

Maryland Historical Trust

Maryland Inventory of Historic Properties number: F-2-90

Name: #10081/MD 180 over Little Catocten Creek

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.

<b>MARYLAND HISTORICAL TRUST</b>	
Eligibility Recommended <u>  X  </u>	Eligibility Not Recommended <u>      </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 NO. F-2-90

NAME AND SHA NO.: 10081

LOCATION

Road Name and Number: MD 180 over Little Catoctin Creek

City/Town: Petersville  vicinity

County: Frederick

Ownership:  State  County  Municipal  Other

Bridge projects over:  Road  Railway  Water  Land

Is bridge located within designated district?:  yes  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 Bridge
- Metal Truss Bridge
- Moveable 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 the Setting:**

Bridge 10081 carries MD 180 over Little Catoctin Creek in Frederick County. The bridge is located near the border of Maryland's Appalachian and Piedmont physiographic regions. Route 180 generally runs in an east-west direction at this location. Little Catoctin Creek runs south into the Potomac River. The bridge is situated approximately one-half mile west of the junction between MD 180 and MD 79.

**Describe the Superstructure and Substructure:  
(Discuss points identified in Context Addendum, Section C)**

This bridge is a single-span concrete girder bridge that extends approximately 23 feet in length with a clear roadway width of 27'. The structure consists of 5 concrete girders, horizontally grooved concrete abutments and wingwalls, and open balustrade-style concrete parapets. Approach guardrails are attached to the ends of the parapets at either end of the bridge but do not extend along the inside faces of the parapets. State Highway Administration files list the bridge as a 1932 standard design, but an internal memorandum dated 7/28/84 suggests that discrepancies in measurements may make the bridge older. The SHA Bridge Inventory lists the construction date of this bridge as "1912, 1932."

Bridge 10081 exhibits signs of deteriorating conditions in all of its superstructural and substructural elements.

A survey of historic concrete beam bridges undertaken by the Maryland State Highway Administration in the Fall of 1995 identified 113 bridges of that type located throughout the state. Slightly more than two-thirds (76) of that total were single-span bridges.

**Discuss major alterations:**

The structure may have been widened rather than built in 1932. Inspection files and one drawing cite an emergency underpinning operation undertaken in 1987; the repairs involved replacing six mudhooks, underpinning one abutment, and paving the stream invert with concrete. The bridge was included in the Special Projects listing for FY 1991 for total replacement due to deteriorating conditions.

**HISTORY**

**When Built:** Possibly 1912, 1932

**Why Built:** Statewide road improvement programs and local transportation needs

**Who Built:** State Roads Commission, contract #F173

**Who Designed:** Unknown; design based on 1932 SRC standards

**Why Altered:** Emergency underpinning was undertaken in 1987 to correct deterioration and restore the bearing capacity of one abutment.

**Was this bridge built as part of an organized bridge building campaign?:** No

**SURVEYOR ANALYSIS**

**This bridge may have NR significance for association with:**

A (Events)    B (Person)    C (Engineering/Architectural Character)

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

Road improvements in Frederick County were fueled by several events occurring during the early twentieth century. First, the Good Roads Movement, which began in the last decade of the nineteenth century, aimed to improve primary roads throughout the state as well as multiple connecting roads between counties. As the movement progressed, numerous existing roads were widened, straightened, or graded, and many new bridges were built to carry the rebuilt roads. Second, rapidly increasing automobile, truck, and bus traffic also fueled the replacement of existing narrow and weak bridges with wider and stronger concrete structures, many of which were built according to standardized specifications and plans developed by the State Roads Commission (SRC). Third, the State Roads Commission established district engineering offices during the 1910s to aid in intrastate road development, and established a separate bridge department in 1920. This fostered construction of many concrete bridges throughout the state. In the 1920s, the SRC emphasized improving the safety and comfort of primary routes while developing secondary networks and feeder roads. By the 1930s, bridges that were originally deemed adequate had become unacceptable for carrying modern traffic loads and many new structures were built as a result.

**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?**

Bridge #10081 participated in the general trend toward upgrading state roads and bridges and improving intrastate access.

**MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST**

**MHT NO. F-2-90**

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

No, the bridge is not located in an area which may be eligible for historic designation.

**Is the bridge a significant example of its type?**

No, the bridge is not a significant example of its type.

**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 character-defining elements for the superstructures of concrete beam bridges are the slab, the longitudinal beams, and the parapet or railing when integral. For the substructure, the character-defining elements are the abutments, piers, and wing walls. The bridge has undergone emergency underpinning of one abutment.

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

No, this structure is not a significant example of the work of the State Roads Commission.

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

No, this bridge does not require further study.

**MARYLAND INVENTORY OF HISTORIC PROPERTIES  
HISTORIC BRIDGE INVENTORY  
MARYLAND STATE HIGHWAY ADMINISTRATION  
MARYLAND HISTORICAL TRUST**

**MHT NO. F-2-90**

**BIBLIOGRAPHY**

Spero, P.A. C. & Company and Louis Berger & Associates  
1994      *Historic Bridges in Maryland: Historic Context Report.*  
            Maryland State Highway Administration, Baltimore.

State Highway Administration  
            Bridge Inspection Reports. On file 707 North Calvert Street, Baltimore.

            As-Built Drawings. On file 707 North Calvert Street, Baltimore.

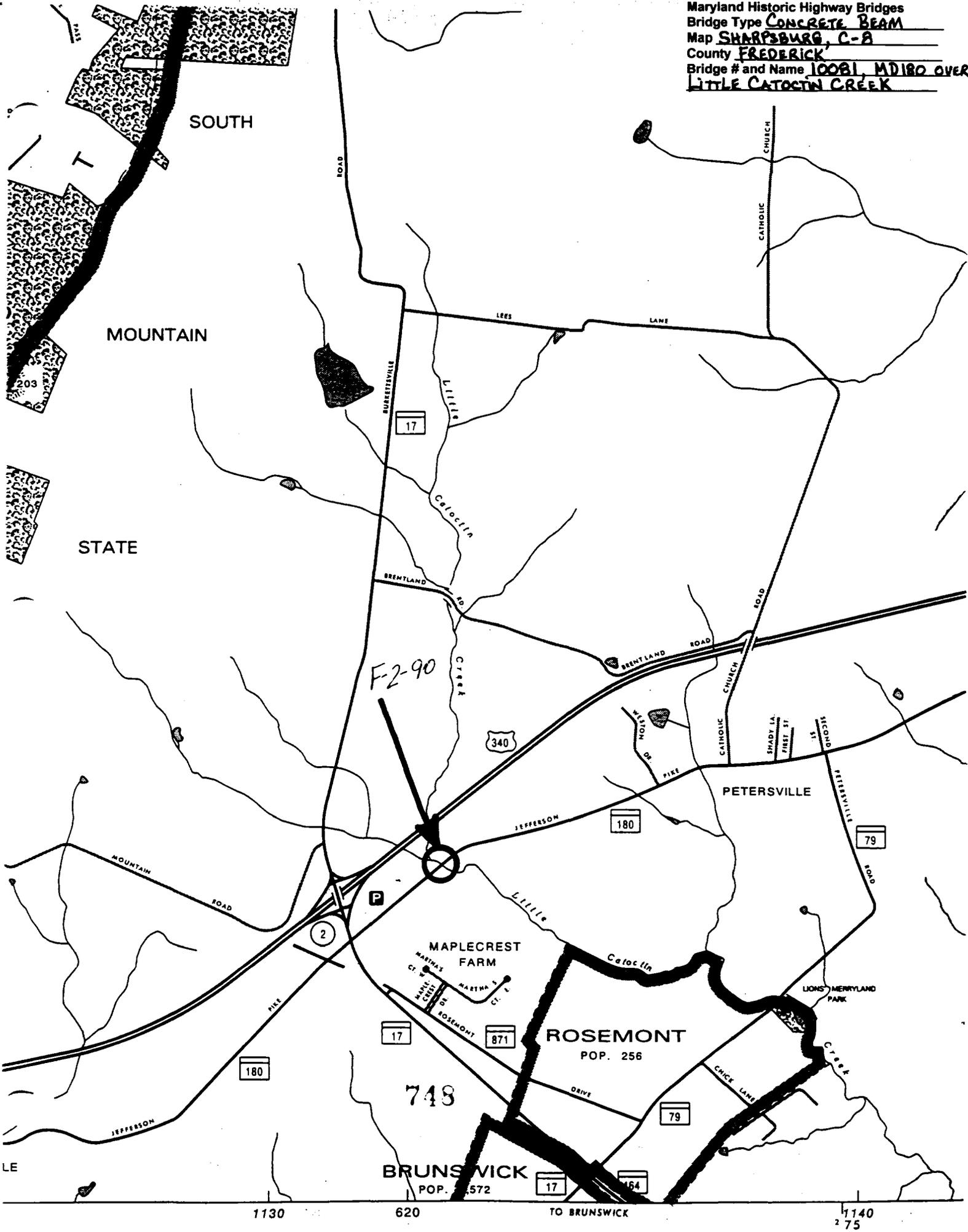
State Roads Commission of Maryland  
1958      *A History of Road Building in Maryland.* Baltimore.

**SURVEYOR INFORMATION**

**Name:**                      Gabrielle M. Lanier/Stephen Linhart  
**Organization:**         KCI Technologies, Inc.  
**Address:**                 5001 Louise Dr., Suite 201  
                                     Mechanicsburg, PA 17055

**Date:** 13 May 1996  
**Telephone:** (717) 691-1340

Maryland Historic Highway Bridges  
Bridge Type CONCRETE BEAM  
Map SHARPSBURG, C-8  
County FREDERICK  
Bridge # and Name 10081, MD180 OVER  
LITTLE CATOCIN CREEK



1130

620

TO BRUNSWICK

1140  
275



Inventory # F-2-90

Name 1001 - MD 190 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY/MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description EAST APPROACH

Number 1 of 36 4



Inventory # F-2-90

Name 10081-MD180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY / MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description ELEVATION LOOKING SOUTH

Number 2 of 36 4



Inventory # F-2-90

Name 10001-MD 180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY / MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description WEST APPROACH

Number <sup>3</sup> 35 of <sup>4</sup> 36



Inventory # F-2-90

Name 10081 - MD 180 OVER LITTLE CATOCTIN CREEK

County/State FREDERICK COUNTY/MD

Name of Photographer FRANK JULIANO

Date 1/95

Location of Negative SHA

Description ELEVATION LOOKING NORTH

Number 4 of 36