F-2-95

Bridge, SHA # 10082

Architectural Survey File

This is the architectural survey file for this MIHP record. The survey file is organized reverse-chronological (that is, with the latest material on top). It contains all MIHP inventory forms, National Register nomination forms, determinations of eligibility (DOE) forms, and accompanying documentation such as photographs and maps.

Users should be aware that additional undigitized material about this property may be found in on-site architectural reports, copies of HABS/HAER or other documentation, drawings, and the "vertical files" at the MHT Library in Crownsville. The vertical files may include newspaper clippings, field notes, draft versions of forms and architectural reports, photographs, maps, and drawings. Researchers who need a thorough understanding of this property should plan to visit the MHT Library as part of their research project; look at the MHT web site (mht.maryland.gov) for details about how to make an appointment.

Last Updated: 11-21-2003

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: F-2-95

Name: MD 180 over Catoctin 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 bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST

Eligibility Recommended ___X___ Eligibility Not Recommended _____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments: _____

_____

_____

Reviewer, OPS: Anne E. Bruder Date: 3 April 2001

Reviewer, NR Program: Peter E. Kurtze Date: 3 April 2001

Maryland Inventory of Historic Properties MHT Number F-2-95
Historic Bridge Inventory
Maryland State Highway Administration
Maryland Historical Trust

SHA Bridge No. 10082 **Name:** MD 180 over Catoctin Creek

Location:
Street/Road Name and Number: MD 180 (Jefferson Pike)

City/Town: Petersville **Vicinity** X

County: Frederick

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 Retractile 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_____

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Describe Setting:

Bridge 10082 carries MD 180 over Catoctin Creek in Frederick County. MD 180 runs east-west over the southern flowing Catoctin Creek. The area immediately adjacent to the bridge has light residential development. The bridge is surround by forest.

Describe Superstructure and Substructure:

Bridge 10082 is a triple-span filled spandrel concrete arch. The length of the bridge is 233 feet. The first and third spans have clear spans of 66 feet while the middle span has a clear span of 75 feet. The rise is approximately 9 feet. The spandrel wall has a 2-inch cove molding around the arch. The spandrel walls are approximately 14 feet high. The abutments are approximately 17 feet high and 24feet wide. The 2 identical piers are 4.5 feet wide with a 9-foot base. There is a clear roadway width of 24 feet with an overall width of 27 feet 8 inches.

Both piers have heavy erosion at the base. There are several patched areas with 1/16-inch cracks with heavy efflorescence. The second pier's western face has heavy erosion and scaling stemming from weep holes at the top and continuing down the full height of the face. The concrete arch has some fine irregular crack with some patchwork and large spalls and delaminated areas along the outside edges next to the bottom of the spandrel walls. The spandrel walls have some fine and irregular cracks with light scale and discolored areas. According to a 1996 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 78.9.

The parapets are original. The builders used a closed parapet design. This reinforced concrete railing consists of vertical posts securely fastened by dowels to the structure, horizontal rails, and solid panels that fill the space between the posts and railings. The panels may be precast, and the posts and rails were built in place. Expansion joints separate the panels. The parapets are in 3 sections. Each section has 7 panels with 9 open panels measuring 66 feet across. Several sections have small and medium areas of spalling with rusting and exposed reinforcement bars. There is a slight misalignment of the parapet cap. A few fine vertical cracks have light efflorescence. The parapets have guardrails and tie bar attachments.

Discuss Major Alterations:

In 1991 the State Highway Administration added new double-faced guardrail, attached to the existing parapet along the interior full-length of the bridge. A single faced guardrail was used as backing for double-faced guardrail. The concrete deck slab was removed and replaced in kind with concrete, and the fill material was removed and compacted when replaced. In addition a 1 ½-inch diameter tiebolt was added to the arch.

When Built: 1928
Why Built: Unknown
Who Built: State Roads Commission
Who Designed: State Roads Commission
Why Altered: Safety concerns.
Was this bridge built as part of an organized bridge building campaign?
No, this bridge was not built as part of an organized bridge building campaign.

<u>Surveyor Analysis:</u>
This bridge may have NR significance for association with:
X A Events _Person
X C Engineering/Architectural

This bridge was determined eligible by the Interagency Review Committee in February 1996.

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

The bridge was built on the Frederick to Petersville Road in 1928,

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?

This bridge is not located in an area that is eligible for historic designation .

Is the bridge a significant example of its type?

Yes, this bridge is a significant example of the State Roads Commission's efforts from 1910 until 1945 to eliminate dangerous geometric alignments. The development of standardized plans helped to facilitate this process.

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

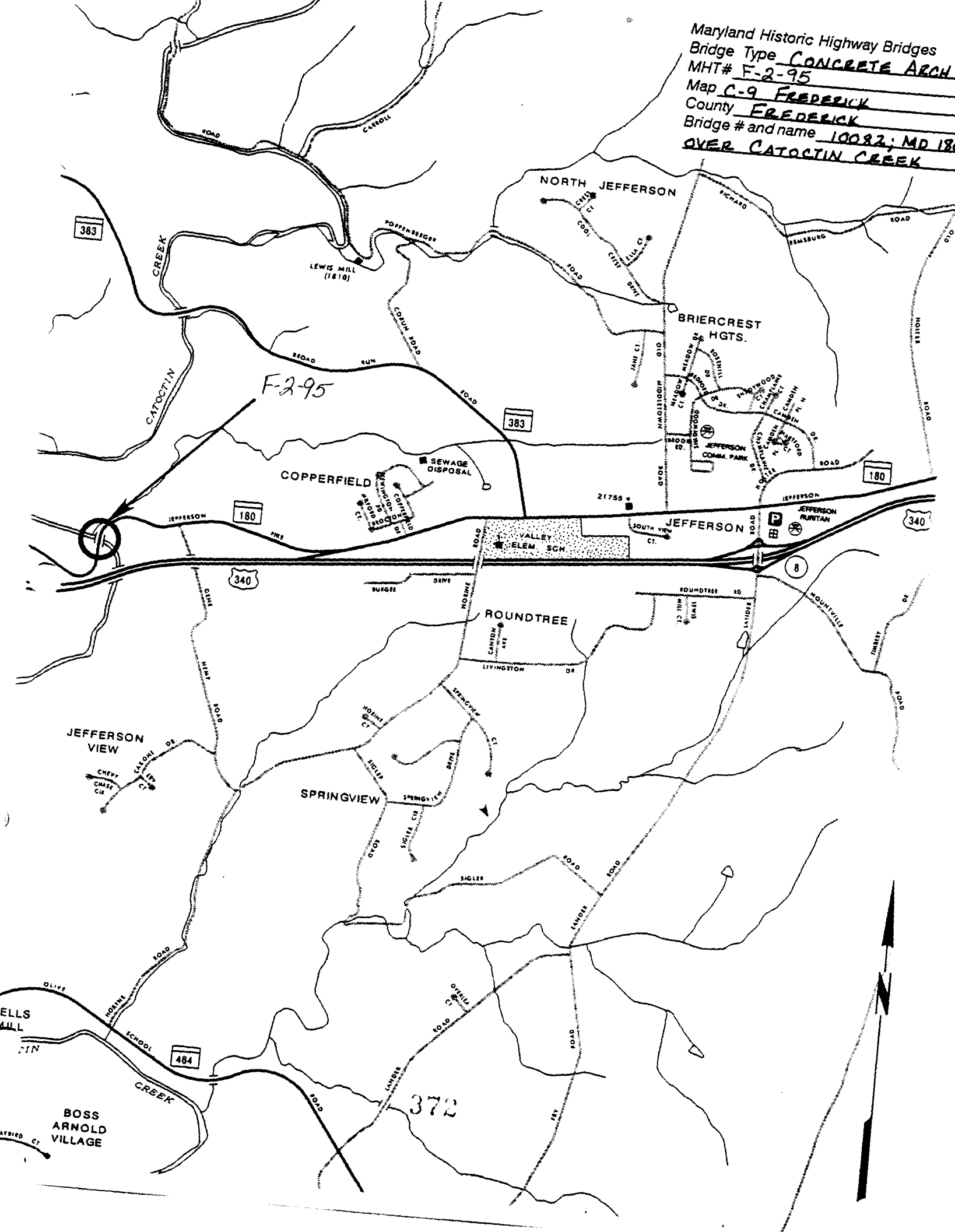
Yes this bridge retains integrity of its character defining elements. Although some repairs were made to the wingwalls, the barrel, the spandrel walls, the parapets, and the abutments, all are original and have only moderate deterioration. The addition of the guardrails, removal of the concrete deck and the addition of the tiebolts do not compromise the integrity of this structure.

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

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:** February 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# F-2-95
Map C-9 FREDERICK
County FREDERICK
Bridge # and name 10082; MD 18
OVER CATOCTIN CREEK
F-2-95
NORTH JEFFERSON
BRIERCREST HGTS.
COPPERFIELD
SEWAGE DISPOSAL
JEFFERSON
ROUNDTREE
SPRINGVIEW
JEFFERSON VIEW
BOSS ARNOLD VILLAGE
LEWIS MILL (1810)
JEFFERSON COMM. PARK
VALLEY ELEM. SCH.
JEFFERSON PIKE
BROAD RUN ROAD
CATOCTIN CREEK
372
383
180
340
464
8


LAUREL CREEK

Inventory # F-2-95

Name 10082- MD 180 OVER CATOCTIN CREEK
County/State FREDERICK COUNTY/MD
Name of Photographer FRANK JULIANO
Date 2/95

Location of Negative SHA

Description EAST APPROACH

Number 1 ~~16~~ of 34

Inventory # F-2-95

Name 10082-MD 180 OVER CATOCTIN CREEK
County/State FREDERICK COUNTY/MD
Name of Photographer FRANK JULIANO
Date 2/95

Location of Negative SHA

Description ELEVATION LOOKING SOUTH

Number 2 ~~4~~ of ~~34~~ 4

Inventory # F-2-95

Name 0082-MD 180 OVER CATOCTIN CREEK
County/State FREDERICK COUNTY/MD
Name of Photographer FRANK JULIANO
Date 2/95

Location of Negative SHA

Description ELEVATION LOOKING NORTH

Number 3 ~~18~~ of ~~34~~ 4


SATSUMA
CREEK

Inventory # F-2-95

Name 10082-MD 180 OVER CATOCTIN CREEK
County/State FREDERICK COUNTY/MD
Name of Photographer FRANK JULIANO
Date 2/95

Location of Negative SHA

Description WEST APPROACH

Number 4 ~~19~~ of ~~31~~ 4