Maryland Historical Trust

Maryland Inventory of His						le	Pa	tur	(In	D Rev
The bridge referenced here of the Historic Bridge Inve February 2001. The Trust received the following dete	ntory, a accepte	nd SHA provided the distoric Bridge	e Trus	t with	eligib	ility d	etern	ninati	ons ir	1
	M	ARYLAND HISTO	RICA	L TRU	ST	•				
Eligibility Recommended	_X			Eligib	ility N	ot Red	comm	ended		
Criteria:AB	_c	_D Considerations: _	A _	B _	_c _	_D_	E _	F _	G _	_None
Comments:								· · · · ·		
Reviewer, OPS:Anne E. E	Bruder				Date	e:3	April :	2001_		
Reviewer, NR Program: Peter E. Kurtze Date:3 April 2001										

Other Type Name

Maryland Historical Trust SHA Bridge No. HO 64 Name: Old Columbia Road over Middle Patuxent River **Location:** Street/Road Name and Number: Old Columbia Road City/Town: Columbia Vicinity County: Howard Ownership: __State X 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_Retractile_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

Describe Setting:

Bridge HO 64 carries Old Columbia Road over the Middle Patuxent River. Old Columbia Road runs north-south over the eastern flowing Middle Patuxent River. The bridge is in a rural section of Howard County. There is moderate residential development around the bridge.

Describe Superstructure and Substructure:

Bridge HO 64 is a single span filled concrete arch bridge. The length of the bridge is 49 feet with a clear span measuring 45 feet at the springline. The bridge has a rise of approximately 10 feet from springline to the crown. The rise to run ratio is 22 percent. The spandrel walls are approximately 12 feet by 12 feet. The wingwalls are approximately 10 feet by 8 feet. There is a clear roadway width of 15 feet 5 inches, with an overall bridge width of 17 feet 4 inches. The spandrel walls have moderate deterioration on the upstream and downstream walls. There are areas of moderate patching with pneumatically applied mortar on both spandrel walls. The arch ring has fine vertical cracking and some signs of efflorescence. According to a 1994 inspection report, the bridge is in satisfactory condition with a sufficiency rating of 83.0.

Bridge HO 64 has its original parapets. The builders used a closed parapet design that consists of vertical posts securely fastened by dowels to the structure, horizontal rails, and solid panels that fill the space between the posts and the railings. The panels may be precast, and the posts and rails were built in place. The precast panels are separated by solid paneled expansion joints. A 4-inch by 6-inch ledge extends the length of the parapets on the exterior of the bridge. The parapets are in a single section totaling 47 feet. Each section has 6 incised panels separated by a triangular shaped incision block. The parapets are in fair condition with moderate to light scaling.

Discuss Major Alterations:

There have been no major alterations to this structure.

History:

When Built? circa 1920
Why Built? Unknown
Who Built? Howard County Department of Public Works
Who Designed? Unknown
Why Altered? N/A
Was this bridge built as part of an organized bridge building campaign?
No, this bridge was not built as part of any state bridge building campaign.

Surveyor Analysis:

This bridge may have NR significance for association with:

XA Events Person XC Engineering/Architectural

This bridge was determined eligible by the Interagency Review Committee in March 1996.

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

The improvement of Howard County roads and bridges resulted from several events that occurred during the first 3 decades of the twentieth century. The original Good Roads movement was aimed toward improving the primary routes throughout the state as well as the connector routes such as Old Columbia Road. A later impact of this crusade included the various geometric improvements, including roadway widening and the reconstruction of substandard and narrow bridges to withstand the new demands placed on them by heavier

He-695

motorized traffic. During the 1920s, bridges that were initially adequate when roadway reconstruction was begun became obsolete as motorized traffic became modernized.

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.

Is the bridge a significant example of its type?

Yes this bridge is a significant example of Maryland's efforts from 1910 until 1945 to eliminate dangerous geometric alignments. The development of standardized plans helped to facilitate this process. However, this bridge also represents the Howard County's efforts to maintain and construct their own bridges. It has the unusual feature of a central inscribed diamond. The bridge was located in an area where a standardized bridge could not be implemented because of the length requirement, so the engineers chose to implement a graceful arched design with the newly formulated reinforced concrete technology.

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

Yes this bridge retains integrity of its character defining elements. The abutments, the barrel, the spandrel walls, and the parapets are original.

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

Yes, this bridge is a significant example of the work of Howard County in the 1920s.

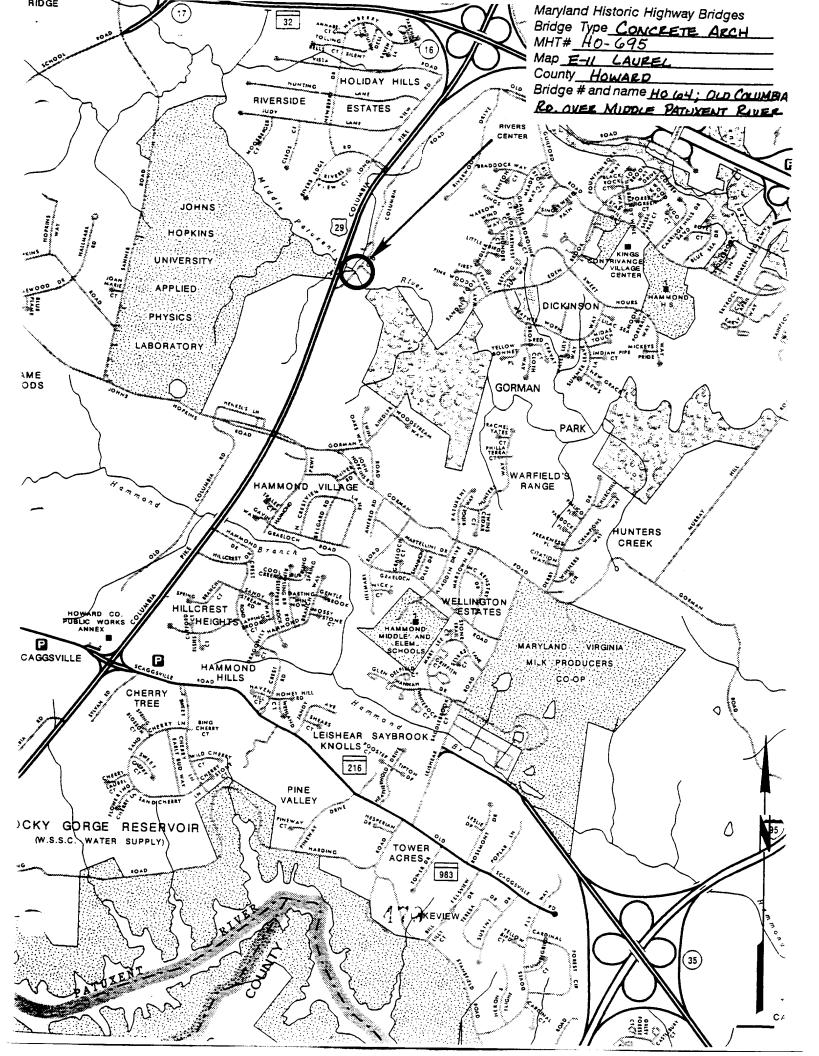
Should this bridge be given further study before significance analysis is made and why?

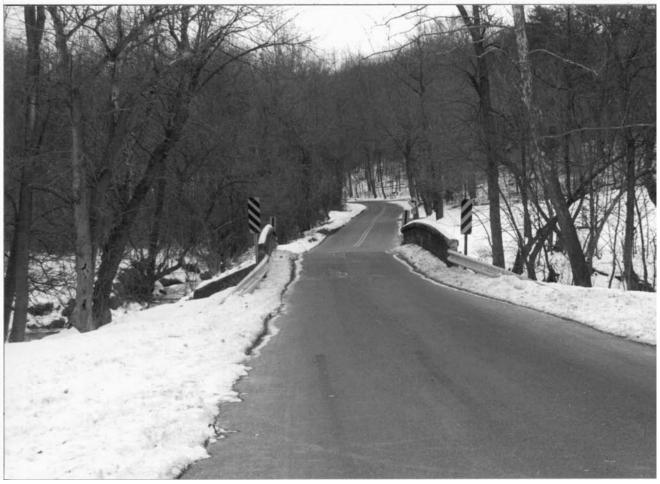
No, further research should not be done on this bridge.

Count	graphy: y inspection/bridge files X SHA inspection/bridge files
Other	(list):
Johnso	on, Arthur Newhall
1899	The Present Condition of Maryland Highways. In <i>Report on the Highways of Maryland</i> . Maryland Geological Survey, The Johns Hopkins University Press, Baltimore.
P.A.C.	Spero & Company and Louis Berger & Associates
1995	Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Maryland State Highway Administration, Maryland State Department of Transportation, Baltimore, Maryland.
Tyrrell	, H. Grattan
1909	Concrete Bridges and Culverts for Both Railroads and Highways. The Myron C. Clark Publishing Company, Chicago and New York.

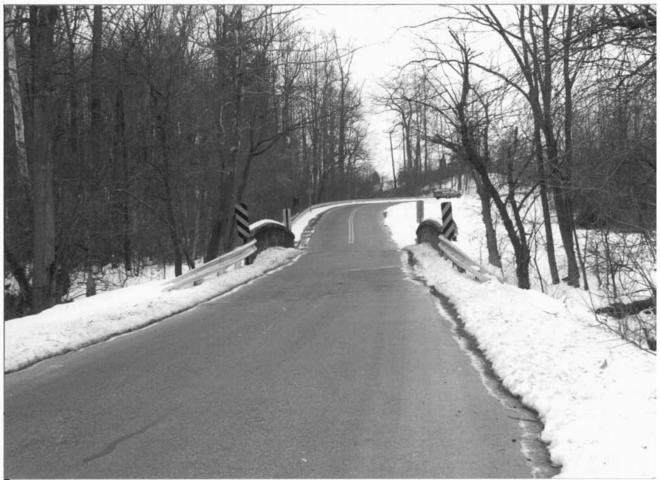
SURVEYOR:

Date bridge recorde	d December 1997
Name of surveyor _	Wallace, Montgomery & Associates / P.A.C. Spero & Company
Organization/Addre	ess P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number(410)	296-1635 FAX number (410) 296-1670



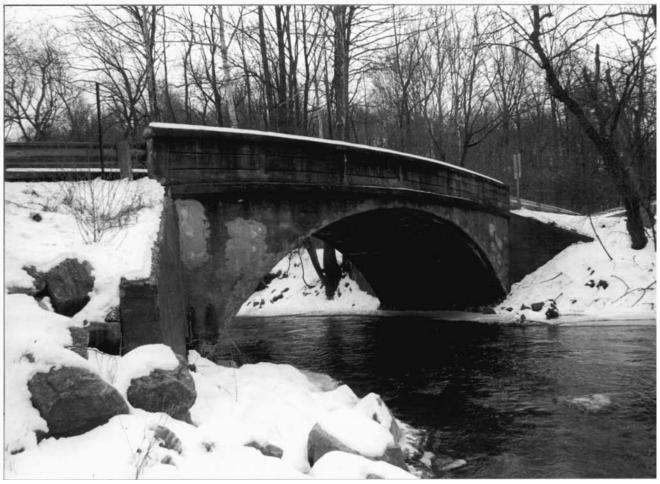


Inventory #H0-695
Name HOU4 - OLD COLUMBIA PIKE OVER PATULENT RIVER
County/State Howarp mo
Name of Photographer OAVID DIENL
Date 2 95
Location of Negative SHA
Description South APPRORTH LOOKING
NORTHERST 1
Number K of K



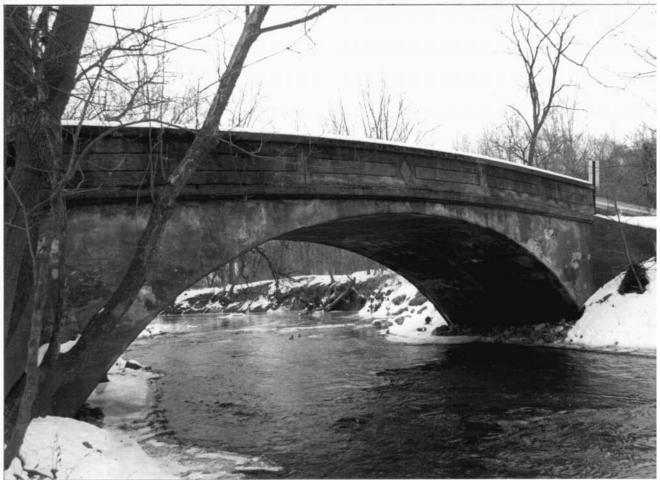
Inventory # $\frac{60^{\circ}695}{}$
Name HOGY-MIDDLE PATULENT RIVER
County/State Howard Imp
Name of Photographer DAVID DIEHL
Date 2 95
Location of Negative SHR
Description NORTH APPROACH LOOKING
South
Number of 3

THE SECRET OF SEC.



Jounny/State 1	MIDDLE PATULENT RIVER
Name of Photog	rapher DAVID DIEHL
Date 2/95	
Location of Neg	ative SHA
Description We	EST ELEVATION LOOKING SOUTH

THE SESTEMBER TITLE



Inventory #
Name HOOH- MIDDLE PATULENT RIVER
County/State Howard mo
Name of Photographer DAVID DIEHL
Date 2 95
Location of Negative SAR
Description EAST ELEVATION LOOKING
NORTHWEST
4 4
Number V of X

110 NAME & 21.00

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

Property/District Name: Old Columbia Road Bridge	Survey Number: HO-695
Tax Parcel#: N/A	
Project: Maryland 216/29 Project Planning Study	Agency: MDOT-SHA
Site visit by MHT Staff:noyes Name	Date
Eligibility recommended X Eligibility not recommen	ded
Criteria:AB _X_CD Considerations:ABC	CDEFGNone
Justification for decision: (Use continuation sheet if necessary ar	nd attach map)
The Old Columbia Road Bridge does not meet National Register has not revealed any association between the bridge and events the broad patterns of our history (Criterion A) or the lives of per here is no evidence that the bridge is likely to yield information (Criterion D).	that have made a significant contribution to rsons significant in our past (Criterion B).
However, based on Criterion C, the bridge, which embodies the and method of construction and possesses high artistic values, is strongly reflects two trends in bridge design: the renaissance of development of standardized bridge design. In addition, the brid City Beautiful movement in its stylized cast concrete ornamentateligible.	National Register-eligible. The bridge the concrete arch bridge and the lge bears evidence of the influence of the
Documentation on the property/district is presented in: Maryland	d Historical Trust Inventory Form
and Maryland 29/216 Project Planning Report	
Prepared by: Traceries, 5420 Western Ave., Chevy Chase, MD Reviewer, Office of Preservation Services Date	20815 November 1997
NR program concurrence: yesnonot applicable Reviewer, NR Program	121/99

MARYLAND HISTORICAL TRUST MD INVENTORY OF HISTORIC PROPERTIES	Inventory No. <u>HO-695</u>
1. Name of Property	
historic name	=======================================
common/other name Old Columbia Road Bride	ge
2. Location ====================================	
street & number Old Columbia Road no city or town Laurel vicinity state county Howard County code 27 zip cod	ot for publication te <u>Maryland</u> code <u>MD</u> de
3. State/Federal Agency Certification	N/A
4. National Park Service Certification	N/A
5. Classification	=======================================
Ownership of Property (Check all that app: private public-local public-State public-Federal	ly)
Category of Property (Check only one box) building(s) district site x structure object	
$\begin{array}{ccc} \underline{1} & \underline{0} & \text{st} \\ \underline{0} & \underline{0} & \text{oh} \end{array}$	uildings ites tructures ojects otal
Is this property listed in the National Review Yes Name of Listing No _X	egister?

Maryland Inventory of Historic Properties Old Columbia Road Bridge Howard County, Maryland

of the property.)

Inventory No. <u>HO-695</u> Page 2

6. Function	or Use
Historic Fu	Inctions (Enter categories from instructions) TRANSPORTATION Sub: Bridge
	TRANSPORTATION Sub: Bridge
7. Descript	======================================
	ral Classification (Enter categories from instructions) No Style
founda roof	Enter categories from instructions) tion <u>Concrete</u> N/A Concrete
Narrative D	escription (Describe the historic and current condition

See Continuation Sheet No. 7-1

8. Statement of Significance					
Applicable National Register Criteria (Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing)					
A	Property is associated with events that have made a significant contribution to the broad patterns of our history.				
В	Property is associated with the lives of persons significant in our past.				
<u>X</u> C	Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.				
D	Property has yielded, or is likely to yield information important in prehistory or history.				
Criteria Considerations (Mark "X" in all the boxes that apply.)					
A	owned by a religious institution or used for religious purposes.				
В	removed from its original location.				
С	a birthplace or a grave.				
D	a cemetery.				
E	a reconstructed building, object, or structure.				
F	a commemorative property.				
G	less than 50 years of age or achieved significance within the past 50 years.				

Maryland Inventory of Historic Properties Old Columbia Road Bridge Howard County, Maryland

Inventory No. HO-695 Page 4

=======================================
Areas of Significance (Enter categories from instructions)
<u>Transportation</u> Engineering
Engineering
Period of Significance 1915-present
Significant Dates 1915-1930
-
Significant Person (Complete if Criterion B is marked above)
respect to the marked above)
-1
Cultural Affiliation <u>Undefined</u>
Architect/Builder <u>Unknown</u>
Narrative Statement of Significance (Explain the significance of the property.)
See Continuation Sheet No. 8-1

=======================================
======================================
(Cite the books, articles, legal records, and other sources used in preparing this form.)
P.A.C. Spero & Company and Louis Berger & Associates, Historic Highway Bridges in Maryland: 1631-1960, Historic Context Report, July 1995 (Revised October 1995).
======================================
Acreage of Property <u>Less than one acre</u>
Verbal Boundary Description (Describe the boundaries of the property.)
The Old Columbia Road Bridge spans the Middle Patuxent River just northeast of where Old Columbia Road intersects Route 29 north of Johns Hopkins Road in Laurel, Maryland.
Boundary Justification (Explain why the boundaries were selected.) The bridge has been associated with this site since the time of its construction in the early twentieth century.
======================================
name/title <u>Kathryn A. Gettings, Architectural Historian</u> organization <u>Traceries</u> date <u>Nov. 4, 1997</u> street & number <u>5420 Western Avenue</u> telephone <u>301/656-5283</u> city or town <u>Chevy Chase</u> state <u>MD</u> zip code 20815
======================================
name_Howard_County, Maryland street & number <u>3430 Courthouse Drive</u> telephone <u>(410) 313-4401</u> city or town <u>Ellicott City</u> state <u>MD</u> zip code <u>21043</u>

MARYLAND INVENTORY OF HISTORIC PROPERTIES CONTINUATION SHEET

Inventory No. <u>HO-695</u>

Section __7_ Page _1_

Old Columbia Road Bridge name of property Howard County, Maryland county and state

This concrete arch bridge is located on a stretch of historic Columbia Road (originally known as the Columbia Turnpike Road). The bridge spans the Middle Patuxent River with a single-span, one-lane closed concrete arch structure. Erected between 1915 and 1930, the bridge has a length of approximately forty feet and a fifteen- to twenty-foot-wide deck. A single barrel arch spans the watercourse and stands approximately fifteen feet above the water's surface at its highest point.

The superstructure of the bridge remains in excellent condition. The elements of primary importance in this bridge, the arch ring, barrel, spandrel walls, and parapet walls, remain intact. The interior and exterior faces of the 3-1/2-foot parapet walls are decorated with cast rectangular panels, and a single lozenge-shaped panel accentuates the center of the exterior face of each wall. Square-edged concrete coping finishes the top of each parapet wall. The substructure of the bridge also remains in place. The abutments consist of poured reinforced concrete as do the wing walls above.

The bridge is in generally good condition with the only signs of deterioration being spalling on the edges of the parapet walls and the disappearance of a commemorative plaque that was bolted to the inner face of the southeast wall. The only major alteration made to the structure was the addition of metal guard rails at either end extending the length of the knee walls.

The bridge is located on a portion of Old Columbia Road which, although superseded by US 29, still carries local traffic. The bridge itself remains intact, as does the setting of the bridge. Despite the proximity of the bridge to the new US 29, the Old Columbia Road bridge's original picturesque appearance is maintained by the woodland that stands to either side of the bridge.

MARYLAND INVENTORY OF HISTORIC PROPERTIES CONTINUATION SHEET

Inventory No. HO-695

Section 8 Page 1

Old Columbia Road Bridge name of property Howard County, Maryland county and state

The Old Columbia Road Bridge (HO-64) spanning the Middle Patuxent River is one of many concrete bridges built throughout Maryland during the late-nineteenth and early-twentieth centuries. The bridge originally served a main north-south route, Columbia Turnpike. For residents of the Scaggsville and Oakland Mills area, Columbia Turnpike was the major route north to Columbia, although this area of the road was not well-developed in this area at that time. When US 29 was relocated, the road and bridge became limited to local traffic.

The bridge strongly reflects two trends in bridge design: the development of reinforced concrete and the development of standardized bridge design. In addition, the popularity of the City Beautiful movement influenced the appearance of this bridge.

In the early twentieth century, the development of reinforced concrete construction initiated a renaissance in arched bridge construction. The use of reinforced concrete allowed the arch bridge, a form that lends itself to load-bearing functions, to be constructed more easily. In addition, the use of concrete allowed more decorative features to be introduced within the bridge. Many bridges, like the bridge at Old Columbia Road, incorporated stylized designs in the cast concrete.

With the rise of road planning, standardized bridge designs were developed in Maryland. While these standardized plans were dominantly of the beam and slab type of construction, the arched bridge, like the bridge at South Entrance Road, was often utilized when aesthetic issues or site conditions required a less utilitarian structure. There exist nearly seventy extant concrete arch bridges on Maryland's state highways built between 1900 and 1940.

The form, decoration, and siting of the bridge reflect a desire of the designers to devise an aesthetically pleasing bridge. During this period, the City Beautiful movement was sweeping the nation. Designers encouraged the construction of public buildings and structures that were attractive, not merely functional.

The Old Columbia Road Bridge over the Middle Patuxent River is a good example of a concrete arch bridge complete with its minimalist architectural decoration. Similar in plan and design to the South Entrance Road Bridge (MHT-724), the Old Columbia Road span was likely funded by Howard County and constructed by a private contractor.

MARYLAND INVENTORY OF HISTORIC PROPERTIES CONTINUATION SHEET

Inventory No. <u>HO-695</u>

Old Columbia Road Bridge name of property Howard County, Maryland county and state

Chain of Title:

Current Owners: Howard County, Maryland

Inventory No. <u>HO-695</u>

Old Columbia Road Bridge

name of property

Howard County, Maryland

county and state

HISTORIC CONTEXT:

Geographic Organization: Piedmont

Chronological/Development Period (s):

Industrial/Urban Dominance (1870-

1930)

Modern Period (1930-present)

Prehistoric/Historic Period Theme (s):

Transportation

RESOURCE TYPE(S)

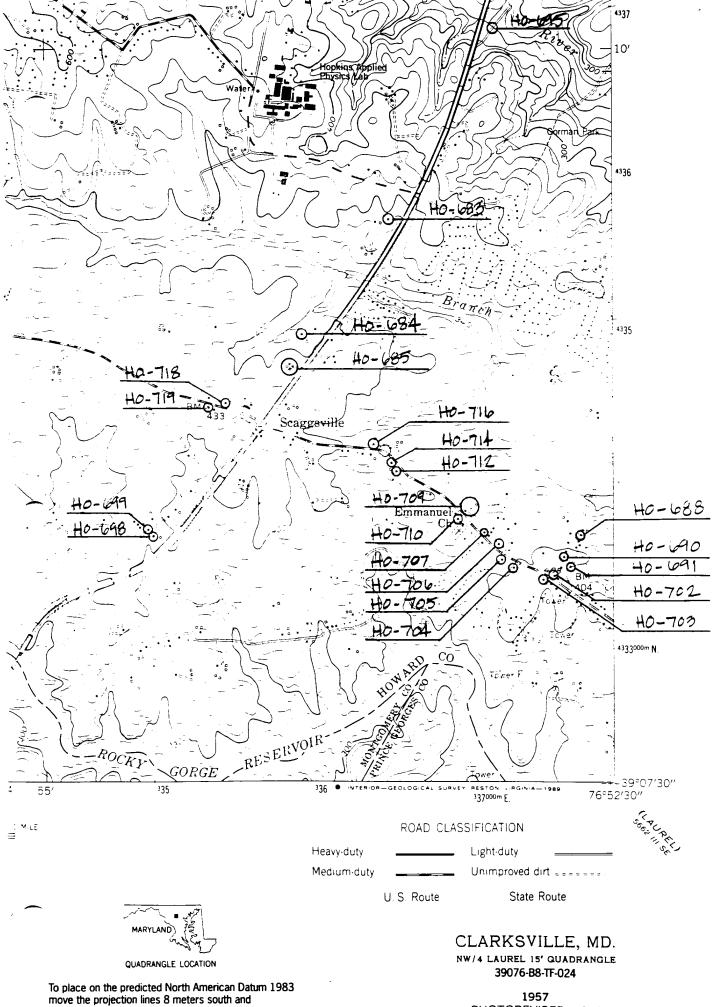
Category: Structure

Historic Environment: Rural

Historic Function (s): TRANSPORTATION/Bridge

Known Design Source: Unknown

Laurel, Howard County MD SKETCH MAP HO-695 2 Middle Patoxent Eiver 1972 Rt. 29 Bridge moded aree Rt. 29



26 meters west as shown by dashed corner ticks

PHOTOREVISED 1979 DMA 5662 III NW-SERIES V833



HO-695 OLD COLUMBIA ROAD BRIDGE HOWARD COUNTY, MD TRACERIES OCTOBER 1997 MD SHPO GENERAL VIEW OF ROADWAY - LOOKING NE 1 OF 4



HO-695

OLD COLUMBIA ROAD BRIDGE
HOWARD COUNTY, MD

TRACERIES
OCTOBER 1997

MD. SHPO

BRIDGE SPAN LOOKING SE

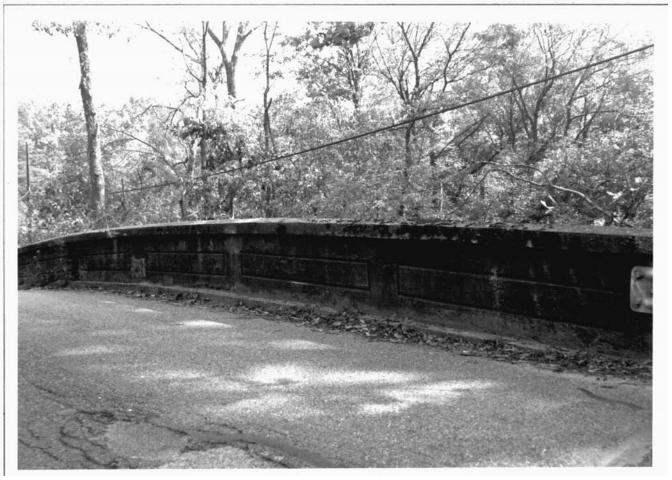
20F4



HO-695 OLD COLUMBIA ROAD BRIDGE HOWARD COUNTY, MD TRACERIES OCTOBER 1997 MD SHPO

BRIDGE SPAN - LOOKING NORTH

3 OF4



HO-695 OLD COLUMBIA ROAD BRIDGE HOWARD COUNTY, MD TRACERIES OCTOBER 1997 MD SHPO KNEE WALL - INTERIOR LOOKING EAST 4 OF 4