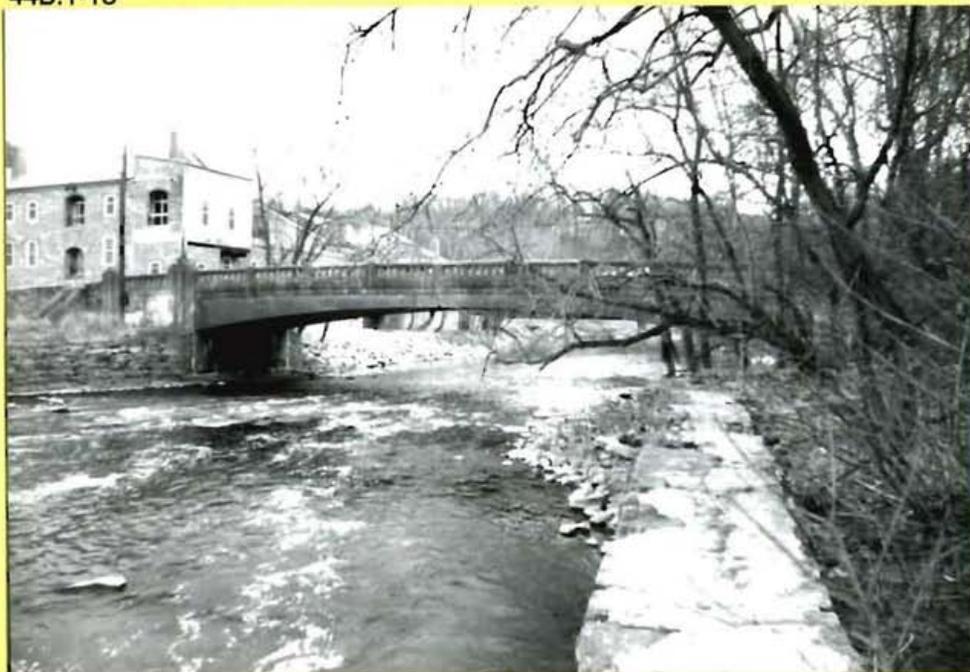


10. NAME(S) OF STRUCTURE

State Bridge Number 2

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

44B:1-15



44B:3

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-88

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 2

## 2. LOCATION

Rockland Road over Brandywine Creek  
Rockland, New Castle County, Delaware

## 3. DATE(S) OF CONSTRUCTION

1933

## 4. USE (ORIGINAL/CURRENT)

Vehicular

## 5. RATING

SG

## 6. CONDITION

Fair: Calcium deposits on bottom of deck; spalled concrete at abutments

State Highway Bridge 2 (Rockland Bridge) comprises a 112'-4 1/2" concrete encased steel girder span, and a 10'-4" concrete frame span for an overall length of 122'-7". It carries two lanes of traffic on a 24'-0" roadway with a 4'-5" sidewalk on each side, for a total width of 33'-2". The superstructure rests on concrete abutments with U-shaped concrete wing walls. Seven concrete-encased steel I-beams of varying dimensions support the deck of the main span. The bridge features considerable architectural elaboration including a concrete parapet comprising battered "skyscraper style" end and intermediate posts spanned by a balustrade with triangular-headed openings. The fascia of both spans is treated as a segmental arch. Stone steps on the north end lead from the bridge deck to the ground below.

Delaware Department of Transportation records state that Bridge 2 was built in 1933 by the New Castle Levy Court, as confirmed by a plaque on the bridge which also lists Levy Court members. The Court awarded the contract to Charles H. Dunleavy of Coatesville, Pennsylvania, for his low bid of \$35,190. Alban P. Shaw, County Engineer, supervised the design. Drawings prepared by the Office of the New Castle County Engineer are on file at the Delaware Department of Transportation, documenting the in-house design of this unique structure. Details of the concrete encased trusses which form the girders of the bridge are clearly delineated, as are specifications for the elaborate "skyscraper style" concrete pylons and balustrade. References to "old masonry" throughout the plans indicate that the bridge incorporates part of the substructure of an earlier structure. The new steel girder bridge replaced a wooden covered bridge constructed in 1833 with hand hewn beams of white pine and a maximum load of six tons. Replacement was justified by the covered bridge's deteriorated condition and its reduced functional capacity as traffic volume and weight increased during the twentieth century.

State Bridge No. 2 is a highly ornamental example of a concrete encased steel girder bridge. In its simplest form, the concrete encased girder was constructed frequently during the period 1925-1935. During this period, county road departments continued to improve and maintain roads and bridges under their jurisdiction, while the State Highway Department carried out the consolidation and improvement of the primary road system, and the development of the secondary road system throughout Delaware. The construction of a new steel girder bridge for the Rockland 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 covered bridges with structures embodying modern technology. With the replacement of the Rockland covered bridge in 1933, New Castle County had reduced the number of its covered bridges to six. The replacement structures reflected changing technology, materials and aesthetics. Other New Castle County bridges of the period which exhibit related decorative treatment are Bridges 3 and 20. Bridge 2 incorporates a structural detail which is unique among the bridges surveyed in Delaware, in that its girders comprise steel trusses encased in concrete, rather than the typical rolled sections. Designed by the local road department, the innovative structure is considered an exceptional example of its type.