Maryland Historical Trust

Maryland Inventory of Historic Properties number: HA-1251

Name: Cherry Hill Rd. over Deer Creek

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 ___X___ Eligibility Not Recommended _____

Criteria: ___A ___B _X_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 MHT No. HA-1251
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

SHA Bridge No. H-94 Bridge name Cherry Hill Road over Deer Creek

LOCATION:
Street/Road name and number [facility carried] Cherry Hill Road

City/town Rocks State Park Vicinity x

County Harford

This bridge projects over: Road____ Railway_____ Water X 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 x_____

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 _____

Concrete ___ :
Concrete Arch_____ Concrete Slab __ Concrete Beam ____ Rigid Frame _____
Other _____ Type Name _____

HA-1251

DESCRIPTION:

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

Describe Setting:

Bridge H-94 carries Cherry Hill Road over Deer Creek approximately 1.5 miles south of the town of Rocks. Cherry Hill Creek runs generally in a north/south direction in the area while Deer Creek flows to the east then south. The bridge is situated in a wooded valley next to a 4-H campsite. The area is relatively undeveloped with no residential buildings around the bridge.

Describe Superstructure and Substructure:

Bridge H-94 is a single span Pratt through truss measuring 117 feet in total length. It has 9 panels and features diagonal endposts. The top chord is a built-up section of two channels with cover plates and stay bars. The bottom chord consists of two rectangular eyebars. The floor system consists of only the original floorbeams; the rest of the floor system has been replaced by a "mabey panel" pony truss which is located inside the through truss structure. The verticals consist of rivetted rolled sections with welded angle additions; diagonals are paired rectangular eyebars, while the counters are cylindrical eyebars. All connections are pinned. The clear width of the roadway is 15'-3". There is no sidewalk on the bridge and the truss members are protected by the new pony truss erected within the original truss. The bridge has a 90 degree alignment to the streambed. The abutments are concrete with concrete wingwalls.

Discuss Major Alterations:

Harford County records indicate the Acrow, or mabey, truss, fitting inside the original truss, was added in 1991 to supplement the load carrying capacity of the bridge. The original through truss supports only its dead load, while the added "mabey panel" truss bridge carries both its own dead load and the live loads of the bridge.

HISTORY:

WHEN was the bridge built 1885-1900

This date is: Actual __ **Estimated** ___x_____

Source of date: Plaque _____ **Design plans** ___ **County bridge files/inspection form** ____

Other (specify): Photographs of the bridge's plaque survive, noting Wrought Iron Bridge Co. but no date. The appearance of the bridge is compatible with W.I.B.Co bridges of 1885-1890.

WHY was the bridge built?

To facilitate local travel needs.

WHO was the designer?

Wrought Iron Bridge Company

WHO was the builder?

The bridge was built by the Wrought Iron Bridge Company of Canton, Ohio. Organized in 1864 by David Hammond and incorporated in 1871, the company was an early and prolific wrought iron bridge builder.

The company published a 'Book of Designs' in 1874, which featured a history of wrought iron bridge building in the U.S. and Europe and a detailed record of the firm's experience. Numerous plans illustrated the variations available.

Like so many of the early bridge builders, the Wrought Iron Bridge Company was eventually bought out by the American Bridge Company. In 1901 the American Bridge Company was purchased by and became a subsidiary of United States Steel, presently known as USX. Purchased by Mr. Brock Rowley, the American Bridge Company was reorganized in early 1987 and presently operates independently with headquarters in Pittsburgh, Pennsylvania.

WHY was the bridge altered?
To maintain load carrying capacity.

Was this bridge built as part of an organized bridge-building campaign?
Bridge H-94 was not 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_____

Was the bridge constructed in response to significant events in Maryland or local history?
Bridge H-94 was one of a large number of metal truss bridges built in Maryland in the late nineteenth and early twentieth centuries. Metal trusses built in the late nineteenth century were frequently of wrought iron construction and featured pinned connections. During the late nineteenth century Baltimore County and Harford County advertised and built a number of metal truss bridges.

General Truss Bridge Trends
The first metal truss bridges in the United States were built to carry rail and canal traffic. A rapidly expanding railroad network, with needs for long spans, heavy load capacity and rapid construction, served as the impetus for advances in metal truss technology from the mid-nineteenth century to its close. The earliest metal truss forms of the United States were patented and introduced between 1830 and the Civil War, including the popular Pratt (1844) and Warren (1848) types.

From the Civil War through the end of the century metal truss technology improved in response to increasing loads and speeds, and new transportation needs; steel began to replace iron; numerous "bridge works" and "iron works" were established in the eastern U.S. for fabricating and shipping the truss components to the bridge site; and expanding road networks required a low cost, expedient bridge type.

General Trends in Maryland
In Maryland, the earliest metal truss bridges carried rail lines, including the Baltimore & Ohio (B&O) and the Baltimore and Susquehanna Railroads. As early as 1849, B&O Chief Engineer Benjamin H. Latrobe recommended the construction of metal truss bridges for "large crossings"; in 1850 he reported "much satisfaction" with the future of iron bridges after constructing the metal truss bridge at Savage.

Numerous metal truss bridges were manufactured in Baltimore, the early industrial hub of bridge building activity in the state, from the 1850s through the 1880s. Among the early bridge builders in the 1850s and 1860s were former B&O employees, B.H. Latrobe and Wendell Bollman, founders of competing Baltimore bridge building companies. Historical research identified more than twenty-five bridge companies that built truss bridges in the state between 1850 and 1920. Among these were the Wrought Iron Bridge Company, King Iron Bridge Company, Patapsco Bridge and Iron Works, Baltimore Bridge Company, Pittsburg Bridge Company, Penn Bridge Company, Smith Bridge

Company, Groton Bridge and Manufacturing Company, Roanoke Iron and Bridge Company, York Bridge Company, Vincennes Bridge Company, Bethlehem Steel Company, American Bridge Company.

The location of the Baltimore & Ohio Railroad, Baltimore bridge fabricators, and the urban needs of the city and its environs resulted in the erection of numerous early truss bridges in Baltimore and the surrounding area. Initially constructed for the railroads, their use quickly came to replace the earlier timber bridges on Baltimore roads.

From Baltimore, the use of the metal truss spread to other parts of the state, with County Commissioners in the Piedmont and Appalachian Plateau counties erecting numerous metal trusses from the 1870s to the early twentieth century.

Harford County Trends

Nine extant metal truss bridges were identified in Harford County as a result of SHA's 1994-1995 historic bridge survey:

H-1, single span Pratt through truss built in 1884
H-54, single span Pratt truss built c. 1889-1897
H-53, single span Pratt pony truss built c. 1885-1900
H-58, single span Pratt through truss built in 1886
H-94, single span Pratt through truss built c. 1885-1900
H-160, single span Pratt through truss built in 1883
12016, single span Pratt truss built in 1934
12033, single span Warren pony truss built c. 1930
12052, 2 Pratt spans built in 1927

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?
This metal truss bridge would have facilitated travel in this area of Harford counties.

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 not located in an area which may be eligible for historic designation.

Is the bridge a significant example of its type?
This bridge is a somewhat compromised example of a Pratt through truss.

Does the bridge retain integrity of important elements described in Context Addendum?
The bridge has lost integrity of a number of its character defining elements with the introduction of the 1991 load-carrying steel pony truss. The new truss has been added in a non-intrusive way and it is clearly distinguishable from the original. It allows the truss to remain in places, and does not visibly detract significantly from the historic appearance of the truss. The bridge retains enough of its integrity to represent its type, which is a rapidly diminishing resource type.

This bridge retains integrity of location, setting, feeling and association.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?
The bridge significant as a remaining example built by the Wrought Iron Bridge Company of Canton, Ohio.

HF-135

Should the bridge be given further study before an evaluation of its significance is made?
Bridge H-94 is listed in the Maryland Historical Trust's Inventory of historic sites. No further study is recommended.

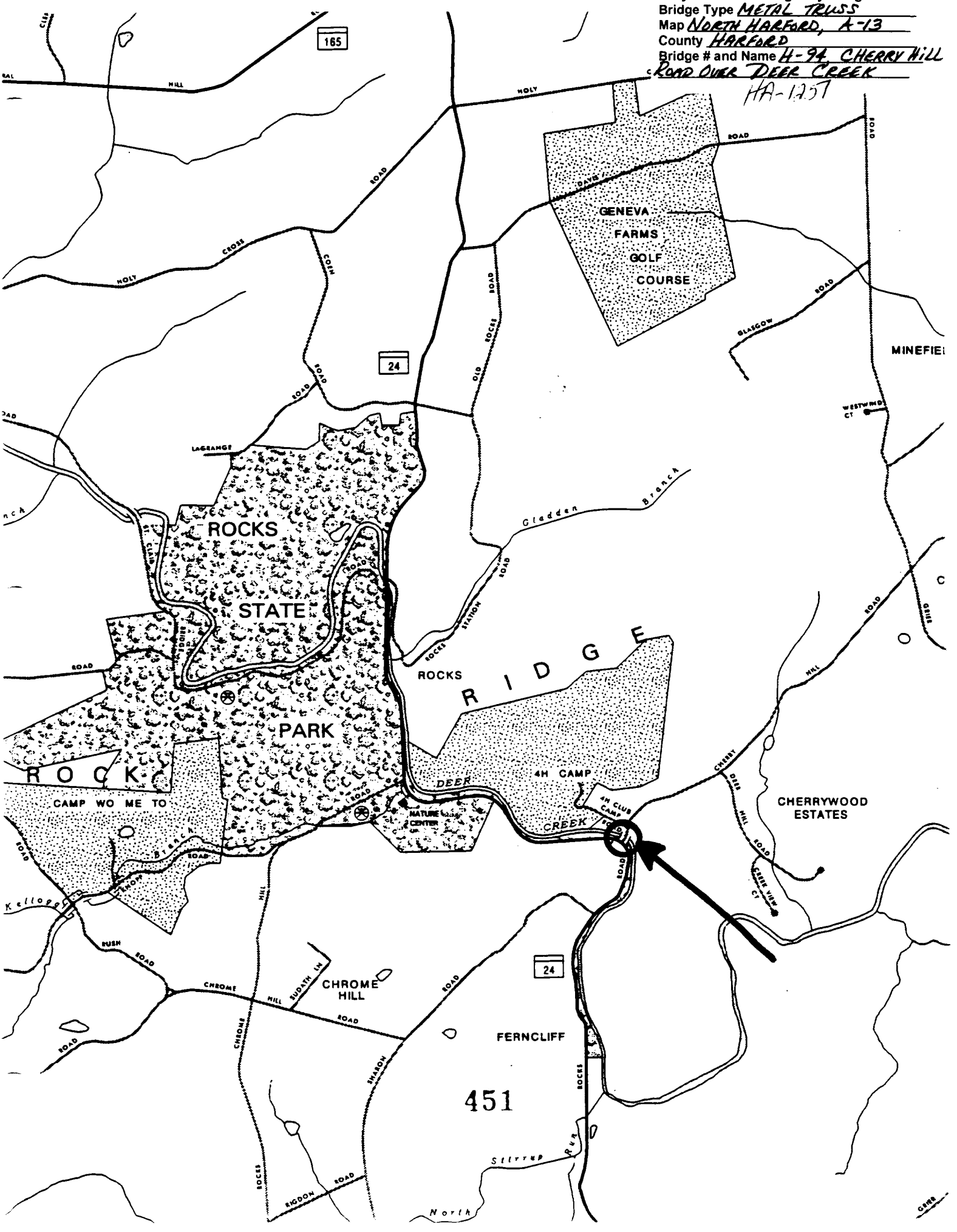
BIBLIOGRAPHY:
County inspection/bridge files _ **SHA inspection/bridge files**
Other (list):
County survey files of the Maryland Historical Trust

P.A.C. Spero & Company and Louis Berger & Associates, *Historic Highway Bridges in Maryland: Historic Context Report*. Prepared for the Maryland State Highway Administration.

SURVEYOR:
Date bridge recorded January 1996

Name of surveyor Paula Spero/Colin Farr
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Suite 412, Baltimore, Maryland 21204
Phone number 410-296-1635 **FAX number** 410-296-1670

Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map NORTH HARFORD, A-13
County HARFORD
Bridge # and Name H-94 CHERRY HILL ROAD OVER DEER CREEK
HA-125T



H 94 EAST ELEVATION 12

1 HA-1251

2 Cherry Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February 1996

6 PAC Speroand Company, Towson MD 21204

7 Cherry Hill Rd. over Deer Creek, east elevation

8 [illegible] of 9


WEIGHT
LIMIT
15
TONS

H94 NORTH EAST ELEVATION 5

1 HA-1251

2 Chevy Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February 1990

6 PAC Spero and Company, Towson MD 21204

7 Chevy Hill Road over Deer Creek, north-east elevation

8 5 of 9


WEIGH
LIMI
15
TON

H94 NORTH PORTAL 1

1 HA-1251

2 Cherry Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February 1996

6 PAC Spiro and Company, Towson MD 21204

7 Cherry Hill Rd. over Deer Creek, North portal

8 3 of 9

H 94 VERTICALS 10

1 4-1251

2 Chewy Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February 1996

6 PHC Spiro and Company: Towson MD 21204

7 Chewy Hill Road over Deer Creek, HW35

8 4 of 9 members

H94 TOPCHORD + END POST

HA-1251

Cherry Hill Road over Deer Creek

Harford County

Colin Farr

February 1996

PAC Spero and Company, Towson MD 21204

Cherry Hill Rd. over Deer Creek. topchord and endpost

5 of 9

H94 UPPER PIN CONNECTION 8

1 HA-1251

2 Cherry Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February, MD

6 PAC Spero and Company, Towson MD 21204

7 Cherry Hill Road over Deer Creek, upper pin connection

8 6 of 9

H94 UNDER DECK 13

1 HA-1251

2 Chewy Hill Road over Deer Creek

3 Harford County

4 Colin Farr

5 February 1996

6 PAC Spew and Company, Towson MD 21204

7 Chewy Hill Rd. over Deer Creek, underdeck

8 1 of 9

1. HA-1251
2. H94, Cherry Hill Road over Deer Creek
3. Harford County, MD
4. Tim Tamburrino
5 July 1997
6 MD SHPO
7 North approach
8. E of 9

1. HA-1251

2. H94, Cherry Hill Road over Deer Creek

3. Harford County, MD

4. Tim Tamburino

5. July 1997

6. MD SHA

7. East elevation

8. 9 of 9

9700373

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

Property/District Name: Cherry Hill Road Bridge (Bridge#94) Survey Number: HA-1251

Project: Rehabilitation of Cherry Hill Road Bridge Agency: FHWA/Harford County

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

Eligibility recommended X Eligibility **not** recommended _____

Criteria: ___A ___B X C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

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

The Cherry Hill Road Bridge, carrying Cherry Hill Road over Deer Creek in northeastern Harford County, is eligible for the National Register under Criterion C as a remaining example of a Pratt truss constructed by the Wrought Iron Bridge Company of Canton, Ohio. The single lane, single span, through Pratt truss was built between 1885 and 1900. Metal truss bridge were erected in large numbers in Maryland and across the country in the late 19th and early 20th centuries. Harford County embarked on an extensive program of metal truss bridge construction in the late 19th century. This bridge is one of approximately 50 metal truss bridges remaining in vehicular use in the state and one of nine extant metal truss bridges identified in Harford County through the statewide historic bridge inventory. Organized in 1864 and incorporated in 1871, the Wrought Iron Bridge Company was an early and prolific wrought iron bridge builder.

The 1991 addition of a jumper bridge within the historic truss altered the appearance and function of the historic bridge. As part of this temporary fix, the deck and stringers were removed. The original bridge presently supports only its dead load, while the jumper bridge carries both its own dead load and the live loads. Despite this alteration, the bridge retains sufficient integrity to represent its type, which is a rapidly diminishing resource type. Fortunately the jumper bridge was added in such a way that it may be removed without damage to the historic bridge.

On March 21, 1996, the interagency bridge review committee, composed of representatives of the Federal Highway Administration, State Highway Administration and Maryland Historical Trust Historical Trust evaluated the bridge and determined it to be eligible for the National Register. The interagency review committee's finding of eligibility was subsequently endorsed by an advisory committee composed of prominent bridge engineers and historians.

Documentation on the property/district is presented in: Project File, Maryland Inventory Form HA-1251

Prepared by: John Hnedak (c. 1981 form), Paula Spero & Colin Farr, PAC Spero (1996 form)

Elizabeth Hannold — Reviewer, Office of Preservation Services
March 14, 1997 — Date

NR program concurrence: X yes ___ no ___ not applicable

Peter E. Kurtze — Reviewer, NR program
3/17/97 — Date

Survey No. HA-1251

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)
__X__	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
__X__	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 Adaption

IV. Historic Period Themes:

____	Agriculture
__X__	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): Transportation-vehicular

Known Design Source: Wrought Iron Bridge Company of Canton, Ohio

~~FAIRHILL NRA~~ HA-1251

MARYLAND HISTORICAL TRUST

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC
IRON TRUSS BRIDGE

AND/OR COMMON

2 LOCATION

STREET & NUMBER
Cherry Hill Road & Deer Creek

CITY, TOWN
Rocks

X VICINITY OF

CONGRESSIONAL DISTRICT

STATE
Maryland

COUNTY
Harford

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	X PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
__BUILDING(S)	__PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
X STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RESIDENCE
__SITE	**PUBLIC ACQUISITION**	**ACCESSIBLE**	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	__BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	X TRANSPORTATION
		__NO	__MILITARY	__OTHER

4 OWNER OF PROPERTY

NAME
Harford County

Telephone #:

STREET & NUMBER

CITY, TOWN

STATE, zip code

___ VICINITY OF

5 LOCATION OF LEGAL DESCRIPTION

Liber #:
Folio #:

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

STREET & NUMBER

CITY, TOWN

STATE

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

__FEDERAL __STATE __COUNTY __LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

NR-1251

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
X EXCELLENT	DETERIORATED	X UNALTERED	X ORIGINAL SITE
GOOD	RUINS	ALTERED	MOVED DATE_____
FAIR	UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

A seven-panel Pratt through-truss with pinned connections. Major memebers are compound "lattice" beams.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW				
__PREHISTORIC	__ARCHEOLOGY-PREHISTORIC	__COMMUNITY PLANNING	__LANDSCAPE ARCHITECTURE	__RELIGION	
__1400-1499	__ARCHEOLOGY-HISTORIC	__CONSERVATION	__LAW	__SCIENCE	
__1500-1599	__AGRICULTURE	__ECONOMICS	__LITERATURE	__SCULPTURE	
__1600-1699	__ARCHITECTURE	__EDUCATION	__MILITARY	__SOCIAL/HUMANITARIAN	
__1700-1799	__ART	__ENGINEERING	__MUSIC	__THEATER	
X 1800-1899	__COMMERCE	__EXPLORATION/SETTLEMENT	__PHILOSOPHY	__TRANSPORTATION	
X __1900-	__COMMUNICATIONS	__INDUSTRY	__POLITICS/GOVERNMENT	__OTHER (SPECIFY)	
		__INVENTION			

SPECIFIC DATES c. 1900 BUILDER/ARCHITECT Wrought Iron Bridge Co. Canton, Ohio

STATEMENT OF SIGNIFICANCE

This bridge is of interest as an example of a rapidly disappearing type of bridge, the structure also performs a valid scenic function.

Recommendations:

While owned by the county, as with many other interesting bridges in the Department of Natural Resources , the DNR should go on record as supporting its maintenance, discouraging any "upgrading" of the road.

CONTINUE ON SEPARATE SHEET IF NECESSARY

9 MAJOR BIBLIOGRAPHICAL REFERENCES

Historic American Engineering Record

Baltimore Industrial Musuem Staff

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

VERBAL BOUNDARY DESCRIPTION

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	COUNTY
STATE	COUNTY

11 FORM PREPARED BY

NAME / TITLE

John Hnedak

ORGANIZATION — DATE

Maryland Historical Trust

STREET & NUMBER — TELEPHONE

CITY OR TOWN — STATE

The Maryland Historic Sites Inventory was officially created by an Act of the Maryland Legislature, to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 Supplement.

The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

RETURN TO: Maryland Historical Trust
The Shaw House, 21 State Circle
Annapolis, Maryland 21401
(301) 267-1438

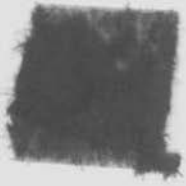

DNR-01-CROWTHER HOUSE
HA-1249
MD & PA ABUTMENT
HA-1252
CHERRY HILL RD BRIDGE
HA-1251
DNR-09 LEOPOLD HOUSE
HA-1250
Minefield
Chestnut Grove Ch
Cem
Cherry Hill
Gladden Br
RAILROAD
DEER CREEK STATE PARK
Rocks
RIDGE
4-H Camp
Gaging Sta
Camp Wo-Me-To
Kellogg
KNOPP
SHARON RD
Tower
CREEK
DEER
110 000 FEET (PA.)
2 380 000 FEET (PA.)
FOREST HILL 2.9 MI.
BEL AIR 7.2 MI.
39°37'30"
76°22'30"
(BEL AIR) 5763 III SE
ROAD CLASSIFICATION
Heavy-duty
Light-duty
Medium-duty
Unimproved dirt
U. S. Route
State Route
MARYLAND
QUADRANGLE LOCATION
FAWN GROVE, MD.—PA.
N3937.5—W7622.5/7.5
1956
PHOTOREVISED 1974
1 MILE
1 KILOMETER
4000 5000 6000 7000 FEET
AL 20 FEET
CAL DATUM OF 1929
L MAP ACCURACY STANDARDS
RVEY, RESTON, VIRGINIA 22092
D SYMBOLS IS AVAILABLE ON REQUEST
Revisions shown in purple compiled from aerial photographs taken 1974. This information not field checked

HA-1251

HA-1251


WROUGHT IRON BRIDGE CO.
BUILDERS
CANTON OHIO

HA - 1251



HA-1251