

Maryland Historical Trust

Maryland Inventory of Historic Properties number: M-23-134

Name: Iron Plow Hauling 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: _____ _____ _____	
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 M: 23-134

SHA Bridge No. M 121 Name: Zion Road over Hawlings River

Location:

Street/Road Name and Number: Zion Road

City/Town: Brookville Vicinity X

County: Montgomery

Ownership: State X 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 M 121 carries Zion Road over Hawlings River in Montgomery County. Zion Road runs east-west over the northern flowing Hawlings River. The bridge is located in the Rachel Carson Conservation Park.

Describe Superstructure and Substructure:

Bridge M 121 is a single span filled concrete arch bridge. The length of the bridge is 26 feet with a clear span of 22 feet. The bridge has a rise of approximately 5 feet 7 inches from springline to the crown. The rise to run ratio is 23 percent. The spandrel walls are approximately 4 feet by 12 feet. The wingwalls are approximately 5 feet by 4 feet. There is a clear roadway width of 11 feet 8 inches with an overall bridge width of 14 feet 4 inches. The spandrel walls have moderate deterioration and small areas of patching. According to a 1997 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 38.8.

The eastern parapet elevation is original. The builders used a closed parapet design that consists of vertical posts securely fastened by dowels to the structure, horizontal rails, and solid panels that fill the space between the posts and the railings. The panels may be precast, and the posts and rails were built in place. The precast panels are separated by solid paneled expansion joints. A 4-inch by 6-inch ledge extends the length of the parapets on the exterior of the bridge. The western parapet is not original. The western parapet is a post and guardrail system. The parapets are in good condition.

Discuss Major Alterations:

At some unknown date the western parapet was removed, and steel guardrails were added.

When Built? circa 1920

Why Built? Improvement of lateral corridors

Who Built? State Roads Commission

Who Designed? State Roads Commission

Why Altered? Unknown

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

No, this bridge was not built during an organized bridge building campaign.

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 March 1996.

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

In 1920 the Maryland State Legislature enacted the "Lateral and Post Roads Loan of 1920." The act that created this loan provided that the proceeds were to be used for the construction of rural post roads, lateral roads and the extension of the State Roads System, with the assistance of funds from the federal government and several counties in the State. Half of the loan was used for the purpose construction of lateral roads. This money was apportioned to the counties on the basis of actual road mileage. The counties then matched the State's money with bond issues, special assessments, or other revenue.

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.

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Is the bridge a significant example of its type?

This bridge is not a significant example of a concrete arch bridge, due to the removal of the parapet and the poor condition of the bridge.

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

The western parapet has been replaced with a steel guardrail, and the spandrel walls, abutment, and wingwalls are in poor condition.

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

No, this 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:** March 1996

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# M:23-134
 Map D-10; DAMASCUS
 County MONTGOMERY
 Bridge # and name M121; ZION RD.
OVER HAWLINGS RIVER



108

850

M:23-134

LAYTONSVILLE

Pop. 195

307

108

MT. ZION



Inventory # M:23-134

Name M 121 - ZION RD OVER HAWKINS RIVER

County/State MONTGOMERY / MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description APPROACH NORTH

Number ¹~~30~~ of ⁴~~31~~



Inventory # M:23-134

Name MIZI-ZION RD OVER HAWKINGS RIVER

County/State MONTGOMERY MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description ELEVATION WEST

Number 2 of 4



Inventory # M: 23-134

Name M 21 - Zion Rd over HAWKING RIVER

County/State MONTGOMERY / MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SHA

Description APPROACH SOUTH

Number 3 of 4
1 of 33



Inventory # M:23-134

Name M21- ZION RD OVER HOWLINGS RIVER

County/State MONTGOMERY / MD

Name of Photographer FRANK JULIANO

Date 2/95

Location of Negative SNA

Description ELEVATION EAST

Number 4 of 4