

Maryland Historical Trust

Maryland Inventory of Historic Properties number: BA-2658

Name: B-0199/Dance Mill Rd. over Dulaney Valley
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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"/>	Eligibility Not Recommended <input 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 <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>

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

MHT NO. BA-2658

NAME AND SHA NO.: B-0199

LOCATION

Road Name and Number: Dance Mill Road over Dulaney Valley Branch

City/Town: Blenheim vicinity

County: Baltimore

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 B-0199 carries Dance Mill Road over Dulaney Valley Branch in northeastern Baltimore County. Dance Mill Road runs east and west while Dulaney Valley Branch flows north to south. Located in the Piedmont physiographic province, a region characterized by variegated topography created by rivers and streams cutting through the valley, the bridge is surrounded by wooded land, open fields and one nearby residence.

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

Bridge B-0199, a single-span concrete tee-beam structure, has a clear span length of 31'-6" and a total bridge length of 34'. The 20' wide roadway carries one lane of traffic in two directions. The low, solid concrete parapets and the concrete slab are integrated with the girders. Steel W-beam guardrails are attached to the ends of the parapets. The substructure consists of concrete and masonry abutments and concrete wing walls.

A 1993 inspection report notes that the concrete on the underside of the deck is delaminating and deteriorating, and the parapets exhibit cracking, spalling, and scaling. The report also mentions that the 1'-5" high parapets do not conform to the minimum 2'-10" standard. With regard to the substructure, the abutments and wing walls show minor surface defects. Also, due to stream flow (a 22' expanse exists between the western edge of the stream and the west abutment), the east abutment exhibits minor scour.

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, this bridge has not undergone any major alterations.

HISTORY

When Built: 1920

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

Who Built: Unknown

Who Designed: Unknown

Why Altered: N/A

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

This bridge was built during the Good Roads Movement era but was not one of the primary corridors slated for improvement.

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?

In many ways, Baltimore County was a leader in modern bridge construction, affecting the materials and design of concrete structures throughout the state. Baltimore was the first of the state's counties to hire a professional engineer to oversee construction and maintenance of its roads. Early Maryland Geological Survey and State Road Commission Reports relate that the county began to build concrete bridges and culverts in 1901, and that by 1903 had constructed many good roads and replaced old wooden bridges with permanent structures. The "progressive work" by the Baltimore county engineer in 1903 was evidenced by the first reinforced concrete highway bridge built in the state. The method of reinforcing concrete using steel rods embedded in concrete beams allowed the girders to withstand heavy loads with no steel surface exposed to air, thereby significantly reducing maintenance costs.

A 1906 state highway report stated that improvement projects begun in 14 counties included the widening, straightening, and/or grading of many existing roads, as well as the construction of many new bridges to carry these rebuilt roads. The rapid increase of automobile, truck, and bus traffic during the early decades of the twentieth century prompted the replacement of old bridges with new, modern concrete structures. During the 1920s, the State Road Commission embarked upon a plan to both improve the safety and comfort of the primary roads while also building up the secondary and farm-to-market road system. The establishment of district engineering offices during the 1910s, the creation of a separate bridge department within the State Road Commission in 1920, and the development of standard statewide specifications for bridges undoubtedly aided the construction of nearly 750 concrete bridges and culverts between 1902 and 1929 in Baltimore County. Finally, the elimination of toll roads, many of which ran through the county and terminated in Baltimore city, may have induced the improvement of additional county roads in an effort to provide unlimited access through the county.

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?

No, the construction of this bridge did not play an active role in the growth or development of this portion of Baltimore County.

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, this bridge is not located within an area which is eligible for historic district designation. Bridge B-0199 is located west of the Long Green Valley Historic District.

Is the bridge a significant example of its type?

No. The use of stone for the substructure does not conform to concrete beam bridges constructed during the 1920s.

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

No. The bridge retains integrity of the majority of its original super- and substructure elements. However, according to the description of concrete beam bridges in the historic context, the primary character defining elements of a concrete tee-beam bridge's substructure generally consist of concrete abutments, wing walls, and piers. Therefore, the stone abutments, wing walls, and pier do not conform to this standard.

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

No, this bridge is not a significant example of the work of the manufacturer, designer, and/or engineer. This bridge was most likely built to standard state specifications, which corresponded to the structure's span length and year.

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

No, this bridge should not receive further study.

BIBLIOGRAPHY

Baltimore County Department of Public Works

1993 Bridge inspection reports. Located in the files of the Engineering Bureau, Baltimore County Department of Public Works, Towson, Maryland.

Crosby, Walter Wilson

1906 *First Report on State Highway Construction (May 1905-January 1906)*. The Johns Hopkins Press, Baltimore.

1908 *Second Report on State Highway Construction (January 1906-January 1908)*. The Johns Hopkins Press, Baltimore.

Johnson, A.N.

1903 *Third Report on the Highways of Maryland (1902-1903)*. The Johns Hopkins Press, Baltimore.

LeViness, Charles T.

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

Maryland Inventory of Historic Properties

Survey information on file at Maryland Historical Trust, Crownsville, MD.

P.A.C. Spero and Company and Louis Berger and Associates, Inc.

1994 *Historic Bridges in Maryland: Historic Context Report*. Prepared for Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore.

State Roads Commission of Maryland

1930 *Reports of the State Roads Commission of Maryland for the Years 1927, 1928, 1929, and 1930*. State of Maryland, State Roads Commission, Baltimore.

SURVEYOR INFORMATION

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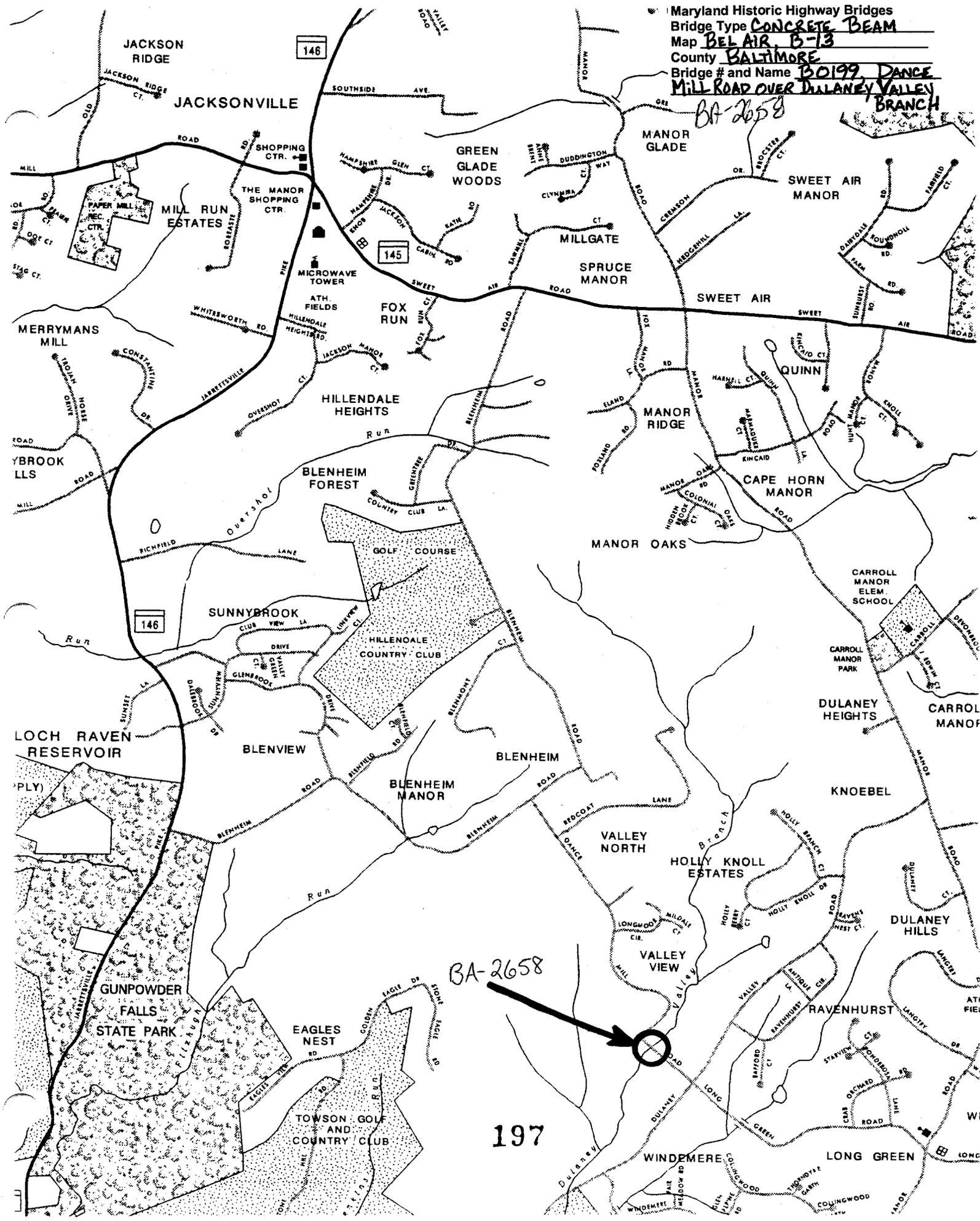
Date: 13 May 1996
Telephone: (717) 691-1340

Maryland Historic Highway Bridges
Bridge Type CONCRETE BEAM
Map BEL AIR, B-13
County BALTIMORE
Bridge # and Name 0199, DANCE
MILL ROAD OVER DULANEY VALLEY
BRANCH

BA-2658

BA-2658

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Inventory # BA-2658

B01991-DANCE MILL RD OVER DUANEY
Name VALLEY BRANCH

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SNA

Description EAST APPROACH LOOKING
NORTHWEST

Number 18 of 33



Inventory # BA-265B

B0199 - DANCE MILL RD OVER DULANEY

Name VALLEY BRANCH

County/State BALTIMORE COUNTY / MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description SOUTH ELEVATION LOOKING
NORTH

Number 2 of 38-3

A black and white photograph of a road, possibly a bridge or a narrow road, with a utility pole on the right side. The road is paved and leads into the distance. There are trees and bushes on both sides. A sign on the utility pole indicates a weight limit. The sign has the text "WEIGHT LIMIT" at the top, followed by three lines of text: "151", "18", and "13".

WEIGHT
LIMIT
151
18
13

Inventory # BA-2658

B0199 - DANCE MILL RD OVER DULANEY
Name VALLEY BRANCH

County/State BALTIMORE COUNTY/MD

Name of Photographer DAVE DIEHL

Date 1/95

Location of Negative SHA

Description WEST APPROACH LOOKING
SOUTHEAST

Number 3 of 35 3