

Maryland Historical Trust

Maryland Inventory of Historic Properties number: AL-II-A-101 ✓

Name: OLD WILLIAMS RD

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>

7/16/01

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

MHT No. AL-II-A-101

SHA Bridge No. A-111 Bridge name Old Williams Road over Town Creek

LOCATION:

Street/Road name and number [facility carried] Old Williams Road

City/town Gildin Vicinity X

County Allegany

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 _____

DESCRIPTION:**Describe Setting:**

Bridge A-111 carries Old Williams Road over Town Creek in an east/west direction. The creek flows north/south. The terrain is generally flat in the immediate area of the bridge with farmlands to the west.

Describe Superstructure and Substructure:

This structure is a single-lane, two-span, steel pony truss bridge with an overall length of 141'-0" and a clear roadway width between curbs of 14 feet. The north truss span superstructure consists of a five panel gusset-plated Warren pony truss with a span length of 65'-0". The top chord is constructed of back to back angles with a riveted cover plate on top. The bottom chord is also constructed of angles. The diagonals are constructed of angles connected with batten plates. The deck is supported by floorbeams located at the panel points on the bottom chord. The floor system of this span consists of I-shaped transverse floorbeams and longitudinal stringers. All connections of joints and members use gusset plates with rivets.

The south truss span superstructure consists of a five panel, steel Pratt pony truss with counters at the center panel. The span length between bearings is 72'-6". The top chord of the truss is constructed of back to back channels with a riveted cover plate on top and lattice bars on the bottom. The bottom chord is constructed of eye bars. The verticals, to which the floorbeams are attached, are composed of angles and lattice bars while the diagonals are constructed of eye bars. The floorbeams support the deck. The floor system is also supported by longitudinal I-shaped stringers which are supported by the transverse floorbeams. All joint and member connections are of pinned construction. The deck for both spans consists of an open steel grate with steel curbs. A strip of the deck, along the east side, is concrete-filled and serves as a sidewalk.

The bridge railing on the Warren truss (north span) consists of modern W-shaped steel guardrail which has been attached to the roadway side of each truss. The bridge railing for the Pratt truss (south span) consists of two steel angles separated by lattice work and attached to the truss verticals along the roadside face of each truss.

The substructure consists of a reinforced concrete north abutment and a stone masonry pier and south abutment. There are wingwalls at each side of the abutments.

Discuss Major Alterations:

Out of four interior floor beams, the northmost three were underpinned in 1977. The underpinning consists of steel piles supporting the northmost interior floorbeam directly below its panel points and steel frames supporting the remaining two floor beams adjacent to their panel points. The sidewalk was reported to have been built at this time. There are W-beam guardrails added to both sides of the north span and built-up steel railings along both sides of the south span.

HISTORY:

WHEN was bridge built (actual date or date range) 1910

This date is: Actual _____ Estimated X

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

Other (specify) _____

WHY was bridge built? To provide a reliable crossing of Old Williams Road over Town Creek, to meet local transportation needs.

WHO was the designer _____
WHO was the builder _____

WHY was bridge altered? [check N/A _____ if not applicable] Safety/structural needs

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

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.

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 Old Williams 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 Old Williams 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.

British engineers James Warren and Willoughby Monzoni patented the Warren truss bridge in 1846. The form originally was a series of equilateral triangles in which the diagonals carried the tensile and compressive forces. Subsequent verticals added to the form served only to brace the triangular web system between the parallel top and bottom chords. The Warren truss was built throughout the country from the middle of the nineteenth well into the twentieth century. Judging from the few surviving Warren truss bridges in Maryland, however, it was used in a very limited fashion in the state. Two examples of the type in the state are this bridge and bridge CL-241 (1908) in Carroll 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 1910, 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 early in the century, it is characterized by relatively delicate members, rather the heavy solid members that characterize its successors.

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
Neither manufacturer, designer, nor engineer has been identified for this bridge.

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. The bridge has a rare surviving early Pratt pony truss span and an even rarer Warren span. 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 Allegany 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:

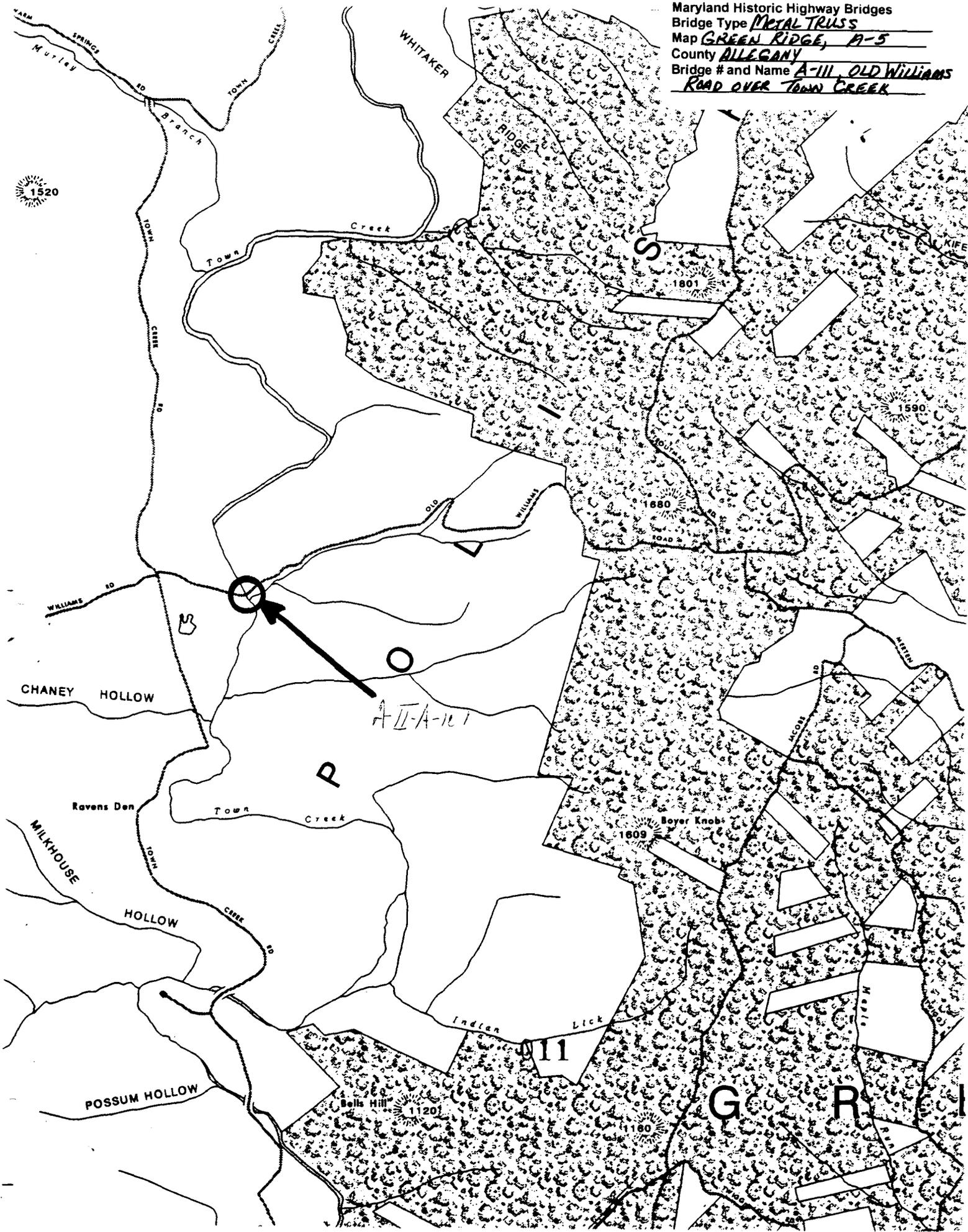
Date bridge recorded 2/3/95

Name of surveyor Charles Ziegler/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 GREEN RIDGE, A-5
County ALLEGANY
Bridge # and Name A-111, OLD WILLIAMS
ROAD OVER TOWN CREEK



1520

1601

1680

1609

1120

1180

A-111

P

111

GREEN RIDGE

A black and white photograph showing a dirt road leading to a fenced area. In the foreground on the right, a rectangular sign on a post reads "WEIGHT LIMIT 5 TONS". The road is unpaved and leads towards a fence line. The background is filled with bare trees, suggesting a winter or late autumn setting. The overall scene is somewhat desolate and rural.

WEIGHT
LIMIT
5
TONS

AL-II-A-101

#A-111

BR # ~~20A1110~~

TOWN CREEK

ALLEGANY CO, MD.

CHARLES ZIEGLER

2/3/95

SHA

WEST APPROACH

1 OF 4



AL-II-A-101

#A-111

BE # ~~204110~~

TOWN CREEK

ALLEGANY CO., MD

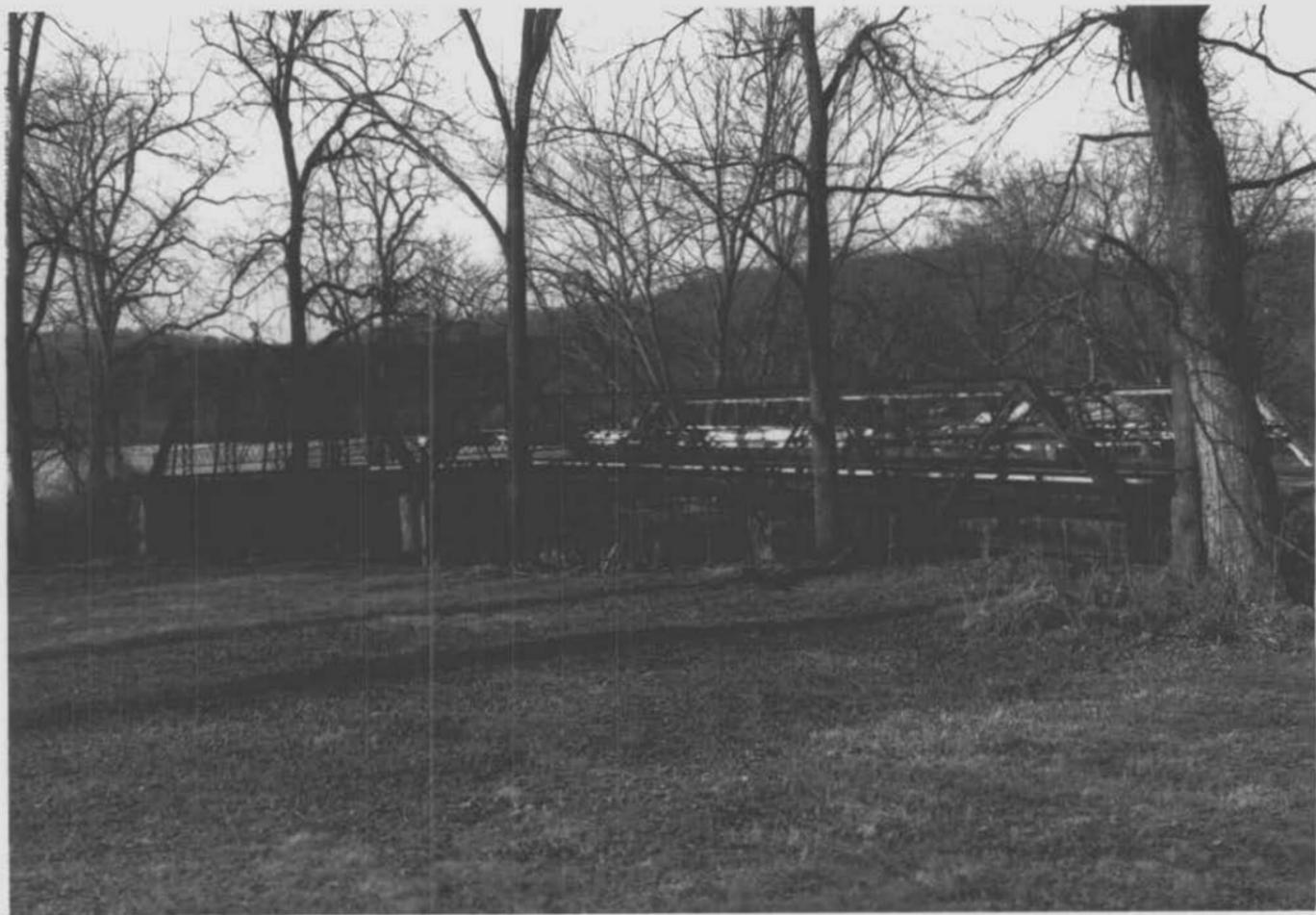
CHARLES ZIEGLER

2/3/95

SHA

EAST APPROACH

2 OF 4



AL-II-A-101
#A-111

BR # ~~20A1110~~
TOWN CREEK
ALLEGANY CO., MD
CHARLES ZIEGLER
2/3/95
S H A

SOUTH ELEVATION (DOWNSTREAM)

3 OF 4



AL-TI-A-101

#A-111

BR # ~~20A1110~~

TOWN CREEK

ALLEGANY CO., MD.

CHARLES ZIEGLER

2/3/95

SHA

NORTH ELEVATION (UPSTREAM)

4 OF 4

MARYLAND HISTORICAL TRUST

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON

Town Creek Bridge

2 LOCATION

STREET & NUMBER

Town Creek Road

CITY, TOWN

CONGRESSIONAL DISTRICT

___ VICINITY OF

STATE

Maryland

COUNTY

Allegany

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
<input type="checkbox"/> DISTRICT	<input 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 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 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

STATE, zip code

___ VICINITY OF

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

AL-II-4-101

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

Simple wire and pony truss bridge.

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 type="checkbox"/> TRANSPORTATION
<input 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	BUILDER/ARCHITECT
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STATEMENT OF SIGNIFICANCE

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

David Dorsey, Historic Sites Surveyor

ORGANIZATION

MHT

DATE

8/78

STREET & NUMBER

County Office Bldg., Box 1439

TELEPHONE

777-5944

CITY OR TOWN

Cumberland

STATE

MD 21502

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