

10. NAME(S) OF STRUCTURE

State Bridge Number 182

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

53A:30-36

54A:3A-6A



53A:30

—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: Photo Archives; contract files.

Plans on file at Delaware DOT: Contract #BNC-53

13. INVENTORIED BY:

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

AFFILIATION

DATE

April-November 19882

HABS/HAER INVENTORY

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

1. NAME(S) OF STRUCTURE

State Bridge Number 182

2. LOCATION

Faulkland Road over Hyde Run
Greenbank Mill, New Castle County, Delaware

3. DATE(S) OF CONSTRUCTION

1922

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

SG

6. CONDITION

Good: Some spalling on underside of beams. Some scour of abutments of waterline, poor approach.

State Highway Bridge 182 is a 25'-0" concrete encased steel girder span, carrying two lanes of traffic on a 24'-8" wide deck. The superstructure rests on concrete abutments, with U-shaped concrete wing walls. Seven concrete encased I-beams, spaced at 4'-0" intervals, support the deck. The concrete parapet is ramped at the portals, and features depressed rectangular, square, and ramped panels. A corbeled band defines the top of the fascia, whose bottom edge has a molded treatment. The beam seat projects from the abutment face; the underside of this projection is coved.

Delaware Department of Transportation records state that Bridge 182 was built in 1922 by the New Castle County Levy Court. The Court awarded the contract to Vincenzo Giovannozzi and Brothers of Wilmington on May 18, 1922. The bridge replaced a timber covered bridge on the same site. Levy Court specifications called for the replacement of the existing wooden covered bridge with a concrete encased steel I beam bridge with a reinforced concrete floor slab, abutments and wing walls. The remains of the covered bridge were to be stored on nearby county land, but some of the stone from the old masonry abutments could be reused. The specifications also included notes on construction materials such as O.H. steel for the reinforcement and steel beams. No re-rolled or square twisted bars were permissible. The ditch surrounding the bridge was paved with stone and thoroughly grouted with concrete. Original drawings dated May 1922, prepared by the New Castle County Engineer, detail the reinforcement scheme and indicate that the structure was designed for a 15 ton truck load with 25% impact.

State Bridge Number 182 is an example of a concrete encased steel girder bridge, with an incised, solid concrete parapet which exhibits some ornamental variation from the standard rectilinear profile. The construction of a new steel girder bridge for the Hyde Run crossing reflects a significant trend which occurred in the 1920s and 1930s in New Castle County, as the Levy Court pursued a systematic program of replacing obsolescent bridges, including covered bridges, with structures which could accommodate growing traffic needs. Bridge 182 was constructed as part of this program. It appears to be in good structural condition and is unaltered. It is considered a good example of a structural type commonly constructed during a period of expansion in the state road network, particularly in New Castle County, following the establishment of effective funding programs. The enactment of the Federal Aid Highway Act in 1916 was followed by the creation of the Delaware State Highway Department the next year. In 1919 the State Aid Road Law increased state funding for road construction to \$250,000 per county per year from its former level of \$10,000/county/year, and authorized counties to issue bonds to match state funds. These programs enabled the state transportation network to expand. During this period, county road departments continued to improve and maintain roads and bridges under their jurisdiction, while the State Highway Department was responsible for roads which it built and the DuPont Highway.