and 1930*. State of Maryland, State Roads Commission, Baltimore.

1932-80 Bridge inspection reports. Located in the files of the Office of Bridge Development, Maryland State Highway Administration, Baltimore.

SURVEYOR INFORMATION

Name:

Margaret A. Bishop and Michelle M. Lupien

Date: 13 May 1996

Organization:

KCI Technologies, Inc.

Telephone: (717) 691-1340

Address:

5001 Louise Dr., Suite 201
Mechanicsburg, PA 17055

1700786
Aberdeen Quad

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

Property/District Name: Bridge No. 12013 Survey Number: HA-1863

Project: Bridge Rehab Agency: FHWA

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)

Harford County Bridge No. 12013 (HA-1863) carries MD 132B over Swan Creek in Harford County, MD. The bridge was included in the Historic Bridge Inventory and was evaluated by the Interagency Bridge Committee. The bridge was determined ineligible for listing on the National Register due to lack of integrity.

The bridge is a concrete beam structure built in 1912. It has a clear span length of 37" and total bridge length of 40'. Due to deterioration, significant repairs, including substantial replacement of historic fabric, were undertaken in 1987. In particular, the bridge's wing walls were replaced and the parapet walls were repaired.

Documentation on the property/district is presented in: Review and Compliance files

Prepared by: SHA

Kimberly Prothro Williams April 7, 1997
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable
Peter G. Kuntz 4/11/97
Reviewer, NR program Date

Handwritten mark

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 Adaptation

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): Bridge

Known Design Source: _____

Maryland Historic Highway Bridges

Bridge Type CONCRETE BEAM

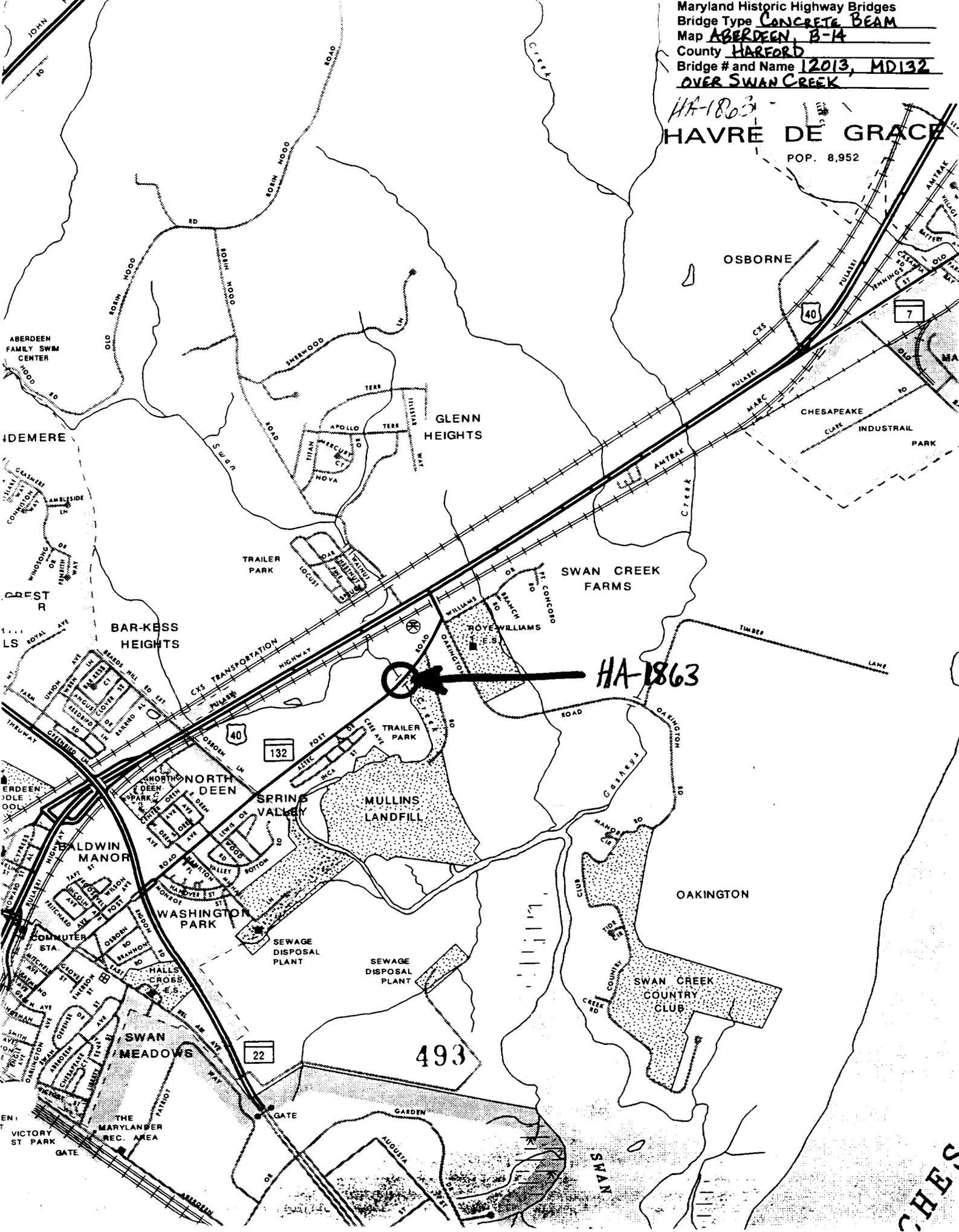
Map ABERDEEN, B-14

County HARFORD

Bridge # and Name 12013, MD132

OVER SWAN CREEK

HA-1803
HAVRE DE GRACE
POP. 8,952



CHESAPEAKE



HA-1863

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

~~MARYLAND SHPO~~ S HA

- STATE HIGHWAY BRIDGE 12013
OVER SWAN CREEK

- VIEW LOOKING NORTH ON
MD ROUTE 132

1/4



HA-1863

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

- ~~MARYLAND SHPD~~ SHA
- STATE HIGHWAY BRIDGE 12013
OVER SWAN CREEK
- VIEW LOOKING SOUTH ON
MD ROUTE 132

2/4



HA-1863

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

- ~~MARYLAND SHPO~~ S HA
- STATE HIGHWAY BRIDGE 12013
OVER SWAN CREEK
- VIEW LOOKING WEST

3/4



HA-1863

HARFORD COUNTY, MD

JOHN TARQUINIO

24 JAN 1995

- MARYLAND SHPO SITE

- STATE HIGHWAY BRIDGE 12013
OVER SWAN CREEK

- VIEW LOOKING EAST

4/4