

Maryland Historical Trust

Maryland Inventory of Historic Properties number: CE-874

Name: Bell Manor Rd Over Conowingo Cr.

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>

*mg*

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

MHT No. CE-874

SHA Bridge No. CE-002

Bridge name Bell Manor Road over Conowingo Creek

**LOCATION:**

Street/Road name and number [facility carried] Bell Manor Road

City/town Conowingo Vicinity X

County Cecil

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

Ownership: State ☐ County X Municipal ☐ Other ☐

**HISTORIC STATUS:**

Is 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 \_\_\_\_\_ 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 CE-002 carries Bell Manor Road over Conowingo Creek just prior to where Conowingo Creek drains into Conowingo Lake/Susquehanna River. Bell Manor Road runs generally in a northwest-southeast direction in the area while Conowingo Creek flows to the southwest. The area is undeveloped with a boating dock just to the south of the bridge for access to Conowingo Lake/Susquehanna River. There is a six span concrete arch railroad bridge downstream of the bridge before Conowingo Lake/Susquehanna River.

**Describe Superstructure and Substructure:**

Bridge CE 002 is a single-span, iron, Pratt through-truss measuring 105' in total length. It has three panels with diagonal endposts. The top chord is a built-up section of back to back channels connected by plates. The bottom chord consists of two parallel flat bars, and bottom chord bracing is round bar in an X arrangement between floorbeams. The floorsystem has I shaped stringers and floorbeams. All verticals are built-up sections of back to back channels connected by lattice work. The diagonal members are eye-bars. Connections are both riveted and pinned. It is a single lane bridge with an open steel grid deck. There are no sidewalks on the bridge and the truss members are protected by a modern W shape guide rail. The abutments are concrete with the wingwalls at approximately 45 degrees.

**Discuss Major Alterations:**

Repair plans dated August 1988 called for the removal and replacement of seven of the truss eye bars, providing offset brackets at existing W beam guide rail supports, and repairs to the concrete abutments and wingwalls. These repairs appear to have been made since that date.

**HISTORY:**

**WHEN was bridge built (actual date or date range)** C.1885

**This date is:** Actual \_\_\_\_\_ Estimated \_\_\_\_\_

**Source of date:** Plaque \_\_\_\_\_ Design plans \_\_\_\_\_ County bridge files/inspection form \_\_\_\_\_

**Other (specify)** County survey form gives c.1885 date based upon county commissioner minutes; bridge inventory listing for Cecil County gives date of 1902. Latrobe was active in the county, and in Baltimore City, in the 1880s and the earlier date is therefore most likely the correct one.

**WHY was bridge built?** To provide a reliable crossing of Bell Manor Road over the mouth of the Conowingo Creek, to meet local transportation needs. Was also built as part of county metal truss bridge building campaign.

**WHO was the designer** Charles H. Latrobe

**WHO was the builder** \_\_\_\_\_

**WHY was bridge altered?** [check N/A \_\_\_\_\_ if not applicable] Safety/structural concerns

**Was bridge built as part of organized bridge-building campaign?** Yes X No \_\_\_\_\_

Charles H. Latrobe was commissioned in the mid-1880s by the Cecil County commissioners to prepare specifications for the superstructures and substructures of at least three metal truss bridges in the county—this bridge and bridges CE-007 and 7057 (Porters Bridge/Richardsmere Bridge).

**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 X**  
**If yes, what event?**

This bridge was one of a large number of metal truss bridges erected in Maryland in the late nineteenth and early twentieth centuries. These bridges, which were stronger and more reliable than the majority of their predecessors, were part of a major advance in bridge technology in Maryland and throughout the nation in the third quarter of the nineteenth century. The bridge was also part of a small metal-truss road building campaign in the 1880s on the part of the Cecil County commissioners.

**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 X**

Because of their solidity, metal truss bridges such as the Bell Manor Road bridge provided reliable crossings, largely free from the dangers of floods and other disasters that regularly destroyed many of their predecessors. By assuring travelers that Bell Manor Road could be safely and reliably passed throughout the year, this bridge promoted small-scale residential, commercial, agricultural, and industrial development along the road and other thoroughfares that fed into it. Though their impacts were quite localized, bridges such as this, taken *en masse*, were an important factor in the development of rural areas throughout the state.

**Is the bridge located in an area which may be eligible for historic designation? No X 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 X**

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.

Numerous Pratt truss bridges were erected throughout the country between 1844, when the type was patented by Thomas and Caleb Pratt, and the early twentieth century. 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. The large majority of Maryland's surviving metal truss bridges are Pratts, built as through or pony trusses either riveted or pin-connected.

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 the mid-1880s, it falls within the period 1860-1900. During this era, steel began to completely replace iron, and the metal truss became popular at highways as well as railroads. Bridges erected during this period were characterized by relatively delicate members.

Does bridge retain integrity [in terms of National Register] of important elements described in Context Addendum? No ☐ Yes ☒

Is bridge a significant example of work of manufacturer, designer and/or engineer? No ☐ Yes ☒

In the mid and late nineteenth century, numerous companies were organized around the country that designed, fabricated, and erected metal truss bridges. One of the first such companies to be established in Maryland was Smith, Latrobe and Company, which was organized in 1866 by Charles Shaler Smith, Benjamin H. Latrobe, and C.H. Latrobe. Reorganized as the Baltimore Bridge Company in 1869 and active until its dissolution in 1880, it constructed many major bridges, including spans across the Mississippi, Missouri, and Kentucky rivers. From the company's dissolution into the 1890s, Charles H. Latrobe (1883-1902) continued to be active designing bridges in Maryland. He is believed to have designed at least three bridges erected in Cecil County--CE-002 (c.1885), CE-007 (c.1890), and 7057 (Porters Bridge/Richardsmere Bridge - c.1885). He also designed three landmark metal arch bridges in Baltimore--Calvert Street, St. Paul, and Cedar Avenue--between 1878 and 1890.

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 Cecil 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 2/13/95

Name of surveyor Matt Hurley/Marvin Brown

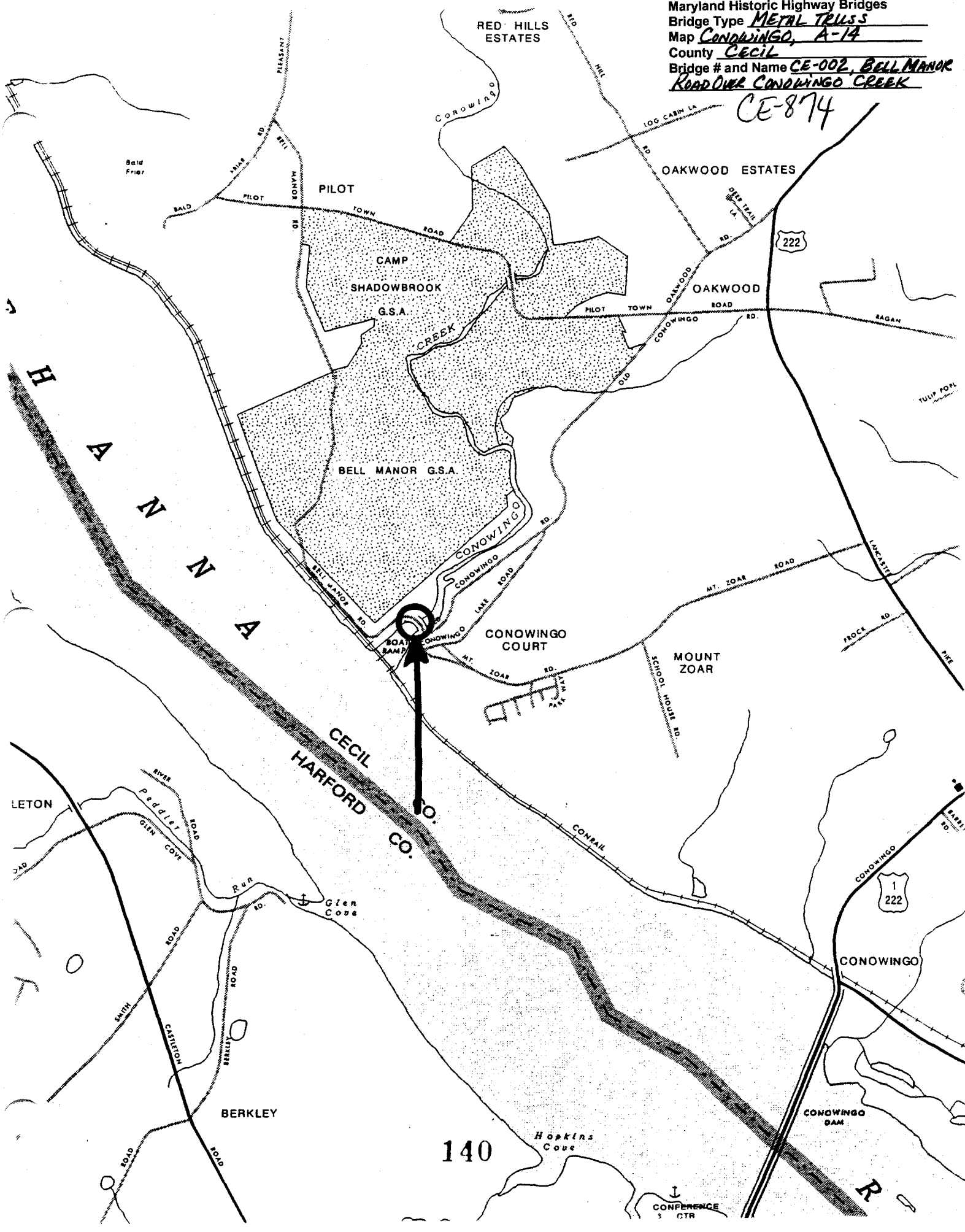
Organization/Address GREINER, INC., 2219 York Road, Suite 200, Timonium, Maryland 21093-3111

Phone number 410-561-0100

FAX number 410-561-1150

Maryland Historic Highway Bridges  
Bridge Type METAL TRUSS  
Map CONOWINGO, A-14  
County CECIL  
Bridge # and Name CE-002, BELL MANOR  
ROAD OVER CONOWINGO CREEK

CE-874





CE-874

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

MARYLAND SHPO

BRIDGE NO CE 002

WEST APPROACH

1 OF 7





CE 874

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO CE 002

EAST APPROACH

2 OF 7



CE-874

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLAND SHPO~~ SHA

BRIDGE NO CE 002

LOOKING UPSTREAM

3 OF 7



CE-874  
CECIL COUNTY, MD  
MATT HURLEY

FEB 13 1995  
~~MARYLAND~~ SHPO S HA

BRIDGE NO CE002  
LOOKING DOWNSTREAM, FROM BRIDGE  
4 OF 7



CE-874

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

MARYLAND SHPO SNA

BRIDGE NO CEC002

CULVERT, UPSTREAM OF EAST APPROACH

5 OF 7





CE-874

CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

~~MARYLAND~~ SHAPO SHA

BRIDGE NO CEC02

LOOKING DOWNSTREAM

6 OF 7



CE-874  
CECIL COUNTY, MD

MATT HURLEY

FEB 13 1995

MARYLAND SHPO SRA

BRIDGE NO CE 00Z

UPSTREAM FLOORBEAM / VERTICAL CONN.

7 OF 7

CE-874

Old Conowingo Iron Bridge

c. 1885

This is the only iron road bridge on the on the Conowingo Creek, however it is the same as the three that span the Octoraro. Charles H. Latrobe was commissioned by the county commissioners in 1884 to prepare specifications for the substructures and superstructures for the Conowingo and Octoraro Bridges. (Cecil County Commissioners Minute Book, August 6, 1884, p. 442)

## MARYLAND HISTORICAL TRUST

CE-874

## INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

File 856

**1 NAME**

HISTORIC

Conowingo Iron Bridge

AND/OR COMMON

**2 LOCATION**

STREET &amp; NUMBER

Mouth of the Conowingo Creek

CITY, TOWN

Oakwood

☒ VICINITY OF

STATE

Maryland

CONGRESSIONAL DISTRICT

COUNTY

Cecil

**3 CLASSIFICATION****CATEGORY**☐ DISTRICT☐ BUILDING(S)☒ STRUCTURE☐ SITE☐ OBJECT**OWNERSHIP**☒ PUBLIC☐ PRIVATE☐ BOTH**PUBLIC ACQUISITION**☐ IN PROCESS☐ BEING CONSIDERED**STATUS**☐ OCCUPIED☒ UNOCCUPIED☐ WORK IN PROGRESS**ACCESSIBLE**☐ YES: RESTRICTED☒ YES: UNRESTRICTED☐ NO**PRESENT USE**☐ AGRICULTURE☐ COMMERCIAL☐ EDUCATIONAL☐ ENTERTAINMENT☐ GOVERNMENT☐ INDUSTRIAL☐ MILITARY☐ MUSEUM☐ PARK☐ PRIVATE RESIDENCE☐ RELIGIOUS☐ SCIENTIFIC☒ TRANSPORTATION☐ OTHER:**4 OWNER OF PROPERTY**

NAME

Telephone #:

STREET &amp; NUMBER

CITY, TOWN

VICINITY OF

STATE, zip code

**5 LOCATION OF LEGAL DESCRIPTION**COURTHOUSE,  
REGISTRY OF DEEDS, ETC.

Clerk of the Circuit Court

STREET &amp; NUMBER

Cecil County Courthouse

CITY, TOWN

Elkton

STATE

Maryland

**6 REPRESENTATION IN EXISTING SURVEYS**

TITLE

DATE

☐ FEDERAL ☐ STATE ☐ COUNTY ☐ LOCALDEPOSITORY FOR  
SURVEY RECORDS

CITY, TOWN

STATE

**7 DESCRIPTION****CONDITION**☐ EXCELLENT☒ GOOD☐ FAIR☐ DETERIORATED☐ RUINS☐ UNEXPOSED**CHECK ONE**☐ UNALTERED☒ ALTERED**CHECK ONE**☒ ORIGINAL SITE☐ MOVED DATE \_\_\_\_\_**DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE**

The Old Conowingo Iron Bridge c. <sup>1885</sup>~~1900~~ is located at the mouth of the Conowingo Creek, south of Oakwood, MD. The bridge is a single span Pratt through truss. The span is approximately 75 ft. across.

It is one of several in the Conowingo area. Although it has lost its date placks a <sup>late</sup>~~early~~ 20th century date can be established since it is exactly the same as dated ones. The lattice railing is still intact.

CONTINUE ON SEPARATE SHEET IF NECESSARY

**8 SIGNIFICANCE**

PERIOD		AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input checked="" type="checkbox"/> TRANSPORTATION	
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES

1884

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

Due to the infrequent traffic that this bridge receives it would not be mandatory that this bridge be widened and replaced. It offers a glimpse into the 19th century town that used to occupy this area.

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**

The property is located in the \_\_\_\_\_ of \_\_\_\_\_ County, Maryland. It is bounded by \_\_\_\_\_ on the north, \_\_\_\_\_ on the south, \_\_\_\_\_ on the east, and \_\_\_\_\_ on the west. The area is approximately \_\_\_\_\_ acres.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE

COUNTY

STATE

COUNTY

**11 FORM PREPARED BY**

NAME / TITLE

Paul B. Touart Historic Sites Surveyor

ORGANIZATION

Cecil County Committee

DATE

2/2/79

STREET &amp; NUMBER

Cecil County Courthouse

TELEPHONE

398-7568

CITY OR TOWN

Elkton

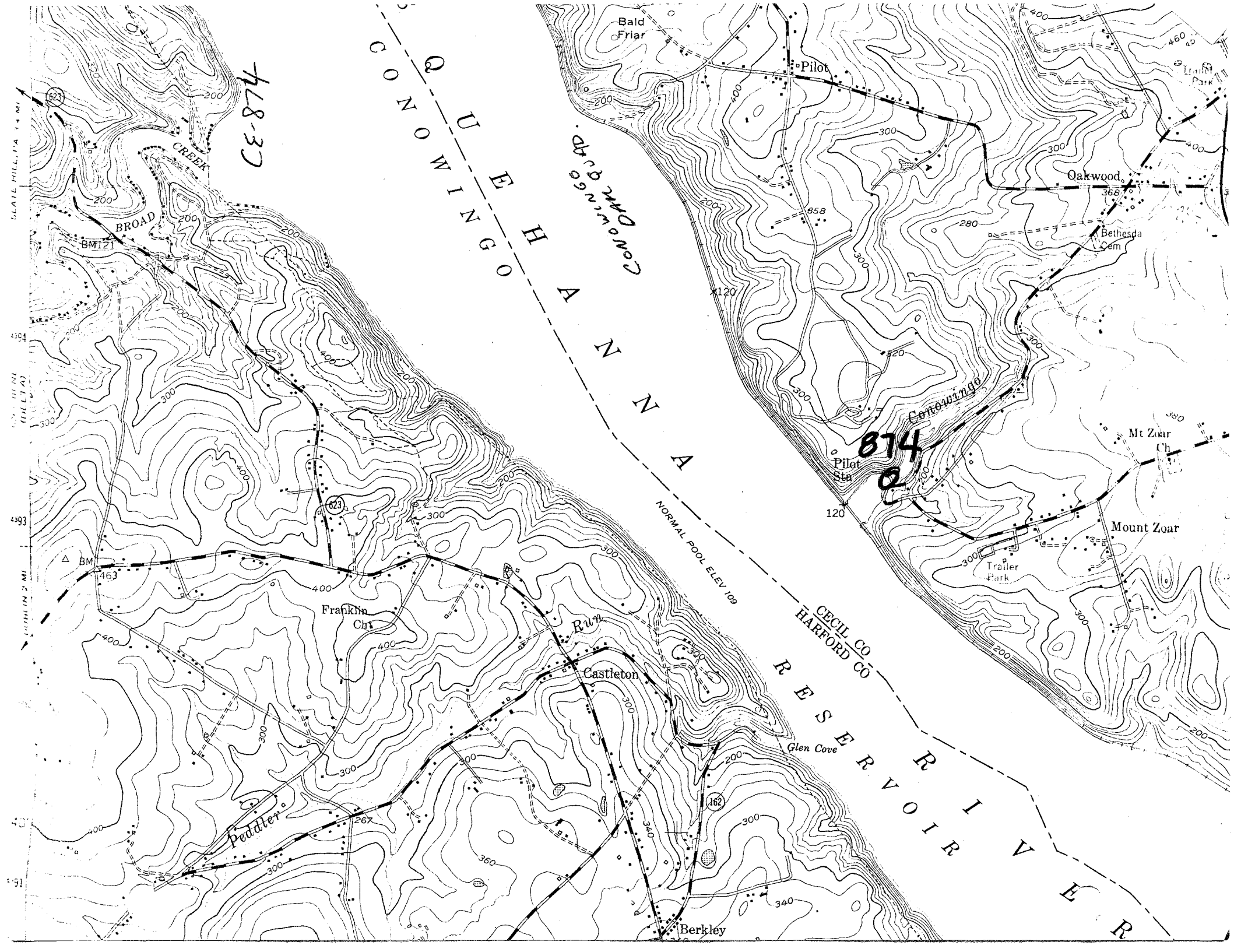
STATE

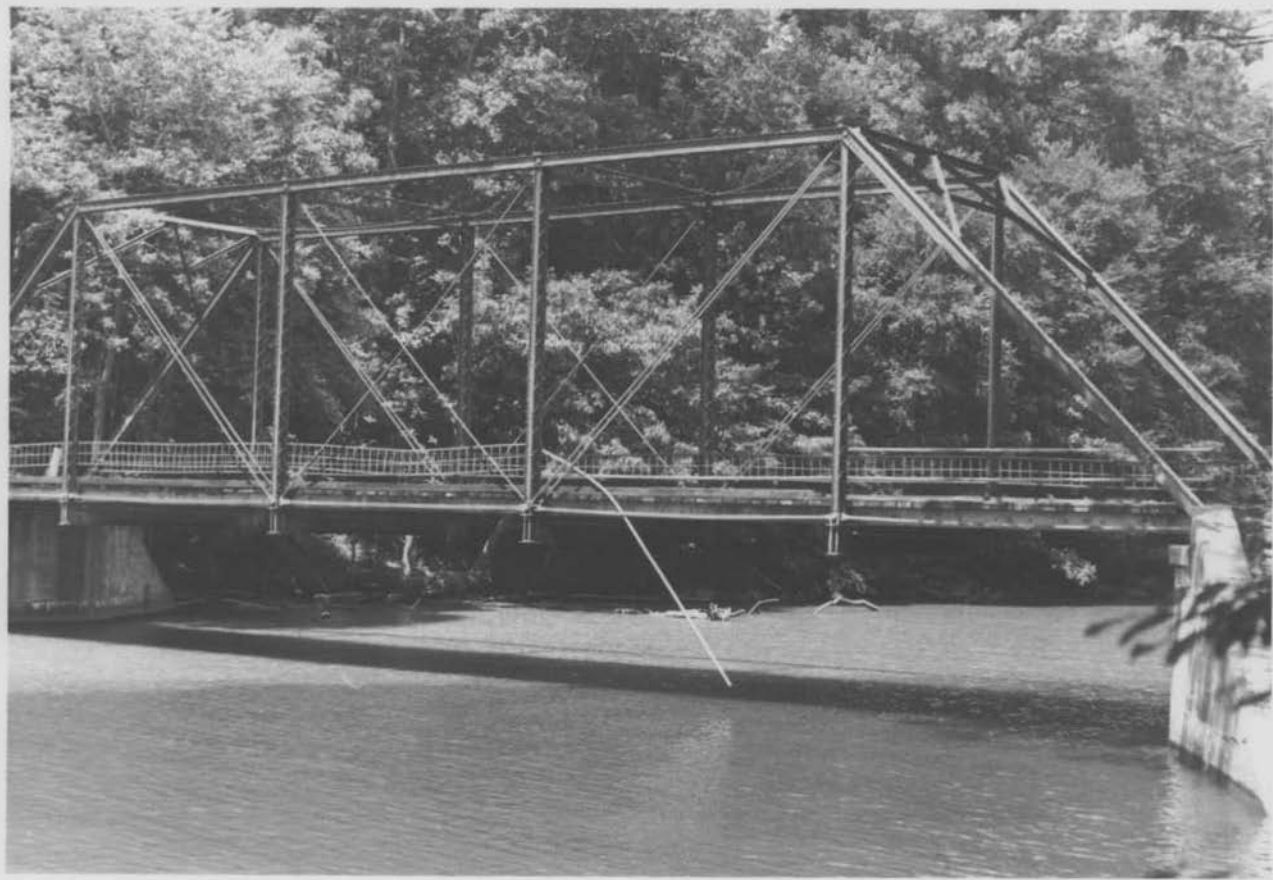
Maryland 21921

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





CONOWINGO IRON BRIDGE

CE- 874

WEST ELEVATION

NK PILOT TOWN, MD.

6/78

PBT

NEG./ MD. HIST. TRUST



CONOWINGO 1 RIN BRIDGE  
SOUTH  
~~WEST~~ ELEVATION

CE-874

NR

PILOT TOWN, MD.

4/78 PBT

NEG./MD HIST. TRUST