

APPENDIX G

Navigation Study

U.S. DEPARTMENT OF TRANSPORTATION

**U.S. COAST GUARD
BRIDGE PROJECT QUESTIONNAIRE**

To be Submitted to:

FIRST COAST GUARD DISTRICT
1 South Street, Battery Building
New York, New York

For:

**NEW JERSEY TURNPIKE AUTHORITY
TREMLEY POINT CONNECTOR ROAD**

**Borough of Carteret, Middlesex County
and
City of Linden, Union County, New Jersey**

Prepared for:

Edwards and Kelcey
299 Madison Avenue
Morristown, New Jersey

JULY 2004

Prepared by:

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A Keyspan Business Solution
Warren, New Jersey 07059

DEPARTMENT OF TRANSPORTATION
U.S. COAST GUARD

COMMANDER (OBR)
FIRST COAST GUARD DISTRICT
1 SOUTH ST., BATTERY BUILDING
NEW YORK, NY 10004-5073

BRIDGE PROJECT QUESTIONNAIRE

A. NAVIGATION DATA

1. **Name of Waterway:** *Rahway River*

1 a. **Mileage along waterway measured from mouth or confluence:**

The proposed bridge would cross a point in the Rahway River approximately 1.559 miles from its confluence with the Arthur Kill.

1 b. **Tributary of:** *Not Applicable* **at mile:** *Not Applicable*

2. **Geographic Location:**

The proposed bridge route would run from Tremley Point Road in the City of Linden, Union County, New Jersey, south to Industrial Road in the Borough of Carteret, Middlesex County, NJ.

3. **Township, section and range, if applicable:**

The proposed bridge would span two townships, the City of Linden to the north and the Borough of Carteret to the south.

4. **Tidally influenced at proposed bridge site?**

Yes.

Range of tide: *4.6 feet*

5. **Depth and width of waterway at proposed bridge site:**

	<u>Depths</u>	<u>Widths</u>
At Mean High Tide:	<i>11.7 feet</i>	<i>550 feet</i>
At Mean Low Tide:	<i>7.1 feet¹</i>	<i>260 feet²</i>

6. **Character of present vessel traffic on waterway. If none so state:**

The present vessel traffic on the Rahway River consists of seasonal use leisure vessels such as cabin cruisers, small motorboats, canoes, paddleboats and sailboats. The boats docked at the Rahway Yacht Club, approximately 3 miles from the Arthur Kill, range in length from 14 to 28 feet with one 36-foot trawler from Georgia which docks there for a period in the summer. Other

¹ Mean lower-low water as shown on NOAA map 12333, 30th ed.

² Measurement of width is approximate and based on USGS map, Terrain Navigator distance tool.

types of traffic include emergency (e.g., state police, fire department), center consul type boats and motorboats used by the New Jersey Turnpike Authority. The Turnpike Authority sends boats with divers to inspect the integrity of the Turnpike's bridge. Additionally, when required, commercial entities will use boats on the Rahway for the placement of oil booms in response to spills from the adjacent roadways.³

6 a. Provide vertical clearance requirement for largest vessel:

Of the boats docked at the Rahway Yacht Club, the maximum vertical clearance requirement is 30 feet. All of the boats docked there exit the Rahway River by traveling east and must pass under the New Jersey Turnpike bridges. All of the turnpike bridges have a vertical clearance of approximately 36 feet at mean low water and 31.4 feet at mean high water.

6 b. Provide photograph for each type of vessel using the waterway:

See Attachment C.

7. Are these waters used to transport interstate or foreign commerce?

No.

7 a. Are these waters susceptible in their natural condition or by reasonable improvement as a means to support interstate or foreign commerce?

In order to alter the waterway so that it would be capable of supporting interstate or foreign commerce extensive dredging would be required to achieve suitable navigable depths. A proposal to have barges bring waste from New York City to the Union County Utilities Authority incinerator just west of the Rahway Yacht Club was rejected because of the impracticability of dredging of the river.

7 b. Any planned waterway improvements to permit larger vessels to navigate (to your knowledge)?

No.

8. Any natural or manmade obstructions, bridges, dams, wiers, etc. downstream or upstream?

Yes.

³ Ted Corey, a long-time member of the Rahway Yacht Club, located at 1706 Paterson Street in Rahway, was interviewed and provided detailed information for questions regarding the character of vessels that use the Rahway River.

8 a. If yes, provide upstream/downstream location with relation to the proposed bridge:

Downstream of the proposed bridge site to the Arthur Kill, there are no obstructions with the exception of the remnants of the abandoned Conrail Sound Shore Branch Railroad Bridge. Approximately 3,100 feet upstream from the site is the Conrail bascule bridge. Immediately after/upstream of the Conrail bridge are a series of NJ Turnpike bridges and approximately 2.5 miles upstream from the turnpike, is the Lawrence Street Bridge.

8 b. If bridges, provide vertical clearance at mean high water and mean low water and horizontal clearance normal to axis of waterway:

The vertical clearance of the Conrail bascule bridge (when not raised) at mean low water is 6 feet, while the horizontal clearance is 65 feet. The vertical clearance of the Turnpike bridge is 36 feet at mean low water, while the horizontal clearance is 70 feet. The Lawrence Street bridge has a vertical clearance of approximately 15 feet, while the horizontal clearance is approximately 110 feet.

8 c. Provide a photograph of the bridge from the waterway showing channel spans:

See Attachment C.

9. Will the structure replace an existing bridge?

No.

9 a. Provide permit number and issuing agencies of permits for bridge(s) to be replaced:

Not applicable.

9 b. Provide vertical clearance above mean high water and mean low water and horizontal clearance normal to axis of waterway:

Not applicable.

9 c. Provide a photograph of the bridge from the waterway showing channel spans:

Not applicable.

10. List names and addresses of persons whose property adjoins bridge right-of-way:

See Attachment D.

11. List names and addresses/location of marinas, marine repair facilities, public boat ramps, private piers/docks along waterway within ½ mile of the site:

Sea Scout Ship 228 has a dock and is located at 4700 Tremley Point Road, Linden, New Jersey and is approximately .4 miles from the proposed bridge site. Ship 228 has a 65-foot U.S. Coast Guard inspected training vessel and a 28-foot sailboat.

12. **Attach location map and plans for the proposed bridge; include vertical clearance above mean high water and mean low water and horizontal clearance normal to axis of the waterway.**

See Attachments A and B.

13. **Attach three (3) photographs taken at the proposed bridge site: one looking upstream, one looking downstream, and one looking along the alignment centerline across the bridge site:**

See Attachment C.

- ATTACHMENTS:**
- A. Location Map**
 - B. Bridge Plans**
 - C. Photographs**
 - D. List of Property Owners**



PHOTO NO. 1: VIEW LOOKING WEST FROM ARTHUR KILL TO OLD RAIL BRIDGE ON THE RAHWAY



PHOTO NO. 2: CLOSER VIEW OF OLD RAIL BRIDGE



PHOTO NO. 3: VIEW LOOKING NORTH FROM RIVER LOCATION OF PROPOSED BRIDGE



PHOTO NO. 4: VIEW LOOKING NORTH ON THE ARTHUR KILL, NEAR THE CONFLUENCE WITH THE RAHWAY RIVER



PHOTO NO. 5: VIEW LOOKING EAST FROM RIVER LOCATION OF PROPOSED BRIDGE



PHOTO NO. 6: VIEW LOOKING EAST FROM RIVER LOCATION OF PROPOSED BRIDGE



PHOTO NO. 7: OLD BARGE MOORED ON A BANK NEAR THE RAHWAY RIVER SEA SCOUTS BASE



PHOTO NO. 8: RAHWAY RIVER SEA SCOUTS BASE



PHOTO NO. 9: VIEW OF NEW JERSEY TURNPIKE BRIDGES



PHOTO NO. 10: VIEW OF CONRAIL BASCULE FROM UNDER NEW JERSEY TURNPIKE BRIDGE



PHOTO NO. 11:

VIEW OF RAHWAY YACHT CLUB



PHOTO NO. 12: VIEW OF TYPICAL VESSELS STORED ON UPLANDS OF RAHWAY YACHT CLUB

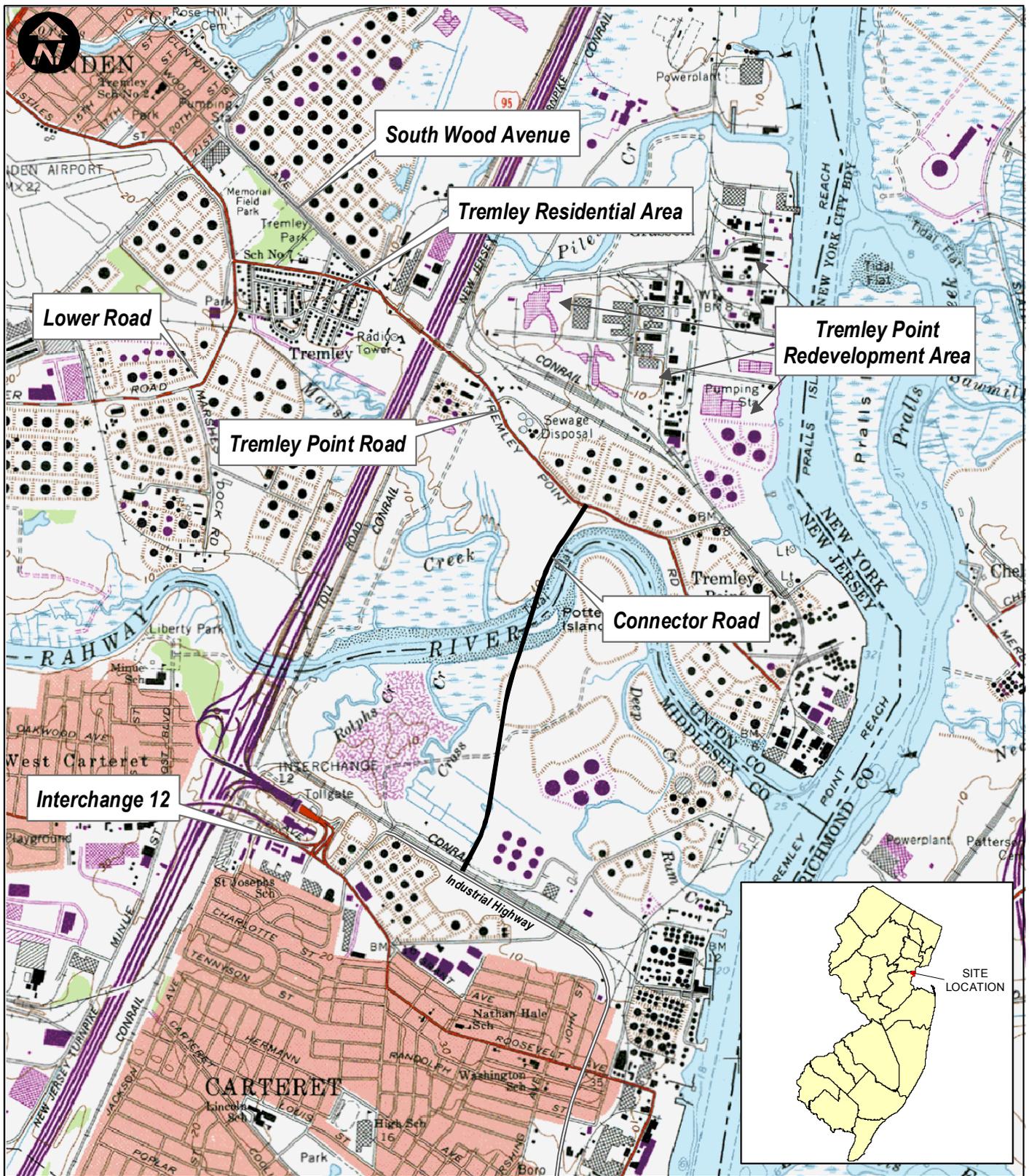


PHOTO NO. 13: VIEW OF LAWRENCE STREET BRIDGE



PHOTO NO. 14: VIEW OF LAWRENCE STREET BRIDGE

ATTACHMENT A
SITE LOCATION MAP



Legend

— Tremley Point Connector Road

SOURCE:
 NJDEP GIS Database
 TeleAtlas Roads, 2006
 USGS Topographic Map,
 7.5 Minute Series
 Arthur Kill Quadrangle, 1981

USGS SITE LOCATION MAP
 NEW JERSEY TURNPIKE AUTHORITY TREMLEY POINT CONNECTOR ROAD
 BOROUGH OF CARTERET, MIDDLESEX COUNTY
 AND CITY OF LINDEN UNION COUNTY, NEW JERSEY

Paulus, Sokolowski & Sartor, LLC
 consulting engineers and environmental planners
 A **KEYSPAN** BUSINESS SOLUTION

Drawn By: ML

Scale: 1" = 2000'

Project No. 02595.003.004

Chk'd By: ID

Date: 04-30-07

Figure No. 1



- Legend**
- Existing New Jersey Turnpike Authority Wetlands Creation Site (9 acres)
 - Approximate Area Available For Creation of Wetlands (9.90 Acres)
 - Approximate Area Available For Enhancement Of Wetlands (5.54 Acres)

Source:
 Access Alternatives From New Jersey Turnpike To Tremley Point, Dated November 2006, Drawn by Edwards & Kelsey.
 Existing Wetlands Mitigation completed by PS&S. Available Mitigation Areas approximated by PS&S.



NEW JERSEY TURNPIKE AUTHORITY
 TREMLEY POINT CONNECTOR ROAD
 BOROUGH OF CARTERET,
 MIDDLESEX COUNTY,
 CITY OF LINDEN
 UNION COUNTY, NEW JERSEY

ACCESS ALTERNATIVES FROM
 NEW JERSEY TURNPIKE
 TO TREMLEY POINT

Drn By: ML	Scale: Not To Scale	Project: 02595.003.004
Ch'kd By: ID	Date: 06-04-07	Figure No.: ES-1

ATTACHMENT B
BRIDGE PLANS

ATTACHMENT C
PHOTOGRAPHS

ATTACHMENT D
LIST OF PROPERTY OWNERS

Names and addresses of persons whose property adjoins bridge right-of-way:

Properties located in City of Linden, Union County, New Jersey:

<u>Block</u>	<u>Lot</u>	<u>Property Address</u>	<u>Owner</u>	<u>Owner's Address</u>
587	15.1	4400 Tremley Point Rd.	EFC Land Development	4700 South Wood Ave. Linden, NJ 07036
587	15.2	4300 Tremley Point Rd.	Lbt Realty Co II	1300 Lower Rd. Linden, NJ 07036
587	16	4050 Tremley Point Rd.	George Sacks Inc.	955 West Side Ave. Jersey City, NJ 07301

Properties located in Borough of Carteret, Middlesex County, New Jersey:

<u>Block</u>	<u>Lot</u>	<u>Property Address</u>	<u>Owner</u>	<u>Owner's Address</u>
11.1	4	Salt Meadow	Gatx – Tax Dept.	500 West Monroe Chicago, IL 60661
11.1	6	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	7	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	8	Salt Meadow	Carteret Development LLC	5 Garret Mountain Plaza West Paterson, NJ 07424
11.1	13	Salt Meadow	Carteret Development LLC	5 Garret Mountain Plaza West Paterson, NJ 07424
11.1	14	Salt Meadow	Carteret Development LLC	5 Garret Mountain Plaza West Paterson, NJ 07424
11.1	15	Salt Meadow	Middlesex Landfill Corp.	238 Shepard Ave. East orange, NJ 07000
11.1	16	Salt Meadow	G&G Excavating Co. & S&E Gorecki	15 Sharot St. Carteret, NJ 07008
11.1	17	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	17.02	Salt Meadow	unknown	
11.1	18	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	19	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	20	37 Salt Meadow Rd.	Industries inc. Cdi	37 Salt Meadow Rd. Carteret, NJ 07008
11.1	21	Salt Meadow	Gatx – Tax Dept.	500 West Monroe Chicago, IL 60661
11.2	27	Salt Meadow	Borough of Carteret	61 Cooke Ave. Carteret, NJ 07008
11.1	28	Salt Meadow	Carteret Development LLC	5 Garret Mountain Plaza West Paterson, NJ 07424