

Maryland Historical Trust

Maryland Inventory of Historic Properties number: HO-729.

Name: Southbound US 1 over Little Patuxent 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 HO-729

SHA Bridge No. 13007 Name: Southbound US 1 over Little Patuxent River

Location:

Street/Road Name and Number: US 1 (Baltimore-Washington Boulevard)

City/Town: Savage Vicinity X

County: Howard

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 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 _____

486

Describe Setting:

Bridge 13007 carries southbound US 1 over Little Patuxent River in Howard County. US Route 1 runs north-south over the eastern flowing Little Patuxent River. US Route 1 is not heavily developed in this area. There is moderate residential development to the north of the bridge.

Describe Superstructure and Substructure:

Bridge 13007 is a single-span filled spandrel concrete arch bridge. The length of the bridge is 99 feet with a clear span of 98 feet. The rise is approximately 14 feet from the springline. The abutments are concrete and are approximately 40 feet wide and 14 feet high. The wingwalls are approximately 14 feet high and 8 feet wide. There is a clear roadway width of 40 feet, with an overall width of 43 feet 6 inches. The closed spandrel arch has a 1-inch angle strip and a 2-inch cove molding around the intrados. Bridge 13007 has modern guardrails. The rails are precast concrete topped with steel tubing. The railing is 97 feet long and 4 feet high.

The concrete arch has fine longitudinal cracking with heavy efflorescence and areas of delamination along the construction joints of the spandrel walls and first interior joints on both the upstream and downstream side of the bridge. The arch has light efflorescence throughout with a few small popouts. There is limited reinforcement bar exposure on the bridge, and a large area 24 inches in diameter has been patched along the eastern spandrel wall (downstream). The northwest and southwest wingwalls are spalling along the spandrel wall joints. The southwest wingwall also has an area approximately 3 inches in length along the spandrel wall joint at the bottom of the wall that has been patched. According to a 1997 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 79.9.

Discuss Major Alterations:

In 1928 the bridge was widened. The existing 24-foot arch was not replaced completely. The existing circa 1920 arch was encased in 1928 with 2 extensions on either side of the concrete arch, each extension measuring 8 feet. The deck of the circa 1920 arch was removed to the fill and the parapets were removed. The engineers attached frames and poured two new sections to the arch adding an additional 16 feet to the bridge for a total length of 40 feet. In 1990, the 1928 open concrete parapets were removed and replaced by pre-cast concrete and steel railings.

When Built: circa 1920, 1928

Why Built: Elimination of a dangerous one lane bridge along Baltimore-Washington Boulevard. and widening of the Boulevard in 1928.

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?: Yes, this bridge was part of the road construction of US 1 between Baltimore and Washington.

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?

Yes, this bridge was built as part of the construction of US 1 between Baltimore and Washington. Historically the route between Baltimore and Washington dates back 200 years. Originally the road was a dirt road built under the 1704 Act, which required 24-foot cart paths. The first section was constructed in 1741 connecting

Baltimore and Elkridge, and in 1749 the road was continued to Georgetown. Substandard maintenance continued throughout the eighteenth century. According to many period accounts, the State of Maryland did not maintain the road. Three successive turnpike companies attempted to construct a road during the turnpike movement of the late-eighteenth and early-nineteenth centuries. Companies were incorporated in 1796, 1812, and 1820 to build a road. Only the company of 1820 succeeded in constructing a turnpike on a 60-foot right-of-way between Baltimore and Washington. The company was liquidated in 1865 after the turnpike was condemned by the State.

In 1906 the Maryland Legislature, bowing to public pressure, decided to rebuild the highway as a state project and call it State Road No. 1. This road suffered during World War I under the weight of the increased numbers of army vehicles. Their increased load carrying capacity and sheer number tore the road apart. Between 1918 and 1919 the road was rebuilt as a concrete road with a 20-foot clearance. Sometime between 1920 and 1923 a dangerous one way structure was removed over the Little Patuxent River at Savage in Howard County and was replaced with a concrete arch with solid 3-foot high paneled parapets. The arch was approximately 140 feet in length and was 24 feet in width. The arch's rise was 14 feet from the springline and the clear span was 96 feet. The run to rise ratio was 16 percent.

In 1925 State Route 1 became part of US 1, the "main street" of the East Coast from Fort Kent, Maine to Key West, Florida. From 1928 to 1930 the roadway was doubled in width to forty feet and resurfaced. This meant extending all the bridges. The improvements were estimated at over \$500,000. The crossing at Savage over the Little Patuxent had to be widened.

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. Portions of US 1 could be nominated as a linear district.

Is the bridge a significant example of its type?

No, this bridge is not a significant example of its type. This bridge has been widened and the original parapets have been removed.

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

No, the bridge's original parapets have been replaced with modern concrete and metal rails, and the rest of the elements are in poor condition.

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

No, this bridge does not retain enough of its original elements to be 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 should not be given further study.

Bibliography:

County inspection/bridge files _____ SHA inspection/bridge files X

Other (list):

Surveyor:

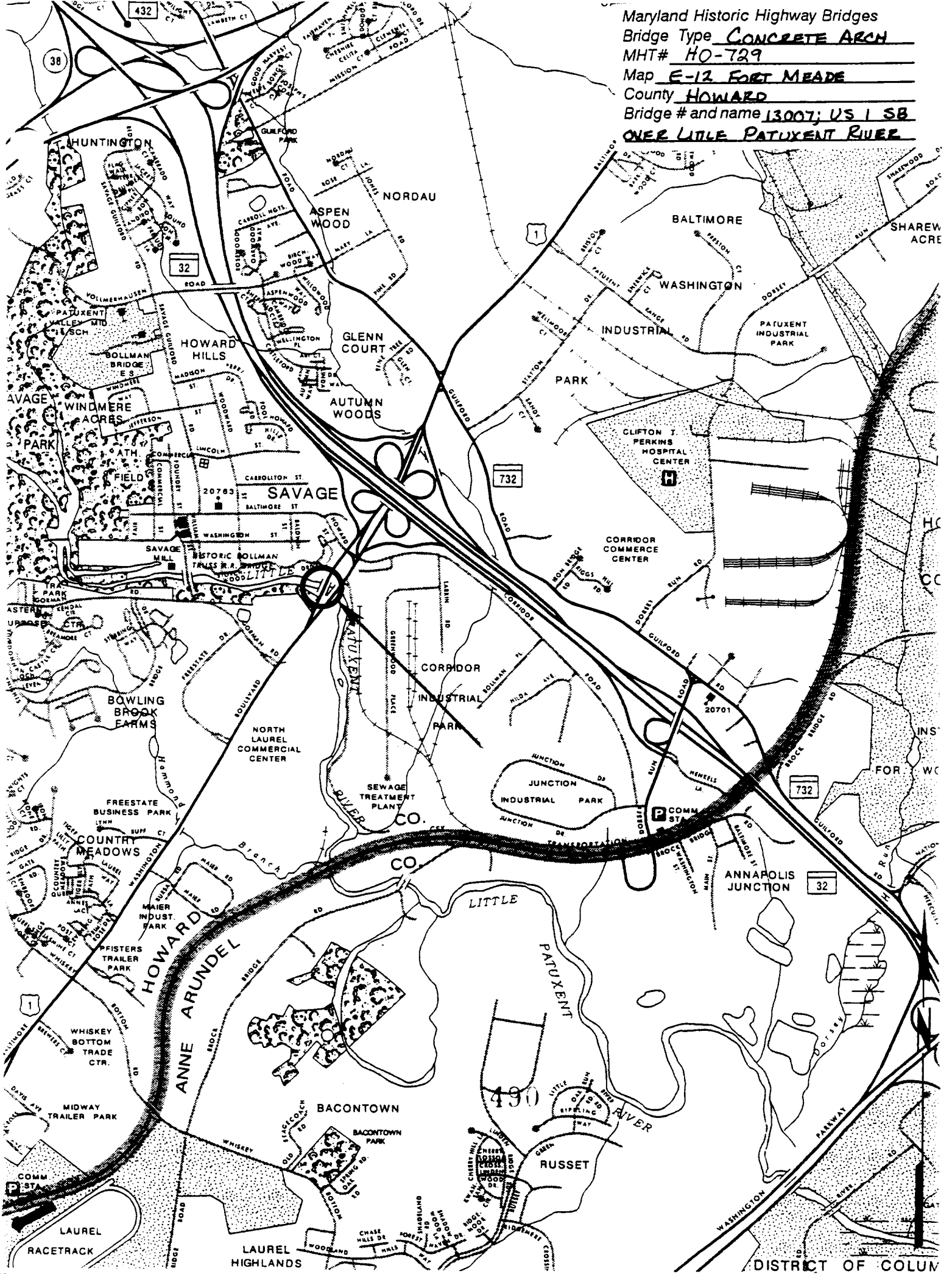
Name: Stacie Y. Webb **Date:** March 1996

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# HO-729
Map E-12 FORT MEADE
County HOWARD
Bridge # and name 13007; US 1 SB
OVER LITTLE PATUXENT RIVER





Inventory # 40-729

Name 13007-US1 SB OVER LITTLE PATUXENT RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description SOUTH APPROACH LOOKING NORTH

Number 1 of 1



Inventory # 40-729

Name 13007 - US 1 SB OVER LITTLE PATUXENT RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

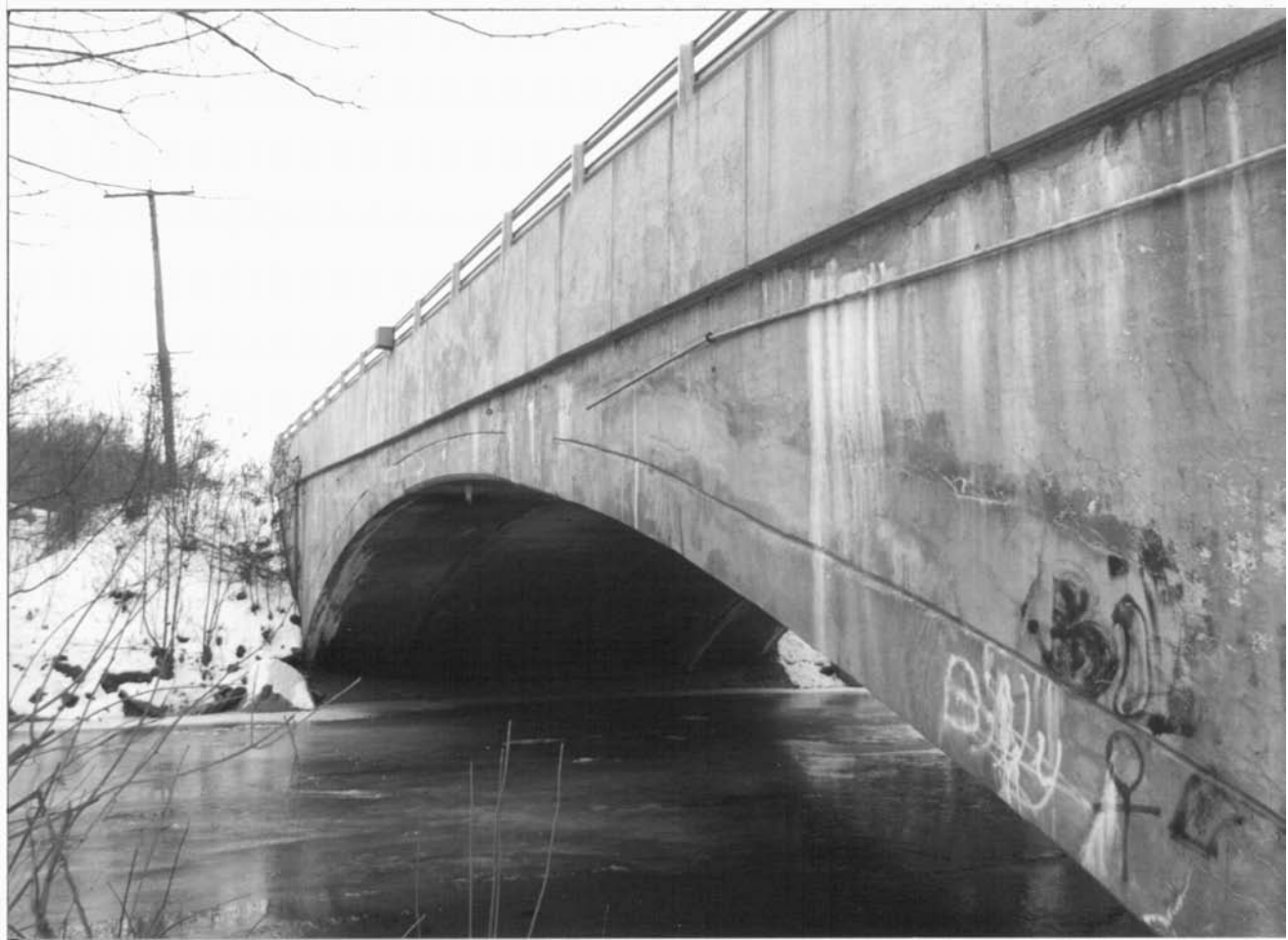
Date 2/95

Location of Negative SHA

Description NORTH APPROACH LOOKING
SOUTH

Number 2 of 4
14 of 32

U.S. GOVERNMENT PRINTING OFFICE



Inventory # 110-729

Name 13007 - US 15B OVER LITTLE PATUXENT RIVER

County/State HOWARD MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description EAST ELEVATION LOOKING

SOUTHWEST

Number 3 of 4
~~15~~ of ~~37~~



Inventory # HO-729

Name 13007 - US 15B OVER LITTLE PATUXENT RIVER

County/State HOWARD / MD

Name of Photographer DAVID DIEHL

Date 2/95

Location of Negative SHA

Description WEST ELEVATION LOOKING
EAST

Number 4 4
10 of 20

U.S. GEOLOGICAL SURVEY