NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0801150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 24.95

NAME & FEATURE INTERSECTED US 40 OVER STILL RUN **FACILITY** US 40

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 73 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The slightly skewed, two-span bridge crosses a wide but shallow creek on a tree-lined section of a heavily traveled two-lane highway. Nearby is the intersection of US 40 and the NJ 55 freeway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge with concrete balustrades is representative of many similar spans designed by the NJ State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 6." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:4,7 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0801151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 26.41

NAME & FEATURE INTERSECTED US 40 OVER SCOTLAND RUN AT MALAGA LAKE **FACILITY** US 40

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 25 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans the spillway that flows into Scotland Run, a tributary of the Maurice River, from Malaga Lake. For 3/10 of one mile on either side of the bridge US 40 travels on top of the earthen dam that forms the privately-owned, tree-lined lake. Extending between the wing walls is the concrete dam/spillway and gates that control the water level of the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge is an example of many similar bridges designed by the NJ State Highway Department in the 1920s and 1930s. The balustrades are slightly different from most state highway stringer bridges but in all other respects the bridge is representative of the type. Markers indicate the original route designation of the bridge was "State Highway Route 49." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:2-3 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 4.1

NAME & FEATURE INTERSECTED NJ 41 OVER SOUTH BRANCH OF BIG TIMBER CREEK **FACILITY** NJ 41

TOWNSHIP DEPTFORD TOWNSHIP

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 2 **LENGTH** 138 ft **WIDTH** 40 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The steel thru girder bridge is located on a very busy stretch of highway near the intersection of NJ 55, NJ 41, the New Jersey Turnpike, and the Atlantic City Expressway. Convenience stores, gas stations, and shopping centers dominate the bridge's surroundings. Scrub trees and undergrowth line the river banks.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The two-span, encased, thru-girder bridge has reinforced-concrete abutments and piers, and cantilevered sidewalks with steel railings. The bridge is representative of a type designed by the State Highway Department in the 1920s. A historic marker notes that in 1777 the Hessians fled across the river at this site at the Battle of Red Hook, but the bridge lacks a historic context with this event. The bridge is not technologically distinguished, and better examples, like 0802I14, exist.

INFOR MATION

PHOTO: 41:41-42 (08/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802H03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DELAWARE STREET (CR 534) OVER STARRS DITCH **FACILITY** DELAWARE STREET / COOPER AVENUE (CR 534)

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The bridge spans Starr's Ditch, a tributary of Woodbury Creek. Upstream the creek widens to form large tidal mudflats. Trees line Delaware Avenue and the surrounding area is a residential neighborhood (c. 1900-1980). To the west is a high-tension electric power line.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:31-32 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802I11 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED EVERGREEN AVENUE (CR 553) OVER WOODBURY CREEK **FACILITY** EVERGREEN AVENUE (CR 553)

TOWNSHIP WOODBURY CITY

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 45 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT Evergreen Avenue passes through Evergreen Park (c. 1970), a narrow green strip along Woodbury Creek in Woodbury City. The creek has been dammed shortly downstream and the concrete arch bridge spans Frank H. Stewart Memorial Lake. The bridge is not integral to the park design, in fact the street ungraciously cuts the park in half. Nearby is a residential area with single-family homes and apartments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:27-28 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0802I14 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HUNTER STREET OVER CONRAIL **FACILITY** HUNTER STREET

TOWNSHIP WOODBURY CITY

TYPE THRU GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 93 ft **WIDTH** 20 ft

CONSTRUCTION DT 1914 **ALTERATION DT** 1935 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** SUBURBAN CONSTRUCTION CO.

SETTING / CONTEXT The two-lane wide, encased thru girder spans a single-track railroad running through an older, well-preserved, 19th-century residential neighborhood in Woodbury City. The bridge is within a large historic district that incorporates Woodbury's commercial and residential areas. A nomination has been submitted for review by ONJH. The bridge appears to be a contributing element.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased, thru-girder with floor beams bridge has stone abutments. The bridge was designed by William C. Cattell, the county engineer, and built by the Suburban Construction Co. of Philadelphia. It was repaired and strengthened by the McClintic-Marshall Co., a division of Bethlehem Steel, in 1935. The bridge is eligible because it falls within the period of significance of the historic neighborhood in which it is located.

INFOR MATION

SOURCES:
Gloucester County Engineer. Bridge File Cards and Plans, #0802i14, 1914-1935.
Office of New Jersey Heritage. Woodbury Historic District Nomination. 1991.
Waddell, J. A. L. Bridge Engineering. 1916.

PHYSICAL DESCRIPTION: The single-span bridge is an above grade crossing of the former Pennsylvania-Reading Seashore Lines, now Conrail. The bridge is a 93'-span encased thru girder with encased floor beams. It is supported on coursed-stone abutments. The bridge has a 20'-roadway and two narrow concrete sidewalks on the interior side of the girders.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Hunter Street Bridge lies within the proposed Woodbury Historic District, a large historic district that incorporates Woodbury's commercial and residential areas. Built in 1914, the bridge was constructed within the dates of significance of the proposed district (c.1715-1941) and contributes to the historic character of the well-preserved, 19th-century residential neighborhood in which it is located. The bridge serves to connect the residential area with the downtown commercial area to the west.

The bridge was constructed by the Suburban Construction Company of Philadelphia after plans approved by the Gloucester County Engineer, William C. Cattell. In 1935 the bridge was repaired by the McClintic-Marshall Co., a division of Bethlehem Steel, but the overall design of the bridge was not significantly altered. The bridge is a representative example of a thru-girder bridge technology, and is historically significant because of its location within a proposed historic district. A nomination for the historic district has been submitted for review by ONJH.

PHOTO: 41:29-30 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOMLIN STATION ROAD (CR 607) OVER NEHONSEY BROOK **FACILITY** TOMLIN STATION ROAD (CR 607)

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The concrete-slab bridge spans a shallow creek in a low-lying wetlands. Scrub brush, small trees and rushes dominate the landscape. To the northeast of the bridge is a small boat launch. The small town of Greenwich lies a few hundred yards north on Tomlin Station Road. The bridge has reinforced concrete abutments.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 40:5-6 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SWEDESBORO-PAULSBORO ROAD OVER STILL RUN **FACILITY** SWEDESBORO PAULSBORO ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JAMES C. HENRY

SETTING / CONTEXT The two-lane bridge spans a small creek in a sparsely developed area. The fields surrounding the bridge were probably once farmed but haven since been allowed to turn to scrub brush. A number of warehouses are located nearby due to the proximity of I-295 and the New Jersey Turnpike. A large electric power line crosses overhead. The bridge has reinforced concrete abutments and wing walls.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 40:1-2 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803E08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED DEMOCRAT ROAD (CR 551 SPUR) OVER NEHONSEY BROOK **FACILITY** DEMOCRAT ROAD / MICKLETON GIBBSTOWN ROAD

TOWNSHIP GREENWICH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1918 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane bridge spans a shallow, tree-lined creek in the village of Gibbstown. The bridge is located within a residential neighborhood (c. 1950-60), although next to the bridge is a large vacant lot.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/07/89

SUMMARY The bridge is a representative example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The T-beam, so called because of the T-pattern of the steel rebars in the reinforced concrete beams, was a popular design from the mid-1910s to the 1930s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:7-9 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803G01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 551) OVER MANTUA CREEK **FACILITY** KINGS HIGHWAY (CR 551)

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 76 ft **WIDTH** 30 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GRAY CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge spans a tidal tributary of the Delaware River outside of the small village of Mount Royal. Up and downstream from the bridge are large marshes and tree-lined banks. The local neighborhood includes a scattering of homes (c. 1950-70) and a number of warehouses and small factories, the most prominent of which is Imperial Chemical Industries at the corner of CR 551 and CR 643.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge is one at least four similar bridges with balustrades and reinforced concrete substructure built by Gloucester County between 1933 and 1942. The Gray Construction Co. of Morristown contracted to build the bridge. Encased stringers are a common bridge type throughout New Jersey and since 1920 have been in wide use by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 41:33-34 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0803K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COOPER STREET (CR 706) OVER ALMONESSON CREEK **FACILITY** COOPER STREET (CR 706)

TOWNSHIP DEPTFORD TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 31 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT Located in a suburban neighborhood (c. 1970) near the NJ 55 freeway, the two-lane concrete arch bridge spans a narrow but steeply banked, tree-lined creek. Just upstream from the bridge is a small dam and lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:43-44 (08/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804E05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WARRINGTON MILL ROAD OVER PURGEY CREEK **FACILITY** WARRINGTON MILL ROAD

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1921 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Set in beautiful park-like surroundings, the bridge forms part of a mill pond, dam, and canal system that once powered a mill which recently burned to the ground. The bridge's roadway approaches are part of an earthen dam creating the mill pond and extending from bridge abutment to abutment is a concrete spillway that once supported flood gates. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam bridge with plain concrete parapets is an example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The bridge postdates the dam and mill, and if the mill had survived the bridge might be of greater historic interest. The T-beam was a popular design from the mid-1910s to the 1930s. The bridge has no significant historical or technological associations.

INFOR MATION

PHOTO: 42:1-3 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804F03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED RATTLING RUN ROAD OVER RATTLING RUN **FACILITY** RATTLING RUN ROAD

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Located in a rural section of Gloucester County, the two-lane, concrete arch bridge spans a shallow creek running through farmer's fields. Nearby is a nineteenth-century farmhouse in good condition.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an elliptical example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:43-44 (07/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804F05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TOMLIN STATION ROAD (CR 607) OVER RATTLING RUN **FACILITY** TOMLIN STATION ROAD (CR 607)

TOWNSHIP EAST GREENWICH TOWNSHIP

TYPE ARCH **DESIGN** ELLIPTICAL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 24 ft

CONSTRUCTION DT 1919 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT Suburban residences (c. 1920-70) on relatively large wooded lots line Tomlin Station Road. Rattling Run is tree-lined and picturesque with grass-covered banks. The concrete arch bridge with parapet walls blends well with its surroundings.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an elliptical example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:41-42 (07/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804H05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JESSUPS MILL ROAD OVER EDWARDS RUN **FACILITY** JESSUPS MILL ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** 1940 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane concrete arch spans a small creek along a tree-lined county road. Nearby is the privately-owned Hidden Acres Picnic Area and Wildlife Refuge. The surroundings woods are new growth scrub trees and undergrowth.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is not a good example of over 15 other existing arches built between 1912 and 1940 in Gloucester County. In 1940 the county rebuilt the west abutment. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:9-10 (07/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804I02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANTUA-WENONAH ROAD (CR 632) OVER MANTUA CREEK **FACILITY** MANTUA-WENONAH ROAD (CR 632)

TOWNSHIP WENONAH BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 50 ft **WIDTH** 40 ft

CONSTRUCTION DT 1933 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CHARLES D. PROSSER

SETTING / CONTEXT The two-lane bridge spans a tree-lined river in a suburban residential neighborhood (c. 1920-60). Trees and heavy undergrowth line the fairly deep and wide Mantua Creek.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer with balustrades and reinforced-concrete substructure is one of at least four similar bridges built by Gloucester County between 1933 and 1942. Charles D. Prosser of Pitman contracted to construct the bridge. Encased stringers are a common bridge type throughout New Jersey and since 1920 have been widely used by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:10-11 (07/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804J08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARNSBORO-BLACKWOOD ROAD OVER MANTUA CREEK **FACILITY** BARNSBORO-BLACKWOOD ROAD (CR 603)

TOWNSHIP DEPTFORD TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 38 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane bridge spans a small creek near an intersection with a gas station and convenience store. The surrounding neighborhood is suburban residential (c. 1950-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of at least five existing T-beam bridges with parapets built by Gloucester County between 1915 and 1932. The T-beam, so called because of the T-pattern of the rebars in the reinforced concrete beams, was a popular design from the mid-1910s to the 1930s, and it is common in southern New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 41:1-2 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804L04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WILSON ROAD OVER BELLS LAKE BRANCH **FACILITY** WILSON ROAD

TOWNSHIP WASHINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 20 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow, skewed, two-lane bridge spans a small creek in a suburban residential neighborhood (c. 1950) near the NJ 168 commercial strip. Developers are building a new shopping center and professional office building in the vacant lot downstream from the bridge.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain parapets is one at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. It is similar to the other T-beams except for its skew. The T-beam, so called because of the T-pattern of the rebars in the reinforced-concrete beams, was a popular design from the mid-1910s to the 1930s. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:18-19 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0804L05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 705 OVER BELLS LAKE BRANCH **FACILITY** LAKELAND-TURNERSVILLE ROAD (CR 705)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE T BEAM **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1915 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in a transitional area between a small industrial zone and a residential neighborhood (c.1920-1950) near NJ 168. A small trapezoidal-shape dam with a single gate extends upstream from the bridge abutments for flood control. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The T-beam bridge with plain concrete parapets is an example of at least five existing T-beam bridges built by Gloucester County between 1915 and 1932. The T-beam, so-called because of the T-pattern of the rebars in the reinforced-concrete beams, was a popular design from the mid-1910s to the 1930s, and they are common in southern New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:12-14 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805153 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 3.2

NAME & FEATURE INTERSECTED NJ 44 OVER NEHONSEY BROOK **FACILITY** NJ 44

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** No Data

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek near where NJ 44 passes over the Penns Grove Branch of Conrail (#0805154). The bridge has a slight grade and makes up part of the approach to the railroad overpass. The surrounding area is wooded with scrub trees and heavy undergrowth. Slightly upstream from the bridge is a small wooded lot with home (c. 1920).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with reinforced-concrete substructure is representative of many short-span bridges designed and built by the state highway department in the period between 1920 and 1950. No historic railing survives and beam guide rails have been added. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:12-13 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805154 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.79

NAME & FEATURE INTERSECTED NJ 44 OVER CONRAIL **FACILITY** NJ 44

TOWNSHIP GREENWICH TOWNSHIP

TYPE SLAB **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 6 **LENGTH** 182 ft **WIDTH** 40.5 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT PENNSYLVANIA RAILROAD **BUILDER** DANIEL S. BADER

SETTING / CONTEXT The skewed continuous-slab bridge provides an above grade crossing for NJ 44 over the Penn's Grove Branch of Conrail (formerly PRSLRR) at the outskirts of the small village of Gibbstown near the Delaware River. To the east and along the railroad track is a small working-class neighborhood of single-story bungalows (c. 1900-1930). To the west is a freight siding. To the south is a dense covering of scrub trees and undergrowth.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The six-span, continuous-slab bridge with paneled concrete parapets has reinforced-concrete abutments, floor beams, and column-and-beam bents. Engineers of the Soo Line Railroad pioneered the continuous slab design in the period before WW I. This span is well preserved, but it is not technologically or historically significant. A more elaborately detailed example of the bridge type (0421150) has been recommended for eligibility.

INFOR MATION

SOURCES:
Condit, Carl W. American Building Art: The Twentieth Century. New York: Oxford University Press, 1961.
New Jersey Department of Transportation. Bridge File 0805154. 1930.

PHYSICAL DESCRIPTION: The skewed, two-lane, six-span, 182'-long, 40.5'-wide bridge survives with very few alterations. The bridge is a continuous reinforced-concrete slab with reinforced-concrete bents, floor beams, and abutments. The bents are composed of concrete columns and longitudinal beams spaced 17' apart except for the central bents which is separated from its neighbors by 22'6". The floor beams do not extend across the middle two spans. The bridge has overhanging sidewalks with paneled parapets. A steel guard rail has been added to the bridge. The approaches are earth fill.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: According to Condit, the first continuous-slab bridge in the United States was built in 1909 to carry Lafayette Avenue over the tracks of the Soo Line in St. Paul, Minnesota. The steady improvement of concrete-slab bridge designs and concrete-reinforcing systems led to their increasing adoption, especially for highway bridges. The NJ 44 bridge employs a common continuous slab design with piers consisting of longitudinal beams extending over rows of columns. A rarer design employs a single row of columns along the center line of the deck.

Railroads in New Jersey did not frequently build continuous slab bridges. No documentation has been located to explain why the Pennsylvania Railroad chose continuous slab construction over other more common bridge designs, e.g. steel girder. The continuous slab design appears to lend itself well to the pronounced skew of the crossing. The railroad also planned in the future to lay a second track under the bridge explaining the uneven placement of the bents and floor beams. The bridge is a good example of its type, but it is not historically or technologically distinguished, and better examples exist.

PHOTO: 40:10-11 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED KINGS HIGHWAY (CR 551) OVER RACCOON CREEK **FACILITY** KINGS HIGHWAY (CR 551)

TOWNSHIP SWEDESBORO BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 4 **LENGTH** 154 ft **WIDTH** 40 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** EDWARD H. ELLIS

SETTING / CONTEXT The two-lane bridge is located on one of the main thoroughfares leading into downtown Swedesboro. Raccoon Creek is a wide slow-moving, tree-lined river with frequent fishing holes along its banks. To the south is a residential neighborhood (c. 1800-1990) with an intermixture of small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete-encased steel stringer with pierced balustrade and reinforced-concrete substructure is one of four similar bridges built by Gloucester County between 1933 and 1942. Edward H. Ellis of Westville contracted to construct the bridge. Concrete-encased stringers are a common bridge type throughout New Jersey and since 1920 have been widely used by the state and county highway departments. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:21-22 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LOCKE AVE (CR 671) OVER RACCOON CREEK **FACILITY** LOCKE AVENUE (CR 671)

TOWNSHIP SWEDESBORO BOROUGH

TYPE SWING SPAN **DESIGN** CENTER BEARING **MATERIAL** Steel

 # SPANS 2 **LENGTH** 156 ft **WIDTH** 15.3 ft

CONSTRUCTION DT 1911 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** OWEGO BRIDGE COMPANY

SETTING / CONTEXT The Locke Avenue Bridge, the furthest upstream of three movable spans across Raccoon Creek between the Delaware River and Swedesboro, last opened to river traffic in the mid-1960s. A working-class neighborhood of two-story, two-family houses is located upstream on the southern river bank. Across the tree-lined northern bank, the land opens into farmers' fields. At the southern approach is the original tender's house.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 11/29/90, Letter 6/30/95.

SUMMARY The riveted-steel truss is the only swing span, and the oldest of three existing movable spans in Gloucester County. The center-bearing swing was one of the most common movable spans built in the 19th and early-20th centuries. Fabricated by the Owego Bridge Co. of Owego, NY, the hand-operated bridge has roller end lifts. Although no longer operable, the bridge possesses good historic integrity and documentation, and its neighborhood provides an appropriate context.

INFOR MATION

PHOTO: 40:26-29 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 538 OVER NARRATICON RUN **FACILITY** SWEDESBORO FRANKLINVILLE ROAD (CR 538)

TOWNSHIP SWEDESBORO BOROUGH

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 30 ft **WIDTH** 30 ft

CONSTRUCTION DT 1925 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** WILLIAM B. JONES

SETTING / CONTEXT The two-lane, concrete arch bridge spans tree-lined Narraticon Creek near its confluence with Raccoon Creek on the northern side of Swedesboro. The neighborhood is a mixture of residential and commercial structures some which date to the nineteenth century but they have all been heavily altered. Immediately adjacent to the bridge is a garage.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 40:22-23 (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805D06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLIN STREET (CR 666) OVER NARRATICON RUN **FACILITY** FRANKLIN STREET (CR 666)

TOWNSHIP SWEDESBORO BOROUGH

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 20 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane bridge spans the spillway from Narraticon Lake in the village of Swedesboro. The surrounding neighborhood is residential (c. 1870-1950), and a number of homes back onto the tree-lined lake. A timber pile and frame dam extends between the bridge's upstream wing walls. The structural association of bridges and dams is common in the region and an example has been recommended for eligibility in Salem County (#1700449).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90

SUMMARY The built-up timber stringer with timber pile piers and board railing is an example of at least seven other wood-stringer bridges built by Gloucester County between 1941 and 1947. Due to deterioration and in-kind replacement little original bridge fabric survives, although no repair records could be located. Timber stringers are common bridge type in Southern New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 40:24-25 (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805F04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MULLICA HILL-SWEDESBORO ROAD OVER SOUTH RACCOON CREEK **FACILITY** MULLICA HILL SWEDESBORO ROAD

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The 2-lane bridge spans a small creek in a rural section of Harrison Township. The tree-lined road passes near cow pastures and orchards.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is one of the newest examples of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:38a-39a (09/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805H03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BREAKNECK ROAD (CR 603) OVER EDWARDS RUN **FACILITY** BREAKNECK ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 28 ft **WIDTH** 47 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-span corrugated-steel pipe culvert spans a very shallow creek in a rural area of Mantua Township. Along the tree-lined county road are numerous farmers' fields and scattered farmhouses and residences (c. 1800-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Steel pipe culverts are a very common form of short-span bridge. An unusual feature of the culvert is the retaining walls made with field stones, perhaps from the abutments of an earlier wood beam bridge that county records indicate once stood at the site. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 42:4-5 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BARNSBORO-FAIRVIEW ROAD (CR 603) / CHESTNUT BRANCH **FACILITY** BARNSBORO-FAIRVIEW ROAD (CR 603)

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** NIELSEN-CARLSON CO.

SETTING / CONTEXT The area surrounding the single-span concrete arch bridge is densely wooded and heavily overgrown with vegetation. The depot village of Sewell (c. 1875) on the Glassboro Branch of Conrail is north along CR 603. Sewell was once a shipment point for locally grown vegetables and fruits. The bridge is one of three arches spanning Chestnut Branch within 3/4 of a mile.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:5-6 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED TYLERS MILL ROAD OVER CHESTNUT BRANCH **FACILITY** TYLERS MILL ROAD

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The Tyler Mill Road Bridge crosses Chestnut Branch just down the hill from a small crossroads village (c. 1850). Upstream the remains of a dam suggest that a mill once stood nearby. Today, the area is lightly wooded and subdivided into residential properties. The crossroads has become a busy intersection near the NJ 55 freeway. The bridge is one of three concrete arches spanning Chestnut Branch within a 3/4 mile radius.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:11-12 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805I03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MANTUA-GLASSBORO ROAD OVER CHESTNUT BRANCH **FACILITY** MANTUA-GLASSBORO ROAD (CR 553A)

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 32 ft **WIDTH** 29 ft

CONSTRUCTION DT 1915 **ALTERATION DT** 1926 **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The ruins of a dam downstream from the bridge indicate that a mill probably once stood nearby and also accounts for the depth of the abutments below the springing line. The surrounding area has been subdivided into wooded residential lots. The bridge is one of three reinforced concrete arches spanning Chestnut Branch within 3/4 of a mile.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. In 1926 the county added concrete wing walls and the soffit shows extensive repair including the addition of an iron or steel stiffening rod. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 41:7-10 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805J06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 635 OVER MANTUA CREEK **FACILITY** GRENLOCH RICHWOOD ROAD (CR 635)

TOWNSHIP WASHINGTON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT Extending between the upstream wing walls of the two-lane bridge is a curved concrete dam/spillway that forms Bethel Lake. On one side of the lake is Bethel Mill County Park and on the other side wooded residential lots (c. 1950-90). Near the intersection of the NJ 55 freeway, the area has become heavily developed in recent years. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 46:29-31 (07/91) REVISED BY (DATE): QUAD: Runnemede

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NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0805J12 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED HOLLY AVENUE (CR 624) OVER MANTUA CREEK **FACILITY** HOLLY AVENUE (CR 624)

TOWNSHIP PITMAN BOROUGH

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 42 ft **WIDTH** 32 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The three-span pipe culvert crosses Mantua Creek at the Pitman Borough and Washington Township border. On the Pitman side of the border is a residential neighborhood (c. 1900-1980) and L. Arthur Walter Park, a city playground. On the Washington Township side of the border is a busy intersection with NJ 47, commercial properties, and an electric transformer station.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span culvert consists of standard corrugated steel pipes with earth backfill and stone and concrete rubble facing. According to county engineer's records, in 1940 a flood washed out an earlier concrete slab bridge, and the contractor apparently used the rubble to build the retaining walls for the culvert. Single and double pipe culverts such as this are common but usually fall below the 20' span limit. The culvert is not historically or technologically distinguished.

INFOR MATION

PHOTO: 46:27-28 (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 6.62

NAME & FEATURE INTERSECTED NJ 44 OVER MANTUA CREEK **FACILITY** NJ 44

TOWNSHIP PAULSBORO BOROUGH

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 167 ft **WIDTH** 40 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The operating vertical lift bridge spans Mantua Creek on the northern edge of Paulsboro, once the principle Delaware River port in Gloucester County. Mantua Creek is a tidal estuary and is still frequently navigated seasonally by pleasure craft. On the north bank is a new operator's house (c.1988). To the south is Paulsboro's business district with a mixture of nineteenth and twentieth century structures without NR district potential.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The vertical lift bridge has thru-girder deck, lattice-girder vertical towers with portal bracing and longitudinal lattice girders, wire-rope lift mechanism, reinforced-concrete counterweights in steel-plate frames, and operating machinery at the center of the span. The bridge is a distinguished and well-preserved example of a "Waddell-type" vertical lift, and is one of three such bridges built by the state in the county between 1935 and 1940. All are eligible.

INFOR MATION

SOURCES:

Pulver, H. E. "Vertical Lift Bridges," in George A. Hool and W. S. Kinne, eds., Movable and Long-Span Bridges. New York: McGraw-Hill, 1923.
Waddell, J. A. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The two-lane bridge is a single-span movable Waddell-type vertical lift with two encased steel stringer approach spans. Its overall length is 167' with a 40' roadway. The main vertical lift span consists of a single thru girder with floor beams. The span is constructed to permit it being lifted vertically to a height of 64' clear above mean low water. At each end of the main span are steel towers approximately 96'-high. Each tower consists of two legs with horizontal and diagonal sway bracing. Between the tops of the opposite towers pass two trusses, and suspended between the trusses is the central overhead machinery house. The towers and bracing are all riveted angles, channels, and beams steel construction. Cantilevered off both sides of the main span are concrete deck sidewalks with sheet metal balustrades. The main span is operable and tended.

Power for lifting the bridge is supplied from the central overhead machinery house that contains an electric motor and a back-up gas engine. At the top of each of the four tower legs are sheaves over which pass steel-wire ropes. The ropes are attached at one end to counterweights and at the other to couplings attached to the roadway. Power is transmitted from the motor to the sheave coupling by means of direct drive line shafting and gears. The span moves up and down along a C-shaped guide on the interior of the tower legs. The machinery is equipped with brakes, clutch, and locks. The two counterweights consist of concrete blocks held within riveted steel plate frames on the exterior side of the tower legs.

The approach spans are concrete encased steel stringers with concrete balustrades and sidewalks. The bridge has a concrete substructure with cutwater piers. The fenders are timber piling. At each end of the main span are safety gates original to the bridge construction. Additional modern safety gates have been added at the abutment ends of the approach spans. Northeast of the northern approach span is a modern two-story operator's house.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The vertical lift bridge across Mantua Creek is a well-preserved and operable example of a historically and technologically significant bridge type. The vertical lift type represented important advances in structural steel construction, and was an alternative to bascule and swing span type movable bridges. The Mantua Creek Bridge is one of three vertical lifts along old New Jersey Highway Route 44 in Salem and Gloucester Counties. All three bridges, built between 1935 and 1940, have been recommended as eligible because they represent an increasingly rare early 20th-century bridge type.

Vertical lift bridges are a special bridge type combining both mechanical and civil engineering technologies. The first vertical lift bridge of importance in the United States was designed by well-known bridge engineer, J. A. L. Waddell. In 1894 he oversaw the construction of the South Halsted Street Bridge over the Chicago River in Chicago, Illinois. The bridge, which had overhead trusses between the towers and sheaves at the top of each tower leg, became known as the Waddell-type vertical lift. Beginning in 1908 vertical lift bridges were built in increasing numbers, often replacing swing-span type movable bridges. According to bridge engineer H. E. Pulver (1923) the advantages of the vertical lift included simplicity of design, rigidity, reliability, ease of operation, short time of operation (usually 40-50 seconds), power economy, cost of operation, and less chance of collision with boats. The bridge type was particularly suitable to long span crossings where high navigational clearance was required.

The Mantua Creek Bridge was built in 1935 as part of the reconstruction of NJ Highway Route 44. No plans or records of the original construction have been located, however, plans from the other two existing vertical lift bridges suggest that the firm of Ash, Howard, Needles, and Tammen of New York and Kansas City probably acted as consulting engineers on the New Deal era public works project. The bridge survives with few significant alterations. In c.1985 the electric motors were rehabilitated and new brakes and locks added. The bridge still opens to navigation, mostly to pleasure craft in the summer.

The Mantua Creek Bridge is the oldest of the three bridges on old NJ Highway Route 44. The second oldest, US 130 over Oldmans Creek

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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(1710152), is nearly identical to the Mantua Creek Bridge. It is no longer operable but retains its original operator's house. The youngest bridge, US 130 over Raccoon Creek (0807151) is also operable. It is of different construction and has been retrofitted with machinery and a new operator's house. As a group the bridges are neither the oldest or largest of their type in the United States, however, they are significant engineering achievements representing the application of vertical lift bridge technology to medium-span crossings.

PHOTO: 40:35-42 (08/91) REVISED BY (DATE): QUAD: Woodbury

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806G05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 581 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** COMMISSIONERS ROAD (CR 581)

TOWNSHIP HARRISON TOWNSHIP

TYPE PIPE CULVERT **DESIGN** **MATERIAL** Steel

 # SPANS 2 **LENGTH** 30 ft **WIDTH** No Data

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The corrugated-steel pipe culvert crosses a shallow tree-lined creek in a rural section of Harrison Township.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY According to county records, the two-span culvert replaced an earlier reinforced-concrete bridge that washed away in the 1940 flood. Concrete rubble from the older bridge appears to have been used to construct the culvert retaining walls. Beam guide rails have been added. Single-span and two-span pipe culverts are common and usually fall under the 20'-minimum for bridge classification. The culvert is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:1a,44a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806G08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 618 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** RICHWOOD HARRISVILLE ROAD (CR 618)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 24 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek in a rural section of South Harrison Township. Nearby are farmers' fields and homes on large wooded lots. Immediately adjacent to the bridge is a well-maintained house (c. 1950) with a generous yard.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:2a-3a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0806H05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-MULLICA HILL ROAD (CR 623) OVER CLEMS RUN **FACILITY** AURA-MULLICA HILL ROAD (CR 623)

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 36 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans the spillway from tree-lined Kincaid Lake in the eastern portion of Harrison Township. Nearby are a few scattered residences (c. 1900-1990), but the area is predominantly rural and forested. A box-shaped, reinforced concrete spillway/dam extends from the bridge's upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:4a-6a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 16.35

NAME & FEATURE INTERSECTED NJ 45 OVER SOUTH BRANCH OF RACCOON CREEK **FACILITY** NJ 45

TOWNSHIP HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 35 ft **WIDTH** 30.3 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a shallow creek about 4/5 mile south of the village of Mullica Hill. The creek banks are densely covered with brush and undergrowth. Nearby are homes (c. 1850-1980) on wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel stringer bridge with concrete balustrades and substructure is representative of many bridges designed and built by the NJ State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 6." Steel-stringer bridges are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:40a-41a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 17.65

NAME & FEATURE INTERSECTED NJ 45 OVER RACCOON CREEK **FACILITY** NJ 45 (MAIN STREET)

TOWNSHIP HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 44 ft **WIDTH** 40.2 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge is located in Mullica Hill near the busy intersection of NJ 45 and US 322. Mullica Hill is a picturesque village with many older homes and buildings (c. 1770-1920). Storefront antique shops are numerous and the village retains much of its nineteenth-century character. Downstream from the bridge is a concrete arch bridge (#0825150) listed as contributing to the Mullica Hill Historic District.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible. Listed. Mullica Hill Historic District. 04/25/1991. Noncontributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The encased steel-stringer bridge with balustrade and reinforced-concrete substructure is representative of many bridges designed by the NJ State Highway Department from 1920 to 1940. The bridge does not fit within the dates of significance of the Mullica Hill Historic District (c. 1770-1920). Steel stringer are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:31a-32a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807D03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PORCHES MILL ROAD OVER OLDMANS CREEK **FACILITY** PORCHES MILL ROAD

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 20.3 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1970ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The narrow bridge spans Oldman's Creek on the Salem County line. Heavy undergrowth and trees line the narrow creek; the surrounding area is rural with vegetable farms, orchards, and scattered residences (c. 1800-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 12/05/90

SUMMARY The short stringer bridge with reinforced-concrete substructure, encased fascia stringers, and pipe railings, has been modified by the addition of concrete jack arches. The corrugated pattern arches were installed c.1970 when the bridge deck was replaced. Their finish duplicates that of the steel form, and waterproofing is seeping out between the seams. The bridge is one of three similar altered stringer spans in the vicinity. None is technologically or historically noteworthy.

INFOR MATION

PHOTO: 43:31-32 (07/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807E07 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MILL STREET OVER OLDMANS CREEK **FACILITY** MILL STREET

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 33 ft **WIDTH** 25 ft

CONSTRUCTION DT 1917 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** H. B. RICEMAN (?)

SETTING / CONTEXT The two-lane bridge spans the spillway from Harrisonville Lake on the border between Gloucester and Salem Counties. To the north is the small mill village of Harrisonville (c. 1810-1920) and downstream the wooded DEP Harrisonville Wildlife Management Area. A circular-shaped concrete spillway/dam extends from the upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is an example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:15a-17a (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807E08 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 617 OVER OLDMANS CREEK **FACILITY** WOODSTOWN-HARRISONVILLE ROAD (CR 617)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 34 ft **WIDTH** 30 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT HOWARD SKINNER, SALEM CO. ENG. **BUILDER** C. FISKE CAMPBELL

SETTING / CONTEXT The two-lane bridge spans a shallow creek on the Gloucester-Salem County border. Nearby are residences (c. 1850-1980), fields, and orchards. Gloucester and Salem County jointly paid for the construction of the steel-stringer bridge. Salem County Engineer Howard Skinner prepared the design.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is similar to at least eight existing steel stringers with balustrades, encased fascia, and reinforced-concrete substructure built by Salem County between 1930 and 1941. The bridge replaced an earlier bridge destroyed in the 1940 flood. The bridge is a representative example of the most common type of pre-1946 bridge in the state, and is not historically or technologically distinguished.

INFOR MATION

PHOTO: 45:18a-20a (08/91) REVISED BY (DATE): QUAD: Woodstown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0807H01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MAIN STREET (CR 622) OVER RACCOON CREEK **FACILITY** MAIN STREET (CR 622)

TOWNSHIP ELK TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JAMES C. HENRY

SETTING / CONTEXT The two-lane bridge spans the spillway from Ewan Lake on the outskirts of the small village of Ewan (c. 1790-1950). Immediately east of the bridge is a large 2 1/2 story, brick, federal-style home with a 1793 datestone. A concrete box dam extends from the southern abutments to create the tree-lined lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:7a-8a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 20.75

NAME & FEATURE INTERSECTED NJ 45 OVER EDWARDS RUN **FACILITY** NJ 45

TOWNSHIP MANTUA TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 38 ft

CONSTRUCTION DT 1920 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The bridge spans a shallow but steep-banked creek outside of the town of Mantua. Small scrub trees and undergrowth line the creek and the roadway. A residential neighborhood (c. 1950-1980) is located to the north on NJ 45. Constructed by the county, the bridge was taken over by the state in 1927.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapets is a representative example of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer from 1909 to 1942, preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 42:7-8 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808F01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED STRINGTOWN ROAD OVER OLDMANS CREEK **FACILITY** STRINGTOWN ROAD

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 18 ft

CONSTRUCTION DT 1912 **ALTERATION DT** 1970ca **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The single-lane bridge spans a shallow creek on the border between Gloucester and Salem Counties. The surrounding area is rural with cow pastures, orchards, fields, and scattered residences (c. 1850-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short stringer bridge with reinforced concrete abutments, encased fascia stringers, and pipe railings has been modified by the addition of concrete jack arches between the stringers. The bridge is one of three similarly altered short stringer spans in the vicinity. The corrugated-pattern arches were added c.1970 when the concrete deck was replaced. Their finish reflects that of the steel form. Waterproofing is seeping out the seams. The bridge is not a good example of its type.

INFOR MATION

PHOTO: 45:12a-14a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808F02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COMMISSIONERS ROAD (CR 581) OVER OLDMANS CREEK **FACILITY** COMMISSIONERS ROAD (CR 581)

TOWNSHIP SOUTH HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 23 ft

CONSTRUCTION DT 1912 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway from Algonkin Lake at Oldmans Creek on the border between Gloucester and Salem Counties. The surrounding area is wooded with dense undergrowth and nearby are farmers' fields, orchards, and scattered residences. A circular concrete spillway/dam extends from the eastern wing walls to create the tree-lined Algonkin Lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The earth-filled, reinforced-concrete arch with plain concrete parapet is an early example with dam and spillway of over 15 other existing arches built by Gloucester County between 1912 and 1940. William C. Cattell, the county engineer preferred the parapet arches for the creek crossings in the hillier western sections of the county. An eligible example of the bridge type is located in the Mullica Hill Historic District (#0825150).

INFOR MATION

PHOTO: 45:9a-11a (08/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808J01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BUCK ROAD (CR 553) OVER STILL RUN **FACILITY** BUCK ROAD (CR 553)

TOWNSHIP ELK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 28.7 ft

CONSTRUCTION DT 1927 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** BUCKINGHAM BROTHERS

SETTING / CONTEXT The two-lane bridge spans a shallow creek in a low lying wooded marsh in an undeveloped rural area of Elk Township. To the east, but out of sight, is Silver Lake.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 02/05/90

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 the concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 46:23-24 (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808J04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED SILVER LAKE ROAD (CR 608) OVER STILL RUN **FACILITY** SILVER LAKE ROAD

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** E. P. HENRY & SON

SETTING / CONTEXT The two-lane bridge spans the spillway from Silver Lake, a privately-owned development with lakefront homes (c. 1920-1990). Rushes and scrub trees line Silver Lake Road which also acts as an earthen retaining wall for the lake. A box-shaped box dam with gates extends from the upstream abutments to form the 3/4-mile long lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is an early example in fair condition of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability and ease of construction. Another early example of a concrete slab bridge (#0809L02) in better condition and with fewer cosmetic alterations (i.e. chainlink fence and guardrails) has been recommended for eligibility.

INFOR MATION

PHOTO: 44:22a-24a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WASHINGTON AVENUE OVER LITTLE EASE RUN **FACILITY** WASHINGTON AVENUE

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 26 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. PEACOCK

SETTING / CONTEXT The two-lane bridge spans a small creek in a low-lying, wooded, undeveloped area of Clayton Borough.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:15a-16a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808K06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRANT AVENUE OVER LITTLE EASE RUN **FACILITY** GRANT AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1973 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small creek in a low-lying, wooded, sparsely developed area of Franklin Township. A few scattered residences (c. 1950-90) are located nearby.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stinger bridge with timber pile piers and board railings is a representative example of at least seven other wood-stringer spans built by Gloucester County between 1941 and 1947. In 1973 the county replaced the deck and made other repairs to the bridge. Due to deterioration and in-kind replacement little original bridge fabric remains. The bridge, a common type in Southern New Jersey, is not historically or technologically distinguished.

INFOR MATION

PHOTO: 4:13a-14a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808L01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CLAYTON-WILLIAMSTOWN ROAD OVER SCOTLAND RUN **FACILITY** CLAYTON WILLIAMSTOWN ROAD (CR 610)

TOWNSHIP CLAYTON BOROUGH

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1931 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** COMTE AND MATAZZO

SETTING / CONTEXT The two-lane, single-span bridge crosses Scotland Run within the boundaries of Scotland Run Park, a county recreation area with beach, playground and picnic area. Downstream the creek enters a densely forested area. Extending from the abutments is a box-shaped spillway/dam with flood gates that creates 7/10-mile long Wilson Lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example with spillway and dam of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:19a-21a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808L04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED GRANT AVENUE OVER SCOTLAND RUN **FACILITY** GRANT AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1938 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small, heavily polluted stream in a forested, undeveloped area within the DEP's Glassboro Fish and Wildlife Management Area.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain concrete parapets is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. The bridge has been coated with gunnite. Since 1920 concrete slab bridges have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:11a-12a (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808N03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MALAGA ROAD (CR 659) OVER HOSPITALITY BRANCH **FACILITY** MALAGA ROAD (CR 659)

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 29 ft

CONSTRUCTION DT 1936 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small tree-lined creek in a rural area of Monroe Township. A two-story house (c. 1960) sits near the bridge on the downstream side.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with plain concrete parapets is a representative example of over 20 existing short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:42a-43a (07/91) REVISED BY (DATE): QUAD: Williamtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0808O01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED WHITEHALL ROAD OVER HOSPITALITY BRANCH **FACILITY** WHITEHALL ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** HILL CONSTRUCTION COMPANY

SETTING / CONTEXT The two-lane, single-span bridge crosses a small creek downstream from the earthen dam and concrete spillway that forms Timber Lake, a privately-owned campground and resort. The surrounding area is lightly wooded with scattered residences(c. 1950-1970).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:40a-41a (07/91) REVISED BY (DATE): QUAD: Williamtown

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CENTERTON-GLASSBORO ROAD OVER REEDS BRANCH **FACILITY** CENTERTON GLASSBORO ROAD (CR 553)

TOWNSHIP ELK TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a shallow creek downstream from a small privately-owned lake. The surrounding area is rural with scattered farmhouses, ranch homes, open fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is a representative example of over 20 existing short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:33-34 (07/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-WILLOW GROVE ROAD OVER REEDS BRANCH **FACILITY** AURA-WILLOW GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 24 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1942 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The surrounding area is rural with scattered farmhouses, ranch homes, fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The county recently demolished the bridge (c. 1991).

INFOR MATION

PHOTO: 43:35 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809J03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED MONROEVILLE-FRANKLINVILLE ROAD OVER REEDS BRANCH **FACILITY** MONROEVILLE FRANKLINVILLE ROAD (CR 604)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream in a rural area with scattered farmhouses, ranch homes, fields, and woods.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar, short-span, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:36-37 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER LITTLE EASE RUN **FACILITY** COLES MILL ROAD (CR 538)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small creek within the village of Coles. A short distance upstream is the dam that creates Franklinville Lake. Next to the dam is a small public beach and parking area. Also near the bridge are a public school and ball fields. The bridge is about 50 yards from the busy intersection of Coles Mill Road and NJ 47.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapet is a representative example of over 20 similar short, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:38-39 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K05 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED ROYAL AVENUE OVER REEDS BRANCH **FACILITY** ROYAL AVENUE

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 28.5 ft

CONSTRUCTION DT 1941 **ALTERATION DT** 1972 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** EDWARD H. ELLIS

SETTING / CONTEXT The two-lane bridge spans a small creek in a wooded area near the NJ 55 freeway. Upstream is a small dam that creates privately-owned Idle Acres Lake. On the north side of the lake is a small residential development (c. 1950-60).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stringer bridge with timber pile piers and board railing is a representative example of at least seven other similar bridges built by Gloucester County between 1941 and 1947. In 1973 the bridge was damaged and unspecified repairs made. Due to deterioration and in-kind replacement little original bridge fabric survives. Timber stringers are common in Southern New Jersey and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:8-9 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809K06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED AURA-WILLOW GROVE ROAD OVER BRANCH OF STILL RUN **FACILITY** AURA-WILLOW GROVE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream near the Salem County line. The area is rural with scattered residences (c. 1800-1990), large wooded lots, and open fields.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 43:5-6 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809L01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED FRANKLINVILLE-WILLIAMSTOWN ROAD OVER SCOTLAND RUN **FACILITY** FRANKLINVILLE WILLIAMSTOWN ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 24 ft

CONSTRUCTION DT 1923 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** KOLYN CONSTRUCTION CO.

SETTING / CONTEXT The two-lane bridge spans a shallow stream in a modern residential neighborhood (c. 1970-80) with houses built on large wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Finding 8/2/90

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:9a-10a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809L02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER SCOTLAND RUN **FACILITY** COLES MILL ROAD (CR538)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small tree-line stream in a semi-rural area with farmhouses, open fields, and woods. The forested lots adjacent the bridge were probably open fields in the 1920s.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is one of the oldest and most complete examples of over 20 similar short reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Slab bridges were often designed by county engineers like William C. Cattell to replace older bridges in the highway improvement campaigns of the 1920s and 1930s. The bridge is technologically significant within the county context and is one of the best examples of its type in the area.

INFORMATION

SOURCES:

Biographical, Genealogical and Descriptive History of the First Congressional District of New Jersey. Volume I. Chicago: Lewis Publishing Company, 1900. pp.477-78.
Gloucester County Records, County Engineer's Office. Plans and Bridge Cards. 1922.
Ketchum, Milo S. Design of Highway Bridges of Steel, Timber and Concrete. New York: McGraw-Hill, 1920.
Seely, Bruce. Building the American Highway System. Philadelphia: Temple University Press, 1986.
"William C. Cattell Died Last Night at Wenonah Home." Woodbury Daily Times. Dec. 24, 1948.

PHYSICAL DESCRIPTION: The two-lane, 24'-long, 30'-wide, single-span concrete-slab bridge with parapets spans a shallow creek in rural Gloucester County. The slab reinforcing consists of ½", ¾" and 1" steel rebars. The abutments are reinforced concrete. According to the county engineer's records, the only alterations to the bridge have been resurfacing the roadway, and in 1983 sandblasting and painting. The cast-metal plaque on the inside of the parapet reads "William C. Cattell, County Engineer. George A. Charlesworth, Contractor."

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is an early example of over 20 similar concrete-slab bridges built by Gloucester County between 1922 and 1941. The bridge is technologically representative of the other concrete slabs in Gloucester County and has the solid parapets and decorative moldings characteristic of county engineer William C. Cattell's designs. The bridge is one of the best examples of a bridge type of local historical significance.

In Gloucester County and throughout rural New Jersey, concrete-slab bridges designed by professional county engineers rapidly replaced older bridges (often less durable timber stringers) in the highway improvement campaigns of the 1920s and 1930s. The slab bridge was an important link in the development of farm to market roads. Proponents hoped that better roads would end the cultural and social isolation of rural dwellers, and would provide a recreational outlet for automobile-owning city dwellers. The roads brought perishable goods, such as milk and vegetables, to the cities, and were one factor leading to the expansion of specialized agriculture in rural New Jersey.

Many county engineers adopted reinforced-concrete bridge construction not only because of its durability but because of the local availability of concrete, sand, and gravel. William C. Cattell (1867-1948), Gloucester County's engineer from 1909 to 1942, was the son of a farmer and received no formal engineering training except at the hands of a professor at a local private academy. At the age of 21, he entered into the business of surveying and civil engineering. Cattell was intimately involved with the professionalization of engineering; he became a member of the American Society of Civil Engineers, and was the first president of the New Jersey Society of Professional Engineers. Cattell appears to have followed the best engineering practice of his time, drawing up general specifications for the systematic improvement of Gloucester County's roads and bridges. By the 1920s Cattell had settled upon a concrete-arch design (0825150) for the hillier western sections of the county, and the concrete slab design for the flatter topography of the eastern part of the county. Through the agency of county engineers such as Cattell and county and state highway improvement campaigns, local contractors, like George A. Charlesworth of Elmer, learned the techniques of reinforced concrete construction. Charlesworth, and perhaps a dozen other local contractors, competed for the county bridge contracts through a bidding process overseen by the county engineer. Between 1922 and 1936 Charlesworth constructed 8 of the existing concrete-slab bridges in the county. Charlesworth built the Coles Mill Road Bridge at a price of $4675.

Although the wooded lots near the Coles Mill Road Bridge were probably open fields in the 1920s, the setting remains rural, speaking to the bridge's significance as a link on a country farm to market road. The Coles Mill Road runs east to west connecting the countryside with New Jersey State Highway Route 47 and the railroad depot at Coles.

PHOTO: 44:7a-8a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809P02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED COLES MILL ROAD (CR 538) OVER HOSPITALITY BRANCH **FACILITY** COLES MILL ROAD (CR 538)

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 30 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CHARLES D. PROSSER

SETTING / CONTEXT The two-lane bridge crosses a small stream in a rural area of Monroe Township. Upstream is a small dam and lake with a privately-owned campground and beach. The surrounding area is sparsely developed with scattered residences (c.1950-1990) and wooded lots.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:33a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0809P06 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED PINEY HOLLOW ROAD OVER HOSPITALITY BRANCH **FACILITY** PINEY HOLLOW ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1930 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE S. MILLER

SETTING / CONTEXT The two-lane bridge spans a small stream in a rural area with scrub forests, fields, and scattered residences (c.1950-1990).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 44:36a-37a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 26.15

NAME & FEATURE INTERSECTED NJ 45 OVER WOODBURY CREEK **FACILITY** NJ 45 (BROAD STREET)

TOWNSHIP WOODBURY CITY

TYPE MULTI GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 1 **LENGTH** 42 ft **WIDTH** 46 ft

CONSTRUCTION DT 1892 **ALTERATION DT** 1953 **SOURCE** NJDOT

DESIGNER/PATENT EDGEMOOR BRIDGE WORKS **BUILDER** DELAWARE CONSTRUCTION CO.

SETTING / CONTEXT The four-lane wide bridge spans Woodbury Creek at the northern end of downtown Woodbury. The bridge lies on the border of a large historic district that incorporates Woodbury's commercial and residential areas (c.1715-1941). A nomination has been submitted for review by ONJH. The bridge appears to be a contributing element, but is also historically and technologically significant in its own right.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** Yes

CONSULT STATUS Individually Eligible. Agreed Potential Historic District. Contributing.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY Constructed in 1892, the single-span deck-girder with floor beams bridge with stone abutments and lattice railing is one of the earliest examples of steel girder construction in New Jersey. The bridge has four shallow girders with floor beams, stringers, and a corrugated plate deck that is now under steel flooring added in 1958. The bridge divides the older section of town from the newer development to the north and contributes to the proposed historic district.

INFORMATION

SOURCES:

Darnell, Victor. Directory of American Bridge Building Companies. Washington, DC: Society for Industrial Archeology, 1984.
New Jersey Department of Transportation. Bridge Plans 0810150, 1892-1958.
Office of New Jersey Heritage. Nomination for Woodbury Historic District, 1991.
Scharf, J. Thomas. History of Delaware, 1609-1888. Volume II. Philadelphia: L. J. Richards Co., 1888.

PHYSICAL DESCRIPTION: The single-span bridge is a multi deck girder and floor beam system with a 42'-span and 46'-roadway. On either side of the bridge are sidewalks with lattice railing. The bridge members consist of 4 built-up girders, 4'-depth, floor beams, and interior and exterior stringers. Original plans indicate all bridge members were constructed of steel. The bridge has been strengthened and some of the floor beams and stringers are modern additions. The bridge rests on coursed-ashlar abutments.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The Broad Street Bridge is technologically significant as one of the earliest examples of steel-girder highway bridge construction in New Jersey. It was designed by a well-known fabricator, the Edgemoor Bridge Works of Delaware, at a time when steel was rapidly replacing iron as a structural material in bridges. In addition, the bridge lies on the proposed border of the Woodbury Historic District (c.1715-1941), and makes a significant contribution to the historic character of the neighborhood. A nomination has been submitted for review by ONJH. The large district, located to the south of the bridge, incorporates portions of Woodbury's commercial and residential areas. The bridge with its distinctive lattice railing visually divides the older section of town from the newer development to the north. The bridge spans Woodbury Creek at its furthest navigable point, and the area adjacent the bridge was once an industrial center with mills and warehouses, and a point for export downstream to the Delaware River.

In 1892 the Edgemoor Bridge Works of Edgemoor, Delaware, received the sub-contract to design and fabricate the Broad Street Bridge for the Delaware Construction Company. Organized in 1869 by William Sellers, the Edgemoor Bridge Works was one of the nation's largest builders of highway and railroad bridges. Among the noteworthy bridges constructed by the company were the East River Bridge between New York and Brooklyn, the Schuylkill and Susquehanna River Bridges for the Pennsylvania Railroad, and the crossing of the Missouri River between Omaha, Nebraska, and Council Bluffs, Iowa. In the late-19th century the Edgemoor Bridge Works' shops were considered some of the most complete and up-to-date in the nation. The company employed between 500 and 800 workers, most of whom lived in the company town of Edgemoor. The Broad Street Bridge is one of the earliest surviving examples of the company's work in New Jersey.

The bridge deck and floor beam system have been strengthened twice in the last one hundred years, but the bridge retains its overall integrity of design. In 1922, shortly after the State Highway Department took over Broad Street as part of State Highway Route 6, new stringers and floor beams were added to the bridge. In 1953 a new deck and roadway was constructed above the existing corrugated plate, and some repairs and changes were made to the stringers and floor beams. The original 1892 plans show a fancy railing different from the one now on the bridge. The original plans specify a "Carnegie Hand Rail," however the current lattice railing was manufactured by the Lyon's Iron Works. It is not known whether the current railing was added after the bridge construction, or if perhaps a change was made from the original plans at the time of construction.

PHOTO: 41:22-26 (08/91 JPH (5/96)) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K02 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED CR 612 OVER LITTLE EASE RUN **FACILITY** CR 612

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 30 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT The two-lane bridge spans a small stream just south of the NJ 55 freeway overpass. Nearby is the small lakeside neighborhood of Porchtown (c. 1920-60). Scrub trees and heavy undergrowth cover the area between the creek and the freeway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 03/12/01

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, reinforced-concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. The structure is not individually eligible for listing in the National Register of Historic Places. However it lies in between two archaeological sites for which there are formal Determinations of Eligibility.

INFOR MATION

PHOTO: 44:1a,44a (07/91 JPH (5/96)) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION
BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K03 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED LEONARD CAKE ROAD OVER LITTLE EASE RUN **FACILITY** LEONARD CAKE ROAD

TOWNSHIP FRANKLIN TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 2 **LENGTH** 32 ft **WIDTH** 30 ft

CONSTRUCTION DT 1942 **ALTERATION DT** 1978 **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT W. H. BAUM, COUNTY ENGINEER **BUILDER** JUST F. ERIKSEN

SETTING / CONTEXT The two-lane bridge spans a small stream in a wooded area near the NJ 55 freeway overpass of Leonard Cake Road. The surrounding area is residential (c. 1950-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The built-up timber stringer with timber pile piers and board railing is a representative example of at least seven similar bridges built by Gloucester County between 1941 and 1947. In 1978 the county replaced the stringers, deck, and railing. Little original bridge fabric survives. Timber stringers are a common bridge type in Southern New Jersey, and the bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 4:5a-6a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810K04 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED BRIDGETON ROAD (CR 613) OVER STILL RUN **FACILITY** BRIDGETON ROAD (CR 613)

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 29 ft **WIDTH** 30 ft

CONSTRUCTION DT 1939 (c1980) **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** JOSEPH W. ROGERS

SETTING / CONTEXT The two-lane bridge crosses the spillway at privately-owned Iona Lake. A box-shaped spillway/dam extends between the upstream abutments and a concrete slab extends from the bridge at deck level to help support the water-control gates. The approaches form the earthen retaining wall for the lake. Summer homes and residences (c. 1920-50) line the 3/5-mile long lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is an example of over 20 similar short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, strength, durability, and ease of construction. The bridge is in fair condition although it has been sprayed with gunite (c. 1980). An early example of a concrete slab bridge (#0809L02) has been recommended for eligibility.

INFOR MATION

PHOTO: 44:2a-4a (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0810P01 **CO** GLOUCESTER **OWNER** COUNTY **MILEPOINT** 0.0

NAME & FEATURE INTERSECTED JACKSON ROAD OVER FARAWAY BRANCH **FACILITY** JACKSON ROAD

TOWNSHIP MONROE TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 30 ft

CONSTRUCTION DT 1935 **ALTERATION DT** **SOURCE** COUNTY ENGINEER

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** GEORGE A. CHARLESWORTH

SETTING / CONTEXT No visible sign of the bridge can be seen above the roadway. To the west is a small lake and to the east is a small trickle of water feeding into Faraway Branch from underneath the road. Possibly some portion of the concrete slab lies underneath the blacktop and berm. No evidence of a pipe can be seen. The area is undeveloped and covered with undergrowth and scrub trees.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab has been significantly altered or demolished. No record of repair or damage to the bridge could be found at the county engineer's office.

INFOR MATION

PHOTO: 44:34a-35a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0813150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 64.86

NAME & FEATURE INTERSECTED NJ 47 OVER MANTUA CREEK **FACILITY** NJ 47

TOWNSHIP GLASSBORO BOROUGH

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 28 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a small creek near an electric substation at the intersection of NJ 47 and CR 658. Upstream from the bridge is a small privately-owned lake with surrounding suburban residences (c. 1950-80). NJ 47 is a heavily traveled commercial strip.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The short, encased steel-stringer bridge with concrete balustrades and reinforced-concrete substructure is representative of many bridges designed by the NJ State Highway Department in the 1920s and 1930s (e.g. bridge nos. 0807151 & 0807152). Steel stringers are the most common pre-1946 bridge type in New Jersey. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 46:25-26 (07/91) REVISED BY (DATE): QUAD: Pitman East

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0815152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 74.87

NAME & FEATURE INTERSECTED NJ 47 OVER BIG TIMBER CREEK **FACILITY** NJ 47

TOWNSHIP WESTVILLE BOROUGH

TYPE THRU GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 6 **LENGTH** 327 ft **WIDTH** 46 ft

CONSTRUCTION DT 1934 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HIGHWAY DEPT **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, six-span bridge crosses Big Timber Creek about 3/4 mile upstream from the Delaware River. The surrounding area is heavily developed with a mixture of commercial buildings and warehouses (c. 1900) near the river. Upstream is a small marina with docks for pleasure craft.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The 6-span bridge is composed of a thru girder main span and encased stringer approaches. It is supported on concrete piers and abutments, and it has concrete balustrades. The road was improved as part of the Camden Extension in the late 1920s, but the new bridge, which replaced a swing span, was not completed until 1934. The State Hwy. Dept. designed several girder bridges for longer crossings, and although not common, the bridge is not historically or technologically significant.

INFOR MATION

SOURCES:
New Jersey Department of Transportation. Bridge Plans 0815152. 1934.

PHYSICAL DESCRIPTION: The four-lane, six-span bridge has a thru girder with floor beams main span and 5 encased stringer approach spans, three to the north and two to the south. The main span has a sheet-metal balustrade and cantilevered sidewalks. The approach spans have concrete balustrades and sidewalks. Beam guide rails have been added to the interior of the thru girders and between the sidewalks and the roadway of the approach spans. The bridge is supported on concrete piers and abutments. Wood fenders protect the main channel piers.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The bridge is an undistinguished example of thru girder and steel-stringer construction using period technology. The New Jersey State Highway Department often chose girders for longer crossings, and the bridge type is standard, although not as frequently seen as some other State Highway Department bridge types. The road was improved as part of the Camden Extension in the late 1920s, but the new bridge, which replaced a movable span, was not completed until 1934.

PHOTO: 41:37-40 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0817150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 9.93

NAME & FEATURE INTERSECTED US 130 SB OVER BIG BIRCH CREEK **FACILITY** US 130 SOUTHBOUND

TOWNSHIP LOGAN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 50 ft

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT C. M. FOX, NJ STATE HWY DEPT **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane concrete bridge spans Big Birch Creek on an open stretch of US 130 along the Delaware River. The bridge carries the southbound traffic of US 130 while a continuous concrete slab built during four-lane expansion (c. 1955) carries the northbound traffic. The surrounding landscape is flat with low-lying reed-covered marshland. In the distance on the banks of the Delaware River can be seen the Monsanto Chemical Plant.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with wing walls is a common bridge design popular since 1920. The bridge is representative of many short-span concrete slabs designed and built by the State Highway Department between 1920 and 1950. The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 40:19 (08/91) REVISED BY (DATE): QUAD: Marcus Hook

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0817151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.8

NAME & FEATURE INTERSECTED US 130 OVER RACCOON CREEK **FACILITY** US 130

TOWNSHIP LOGAN TOWNSHIP

TYPE VERTICAL LIFT **DESIGN** **MATERIAL** Steel

 # SPANS 5 **LENGTH** 285 ft **WIDTH** 52 ft

CONSTRUCTION DT 1940 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT ASH, HOWARD, NEEDLES & TAMMEN **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, heavily-skewed, vertical-lift bridge spans Raccoon Creek on the southern edge of Bridgeport near the Commodore Barry Bridge to Chester, PA. The bridge is the furthest downstream of three movable bridges across Raccoon Creek and is still operable. On the northern bank is a modern, two-story operator's house (c. 1988) neighboring a number of small residences and businesses (c. 1830-1950).

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** Yes

CONSULT STATUS Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The skewed vertical lift bridge has a thru-girder moveable span, built-up towers with portal bracing and longitudinal girders, concrete counterweights with steel-plate frames, and a steel grate deck. It is a distinguished and well-preserved example of a "Waddell-type" vertical lift. The bridge is the largest and newest of three vertical lifts built by the state in the county between 1935-1940. All are eligible. The tender's shanty was replaced in 1988.

INFORMATION

SOURCES:

New Jersey State Highway Commission, Division of Bridges, Raccoon Creek Bridge Plans, 1938.
Pulver, H. E. "Vertical Lift Bridges," in George A. Hool and W. S. Kinne, eds., Movable and Long-Span Bridges. New York: McGraw-Hill, 1923.
Waddell, J. A. Bridge Engineering. New York: John Wiley & Sons, 1916.

PHYSICAL DESCRIPTION: The four-lane bridge is a single-span movable Waddell-type vertical lift with four encased steel stringer approach spans. Its overall length is 285' with a 52' roadway. The main vertical lift span, which is skewed, consists of a single, 93'-long toe-to-toe, thru girder with floor beams. The span is constructed to permit it being lifted vertically to a height of 64' clear above mean low water. At each end of the main span are steel towers approximately 95'-high. Each tower consists of two built-up girder legs with horizontal and diagonal sway bracing. Between the tops of the opposite towers pass two girders, and suspended between the girders is the central overhead machinery house. Cantilevered off both sides of the main span are concrete deck sidewalks with sheet metal balustrades. The main span is operable.

Power for lifting the bridge is supplied from the central overhead machinery house that contains an electric motor and a back-up gas engine. At the top of each of the four tower legs are sheaves over which pass steel-wire ropes. The ropes are attached at one end to counterweights and at the other to couplings attached to the roadway. Power is transmitted from the motor to the sheave coupling by means of direct drive line shafting and gears. The span moves up and down along a C-shaped guide on the interior of the tower legs. The machinery is equipped with brakes, clutch, and locks. The two counterweights consist of concrete blocks held within riveted steel plate frames on the exterior side of the tower legs.

The approach spans are concrete encased steel stringers with concrete balustrades and sidewalks. There are four approach spans, two to the north and two to the south of the main span. The bridge has a concrete substructure with cutwater piers. The fenders are timber piling. At each end of the main span are safety gates original to the bridge construction. Additional modern safety gates have been added at the abutment ends of the approach spans. Northeast of the northern approach span is a modern two-story operator's house.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: The vertical lift bridge across Raccoon Creek is a well-preserved and operable example of a historically and technologically significant bridge type. The vertical lift type represented important advances in structural steel construction, and was an alternative to bascule and swing span type movable bridges. The Raccoon Creek Bridge is one of three vertical lifts along old New Jersey Highway Route 44 in Salem and Gloucester Counties. All three bridges, built between 1935 and 1940, have been recommended as eligible because they represent an increasingly rare early 20th-century bridge type.

Vertical lift bridges are a special bridge type combining both mechanical and civil engineering technologies. The first vertical lift bridge of importance in the United States was designed by well-known bridge engineer, J. A. L. Waddell. In 1894 he oversaw the construction of the South Halsted Street Bridge over the Chicago River in Chicago, Illinois. The bridge, which had overhead trusses between the towers and sheaves at the top of each tower leg, became known as the Waddell-type vertical lift. Beginning in 1908 vertical lift bridges were built in increasing numbers, often replacing swing-span type movable bridges. According to bridge engineer H. E. Pulver (1923) the advantages of the vertical lift included simplicity of design, rigidity, reliability, ease of operation, short time of operation (usually 40-50 seconds), power economy, cost of operation, and less chance of collision with boats. The bridge type was particularly suitable to long span crossings where high navigational clearance was required.

The Raccoon Creek Bridge was built in 1940 as part of the reconstruction of NJ Highway Route 44. The firm of Ash, Howard, Needles, and Tammen of New York and Kansas City acted as consulting engineers on the New Deal public works project. The bridge survives with few significant alterations. In c.1985 the electric motors were rehabilitated and locking mechanism added. As well, a new operator's house was constructed on the Bridgeport side of the creek. The original operator's house and dwelling, which plans show on the opposite bank of the creek, have been demolished. The bridge still opens to navigation, mostly to pleasure craft in the summer. At one time Raccoon Creek was navigable upstream to Swedesboro, which was a shipping point for lumber and fresh produce.

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

The Raccoon Creek Bridge is the youngest of the three bridges on old NJ Highway Route 44. It differs from the other two in that it is skewed; it has a 4-lane roadway instead of a 2-lane; and, it has tower legs and bracing of built-up girders rather than riveted angle, channel, and beam columns and trusses. The oldest vertical lift bridge, NJ 44 over Mantua Creek in Paulsboro (0806150), is still operable and has been outfitted with new operating machinery and operator's house. The second oldest bridge, US 130 over Oldmans Creek (1710152) is no longer operable, but retains its original operator's house. As a group the bridges are neither the oldest or largest of their type in the United States, however, they are significant engineering achievements representing the application of vertical lift bridge technology to medium-span crossings.

PHOTO: 40:16-18 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
Correspondence.Unit@DOT.State.NJ.US

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0818151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 25.4

NAME & FEATURE INTERSECTED US 130 OVER BIG TIMBER CREEK **FACILITY** US 130

TOWNSHIP WESTVILLE BOROUGH

TYPE DECK PLATE GIRDER **DESIGN** **MATERIAL** Steel

 # SPANS 3 **LENGTH** 287 ft **WIDTH** 58 ft

CONSTRUCTION DT 1928 **ALTERATION DT** 1977 **SOURCE** NJDOT

DESIGNER/PATENT HARDESTY AND HANOVER **BUILDER** UNKNOWN

SETTING / CONTEXT The four-lane, three-span bridge crosses Big Timber Creek between Gloucester and Camden Counties. The surrounding area is heavily developed with commercial warehouses (c. 1900), small businesses, and restaurants near the river, and residential neighborhoods (c. 1830-1950) lying off side streets. The bridge spans the creek about 1/2 mile upstream from the Delaware River.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span bridge has a deck girder main span and steel stringer approaches. The main span rests on reinforced-concrete cutwater piers while the approach spans rest on separate concrete bents. According to NJDOT plans the bridge was originally built as a bascule designed by Hardesty and Hanover of New York. In 1977, the state built entirely new approach spans and fixed the moveable span in place, retaining only the girders, floor beams, and substructure.

INFOR MATION

PHOTO: 41:35-36 (08/91) REVISED BY (DATE): QUAD: Philadelphia

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0819150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 0.78

NAME & FEATURE INTERSECTED NJ 168 OVER GRENLOCH LAKE **FACILITY** NJ 168

TOWNSHIP WASHINGTON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 23 ft **WIDTH** 73.6 ft

CONSTRUCTION DT 1932 **ALTERATION DT** **SOURCE** INSCRIPTION

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER** UNKNOWN

SETTING / CONTEXT The very wide four-lane bridge spans a shallow lake on the border between Gloucester and Camden Counties. The area to the north is suburban residential (c. 1950-90) and the area to the south is a heavily developed commercial strip with shopping centers and fast food restaurants (c. 1960-90). A small grassy park surrounds the lake, which is popular with fishermen.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with balustrades and reinforced-concrete substructure is a common bridge design popular since 1920. The bridge is a representative example of many short-span concrete slabs designed by the State Highway Department in the 1920s and 1930s. Markers indicate the original route designation of the bridge was "State Highway Route 42". The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:15-17 (07/91) REVISED BY (DATE): QUAD: Runnemede

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0821179 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 23.07

NAME & FEATURE INTERSECTED I 295, US 130 SOUTHBOUND OVER HESSIAN RUN **FACILITY** I-295 / US 130 SOUTHBOUND

TOWNSHIP WEST DEPTFORD TOWNSHIP

TYPE BOX CULVERT **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 20 ft **WIDTH** No Data

CONSTRUCTION DT 1941 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane culvert carries the southbound traffic of I-295 over the former creek bed of Hessian Run. The state is currently rebuilding portions of the road, and Hessian Run has been rechanneled through a new pipe culvert north of the old culvert. During the construction the old culvert and creek bed have been gradually filled in by dirt and silt. The nearby areas on either side of the road are residential (c. 1950-70).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete box culvert with wing walls is a very common form in short-span crossings. Extensive highway improvements in the area around Westville have significantly altered the original context of the culvert, which was built in 1941 as part of the NJ 44 highway improvements. Concrete culverts have been in use since the early 20th century, and this example is neither innovative nor exceptional.

INFOR MATION

PHOTO: 40:44 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0824150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.45

NAME & FEATURE INTERSECTED US 322 OVER CONRAIL **FACILITY** US 322

TOWNSHIP LOGAN TOWNSHIP

TYPE STRINGER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 3 **LENGTH** 113 ft **WIDTH** 52.1 ft

CONSTRUCTION DT 1939 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT M. LUDASY, PA-READING RAILROAD **BUILDER**

SETTING / CONTEXT The four-lane bridge crosses a single track of the former Pennsylvania-Reading Seashore Railroad about 1 1/2 miles east of the Commodore Barry Bridge across the Delaware River. The topography is low-lying and flat. To the west is the small town of Bridgeport (c. 1850-1950) and to the east farmers' fields and an abandoned airfield (c. 1960).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span encased stringer bridge with concrete balustrades is supported by concrete bents with crash walls. The only stringer railroad overpass in the county, the bridge is representative of common period technology. It is not innovative or historically significant. The Reading and Pennsylvania Railroad systems built the bridge after the merger of their South Jersey operations.

INFOR MATION

PHOTO: 40:14-15 (08/91) REVISED BY (DATE): QUAD: Bridgeport

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY DEPARTMENT OF TRANSPORTATION

BUREAU OF ENVIRONMENTAL SERVICES

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0825150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.25

NAME & FEATURE INTERSECTED US 322 OVER RACCOON CREEK **FACILITY** US 322

TOWNSHIP HARRISON TOWNSHIP

TYPE ARCH **DESIGN** BARREL **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 36 ft **WIDTH** 24.3 ft

CONSTRUCTION DT 1928 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** CONARD & BUGBY

SETTING / CONTEXT The two-lane bridge spans Raccoon Creek within the village of Mullica Hill (c. 1770-1920) near the busy intersection of US 322 and NJ 45. The surrounding area is commercial with numerous storefront antique shops in older residential structures. The bridge sits immediately upstream from a concrete-encased steel stringer bridge (1940, #0807152) that carries NJ 45. The creek lies in a shallow valley that divides the village in half.

1995 SURVEY RECOMMENDATION Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** Yes

CONSULT STATUS Not Individually Eligible. Listed. Mullica Hill Historic District. 04/25/1991. Contributing.

CONSULT DOCUMENTS SHPO Opinion 10/98, Letter 03/12/01.

SUMMARY The earth-filled, reinforced-concrete arch bridge is a representative example of over 15 similar arches built by Gloucester County between 1912 and 1940. While not individually distinguished based on size, date and detailing, the bridge was constructed within the Mullica Hill Historic District's period of significance and contributes to the historic character of the village. William C. Cattell, the county engineer from 1909 to 1942, preferred the distinctive parapet bridges for the hillier western sections of the county.

INFOR MATION

PHOTO: 45:33a-34a (09/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0825152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 11.3

NAME & FEATURE INTERSECTED US 322 OVER BRANCH OF RACCOON CREEK **FACILITY** US 322

TOWNSHIP HARRISON TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 24 ft **WIDTH** 28.6 ft

CONSTRUCTION DT 1924 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT WILLIAM C. CATTELL, CO. ENG. **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans the spillway from Mullica Hill Pond on a branch of Raccoon Creek just east of the village of Mullica Hill (c. 1770-1920). The pond lies within a municipal park and is surrounded by residential housing (c. 1950-70). A box-shaped concrete spillway/dam extends from the upstream abutments to create the lake. The structural association of bridges and dams is common in the region.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge with concrete parapets is a representative example of over 20 similar short-span, parapet, concrete slab bridges built by Gloucester County between 1922 and 1941. Since 1920 concrete slab bridge designs have been popular because of their low cost, durability, strength and ease of construction. The bridge lies well outside the Mullica Hill Historic District. An early example of a concrete slab bridge (#0809L02) has been recommended for National Register eligibility.

INFOR MATION

PHOTO: 45:35a-37a (09/91) REVISED BY (DATE): QUAD: Pitman West

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0833150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 27.14

NAME & FEATURE INTERSECTED US 40 & NJ 47 OVER CONRAIL **FACILITY** US 40 & NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE T BEAM **DESIGN** CONTINUOUS **MATERIAL** Reinforced Concrete

 # SPANS 3 **LENGTH** 107 ft **WIDTH** 40 ft

CONSTRUCTION DT 1929 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT UNKNOWN **BUILDER** UNKNOWN

SETTING / CONTEXT The two-lane bridge spans a single railroad track on a busy stretch of highway within the town of Malaga. Immediately east of the bridge US 40 splits off to the east and NJ 47 splits to the north in a T-shaped intersection. Across from the intersection is the Malaga Elementary School (c. 1950) and to the south a small residential neighborhood (c.1900-1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The three-span, continuous T-beam bridge with paneled concrete parapets has concrete bents and abutments. The bridge is the only T-beam railroad overpass in the county. Engineers pioneered the continuous T-beam bridge in the period before WWI and the bridge is representative of period technology. The bridge spans the West Jersey and Seashore Railroad, part of the Pennsylvania Railroad system. The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:1,44 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0837152 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 54.62

NAME & FEATURE INTERSECTED NJ 47 OVER SCOTLAND RUN **FACILITY** NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 22 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** MARKER

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek along a heavily travelled section of NJ 47 between the towns of Iona and Malaga. Trees and heavy undergrowth line the roadway and creek near the bridge. The surrounding area is developed with billboards, scattered residences, and small businesses.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The concrete slab with reinforced-concrete substructure and balustrades is representative of many short concrete-slab bridges designed by the State Highway Department in the 1920s and 1930s. A beam guide rail has been added to the bridge. Markers indicate the original route designation of the bridge was "State Highway Route 20." The bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 43:42-43 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0837153 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 56.26

NAME & FEATURE INTERSECTED NJ 47 OVER LITTLE EASE RUN **FACILITY** NJ 47

TOWNSHIP FRANKLIN TOWNSHIP

TYPE SLAB **DESIGN** **MATERIAL** Reinforced Concrete

 # SPANS 1 **LENGTH** 31 ft **WIDTH** 40 ft

CONSTRUCTION DT 1926 **ALTERATION DT** **SOURCE** PLAQUE

DESIGNER/PATENT NJ STATE HWY DEPT BRIDGE DIV **BUILDER**

SETTING / CONTEXT The two-lane bridge spans a small creek in the village of Coles in the western part of Gloucester County. The area along NJ 47 is developed with scattered small businesses, convenience stores and residences. Immediately north of the bridge is a busy intersection with CR 538. To the south are ball fields associated with the brick Franklinville Elementary School (c. 1920-50).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, skewed, concrete slab bridge with reinforced-concrete substructure and balustrades is a representative example of many short concrete-slab bridges designed by the State Highway Department in the 1920s and 1930s. Beam guide rails have been added to the bridge. Markers indicate the original route designation of the bridge was "State Highway Route 20." The bridge is not historically or technologically distinguished.

INFOR MATION

PHOTO: 43:40-41 (07/91) REVISED BY (DATE): QUAD: Newfield

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0850160 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 2.1

NAME & FEATURE INTERSECTED MANTUA BOULEVARD OVER MILLVILLE BRANCH OF CONRAIL **FACILITY** MANTUA BOULEVARD (CR 676)

TOWNSHIP MANTUA TOWNSHIP

TYPE DECK PLATE GIRDER **DESIGN** ENCASED **MATERIAL** Steel

 # SPANS 1 **LENGTH** 70 ft **WIDTH** 30 ft

CONSTRUCTION DT 1937 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The heavily-skewed, two-lane, deck girder bridge spans a single track of the Millville Branch of Conrail near the western end of the village of Sewell. The immediately surrounding area is lightly wooded with scrub trees and heavy undergrowth. To the east is a residential neighborhood (c. 1920-80) and to the west a commercial warehouse (c. 1980).

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The single-span, encased, deck-girder and floor beams bridge with a vaguely Moderne-styled reinforced-concrete substructure has paneled concrete parapets with vertical scoring and concrete wing walls with horizontal scoring. While not common, such detailing is not infrequent in the late 1930s. The bridge is technologically unexceptional. Better detailed railroad overpass bridges that are evaluated as eligible are located in Mercer and Camden counties.

INFOR MATION

SOURCES:
Ketchum, Milo S. The Design of Highway Bridges of Steel, Timber and Concrete. New York: McGraw-Hill, 1920.
New Jersey State Department of Transportation. Bridge Plans. 1937.

PHYSICAL DESCRIPTION: The 70'-foot long, 30'-wide, skewed, single-span, concrete-encased, deck-girder bridge survives with very few alterations. The paneled parapet walls carry an Art-Deco motif with vertical scoring and the concrete wing walls have been molded to appear like masonry. The concrete-encased girder fascia have horizontal scoring. The floor beams are also encased. Stone block pavers, probably original, can be seen in spots underneath the bridge's asphalt road surface.

HISTORICAL AND TECHNOLOGICAL SIGNIFICANCE: Many railroads, including the Central Railroad of New Jersey, frequently chose steel-girder bridges for their above grade crossings. Except for the distinguishing Art-Deco motif on the parapets, fascia, and wing walls, the Mantua Boulevard bridge is technologically unexceptional in comparison to other girders. Built in 1937, it is not an early example of concrete-encased girder construction. In Gloucester County, an older example of a concrete-encased girder, Hunter Street over Conrail (0802I14, c. 1914), has been recommended for contributing status in the proposed Woodbury Historic District.

PHOTO: 41:3-4 (08/91) REVISED BY (DATE): QUAD: Woodbury

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0870150 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 108.19

NAME & FEATURE INTERSECTED WINSLOW INDUSTRIAL TRACK OVER EGG HARBOR CREEK **FACILITY** WINSLOW INDUSTRIAL TRACK RAILROAD SPUR

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 28 **LENGTH** 176 ft **WIDTH** 9 ft

CONSTRUCTION DT 1910 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The single track railroad trestle spans a shallow but wide creek in a section of sandy pine barrens in eastern Gloucester County on the border with Camden County. To the north is a Camden County landfill and many abandoned sand pits. The area to the south is covered with scrub trees and heavy undergrowth. The railway does not appear to be heavily used.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of two open-deck, timber stringers with closely-spaced pile bents and abutments on the Winslow Industrial Track in Gloucester County. Due to deterioration and in-kind replacement it appears that little original bridge fabric survives although no repair records could be located. Timber stringers are a common railroad bridge type, and the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 400:4-5 (08/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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November 12 , 2002

NEW JERSEY HISTORIC BRIDGE DATA

STRUCTURE # 0870151 **CO** GLOUCESTER **OWNER** NJDOT **MILEPOINT** 108.95

NAME & FEATURE INTERSECTED WINSLOW INDUSTRIAL TRACK OVER HOSPITALITY LAKE **FACILITY** WINSLOW INDUSTRIAL TRACK RAILROAD SPUR

TOWNSHIP MONROE TOWNSHIP

TYPE STRINGER **DESIGN** **MATERIAL** Wood

 # SPANS 11 **LENGTH** 128 ft **WIDTH** 5.1 ft

CONSTRUCTION DT 1922 **ALTERATION DT** **SOURCE** NJDOT

DESIGNER/PATENT CENTRAL RAILROAD OF NEW JERSEY **BUILDER** UNKNOWN

SETTING / CONTEXT The single-track railroad trestle spans a lake in the pine barrens of south-central New Jersey. The lake is a popular spot with fishermen and a short walk south from US 322. The surrounding area is sparsely developed with a few scattered roadside stands and residences along the nearby highway.

1995 SURVEY RECOMMENDATION Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN (EVALUATED)** No

CONSULT STATUS Not Individually Eligible.

CONSULT DOCUMENTS SHPO Letter 6/30/95

SUMMARY The bridge is one of two open-deck timber stringers with closely-spaced pile bents and abutments on the Winslow Industrial Track in Gloucester County. Due to deterioration and in-kind replacement it appears that little original bridge fabric survives although no repair records could be located. Timber stringers are a common railroad bridge type, and the bridge is not historically or technologically significant.

INFOR MATION

PHOTO: 44:38a-39a (07/91) REVISED BY (DATE): QUAD: Buena

A. G. Lichtenstein & Associates, Inc. performed initial survery.
NJDOT updated data 03-01-2001.

Correction Updates Etc should be sent to
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