

Maryland Historical Trust

Maryland Inventory of Historic Properties number: F-6-121

Name: STEVENS RD. OVER HUNTING 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 <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 BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. F-6-121

SHA Bridge No. F-407 Bridge name Stevens Road over Hunting Creek

LOCATION:

Street/Road name and number [facility carried] Stevens Road

City/town Creagerstown Vicinity X

County Frederick

This bridge projects over: Road Railway Water X Land

Ownership: State County X Municipal Other

HISTORIC STATUS:

Is 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 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 No. F407, built in 1914, carries a single lane for two-way traffic on Stevens Road over Hunting Creek. The bridge is located in a rural wooded area just east of Creagerstown in Frederick County. The bridge is oriented in the east-west direction with Hunting Creek flowing from north to south beneath it.

Describe Superstructure and Substructure:

This bridge is a single-span, 94'-10"-long, Pratt through-truss. The top chord is a built up box member consisting of back to back channels with a riveted cover plate on top and batten plates along the bottom. The bottom chord consists of dual eye bar members. The vertical members are back to back channels connected with lattice bars and rivets. The diagonals are dual metal bars in all panels except the center panel where there are single crossed bars. The top transverse bracing members are angles. The top and underside lateral cross bracing consist of rods. The portals are constructed from T-shapes and angles. The deck consists of I-shaped stringers topped with timber planking. The deck rests on I-shaped floorbeams which are suspended from the vertical truss members at each panel point. All joints are secured with pin connections except for portal bracing where gusset plates and rivets are used. A W-beam steel guardrail with I-shaped posts lines the outside of the deck. The bridge originally rested on stone abutments and wingwalls.

Discuss Major Alterations:

The timber decking and stringers and abutments were replaced in 1990. The abutments are now reinforced concrete.

HISTORY:

WHEN was bridge built (actual date or date range) 1914
This date is: Actual Estimated
Source of date: Plaque Design plans County bridge files/inspection form
Other (specify) State inventory form F-6-1

WHY was bridge built? To provide a reliable crossing of Stevens Road over Hunting Creek, to meet local transportation needs.

WHO was the designer _____

WHO was the builder York Bridge Company - builder and/or designer

WHY was bridge altered? [check N/A if not applicable] Structural needs/safety

Was bridge built as part of organized bridge-building campaign? Yes No

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:

A - Events B- Person
 C- Engineering/architectural character

Was bridge constructed in response to significant events in Maryland or local history? No Yes
If yes, what event?

This bridge was one of a large number of metal truss bridges erected in Maryland in the late nineteenth and early twentieth centuries. These bridges, which were stronger and more reliable than the majority of their predecessors, were part of a major advance in bridge technology in Maryland and throughout the nation in the third quarter of the nineteenth century.

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth & development of the area? No Yes If yes, what impact?

Because of their solidity, metal truss bridges such as the Stevens Road bridge provided reliable crossings, largely free from the dangers of floods and other disasters that regularly destroyed many of their predecessors. By assuring travelers that Stevens Road could be safely and reliably passed throughout the year, this bridge promoted small-scale residential, commercial, agricultural, and industrial development along the road and other thoroughfares that fed into it. Though their impacts were quite localized, bridges such as this, taken *en masse*, were an important factor in the development of rural areas throughout the state.

Is the bridge located in an area which may be eligible for historic designation? No Yes
Would the bridge add to or detract from historic & visual character of the possible district?

Is the bridge a significant example of its type? No Yes If yes, why?

Between 1840 and the Civil War, under the impetus of a rapidly expanding railroad system, the majority of early American metal truss bridge forms were patented and introduced. In Maryland, the earliest metal truss bridges carried rail lines, which required their great strength and reliability. From the War through the end of the century, metal truss technology was improved, steel began to replace iron, and the use of trusses was expanded to carry roads as well as rail lines.

Numerous metal truss bridges were erected in Baltimore, the original hub of the metal truss in the state, from the 1850s through the 1880s. From Baltimore, the use of the metal truss spread out to other parts of the state, particularly the Piedmont and Appalachian Plateau. Many bridge and iron works were established in the eastern United States to design and fabricate truss members, which were then shipped to sites in Maryland and elsewhere to be erected. More than 15 different bridge companies located in Maryland, Ohio, Pennsylvania, New York, Virginia, and Indiana are known to have shipped metal truss bridges to sites throughout Maryland. Bridges were first fabricated in Maryland, and shipped to sites within the state and beyond, by the companies of seminal bridge designer Wendel Bollman.

Early in the twentieth century, concrete bridges began to compete with metal truss bridges throughout the state at small to moderate crossings. With the development of uniform standards for concrete bridges by the State Roads Commission in the 1910s, the construction of smaller metal truss bridges significantly declined throughout the state. The metal truss still remained the bridge of choice for large crossings, however. In the 1920s, heavier members began to be used at these bridges. Reflecting even heavier load requirements and increased lengths, metal truss bridges erected in the state in the 1930s and 1940s were heavy and solid, rather than light and delicate like their late-nineteenth and early-twentieth century predecessors.

Numerous Pratt truss bridges were erected throughout the country between 1844, when the type was patented by Thomas and Caleb Pratt, and the early twentieth century. The Pratt has diagonals extended across one panel in tension and verticals in compression, except for hip verticals immediately adjacent to the inclined end posts of the bridge. The large majority of Maryland's surviving metal truss bridges are Pratts, built as through or pony trusses either riveted or pin-connected.

This bridge was erected during one of the three key periods (1840-1860, 1860-1900, and 1900-1960) of bridge construction in Maryland. Built in 1914, it falls within the period 1900-1960. During this era, metal truss highway bridges became increasingly standardized. Also during this period, smaller and moderate length trusses were gradually replaced by reinforced concrete structures, and the modern metal girder bridge, which could easily be widened, replaced the metal truss bridge at all but the largest approaches and crossings. Built early in the century, it is characterized by relatively delicate members, rather the heavy solid members that characterize its successors.

Does bridge retain integrity [in terms of National Register] of important elements described in Context Addendum? No Yes If no, why?

Is bridge a significant example of work of manufacturer, designer and/or engineer? No Yes

In the late nineteenth and early twentieth centuries, numerous metal truss bridge fabricating companies sprang up around the country that shipped bridge components to crossings for assembly on site. Among them was the York Bridge Company of York, Pennsylvania, which fabricated Pratt, Warren, and Parker trusses erected in Maryland in the early twentieth century. These included bridges CL-227 (1911) and CL-241 (1908) in Carroll County and F-407 (1914) and F-506 (1908) in Frederick County.

Should bridge be given further study before significance analysis is made? No Yes

It is believed that no further evaluation is necessary to determine the eligibility of this bridge for listing in the National Register. However, additional research, which could be conducted as part of any future National Register nomination prepared for the bridge, might provide further information about its history and environs.

BIBLIOGRAPHY:

Bridge inspection reports and files of the Frederick County engineer's office.

County survey files of the Maryland Historical Trust.

Jackson, Donald H. *Great American Bridges and Dams*. Washington, D.C: The Preservation Press, 1968.

P.A.C. Spero & Company and Louis Berger & Associates, Inc. *Historic Bridges in Maryland: Historic Context Report*. Prepared for the Maryland State Highway Administration, September, 1994.

Pennsylvania Historical and Museum Commission and Pennsylvania Department of Transportation. *Historic Highway Bridges in Pennsylvania*. Commonwealth of Pennsylvania, 1986.

State inventory form F-6-1

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 2/7/95

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