

Maryland Historical Trust

Maryland Inventory of Historic Properties number: G-IV-A-273

Name: MD 39 over Yonghiogheny 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> 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 Properties
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

MHT Number G-IV-A-273

SHA Bridge No. 11002 Name: MD 39 over Youghiogeny River

Location:

Street/Road Name and Number: MD 39 (Hutton Oakland Road)

City/Town: Crellin Vicinity X

County: Garrett

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:

 Timber Bridge

 Beam Bridge Truss-Covered Trestle

 Timber-and-Concrete

 Stone Arch

 Metal Truss

 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

X Concrete

 X Concrete Arch Concrete Slab Concrete Beam

 Rigid Frame

 Other Type Name _____

Describe Setting:

Bridge 11002 carries MD 39 over the Youghiogheny River in Garrett County. MD 39 runs east-west over the southern flowing Youghiogheny River. The bridge is in a moderately populated residential and commercial area. Structures include housing and commercial buildings from the mid-1930s to the present.

Describe Superstructure and Substructure:

Bridge 11002 is a double-span filled concrete arch. The length of the bridge is 144 feet with each span measuring 58 feet. The bridge has a rise of 13 feet from springline to the crown. The spandrel walls are approximately 20 feet high and 15 feet wide. The pier is 24 feet long and 4 feet wide. The base of the pier is 2.5 feet high and 3.5 feet long. There is a clear roadway width of 24 feet, with an overall width of 27 feet 4 inches. According to a 1996 inspection report the arch has medium to small size spalls along the barrel and spandrel wall joint on both the north and south sides of span number 1. The spalls are on average 6 inches by 3 inches by 6 inches. In addition there is efflorescence and exposed and rusting reinforcement bars on both spans. Span number 2 has fine irregular cracks with small spalls and exposed, rusted reinforcement bars. The pier has fine and medium vertical and irregular cracks with small and medium delaminated areas. The southwest wingwall has one large size area of delamination. In addition that same wingwall has medium irregular cracks with efflorescence. The spandrel walls have small to medium size spalls. There is an area of general deterioration at the joint of the barrel. The spandrel walls have numerous fine and open parallel and irregular cracks with efflorescence along their full length. The bridge is in satisfactory condition with a sufficiency rating of 77.1.

Bridge 11002 does not retain its original parapets. The bridge has concrete curbs with modified traffic barriers or w-beams. The beams are attached to steel posts. The steel posts are attached to a concrete cap that extends across the bridge.

Discuss Major Alterations:

In 1984 the bridge's original parapets were removed and replaced with a guardrail system. In 1989, following major shifts in the spandrel walls, 14 tie rods were added to the bridge. The rods are 26 feet long and 1 1/2-inches in diameter. In addition, back fill was removed in some areas to prevent further spandrel wall shifting.

When Built: 1923

Why Built: To connect West Virginia and Maryland in 1920s.

Who Built: State Roads Commission

Who Designed: State Roads Commission

Why Altered: Parapets were unsafe and deteriorated. The spandrel walls were shifting.

Was this bridge built as part of an organized bridge building campaign? Yes, this bridge was built as part of the State Roads Commission's "Lateral and Post Roads Loan of 1920."

Surveyor Analysis:

This bridge may have NR significance for association with:

- A Events Person
 C Engineering/Architectural

This bridge was determined not eligible by the interagency Review Committee in February 1996.

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

Yes, this bridge was built as part of the State Roads Commission's "Lateral and Post Roads Loan of 1920." In 1920 the state received an appropriation of \$3,000,000. The money allowed construction of rural post roads, lateral roads and the extension of the State Roads System with the assistance of the funds from the US Government and several counties in the State. The state and counties received funding for lateral road

improvements. Garrett County received a portion of this funding. In Garrett County between 1920 and 1923 the State Roads Commission put down ten miles of concrete and five miles of tar macadam. In addition, the SRC completed a two-mile section that connected the Maryland and West Virginia roads systems near Hutton, WV. Part of the effort to connect West Virginia and Maryland also included the construction of a "double 58-foot arch bridge...built over the Youghiogheny River on that section of road which goes from Oakland to Hutton."

Is the bridge located in an area that 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 that is eligible for historic designation. However there are several structures near the bridge that may be eligible for individual designation.

Is the bridge a significant example of its type?

No, this bridge is not a significant example of its type. The parapets were removed in 1984. In 1989 tiebolts were added to the spandrel walls. At that time portions of the original backfill were removed and new materials were placed in the arch. When the original fill was removed the on site engineer examined the material and determined if it would be reused within the bridge. On top of the concrete arch is a layer of backfill, a layer of concrete (mix No. 1) which could not be greater than 1 foot 4 inches or less than 6 inches. The concrete layer was followed by a layer of porous backfill (size No. 57) which was topped with a layer of bituminous roadway. The removal of the parapets, the addition of the tiebacks, the replacement of the fill has upgraded this bridge to satisfactory condition overall but at a price to the integrity of the bridge.

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. The obvious loss is the bridge's parapets. In addition, the condition of the bridge is maintained by fourteen tiebolts that were bored through the bridge. At the time in which the tiebolts were added, the backfill was also removed and upgraded. During this same period the incisions on the spandrel wall and arch rings were covered over. Engineers had instruction to sandblast those areas within exposed reinforcement bars and spall and make repairs accordingly. Repairs included covering the newly cleaned spall with pneumatically applied mortar. The area around the intrados was heavily deteriorated in 1989 and was cleaned quite well by the sandblasting. This bridge does not retain the elements of a 1923 concrete arch except for its arch ring.

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

No, the bridge should not be given further study.

Bibliography:

County inspection/bridge files _____ SHA inspection/bridge files X

Other (list):

Surveyor:

Name: Stacie Y. Webb **Date:** September 1995

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

Address: 707 N. Calvert Street, Baltimore, Maryland

Edited by P.A.C. Spero & Company, December 1997

Maryland Historic Highway Bridges

Bridge Type CONCRETE ARCH

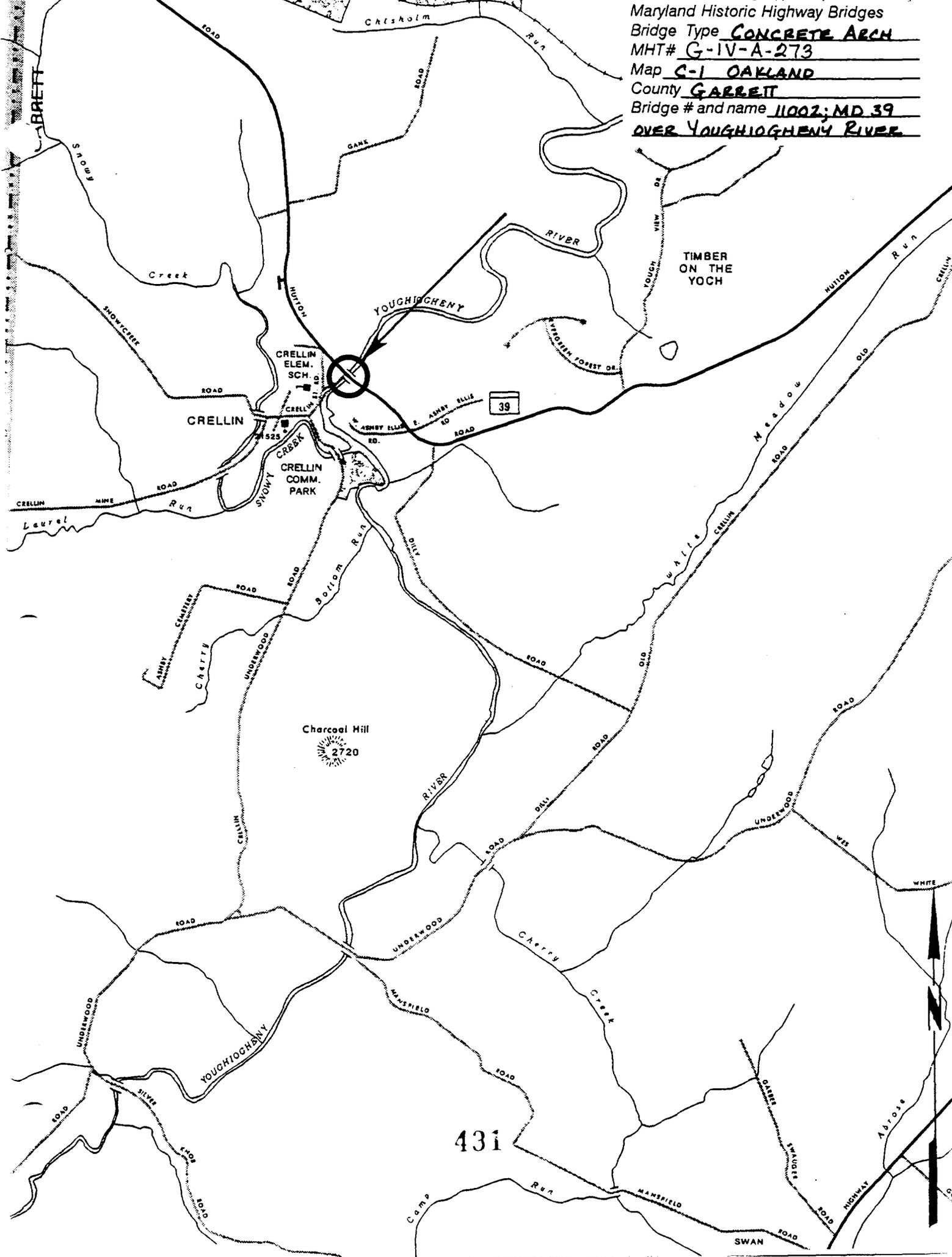
MHT# G-1V-A-273

Map C-1 OAKLAND

County GARRETT

Bridge # and name 11002; MD 39

OVER YOUGHIOGHENY RIVER



431

G



BR# ~~101210~~ 11002 G-IV-A-273

POUGHKEEPSIE RIVER

GARRETT CO. MD

CHARLES ZIEGLER

1/20/95

54A

SOUTHEAST APPROACH

1 of 4



BR # ~~101120~~ 11002 G-IV-A-273
CREEK VOUGHIGHENY RIVER

GREENSBORO, N.C.

CHARLES ZIEGLER

1/20/95

SHA

SOUTHWEST ELEVATION (UTSTREAM)

201 < 1



BR# ~~7211210~~ 11002

G-IV-A-273

CUT OVER YOUGHIOGHENNY RIVER

GARRETT CO. Md.

CHARLES ZIEGLER

1/20/96

SHA

NORTHEAST ELEVATION (DOWNSTREAM)

3 d 4



SN # ~~1000~~ 11002 G-IV-A-273

OVER YOUR HOUSE

LAURENCE MD

PLA 20 11002

11002

850

NORTHWEST APPROACH

4 of 4