

**MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes
no

Property Name: SHA Bridge No. 1606100, MD 382 over Charles Branch Inventory Number: PG:82B-39
 Address: Croom Road (MD 382) Historic district: yes no
 City: Croom Zip Code: 20772 County: Prince Georges
 USGS Quadrangle(s): Upper Marlboro
 Property Owner: State Highway Administration Tax Account ID Number: _____
 Tax Map Parcel Number(s): _____ Tax Map Number: _____
 Project: Reevaluation of Highway Bridges Statewide Agency: FHWA/MD SHA
 Agency Prepared By: KCI Technologies, Inc.
 Preparer's Name: Kim Sebestyen Date Prepared: 10/16/2009

Documentation is presented in: Project Review and Compliance Files
 Preparer's Eligibility Recommendation: Eligibility recommended Eligibility not recommended
 Criteria: A B C D Considerations: A B C D E F G
Complete if the property is a contributing or non-contributing resource to a NR district/property
 Name of the District/Property: _____
 Inventory Number: _____ Eligible: yes Listed: yes

Site visit by MHT Staff yes no Name: _____ Date: _____

Description of Property and Justification: *(Please attach map and photo)*

SHA Bridge No.1606100 (MIHP No. PG: 82B-39) is located at the town of Marlton in Prince George's County and carries MD 382 over Charles Branch. Charles Branch is a tributary stream of the Patuxent River. The bridge setting is in a rural residential area and adjacent to Marlton Community Park. This bridge replaced an original 1906 steel beam bridge at this location. At that time, MD 382 was realigned and straightened.

The 1933 single-span concrete beam bridge carries one lane of traffic in each direction. MD 382 runs east-west in this location and is classified as a Rural Major Collector roadway. The ADT as of 2006 was 4,610 and the future ADT is expected to be 5,315 by 2026. The current BSR rating for the bridge is 70.5 (SI&A 2008).

Background

The Interagency Historic Highway Bridge Inventory Committee (HHBIC) considered the 1996 MIHP form and subsequently determined Bridge No. 1606100 to be eligible for the National Register of Historic Places (NRHP). The Maryland Historical Trust (MHT) concurred with the determination in 2001 as eligible under NRHP Criterion C.

MARYLAND HISTORICAL TRUST REVIEW	
Eligibility recommended <input type="checkbox"/>	Eligibility not recommended <input checked="" type="checkbox"/>
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G
MHT Comments: <i>lost integrity</i>	
<u><i>Jim Salunke</i></u> Reviewer, Office of Preservation Services	<u>5/14/10</u> Date
<u><i>B. Kintz</i></u> Reviewer, National Register Program	<u>5/18/10</u> Date

SHA Bridge No. 1606100 was re-evaluated for NRHP eligibility as part of the 2009 statewide re-evaluation of the eligible bridges in SHA's Historic Highway Bridge Inventory. SHA requested that KCI conduct research to gather information and provide additional analysis of each of the bridge's integrity and significance to supplement the original NRHP evaluation. KCI conducted additional research at SHA's Office of Structures (OOS) to gather information on alterations and repairs that have been made to the structure. The following files at OOS were reviewed by the architectural historians and engineers: Bridge Inspection Reports (BIR), repair history files, SHA Bridge Plans, the Bridge Inspection and Remedial Engineering (BIRE) Worklist, and Structure Inventory and Appraisal (SI&A) reports. A KCI architectural historian visited the bridge to examine and document current conditions with field notes, digital photography, and black and white photography. For evaluation of the bridge's historic significance and NRHP eligibility, KCI consulted the original MIHP form, Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report, A Context for Common Historic Bridge Types, NCHRP Project 25-25, Task 15, and "NR Bulletin 15: How to Apply the National Register Criteria for Evaluation."

Evaluation

In the 1996 MIHP form for SHA Bridge No. 1606100, it was noted that the bridge retained a high degree of integrity. While the bridge currently retains the majority of its character defining elements (CDEs), these elements have been compromised through loss of material. Inspection reports from 1997 through 2008 indicate that major alterations have not been undertaken on the bridge.

The superstructure was given a rating of 5 in the 2008 BIR. This rating dropped from a 6 in 2002 to a 5 in 2004 due to increasing deterioration of the girders and parapet walls. During the 2009 field survey it was noted that both parapet walls exhibit severe scaling and loss of material on the interior and exterior. Rusted rebar is exposed in several areas. The top rail on the east end of the north parapet wall has suffered complete loss of material in a section approximately 2.5 feet in length and only the vertical and horizontal rebar is present. The outside girder on the north elevation is severely deteriorated starting at the east abutment and extending approximately 17 feet to the west. A large amount of exposed, rusted rebar is visible in this area. There is deterioration of the concrete along the base of the balustrades for the entire length of the girder. The girder also exhibits efflorescence and dripping stalactites and has soft concrete behind the exposed rebar. The 2008 BIR notes that this condition was first reported in the 1996 inspection and that it has worsened since the 2006 inspection. The south elevation exterior girder has minor scaling, dripping stalactites, exposed rebar, and heavy efflorescence. There is also scaling along the base of the balustrades on the south elevation. Interior girders and diaphragms exhibit minor scaling, cracking, efflorescence, exposed rebar, and dripping stalactites.

The substructure was given a rating of 6 in the 2008 BIR; this rating has remained the same since 1996. The 2009 field survey noted that both abutment walls are in generally good condition with minor cracking, efflorescence, and some scour with visible aggregate at the waterline. Three wingwalls have efflorescence at the junction with the abutments and the northeast wingwall has large buildup of minerals or efflorescence from the decaying concrete girder above. The southeast wingwall has minor cracking, efflorescence, and scaling.

The deck was given a rating of 6 in the 2008 BIR; this rating has remained the same since 1996. The bituminous deck surface appears to have been recently paved and has no condition problems. The bridge has no curbs and the deck is paved to the edge of the parapet wall. The underside of the deck has minor cracking, scaling, efflorescence, and exposed rebar.

Although the HHBIC determined that SHA Bridge No. 1606100 was eligible for listing in the NRHP because it retained all of its CDEs, they did not consider the information provided on the original MIHP form that noted that this bridge was not a significant

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ Eligibility not recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services

Date

Reviewer, National Register Program

Date

example of its type and was not a significant example of State Roads Commission bridge construction in the 1930s. The MIHP form noted that this bridge "is one of many that were built according to standard State Roads Commission specifications for concrete beam bridges". In addition the bridge has lost integrity of its primary character defining elements since the original evaluation in 1996. The bridge has lost integrity because of a continuous loss of materials, design, and workmanship. The setting, location, and association of the bridge have not changed. The overall feeling of the bridge is poor due to the deteriorated condition of the structure. Areas of efflorescence, spalling, cracking and scaling would be expected on a concrete bridge that carries traffic over water, however, deterioration has begun to affect the material integrity of this bridge.

Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report indicates that standardized plans for bridges were developed in 1912, concurrent with the reorganization of the State Roads Commission. Design plans for specific bridge types were updated periodically to accommodate wider roads and heavier loads, and by the 1930s, new standard plans had become commonplace and were not announced in the annual report (pp. 180-181). SHA Bridge No. 1606100 was built to the 1933 standard plan, which incorporated methods to accommodate the increasing demands of traffic, by increasing the roadway width to 30 feet and increasing the number of beams while decreasing the section size of the girders to increase load bearing capacity.

A Context for Common Bridge Types, NCHRP Project 25-25, Task 15 notes that the most significant concrete beam bridges are those that were "built according to...standard plans...in the first quarter of the twentieth century and particularly, those that were built very early in this type's history - within the first decade of the twentieth century," (p. 3-94).

The structure is not an important example of a concrete beam bridge of its time period. It was constructed from a standardized bridge plan to help meet the transportation demands of its time. It is not an early example of a concrete beam bridge that was constructed without the use of a standardized plan, nor is it the work of a master. Based on this evaluation, Bridge No. 1606100 is recommended not eligible for inclusion in the NRHP under Criterion C. Additional background research indicates that the bridge not associated with a known event of local, regional, or national significance (Criterion A), or a known person of local, regional, or national significance (Criterion B). Criterion D was not evaluated as part of the historic standing structures studies for this project.

MARYLAND HISTORICAL TRUST REVIEW

Eligibility recommended _____ Eligibility not recommended _____

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G

MHT Comments:

Reviewer, Office of Preservation Services

Date

Reviewer, National Register Program

Date

MIHP No. PG;82B-39
SHA Bridge No. 1606100
MD 382 over Charles Branch
Prince George's County, Maryland

Photograph Log

Image File Name	Description of View
PG-82B-39_2009-01-14_01.tif	Deterioration on north elevation, facing southwest
PG-82B-39_2009-01-14_02.tif	North elevation, facing south
PG-82B-39_2009-01-14_03.tif	South elevation, facing north
PG-82B-39_2009-01-14_04.tif	North parapet wall railing, facing north
PG-82B-39_2009-01-14_05.tif	West abutment and scaled girder, facing northwest
PG-82B-39_2009-01-14_06.tif	Northwest abutment and wingwall, facing southwest

Printed on Epson Premium Photo Paper Glossy with Epson UltraChrome Black Ink

Saved on Verbatim UltraLife Archival Grade DVD-R, AZO recording dye



MIHP No. PG: 82B-39

SHA Bridge No. 1606100 MD 302 over Charles Branch

PG Co. MD

Brian Keller

7/14/09

MD SHPO

Determination on No elev., facing SW

1/6



MHTP No. PG: 82B-39

SHA Bridge No. 1606100 MD 392 over Charles Branch

PG Co. MD

Bridm Koller

1/14/09

MD SHPD

N. elev., facing S.

2/6



MIHP No. PG: 82B-39

SHA Bridge No. 160600 MD 362 over Charles Branch

PG Co. MD

Brian Keller

1/14/09

MD SHPD

S. elev., facing N.

3/6



MHTP No. PH: 82B-39

SHA. Bridge No. 1606100 MD 392 over Charles Branch

Pla Co. MD

Brian Keller

1/14/09

MD SHPO

N. wall railing, facing N.

4/6



MIHP No. P6: 82B-39

SHA Bridge No. 1606100 MD 392 over Charles Branch

P6 Co. MD

Brian Koller

1/14/09

MD SHPO

W. abutment + scaled girder, facing NW

5/6



MIHP No. PG: 82B-39

SHA Bridge No. 16061 00 MD 382 over Charles Branch

PG Co. MD

Brian Keller

1/14/09

MD SHPO

NW abutment ← wing wall, facing SW

6/6

Maryland Historical Trust

Maryland Inventory of Historic Properties number: PG: 82B-39

Name: MD 382 OVER CHARLES 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 <input checked="" type="checkbox"/> X	Eligibility Not Recommended _____
Criteria: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D	Considerations: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/> E <input type="checkbox"/> F <input type="checkbox"/> G <input type="checkbox"/> 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 NO. PG: 82B-39

NAME AND SHA NO.: 16061

LOCATION

Road Name and Number: MD 382 over Charles Branch

City/Town: Croom _ vicinity

County: Prince George's

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 #16061 carries MD 382 over the Charles Branch in Prince George's County. This area falls within Maryland's Tidewater or Coastal Plain physiographic region. The bridge is located in a rural area bordered by farmland east of US 301 and west of the Conrail tracks.

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

Bridge #16061 carries two lanes of traffic over the Charles Branch. It is a single-span concrete beam bridge with a span length of 44', a total length of 54', and a clear roadway width of 30'. The bridge consists of a concrete slab, wingwalls, abutments, and open balustrade-style concrete parapets. Modern metal guardrails line both approaches to the bridge but do not extend along the inside faces of the parapets.

The earliest inspection report for this bridge, which dates to 1932, describes the bridge as a "new standard bridge" adhering to 1933 standards. This "new" bridge replaced the previous bridge at this location, which had been built in 1906 and was described as a 27' long steel I-beam span carrying an oiled gravel roadway. According to SHA contract files, when Bridge #16061 was built, MD 382 was aligned and straightened south of the earlier roadway.

Inspection reports from 1974-1976 remark on the overall good condition of this bridge, while the reports for 1977 and 1978 note increased deterioration of girders, curbs, and balustrades. Inspection reports for 1980-1995 note some deterioration in the form of cracking and spalling in several places, but no major repairs or alterations were ever indicated. The 1992 report notes severe spalling on the north side of the exterior deck.

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:

According to available documentary evidence, no major alterations have been undertaken on this bridge.

HISTORY

When Built: 1933

Why Built: Statewide road improvement programs and local transportation needs

Who Built: State Roads Commission, contract #P-242-I-87

Who Designed: Unknown, design based on SRC and AASHO bridge specifications dated June 1931

Why Altered: N/A

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 Prince George's 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 #16061 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. PG: 82B-39

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 is eligible for historic designation.

Is the bridge a significant example of its type?

No, this structure is not a significant example of its type. The bridge is one of many that were built according to standard State Roads Commission specifications for concrete beam bridges.

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

Yes, the bridge retains integrity of the primary character-defining elements of a concrete beam bridge. 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. Based on the information contained in SHA inspection reports and drawings, this bridge has not experienced any major alterations, with the exception of the installation of metal guard rails, since it was built.

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 structure should not be given further study. It is one of a number of concrete beam bridges that were built in the 1930s according to then-current State Roads Commission standards.

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.

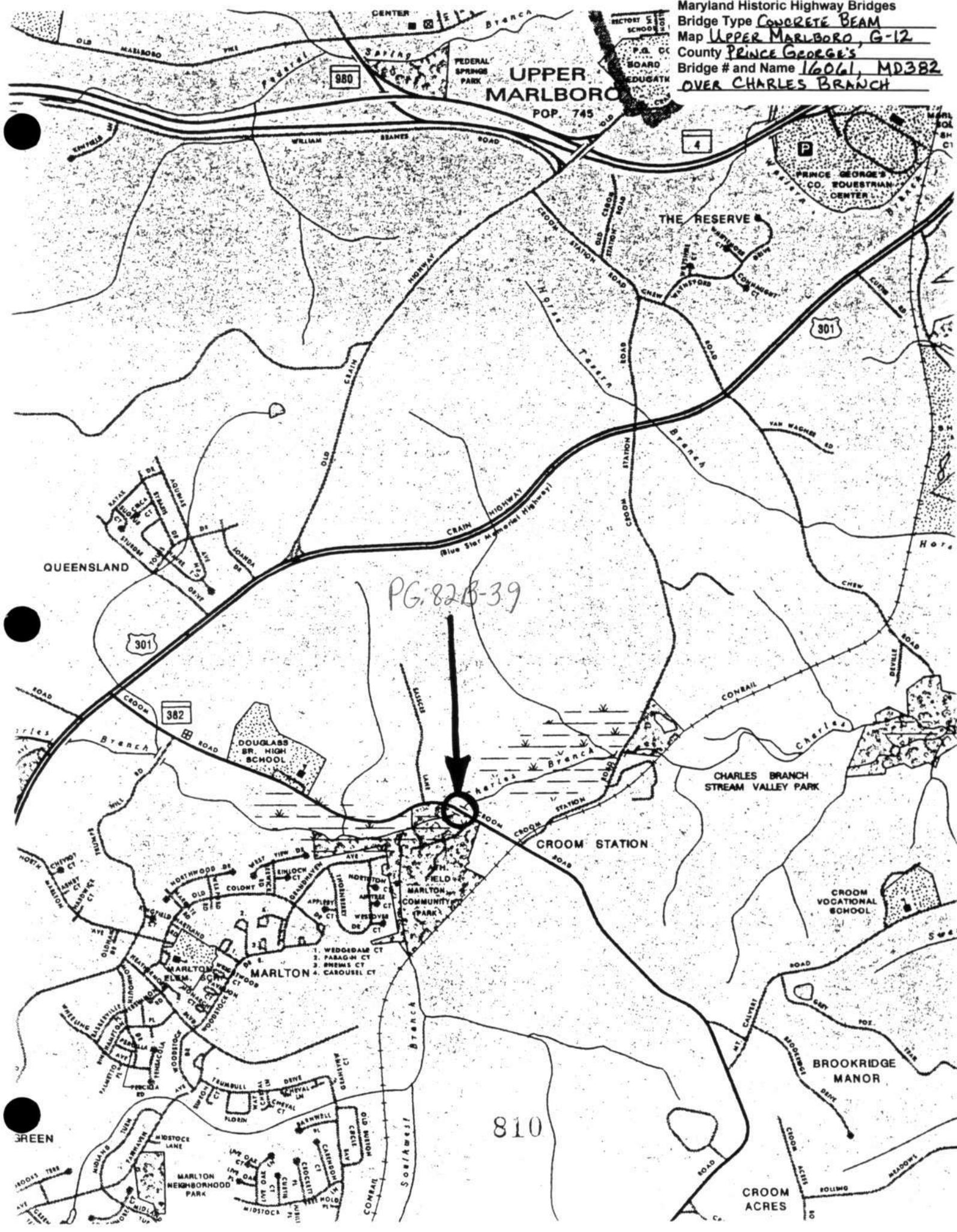
State Roads Commission of Maryland
1958 *A History of Road Building in Maryland.* Baltimore.

SURVEYOR INFORMATION

Name: Gabrielle M. Lanier
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 UPPER MARLBORO, G-12
County PRINCE GEORGE'S
Bridge # and Name 16061, MD382
OVER CHARLES BRANCH



PG. 82B-39



810

GREEN



Inventory # PG: 82B-39

Name 16061-MD382 OVER CHARLES BRANCH

County/State PRINCE GEORGES COUNTY/MD

Name of Photographer WALLY KING

Date 1/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING
NORTH

Number 18 of 24

1198-840[20]0000-4411



Inventory # PG:82B-39

Name 16061-MD382 OVER CHARLES BRANCH

County/State PRINCE GEORGES COUNTY / MD

Name of Photographer WALLY KING

Date 1/95

Location of Negative SHA

Description NORTH APPROACH LOOKING SOUTH

Number 2A of 4
24



Inventory # PG:82B-39

Name 16061-MD382 OVER CHARLES BRANCH

County/State PRINCE GEORGES COUNTY/MD

Name of Photographer WALLY KING

Date 1/95

Location of Negative SHA

Description WEST ELEVATION

Number 3 of 4

2025 RELEASE UNDER E.O. 14176



Inventory # ^{PG:} 828-39

Name 6061-MD382 OVER CHARLES BRANCH

County/State PRINCE GEORGES COUNTY / MD

Name of Photographer WALLY KING

Date 1195

Location of Negative _____

Description EAST ELEVATION

Number 4 of 4

dar(k)no0110004314018