

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: B-4526

Name: GUILFORD AVE. over CSX (BL 8029)

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 bridged received the following determination of eligibly.

MARYLAND HISTORICAL TRUST	
Eligibility Recommended <input checked="" type="checkbox"/> X	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. B-4526

Name and SHA No. Guilford Avenue Bridge (BC8029)

Location:

Street/Road Name and Number: Guilford Avenue over CSX

City/Town: Baltimore _____ vicinity

County: Baltimore _____

Ownership: __ State __ County x Municipal __ Other

This bridge projects over: __ Road x Railway __ 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

x Stone Arch

__ Metal Truss Bridge

__ 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

__ Concrete

__ Concrete Arch __ Concrete Slab __ Concrete Beam __ Rigid Frame

__ Other Type Name _____

Description:**Describe Setting:**

Bridge BC8029 carries Guilford Avenue over the CSX railroad in the City of Baltimore. Guilford Avenue is oriented in a north-south direction; the railroad runs generally east-west. The bridge is situated in a predominately residential neighborhood comprised almost exclusively of row houses.

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

Bridge BC8029 is a single span stone arch structure measuring 26 feet in length. Its arch is lined with an evenly shaped voussoir displaying a prominent keystone. The arch barrel is comprised of both brick and concrete sections. Abutments flare at perpendicular angles to the roadway and are topped with a series of stepped capstones. Parapets have been capped with wrought iron fencing.

Discuss major alterations:

No major alterations appear to have been undertaken at this bridge. However, minor modifications, such as lining the arch barrel with shotcrete or gunnite, have occurred at some point in the past. It should be noted that at the time the bridge was built, the electric overhead "third rail" was in place along the top of the arch. This feature has since been removed.

History:

When Built: 1895

Why Built: as part of B&O Railroad's Baltimore Belt Line

Who Built: B&O Railroad

Who Designed: B&O Railroad

Why Altered: stabilization of structure

Was this bridge built as part of an organized bridge building campaign: yes

Bridges BC8026, BC8027, BC8028, BC8029 and BC8030 were constructed during the 1890s as part of the grade separation campaign associated with the B&O Railroad's Baltimore Belt Line. As related structures, these bridges together are potentially eligible under Criterion A for their role as part of the first electric railway in the country.

Surveyor Analysis:

This bridge may have NR significance for association with:

A Events B Person

C Engineering/Architectural Character

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

Bridge BC8029, along with more than half a dozen others like it, was constructed as part of the Baltimore and Ohio's pioneer rail line named the Baltimore Belt Railroad. Prior to the opening of this line, the B&O had no way to connect its Camden Station on the southwestern side of the city with its Philadelphia line on the northeastern end of town. Several options were considered, including a raised track around the north side of the harbor; however the combination of the expense and outrage by residents prompted the company to seek an alternative solution. The final design called for constructing a massive tunnel connecting Camden Station with the North Avenue area along the line of Howard Street, with the line then passing under the specially designed North Avenue portal up along Jones Falls valley to Huntingdon Avenue, and finally cutting across town along the general route of 26th Street to connect with the Philadelphia line.

Measuring only 7.3 miles in total length, the Baltimore Belt Line was nevertheless an engineering nightmare. Since the grade from Camden Station to northern Baltimore was higher than most trains could comfortably handle under steam power, it was decided early on to use electricity as the means for solving the problem. Unfortunately, at this time electric traction was still in its infancy, although developing quickly. In 1892, B&O bravely signed a contract with the newly formed General Electric Company to provide electric power to the Baltimore Belt Line. Once implemented, this would be the first electric railway in the country. In another innovative move, the Howard Street tunnel was to be the longest soft-earth tunnel nationally (measuring 7340 feet in length).

Beginning at Huntingdon Avenue and 26th Street, the Baltimore Belt Line turned sharply east and traveled through the soon to be developed residential area called Peabody Heights (now referred to as Charles Village) and the already established community of Waverley, near York Road. This section of railway was constructed by excavating a deep channel for the tracks, and erecting a series of short tunnels (or bridges, depending on one's point of view) at the street crossing locations overhead.

The Baltimore Belt Line was under construction from 1890 to 1896. The first trains to use the line began running in May 1895, although this was under steam power only and travelling only in one direction. Ironically, while the B&O Railroad suffered sizable losses over the years, the Baltimore Belt Line has remained a popular and well-used route to this day.

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?

Unknown.

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 and visual character of the possible district?

Bridge BC8029 may be situated in an area eligible for historic designation. If so, the bridge would add to both the historic and visual character of the possible district.

Is the bridge a significant example of its type?

Bridge BC8029 is a well-preserved example of the stone arch bridge.

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

Bridge BC8029 possesses historic integrity of location, design, setting, materials, workmanship, feeling and association. Despite the minimal alterations discussed above, this bridge still retains integrity of most of its original components, including the stone arch ring, barrel, and abutments.

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

As components of the first electric railway, Bridges BC8026, BC8027, BC8029 and BC8030 are together potentially eligible under Criterion C as significant examples of the B&O Railroad's grade separation design and engineering campaign in Baltimore during the 1890s.

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

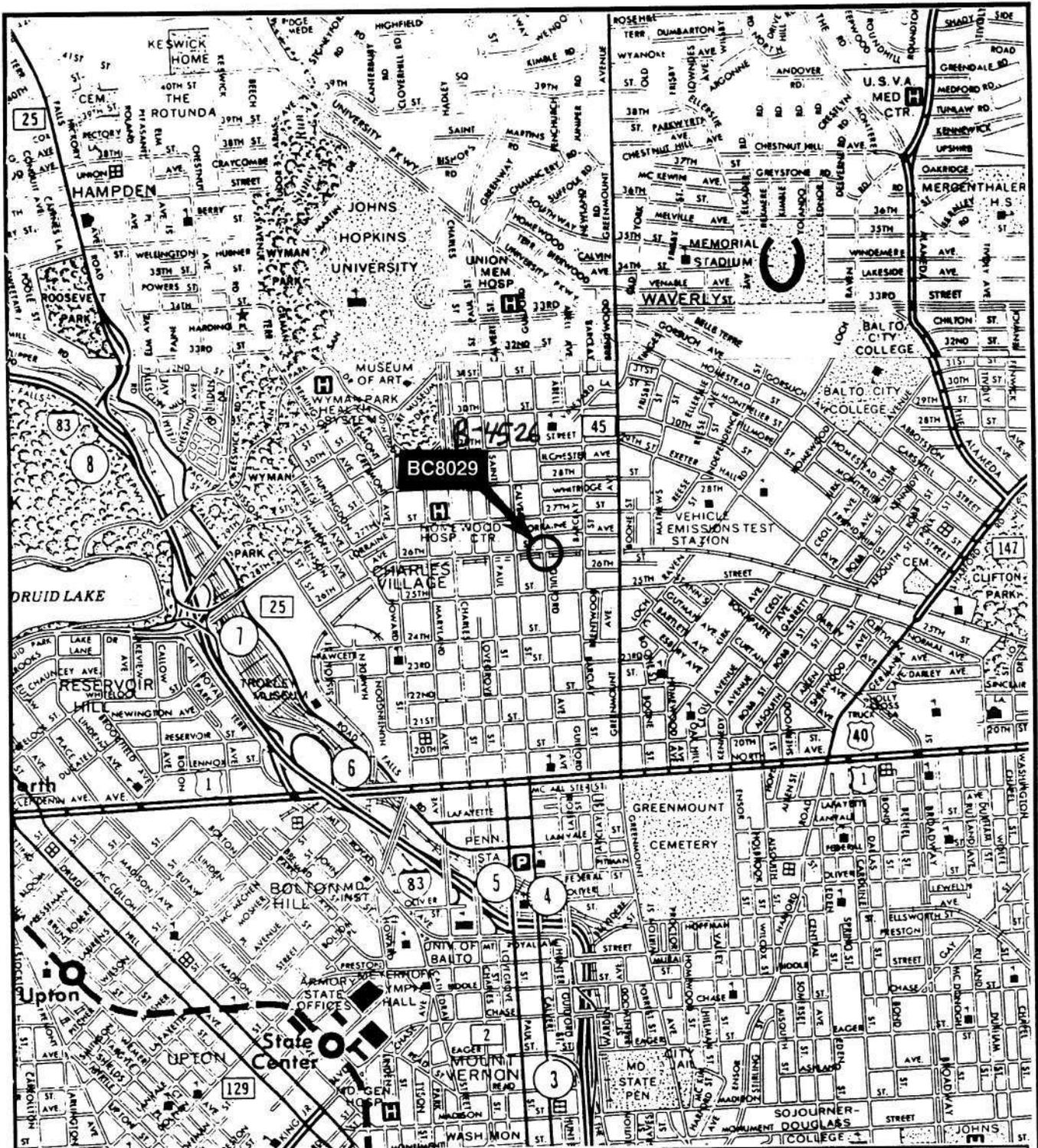
No further evaluation is necessary to determine National Register significance. However, additional research concerning the railroad's effect on the development of the neighborhood may be useful in providing a more complete picture of the bridge's background.

Provide black and white prints and negatives and color slides of bridge, details, and setting labeled according to NR Bulletin 16A and Maryland Supplement to Bulletin 16A.

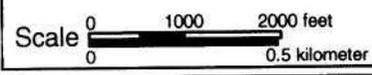
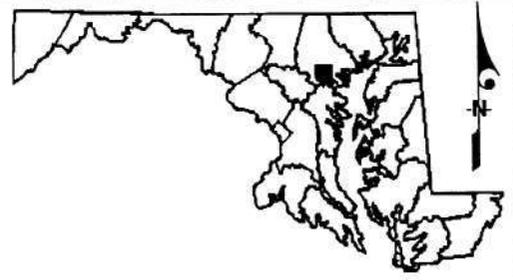
Provide a photocopy USGS map illustrating the location of the bridge.

Surveyor:

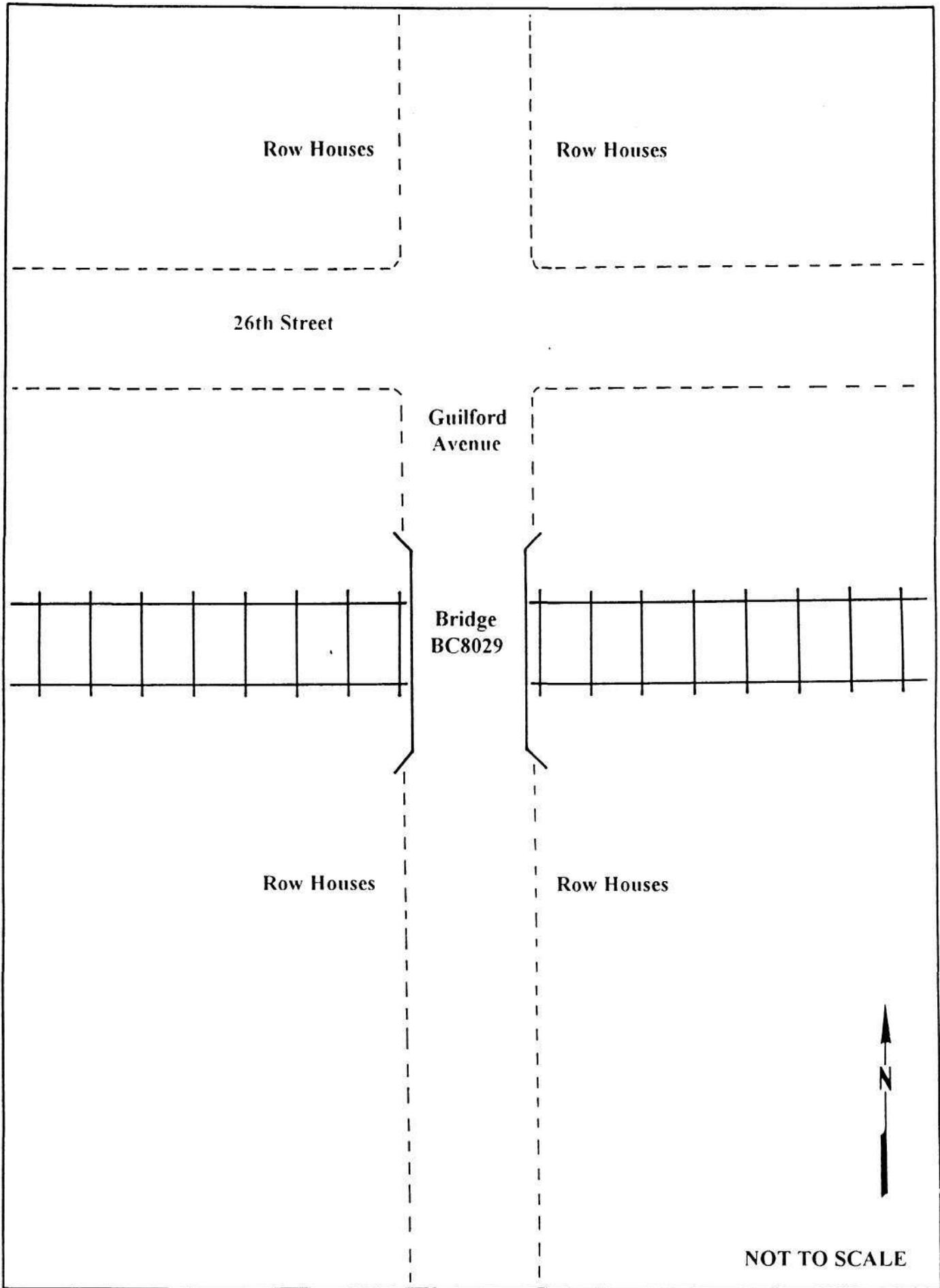
Name:	<u>Alice Crampton/Julie Abell</u>	Date:	<u>12/2/94</u>
Organization:	<u>Parsons Engineering Science, Inc.</u>	Telephone:	<u>(703) 591-7575</u>
Address:	<u>10521 Rosehaven Street</u>		
	<u>Fairfax, Virginia 22030-2899</u>		



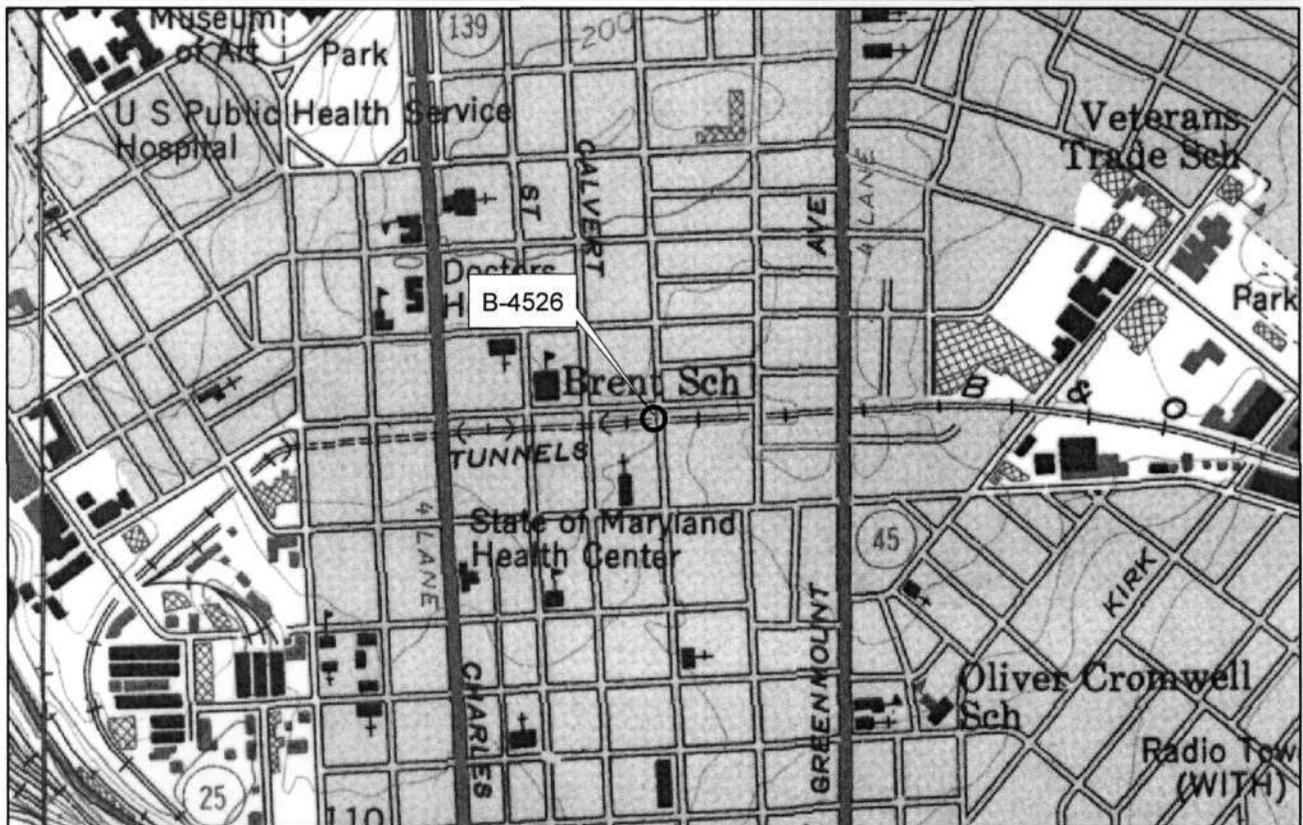
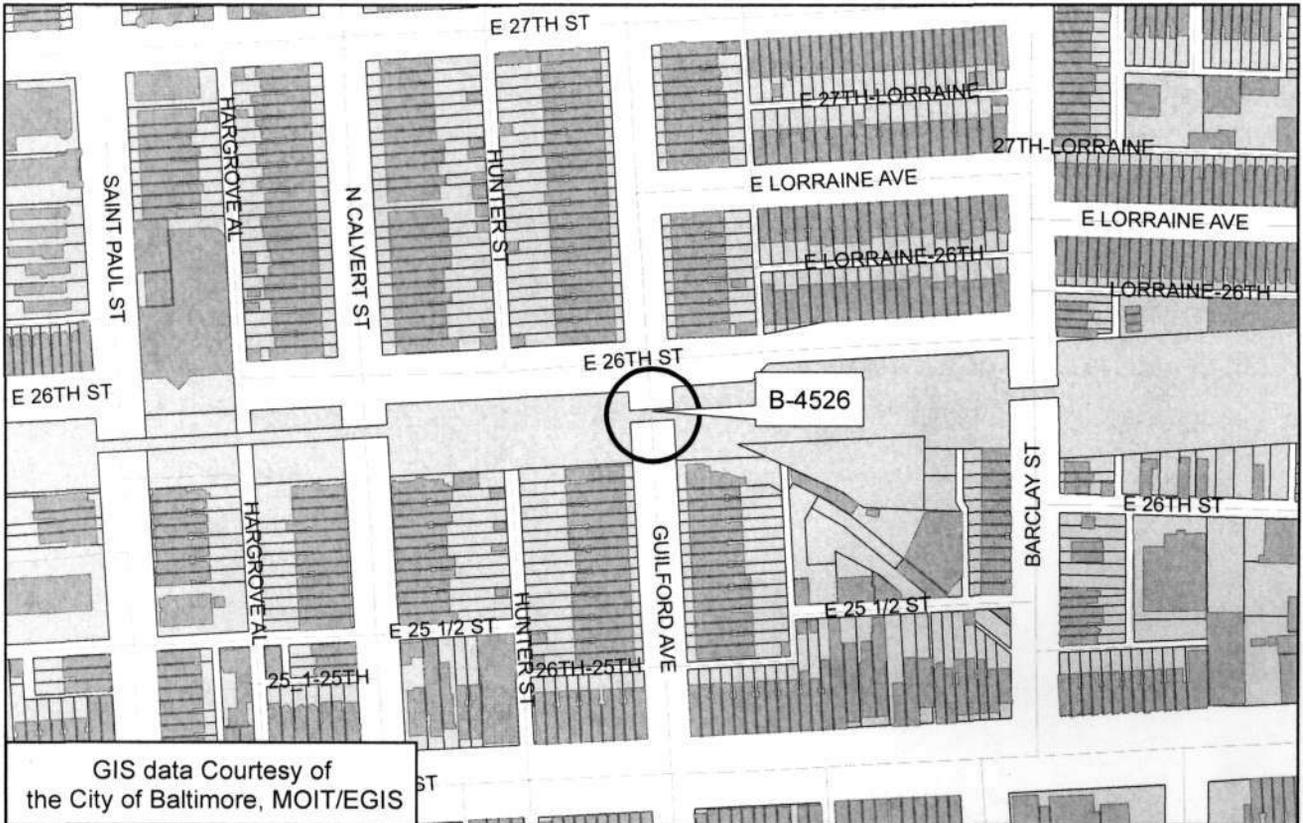
Baltimore City - Bridge Number BC8029
 Guilford Avenue over CSX
 B-4526



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B-4526
Guilford Avenue Bridge (BC8029)
Guilford Avenue over CSX
Baltimore City
Baltimore East Quad





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Guilford Avenue Bridge (BC8029)

Baltimore County, Maryland

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Maryland State Highway Administration

East elevation

1 of 4



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Guilford Avenue Bridge (BC8029)

Baltimore County, Maryland

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West elevation

2 of 4



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Guilford Avenue Bridge (BC8029)

Baltimore County, Maryland

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Approach looking north

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Guilford Avenue Bridge (BC8029)

Baltimore County, Maryland

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Approach looking south

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