

Maryland Historical Trust

Maryland Inventory of Historic Properties Number: 6-11-C-373

Name: Maple Grove Below Casleman River

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"/>	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>

SHA Bridge No. G-103 Name: Maple Grove Road over Casselman River

Location:

Street/Road Name and Number: Maple Grove Road

City/Town: Grantsville Vicinity X

County: Garrett

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 Retractable 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

 Other Type Name _____

Describe Setting:

Bridge G-103 carries Maple Grove Road over the Casselman River in Garrett County. Maple Grove Road runs north-south over the northern flowing Casselman River. The bridge and Maple Grove Road bisect a former farm. On both the northwestern and southwestern slopes of the Casselman River are two barns used for equipment and hay. On the northeastern and southeastern slopes are mid-twentieth century houses that now occupy 1 to 3 acre lots on the former farm.

Describe Superstructure and Substructure:

Bridge G-103 is a single span filled concrete arch bridge. The length of the bridge is 56 feet 6 inches with a clear span of equal distance at the springline. The spandrel walls are approximately 5 feet wide. There is a clear roadway width of 13 feet 4 inches, with an overall width of 13 feet 4 inches. According to a 1995 inspection report, the concrete arch has heavy spalling and efflorescence on the downstream spandrel wall. The haunch is 3 inches of excised molding. The crown is approximately 2 ½ inches wide. The construction joint between the top of the arch and the parapet on both sides of the bridge is extremely deteriorated with heavy delamination and reinforcement bar exposure. In addition, the intrados has heavy delamination and rusted reinforcement bars. The bridge is in satisfactory condition with a sufficiency rating of 58.5.

Bridge G-103 has half its original parapets. The original parapets are the 2-rail type. This type of railing consists of posts, a top rails, and an intermediate rail. The northern railing is original, however, the southern railing has been replaced by a w-beam guardrail. The northern railing has 5 posts that measure approximately 5 inches by 2 feet 5 inches. Each of the parallel railings is approximately 6 feet long by 6 inches wide. The southern posts are similar in dimensions to the northern posts, however, the railing is standard guardrail.

Discuss Major Alterations:

At an unknown date, county maintenance crews replaced the southern railing with a guardrail system..

History:

When Built: 1926

Why Built: Expansion of Garret County infrastructure.

Who Built: Concrete Steel Bridge Co.

Who Designed: Concrete Steel Bridge Co.

Why Altered: Replaced a deteriorated concrete railing.

Was this bridge built as part of an organized bridge building campaign? No, this bridge was not built as part of an organized bridge building campaign.

Surveyor Analysis:

This bridge may have NR significance for association with:

A Events Person

C Engineering/Architectural

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

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

Yes, as Garrett County expanded , it needed to improve its infrastructure. Founded in 1871, Garrett County relied heavy on the railroad and the National Pike as its transportation corridors even as early the first decade of the twentieth century. As the county expanded in population and made in-roads into mineral exploration the county infrastructure needed improvement. The Concrete Steel Bridge Company of Clarksburg, West Virginia designed and built the bridge.

The bridge was built by the Concrete Steel Bridge Company of Clarksburg, WV, a partnership between P.M. Harrison and Frank Duff McEnteer. Mr. Harrison was the representative of the York Bridge Company in Clarksburg, WV and had direct access to the plans and patented designs of Daniel Luten. Mr. McEnteer had come to Clarksburg to build the Palace Furniture Company, a new building made of monolithic frame and "mushroom" floor system. In 1914 McEnteer was appointed to superintend the construction of the Fourth Street Bridge, designed by Luten Bridge Company, and that same year, he and Harrison incorporated their partnership into the Concrete Steel Bridge Company. By 1925, the company had 52 crews in the field and offices in Pennsylvania in Pittsburgh and Harrisburg, Huntington, West Virginia, and Knoxville, Tennessee and a subsidiary company in Jacksonville, Florida. The Companies' bridges could be found from Florida to New York. Most of the Company's contracts were for structures under 60 feet but, they did build several large spans. A 4 arch bridge with spans of 110 feet each crossed the Greenbriar at Alderson, WV. The Concrete Steel Bridge Company diversified its assets to the point of no return. An effort was made to save Clarksburg's sagging construction industry using the company assets to form the Clarksburg Supply and Equipment Company (a consolidation of the bridge company and two other firms that supplied concrete and concrete blocks). The bridge company attempted to build the large multi-span bridge at Hyner, PA, however, problems with the bridge's foundation caused cost overruns that the company could not absorb. The Concrete Steel Bridge Company liquidated in September 1931. Following the failure of his company, McEnteer joined the West Virginia Road Commission and served as district engineer from 1932 to 1938. In 1942, McEnteer joined the firm of Johnson, Piper and Drake as a project manager for the firm's Middle East contract. In 1943, he was made Chief Engineer of the Construction Division of the US Armed Forces in the Middle East stationed in Cairo. After the war, McEnteer opened a small design firm and worked as an independent consultant until his death in 1957. He designed everything from concrete slabs to coal depots. It is estimated that the time of his death, McEnteer had overseen the construction of a least a thousand bridges through his company alone. He probably built an additional five hundred as a highway engineer and independent contractor. Because McEnteer built small to medium size structures in mostly rural areas his work is not fully known. (Kemp 1990)

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, the 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 has a marble plaque that dates the bridge to 1926. The plaque also lists the builder as Concrete Steel Bridge Company of Clarksburg WV. It is unknown how many identified structures built by this company exist.

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

The bridge is experiencing severe deterioration and will probably have to be replaced within the next ten years.

However except for the replaced parapet the character defining elements still exist.

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

Yes, its is important to know how many bridge constructed by the Concrete Steel Bridge Company are remaining in the region. There are very few that can be documented with a construction marker.

Bibliography:

County inspection/bridge files _____ X _____ SHA inspection/bridge files _____

Other (list):

Frank Duff McEnteer Collection - Institute for the History of Technology and Industrial Archeology.

Kemp, Emory L. and Janet E.
1990 Frank Duff McEnteer: Builder of a Thousand Bridges

Surveyor:

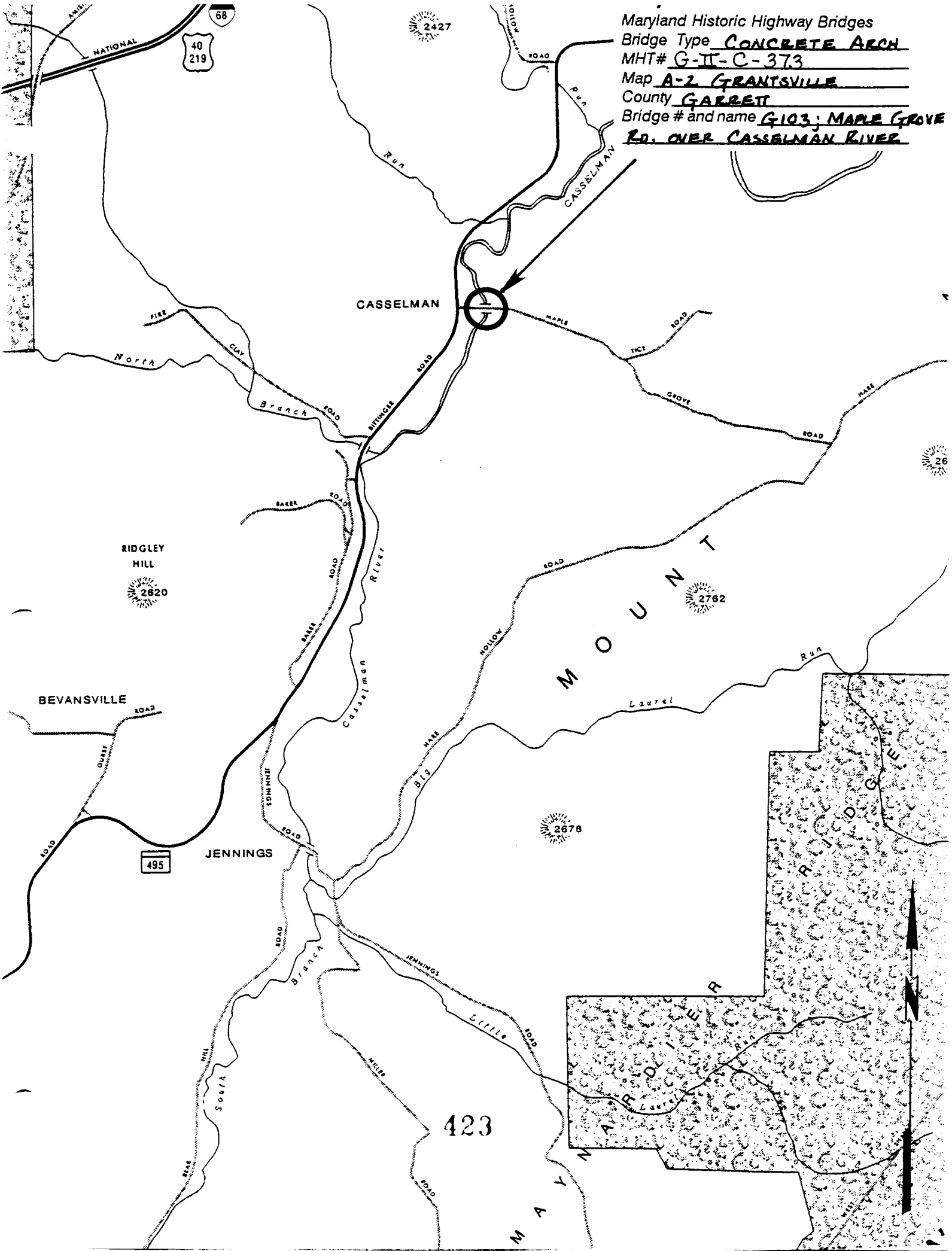
Name: Stacie Y. Webb **Date:** September 1995

Organization: State Highway Admin. **Telephone:** (410) 545-8559

Address: 707 N. Calvert Street, Baltimore, Maryland

Edited by P.A.C. Spero & Company, December 1997

Maryland Historic Highway Bridges
Bridge Type CONCRETE ARCH
MHT# G-II-C-373
Map A-2 GRANTSVILLE
County GARRET
Bridge # and name G103; MAPLE GROVE
RD. OVER CASSELMAN RIVER





3R# 20610310

G-II-C-373

DYCK CASSELMAN RIVER

C-ARLETT CO MD

CHARLES ZIEGLER

1126195

344

WEST APPROACH

1 of 6



WEIGHT
LIMIT
10
TONS

BE# 20610310 G-II-C-373
OVER CASSEMAN RIVER
SARRET CO. MD

Charles Ziegler

1/26/95

S4A

EAST APPROACH

2016



BR# 20610310 G-II-C-373
OVER CASSELMAN RIVER
GARRET CO MD

CHARLES ZIEGLER

1/26/95

SHA

SOUTH ELEVATION (UPSTREAM)

3066

WEIGHT
LIMIT
10
TONS



3R 20610310

G-II-C-373

OVER COSSELMAN RIVER

GARRETT CO. MD

CHARLES ZIEGLER

1/26/95

SHA

NORTH ELEVATION (DOWNSTREAM)

4/9/6

THE CONCRETE STEEL
BRIDGE CO.
—
DESIGNERS AND BUILDERS
—
CLARKSBURG W. VA.

BR # 206 10310 G-II-C-373
OVER CASSELLMAN RIVER
GARRETT CO MD.
Charles Ziegler

1/26/95
SHA

PLAQUE ON N.W. TOP OF HERK WALL

016

1928

BOARD OF COUNTY COMMISSIONERS
OF GARRETT COUNTY, MARYLAND

GEORGE D. BROWNING,	PRES.
H. P. MILLER,	COMR.
G. E. ASHBY,	COMR.
W. C. REYERS,	CLERK.

BR# 20610310

G-II-C-373

OVER CASSELLMAN RIVER

GARRETT Co. Md.

Charles Ziegler

1/26 '95

SUA

PLAQUE ON S.W. TOP OF CHEEKWALL

6 of 6