

Maryland Historical Trust

Maryland Inventory of Historic Properties number: PG: 76A-23

Name: P-398/WHEELER HILL BRIDGE FOR ANNE BRUDER

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 <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> A </u> <u> B </u> <u> C </u> <u> D </u>	Considerations: <u> A </u> <u> B </u> <u> C </u> <u> D </u> <u> E </u> <u> F </u> <u> G </u> <u>None</u>
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>

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

MHT No. PG:76A-23

SHA Bridge No. P398 Bridge name Wheeler Hill Road over Barnaby Run

LOCATION:

Street/Road name and number [facility carried] Wheeler Hill Road

City/town Suitland Vicinity X

County Prince George's

This bridge projects over: Road Railway Water X Land

Ownership: State County Municipal X 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

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

DESCRIPTION:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge P398 carries Wheeler Hill Road over Barnaby Creek. It is a one lane bridge with a limited load capacity. The bridge is in a wooded portion of a generally urban area. The bridge runs in a north-south direction, and the creek flows west-east.

Describe Superstructure and Substructure:

Bridge No. P398 is a 20'-0" simple span, one-lane, concrete slab bridge carrying a 15'-6" clear roadway width. The total bridge length is 23'. A bituminous concrete wearing surface covers the slab. It does not appear that any reconstruction has been done since the bridge was originally built. The date of construction is unknown, although available information indicates it was built in the early twentieth century. The bridge is posted for a maximum speed of 25 miles per hour with a weight limit of 12 tons.

The bridge inspection from 1991 indicates the structure to be in fair condition. The deck concrete has spalling with exposed deteriorating reinforcing steel near the outer edges along the underside. Settlement at the southeast wingwall has caused approximately 4" of movement in this wall. All the wingwalls have open vertical cracks at the abutment corners. Stream flow against the north abutment has eroded up to 9" out of the face of the wall along much of its length. No significant change has occurred in the condition of this structure since the 1989 inspection. It was recommended in the inspection report that the bridge be replaced due to the deck geometry and limited load carrying capacity

Discuss Major Alterations:

No major alterations have been made to Bridge No. P398 since its construction.

HISTORY:

WHEN was the bridge built (actual date or date range) early twentieth century, c. 1910

This date is: Actual _____ Estimated X

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

Other (specify) _____

WHY was the bridge built?

Local transportation needs

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

According to the 1991 bridge inspection report, no alterations have been made to this structure.

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

Unknown

SURVEYOR/HISTORIAN ANALYSIS:

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

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

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

Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war-related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920 to 1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of \$3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund [with an equal sum from the counties] the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had become inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930s. Most improvements to local roads waited until the years after World War II.

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?

Unknown.

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?

Bridge No. P398 is not located in an area which may be eligible for historic designation.

Is the bridge a significant example of its type?

No. This bridge is not a significant example of an early twentieth century concrete slab bridge.

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

Bridge No. P398 has had no major alterations since its construction. However, it was determined to be only in fair condition in 1991, and several of its character defining elements were in deteriorating condition.

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

There are no records which indicate this to be the work of a known manufacturer, designer, or engineer.

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

No further evaluation is necessary to determine National Register significance. However, additional research concerning the history of this bridge and its relationship to the surrounding landscape may be useful in providing a more complete picture of the bridge's background.

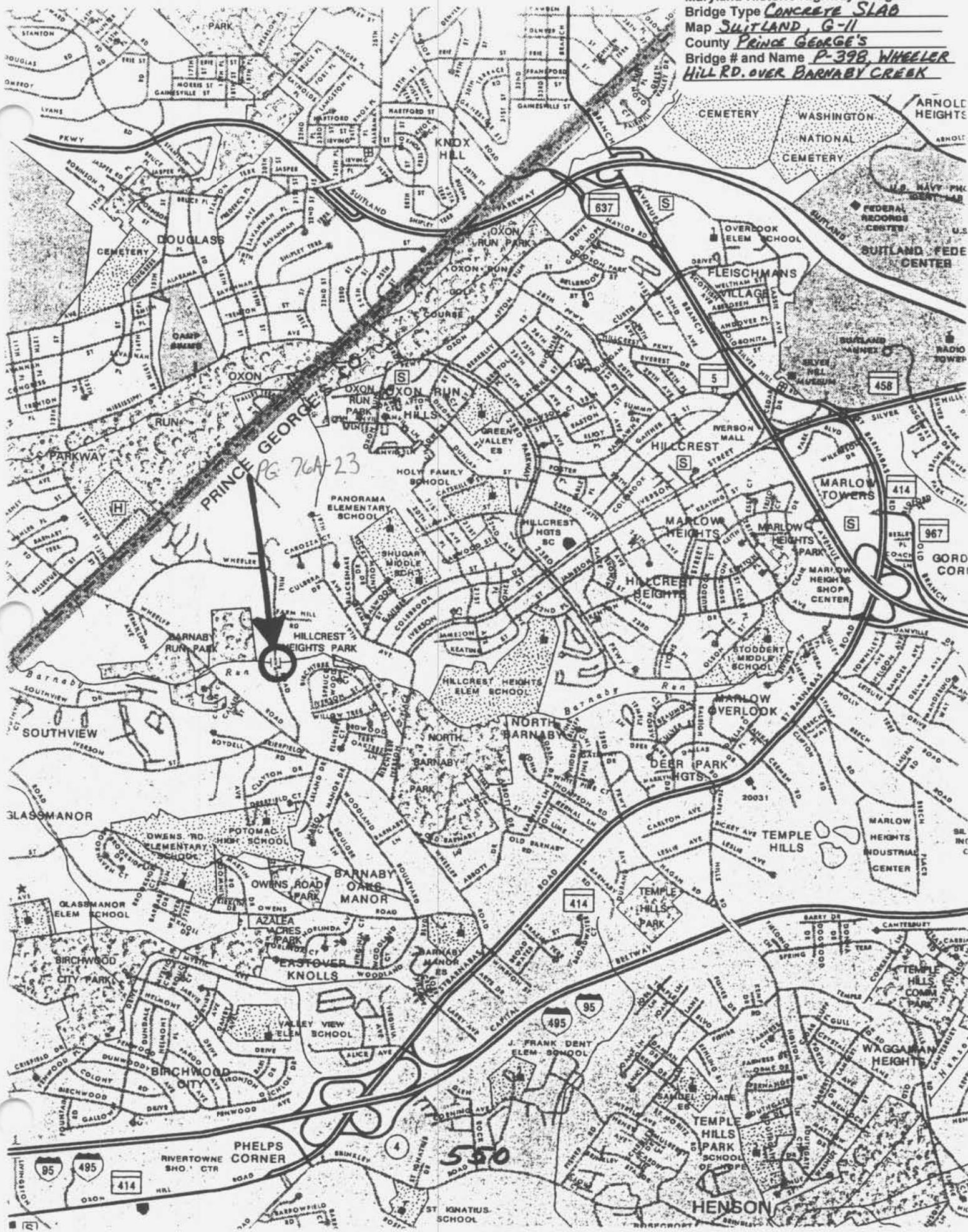
BIBLIOGRAPHY:

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

SURVEYOR:

Date bridge recorded August 1995
Name of surveyor Leo Hirrell
Organization/Address P.A.C. Spero & Company; 40 West Chesapeake Avenue, Suite 412; Baltimore, Maryland 21204
Phone number 410-296-1635 FAX number 410-296-1670

Maryland Historic Highway Bridges
Bridge Type Concrete Slab
Map SUITLAND, G-11
County PRINCE GEORGE'S
Bridge # and Name P-398, WHEELER HILL RD. OVER BARNABY CREEK



PRINCE PG 76A-23

550

95 495 414

RIVERTOWNE SHO. CTR

HENSON



- 1 PG: 76A-23
- 2 (P398) Wheeler Hill Rd. over Barnaby Creek
- 3 Prince George's County, MD.
- 4 Tim Tamburrino
- 5 8/11/95
- 6 MD SHPO
- 7 South Approach, View Looking North
- 8 1 of 5



- 1 PGI: 76A-23
- 2 (P398) Wheeler Hill Rd. over Barnaby Creek
- 3 Prince George's County, MD.
- 4 Tim Tamburri
- 5 8/11/95
- 6 MD SHPO
- 7 North Approach, View Looking South
- 8 2 of 5



- 1 PG: 76A-23
- 2 (P398) Wheeler Hill Rd. over Barnaby Creek
- 3 Prince George's County, MD.
- 4 Tim Tamburrino
- 5 8/11/95
- 6 MD SHPO
- 7 East Elevation, View Looking N.W.
- 8 3 of 5



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- 2 (P398) Wheeler Rd. over Barnaby Creek
- 3 Prince George's County, MD
- 4 Tim Tamburrino
- 5 8/11/95
- 6 MD SHPO
- 7 West Elevation, View Looking East
- 8 4 of 5



- 1 PG:76A-23
- 2 (P398) Wheeler Hill Rd. over Barnaby Creek
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- 4 Tim Tamburrino
- 5 8/11/95
- 6 MD SHPO
- 7 West Elevation, Detail of Slab + Wingwall
View Looking East
- 8 5 of 5