

**MARYLAND HISTORICAL TRUST
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes no

Property Name: Bridge No. BC 6523 Inventory Number: BA-3278

Address: Spooks Hill Road Spooks Hill Road over Cooper's Run Historic district: yes no

City: _____ Zip Code: 21120 County: Baltimore County

USGS Quadrangle(s): New Freedom

Property Owner: City of Baltimore Tax Account ID Number: N/A

Tax Map Parcel Number(s): N/A Tax Map Number: N/A

Project: _____ Agency: _____

Agency Prepared By: R. Christopher Goodwin & Associates, Inc

Preparer's Name: Katherine Grandine Date Prepared: 11/29/2012

Documentation is presented in: _____

Preparer's Eligibility Recommendation: Eligibility recommended Eligibility not recommended

Criteria: A B C D Considerations: A B C D E F G

Complete if the property is a contributing or non-contributing resource to a NR district/property:

Name of the District/Property: _____

Inventory Number: _____ Eligible: yes no Listed: yes no

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

Description of Property and Justification: *(Please attach map and photo)*

The Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) is located in Baltimore County, Maryland, on the Prettyboy Reservoir property. The bridge is owned and maintained by the City of Baltimore. Cooper's Run enters Prettyboy Reservoir from the northeast, south of Beckleysville Road. This bridge was not previously documented as part of the Maryland State Highway (SHA) Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report and accompanying statewide historic bridge inventory that resulted in formal determinations of eligibility of many bridges throughout the state of Maryland (P.A.C. Spero et al. 1995).

Description

The bridge, constructed in 1933, is a single-span, concrete T-beam and has a total length of 34 feet. Two exterior and three interior concrete beams support the deck. The beams are supported by reinforced poured-concrete piers. The ends of the bridge are enclosed with reinforced poured-concrete walls that extend into the shoreline. The center of the bridge has an open span. The bridge supports two traffic lanes with a roadway width of 20 feet. The roadway is bituminous concrete (City of Baltimore 2009). The bridge has solid concrete parapet walls. The structure exhibits minor elements of classicism in its overall design. These elements comprise the piers at the bridge ends and on either side of the open span that rise from the foundation to the top of the

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MHT Comments:	
<u>[Signature]</u> Reviewer, Office of Preservation Services	<u>1/14/13</u> Date
<u>[Signature]</u> Reviewer, National Register Program	<u>1/14/13</u> Date

parapet wall. The parapet walls have molded bases, slightly recessed walls, and projecting caps.

The bridge retains a high degree of integrity of design, setting, materials, and workmanship to its original construction. The reinforced concrete is deteriorating, and modern concrete has been applied to repair areas of severe spalling along the parapet walls.

History

The Spooks Hill Road bridge over Cooper’s Run (Bridge No. BC 6523) was constructed in 1933 by the City of Baltimore Department of Public Works. The bridge was constructed as a result of the establishment of the Prettyboy Reservoir. The Prettyboy Reservoir was the second reservoir established along the Gunpowder River by the City of Baltimore to increase its drinking water supply.

The City of Baltimore began a program to secure drinking water as early as 1858, when the first reservoir was established along Jones Falls. During the 1880s, the City of Baltimore expanded its water supply by tapping into the Gunpowder River. The first dam on the Gunpowder River was constructed near Loch Raven in central Baltimore County in 1881. In 1912, a larger dam was constructed and the water was impounded to form the Loch Raven Reservoir. The Loch Raven dam was increased in height to impound additional water in 1922-1923 (Maryland Historical Trust [MHT] MIHP form BA-2732).

The City of Baltimore further expanded the drinking water supply during the 1930s with the construction of Prettyboy dam in northwestern Baltimore County. The purpose of the new reservoir was to impound and store 20 billion gallons of water. The project to establish the Prettyboy Reservoir cost over \$4.1 million and was paid for by loans approved by city residents. The funds were expended under the direction of the Public Improvement Commission of Baltimore, a commission formed by city ordinance in 1920. The project costs included the acquisition of 7,380 acres of land for \$642,087 and the construction of the dam for \$2.3 million. The gravity-type dam measures 692.5 feet wide and 188.5 feet deep and required 192,000 cubic yards of reinforced poured concrete (City of Baltimore n.d.). The dam is capped by a four-span, concrete arch bridge with stone parapet walls (Bridge No. BC 6520). The design of the dam, bridge, and gatehouse “reflect the aesthetics of the City Beautiful Movement with classical proportions and detailing” and was assessed in 1996 and 2001 as possessing significance for listing in the National Register of Historic Places (MHT DOE and MIHP forms BA-2732). Classical elements incorporated into the bridge design are the four, closed-spandrel, concrete arch openings in the center of the bridge and the piers and paneling of the closed parapet walls.

Project costs also included the construction of new bridges, culverts, and roadways. Several roads that once crossed the Gunpowder River required realignment as the valleys north of the dam filled with water. New sections of roadway were constructed to avoid the newly flooded areas. In all, 1,500 acres flooded when the reservoir reached capacity; the circumference of the reservoir was reported as 46 miles. The City of Baltimore constructed approximately 10.3 miles of road at a cost of \$431,396 (City of Baltimore n.d.). One section of new road was Spooks Hill Road along the east side of the reservoir between Kidds Schoolhouse Road and Frog Hollow Cove (United States Geological Survey [USGS] 1939). All road sections on City of Baltimore-owned property joined existing county roads to facilitate transportation over or around the reservoir. No separate internal circulation network was constructed on the reservoir property.

The construction of seven bridges and numerous culverts cost \$237,490 of the total project cost. Two bridges were constructed across the main body of the reservoir and four crossed tributaries (City of Baltimore n.d.). Of these six bridges, three bridges are metal and three originally were concrete T-beam construction. No comprehensive design program for the bridges constructed on the Prettyboy Reservoir property is evident from the extant bridges.

The two major bridges that span the main body of the reservoir are the Beckleysville Road bridge (Bridge No. BC 6516) (BA-

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MHT Comments:													
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Reviewer, Office of Preservation Services							Date						
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Reviewer, National Register Program							Date						

2735) and the Clipper Mill Road bridge (Bridge No. BC 6519) (BA-2811). Both bridges were completed in 1931. The Beckleysville Road bridge (Bridge No. BC 6516) (BA-2735) is an example of a metal, Pratt through truss bridge. The Clipper Mill Road bridge (Bridge No. BC 6519) (BA-2811), rehabilitated in 1988, is an example of metal plate girder bridge. Both bridges were recommended for National Register eligibility in 2001 as a result of the SHA historic bridge inventory. The Kidds Schoolhouse Road bridge (BA-2706) across Cooper's Run is another example of a metal girder bridge similar to the Clipper Mill Road bridge. The Kidds Schoolhouse Road bridge (BA-2706), which was rehabilitated in 1989, has not been evaluated for National Register listing.

Three concrete T-beam bridges were constructed in 1933 over tributaries to the Prettyboy Reservoir. One bridge was constructed on Georges Creek Road and two bridges were constructed on Spooks Hill Road. The Georges Creek Road bridge (Bridge No. BC 6521) (BA-2734) on the west side of the Prettyboy Reservoir was constructed with two, 41-foot concrete beam spans. Photographs dated 1995 showed that the bridge had solid poured-concrete parapet walls formed to suggest vertical piers with recessed panels (MHT MIHP form BA-2734). The Georges Creek Road bridge was replaced with a new concrete bridge in 2012. The Spooks Hill Road bridge over Frog Hollow Run (Bridge No. BC 6524) (BA-3132) was a single-span, concrete beam bridge measuring 24 feet in length (MHT MIHP form BA-3132). The solid parapet wall originally had solid poured-concrete parapet walls that suggested indented panels. The bridge over Frog Hollow Run was replaced with a new concrete bridge in 2001. Both the Georges Creek Road bridge (Bridge No. BC 6521) (BA-2734) and the Spooks Hill Road bridge over Frog Hollow Run (Bridge No. BC 6524) (BA-3132) were recommended for National Register eligibility in 2001 as a result of the SHA historic bridge inventory.

The Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) also is an example of a concrete T-beam bridge. This bridge has similar poured-concrete parapet walls that suggest piers with recessed panels. This common treatment of the bridge parapet walls may reflect the design aesthetic of the more elaborate stone parapets on the Prettyboy Dam Road bridge (BA-2732). The parapet walls on Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) have molded bases, slightly recessed walls, and projecting caps. The bridge is different from the other two concrete beam bridges in that it has a central open span flanked by infilled walls. This design reflects, in a modest way, the boxed girders of the Prettyboy Dam Road bridge leading to the four open concrete arches.

The choice of using concrete T-beam construction for the Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) was standard practice by the 1930s. Concrete T-beam construction had become a standardized bridge type. The earliest reference to "T-beam" structures in U.S. road and bridge construction literature was in 1909. The use of concrete T-beam construction for bridges gained popularity during the second decade of the twentieth century. By 1920, reinforced concrete, T-beam construction had "found broad application in standardized bridge design across the United States" (P.A.C. Spero et al. 1995:166). The Maryland SHA historic bridge survey documented 113 concrete beam bridges throughout the state built between 1900 and 1940 (P.A.C. Spero et al. 1995:182-183; MHT MIHP form BA-2734).

Evaluation

The Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) was constructed in 1933 as a result of the establishment of the Prettyboy Reservoir. As water filled the area north of the dam, the City of Baltimore realigned surrounding roads and built new bridges to accommodate through traffic and access to reservoir property. All roads joined with existing county roads to facilitate transportation over or around the reservoir. Seven bridges span the main body of the reservoir and its tributaries, but no comprehensive design program for the bridges is evident from the extant bridges. The concrete arches of the Prettyboy Dam Road bridge represent the most elaborate bridge design on the reservoir property.

Concrete T-beam construction was adopted for three smaller bridges constructed over tributaries to the reservoir. The three bridges

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shared similar construction techniques and treatments of the parapet walls. Of these three bridges, the Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) is the last intact concrete T-beam bridge constructed at the same time as the main Prettyboy Dam Road bridge (BA-2732). The appearance of the Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) exhibits some elements of classical design incorporated into the design of the more ornate Prettyboy Dam Road bridge. These elements include the treatment of the parapet walls and the enclosed girders. The Georges Creek Road bridge (BA-2734) and the Spooks Hill Road bridge over Frog Hollow Run (BA-3132) were similar concrete T-beam bridges constructed at the same time and for the same purpose that were evaluated as eligible for listing in the National Register of Historic Places. Based on this comparative data, Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) also appears to possess sufficient significance for listing in the National Register of Historic Places applying Criterion A.

The Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523), constructed in 1933, is an example of concrete T-beam construction. By the 1930s, concrete beam construction for bridges was standardized and widely used throughout Maryland. The use of T-beam construction for the Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) does not represent an early use of the technology, but rather an application of a widely used technology. Therefore, the Spooks Hill Road bridge over Cooper's Run (Bridge No. BC 6523) possesses no engineering significance applying National Register Criterion C.

References

City of Baltimore

- 2009 □ Bridge Inspection Report of Bridge No. BC 6523.
- n.d. □ Plaques on the Prettyboy Dam Road Bridge No. BC 6520.

Maryland Historical Trust (MHT)

- var. □ Maryland Inventory of Historic Properties forms, Determinations of Eligibility forms and records, and GIS data.

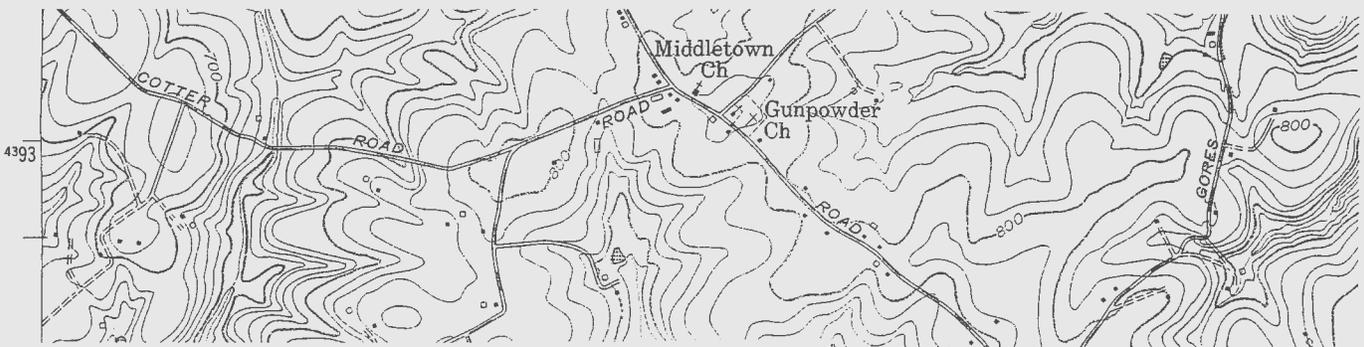
P.A.C. Spero & Company and Louis Berger & Associates

- 1995 □ Historic Highway Bridges in Maryland: 1631-1960: Historic Context Report. Prepared for Maryland State Highway Administration, Maryland State Department of Transportation. Electronic document available at <http://www.marylandroads.com>.

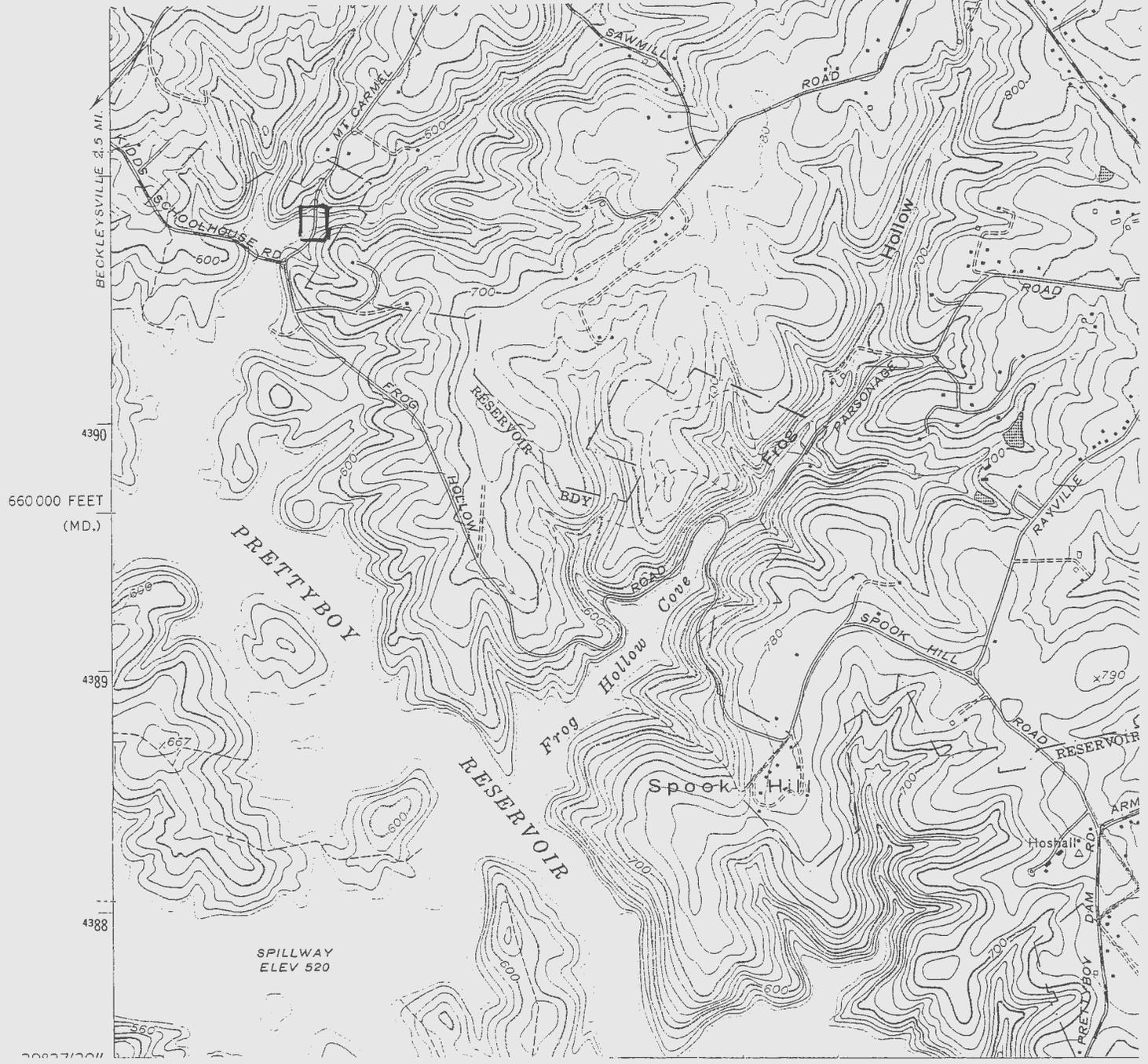
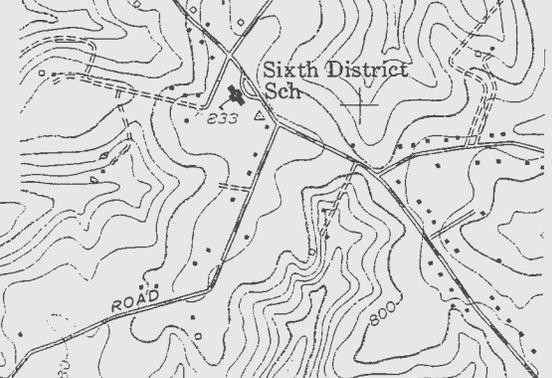
United States Geological Survey (USGS)

- 1939 □ Parkton MD-PA 15-minute quadrangle map. 1902, reprinted 1939. Electronic document, <http://nationalmap.gov/historical>, accessed November 2012.

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BA-3278
 Bridge BC 6523 Spooks Hill Road over Cooper's Run
 New Freedom USGS 7.5 minute quad map
 Scale 1:24,000



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Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. BA-3278

Bridge BC 6523 Spooks Hill Road over Cooper's Run

Continuation Sheet

Number Photo Log Page 1

The following information is the same for each photograph:

1. MIHP # BA-3278
2. Bridge No. BC 6523 Spooks Hill Road over Cooper's Run
3. Baltimore County, Maryland
4. RCG&A, Inc.
5. November 2012
6. MHT

Photo paper and ink: HP Vivera ink 97 Tri-Color cartridge, 101 Blue Photo cartridge,
and 102 Gray Photo cartridge on HP Premium Photo Paper (high gloss)
Verbatim Ultralife Gold Archival Grade CD-R, PhthaloCyanine Dye

Photo

BA-3278_2012-11-15_01.tif	Bridge setting, looking northeast
BA-3278_2012-11-15_02.tif	Bridge deck, looking south
BA-3278_2012-11-15_03.tif	West side of bridge, looking northeast
BA-3278_2012-11-15_04.tif	East elevation of bridge, looking northwest
BA-3278_2012-11-15_05.tif	Detail of bridge open span, looking northwest



BA-3278

Bridge No. BC6523

Baltimore Co.

RC&A, Inc.

11/2012

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Bridge setting, looking NE

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BA-3278

Bridge No. BC 6523

Baltimore Co.

RCG+A, Inc.

10/2012

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Bridge deck, looking S

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BA-3278

Bridge No. BC 6523

Baltimore Co. MD

RC&A, Inc.

11/2012

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West side of Bridge looking NE

3/5



BA-3278

Bridge No. BC 6523

Baltimore Co. MD

11/2012

REG4 A, Inc.

11/2012

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East elevation of bridge, looking NW

4/5



BA-3278
Bridge No. BC 6523
Baltimore Co. MD
REG+A, INC.

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