Maryland Historical Trust

Maryland Inventory of Historic Properties number: PG:67-30

Name: MD 193 over CSXT RR & Branchville Rd

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 __X____

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

MHT No. PG:67-30

SHA Bridge No. 16070 **Bridge name** MD 193 over CSXT Railroad and Branchville Road

LOCATION:
Street/Road name and number [facility carried] MD 193 (Greenbelt Road)

City/town College Park **Vicinity** _____

County Prince George's

This bridge projects over: Road X **Railway** X **Water** _____ **Land** ____

Ownership: State X **County** _____ **Municipal** _____ **Other** _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ **No** X
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 _____ **Retractile**_____ **Pontoon** _____

Metal Girder X:
Rolled Girder X **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** _____

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DESCRIPTION:

Setting: Urban ___X___ **Small town** _____ **Rural** _____

Describe Setting:

Bridge No. 16070 carries MD 193 (Greenbelt Road) over CSXT Railroad, Metro and Branchville Road in Prince George's County. MD 193 runs east-west, while the CSXT Railroad extends north-south. The bridge is located in College Park, and is surrounded by commercial property and wooded areas.

Describe Superstructure and Substructure:

Bridge No. 16070 is a 4-span, 6-lane, metal girder bridge. The bridge was originally built in 1946, and widened in 1961; the abutments were widened, new piers added and the parapets were replaced. The structure is 246.5 feet long and has a clear roadway width of 64 feet between curbs; there are two sidewalks measuring 4 feet wide. The out-to-out width is 74 feet. The superstructure consists of fourteen (14) rolled girders. The north side of the bridge dates to 1946 and has eight (8) girders and a corrugated metal deck which was added in 1990. The south side of the bridge dates to 1961 and consists of six (6) metal girders and a concrete slab deck. The parapets are solid concrete topped by a chain-link pedestrian barrier. The substructure consists of two (2) reinforced concrete abutments and three (3) pier columns. There are two (2) U-shaped concrete wing walls and two (2) flared concrete wing walls. The bridge is not posted, and has a sufficiency rating of 75.7.

According to the 1996 inspection report, this structure was in satisfactory to good condition with some cracking, scaling and rusting. The westbound deck has an asphalt overlay with light random cracking and scaling. The eastbound deck is concrete and in good condition. The interior and exterior girders have light rust, especially on the bottom flanges. The south pier columns have been patched, with light cracks showing through. The abutments have light vertical cracking and the wing walls have had their top sections repoured during the 1990 rehabilitation.

Discuss Major Alterations:

The bridge was altered in 1961 and 1990. The bridge was widened in 1961, with the addition of eastbound lanes, widened abutments, new piers, new deck and parapets. In 1990, the original deck on the westbound lanes were replaced with corrugated steel and an asphalt overlay and the abutments were patched.

HISTORY:

WHEN was the bridge built: 1946
This date is: Actual ___X___ **Estimated** _____
Source of date: Plaque ____ **Design plans** ___ **County bridge files/inspection form**
Other (specify): State Highway Administration bridge files/inspection form

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

State Roads Commission

WHO was the builder?

State Roads Commission

WHY was the bridge altered?

The bridge was altered to correct functional or structural deficiencies.

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

There is no evidence that the bridge was built as part of an organized bridge building campaign.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

The bridge does not have National Register significance.

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

Metal girder bridges were most likely introduced and first popularized in Maryland by the state's major railroads of the nineteenth century including the Baltimore and Susquehanna, its successor the Northern Central, and the Baltimore and Ohio Railroad. Bridge engineering historians have documented the fact that James Milholland (or Mulholland) erected the earliest plate girder span in the United States on the Baltimore and Susquehanna Railroad in 1846 at Bolton Station, near present-day Mount Royal Station. The sides (web) and bottom flange of Milholland's 54-foot-long span were wholly of wrought iron and included a top flange reinforced with a 12x12-inch timber. Plates employed in the bridge were 6 feet deep and 38 inches wide, giving the entire bridge a total weight of some 14 tons. Milholland's pioneering plate girder cost $2,200 (Tyrrell 1911:195). By December 31, 1861, the Northern Central Railroad, which succeeded the Baltimore and Susquehanna, maintained an operating inventory in Maryland of 50 or more bridges described simply as "girder" spans, in addition to a number of Howe trusses. Most of these were probably iron girder bridges; the longest were the 117-foot double-span bridge over Jones Falls and the 106-foot double-span girder bridge at Pierce's Mill (Gunnarson 1990:179-180).

As in the nation, girder bridge technology in Maryland was quickly adapted to cope with the increasingly heavy traffic demands of the twentieth century caused by automobile and truck traffic. The 1899 Maryland Geological Survey report on highways noted that "there are comparatively few I-beam bridges, one of the cheapest and best forms for spans less than 25 or 30 feet" (Johnson 1899:206). Interestingly, the report also urged construction of a composite metal, brick, and concrete bridge, noting that "no method of construction is more durable than the combination of masonry and I-beams, between which are transverse arches of brick, the whole covered with concrete, over which is laid the roadway" (Johnson 1899:206). Whether any such bridges (transitional structures between I-beams and reinforced concrete spans) were built is unknown.

Official state and county highway reports—issued between 1900 and the early 1920s through the Highway Division of the Maryland Geological Survey and its successor, the State Roads Commission—generally do not reference or describe girder construction. An analysis of the current statewide listing of county and municipal bridges (a listing maintained by the State Highway

Administration) reveals that 48 county bridges, out of the total of 141 approximately dated to "1900" by county engineers, were listed as steel girder, steel stringer, or variants of such terms. (It should be noted that the "1900" date is often given when no exact date is pinpointed for a bridge that is clearly old). A grand total of 200 bridges (including "steel culverts"), out of 550 bridges dated on the county list between 1901 and 1930, were described as steel beam, steel girder, or steel stringer and girder varieties. The total suggests that among the various highway bridge types built in the early twentieth century metal girder bridges in Maryland between 1900 and 1930 were second in popularity only to reinforced concrete bridges. However, these numbers must be interpreted with caution, as they do not necessarily include all county and municipal bridges.

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 that the construction of this bridge had a significant impact on the growth and development of this area.

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?

The bridge is located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

A significant example of a metal girder bridge should possess character-defining elements of its type, and be readily recognizable as an historic structure from the perspective of the traveler. The integrity of distinctive features visible from the roadway approach, including parapet walls or railings, is important in structures which are common examples of their type. In addition, the structure must be in excellent condition. This bridge, which is lacking such features as the original parapet walls, deck and the integrity of the abutments, is an undistinguished example of a metal girder bridge.

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

The bridge retains some character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including the rolled metal girders and original piers, however the abutments have been widened and a new set of piers were added.

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

This bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

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

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

County inspection/bridge files _____ **SHA inspection/bridge files** ___X___
Other (list):

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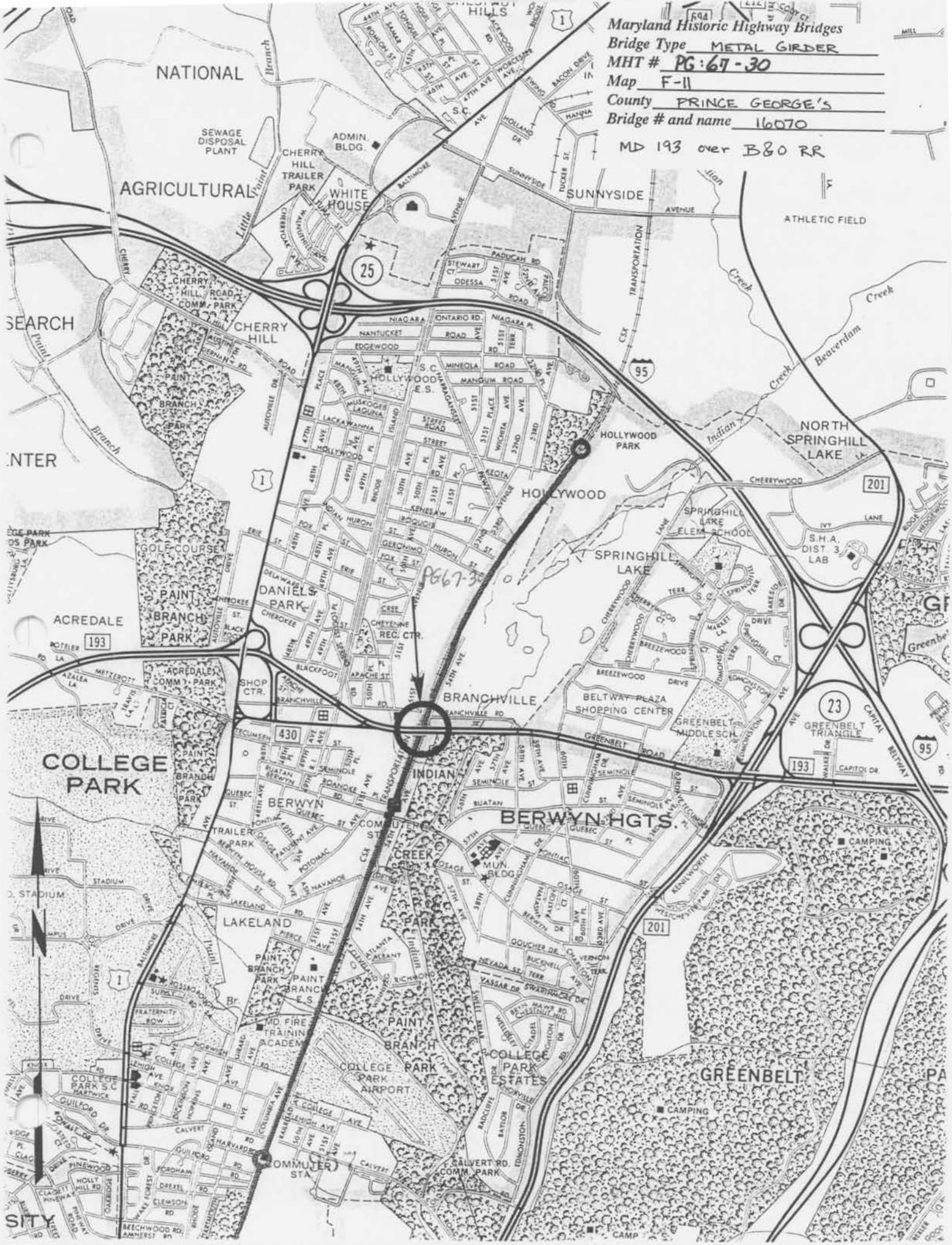
Gunnarson, Robert
1990 *The Story of the Northern Central Railway, From Baltimore to Lake Ontario.* Greenberg Publishing Co., Sykesville, Maryland.

Johnson, Arthur Newhall
1899 The Present Condition of Maryland Highways. In *Report on the Highways of Maryland.* Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.

Tyrrell, Henry G.
1911 *History of Bridge Engineering.* Published by author, Chicago.

SURVEYOR:

Date bridge recorded 2/25/97
Name of surveyor Caroline Hall/Tim Tamburrino
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1685 **FAX number** (410) 296-1670


Maryland Historic Highway Bridges
Bridge Type METAL GIRDER
MHT # PG:67-30
Map F-11
County PRINCE GEORGE'S
Bridge # and name 16070
MD 193 over B&O RR
NATIONAL
AGRICULTURAL
SEARCH
CENTER
SEWAGE DISPOSAL PLANT
ADMIN. BLDG.
CHERRY HILL TRAILER PARK
WHITE HOUSE
SUNNYSIDE
ATHLETIC FIELD
CHERRY HILL ROAD COMM. PARK
CHERRY HILL
PAINT BRANCH PARK
HOLLYWOOD E.S.
HOLLYWOOD PARK
HOLLYWOOD
NORTH SPRINGHILL LAKE
SPRINGHILL LAKE ELEM. SCHOOL
S.H.A. DIST. 3 LAB
SPRINGHILL LAKE
GOLF COURSE
DANIELS PARK
ACREDALE
ACREDALE COMM. PARK
SHOP CTR.
BRANCHVILLE
BELTWAY PLAZA SHOPPING CENTER
GREENBELT MIDDLE SCH.
GREENBELT TRIANGLE
COLLEGE PARK
INDIAN CREEK
BERWYN
BERWYN HGTS.
TRAILER PARK
MUN. BLDG.
LAKELAND
PAINT BRANCH E.S.
MD. FIRE TRAINING ACADEMY
PAINT BRANCH PARK
COLLEGE PARK AIRPORT
COLLEGE PARK ESTATES
GREENBELT
CAMPING
COLLEGE PARK S.C.
COMMUTER STA.
CALVERT RD. COMM. PARK
PG67-30

1 PG: 67-30
2. MD 193 over CSXT RR & Branchville Road
3. Prince George's Co. MD
4. Tim Tamburino
5. 3-97
6 MD SHPO
7. North elevation
8. 1 of 5

1. PG: 67-30
2. MD 193 over CSXT RR & Branchville Road
3. Prince George's Co. MD
4. Tim Tamburino
5. 3-97
6. MD SHPO
7. South elevation
8. 2 of 5

1. PG: 67-30
2 MD 193 over CSXT RR @ Branchville Road
3. Prince Georges Co MD
4. Tim Tamburino
5. 3-97
6 MD SHPO
7 Detail of pier
8. 3 of 5

1. PG: 67-30
2. MD 193 over CSXT RR + Branchville Road
3. Prince Georges Co. MD
4. Tim Tamburrino
5. 3-97
6. MD SHPO
7. East abutment and retaining wall
8. 4 of 5

1. PG: 67-30
2. MD 193 over CSXT RR & Branchville Road
3. Prince George's Co. MD
4. Tim Tamburrino
5. 3-97
6. MD SHPO
7. East approach
8. 5 of 5