

10. NAME(S) OF STRUCTURE

State Bridge Number 713

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

12B:0-4



12B: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).

Carter, Dick. The History of Sussex County. Georgetown, Delaware: Community Newspaper Corp., 1976.

Hancock, Harold Bell. The History of Sussex County, Delaware. [s.l. : s.n.] 1976.

Delaware State Archives. Sussex County Road Papers 1875-1940.

Delaware DOT records: Annual Reports; contract files.

Plans on file at Delaware DOT: Contract #535

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 713

2. LOCATION

Road 277 over Love Creek
Robinsonville, Sussex County, Delaware

3. DATE(S) OF CONSTRUCTION

1937

4. USE (ORIGINAL/CURRENT)

Vehicular

5. RATING

TB

6. CONDITION

Good

Delaware State Highway Bridge 713 is a 18'-0" timber bridge consisting of seventeen 6" x 14" beams spaced 1'-9" apart. The substructure, comprising pile bents and U-shaped wing walls (on the north end only), also is timber. The pile bents consist of 10" x 12" caps on 12" diameter piling. The wing walls on the north are made of 4" x 10" planks. There are no wing walls on the south elevation. The deck is 29'-3" in width and carries two lanes of traffic. A simple wood railing, 3'-3" in height, runs the length of the bridge.

Bridge 713 was built in 1937 under Delaware Highway Department contract 535. The contract was awarded to Walter Roach and Sons of Georgetown, Delaware, for \$2,655.00; that sum covered the construction of two creosoted timber bridges, Bridges 680 and 713. Bridge 713 replaced a 10'-0" long concrete bridge which had settled as a result of flooding in September 1935, one of 100 structures destroyed or seriously damaged in this storm. Timber bridges offered an inexpensive and quickly-erected replacement for these washed-out crossings. The speed of erection is reflected in the accounting for Contract 535: from award on June 7 to formal certification of completion on August 14, the two bridges took just nine weeks to build. The 1937 annual report of the State Highway Department noted that a total of 52 creosoted timber bridges were built during the year on the secondary system to replace inadequate or obsolescent structures. Original drawings dated May 1937 document the configuration and construction features of the bridge. Typical of timber bridges built during this period, Bridge 713 was designed for a 15 ton truck load, without impact.

State Bridge 713 is significant as a representative example of a southern Delaware timber bridge which appears to retain much of its original fabric. The majority of bridges surveyed on secondary roads in southern Delaware are simple timber bridges, mostly single spans, consisting of timber stringers on pile bents with wood decks and railings. Their structural configuration is simple and represents the continued use of one of the most primitive types of early bridges which found widespread application over a long period. Most of the bridges surveyed in Delaware date to the 1930s, although some are attributed earlier dates by the Department. Historic photographs illustrate that the type was built widely prior to the 1920s; it continued to be built in the 1940s. These bridges represent a specific engineering response to conditions characteristic of the region: they present a low-cost solution to the need for short spans crossing the numerous small waterways of southern Delaware. The structural simplicity of the type, the use of readily available materials, and the speed of erection also made it an ideal choice for use as a replacement bridge in emergency situations, such as after the disastrous floods of September 1935 when approximately 100 bridges were destroyed in Delaware.