

Maryland Historical Trust

Maryland Inventory of Historic Properties number: M:12-51
Name: Peach Tree Rd over CSXT RR

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 <u> X </u>	Eligibility Not Recommended <u> </u>
Criteria: <u> </u> A <u> </u> B <u> X </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>

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

MHT No. M:12-51

SHA Bridge No. M-150 Bridge name Peach Tree Road over CSXT Railroad

LOCATION:

Street/Road name and number [facility carried] Peach Tree Road

City/town Sellman Vicinity _____

County Montgomery

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

Ownership: State _____ County X 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 _____ Retractable _____ Pontoon _____

Metal Girder X _____:

Rolled Girder _____ Rolled Girder Concrete Encased X

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:

Setting: Urban _____ Small town _____ Rural X

Describe Setting:

Bridge No. M-150 carries Peach Tree Road over CSXT Railroad in Montgomery County. Peach Tree Road runs north-south, while the CSXT Railroad travels east-west. The bridge is located in Sellman, and is surrounded by single family dwellings and open space.

Describe Superstructure and Substructure:

Bridge No. M-150 is a 3-span, single-lane, concrete encased metal girder bridge. The bridge was built in 1928. The structure is 111 feet long and has a clear roadway width of 14 feet. The superstructure consists of five (5) concrete encased rolled girders which support a concrete deck and a non-structural railing. The girders are 2.5 feet x 11 inches and are spaced 3.2 feet apart. The roadway is carried on the girders. The concrete deck is 7.5 inches thick and it has a concrete wearing surface. The structure has steel angle railings. The substructure consists of two concrete spill-through abutments and two (2) concrete hammerhead piers. The bridge has a Montgomery County sufficiency rating of 49.5.

According to the 1995 inspection report, this structure is in fair to poor condition with cracking and spalling. The asphalt wearing surface has completely worn on the west side of the bridge. The east side of the bridge has cracking and spalled areas on the east side of the deck. The underside of the deck has open cracks with efflorescence. The concrete encasement has spalled from the bottom of the steel beams. The bottom flanges are exposed and corroding. Both piers and abutments have been patched with gunite.

Discuss Major Alterations:

According to the 1995 inspection report, there have been no major alterations to the bridge.

HISTORY:

WHEN was the bridge built: 1928
This date is: Actual X Estimated _____
Source of date: Plaque _____ Design plans _____ County bridge files/inspection form X
Other (specify)

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?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

N/A

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 X

The bridge is eligible for the National Register of Historic Places under Criterion C, as a significant example of metal girder construction. The structure has a high degree of integrity and retains such character-defining elements of its type as concrete encased steel beams, concrete abutments and hammerhead piers.

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?

The bridge is a potentially significant example of a metal girder bridge, possessing a high degree of integrity.

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

The bridge retains the character-defining elements of its type, as defined by the Statewide Historic Bridge Context, including concrete encased metal girders, concrete abutments and concrete hammerhead piers.

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

This bridge is a significant example of the work of the 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 X SHA inspection/bridge files

Other (list):

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.

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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

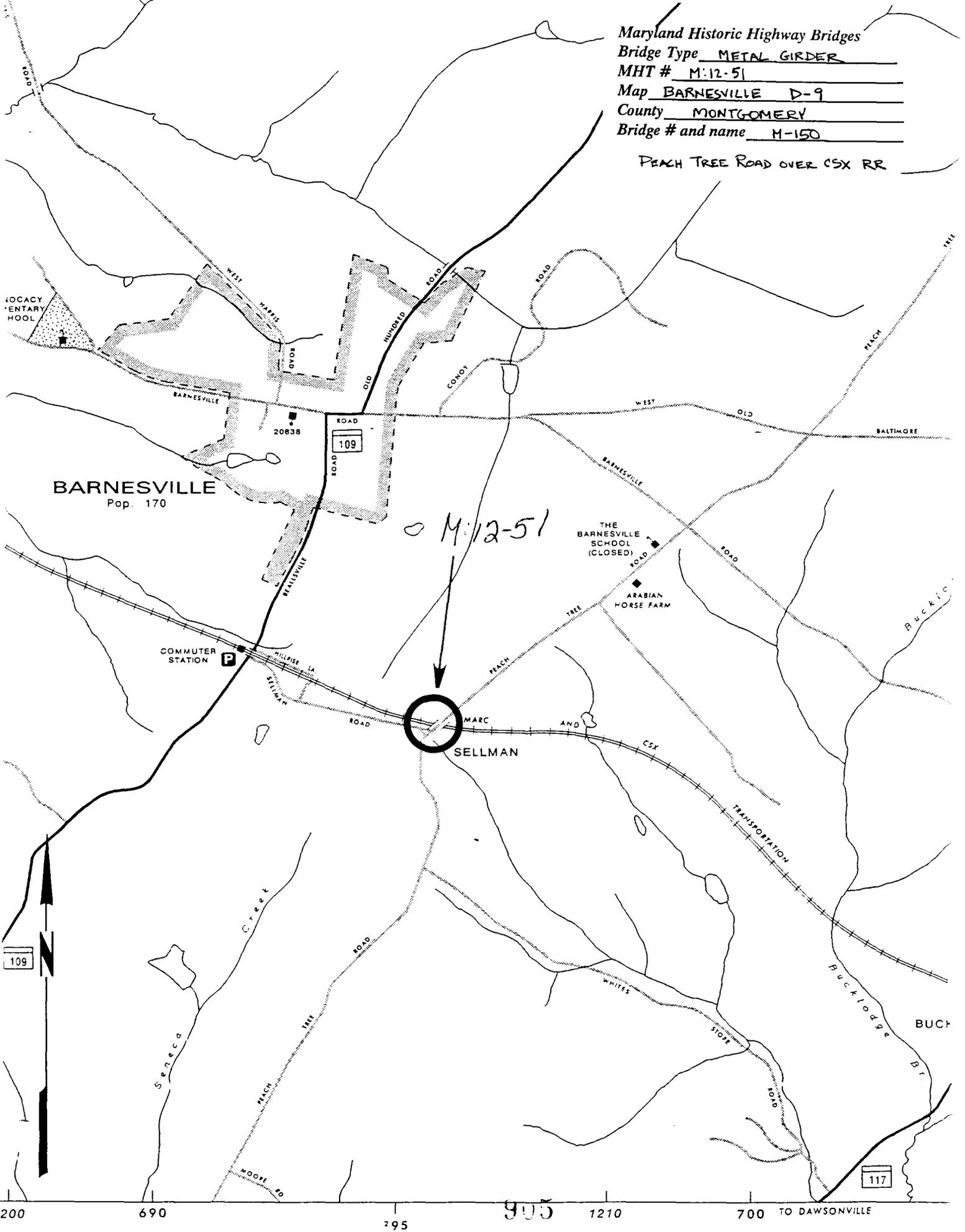
MHT # M:12-51

Map BARNESVILLE D-9

County MONTGOMERY

Bridge # and name M-150

PEACH TREE ROAD OVER CSX RR



200 690 295 905 1210 700 TO DAWSONVILLE



1. M-12-51
2. (M-150) PEACH TREE ROAD OVER CSXT RAILROAD
3. MONTGOMERY CO, MD
4. TIM TAMBURRINO
5. 3-97
6. MD SHPO
7. SOUTH APPROACH
8. 1 of 5



1. M: 12-51
2. (M-150) PEACH TREE ROAD OVER CSXT RAILROAD
3. MONTGOMERY CO., MD
4. TIM TAMBURRINO
5. 3-97
6. MD SHPO
7. NORTH APPROACH
8. 2 of 5



1. M:12-51
2. (M-150) PEACH TREE ROAD OVER CSXT RAILROAD
3. MONTGOMERY CO, MD
4. TIM TAMBURRINO
5. 3-97
6. MD SHPO
7. WEST ELEVATION
8. 3 of 5



1. M: 12-51
2. (M-150) PEACH TREE ROAD OVER CSXT RAILROAD
3. MONTGOMERY CO MD
4. TIM TAMBURINO
5. 3-97
6. MD SHPO
7. SUPERSTRUCTURE, EAST ELEVATION
8. 4 of 5



1. M: 12.51
2. (M-150) PEACH TREE ROAD OVER CSXT RAILROAD
3. MONTGOMERY CO, MD
4. TIM TAMBURRINO
5. 3.97
6. MD SHPO
7. EAST ELEVATION
8. 5 of 5

**INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM**

Property/District Name: Peach Tree Road over CSXT Railroad, Bridge #M-150

Survey Number: M:12-51

Project: Bridge Replacement Agency: MO Cnty. DPW

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

Eligibility recommended _____ Eligibility **not** recommended

Criteria: A B C D Considerations: A B C D E F G
 None

Justification for decision: (Use continuation sheet if necessary and attach map)

Based on the information provided, the Peach Tree Road over CSXT Railroad Bridge is a 1928 concrete rolled metal girder bridge with a concrete deck, steel railing, hammerhead piers and abutments. The last report produced for the bridge indicates that no major alterations have occurred on the bridge and thus the Peach Tree Road Bridge has all of its major CDEs, which would ordinarily make it eligible for the National Register. Indeed, P.A.C. Spero and Co. recommended the bridge's eligibility on the 1997 Historic Bridge Inventory survey form. However, the bridge's concrete has begun to fail, and thus the integrity of the materials is not sufficient to make the bridge eligible for the National Register under Criterion C. Furthermore, no known archeological sites are within the bridge, and therefore it is not eligible for the National Register under criterion D.

Documentation on the property/district is presented in: Project Review and Compliance

Prepared by: P.A.C. Spero & Co. and MO. Cnty. DPW (Manuel Monasi)

Anne E. Bruder 3/2/98
Reviewer, Office of Preservation Services Date

NR program concurrence: yes no not applicable

Peter J. Kuntz 3/2/98
Reviewer, NR program Date

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MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

- Eastern Shore (all Eastern Shore counties, and Cecil)
- Western Shore (Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
- Piedmont (Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
- Western Maryland (Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

- Paleo-Indian 10000-7500 B.C.
- Early Archaic 7500-6000 B.C.
- Middle Archaic 6000-4000 B.C.
- Late Archaic 4000-2000 B.C.
- Early Woodland 2000-500 B.C.
- Middle Woodland 500 B.C. - A.D. 900
- Late Woodland/Archaic A.D. 900-1600
- Contact and Settlement A.D. 1570-1750
- Rural Agrarian Intensification A.D. 1680-1815
- Agricultural-Industrial Transition A.D. 1815-1870
- Industrial/Urban Dominance A.D. 1870-1930
- Modern Period A.D. 1930-Present
- Unknown Period (prehistoric historic)

III. Prehistoric Period Themes:

- Subsistence
- Settlement
- Political
- Demographic
- Religion
- Technology
- Environmental Adaptation

IV. Historic Period Themes:

- Agriculture
- Architecture, Landscape Architecture, and Community Planning
- Economic (Commercial and Industrial)
- Government/Law
- Military
- Religion
- Social/Educational/Cultural
- Transportation

V. Resource Type:

Category: Structure
 Historic Environment: Rural
 Historic Function(s) and Use(s): Bridge/Transportation
 Known Design Source: _____



Photo A: View of 14-foot wide deck.



Photo B: View of deck indicates extensive cracking and spalling.



Photo C: View of existing substandard 20'7" vertical clearance and 8'6" horizontal clearance over the CSXT railroad tracks.



Photo D: View of bridge indicating Gunite repairs, severe spalling, and random transverse cracking.