

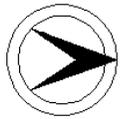








**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2001150	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	38.62		
<b>NAME &amp; FEATURE INTERSECTED</b>	US 1&9 OVER RAHWAY RIVER & HAZELWOOD AVENUE			<b>FACILITY</b>	US 1&9				
<b>TOWNSHIP</b>	RAHWAY CITY								
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel	
<b># SPANS</b>	6	<b>LENGTH</b>	306 ft	<b>WIDTH</b>	50 ft				
<b>CONSTRUCTION DT</b>	1928	<b>ALTERATION DT</b>						<b>SOURCE</b>	INSCRIPTION
<b>DESIGNER/PATENT</b>	NJ STATE HWY DEPT BRIDGE DIV					<b>BUILDER</b>	UNKNOWN		

**SETTING / CONTEXT** The bridge is located in an area of mixed use and age, with high-rise housing, light industrial and small commercial structures. The bridge carries a 4-lane divided highway with 2 sidewalks over the Rahway River and a 2-lane collector street.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Finding 11/22/91, Letter 6/30/95.

**SUMMARY** The 6-span stringer bridge sits on 5-column concrete bents and scored abutments. Three river piers have cutwater foundations for the bents. The encased stringers are deeper over the street and river spans than over the 2 spans at the south abutment. A concrete balustrade encloses the bridge, as well as a staircase to the lower road. It was determined eligible because it "is representative of multi-span concrete encased girder technology and a major link in a highway system at a major crossing".

**INFORMATION**

PHOTO: 150:14-16, (04/92)

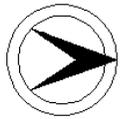
REVISED BY (DATE):

QUAD: Perth Amboy





**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2002005	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0	
<b>NAME &amp; FEATURE INTERSECTED</b>	VALLEY ROAD OVER RAHWAY RIVER			<b>FACILITY</b>	VALLEY ROAD			
<b>TOWNSHIP</b>	CLARK TOWNSHIP							
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel
<b># SPANS</b>	4	<b>LENGTH</b>	149 ft	<b>WIDTH</b>	29.3 ft			
<b>CONSTRUCTION DT</b>	1926	<b>ALTERATION DT</b>	1977		<b>SOURCE</b>	PLAQUE		
<b>DESIGNER/PATENT</b>	JACOB L. BAUER, COUNTY ENGINEER				<b>BUILDER</b>	ARTHUR E. SMITH		

**SETTING / CONTEXT** The bridge is located in Rahway River Park, a linear greenway following the winding river through the post-World War II residential area. A dam 100' upstream from the bridge has created a recreational lake. The bridge carries 2 lanes of traffic and two sidewalks over the river.

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

**CONSULT STATUS** Not Individually Eligible. Potential Rahway River Park, May contribute.

**CONSULT DOCUMENTS** DOE 10/28/83. SHPO Letter 6/30/95.

**SUMMARY** The four-span stringer bridge sits on concrete roundnose piers and abutments. The stringers are encased except for the additional sidewalk stringer on the downstream face. The sidewalk was added in 1977, outside of the paneled parapet and has chain-link fence for a railing. The other sidewalk is inside the parapet, which has a pipe railing set in the cap. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

**INFORMATION**

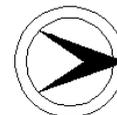
PHOTO: 159:15-18 (05/92)

REVISED BY (DATE):

QUAD: Roselle







NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2002150	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	44.03	
<b>NAME &amp; FEATURE INTERSECTED</b>	US 1&9 OVER ELIZABETH RIVER 7 LOCAL STREETS			<b>FACILITY</b>	US 1&9 (ELIZABETH RIVER VIADUCT)			
<b>TOWNSHIP</b>	ELIZABETH CITY							
<b>TYPE</b>	MULTI GIRDER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel Rein. Concrete
<b># SPANS</b>	42	<b>LENGTH</b>	185200 ft	<b>WIDTH</b>	46.6 ft			
<b>CONSTRUCTION DT</b>	1929	<b>ALTERATION DT</b>						<b>SOURCE PLANS</b>
<b>DESIGNER/PATENT</b>	NJ STATE HWY DEPT BRIDGE DIV					<b>BUILDER</b>		

**SETTING / CONTEXT** The long viaduct carries 4 lanes of divided traffic over a meandering river and local streets in an late-19th century brick and frame row houses, cleared land, and commercial blocks in a mixed-use section of Elizabeth. The buildings have been altered, and the area does not appear to have historic district potential. The viaduct is later than the surrounding buildings, and, because of its size and age, is an intrusive element in the neighborhood.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Finding 9/11/91, Letter 6/30/95.

**SUMMARY** Built as part of the NJ 25 metropolitan traffic plan designed by the Department in response to the opening of the Holland Tunnel, the 42-span viaduct composed of reinforced concrete and steel multi-girder spans is historically and technologically significant. The reinforced concrete girders are not a commonly used bridge type in the state, and historically the span represents a major structure built by the Department to resolve the efficient flow of thru traffic through an urban area.

**INFORMATION**

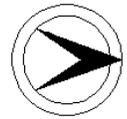
**Bibliography:**  
 NJDOT: Plan File; 2002150.  
 State Highway Commission. "Report of the State Highway Engineer to the New Jersey State Highway Commission in the matter of a comprehensive State Highway System for the State of New Jersey, in accordance with Senate Concurrent Resolution Number 3," 1926.  
 TAMS. "Routes U.S. 1 & 9 Corridor Historic Engineering Survey Historical Narrative and Assessment of Significance," June, 1991.  
 Johannesson, Sigvald. "Lincoln Highway from Jersey City to Elizabeth, New Jersey," American Society of Civil Engineers Proceedings, (November, 1933), pp. 1389-1412.  
 S. Johannesson. "Viaduct Design and Structure," Engineering News-Record, Vol. 100, No. 1, (Jan. 5, 1928), pp. 5-8.

**Physical Description:** The 1,852-foot long, 42-span viaduct is composed of reinforced concrete multi-girder, encased steel thru girder, and encased deck multi-girder spans. It was built with a vertical clearance of 22' over mean high water. The whole is finished with standard-design concrete balustrades enclosing the cantilevered safety walks on each side of the 48.5-foot roadway. The elevated viaduct that crosses three city street and the meandering Elizabeth River three times is accessed by a 325' approach ramp on the south end and a 470' ramp on the north end. Because the structure crosses six features, it is made up of skewed and 90 degree crossings with steel girders at the feature crossings linked by two- or three-span continuous reinforced concrete deck multi-girder and floor beam spans. The earth-filled ramps have concrete retaining walls and are finished with the same balustrade as the viaduct itself. The ramps are flanked by surface local roads.

The northerly end of the viaduct over Elizabeth Avenue is a 90-degree crossing composed of three span continuous haunched concrete encased deck multi girders. The five girders with a floor beam and stringer flooring system bear on shoes on concrete abutments or bents. The three crossing spans to the south are encased steel deck multi-girders at various skews. They are supported on reinforced concrete columns with bracketed struts. The southerly terminus of the viaduct that crosses the Elizabeth River and paralleling Pearl Street is composed of four encased skewed thru girders supported on concrete columns and a concrete abutment at the south approach ramp. The approach spans are primarily 90-degree two-span continuous reinforced concrete deck multi-girders with cantilevered end sections. They have a haunched profile and are supported on concrete columns with decorative corner brackets. The design with flexible twin columns, set 2' or 3' apart and joined at their bases, and the cantilevered sections at all expansion points to ensure that the joints do not bind and that the joints develop elastic movements only. When adjacent to a skewed crossing span, a third span is used on one face to compensate for the skew. This results in the skew being compensated for in the end spans only. A concrete deck which is integral with the floor beams and stringers is used throughout. The viaduct appears to survive unaltered.

**Historical and Technological Significance:** The Elizabeth River Viaduct was designed and built the New Jersey State Highway Department as part of the historically and technologically significant Route 1 Extension, the approximately 13-mile long arterial highway from the end of the 1927 Holland Tunnel to Bayway Circle on the south side of Elizabeth. Considered to be America's first "super highway," the carefully considered and designed roadway is distinguished by a variety of innovative engineering solutions to carrying a wide, limited access, high-speed highway through congested areas and some difficult terrain. The portion of the highway between the tunnel toll plaza and what was Airport Circle on the north side of Newark is carried under and over Jersey City (Hudson County) streets and water features on a variety of distinguished bridges and viaducts, including in the spectacular Pulaski Skyway cantilevered thru truss spans over the Passaic and Hackensack rivers. That approximately 7.25 mile-long section of the route, which is predominantly open cut through the Bergen Hill or elevated viaduct, is not of traditional design, and it is technologically and historically significant.

Southerly of Airport Circle the highway was planned as a surface road with some grade crossings. The 1,852'-long, 1929 Elizabeth River Viaduct, which crosses three city streets and an S-curve in the river, is the most significant original structure associated with the Route 1 Extension south of Airport Circle because of its size, design, and state of preservation. The structure employs the same distinctive engineering solutions, like the flexible twin column bents for the reinforced concrete approaches and the concrete railings and curbs, as the elevated portion of the important roadway. Beyond its common history with the other structures on the Route 1 Extension, the viaduct is technologically significant as an engineering solution to a specific transportation problem. It reflects thinking on economics of travel and construction and long-term maintenance and structure performance. While not innovative technology, the complex structure does reflect



NEW JERSEY HISTORIC BRIDGE DATA

then-current engineering concepts, and the approaches are a design not common in the state (criteria A, C).

The final design of the viaduct and the other structures on the route was based on the decision to use encased steel whenever possible. "Complete designs were made of a number of types of viaduct structures, both of concrete and of steel with a concrete or cement-mortar protection, with various span lengths. Comparative estimates of cost indicated that if the subsurface conditions were good and the span lengths uniform, a reinforced-concrete structure with a moderate span length (say up to 40ft.) would be economical. If, however, the subsurface conditions were such that greater span lengths were advisable, or if the surface conditions required a longer or skew spans of varying lengths, a steel structure of simple supported girders or trusses was indicated as the more economical" (Johannesson, "Viaduct Design ...", p. 6). Because much of Route 1 Extension passed through developed areas with existing street and railroad patterns, it was only at certain places, like the Elizabeth River Viaduct, that it possible to use reinforced concrete structures. Additionally, "no attempt was made to distort the alignment for the purpose of improving the angle of a crossing over highways, railroads, and rivers, because any saving in construction would have been overbalanced greatly by the consequent additional cost of vehicle operation" (Johannesson, "Lincoln Highway ...", p. 1392). Thus the design of the viaduct reflects the thinking and decision making that went into the design of one of the most important, early vehicular transportation routes in the country.

The Route 1 Extension, or Route 25 as it was later designated, was designed by the New Jersey State Highway Department, William G. Sloan, State Highway Engineer. Morris Goodkind was the State Bridge Engineer, and the design engineer for the project was Sivgald Johannesson, who later became the head of the planning section of the Department.

Boundary Description and Justification: Although the viaduct was built as one component of a historically significant road development campaign, only the north approximately 7.25 miles of the highway are evaluated as a potential historic district. Most of the southern portion of the highway as a whole has lost its integrity of original design and never was technologically significant. The viaduct, however, is technologically significant based on its design and integrity of original design. The significant boundary is limited to the substructure and superstructure of the elevated portion of the 1,852-foot long, 42-span structure and the earth-filled approach ramps at either end. The mixed-use late-19th and early-20th century neighborhood surrounding the structure in Elizabeth does not possess historic district potential.

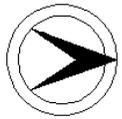
PHOTO: 152:32-39A (05/92)

REVISED BY (DATE):

QUAD: Elizabeth



NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

**STRUCTURE #** 2002152      **CO** UNION      **OWNER** NJDOT      **MILEPOINT** 44.64  
**NAME & FEATURE INTERSECTED** MAGNOLIA AVENUE OVER US 1&9      **FACILITY** MAGNOLIA AVENUE  
**TOWNSHIP** ELIZABETH CITY  
**TYPE** STRINGER      **DESIGN** ENCASED      **MATERIAL** Steel  
**# SPANS** 6      **LENGTH** 222 ft      **WIDTH** 30.7 ft  
**CONSTRUCTION DT** 1934      **ALTERATION DT**      **SOURCE** PLANS  
**DESIGNER/PATENT** NJ STATE HWY DEPT BRIDGE DIV      **BUILDER** J. F. CHAPMAN & SONS, INC.

**SETTING / CONTEXT** The viaduct carries a local street over a divided highway in a mixed use area of Elizabeth. The viaduct was built after the 1925-1932 completion of the Route 1 Extension approach road to the Holland Tunnel, but it was apparently part of the conceptual plan for the route.

**1995 SURVEY RECOMMENDATION** Eligible      **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Finding 9/11/91, Letter 6/30/95.

**SUMMARY** The overpass that consists of encased stringers and reinforced concrete T beam spans has no elements that would be considered unusual or innovative. It was, however, determined by the SHPO to "be a self-contained, ornamented, relatively intact viaduct which may be associated with public sponsorship and typical of highway viaducts of the period." The structure has a high level of integrity with the only alterations being removal of the asphalt paving block wearing surface and the added fence.

**INFORMATION**

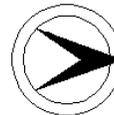
PHOTO: (1991)

REVISED BY (DATE):

QUAD: Elizabeth



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003008	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	EASTMAN STREET OVER RAHWAY RIVER			<b>FACILITY</b>	EASTMAN STREET		
<b>TOWNSHIP</b>	CRANFORD TOWNSHIP						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>	PARTIALLY ENCASED			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	85 ft	<b>WIDTH</b>	30 ft		
<b>CONSTRUCTION DT</b>	1918	<b>ALTERATION DT</b>				<b>SOURCE</b>	PLAQUE
<b>DESIGNER/PATENT</b>	JACOB L. BAUER, COUNTY ENGINEER				<b>BUILDER</b>	AMERICAN.BRIDGE, DVR.BLR.WRKS	

**SETTING / CONTEXT** The bridge is located in a potential large historic district of early-20th century residences. The bridge carries a two-lane street and two sidewalks over the Rahway River, a winding waterway that is bounded by parklands for much of its length. The homes in the district are well-preserved examples of picturesque and academic Colonial Revival styles. Bridges 2003014, 2003072, both thru-girder spans, and 2003025, a reinforced concrete arch, are also located in the potential district.

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

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

**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The one-span thru-girder bridge sits on concrete abutments. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks are enclosed with fence-like metal railings. The bridge is a representative example of a common early-20th century bridge type, and is not technologically or historically distinguished by itself. It is significant because it was constructed during the period of significance of the potential district.

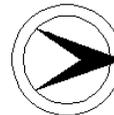
**INFORMATION**

PHOTO: 159:6-7 (05/92 JPH (5/96))

REVISED BY (DATE):

QUAD: Roselle

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003014	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	SPRINGFIELD AVENUE OVER RAHWAY RIVER			<b>FACILITY</b>	SPRINGFIELD AVENUE		
<b>TOWNSHIP</b>	CRANFORD TOWNSHIP						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>	PARTIALLY ENCASED			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	86 ft	<b>WIDTH</b>	30 ft		
<b>CONSTRUCTION DT</b>	1916	<b>ALTERATION DT</b>	1979	<b>SOURCE</b>	PLAQUE		
<b>DESIGNER/PATENT</b>	JACOB L.BAUER, COUNTY ENGINEER			<b>BUILDER</b>	LOGAN CONSTRUCTION CO.		

**SETTING / CONTEXT** The bridge is located on a main street in Cranford, and it carries two lanes and two sidewalks over the Rahway River. The neighborhood is dominated by well-preserved, architecturally significant early-20th century picturesque and academic Colonial Revival dwellings. The neighborhood has historic district potential. Two other thru-girder bridges contribute to the potential district, and one reinforced concrete arch bridge.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

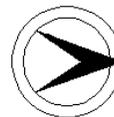
**SUMMARY** The one-span thru-girder bridge is supported by concrete abutments with wingwalls. The rolled floorbeams are encased except for the bottom flanges. The cantilevered sidewalks have reinforced concrete decks and the original iron railings. The bridge deck was replaced in 1979, with a slight crest curve and curbs on the inside face of the girders. Though a representative example of a common bridge type, the bridge is significant as a contributing element to the potential historic district.

**INFORMATION**

PHOTO: 159:43-44 (05/92) REVISED BY (DATE): QUAD: Roselle



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003025	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	EASTMAN STREET OVER RAHWAY RIVER			<b>FACILITY</b>	EASTMAN STREET		
<b>TOWNSHIP</b>	CRANFORD TOWNSHIP						
<b>TYPE</b>	DECK ARCH	<b>DESIGN</b>	ELLIPTICAL			<b>MATERIAL</b>	Reinforced Concrete
<b># SPANS</b>	1	<b>LENGTH</b>	105 ft	<b>WIDTH</b>	29.8 ft		
<b>CONSTRUCTION DT</b>	1913	<b>ALTERATION DT</b>	1985ca		<b>SOURCE</b>	NJDOT/STYLE	
<b>DESIGNER/PATENT</b>					<b>BUILDER</b>		

**SETTING / CONTEXT** The bridge carries two lanes and two sidewalks over the Rahway River. A greenway borders the winding river through the county, and this bridge is located next to McConnell Park. The neighborhood surrounding the park and bridge is early-20th century residences predominantly in the picturesque and academic Colonial Revival style. The area has historic district potential. The district includes three other bridges, all thru-girder spans from the period of significance of the district.

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

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

**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The reinforced concrete deck arch bridge has paneled spandrels and wingwalls. The arch creates a vertical crest curve over the bridge, which is skewed. A metal railing is bolted to the curb at the spandrel wall. Though the railing is not original, it is not intrusive into the character of the bridge or its surroundings. The bridge is significant because it was built during the period of significance of a potential historic district but is not technologically distinguished in its own right.

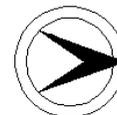
**INFORMATION**

PHOTO: 159:4-5 (05/92)

REVISED BY (DATE):

QUAD: Roselle

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003045	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	LINCOLN AVENUE OVER RAHWAY RIVER			<b>FACILITY</b>	LINCOLN AVENUE		
<b>TOWNSHIP</b>	CRANFORD TOWNSHIP						
<b>TYPE</b>	BRICK ARCH	<b>DESIGN</b>	ELLIPTICAL			<b>MATERIAL</b>	Brick
<b># SPANS</b>	3	<b>LENGTH</b>	73 ft	<b>WIDTH</b>	48 ft		
<b>CONSTRUCTION DT</b>	1875	<b>ALTERATION DT</b>	Demolished		<b>SOURCE</b>	COUNTY ENGINEER	
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			
<b>SETTING / CONTEXT</b>	The bridge is located in a wooded greenway along the Rahway River with some late-20th century residences nearby. The bridge carries a two-lane street with two sidewalks over the Rahway River downstream from National Register-listed Droescher's Mill. A dam approximately 300' upstream creates a mill pond and adds to the park-like atmosphere of the mill and bridge.						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Bridge was Individually Eligible. Potential Union County Park System Multiple Property nomination, May have contributed.						
<b>CONSULT DOCUMENTS</b>	SHPO Finding 07/18/90, Letter 03/12/01.						

**SUMMARY** The 1875 three-span brick arch bridge no longer carries the load of traffic. A Bailey truss was placed over the arches in 1985 due to the crumbling state of the southern arch. The arches are skewed using a ribbed pattern consisting of approximately 2' wide ribs stepped along the intrados. The arches have a stone fascia, and a metal railing that was placed in 1926. The ribbed brick intrados is a unique feature; the arches are deteriorating. Despite this, the bridge remains individually eligible for listing in the National Register of Historic Places under Criterion C.

**INFORMATION** Bibliography:  
Cranford Board of Trade. Cranford, New Jersey. 1913.  
County Engineer Office; Bridge File.

Physical Description: The 1875 three-span brick arch has a ribbed intrados. The bricks were laid in a stepped pattern to provide for the skew of the bridge as it crossed the waterway. Each rib is approximately 2' wide, and is stepped 6" from the preceding rib. The spandrel walls are ashlar with a concrete cap. The arches all have gauged ring stones. A concrete footing is present at the base of each arch, with a short buttress protruding from the upstream face of the structure. In 1926, the original metal railing was replaced with another metal railing, each type being finely detailed for this important bridge.

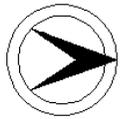
The arch action of the spans has been lost. The ashlar spandrel wall has fallen into the river, as have parts of the brick arches which has caused the bridge to fail.

In 1985, a Bailey truss was placed over the arch structure to carry the vehicular traffic across the river and the deteriorated arch. Additional precautions have been made for pedestrians to cross the bridge in a safe manner, with chain-link fencing and beam guide rails marking sidewalks.

Historical and Technological Significance: The ca. 1875 three-span brick arch bridge with the stepped intrados is a rare example of its design. No other example has been identified on a highway in the state. However, deterioration has caused the arch action of the span to fail. It is evaluated as not eligible due to its loss of structural integrity. The date of construction is based on the style and type, but it has not been documented.

PHOTO: 157:28-33 (05/92 JPH (5/96))                      REVISED BY (DATE):                      QUAD: Roselle

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003072	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	SPRINGFIELD AVENUE OVER RAHWAY RIVER			<b>FACILITY</b>	SPRINGFIELD AVENUE		
<b>TOWNSHIP</b>	CRANFORD TOWNSHIP						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>	PARTIALLY ENCASED			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	76 ft	<b>WIDTH</b>	31.4 ft		
<b>CONSTRUCTION DT</b>	1914	<b>ALTERATION DT</b>				<b>SOURCE</b>	PLAQUE
<b>DESIGNER/PATENT</b>	JACOB L. BAUER, COUNTY ENGINEER				<b>BUILDER</b>	JAS. E. GANO	
<b>SETTING / CONTEXT</b>	The bridge is located in a potential historic district of predominantly early-20th century picturesque and academic Colonial Revival dwellings. The homes are well-maintained and well-preserved. The bridge carries a two-lane road with two sidewalks over the Rahway River, a winding waterway that has a wooded greenway along both banks through most of Union County.						
<b>1995 SURVEY RECOMMENDATION</b>	Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible. Agreed Potential Cranford Historic District. Contributing.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						

**SUMMARY** The thru-girder bridge sits on concrete abutments. The floorbeams are built-up, and encased stringers support the concrete deck. The original iron railings remain along the cantilevered sidewalks, with pipe railings bolted to the top flanges of the girders to protect pedestrians from traffic. The bridge is not technologically or historically distinguished, but is eligible because it contributes to a potential historic district.

**INFORMATION**

PHOTO: 159:1-3 (05/92)

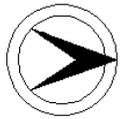
REVISED BY (DATE):

QUAD: Roselle





NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

**STRUCTURE #** 2003160      **CO** UNION      **OWNER** NJDOT      **MILEPOINT** 0.0  
**NAME & FEATURE INTERSECTED** SPRINGFIELD AVENUE (CR 509 SPUR) OVER US 22      **FACILITY** SPRINGFIELD AVENUE (CR 509 SPUR)  
**TOWNSHIP** SPRINGFIELD TOWNSHIP  
**TYPE** STRINGER      **DESIGN** ENCASED      **MATERIAL** Steel  
**# SPANS** 2      **LENGTH** 127 ft      **WIDTH** 42 ft  
**CONSTRUCTION DT** 1941      **ALTERATION DT**      **SOURCE** INSCRIPTION  
**DESIGNER/PATENT** NJ STATE HWY DEPT BRIDGE DIV      **BUILDER**

**SETTING / CONTEXT** The bridge is located in a post-World War II commercial area. It carries a four-lane county route with a mountable median and two sidewalks over a four-lane divided 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 two-span encased stringer bridge bears on a concrete substructure. The abutments have Moderne detailing and fluted pilasters. The pier is an eight-column bent with a concrete cap. The fluted pilasters at the fascia of the abutments and pier rise into stepped posts in the concrete balustrade. The bridge is not distinguished, but is a representative example of a common bridge type and style used by the State Highway Department Bridge Division.

**INFORMATION**

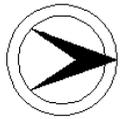
PHOTO: 158:22-23 (05/92)

REVISED BY (DATE):

QUAD: Roselle



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2003162	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	53.12
<b>NAME &amp; FEATURE INTERSECTED</b>	US 22 WB OVER RAHWAY RIVER			<b>FACILITY</b>	US 22 WESTBOUND		
<b>TOWNSHIP</b>	UNION TOWNSHIP						
<b>TYPE</b>	RIGID FRAME	<b>DESIGN</b>		<b>MATERIAL</b>	Reinforced Concrete		
<b># SPANS</b>	1	<b>LENGTH</b>	54 ft	<b>WIDTH</b>	44 ft		
<b>CONSTRUCTION DT</b>	1941	<b>ALTERATION DT</b>		<b>SOURCE</b>	INSCRIPTION		
<b>DESIGNER/PATENT</b>	NJ STATE HWY DEPT BRIDGE DIV			<b>BUILDER</b>			

**SETTING / CONTEXT** The bridge is located in Rahway River Parkway, a forested greenway that follows the river through most of Union County. The bridge carries two lanes of one-directional traffic, two shoulders and two sidewalks over the river. Post-World War II structures line the highway in the vicinity of the bridge. The greenway does not appear to have historical or landscape architecture significance, and in this section the bridge is not related to it as there is no linkage between the two.

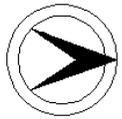
**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** DOE 10/28/83. SHPO Letter 6/30/95.

**SUMMARY** The rigid frame bridge is nicely detailed. The concrete abutments have paneled posts at the corners. At the approaches are banded concrete bullnose parapets flanking a concrete balustrade. The balusters are octagonal and rise directly from the sidewalk to the scored concrete top rail. The posts are scored vertically. This is an early example of this common post WW II detailing and balustrade, but the rigid frame structure is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 158:26-29 (05/92) REVISED BY (DATE): QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

**STRUCTURE #** 2003166      **CO** UNION      **OWNER** NJDOT      **MILEPOINT** 54.83  
**NAME & FEATURE INTERSECTED** US 22 OVER CHESTNUT STREET (CR 626)      **FACILITY** US 22  
**TOWNSHIP** UNION TOWNSHIP  
**TYPE** THRU GIRDER      **DESIGN** ENCASED      **MATERIAL** Steel  
**# SPANS** 2      **LENGTH** 149 ft      **WIDTH** 50 ft  
**CONSTRUCTION DT** 1929      **ALTERATION DT**      **SOURCE** INSCRIPTION  
**DESIGNER/PATENT** NJ STATE HWY DEPT BRIDGE DIV      **BUILDER**

**SETTING / CONTEXT** The bridge is located in a residential area with well-maintained single family dwellings of mixed-20th century construction. It carries a four-lane divided highway with 2 sidewalks over a busy 4-lane collector road.

**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 2-span thru-girder bridge sits on a concrete substructure. The abutments and wingwalls are scored. The 7-column bent has octagonal columns with a brace near the tops. The encased girders support encased floorbeams that are braced with longitudinal diaphragms. The cantilevered sidewalks are enclosed by a metal railing with concrete posts. Concrete obelisks mark the four ends of the girders, but are missing original luminaries. The bridge is a representative example of a common NJDOT design.

**INFORMATION**

PHOTO: 156:29-31 (05/92)

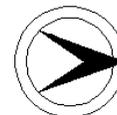
REVISED BY (DATE):

QUAD: Roselle





**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2004001	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	SOUTH FRONT STREET OVER ELIZABETH RIVER		<b>FACILITY</b>	SOUTH FRONT STREET			
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	SINGLE LEAF BASCULE	<b>DESIGN</b>	STRAUSS HEEL TRUNNION			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	158 ft	<b>WIDTH</b>	17.8 ft		
<b>CONSTRUCTION DT</b>	1920	<b>ALTERATION DT</b>	1976	<b>SOURCE</b>	PLANS/COUNTY ENGR		
<b>DESIGNER/PATENT</b>	STRAUSS BASCULE BRIDGE COMPANY			<b>BUILDER</b>	AMERICAN BRIDGE COMPANY		

**SETTING / CONTEXT** The bridge is located in an industrial area that is in the process of being cleared and redeveloped for recreational use. The one-lane bridge crosses a small waterway near its outlet into the Arthur Kill. The waterway is now used only for pleasure craft, as only a few hundred feet of the river are navigable. The bridge provides access to a concrete plant located along the Arthur Kill.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The skewed Strauss heel trunnion bridge has a Warren thru-truss moveable span. The bridge bears on concrete abutments. The concrete counterweight has been repaired several times. The original gearing is housed above the roadway, along with electric motors from 1940. The only operational moveable-span bridge in Union County, the bridge is a well-preserved example of an uncommon type and is historically and technologically noteworthy.

**INFORMATION**

Bibliography:  
Hool and Kinne. Movable and Long-Span Steel Bridges. 1943.  
Union County Engineer. Bridge File: EL1. 1902 Bauer Atlas of Union County.  
Waddell, J.A.L. Bridge Engineering. 1925.

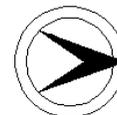
**Physical Description:** The 158'-long single-leaf Strauss heel trunnion bascule bridge has a rivet-connected Warren with verticals moveable span fabricated of traditionally composed members. Because the bridge is skewed, the trusses are different lengths; 131'-8" on the west truss, 116'-5" on the east truss. The roadway is 17'-8" wide. The substructure is concrete. The flooring system, which includes an open grate deck, was strengthened in 1976, and the concrete counterweight, carried overhead by a framed truss that pivots on two trunnions when the bridge is in operation, was repaired in 1976. The operating machinery, made up of open gear sets and line shafts, is located in a corrugated metal-clad machinery closure adjacent to the operating strut fitted with a rack and the operating pinion. The controls are located in the small, gable-roofed brick tender's house adjacent to the span. A standard-design metal railing encloses the cantilevered sidewalk. The bridge is well preserved.

**Historical and Technological Significance:** The 1920 Strauss heel trunnion single-leaf bascule bridge, designed by the Strauss Bascule Bridge Company of Chicago and fabricated by American Bridge Company's Pencoyd plant, is a well-preserved example of a proprietary bridge type that is not common in New Jersey (criterion C). The heel trunnion is a variation on the patented articulated parallel-moving counterweight design Joseph B. Strauss developed in 1905. Unlike the articulated counterweight bridges, in the heel trunnion design the counterweight trunnion is a fixed pivotal point. It is located at the top of a stationary tower supported by the main column and an auxiliary column. The counterweight is carried by one end of a trussed frame. The other end of this trussed frame is connected by a pivot to a link which in turn attaches to the inclined end post of the thru truss superstructure by a pin. This arrangement provides a parallelogram of linkages with the side formed by the triangular counterweight tower with the initially mentioned fixed pivotal point. Near the center of the tower is an "operating strut" with a rack that is pulled by the operating pinion causing the parallelogram to close up thereby opening the leaf. This is one of only two documented road-carrying heel trunnion bridges in New Jersey; NJ 7 over the Passaic River in Bergen County (0208150) is the other. Several more survive on the state's rail lines.

**Boundary Description and Justification:** The bridge is evaluated as individually significant, and the boundary is limited to the superstructure and substructure of the bridge itself and the tender's house.

PHOTO: 152:14-20A (04/92) REVISED BY (DATE): QUAD: Elizabeth

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2004002	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	SOUTH FIRST STREET OVER ELIZABETH RIVER		<b>FACILITY</b>	SOUTH FIRST STREET			
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	SINGLE LEAF BASCULE	<b>DESIGN</b>	STRAUSS OVERHEAD			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	80 ft	<b>WIDTH</b>	24.8 ft		
<b>CONSTRUCTION DT</b>	1908	<b>ALTERATION DT</b>	1984	<b>SOURCE</b>	PLANS/COUNTY ENGR		
<b>DESIGNER/PATENT</b>	STRAUSS BASCULE BRIDGE COMPANY			<b>BUILDER</b>			

**SETTING / CONTEXT** The bridge is located in an industrial area that is undergoing clearing and redevelopment for recreational use. The bridge carries a 2-lane road over a tidal river. This section of the river is used for recreational marine traffic only.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The 1908 Strauss overhead articulated counterweight bridge is supported on a concrete substructure. The moveable span is riveted Warren pony trusses, and the concrete counterweight is enclosed by a lattice screen. Although the bridge was fixed in 1984 after the tenders shanty burned, the bridge remains as one of the earliest and most complete patented Strauss overhead counterweight bridges in the state. The bridge is a historically and technologically distinguished structure.

**INFORMATION**

**Bibliography:**  
 Union County Engineer Office. Bridge File: 2004002.  
 Waddell, J.A.L. Bridge Engineering. 1925. 1902 Bauer Map of Union County.

**Physical Description:** The 80'-long single leaf bascule bridge is a Strauss articulated overhead counterweight type supported on a concrete substructure. The lift span is a rivet-connected Warren pony truss span with a 24'-8" roadway. It is traditionally composed of built-up members as are the trunnion columns, tower, and counterweight linkages that permit the counterweight to pivot and move parallel to itself during operation of the bridge. A distinctive detail of the 1907 bridge is the lattice, or lacing as it is identified on the Strauss Bascule and Concrete Bridge Company plans, enclosure of the counterweight that is located 30' above the roadway. The superstructure is remarkably complete. The steel grid deck was installed in 1976 as part of an upgrading of the floor system. The most significant alteration to the bridge is the loss of the operator's shanty and controls as the result of a fire in 1984. The bridge has consequently been fixed in the closed position, but the gear sets and shafts are still in place. Plans for the original mechanical systems are preserved in the County Engineer's office. The original pipe railings and safety gates are still place.

**Historical and Technological Significance:** The 1908 Strauss overhead articulated counterweight bascule bridge designed by the Strauss Bascule and Concrete Bridge Company of Chicago, Illinois, is one of the earliest and most complete examples of the technologically important bridge type in the state (criterion C). In addition to its early date of construction, this example of what would go on in the early-20th century to become the most popular moveable bridge type in the country is distinguished by the fact that it has an enclosure around the raw concrete counterweight. The metal lattice enclosure or screen was an aesthetic consideration, and the detail has been identified on only one other bridge in New Jersey; the 1906 Federal Street bridge in Camden (043B008). J. B. Strauss (1870-1938) invented the pivoting counterweight linkage used at the South First Street bridge, and he applied for a patent in 1905, the same year the first bridge of this type was built in Cleveland. That year he also founded the Strauss Bascule and Concrete Bridge Company in Chicago to market his bridge designs. Strauss went on to become the most widely respected moveable-span bridge engineer of the pre-World War II era.

Strauss reasoned that if, unlike the traditional trunnion bridge, which operates like a seesaw and moves in a vertical plane on a horizontal steel pivot, the entire weight of the counterweight could be concentrated at the end (tail) of the moveable leaf, it would then be possible to use a lighter counterweight. Such an arrangement also meant a shorter tail end to the leaf, thus saving on materials that the "counterweight could be made in such shape that no pit is required to receive it when the leaf is in the upright position" (Waddell, p. 704). The patented linkage, or arms, ensures that the counterweight will always move in a series of parallel positions and thus maintain the position of the weight at the tail end of the leaf.

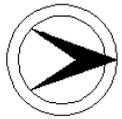
When the Strauss overhead counterweight span at South First Street was erected, it was the first bridge at the crossing. A 1902 county map shows the area next to the industrialized Arthur Kill-Newark Bay waterfront as platted but not developed. The bridge was built just upstream from the South Front Street span. In 1984 a fire destroyed the original operator's house, electric motor that operated the span, and the controls. It was not replaced, and the bridge was fixed in the closed position at that time. A machinery plan for the bridge survives, so how the operating mechanism was arranged is well documented. Despite the loss of the operator's house, the superstructure survives in a remarkably complete state of preservation making this bridge one of the most important of its type in New Jersey. It is one of at least five Strauss overhead counterweight trunnion bridges built between 1907 and 1938 remaining in the state. Others include 043B008, 01M0001, 03H8001, and 1707150.

**Boundary Description and Justification:** The bridge is evaluated as individually distinguished. The significant boundary is thus limited to the substructure and superstructure and the operator's shanty.

PHOTO: 152:6A-13A (04/92) REVISED BY (DATE): QUAD: Elizabeth



NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

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<b>STRUCTURE #</b>	2004151	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	56.7
<b>NAME &amp; FEATURE INTERSECTED</b>	US 22 OVER ELIZABETH RIVER			<b>FACILITY</b>	US 22		
<b>TOWNSHIP</b>	HILLSIDE TOWNSHIP						
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED	<b>MATERIAL</b>	Steel		
<b># SPANS</b>	1	<b>LENGTH</b>	71 ft	<b>WIDTH</b>	60 ft		
<b>CONSTRUCTION DT</b>	1940	<b>ALTERATION DT</b>		<b>SOURCE</b>	INSCRIPTION		
<b>DESIGNER/PATENT</b>	NJ STATE HWY DEPT BRIDGE DIV			<b>BUILDER</b>	UNKNOWN		

**SETTING / CONTEXT** The bridge is located on a divided highway lined with mid- to late-20th century commercial structures. The bridge carries the four-lane divided highway and two sidewalks over the Elizabeth River. The river is located in Elizabeth River Park, a greenway that follows the waterway most of the way through the county.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Union County Park System Multiple Property nomination, Might be Noncontributing.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The one-span stringer bridge bears on concrete abutments. The stringers are deep, web-stiffened steel beams that are encased in concrete. The concrete balustrades are typical of pre-World War II State Highway Department Bridge Division designs. A New Jersey-type barrier divides the highway. The bridge is a representative example of a common bridge type and style, and it is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 153:23-24 (04/92)

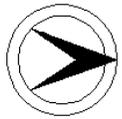
REVISED BY (DATE):

QUAD: Elizabeth





NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

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<b>STRUCTURE #</b>	2004155	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	HILLSIDE AVENUE OVER US 22			<b>FACILITY</b>	HILLSIDE AVENUE		
<b>TOWNSHIP</b>	HILLSIDE TOWNSHIP						
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED	<b>MATERIAL</b>	Steel		
<b># SPANS</b>	1	<b>LENGTH</b>	77 ft	<b>WIDTH</b>	30 ft		
<b>CONSTRUCTION DT</b>	1940	<b>ALTERATION DT</b>		<b>SOURCE</b>	INSCRIPTION		
<b>DESIGNER/PATENT</b>	NJ STATE HWY DEPT BRIDGE DIV			<b>BUILDER</b>			

**SETTING / CONTEXT** The bridge is located along US 22, a divided highway that is lined with post-World War II commercial buildings. Single family dwellings of the same era are also nearby. The bridge carries a two-lane road with two sidewalks over the four-lane highway with shoulders.

**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 one-span encased stringer bridge bears on concrete abutments that are finished with Moderne detailing. The well-detailed bridge with a concrete balustrade is a representative of a common design by the State Highway Department Bridge Division for grade crossing elimination prior to World War II. It is not technologically or historically distinguished.

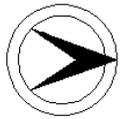
**INFORMATION**

PHOTO: 153-8-9 (04/92)

REVISED BY (DATE):

QUAD: Elizabeth

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2004157	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	NORTH BROAD STREET (CR 623) OVER US 22 & CONRAIL		<b>FACILITY</b>	NORTH BROAD STREET (CR 623)			
<b>TOWNSHIP</b>	HILLSIDE TOWNSHIP						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>		<b>MATERIAL</b>	Steel		
<b># SPANS</b>	5	<b>LENGTH</b>	220 ft	<b>WIDTH</b>	40 ft		
<b>CONSTRUCTION DT</b>	1929	<b>ALTERATION DT</b>		<b>SOURCE</b>	PLAQUE		
<b>DESIGNER/PATENT</b>	LEHIGH VALLEY RR ENGNRS OFFICE			<b>BUILDER</b>	BETHLEHEM STEEL COMPANY		

**SETTING / CONTEXT** The bridge is located in an area of post-World War II commercial structures. It carries a local two-lane road with two sidewalks over a four-lane divided highway and four sets of railroad tracks. The tracks are part of the Lehigh Valley Railroad's main line, which was developed in 1888. It branched off the existing route in South Plainfield and headed to Jersey City via Newark. The original double-track was expanded to four tracks in 1901. Conrail took control of the line in 1976.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

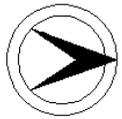
**SUMMARY** The bridge is composed of three types, all on a concrete substructure of 3-column hammerhead piers and abutments with wingwalls. The span over the tracks is a steel thru girder with floorbeams and stringers. The span over the highway is 3 deck girder span with floorbeams. There are also three encased stringer spans. A metal railing and new high pedestrian fence cross the span. None of the bridge types is distinguished technologically nor is the bridge historically noteworthy.

**INFORMATION**

PHOTO: 153:6-7 (04/92) REVISED BY (DATE): QUAD: Elizabeth



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2006151	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	28.42
<b>NAME &amp; FEATURE INTERSECTED</b>	NJ 27 OVER ROBINSONS BRANCH RAHWAY RIVER			<b>FACILITY</b>	NJ 27		
<b>TOWNSHIP</b>	RAHWAY CITY						
<b>TYPE</b>	BRICK ARCH	<b>DESIGN</b>	PARABOLIC			<b>MATERIAL</b>	Brick
<b># SPANS</b>	3	<b>LENGTH</b>	72 ft	<b>WIDTH</b>	80 ft		
<b>CONSTRUCTION DT</b>	1890ca	<b>ALTERATION DT</b>	Unknown		<b>SOURCE STYLE</b>		
<b>DESIGNER/PATENT</b>	UNKNOWN			<b>BUILDER</b>	UNKNOWN		

**SETTING / CONTEXT** The bridge is located in a greenway that follows the Robinson's Branch of the Rahway River through a neighborhood of post-World War II residences. The bridge carries four lanes of traffic and two sidewalks over the stream.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The three-span brick arch bridge sits on ashlar footings. Concrete repairs were used to buttress the piers and form cutwater piers at the base of the arches. The spandrel walls are rusticated ashlar as are the ringstones. The bridge appears to have been widened in kind by 15'-20' on each side, and the stone parapets moved out with the face of the bridge. The bridge is a significant example of a brick arch bridge, one of four in Union County.

**INFORMATION** Bibliography:  
 Robinson, E. Atlas of Union County, New Jersey. 1882.  
 Sanborn Insurance Atlas, Rahway, New Jersey, 1923.

**Physical Description:** The handsome three-span brick arch bridge rests on ashlar footings with concrete buttressing at the upstream face of the piers. The spandrel walls are ashlar, as are the ringstones. The bridge is 80' in width from the outside faces of the ashlar parapets. Approach guide rails do not cross the bridge or connect to the stone of the parapets. Iron signposts naming Robinson's Branch are present at the approaches to the bridge.

**Historical and Technological Significance:** The well-preserved ca. 1875 three-span brick arch bridge is a significant example of its type in the region based on its size and state of preservation (criterion C). The brick arch is a bridge type that was used in north New Jersey in the 1870s, 1880s, and early 1890s. No specific information about the date of construction or the builder could be located. The date is based on stylistic comparison with the 1875 Lincoln Avenue bridge (2003006).

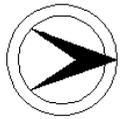
On initial field inspection it appeared that the bridge had been widened in-kind at some point, but after researching old atlases and insurance maps, the bridge appears to have been 80' wide since at least 1882. The construction of such a wide bridge signifies the importance of the structure in the transportation system of the city, county, and state. The bridge is well-preserved, and is still very functional in its ability to handle traffic loads imposed on it in the late-20th century. It is the widest of three identified brick arch bridges in Union County.

**Boundary Description and Justification:** The bridge is evaluated as individually distinguished. The significant boundary is limited to the span itself.

PHOTO: 151:9-12 (04/92 JPH (5/96)) REVISIED BY (DATE): QUAD: Perth Amboy



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2007020	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0	
<b>NAME &amp; FEATURE INTERSECTED</b>	LIBERTY AVENUE OVER ELIZABETH RIVER			<b>FACILITY</b>	LIBERTY AVENUE			
<b>TOWNSHIP</b>	HILLSIDE TOWNSHIP							
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel
<b># SPANS</b>	2	<b>LENGTH</b>	60 ft	<b>WIDTH</b>	43.9 ft			
<b>CONSTRUCTION DT</b>	1921	<b>ALTERATION DT</b>						<b>SOURCE BUILDER</b>

**SETTING / CONTEXT** The bridge is located in a county park surrounded by residences from the early- through the late-20th century. A dam approximately 30 feet upstream from the bridge creates a small recreational lake. The bridge carries a two-lane road with two sidewalks over the river.

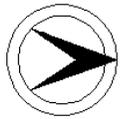
**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The two-span stringer bridge sits on a concrete substructure. The bridge is nicely detailed, with paneled posts at the abutments and pier, and haunched fascia stringer encasement. The concrete balustrade has posts with oval panels. The bridge is a representative example of a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 153:25-27 (04/92) REVISD BY (DATE): QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

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<b>STRUCTURE #</b>	2007032	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	CONANT STREET OVER STREAM 8-5			<b>FACILITY</b>	CONANT STREET		
<b>TOWNSHIP</b>	HILLSIDE TOWNSHIP						
<b>TYPE</b>	CULVERT	<b>DESIGN</b>		<b>MATERIAL</b>	Reinforced Concrete		
<b># SPANS</b>	1	<b>LENGTH</b>	130 ft	<b>WIDTH</b>	30 ft		
<b>CONSTRUCTION DT</b>	1930	<b>ALTERATION DT</b>		<b>SOURCE</b>	NJDOT		
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			

**SETTING / CONTEXT** The opening of the culvert is located in a greenway, near an elevated railroad track. The culvert winds under a local two-lane street and the track, which is elevated above the roadway on a bridge with a rusticated ashlar substructure.

**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 culvert is only 15' wide at the opening, but increases in span below the street because it is skewed. A pipe railing is mounted in the concrete over the outlet. Concrete wingwalls and channel protection bound the stream at the outlet. The structure is not technologically or historically distinguished.

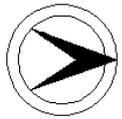
**INFORMATION**

PHOTO: 153:28 (04/92)

REVISED BY (DATE):

QUAD: Elizabeth

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2007151	<b>CO</b>	UNION	<b>OWNER</b>	UNKNOWN	<b>MILEPOINT</b>	34.0
<b>NAME &amp; FEATURE INTERSECTED</b>	NJ 27 (CHERRY ST) OVER CONRAIL ELIZABETH BRANCH		<b>FACILITY</b>	NJ 27 (CHERRY STREET)			
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	THRU TRUSS	<b>DESIGN</b>	WARREN			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	93 ft	<b>WIDTH</b>	36 ft		
<b>CONSTRUCTION DT</b>	1921	<b>ALTERATION DT</b>			<b>SOURCE</b>	INSCRIPTION/PLANS	
<b>DESIGNER/PATENT</b>	CRR NJ CHIEF ENGINEERS OFFICE			<b>BUILDER</b>	AMERICAN BRIDGE COMPANY		

**SETTING / CONTEXT** The bridge is located in a neighborhood of late-19th and early-20th century residences, with a school nearby. The span carries a two-lane road with two sidewalks over one abandoned track. The Elizabeth Branch of the Central RR of New Jersey was developed in the 1830's and originally operated with horse-drawn streetcars. By 1840 it was using steam engines and soon was expanded to Somerville from Elizabeth. It was four-tracked by 1882. This branch of the line went out of use in 1967.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95. DOE 11/30/95.

**SUMMARY** The 6-panel Warren thru truss span has concrete abutments. The riveted members are built-up from angles, plates and lacing. Struts between the top chords have lattice webs. The bottom chord is encased, as are the stringers and floorbeams. The cantilevered sidewalks retain the original metal railings. One of 5 similar spans built by the CNJ in the vicinity, this one is not as old or interestingly detailed as several of the others. It is not technologically notable. Tuttle Parkway is noteworthy.

**INFORMATION**

PHOTO: 154:22-25 (05/92)

REVISED BY (DATE):

QUAD: Elizabeth











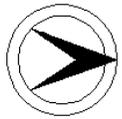












NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2011062	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0		
<b>NAME &amp; FEATURE INTERSECTED</b>	CENTRAL AVENUE OVER PASSAIC RIVER			<b>FACILITY</b>	CENTRAL AVENUE				
<b>TOWNSHIP</b>	NEW PROVIDENCE BOROUGH								
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel	
<b># SPANS</b>	2	<b>LENGTH</b>	89 ft	<b>WIDTH</b>	30 ft				
<b>CONSTRUCTION DT</b>	1928	<b>ALTERATION DT</b>						<b>SOURCE</b>	PLAQUE
<b>DESIGNER/PATENT</b>	BAUER(UNION) & HOPKINS(MORRIS)					<b>BUILDER</b>	A. L. TRIMPI		

**SETTING / CONTEXT** The bridge is located in Passaic River Park, a greenway located along the river which separates Union and Morris Counties. The bridge carries a two-lane residential street with two sidewalks over the river. The residences are from the mid- to late-20th century.

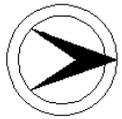
**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The two-span stringer bridge is supported by rusticated concrete abutments and a pier. The encased stringers support a concrete deck and paneled parapets. The original light standards have been removed from the parapet posts. The bridge is a representative example of a common type and it is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 156:11-12 (05/92) REVISD BY (DATE): QUAD: Chatham



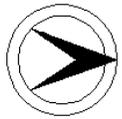


NEW JERSEY HISTORIC BRIDGE DATA

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<b>STRUCTURE #</b>	2012003	<b>CO</b>	UNION	<b>OWNER</b>	CITY OR MUNC.	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	PARK AVENUE OVER CEDAR BROOK			<b>FACILITY</b>	PARK AVENUE		
<b>TOWNSHIP</b>	PLAINFIELD CITY						
<b>TYPE</b>	CULVERT	<b>DESIGN</b>		<b>MATERIAL</b>	Concrete		
<b># SPANS</b>	2	<b>LENGTH</b>	30 ft	<b>WIDTH</b>	40 ft		
<b>CONSTRUCTION DT</b>	1930	<b>ALTERATION DT</b>		<b>SOURCE</b>	COUNTY ENGINEER		
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			
<b>SETTING / CONTEXT</b>	The bridge is located on heavily travelled two-lane street that passes through a mixed 20th century neighborhood of residences and homes converted to commercial space. It carries the road over a stream that has been channeled underground and acts as the storm water collector.						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						
<b>SUMMARY</b>	The reinforced concrete box culvert bridge is underground. The structure is part of a storm water collection system that outlets into Cedar Brook. The channeled stream surfaces approximately 1000' downstream from this bridge, where a pipe railing is set in concrete over the opening of the culvert. The structure is not technologically or historically distinguished.						
<b>INFORMATION</b>							
	PHOTO: 163:6-7 (05/92)			REVISED BY (DATE):		QUAD: Plainfield	

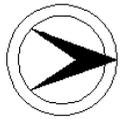




NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2012010	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	ROOSEVELT AVENUE OVER GREEN BROOK			<b>FACILITY</b>	ROOSEVELT AVENUE		
<b>TOWNSHIP</b>	PLAINFIELD CITY						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>		<b>MATERIAL</b>	Steel		
<b># SPANS</b>	1	<b>LENGTH</b>	64 ft	<b>WIDTH</b>	25.2 ft		
<b>CONSTRUCTION DT</b>	1922	<b>ALTERATION DT</b>		<b>SOURCE</b>	PLAQUES		
<b>DESIGNER/PATENT</b>	BAUER(UNION)& VAN EMBURGH(SOM)			<b>BUILDER</b>	DOVER BOILER WORKS		
<b>SETTING / CONTEXT</b>	The bridge is located in a residential area of ca.1900 single family dwellings with later infill structures. The area does not appear to have historic district potential. The bridge carries a one-way one-lane road with two parking lanes and two sidewalks over the stream that separates Union and Somerset Counties.						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						
<b>SUMMARY</b>	The one-span thru-girder bridge is supported on concrete abutments. The substructure has been repaired with gunite and with concrete toe walls. The built-up riveted girders support rolled floorbeams and encased stringers that have exposed bottom flanges. The sidewalks are cantilevered from the girder on built-up brackets, with original picket fence-like railings. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.						
<b>INFORMATION</b>							
	PHOTO:	155:6-9 (05/92)		REVISED BY (DATE):		QUAD:	Plainfield





NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2012014	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0	
<b>NAME &amp; FEATURE INTERSECTED</b>	SANDFORD AVENUE OVER GREEN BROOK			<b>FACILITY</b>	SANDFORD AVENUE			
<b>TOWNSHIP</b>	PLAINFIELD CITY							
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel
<b># SPANS</b>	2	<b>LENGTH</b>	54 ft	<b>WIDTH</b>	35 ft			
<b>CONSTRUCTION DT</b>	1919	<b>ALTERATION DT</b>			<b>SOURCE</b>	PLAQUE		
<b>DESIGNER/PATENT</b>	JACOB BAUER(UNION)& SOM CO ENG				<b>BUILDER</b>	ARTHUR E. SMITH		

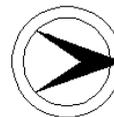
**SETTING / CONTEXT** The bridge is located in a single-family dwelling neighborhood with houses dating from around 1900. The bridge carries a two-lane street with two sidewalks over the stream that forms the boundary between Union and Somerset Counties.

**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 stringer bridge sits on concrete abutments and a "round nose" pier. Concrete walls line the channel, protecting buildings that are close to the stream from slope erosion. The stringers are encased (except for one) in concrete. The bridge has concrete balustrades with paneled posts and scored fascias. The bridge is a representative example of a common type, and is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 155:42-43 (05/92) REVISD BY (DATE): QUAD: Chatham



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2012018	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0		
<b>NAME &amp; FEATURE INTERSECTED</b>	NORWOOD AVENUE OVER GREEN BROOK			<b>FACILITY</b>	NORWOOD AVENUE				
<b>TOWNSHIP</b>	PLAINFIELD CITY								
<b>TYPE</b>	DECK ARCH	<b>DESIGN</b>	ELLIPTICAL				<b>MATERIAL</b>	Reinforced Concrete	
<b># SPANS</b>	1	<b>LENGTH</b>	80 ft	<b>WIDTH</b>	36 ft				
<b>CONSTRUCTION DT</b>	1917	<b>ALTERATION DT</b>						<b>SOURCE</b>	PLAQUES
<b>DESIGNER/PATENT</b>	BAUER(UNION) & DOUGHTY(SOM)				<b>BUILDER</b>	F. W. SCHWIERS JR. COMPANY			

**SETTING / CONTEXT** The bridge is located in a neighborhood of single family dwellings dating from the first half of the 20th century. It carries a two-lane street with two sidewalks over a stream. Green Brook is the dividing line between Union and Somerset counties.

**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 reinforced concrete arch bridge has concrete abutments and wingwalls. The arch has been repaired with gunite throughout. The bridge is bounded by concrete balustrades that are parallel with the vertical crest over the span. Pipe railings are present at the approaches, attached to the concrete end posts of the balustrade. The bridge is a representative example of a common early-20th century bridge type. It is not technologically or historically distinguished. 2013022 is more noteworthy.

**INFORMATION**

PHOTO: 155:39-40 (05/92) REVISIED BY (DATE): QUAD: Chatham

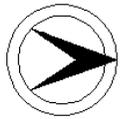






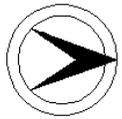


**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

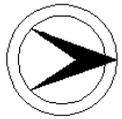
<b>STRUCTURE #</b>	2012051	<b>CO</b>	UNION	<b>OWNER</b>	CITY OR MUNC.	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	PROSPECT AVENUE OVER CEDAR BROOK			<b>FACILITY</b>	PROSPECT AVENUE		
<b>TOWNSHIP</b>	PLAINFIELD CITY						
<b>TYPE</b>	CULVERT	<b>DESIGN</b>		<b>MATERIAL</b>	Concrete		
<b># SPANS</b>	2	<b>LENGTH</b>	28 ft	<b>WIDTH</b>	39.6 ft		
<b>CONSTRUCTION DT</b>	1929	<b>ALTERATION DT</b>		<b>SOURCE</b>	COUNTY ENGINEER		
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			
<b>SETTING / CONTEXT</b>	The bridge is an underground structure. It is located below a two-lane residential street of mixed 20th century construction. The "stream" that it crosses is part of the storm water collection system of the City of Plainfield. The opening of the channel is approximately 1000' downstream from this structure.						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						
<b>SUMMARY</b>	The two-span concrete culvert bridge is unmarked above ground. According to the County Engineer, it is a reinforced concrete two-cell culvert. The bridge is not technologically or historically distinguished.						
<b>INFORMATION</b>							
	PHOTO:	155:20	(05/92)	REVISED BY (DATE):		QUAD:	Plainfield



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2012052	<b>CO</b>	UNION	<b>OWNER</b>	CITY OR MUNC.	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	WATCHUNG AVENUE OVER CEDAR BROOK			<b>FACILITY</b>	WATCHUNG AVENUE		
<b>TOWNSHIP</b>	PLAINFIELD CITY						
<b>TYPE</b>	CULVERT	<b>DESIGN</b>		<b>MATERIAL</b>	Reinforced Concrete		
<b># SPANS</b>	2	<b>LENGTH</b>	26 ft	<b>WIDTH</b>	36 ft		
<b>CONSTRUCTION DT</b>	1930	<b>ALTERATION DT</b>		<b>SOURCE</b>	COUNTY ENGINEER OFFC		
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			
<b>SETTING / CONTEXT</b>	The bridge is entirely underground. It is located below a two-lane residential street in a mixed-20th century neighborhood. The "stream" is part of the City of Plainfield's storm sewer system. The stream outlets from underground approximately 2500' downstream from this structure.						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						
<b>SUMMARY</b>	According to the County Engineer, the two-span bridge is a reinforced concrete two-cell culvert. The stream outlets from its underground location on the grounds of a nearby middle school. At the structure outlet a pipe railing is set in the concrete above the opening. The bridge is not technologically or historically distinguished. A photograph of the outlet (not at this site) is attached.						
<b>INFORMATION</b>							
	PHOTO:	155:21,163:9	(05/92)	REVISED BY (DATE):		QUAD:	Plainfield

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2012053	<b>CO</b>	UNION	<b>OWNER</b>	CITY OR MUNC.	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	PUTNAM AVENUE OVER CEDAR BROOK			<b>FACILITY</b>	PUTNAM AVENUE		
<b>TOWNSHIP</b>	PLAINFIELD CITY						
<b>TYPE</b>	CULVERT	<b>DESIGN</b>		<b>MATERIAL</b>	Reinforced Concrete		
<b># SPANS</b>	1	<b>LENGTH</b>	23 ft	<b>WIDTH</b>	60 ft		
<b>CONSTRUCTION DT</b>	1930	<b>ALTERATION DT</b>		<b>SOURCE</b>	COUNTY ENGINEER OFFC		
<b>DESIGNER/PATENT</b>				<b>BUILDER</b>			
<b>SETTING / CONTEXT</b>	<p>The bridge is located entirely underground. It carries a two-lane street in a residential neighborhood of mixed-20th century construction. The "stream" crossed is part of the local storm sewer system. The culvert outlet is approximately 3000' downstream from the structure. A photograph of the outlet, which is approximately 3000' downstream from this structure, is also attached.</p>						
<b>1995 SURVEY RECOMMENDATION</b>	Not Eligible			<b>HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )</b>	No		
<b>CONSULT STATUS</b>	Not Individually Eligible.						
<b>CONSULT DOCUMENTS</b>	SHPO Letter 6/30/95						

**SUMMARY** The bridge is unmarked at street level. According to the County Engineer, the structure is a single-cell reinforced concrete box culvert. The outlet is more than half a mile from the structure, on the grounds of the local middle school. A pipe railing is set in the concrete over the opening of the culvert. The bridge is technologically and historically undistinguished.

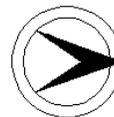
**INFORMATION**

PHOTO: 155:22 (05/92)

REVISED BY (DATE):

QUAD: Plainfield

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2012150	<b>CO</b>	UNION	<b>OWNER</b>	NJDOT	<b>MILEPOINT</b>	0.38
<b>NAME &amp; FEATURE INTERSECTED</b>	MORRIS AVENUE (NJ 82) OVER RAHWAY RIVER			<b>FACILITY</b>	MORRIS AVENUE (NJ 82)		
<b>TOWNSHIP</b>	SPRINGFIELD TOWNSHIP						
<b>TYPE</b>	STONE ARCH	<b>DESIGN</b>	BARREL	<b>MATERIAL</b>	Stone		
<b># SPANS</b>	3	<b>LENGTH</b>	90 ft	<b>WIDTH</b>	55.8 ft		
<b>CONSTRUCTION DT</b>	1872	<b>ALTERATION DT</b>	1935	<b>SOURCE</b>	NJDOT/PLANS		
<b>DESIGNER/PATENT</b>	UNKNOWN			<b>BUILDER</b>	UNKNOWN		

**SETTING / CONTEXT** The bridge is located in a linear greenway that follows the Rahway River as it winds through Union County. The bridge carries a four-lane state route over the river.

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

**CONSULT STATUS** Not Individually Eligible. Potential Rahway River Park, May contribute.

**CONSULT DOCUMENTS** SHPO Finding 8/13/82, Letter 6/30/95. DOE 10/28/83.

**SUMMARY** The 3-span stone arch bridge stone with a rubble stone intrados has vermiculated-finish coursed ashlar spandrel walls and ringstones. The intrados of the arches have been coated with gunite. In 1935 the county added concrete balustrades at both faces. The bridge was determined not eligible "on the basis of evidence presented in" two studies dated 1980 and 1982 for the Route 82 Rahway River bridge replacement. A Section 4(f) evaluation was done and is dated May, 1985.

**INFORMATION**

PHOTO: 156:40-44 (05/92)

REVISED BY (DATE):

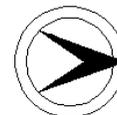
QUAD: Roselle











NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2013010	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	IRVING STREET OVER ROBINSONS BRANCH RAHWAY RIVER		<b>FACILITY</b>	IRVING STREET			
<b>TOWNSHIP</b>	RAHWAY CITY						
<b>TYPE</b>	STONE ARCH	<b>DESIGN</b>	ELLIPTICAL			<b>MATERIAL</b>	Stone, Brick
<b># SPANS</b>	3	<b>LENGTH</b>	68 ft	<b>WIDTH</b>	66.2 ft		
<b>CONSTRUCTION DT</b>	1875ca	<b>ALTERATION DT</b>	1924		<b>SOURCE</b>	STYLE/PLAQUE	
<b>DESIGNER/PATENT</b>	UNKNOWN			<b>BUILDER</b>	UNKNOWN		

**SETTING / CONTEXT** The bridge is located in downtown Rahway City, surrounded by mid- to late-19th century commercial structures and 20th century multi-unit housing. The bridge is on a two-lane street with parking lanes and sidewalks. It crosses the Robinson Branch of the Rahway River, a waterway that is channeled through the city with rubble stone as well as concrete retaining walls.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The undocumented three-span bridge is a combination of stone and brick arches founded on rusticated ashlar cutwater piers and abutments. The center section of each arch is stone, with 13' of brick arch widening on each side at an unknown date. The spandrels are coursed ashlar with gauged ringstones. In 1924, paneled concrete parapets were added by the county. One of only two stone arch spans in the county (2012150 is other), this bridge is historically and technologically distinguished.

**INFORMATION** Bibliography:  
 Robinson, E. Atlas of Union County, New Jersey. 1882.; Sanborn Insurance Atlas, Rahway, New Jersey, 1886, 1891, 1896, 1901, 1908, 1915, 1923.  
 1902 Bauer Atlas of Union County.

**Physical Description:** The three-span arch bridge is a combination of stone and brick arches. The center portion of the bridge is a stone arch structure, approximately 40' wide. On each side of the stone arch is a brick arch approximately 13' wide. The arches are founded on ashlar footings with cutwater pier heads. In 1924, paneled concrete parapets were added to the structure above the ashlar spandrel walls.

The bridge underside is inaccessible from the street as the parapets abut buildings and privacy walls that follow the banks of the river to the edge of the sidewalk. Stone retaining walls line the banks of the river in this densely developed urban setting.

**Historical and Technological Significance:** The ca. 1875 stone and brick arch bridge is one of the oldest bridges in Rahway, and is one of two stone arch spans in the county. The stone structure dates stylistically to circa 1875. The date of the brick arch extensions is not known, but research of 19th- and early-20th century atlases and maps show the bridge to be 66' wide, its present width, as early as 1882.

Despite the 1924 concrete parapet, the structural integrity of the arches has been maintained, and the bridge ranks as a locally significant example of a bridge technology that is not common in the county (criterion C). The other stone arch bridge, the 1872 Morris Avenue (NJ 82) over the Rahway River (2012150) was determined not eligible by the SHPO in 1985.

**Boundary Description and Justification:** The bridge is evaluated as individually distinguished, and the significant boundary is limited to the span itself.

PHOTO: 150:32-34 (04/92) REVISIED BY (DATE): QUAD: Perth Amboy











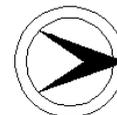








NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2013051	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0	
<b>NAME &amp; FEATURE INTERSECTED</b>	WHITTIER STREET OVER RAHWAY RIVER			<b>FACILITY</b>	WHITTIER STREET			
<b>TOWNSHIP</b>	RAHWAY CITY							
<b>TYPE</b>	BRICK ARCH	<b>DESIGN</b>	PARABOLIC				<b>MATERIAL</b>	Brick
<b># SPANS</b>	1	<b>LENGTH</b>	30 ft	<b>WIDTH</b>	65 ft			
<b>CONSTRUCTION DT</b>	1875ca	<b>ALTERATION DT</b>	1953-54		<b>SOURCE</b>	STYLE/COUNTY ENGNR		
<b>DESIGNER/PATENT</b>	UNKNOWN			<b>BUILDER</b>	UNKNOWN			

**SETTING / CONTEXT** The bridge is located in a greenway that follows the Rahway River through Union County. The greenway is surrounded by late-19th century housing in this area. The bridge carries a two-lane street with two sidewalks. The greenway is a narrow park that does not appear to have any distinguishing features that would make it a potential historic district. It is casually landscaped. The bridge predates the greenway, and there is no access to the bridge from within the greenway.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** DOE 10/28/83. SHPO Letter 6/30/95.

**SUMMARY** The 30'brick arch bridge has ashlar spandrel walls and gauged ringstones at both faces and ashlar footings. Much of the intrados has been coated with gunite. The concrete parapets were added one at a time in 1953 and 1954, detracting from the historic character of the bridge, but its structural integrity is intact. The structure is a short, altered example of a well-represented type from the later-19th century. Other brick arch bridges (2013010) have been evaluated as more noteworthy than this.

**INFORMATION**

Bibliography:  
 Robinson, E. Atlas of Union County, New Jersey. 1882.  
 Sanborn Insurance Atlas, Rahway, New Jersey. 1923.  
 1902 Bauer Atlas of Union County.

Physical Description: The one-span brick arch bridge sits on ashlar footings, and has rusticated ashlar spandrell walls and gauged ringstones. The span length is 30', a normal distance for a brick arch bridge. The intrados of the arch has been partially coated with gunite. In 1953 and 1954, concrete parapets were built above the spandrel walls (one each year).

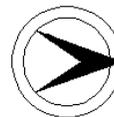
Historical and Technological Significance: The single-arch bridge is the smallest of the four brick arch bridges identified in Union County. The others are all three-span bridges, and all are as well-preserved as this structure, if not better. Though the structural components of the bridge have been preserved, the addition of 1950s style parapets detracts from the historical integrity of the structure.

Through research of 19th and 20th century maps and atlases, it appears that the span has always been the width that it is now. The masonry arch bridges of the 1800s that do remain have in common the width of structure capable of handling the increased road use of the 20th century. This structure, though it is one of the older spans in the county, is not historically distinguished due to the existence of larger and more well-preserved examples of the same type of bridge. Technologically it employs a commonly used design for the situation in which it exists.

PHOTO: 151:23-25 (04/92) REVISIED BY (DATE): QUAD: Perth Amboy



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2013151	<b>CO</b>	UNION	<b>OWNER</b>	RAILROAD	<b>MILEPOINT</b>	12.47
<b>NAME &amp; FEATURE INTERSECTED</b>	CONRAIL ELIZABETH BRANCH OVER ELMORA AVE (CR 439)			<b>FACILITY</b>	CONRAIL ELIZABETH BRANCH		
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>		<b>MATERIAL</b>	Steel		
<b># SPANS</b>	3	<b>LENGTH</b>	86 ft	<b>WIDTH</b>	50 ft		
<b>CONSTRUCTION DT</b>	1907	<b>ALTERATION DT</b>		<b>SOURCE</b>	INSCRIPTION		
<b>DESIGNER/PATENT</b>	CRR NJ CHIEF ENGINEERS OFFICE			<b>BUILDER</b>			

**SETTING / CONTEXT** The bridge is located in a late-20th century commercial area. The bridge carries one abandoned track on a four-track-wide structure over a two-lane street. The rail line was developed in the 1830s in Elizabeth, and extended west to Phillipsburg, NJ, by 1852. The line was four-tracked from Elizabeth to Westfield by 1882. Use of this line was discontinued by the CNJ in 1967, when they diverted commuter traffic to the mainline of the Lehigh Valley Railroad.

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

**CONSULT STATUS** Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.

**CONSULT DOCUMENTS** DOE 11/30/95. SHPO Letter 6/30/95.

**SUMMARY** The three-span multi-thru girder bridge sits on steel bents and concrete abutments. The riveted bents are built-up using plates, angles and lattice bars. The rolled floorbeams support a steel plate deck. The girders are protected from the ballast with brick curbs above the deck. Pipe railings are present along inside the fascia girders at both faces of the bridge. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

**INFORMATION**

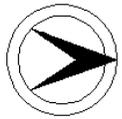
PHOTO: 154:32-35 (05/92)

REVISED BY (DATE):

QUAD: Elizabeth



**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2016013	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	PARK AVENUE OVER GREEN BROOK			<b>FACILITY</b>	PARK AVENUE		
<b>TOWNSHIP</b>	SCOTCH PLAINS TOWNSHIP						
<b>TYPE</b>	DECK ARCH	<b>DESIGN</b>	ELLIPTICAL			<b>MATERIAL</b>	Reinforced Concrete
<b># SPANS</b>	1	<b>LENGTH</b>	86 ft	<b>WIDTH</b>	22.2 ft		
<b>CONSTRUCTION DT</b>	1920	<b>ALTERATION DT</b>				<b>SOURCE</b>	PLAQUE
<b>DESIGNER/PATENT</b>	J. BAUER(UNION) & SOM CO ENGN			<b>BUILDER</b>	ARTHUR E. SMITH		

**SETTING / CONTEXT** The bridge is located in a park setting with early- and late-20th century commercial structures surrounding the green area. The bridge carries two traffic lanes and two sidewalks over a stream. The waterway is Green Brook, which divides Union and Somerset Counties.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The one-span reinforced concrete arch bridge is skewed. The intrados and spandrel walls have been repaired with gunite throughout the structure. The concrete parapets are paneled, and are arched parallel to the vertical crest curve created by the arch. The bridge is not technologically or historically distinguished, being one of nine pre-World War II reinforced concrete deck arches in Union County. 2013022 is a more distinguished example of the type.

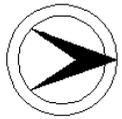
**INFORMATION**

PHOTO: 158:10-11 (05/92) REVISD BY (DATE): QUAD: Chatham





NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2017033	<b>CO</b>	UNION	<b>OWNER</b>	COUNTY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	MEISEL AVENUE OVER STREAM 10-35			<b>FACILITY</b>	MEISEL AVENUE		
<b>TOWNSHIP</b>	SPRINGFIELD TOWNSHIP						
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED	<b>MATERIAL</b>	Steel		
<b># SPANS</b>	2	<b>LENGTH</b>	49 ft	<b>WIDTH</b>	46 ft		
<b>CONSTRUCTION DT</b>	1926	<b>ALTERATION DT</b>		<b>SOURCE</b>	PLAQUE		
<b>DESIGNER/PATENT</b>	JACOB L. BAUER, COUNTY ENGINEER			<b>BUILDER</b>	J. F. CHAPMAN & SON		

**SETTING / CONTEXT** The bridge is located in the Rahway River Parkway, a greenway that follows the river through most of Union County. The structure carries a two-lane road with two sidewalks over a stream that empties into the Rahway.

**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Potential Rahway River Park, May contribute. Potential Union County Park System Multiple Property nomination, May contribute.  
**CONSULT DOCUMENTS** DOE 10/28/83. SHPO Letter 6/30/95.

**SUMMARY** The nicely-detailed 2-span encased stringer bridge bears on concrete abutments. The substructure is scored to appear as ashlar. The fascia encasement is paneled and slightly arched. The concrete balustrade has paneled posts with a textured finish. Although it is more elaborately finished than most other stringer bridges, it is still a representative example of a common bridge type. The bridge is not technologically or historically distinguished.

**INFORMATION**

PHOTO: 158:30-32 (05/92)

REVISED BY (DATE):

QUAD: Roselle



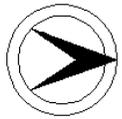








NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

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<b>STRUCTURE #</b>	2049161	<b>CO</b>	UNION	<b>OWNER</b>	RAILROAD	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	HAND PLACE OVER AMTRAK NORTHEAST CORRIDOR		<b>FACILITY</b>	HAND PLACE			
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	THRU GIRDER	<b>DESIGN</b>	PARTIALLY ENCASED		<b>MATERIAL</b>	Steel	
<b># SPANS</b>	1	<b>LENGTH</b>	87 ft	<b>WIDTH</b>	18 ft		
<b>CONSTRUCTION DT</b>	1936	<b>ALTERATION DT</b>			<b>SOURCE</b>	NJDOT	
<b>DESIGNER/PATENT</b>					<b>BUILDER</b>		

**SETTING / CONTEXT** The bridge is located adjacent to a 1960s multi-unit housing complex. It carries a one-lane road with a closed sidewalk over four electrified tracks.

**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 riveted thru-girder bridge sits on ashlar abutments with concrete seats. The abutments continue beyond the superstructure to a width twice that in use. The girders are encased below the deck with the exception of the bottom flanges. The floorbeams are encased. The sidewalk is cantilevered from one girder, and is enclosed by a high corrugated metal barrier. The sidewalk is closed to pedestrians. The bridge is not technologically or historically distinguished.

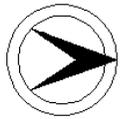
**INFORMATION**

PHOTO: 153:3-5 (04/92)

REVISED BY (DATE):

QUAD: Elizabeth

NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2050150	<b>CO</b>	UNION	<b>OWNER</b>	UNKNOWN	<b>MILEPOINT</b>	1.477
<b>NAME &amp; FEATURE INTERSECTED</b>	GORDON STREET OVER ELIZABETH BRANCH RR		<b>FACILITY</b>	GORDON STREET			
<b>TOWNSHIP</b>	ROSELLE BOROUGH						
<b>TYPE</b>	THRU TRUSS	<b>DESIGN</b>	WARREN			<b>MATERIAL</b>	Steel, Wood
<b># SPANS</b>	6	<b>LENGTH</b>	171 ft	<b>WIDTH</b>	21.4 ft		
<b>CONSTRUCTION DT</b>	1911	<b>ALTERATION DT</b>	1990ca		<b>SOURCE</b>	PLAQUE, INSC., PLANS	
<b>DESIGNER/PATENT</b>	CRR NJ CHIEF ENGINEERS OFFICE			<b>BUILDER</b>	PA STEEL COMPANY, STEELTON, PA		

**SETTING / CONTEXT** The bridge carries a two-lane road with one sidewalk over one abandoned track. The tracks run through an early-20th century industrial area. The Central RR of NJ developed the line in the 1830s as a streetcar line, and it soon evolved into a larger system, stretching from Elizabeth to Somerville. It was four-tracked by 1882. The early-20th century was marked by grade-crossing elimination projects, resulting in several bridges in this area.

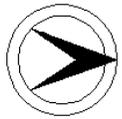
**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.  
**CONSULT DOCUMENTS** DOE 11/30/95. SHPO Letter 6/30/95.

**SUMMARY** The 7-panel Warren thru truss bridge is supported by a concrete pier and abutment. The opposite abutment is stone with concrete and timber additions. The truss members are riveted, built-up of angles, plates and lacing bars. The south approach is a five-span continuous glulam structure supported by timber bents. The bridge, 1 of 5 over the main line in the area, is a technologically and historically distinguished example based on its age, design, and association.

**INFORMATION**

PHOTO: 157:14-19 (05/92 JPH (5/96)) REVISD BY (DATE): QUAD: Roselle

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2050161	<b>CO</b>	UNION	<b>OWNER</b>	UNKNOWN	<b>MILEPOINT</b>	13.89
<b>NAME &amp; FEATURE INTERSECTED</b>	WALNUT STREET OVER ELIZABETH BRANCH RR		<b>FACILITY</b>	WALNUT STREET			
<b>TOWNSHIP</b>	ROSELLE BOROUGH						
<b>TYPE</b>	THRU TRUSS	<b>DESIGN</b>	WARREN			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	95 ft	<b>WIDTH</b>	28 ft		
<b>CONSTRUCTION DT</b>	1911	<b>ALTERATION DT</b>			<b>SOURCE</b>	PLANS	
<b>DESIGNER/PATENT</b>	CRR NJ CHIEF ENGINEERS OFFICE			<b>BUILDER</b>	PA STEEL COMPANY, STEELTON, PA		

**SETTING / CONTEXT** The bridge is located in an area of late-20th century commercial development. It carries a two-lane road and one sidewalk over one inactive track. The line is the Elizabeth Branch of the Central RR of New Jersey. The CNJ developed this line in the 1830s, and it was four-tracked from Elizabeth to Westfield by 1882, with lesser tracking extending to Somerville. The early-20th century was marked by construction of grade-crossing elimination bridges.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** Yes  
**CONSULT STATUS** Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.  
**CONSULT DOCUMENTS** DOE 11/30/95. SHPO Letter 6/30/95.

**SUMMARY** The cambered Warren with verticals thru-truss bridge sits on concrete abutments. It has unusual design details including large asymmetric gusset plates and a longitudinal center strut. Some of the original sidewalk railings survive. The bridge, 1 of 5 similar spans built by the CNJ in the area, is technologically and historically distinguished based on its design, age, state of preservation, and associations.

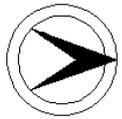
**INFORMATION**

PHOTO: 157:4-10 (05/92)

REVISED BY (DATE):

QUAD: Roselle

NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

<b>STRUCTURE #</b>	2050162	<b>CO</b>	UNION	<b>OWNER</b>	UNKNOWN	<b>MILEPOINT</b>	1.192
<b>NAME &amp; FEATURE INTERSECTED</b>	CHILTON STREET OVER CONRAIL ELIZABETH BRANCH		<b>FACILITY</b>	CHILTON STREET			
<b>TOWNSHIP</b>	ELIZABETH CITY						
<b>TYPE</b>	THRU TRUSS	<b>DESIGN</b>	WARREN			<b>MATERIAL</b>	Steel
<b># SPANS</b>	1	<b>LENGTH</b>	96 ft	<b>WIDTH</b>	36 ft		
<b>CONSTRUCTION DT</b>	1926	<b>ALTERATION DT</b>			<b>SOURCE</b>	INSCRIPTION/PLANS	
<b>DESIGNER/PATENT</b>	CRR NJ CHIEF ENGINEERS OFFICE			<b>BUILDER</b>	MCCLINTIC-MARSHALL CO.		

**SETTING / CONTEXT** The bridge is located in an area of late-19th century single family residences with 20th century intrusions. The bridge carries a two-lane one-way road with two sidewalks over one abandoned railroad track. The Central RR of NJ was developed in the 1830s from Elizabethport to Plainfield. It soon extended to Somerville, and later to Phillipsburg. The line was four-tracked in Elizabeth by 1882. In 1967, this branch went out of use by CNJ.

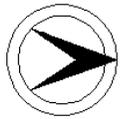
**1995 SURVEY RECOMMENDATION** Not Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Central Railroad of NJ Main Line Corridor. Contributing.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95. DOE 11/30/95.

**SUMMARY** The cambered Warren thru-truss bridge bears on concrete abutments. The members of the truss are riveted, built-up sections using angles and web plates. The bottom chord is encased, as are the floorbeams (bottom flange exposed) and stringers. Some of the blast plates remain in place. The sidewalks are cantilevered on both faces. The bridge, a common CNJ type, is the most recent example of five Warren thru truss bridges along this line in Union County. Tuttle Parkway is older and more noteworthy.

**INFORMATION**

PHOTO: 154:18-21 (05/92) REVISD BY (DATE): QUAD: Elizabeth

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2053160	<b>CO</b>	UNION	<b>OWNER</b>	UNKNOWN	<b>MILEPOINT</b>	0.0	
<b>NAME &amp; FEATURE INTERSECTED</b>	LAKE AVENUE OVER CONRAIL & ROBINSON BRANCH RAHWAY RIVER		<b>FACILITY</b>	LAKE AVENUE				
<b>TOWNSHIP</b>	CLARK TOWNSHIP							
<b>TYPE</b>	STRINGER	<b>DESIGN</b>	ENCASED				<b>MATERIAL</b>	Steel
<b># SPANS</b>	4	<b>LENGTH</b>	210 ft	<b>WIDTH</b>	34 ft			
<b>CONSTRUCTION DT</b>	1936	<b>ALTERATION DT</b>						<b>SOURCE PLANS</b>
<b>DESIGNER/PATENT</b>	LEHIGH VALLEY RR OFF. OF ENGR				<b>BUILDER</b>			

**SETTING / CONTEXT** The bridge is located in an area dominated by late-20th century multi-unit housing and 1970's light industrial structures. The bridge carries a two-lane road with two sidewalks over two active tracks. The rail line was built by the Lehigh Valley Railroad in 1888 as the Jersey City Extension. It became the main line soon after the extension was finished. It was changed from four-tracks to double-track in the 1950s or 1960s. Conrail took over the line in 1976.

**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 four-span stringer bridge bears on a concrete substructure of stub abutments and 3-column hammerhead piers. The stringers are encased in concrete, and support a concrete deck. Four blast plates remain fastened to the stringers. The parapets are paneled concrete with guiderails attached at the approaches. The bridge is a representative example of a common pre-World War II bridge type in New Jersey. It is not technologically or historically distinguished.

**INFORMATION**

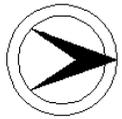
PHOTO: 155:23-24 (05/92)

REVISED BY (DATE):

QUAD: Perth Amboy



NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES



NEW JERSEY HISTORIC BRIDGE DATA

**STRUCTURE #** 2054160      **CO** UNION      **OWNER** CITY OR MUNC.      **MILEPOINT** 10.0  
**NAME & FEATURE INTERSECTED** FIFTH AVENUE OVER STATEN ISLAND RAPID TRANSIT      **FACILITY** FIFTH AVENUE  
**TOWNSHIP** ROSELLE BOROUGH  
**TYPE** THRU GIRDER      **DESIGN** PARTIALLY ENCASED      **MATERIAL** Steel  
**# SPANS** 1      **LENGTH** 74 ft      **WIDTH** 30 ft  
**CONSTRUCTION DT** 1928      **ALTERATION DT**      **SOURCE** PLAQUE  
**DESIGNER/PATENT** W. MARTIN VAN WAGNER, BORO ENG      **BUILDER** WELDON CONTRACTING CO.

**SETTING / CONTEXT** The bridge is located in a residential area developed between the 1920s and the 1940s. It carries a two-lane road with two sidewalks over two abandoned tracks of the Staten Island Rapid Transit line.

**1995 SURVEY RECOMMENDATION** Not Eligible      **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Not Individually Eligible. Staten Island RR Historic District, Eligible, May contribute.  
**CONSULT DOCUMENTS** SHPO Finding 12/07/89 2/27/95, Letter 6/30/95.

**SUMMARY** The single-span thru-girder bridge sits on concrete abutments. The riveted girder is encased below the deck. The floorbeams are encased, as are the cantilevered sidewalk brackets. Chain-link fencing lines the sidewalks across the bridge, with parts of the original railing remaining as well. The bridge is a representative example of a common bridge type, and is not technologically or historically distinguished.

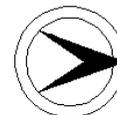
**INFORMATION**

PHOTO: 157:25-27 (05/92)

REVISED BY (DATE):

QUAD: Roselle

**NEW JERSEY DEPARTMENT OF TRANSPORTATION  
BUREAU OF ENVIRONMENTAL SERVICES**



**NEW JERSEY HISTORIC BRIDGE DATA**

<b>STRUCTURE #</b>	2062157	<b>CO</b>	UNION	<b>OWNER</b>	STATE AGENCY	<b>MILEPOINT</b>	0.0
<b>NAME &amp; FEATURE INTERSECTED</b>	HIGH STREET OVER NEW JERSEY TRANSIT MORRISTOWN LINE			<b>FACILITY</b>	HIGH STREET		
<b>TOWNSHIP</b>	SUMMIT CITY						
<b>TYPE</b>	RIGID FRAME	<b>DESIGN</b>		<b>MATERIAL</b>	Steel		
<b># SPANS</b>	1	<b>LENGTH</b>	65 ft	<b>WIDTH</b>	30 ft		
<b>CONSTRUCTION DT</b>	1937	<b>ALTERATION DT</b>		<b>SOURCE PLANS</b>			
<b>DESIGNER/PATENT</b>	DL&W RR OFFICE OF ENGINEER			<b>BUILDER UNKNOWN</b>			

**SETTING / CONTEXT** The bridge is located adjacent to 1920s Colonial Revival apartment complex. The bridge carries a two-lane road with two sidewalks over three electrified tracks of New Jersey Transit's Morristown Line. The Morristown Line was built as the Morris and Essex RR in 1835, and was later leased to the Delaware, Lackawanna and Western RR. The DL & W developed the line into a passenger route, building a more efficient route, the Boonton Line, for freight. NJ Transit now operates the tracks.

**1995 SURVEY RECOMMENDATION** Eligible **HISTORIC BRIDGE MANAGEMENT PLAN ( EVALUATED )** No  
**CONSULT STATUS** Individually Eligible.  
**CONSULT DOCUMENTS** SHPO Letter 6/30/95

**SUMMARY** The skewed steel frame bridge appears to be a stringer span on concrete abutments with wingwalls. The rivet-connected steel frames are visible only under the deck, where the exposed beams are haunched as they enter the concrete abutments that encase the rolled steel columns. The structure is significant as an example of an uncommon bridge type. Only one other steel frame bridge has been identified in the state, also from 1937 (0917150). It's unknown if the DL&W RR built any others of this type.

**INFORMATION**

**Bibliography:**  
 Condit, Carl. American Building Art 20th Century. 1961.  
 Mensch, L.J. "Early Use of Rigid Frame Bridges." Civil Engineering. Vol. 5, No. 10 (October, 1935).

**Physical Description:** The skewed one-span steel frame bridge has the appearance of being a stringer bridge on concrete abutments. The rolled beam section of the frame is exposed steel. The seven beams are haunched as they enter the concrete abutments that are really the encasement for the rolled section columns of the steel frame. The haunched connections are built up of plates and angles that are rivet-connected to the rolled sections. The knee, which have the great concentration of stress distributions, has riveted stiffeners.

The concrete abutments are flanked by wingwalls at all four corners of the bridge. A high paneled concrete parapet crosses the bridge at both faces and continues above each wingwall for 5'-10'. Pedestrian fencing has been added to the top of the parapet along the sidewalks. The approach guide rails are fixed to the parapets.

**Historical and Technological Significance:** The steel frame bridge is technologically distinguished as a complete example of a pre-World War II bridge type that is not common in the state of New Jersey. The structure, built in 1937, is the only identified, highway-related example of its type in Union County, and is one of only two documented pre-World War II examples in the state.

The Delaware Lackawanna and Western Railroad built the bridge in 1937, long after their main grade crossing elimination campaign in the City of Summit. They built at least seven girder bridges in Summit in 1905, as they strove to improve their commuter service to New York City. It is not known if other steel frame bridges were built by the DL&W RR. The right-of-way, now used by NJT as its Morristown line, was originally used for both freight and passenger service. When traffic became heavy and profits were suffering, the D L & W built the Boonton cutoff to more efficiently handle freight. This portion of the line remained the commuter line, and is still used mainly for that purpose.

The other steel frame structure identified (0917150) was also built in 1937. It is located on the historically and technologically significant limited-access New Jersey approach to the Lincoln Tunnel. The tunnel and approach were designed for by the Port Authority of New York, Othmar Ammann, Chief Engineer.

Not to be confused with the reinforced concrete rigid frame bridge that was first used in this country in the early 1920s on Westchester County, New York parkways, the steel rigid frame bridge was largely the product of the invention of electric arch welding. Welding permitted the transformation of the individual elements, like posts and beams, into a continuous unit in which the size and shape of each member can be calculated exactly and entirely on the basis of the role it plays in the total action of the frame. As a consequence, the quantity of material in the member for a given load can usually be reduced. A welded joint could theoretically be made as strong as the original solid metal if complete fusion was obtained. This was viewed as an advantage over riveted connections. Rigid steel frames were used in buildings beginning in 1920 at the factory of the Electric Welding Company of America at Brooklyn. The concept of a rigid frame bridge was developed in reinforced concrete in Europe around the turn of the century, but rigid frame bridges were not built in this country until the early 1920s. Examples of steel rigid frame bridges are rare in New Jersey.

**Boundary Description and Justification:** The bridge is evaluated as individually distinguished. It is not part of a grade crossing elimination campaign or other major improvement campaign. The significant boundary is limited to the structure itself.

PHOTO: 156:3-4 (05/92) REVISED BY (DATE): QUAD: Roselle

