

Maryland Historical Trust

Maryland Inventory of Historic Properties number: 6-1-3-01

Name: NEW CASSELMAN RIVER BRIDGE.
Casselman

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"/> 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>

mg

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

MHT No. G-II-C-101

SHA Bridge No. 11007

Bridge name US 40 Alternate over Casselman River

LOCATION:

Street/Road name and number [facility carried] US 40 Alternate

City/town Grantsville Vicinity _____

County Garrett

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

Ownership: State X County _____ 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 11007 carries US 40 Alternate over the Casselman River. Located east of Grantsville, Maryland, the bridge is located several hundred feet south of its famous predecessor, the stone-arch Casselman Bridge on the National Road. The bridge carries US 40 Alternate in a generally east/west direction, while the river flows in a south/north direction. The area is relatively undeveloped, although a small craft market and motel are located on the east approach.

Describe Superstructure and Substructure:

This structure is a skewed single-span Pratt through truss. The truss is comprised of seven panels measuring 19'-0" each and has a total length of 133'-0". The clear roadway width is approximately 14 feet. The top chord is constructed from back to back channels, a riveted cover plate on top, and lattice on the bottom. The bottom chord consists of double channels face to face. All diagonal and vertical members are I-shaped members. The deck is supported by floorbeams attached to the I-shaped vertical members. The floor system consists of built-up transverse floorbeams and I-shaped longitudinal stringers. The portal bracing is also comprised of riveted I-shaped members. All joint and member connections use gusset plates with rivets. The deck consists of a concrete deck slab supported by the longitudinal I-shaped stringers and asphalt overlay has been added to the top surface of the concrete deck. The guardrails consist of two shapes with a round steel pipe on the top and a W-shaped steel rail on the bottom. The rail is supported by attachments to the truss members as well as additional vertical supports attached to the bottom chord of the trusses. The substructure consists of two cantilever concrete abutments with concrete wingwalls.

Discuss Major Alterations:

The only apparent alteration to the bridge is the replacement of the original channel bridge railing with new W-beam guiderails.

HISTORY:

WHEN was bridge built (actual date or date range) 1932

This date is: Actual Estimated _____

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

Other (specify) SHA bridge inspection files; State inventory form

WHY was bridge built? To provide a reliable crossing of US 40 over the Casselman River, to meet local and regional transportation needs.

WHO was the designer _____

WHO was the builder _____

WHY was bridge altered? [check N/A if not applicable] _____

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

This bridge was built under the aegis of the State Roads Commission as part of the Good Roads Movement, in connection with the 1930s construction of route 40.

SURVEYOR/HISTORIAN ANALYSIS:

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

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

Was bridge constructed in response to significant events in Maryland or local history? No_ Yes X
If yes, what event?

This bridge was one of a small but significant number of metal truss bridges erected in Maryland from the 1920s through the 1940s. Its heavy, solid construction reflects continuing advances in metal truss technology and fabrication early in the century, and the almost unyielding reliability of substantial trusses for major crossings. Such bridges were built throughout the state during the period, particularly in the early 1930s, as part of the Good Roads Movement promoted by the State Roads Commission.

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 X

Because of their solidity and reliability, metal truss bridges with heavy members such as this bridge were often utilized in Maryland from the 1920s through the 1940s at long crossings, and on major highways, like route 40. Multi-lane facilities carrying major thoroughfares, they had not only a significant impact on local growth, but facilitated regional residential, commercial, agricultural, and industrial development.

Is the bridge located in an area which may be eligible for historic designation? No X 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 X

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 1932, 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 after 1930, it is characterized by heavy solid members, rather than the relatively delicate members that characterized its late-nineteenth and early-twentieth century predecessors.

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

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

In the early twentieth century, metal truss bridges were largely supplanted in the state by concrete and, later, metal girder structures. The old metal fabricators disappeared during this period. They were replaced, in the 1920s and 1930s, by a new if less numerous generation of metal truss fabricators. Among the new bridge companies active in Maryland was the Roanoke Iron and Bridge Company, the McClintic-Marshall Company, and the American Bridge Company. Although according to its earlier survey form this bridge was built to plans of the State Roads Commission, it was likely actually the work of one of these three companies or one of their competitors.

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 Maryland State Highway Administration.

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 G-II-C-101

SURVEYOR/SURVEY INFORMATION:

Date bridge recorded 1/26/95

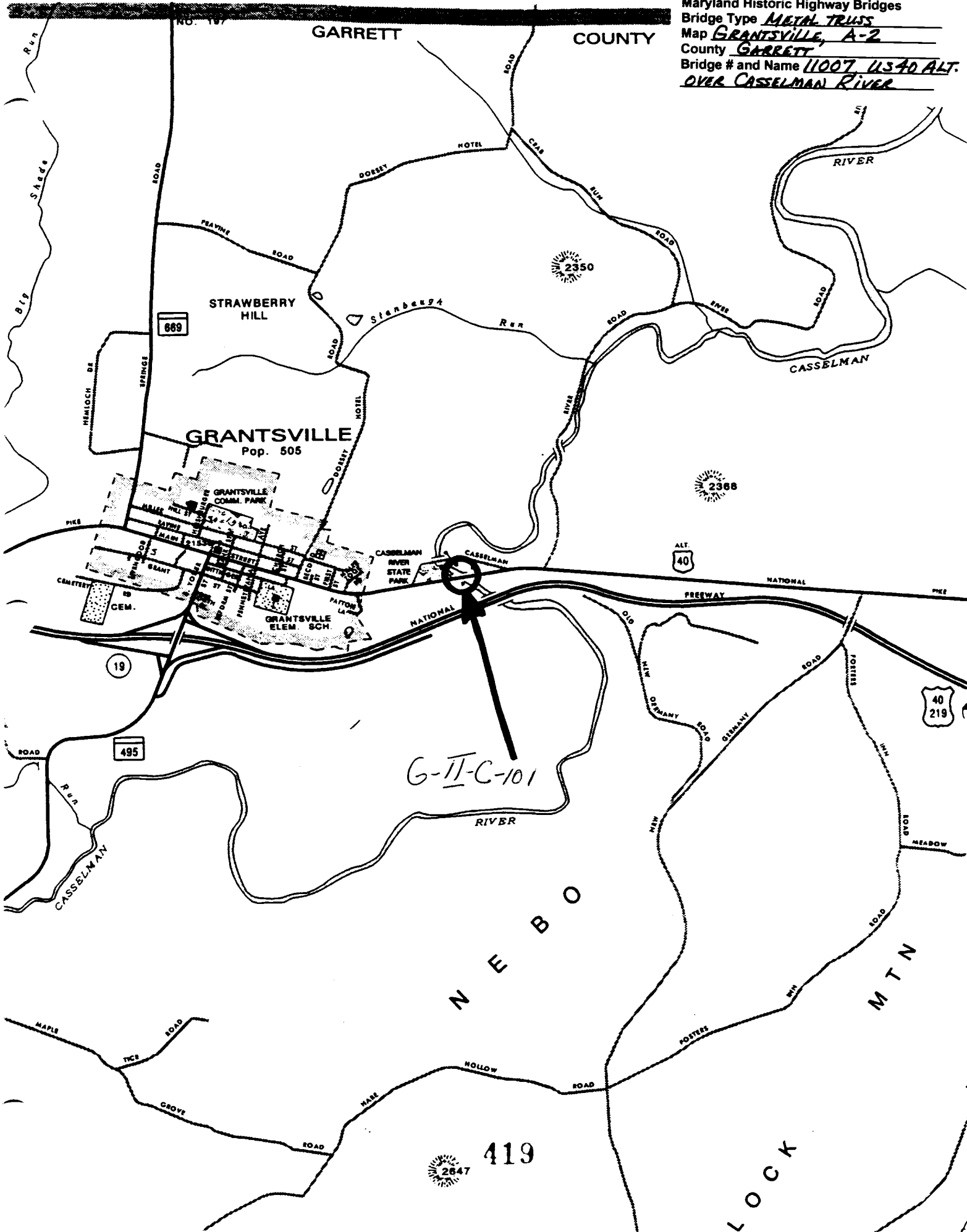
Name of surveyor Charles L. Ziegler/Marvin Brown

Organization/Address GREINER, INC., 2219 York Road, Suite 200, Timonium, Maryland 21093-3111

Phone number 410-561-0100

FAX number 410-561-1150

Maryland Historic Highway Bridges
Bridge Type METAL TRUSS
Map GRANTSVILLE, A-2
County GARRETT
Bridge # and Name 11007 US 40 ALT.
OVER CASSELMAN RIVER





G-II-C-101

#11017

BR# 40117-10 11007

OVER CASSELMAN RIVER

CAYENNE CO MD

CHARLES ZIEGLER

1/26/95

SHA

WEST APPROACH

1 of 6



CASSELMAN
RIVER

G-II-C-101 BR # 11007

OVER CASSELLMAN RIVER

GARRETT Co. MD

Charles Ziegler

1/26/95

SIA

EAST APPROACH

2016



G-II-C-101 BR# 1011710 11007
over Casselman River
Garrett co. Md.
Charles Ziegler
1/26/95
SHA

NORTH ELEVATION (DOWNSTREAM)

3016



G-II-C-101

BR # 101110

OVER Casselman

GARRETT Co. Md.

Charles Ziegler

1/26/95

SHH

CASSELLMAN BRIDGE NORTH (DOWNSTREAM)
OF BRIDGE

41 of 6



BEH 1211970 11007
OVER CASSELMAN RIVER
GARRETT CO MD.

Stanley Ziegler

1/26/95

SAA

CASSELMAN BRIDGE TO NORTH (DOWNSTREAM)

5076



BR# 601710 11007

OVER CASSELMAN RIVER
GARRET CO MD.

Charles Ziegler

1/26/95

SHA

SOUTH ELEVATION (UPSTREAM)

6016

G-II-C-101

1932

New Casselman River Bridge
Grantsville vicinity
public (unrestricted)

Located east of Grantsville, Maryland, the New Casselman River Bridge carries US 40 over the Casselman River, several hundred feet south of its famous predecessor, the Casselman Bridge on the National Road. It consists of a skew Pratt five panel steel through truss, strengthened with triangular truss sway bracing. The length of the truss is 133 feet, while the roadway width is 40 feet.

Erected in 1932, this structure was built according to in-house designs of the Maryland State Roads Commission, under Chief Engineer H.D. Williar. This bridge is one of three historic truss bridges -- part of Maryland's state road system in Garrett County, and one of 26 bridges of the same general structural type throughout the state road network -- identified by the Maryland Historical Trust for the Maryland Department of Transportation in a jointly conducted survey which took place during 1980-81.

INVENTORY FORM FOR STATE HISTORIC SITES SURVEY

1 NAME

HISTORIC

AND/OR COMMON

New Casselman River Bridge

2 LOCATION

STREET & NUMBER

East of Grantsville

CITY, TOWN

Grantsville

CONGRESSIONAL DISTRICT

6

VICINITY OF

STATE

Maryland

COUNTY

Garrett

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE
<input type="checkbox"/> DISTRICT	<input checked="" type="checkbox"/> PUBLIC	<input checked="" type="checkbox"/> OCCUPIED	<input type="checkbox"/> AGRICULTURE <input type="checkbox"/> MUSEUM
<input type="checkbox"/> BUILDING(S)	<input type="checkbox"/> PRIVATE	<input type="checkbox"/> UNOCCUPIED	<input type="checkbox"/> COMMERCIAL <input type="checkbox"/> PARK
<input checked="" type="checkbox"/> STRUCTURE	<input type="checkbox"/> BOTH	<input type="checkbox"/> WORK IN PROGRESS	<input type="checkbox"/> EDUCATIONAL <input type="checkbox"/> PRIVATE RESIDENCE
<input type="checkbox"/> SITE	PUBLIC ACQUISITION	ACCESSIBLE	<input type="checkbox"/> ENTERTAINMENT <input type="checkbox"/> RELIGIOUS
<input type="checkbox"/> OBJECT	<input type="checkbox"/> IN PROCESS	<input type="checkbox"/> YES: RESTRICTED	<input type="checkbox"/> GOVERNMENT <input type="checkbox"/> SCIENTIFIC
	<input type="checkbox"/> BEING CONSIDERED	<input checked="" type="checkbox"/> YES: UNRESTRICTED	<input type="checkbox"/> INDUSTRIAL <input checked="" type="checkbox"/> TRANSPORTATION
		<input type="checkbox"/> NO	<input type="checkbox"/> MILITARY <input type="checkbox"/> OTHER

4 OWNER OF PROPERTY

NAME

State Highway Administration DOT Survey Telephone #:

STREET & NUMBER

301 West Preston Street

CITY, TOWN

Baltimore

VICINITY OF

Maryland

STATE, zip code

21201

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,

REGISTRY OF DEEDS, ETC. Garrett County Courthouse

Liber #:

Folio #:

STREET & NUMBER

CITY, TOWN

Oakland

STATE

Maryland

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input checked="" type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input checked="" type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED DATE _____
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The new Casselman bridge carries U.S. 40 over the Casselman river in a generally east west direction, several hundred feet to the south of its famous stone predecessor. It consists of a skew pratt five panel steel through truss with triangular truss sway bracing. The length of each side of the truss is 133 feet; the roadway width is 40'. Shoulders for both sides of the two lane road are carried within the truss. The extreme points of the skew are the northwest and southeast corners.

CONTINUE ON SEPARATE SHEET IF NECESSARY

8 SIGNIFICANCE

PERIOD

AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW

- | | | | | |
|---|---|---|---|--|
| <input type="checkbox"/> PREHISTORIC | <input type="checkbox"/> ARCHEOLOGY-PREHISTORIC | <input type="checkbox"/> COMMUNITY PLANNING | <input type="checkbox"/> LANDSCAPE ARCHITECTURE | <input type="checkbox"/> RELIGION |
| <input type="checkbox"/> 1400-1499 | <input type="checkbox"/> ARCHEOLOGY-HISTORIC | <input type="checkbox"/> CONSERVATION | <input type="checkbox"/> LAW | <input type="checkbox"/> SCIENCE |
| <input type="checkbox"/> 1500-1599 | <input type="checkbox"/> AGRICULTURE | <input type="checkbox"/> ECONOMICS | <input type="checkbox"/> LITERATURE | <input type="checkbox"/> SCULPTURE |
| <input type="checkbox"/> 1600-1699 | <input type="checkbox"/> ARCHITECTURE | <input type="checkbox"/> EDUCATION | <input type="checkbox"/> MILITARY | <input type="checkbox"/> SOCIAL/HUMANITARIAN |
| <input type="checkbox"/> 1700-1799 | <input type="checkbox"/> ART | <input checked="" type="checkbox"/> ENGINEERING | <input type="checkbox"/> MUSIC | <input type="checkbox"/> THEATER |
| <input type="checkbox"/> 1800-1899 | <input type="checkbox"/> COMMERCE | <input type="checkbox"/> EXPLORATION/SETTLEMENT | <input type="checkbox"/> PHILOSOPHY | <input checked="" type="checkbox"/> TRANSPORTATION |
| <input checked="" type="checkbox"/> 1900- | <input type="checkbox"/> COMMUNICATIONS | <input type="checkbox"/> INDUSTRY | <input type="checkbox"/> POLITICS/GOVERNMENT | <input type="checkbox"/> OTHER (SPECIFY) |
| | | <input type="checkbox"/> INVENTION | | |

SPECIFIC DATES 1932

BUILDER/ARCHITECT

STATEMENT OF SIGNIFICANCE

built according to in-house designs of the Maryland State Roads Commission, under Chief Engineer Williar.

This bridge is the successor to the Casselman river bridge of National Pike fame (MHSI # G-II-C-023) (cf. general bridge significance, M/DOT survey, attached).

CONTINUE ON SEPARATE SHEET IF NECESSARY

9 MAJOR BIBLIOGRAPHICAL REFERENCES

see continuation sheet.

CONTINUE ON SEPARATE SHEET IF NECESSARY

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY _____

Quadrangle Name: Grantsville, MD

Quadrangle Scale: 1:24 000

UTM: 17,659260.4395470

VERBAL BOUNDARY DESCRIPTION

N/A

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

STATE	COUNTY
N/A	

STATE	COUNTY

11 FORM PREPARED BY

NAME / TITLE
John Hnedak/M/DOT Survey Manager

ORGANIZATION	DATE
Maryland Historical Trust	1980

STREET & NUMBER	TELEPHONE
21 State Circle	(301) 269-2438

CITY OR TOWN	STATE
Annapolis	Maryland

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.

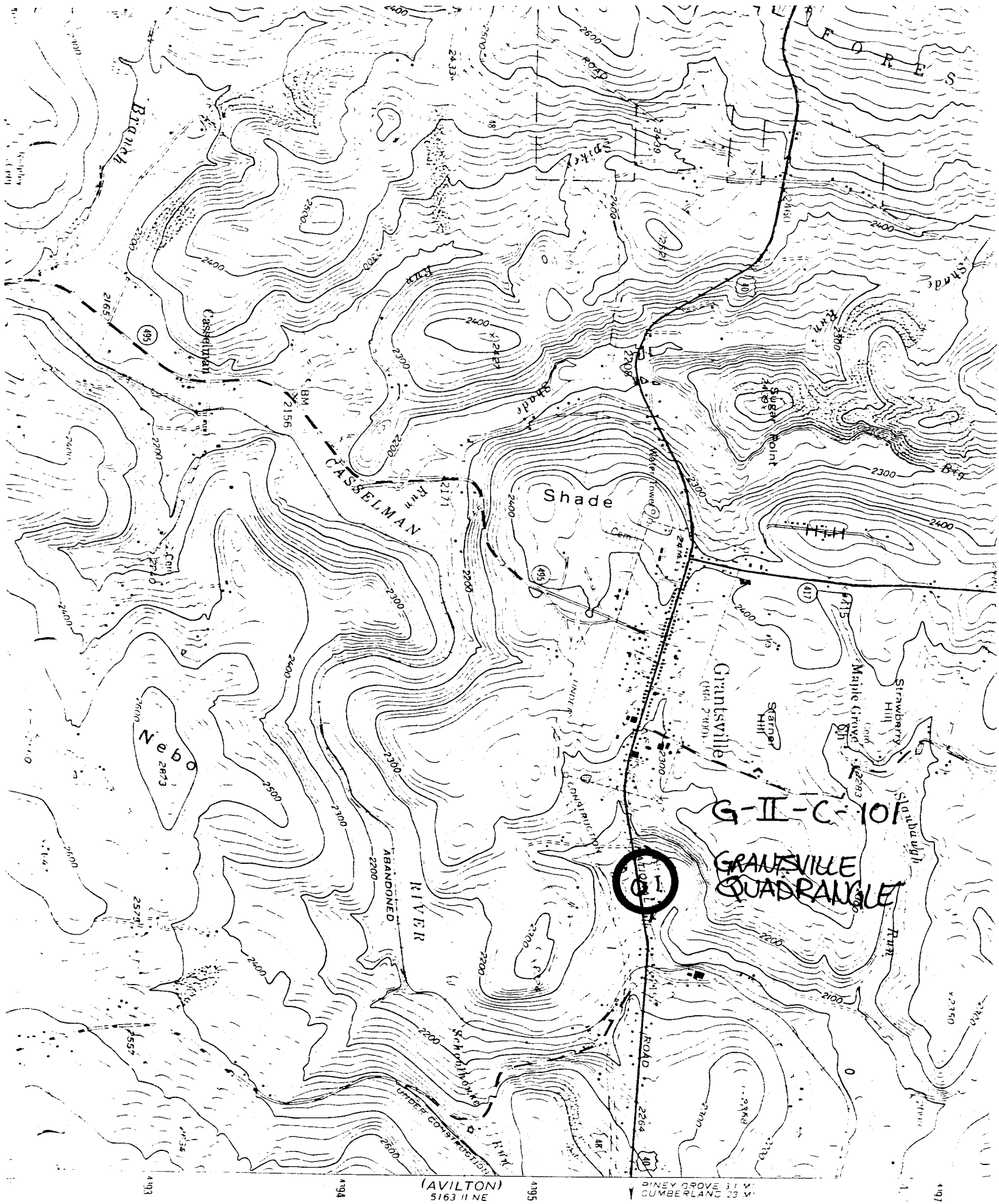
The Survey and Inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

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

9. Bibliography

Files of the Bureau of Bridge Design, State Highway
Administration 300 West Preston Street Baltimore
Maryland. Drawer 91.

Condit, Carl, American Building Art, 20th Century; New
York, Oxford University Press, 1961.



(AVILTON)
5163 II NE

PINEY GROVE 31 W
CUMBERLAND 23 W



G-II-C-101

⊗ Casselman River Bridge

M/DOT

Hnedak/Meyer

Summer 1980



G-II-C-23

New Casselamn River Bridge
from Old bridge

M.DOT

Hnedak/ Meyer

Spring 1980