

Maryland Historical Trust

Maryland Inventory of Historic Properties number: WO-488

Name: MD 374 over Potomac River

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: <u>Concurrence in 2000 that it's not eligible.</u>	
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 Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number WO-488

SHA No. 23017

Bridge name MD 374 over Pocomoke River

Location:

Street/Road Name and Number: MD 374 (Libertytown and Powellville Road)

City/Town: Libertytown Vicinity X

County: Worcester

Ownership: X State ___ County ___ Municipal ___ Other

This bridge projects over: ___ Road ___ Railway X Water ___ Land

Is the bridge located within a designated district: ___ yes X no

___ NR listed district ___ NR determined eligible district

___ locally designated ___ other

Name of District: _____

Bridge Type:

X Timber Bridge

X Beam Bridge ___ Truss-Covered ___ Trestle

___ Timber-and-Concrete

___ Stone Arch

___ 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 _____

Description:

Describe Setting:

Bridge 23017 carries MD 374 over the Pocomoke River in Worcester County, Maryland. MD 374 generally runs east-west direction at this location; the Pocomoke River flows north-south. The area immediately adjacent to the bridge is not heavily developed. The bridge is surrounded by wetlands and farms.

Describe Superstructure and Substructure

Bridge 23017 is a 120-foot, six span composite timber and concrete structure carrying MD 374 over the Pocomoke River. The bridge is not posted. It is supported on two timber abutments and six bents constructed from six timber piles with timber caps.

Each timber bent is made up of six timber piles with cross support beams. Each bent consists of six 14" +/- diameter piles. The piles are spaced approximately 5'-6" from each other. The bracing is 3" x 10" on intermediate bents. The timber cap is 12" x 14" x 16" and is attached to each pile with 2 1" x 2'-8" giant grip drive dowels. (A round peg-like short connecting piece fitting between the cap and the pile) Between the pile and the deck is a 16 oz copper plate.

Currently the timber pile bents are in a deteriorated state. Pile no. 1 has an area of 1' x 2' high by 5" deep. Bent No 2, pile no. 4 was penetrated 4 " which indicated that there is a significant brown rot and effective cross section loss. This pile is very similar to the deteriorated piles at bent no. 1 pile no. 6, which has deterioration at the waterline with 5" penetration. At bent no. 3, pile no. 4 there is a split in the south side of the pile at the bent cap and extends 3' down at an angle. At bent no. 4 pile nos. 1 and 3 have 2" of penetration while at bent no. 5, piles no. 1 and 3 have hollow soundings throughout. The deterioration is caused by the substructure's 52 years in tidal conditions with little conservation.

The parapets are not the 13-to-1 section standardized in 1928. This bridge has seventeen 3'-2" x 10" posts crossed by two 6'-3" concrete cross sections.

Discuss Major Alterations:

The replacement and splicing of cross bracing was completed in 1995. A March 1998 memorandum in the bridge inspection file describes the completed installation of bent cap supports and pile jacket supports. The work was completed by March of 1998.

History:**When Built:** 1941-42This date is: Actual Estimated _____Source of date: Plaque _____ Design plans _____ County bridge files/inspection form

Why Built: The old Libertytown and Powellville Road (MD 374) needed a structure with increased load capacity. It is unclear what the previous structure was.

Who Built: State Roads Commission**Why Altered:** N/A**Was this bridge built as part of an organized bridge building campaign:**

Yes, the bridge was built during the upsurge of construction of bridges during the Second World War.

Surveyor Analysis:**This bridge may have NR significance for association with:** **A Events** **B Person** **C Engineering/Architectural**

Bridge 23017 is not eligible for the National Register of Historic Places.

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

The need to increase load capability in rural areas became more important during the Second World War. By virtue of the Act of Congress approved November 19, 1941 entitled "An Act to Supplement the Federal-Aid Road Act approved July 16, 1916 as amended and supplemented to authorize appropriations during the National Emergency declared by the President on May 1941, for the immediate construction of roads urgently needed for the National Defense and for other purposes," the State Roads Commission embarked upon an unprecedented construction of roads and bridges. Projects that were in the preliminary planning stages could be bumped up for earlier construction under this new regulation, while other projects were halted. Although construction continued during the war, large-scale highway projects were shelved unless determined vital to the economic or defense needs of the nation.

It was important during this time to design projects that eliminated the use of critical materials. Timber or reinforced concrete construction was used in many places where structural steel would ordinarily have been used. In the case of reinforced concrete construction, the members were proportioned to keep the amount of reinforcing steel to a minimum. Bridge 23017 has very little metal. There are bolts between the piles and the deck and reinforcing bolts within the deck and parapet.

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?

Although built during the Second World War this bridge did not greatly effect the area surrounding it. The structure did not increase settlement or industry.

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

No this bridge is not located in an area which eligible for historic designation.

Is the bridge a significant example of its type?

No, this structure is not a significant example of a timber bridge.

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

The concrete and timber deck combination is considered a primary character defining element. The concrete surface has longitudinal, map and transverse cracking. There is light to moderate scaling in the mainline. There is some surface spalling at both abutments. The overall rating on this element is satisfactory.

The timber piles and bents are considered primary character defining elements. Bent cap supports and pile jacket supports were added in 1998.

The concrete parapets used on Bridge 23017 are considered primary character defining elements. Currently the balustrades are in good condition. The posts have diagonal cracks with minor rebar exposures.

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

No, this structure is not a significant example of the work of the State Roads Commission. Although it represents an effective use of wartime construction restrictions no new techniques were created to achieve this goal. In addition the bridge did not significantly change the nature of the region which it served.

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

No this structure should not be given further study.

Bibliography:

Spero, P.A.C. & Company, and Louis Berger & Associates. Historic Bridges in Maryland: Historic Bridge Context, September 1994.

State Roads Commission Report 1941-1942.

Surveyor:

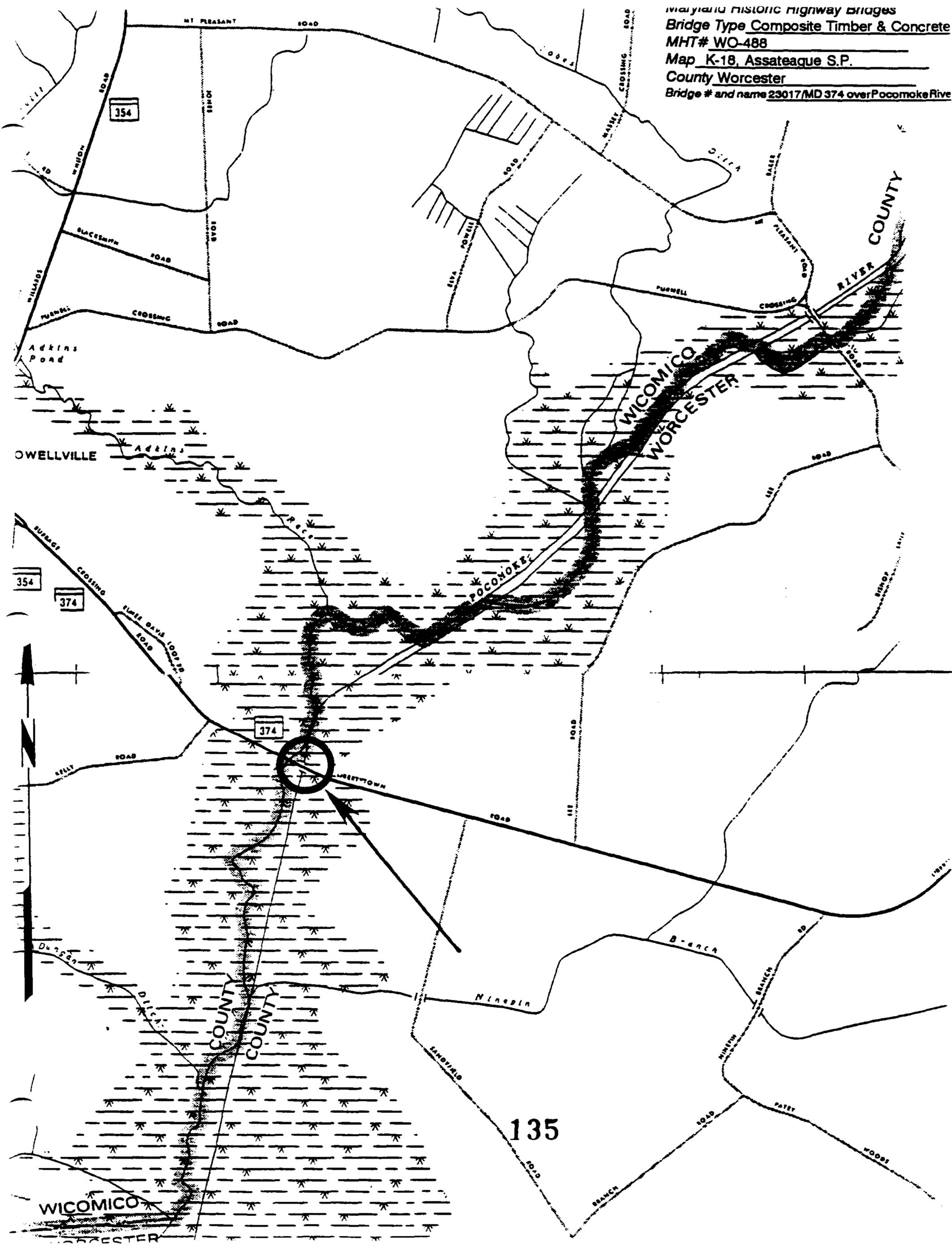
Name: Stacie Yvonne Webb **Date:** July 26, 1995

Organization: State Highway Admin. **Telephone:** (410)545-8559

Address: 707 North Calvert Street, Baltimore, MD, 21203

Revised by P.A.C. Spero & Company, July 1998

Historic Highway Bridges
Bridge Type Composite Timber & Concrete
MHT# WO-488
Map K-18, Assateague S.P.
County Worcester
Bridge # and name 23017/MD 374 over Pocomoke River





1. WO-488
2. MD 374 over Pokomoke River
3. Worchester Co. MD
4. 3/98
5. Marris German, WMA
6. MD SHPO
7. New block + tri beam Attach. Northwest corner;
all 4 corners - same.
8. 1 of 5



1. WO-488

2 MD 374 over Pokomoke River

3 Worcester Co., MD

4. 3/98

5. Marris German, WMA

6 MD SHPO

7. Elevation looking upstream

8. 2 of 5



1. WO-488

2. MD 374 over Pokomoke River

3. Worcester Co, MD

4. 3/98

5. Marris German, WMA

6. MD SHPD

7. Elevation looking downstream

8. 3 of 5



1. WO-488

2. MD 374 over Pokomoke River

3. Worcester Co, MD

4. 3/98

5. Marris German, WMA

6. MD SHPO

7. Looking West

8. 4 of 5



1. WO-488
2. MD 374 over Pokomake River
3. Worcester Co MD
- 4/ 3/98
5. Marvis German, WMA
6. MD SHPO
7. Looking East
8. 5 of 5

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

Property/District Name: MD374 (SHA Bridge #23017) Libertytown & Powellville Road, Libertytown, Worcester County Survey Number: WO-488

Project: Bridge Replacement Agency: SHA

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)

374

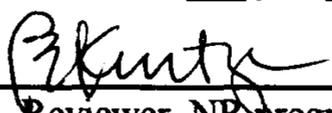
Bridge No. 23017 carries MD ~~347~~ over the Pocomoke River in Worcester County. It is a six-span, two lane composite timber bridge, constructed in 1941-42, which was determined to be ineligible for listing by the Interagency Historic Bridge Committee in 1995 because the timber pile bents are in a deteriorated state, and 80% require replacement. Replacements and splicing of cross bracing evidently occurred at some time in the past, which has further undermined the historic integrity of the structure. The Trust concurs with SHA and the Interagency Committee regarding the bridge's integrity and thus the bridge is not eligible for inclusion in the National Register under Criterion C - engineering. No information was provided which would indicate that the Bridge could meet either Criteria A or B, and thus it is not eligible under either.

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

Prepared by: Rita M. Suffness, SHA Architectural Historian January 10, 2000

Anne Bruder February 16, 2000
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable

 2/23/00
Reviewer, NR program Date

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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): Transportation-related
 Known Design Source: State Roads Commission

Maryland Inventory of Historic Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number WO-488

SHA No. 23017 Bridge name MD 374 over Pocomoke River

Location:

Street/Road Name and Number: MD 374 (Libertytown and Powellville Road)

City/Town: Libertytown Vicinity X

County: Worcester

Ownership: X State ___ County ___ Municipal ___ Other

This bridge projects over: ___ Road ___ Railway X Water ___ Land

Is the bridge located within a designated district: ___ yes X no

___ NR listed district ___ NR determined eligible district

___ locally designated ___ other

Name of District: _____

Bridge Type:

X Timber Bridge

___ X Beam Bridge ___ Truss-Covered ___ Trestle

___ Timber-and-Concrete

___ Stone Arch

___ 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 _____**Description:****Describe Setting:**

Bridge 23017 carries MD 374 over the Pocomoke River in Worcester County, Maryland. MD 374 generally runs east-west direction at this location; the Pocomoke River flows north-south. The area immediately adjacent to the bridge is not heavily developed. The bridge is surrounded by wetlands and farms.

Describe Superstructure and Substructure

Bridge 23017 is a 120-foot, six span composite timber and concrete structure carrying MD 374 over the Pocomoke River. The bridge is not posted. It is supported on two timber abutments and six bents constructed from six timber piles with timber caps.

Each timber bent is made up of six timber piles with cross support beams. Each bent consists of six 14" +/- diameter piles. The piles are spaced approximately 5'-6" from each other. The bracing is 3" x 10" on intermediate bents. The timber cap is 12" x 14" x 16" and is attached to each pile with 2 1" x 2'-8" giant grip drive dowels. (A round peg-like short connecting piece fitting between the cap and the pile) Between the pile and the deck is a 16 oz copper plate.

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The parapets are not the 13-to-1 section standardized in 1928. This bridge has seventeen 3'-2" x 10" posts crossed by two 6'-3" concrete cross sections.

Discuss Major Alterations:

The replacement and splicing of cross bracing was completed in 1995. A March 1998 memorandum in the bridge inspection file describes the completed installation of bent cap supports and pile jacket supports. The work was completed by March of 1998.

History:**When Built:** 1941-42This date is: Actual Estimated Source of date: Plaque Design plans County bridge files/inspection form

Why Built: The old Libertytown and Powellville Road (MD 374) needed a structure with increased load capacity. It is unclear what the previous structure was.

Who Built: State Roads Commission**Why Altered:** N/A**Was this bridge built as part of an organized bridge building campaign:**

Yes, the bridge was built during the upsurge of construction of bridges during the Second World War.

Surveyor Analysis:**This bridge may have NR significance for association with:** **A Events** **B Person** **C Engineering/Architectural**

Bridge 23017 is not eligible for the National Register of Historic Places.

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

The need to increase load capability in rural areas became more important during the Second World War. By virtue of the Act of Congress approved November 19, 1941 entitled "An Act to Supplement the Federal-Aid Road Act approved July 16, 1916 as amended and supplemented to authorize appropriations during the National Emergency declared by the President on May 1941, for the immediate construction of roads urgently needed for the National Defense and for other purposes," the State Roads Commission embarked upon an unprecedented construction of roads and bridges. Projects that were in the preliminary planning stages could be bumped up for earlier construction under this new regulation, while other projects were halted. Although construction continued during the war, large-scale highway projects were shelved unless determined vital to the economic or defense needs of the nation.

It was important during this time to design projects that eliminated the use of critical materials. Timber or reinforced concrete construction was used in many places where structural steel would ordinarily have been used. In the case of reinforced concrete construction, the members were proportioned to keep the amount of reinforcing steel to a minimum. Bridge 23017 has very little metal. There are bolts between the piles and the deck and reinforcing bolts within the deck and parapet.

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?

Although built during the Second World War this bridge did not greatly effect the area surrounding it. The structure did not increase settlement or industry.

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

No this bridge is not located in an area which eligible for historic designation.

Is the bridge a significant example of its type?

No, this structure is not a significant example of a timber bridge.

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

The concrete and timber deck combination is considered a primary character defining element. The concrete surface has longitudinal, map and transverse cracking. There is light to moderate scaling in the mainline. There is some surface spalling at both abutments. The overall rating on this element is satisfactory.

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The concrete parapets used on Bridge 23017 are considered primary character defining elements. Currently the balustrades are in good condition. The posts have diagonal cracks with minor rebar exposures.

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

No, this structure is not a significant example of the work of the State Roads Commission. Although it represents an effective use of wartime construction restrictions no new techniques were created to achieve this goal. In addition the bridge did not significantly change the nature of the region which it served.

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

No this structure should not be given further study.

Bibliography:

Spero, P.A.C. & Company, and Louis Berger & Associates. Historic Bridges in Maryland:
Historic Bridge Context, September 1994.

State Roads Commission Report 1941-1942.

Surveyor:

Name: Stacie Yvonne Webb **Date:** July 26, 1995

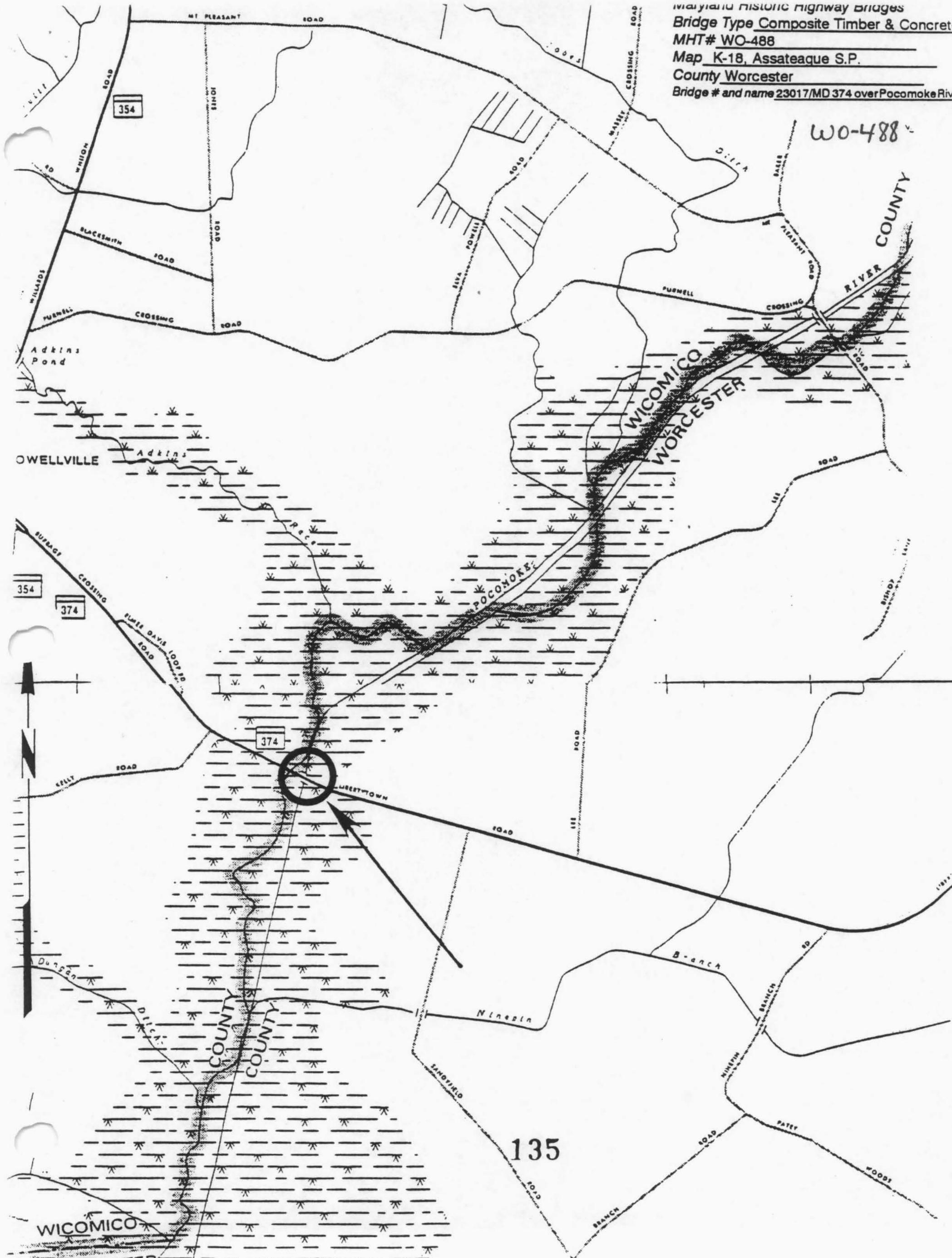
Organization: State Highway Admin. **Telephone:** (410)545-8559

Address: 707 North Calvert Street, Baltimore, MD, 21203

Revised by P.A.C. Spero & Company, July 1998

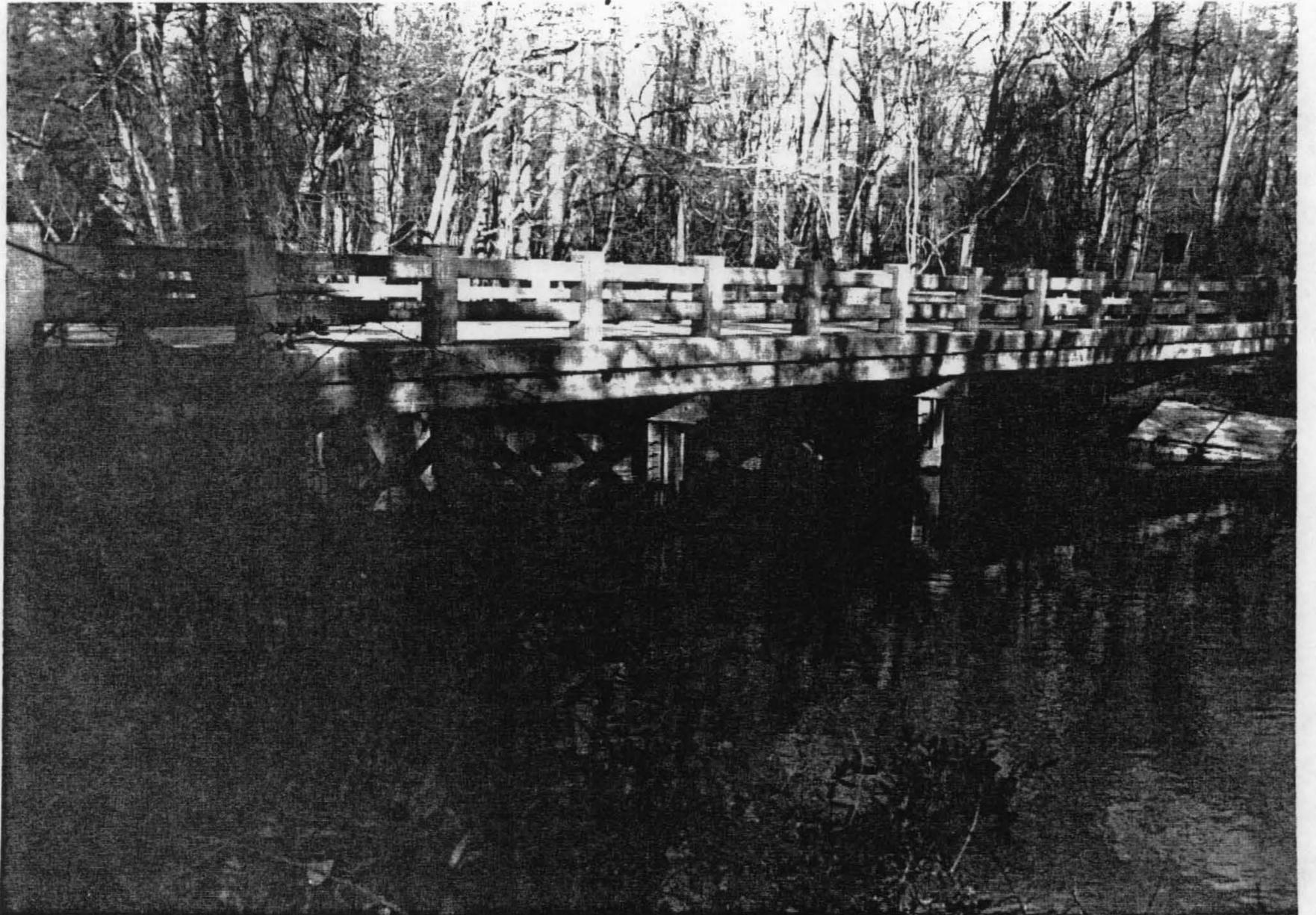
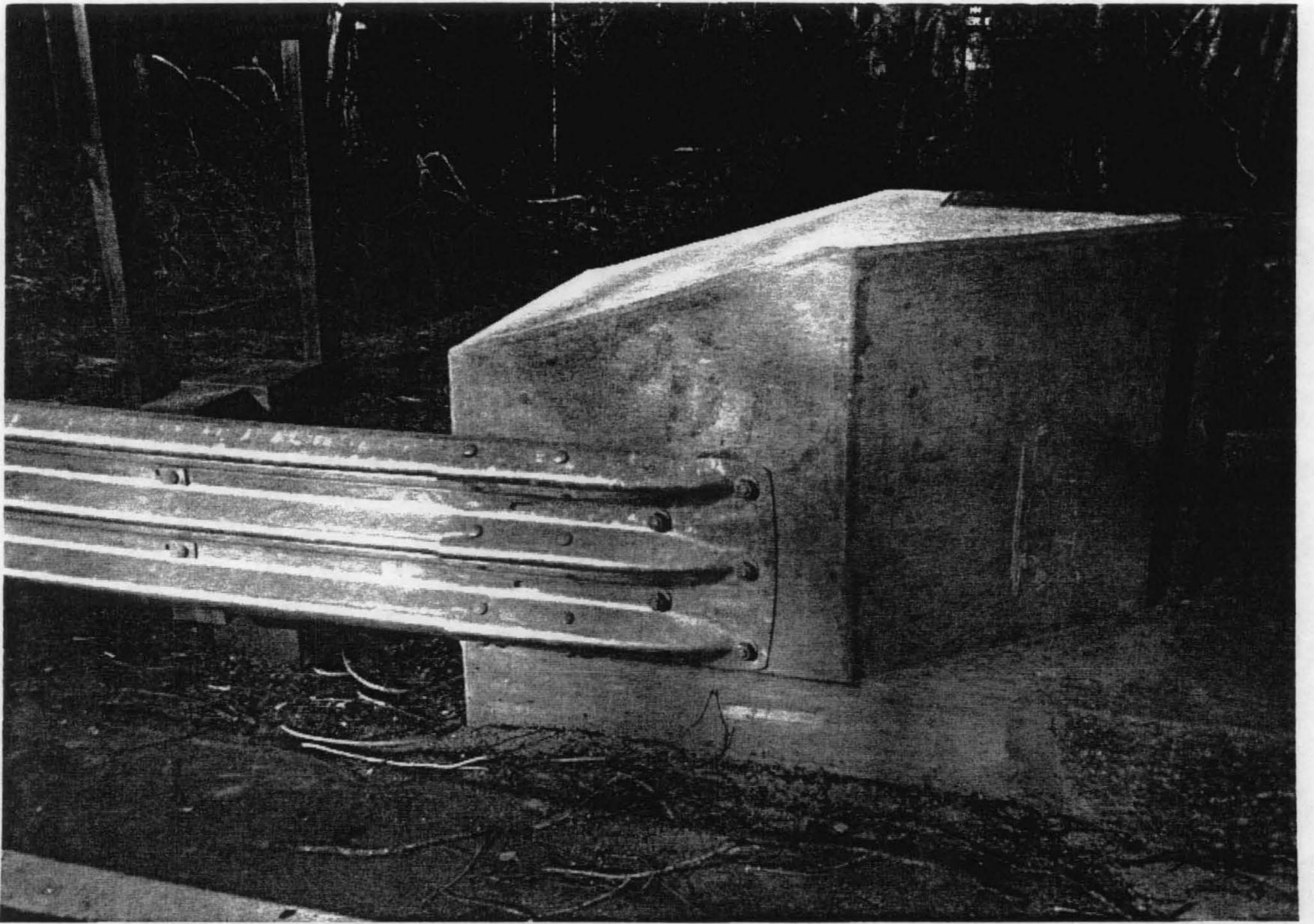
Virginia Historic Highway Bridges
Bridge Type Composite Timber & Concrete
MHT# WO-488
Map K-18, Assateague S.P.
County Worcester
Bridge # and name 23017/MD 374 over Pocomoke River

WO-488

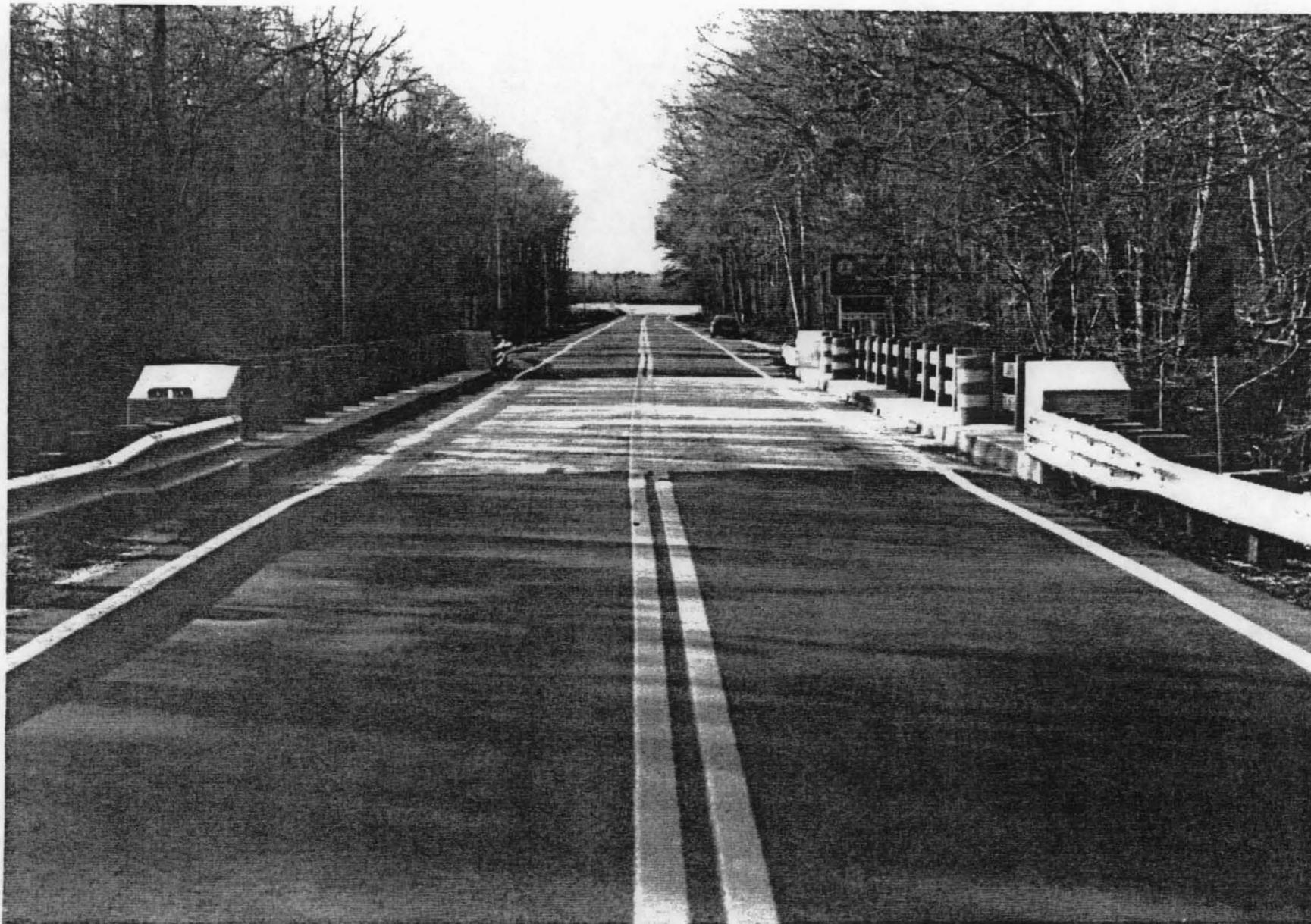


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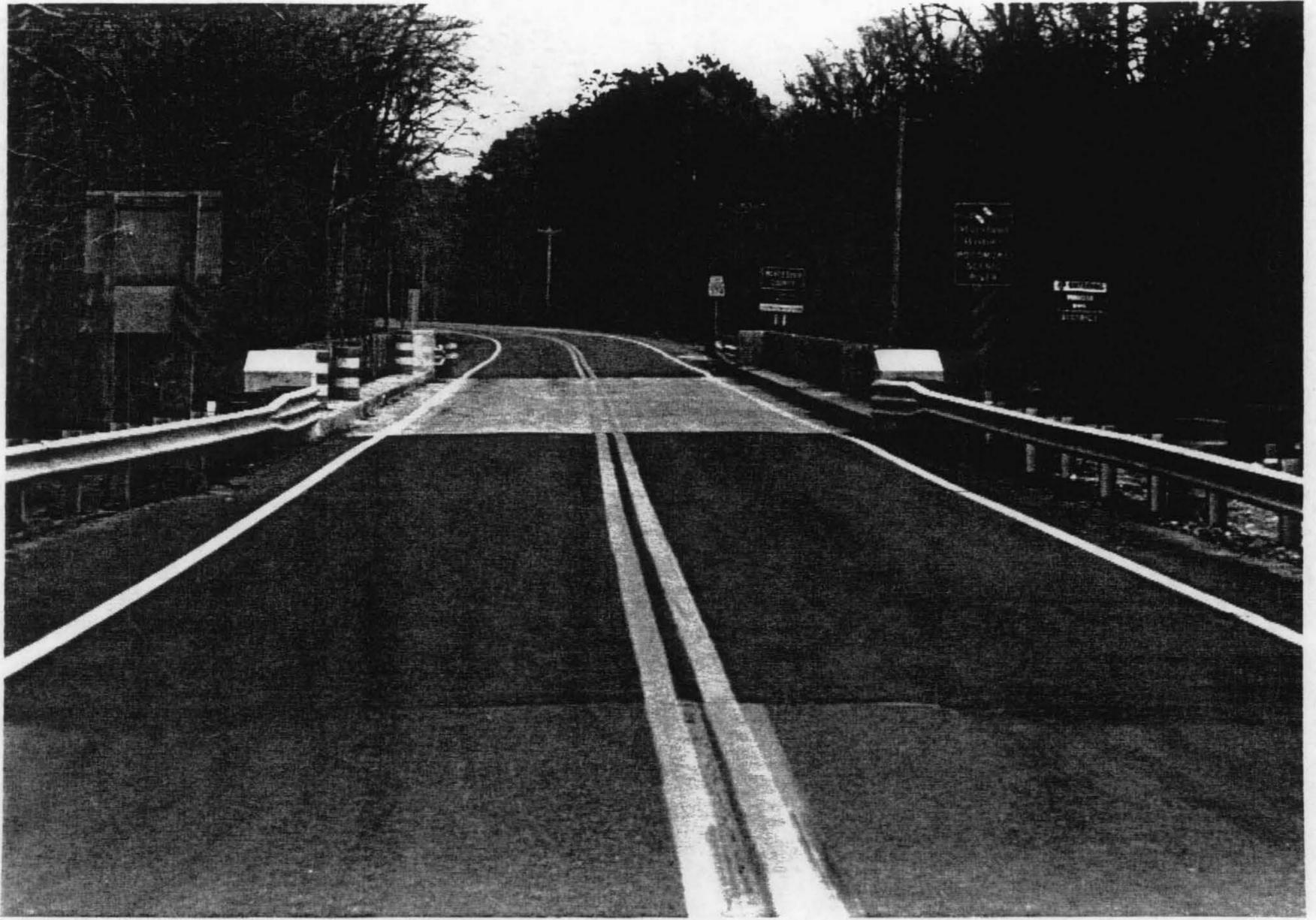


W0-488



PHOTOGRAPH BY J. B. BROWN

W0-488



9604011

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

Property/District Name: Bridge No. 23017 Survey Number: WO-488

Project: Repair Br. No. 23017 Agency: SHA

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)

Based on the available information, Bridge No. 23017, which carries MD 347 over the Pocomoke River in Worcester County, does not meet the Maryland Register/National Register Criteria for listing. The six span timber bridge was built in 1941-42 and has concrete parapets. It is ineligible due to its lack of integrity. The substructure is in a state of severe deterioration. Thus the bridge is unlikely to be eligible under Criterion C as a representative example of its type. It is not known to have any association with significant events or people and thus is unlikely to be eligible under Criteria A or B. It is not located in an historic district.

On July 27, 1995, the interagency bridge review committee determined this bridge to be ineligible for the National Register of Historic Places.

Documentation on the property/district is presented in: Project file, Maryland Inventory

Form #? _____ (as yet unassigned)

Prepared by: Stacie Webb, SHA

Elizabeth Hannold December 27, 1996
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable
Peter S. Kuntz 12/30/96
Reviewer, NR program Date

Smith

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

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- Late Woodland/Archaic A.D. 900-1600
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- 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: State Roads Commission