

10. NAME(S) OF STRUCTURE
State Bridge Number 137

11. PHOTOS (W/ FILM ROLL & FRAME NO.) AND SKETCH MAP OF LOCATION

50A:21-34



50A:27

Mack, Warren W. "A History of Motor Highways in Delaware", in Reed, Henry Clay, Delaware: A History of the First State, vol.2, pp.535-550 (NY: Lewis Historical Publishing Co., 1947).

Delaware State Program. Delaware State Highways; The Story of Roads in Delaware.... [Newark, Delaware: Press of Kells, 1919].

Federal Writers' Project. Delaware: A Guide to the First State. (New York: Viking Press, 1938).

Delaware State Archives. New Castle County Levy Court Records. Specifications, Proposals, Contract and Bond files.

Delaware State Archives. New Castle County Road Commissioners Records, 1750-1940.

Delaware DOT records: Annual Reports; contract files.

Plans on file at Delaware DOT: Contract # BNC-63, 69-040-01, 77-080-05 1939, 1981

12. SOURCES

13. INVENTORIED BY:

AFFILIATION

DATE

P.A.C. Spero & Company with Kidde Consultants for Delaware DOT

April-November 1988

HABS/HAER INVENTORY

See "HABS/HAER Inventory Guidelines" before filling out this card.

1. NAME(S) OF STRUCTURE

State Bridge Number 137
Wooddale Covered Bridge

2. LOCATION

Road 263A over Red Clay Creek
Mt. Cuba, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1850-1880/1969

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

TB

6. CONDITION

Good: Sheathing has been damaged. Some rusting on structural steel.

State Highway Bridge 137 is a covered timber bridge spanning 53'-6" long. It carries one lane of vehicular traffic on a 13'-0" wide deck. The bridge originally consisted of a Town lattice truss comprised with oak timber connected together with hardwood tapered dowels ("trunnels"). The abutments were constructed of semi-coursed rubble with a smooth finish on the exposed face. Flared wing walls are topped with granite capstone. A major 1969 alteration added rolled steel I-beams under the deck, which support the bridge structurally. The bridge is 10'-0" above water level.

Delaware Department of Transportation record drawings, made in 1939, document the configuration and construction details of this structure. These drawings depict a Town Lattice truss on rubble masonry abutments with flared stone wing walls, having a 53'-6" clear span, 67'-0" overall length, and 15'-9" width. The truss is constructed of 2"x8" diagonals; plates and sills are built up from 3"x10" timbers. Floor beams of 6"x12" timbers with 4"x6" cross bracing support 4"x8" stringers carrying 8"x2½" plank decking. Drawings note "Live load 3 tons (not 13)". Delaware Department of Transportation records also include drawings dated July 23, 1981, detailing alterations which add wood members to the floor framing system; the 1981 drawings also show that a steel I-beam subframe had been constructed by that date, to relieve the load on the wooden truss. Records indicate that there were over thirty-five covered bridges in Delaware. By 1937, there were five remaining: Smith's Bridge across the Brandywine; Yeatman's Bridge across White Clay Creek; and three across the Red Clay Creek. Two of the covered bridges built to cross Red Clay Creek are still standing, the Wooddale and Ashland Bridges.

Bridge 137 was built as early as the mid-nineteenth century and is one of only two remaining covered bridges in the State. These bridges are Town trusses, patented by Ithiel Town of New Haven, Connecticut in 1820. Town, an architect, designed his truss for ease of construction by a good carpenter. He advertised and marketed it for roadways and later, for railroad use, meeting with widespread adoption over the next thirty years. From New England to Virginia to as far west as Ohio, Town's timber bridges were used for both highway and railway spans. The Wooddale Bridge is thought to have been built by the same craftsmen that constructed its twin, the Ashland covered bridge some two miles away. Both structures were listed on the National Register of Historic Places in 1973.