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

MHT No. PG: 62-33

SHA Bridge No. _____ **Bridge name** Baltimore Avenue small structure

LOCATION:

Street/Road name and number Baltimore Avenue (US 1) over branch of Indian Creek

City/town Muirkirk **Vicinity** _____

County Prince George's

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

Ownership: State _____ **County** _____ **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 _____

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 X:

Concrete Arch _____ **Concrete Slab** X **Concrete Beam** ____ **Rigid Frame** _____

Other _____ **Type Name** _____

DESCRIPTION:

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

Describe Setting:

Baltimore Avenue small structure carries Baltimore Avenue (US 1) over a branch of Indian Creek in Prince George's County. Baltimore Avenue runs north-south and the creek flows east-west. The culvert is located in the town of Muirkirk, and is surrounded by industrial parks to the east and west.

Describe Superstructure and Substructure:

Baltimore Avenue small structure is a 1-span, 4-lane, concrete slab small structure. The small structure was originally built circa 1935. The structure is 4.9 meters (16-feet) long; there are no sidewalks. The concrete slab has a bituminous wearing surface. The structure has pierced parapets with raised-panel endblocks. The substructure consists of two concrete abutments. There are four flared concrete wing walls.

Discuss Major Alterations:

The small structure has had no major alterations.

HISTORY:

WHEN was the bridge built: circa 1935

This date is: Actual _____ **Estimated** ___X___

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

Other (specify)

WHY was the bridge built?

The bridge was constructed in response to the need for more efficient transportation network and increased load capacity.

WHO was the designer?

Unknown

WHO was the builder?

Unknown

WHY was the bridge altered?

N/A

Was this bridge built as part of an organized bridge-building campaign?

There is no evidence that the small structure was 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 _____

The small structure does not have National Register significance.

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

The historical context for Maryland's small structures parallels that of the state's bridges. Two specific periods are significant in the specific historical context of small structures. The first half of the nineteenth century, generally between 1800 and 1850, relates to the extensive road-building activity in the state during the nineteenth century, in particular the building of the National Road and the numerous turnpikes or toll roads. The later period of significance is generally between 1900 and 1947. It may actually be further divided into two periods. The first is the period between 1900 and 1911, when concrete was promoted as a "permanent" construction material for small structures and reinforced concrete was introduced (around 1903). The second era extends from 1912 to 1947, during which time the state issued and promoted extensively the use of Standard Plans for small structures.

By 1912, the newly-formed State Roads Commission joined a growing number of state highway departments in developing standardized plans for their bridges and small structures. Maryland's Standard Plans included designs for concrete culverts and concrete box, slab and girder structures. The small structure designs were for spans in increments of 2 feet from 6 feet to 18 feet in length. The 6-foot to 16-foot spans were slab structures while the 18-foot length was a girder-type structure. The 1912 Standard Plan specified both reinforced and plain concrete and provided ratios for mixing the concrete. A plain parapet rail was shown on the plans.

Revised Standard Plans came out in 1919 and had a separate plan sheet for the slab and girder designs. Again, the 18-foot length was a girder. These Standard Plans included an incised parapet rail in which the number of incised panels increased with the length of the structure. No designs for box bridges or culverts were shown in the 1919 plans.

In 1924, the State Standard Plans included designs for slab bridges from 6 feet to 20 feet in increments of 2 feet. Girders were no longer included for the Standard Plans for small structures. Like the 1919 plans, the designs included an incised parapet rail with the number of panels increasing with the size of the span. The 1924 plans also included a standard design for slab abutments that featured horizontal scoring in the concrete abutments and wingwalls.

In 1928, the State Roads Commission developed an open rail balustrade called the "standard open handrail." In 1930, standard small structure plans utilized the open balustrade for the 6-foot to 18-foot slab structures. The plans included an isometric view of a slab structure with the standard open handrail and abutments with horizontal scoring. The 1933 Standard Plans for small concrete structures specified concrete slab design for structures from 6 feet to 18 feet in length, horizontally incised abutments and wingwalls and the open balustrade design that was introduced in the Standard Plans of 1928.

The concrete slab structure, along with some girder structures and box culverts, was widely used on state highways throughout Maryland (and most assuredly on roadways of cities and counties) up through World War II. State Roads Commission reports of the pre-World War II era repeatedly mention the use of slab construction for small structures.

PG:62-33

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?

There is no evidence that the construction of this culvert had a significant impact on the growth and development of this area.

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 located in an area which does not appear to be eligible for historic designation.

Is the bridge a significant example of its type?

Small structures are generally not eligible for the National Register because there are many extant examples and because they are essentially non-descript and very hard to date.

Does the bridge retain integrity of important elements?

The CDE's for concrete slab small structures are identified as the slab, the parapet or railing, the abutments and wingwalls. This small structure retains those features.

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

This bridge is not a significant example of the work of a manufacturer, designer, and/or engineer.

Should the bridge be given further study before an evaluation of its significance is made?

No further study of this bridge is required to evaluate its significance.

BIBLIOGRAPHY:

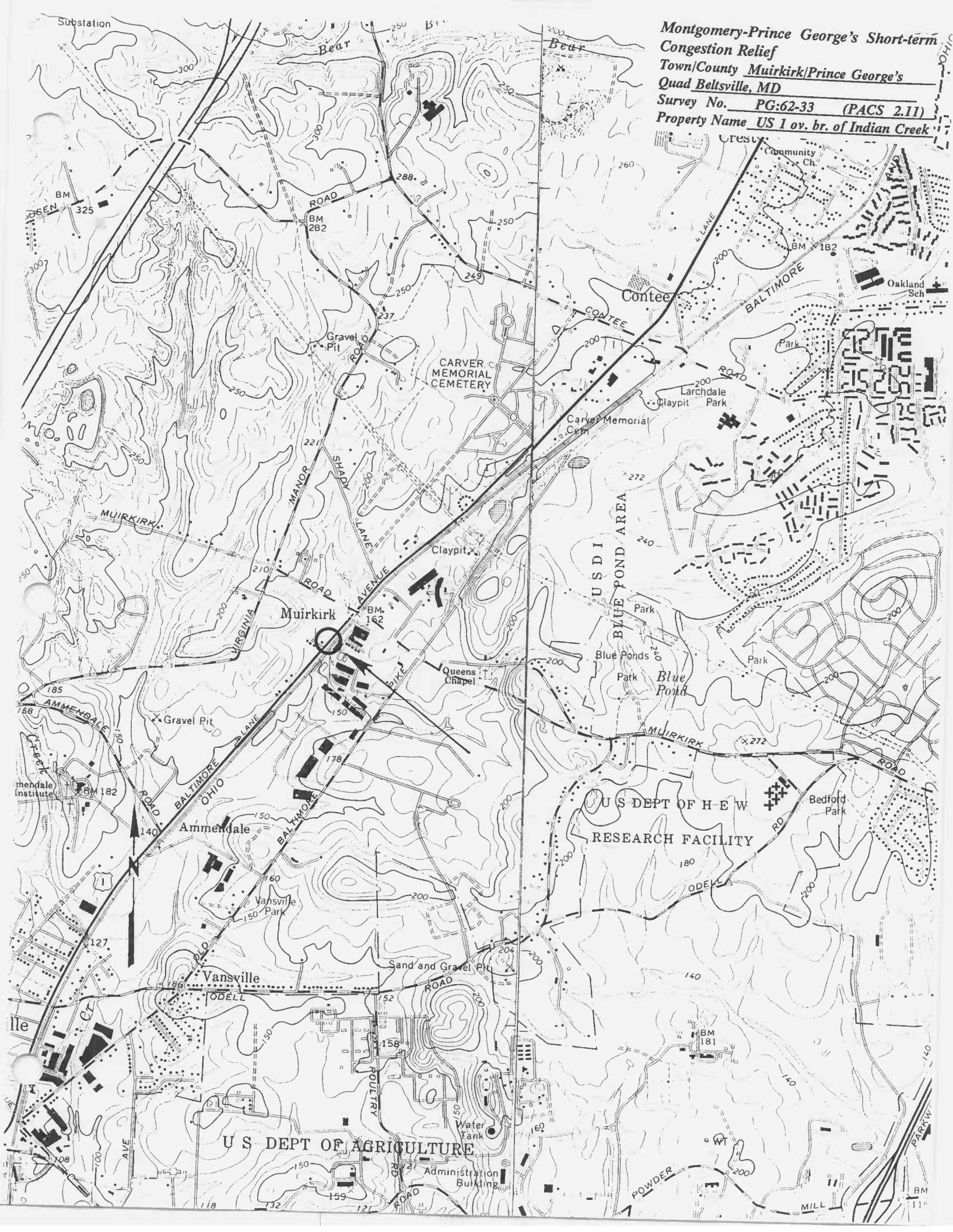
County inspection/bridge files _____ **SHA inspection/bridge files** _____
Other (list):

Parsons Brinckerhoff Quade & Douglas, Inc. Small Structures on Maryland's Roadways: Historic Context Report. Maryland State Highway Administration, June 1997.

SURVEYOR:

Date bridge recorded May 1998
Name of surveyor Susan Taylor
Organization/Address P.A.C. Spero & Co., 40 W. Chesapeake Avenue, Baltimore, MD 21204
Phone number (410) 296-1685 **FAX number** (410) 296-1670

THE TRUST CONCURS THAT SMALL STRUCTURE PG:62-33 IS NOT ELIGIBLE FOR INCLUSION IN NRHP.
[illegible] 2/23/99 [illegible] 2/23/99


Montgomery-Prince George's Short-term Congestion Relief
Town/County Muirkirk/Prince George's
Quad Beltsville, MD
Survey No. PG:62-33 (PACS 2.11)
Property Name US 1 ov. br. of Indian Creek
Substation
Bear
Community Ch.
Contee
Oakland Sch
BALTIMORE
CONTEE
ROAD
Gravel Pit
CARVER MEMORIAL CEMETERY
Larchdale Park
Claypit
Carver Memorial Cem
MANOR
SHADY LANE
MUIRKIRK
Claypit
AVENUE
Muirkirk
VIRGINIA
Queens Chapel
PIKE
U S D I BLUE POND AREA
Blue Ponds
Blue Pond
Park
AMMENDALE
Gravel Pit
BALTIMORE
OHIO
Ammendale
Vansville Park
U S DEPT OF H E W RESEARCH FACILITY
Bedford Park
ODELL
RD
Sand and Gravel Pit
Vansville
ODELL
ROAD
POULTRY
Water Tank
U S DEPT OF AGRICULTURE
Administration Building
POWDER
MILL
PARKWAY

1 PG 62 33

2 USI Culvert over Ravine

3 Prince Georges Co MD

4 Susan Taylor

5 5/98

6 MD SHPO

7 North Approach

8 1 of 5

1 PG 62-33

2 USI Culverts over Ravine

3 Prince Georges Co, MD

4 Susan Taylor

5 5/98

6 MD SHPO

7 east elevation

8 2 of 3

1 PG:62 3J

2 US 1 culvert over Ravine

3 Prince Georges Co. MD

4 Susan Taylor

5 5/98

6 MD SHPO

7 East elevation

8 3 of 5

1 PG:62-33

2 US 1 Culvert over Ro...

3 Prince George's Co, MD

4 Susan Taylor

5 5/98

6 MD SHPO

7 South Approach

8 4 of 5

1 PG:162 33

2 US1 Culvert over Ravine

3 Prince Georges Co, MD

4 Susan Taylor

5 5/98

6 MD SHPO

7 West elevation

8 5 of 5