

Maryland Historical Trust

Maryland Inventory of Historic Properties number: GA-481

Name: 17024 / MD 300 OVER RED LION BRANCH

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

MHT No. QA-481

SHA Bridge No. 17024 Bridge name Red Lion Branch

LOCATION:

Street/Road name and number [facility carried] MD 300

City/town Sudlersville

Vicinity

County Queen Anne's

This bridge projects over: Road Railway Water Land

Ownership: State County Municipal Other

HISTORIC STATUS:

Is the 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:

Setting: Urban _____ Small town _____ Rural X

Describe Setting: Bridge No. 17024 Carries MD 300 over Red Lion Branch approximately one mile west of the village of Sudlersville. A small construction site lies just east of the bridge. A few modern houses lie to the west. The stream flows from south to north.

Describe Superstructure and Substructure:

The existing structure, built in 1920, is a three span concrete slab bridge supported on concrete piers and concrete abutments. Each span measures 15' and the clear roadway width is 24'. The bridge has integral Jersey type parapets. It has an unknown design load.

Discuss Major Alterations:

In 1991 a 3 foot section of the concrete slab on both sides of the bridge full length was replaced and Jersey type parapets were installed. The piers and abutments were rehabilitated with cast-in-place concrete and spalling on the underside was repaired with gunite.

HISTORY:

WHEN was the bridge built 1920

This date is: Actual X Estimated _____

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

Other (specify) SHA files

WHY was the bridge built?

The need for a more efficient transportation network and increased load capacity in the decades following World War I.

WHO was the designer?

State Highway Administration

WHO was the builder?

State Highway Administration

WHY was the bridge altered?

The bridge was deemed structurally unsound by the State Highway Administration in 1990.

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

As part of an effort by the State to increase load capacity on secondary roads during the 1920's and 1930's.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events _____ B- Person _____

C- Engineering/architectural character _____

This bridge does not have National Register significance

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

Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war-related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system.

With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction.

In the early years, there was a need to replace the numerous single lane timber bridges. Walter Wilson Crosby, Chief Engineer stated in 1906, "The general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do away with the further expense of the maintenance of expensive and dangerous wooden structures". Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

The creation of standard plans and a description of their use was first announced in the 1912-15 Reports of the State Roads Commission whereby bridges spanning up to 36 feet were to use standardized designs.

Published on a single sheet, the 1912 Standard Plans included those structures that were amenable to such an approach: slab spans, (deck) girder spans, box culverts, box bridges, abutments, and piers (State Roads Commission 1912). Slab spans, with lengths of 6 to 16 feet in two foot increments, featured a solid parapet that was integrated into the slab, with a roadway of 22 feet.

In the Report for the years 1916-1919, a revision of the standard plans was noted:

During the four years covered by this report, it has been found necessary to revise our standard plans for culverts and bridges, to take care of the increased tonnage which they have been forced to carry. Army cantonments...increased their operations several hundred per cent, and the brunt of the enormous truck traffic resulting therefrom, was borne by the State Roads of Maryland. In addition to these war activities, freight motor lines from Baltimore to Washington, Philadelphia, New York, and various points throughout Maryland, and the weight of many of these trucks when loaded, was in excess of the loads for which our early bridges were designed (State Roads Commission 1920:56).

Published on separate sheets, the new standard plans (State Roads Commission 1919) for slab bridges reveal that the major changes was an increase in roadway width from 22 feet to 24 feet and a redesign of the reinforcement. The slab spans continued to feature solid parapets integrated into the span. The range of span lengths remained 6 to 16 feet, but the next year (1920) witnessed the issue of a supplemental plan for a 20 foot long slab span (State Roads Commission 1920).

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?

There is no evidence to suggest that the construction of this bridge had a significant impact on local growth or development.

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

No.

Is the bridge a significant example of its type?

No, the bridge has been substantially modified.

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

No, the parapets have been recently replaced.

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

No, this is a substantially modified bridge built from standardized State plans.

Should the bridge be given further study before an evaluation of its significance is made?

This bridge does not warrant further study.

BIBLIOGRAPHY:

County inspection/bridge files

SHA inspection/bridge files

Other (list):

Lake, Griffin, and Stevenson, 1877 Atlases and other Early Maps of the Eastern Shore of Maryland, Philadelphia, 1877.

SURVEYOR:

Date bridge recorded 8/11/95

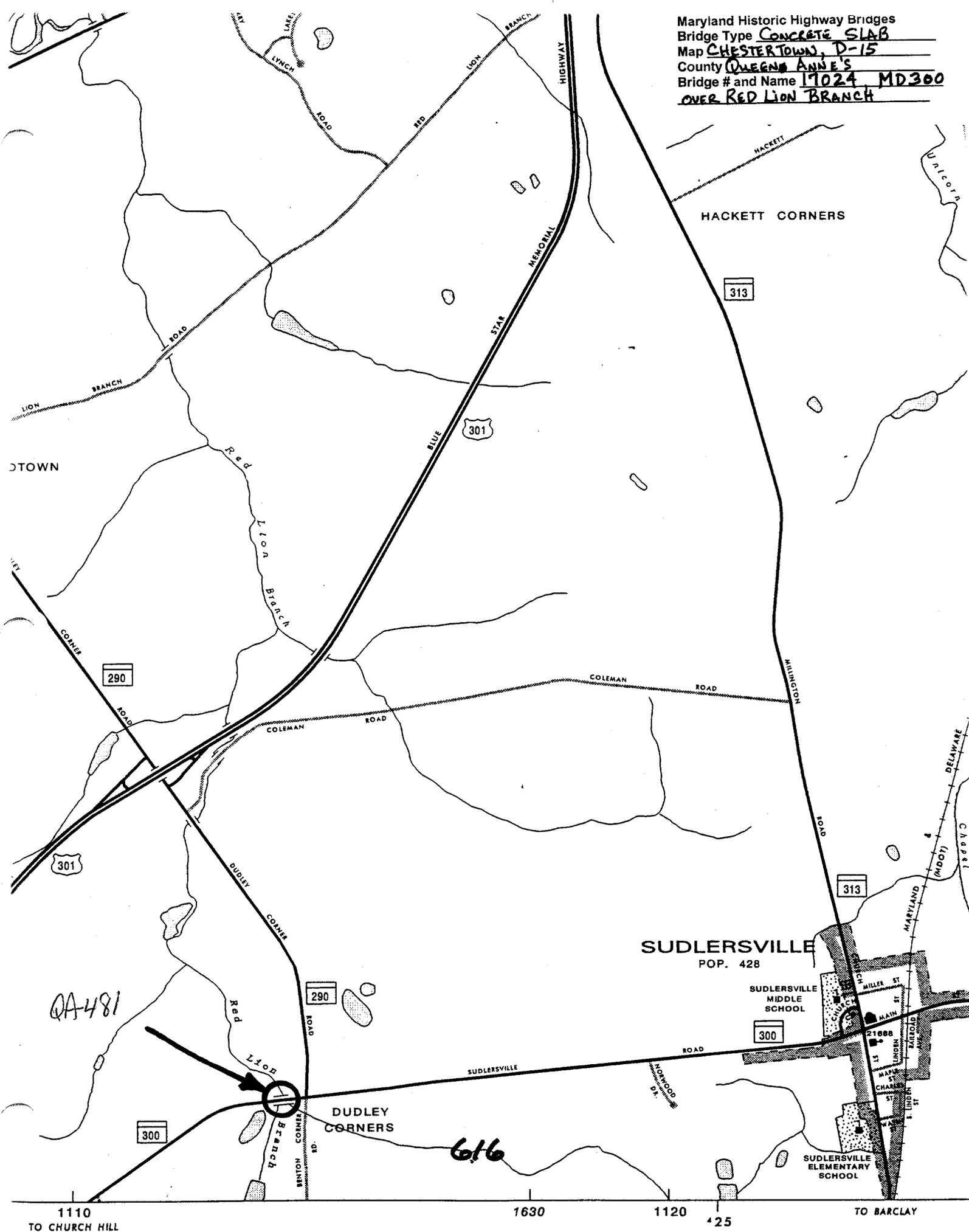
Name of surveyor Daniel Moriarty

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Maryland Historic Highway Bridges
Bridge Type CONCRETE SLAB
Map CHESTERTOWN, D-15
County QUEEN ANNE'S
Bridge # and Name 17024, MD300
OVER RED LION BRANCH





GA-181

QUEEN ANNES COUNTY

MATT HICKSON

3-16-95

~~MARYLAND SHPO~~ SILVA

BRIDGE 117024, LOOKING NE

1 OF ~~4~~ 3



42-451

QUEEN ANNES COUNTY

MATT HICKSON

3-16-05

~~RAILROAD SUPO~~ SHA

BRIDGE 17024, LOOKING SW

2 of 3



QA-491

QUEEN ANNES COUNTY

MATT. HICKSON

3-16-95

~~MARYLAND SUPD~~ S1301

BRIDGE 17024, LOOKING DOWNSTREAM (NW)

3 OF 4