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Attachment 3.

A CULTURAL RESOURCE RECONNAISSANCE STUDY
RIKERS ISLAND, BRONX COUNTY, NEW YORK

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Environmental Analysis Branch
New York District
U.S. Army Corps of Engineers

August 1994

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I. Study Area

Rikers Island is located in the East River, which forms the boundary between Manhattan Island and the Boroughs of Brooklyn and Queens in New York City. The island itself lies in the Borough of the Bronx, Bronx County. The island is situated north of Bowery Bay and La Guardia Airport, near the East River and the South Brother Channels and at the mouth of both Flushing Bay and the Long Island Sound. Northwest and West of Rikers Island are North and South Brother Islands, at distances of 2000 and 1500 feet respectively (Figures 1 and 2).

The project area lies at the interface of the Piedmont physiographic province with the Coastal Plain. This boundary cuts northeasterly across Staten Island and Long Island, then under Long Island Sound. The older rocks, to the northwest of this boundary, are characteristic of the Piedmont and New England Provinces and are over 570 million years old. The Coastal Plain Province sediments, to the southeast, are younger, unconsolidated sedimentary layers that were deposited within the last 136 million years (U.S. Army Corps of Engineers 1992).

A glacial moraine, deposited during the last period of glaciation, the Wisconsin glaciation, forms the northern side of Long Island, and extends west across Staten Island and into New Jersey. Glacial till, containing rocks, boulders, sand silts and clays, can be found north of the moraine, while to the south, the sediments consist of well-sorted outwash sands. Rikers is located north of this moraine. The shoreline and river bottom in the Rikers Island vicinity is characterized by gravels, boulders and glacial till as evidenced by a boring sample (City of New York Department of General Services 1991; U.S. Army Corps of Engineers 1992).

During the Wisconsin glaciation the sea level was as much as 120 meters lower than at present as much of the water was in ice form. Rikers Island, following the retreat of the glacier, was under Lake Flushing which formed behind the glacial moraine deposited by the retreating glacier (Schuberth 1968; United States Coast Guard 1988; Garrow & Associates, Inc. 1991; Pickman 1993).

The majority of the land mass forming Rikers Island is comprised of late 19th/early 20th century fill. The island today encompasses over 400 acres but in the early historic period its area totalled just 87 acres and consisted of five small islands. Expansion occurred during several landfilling episodes (see section VI, below).

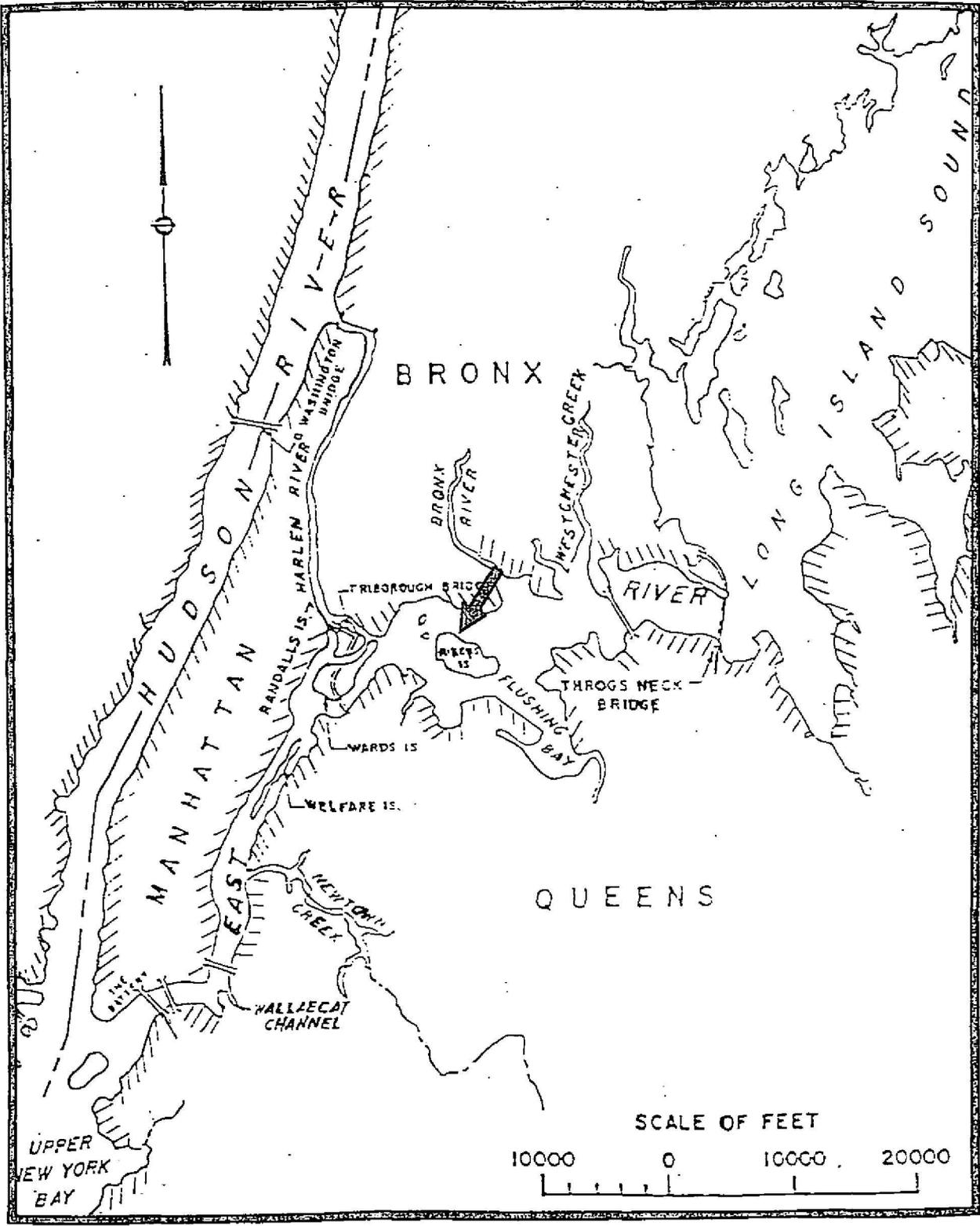


Figure 1. Location of project area (indicated by arrow).

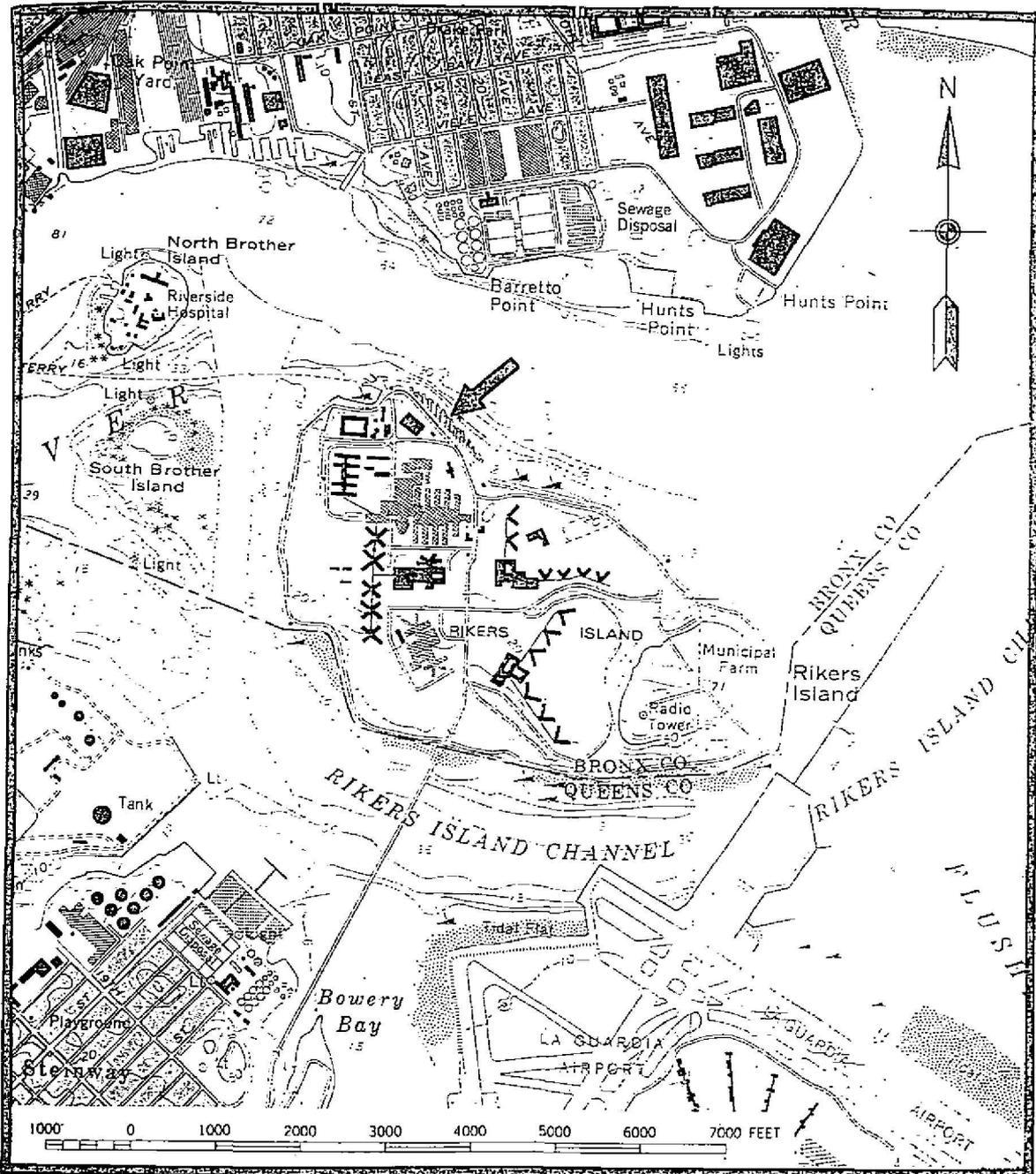


Figure 2. Detailed location of project area. Source: USGS 7.5 minute series. Central Park and Flushing, NY quadrangles. 1966/1979. Study area indicated by arrow.

Rikers Island currently contains the Rikers Island Correctional Facility which houses over 16,000 inmates in ten major jails. Other structures on Rikers Island contain a "boot camp," a bakery, laundry, tailor shop, print shop, maintenance and transportation divisions, marine unit, K-9 unit, power plant and sewer plants (City of New York Department of Correction n.d.). Several parcels of the island are maintained for agriculture. Last year over 20,000 pounds of produce were grown, and consumed, on the island (Windsor, personal communication 1994).

II. Study Description

The northeastern tip of Rikers Island suffered from extensive erosion during a storm in December 1992. Approximately 2,000 feet of shoreline was scoured which has placed several of the island's facilities in danger of collapse. The stability of a new sewage pumping station built adjacent to the shoreline may be threatened by erosion. The bulkhead and fill supporting this structure has receded to the point that the abandonment of the facility may be necessary. A 500 foot stretch of the eroded shoreline, roughly centered about the pump station, was examined under this study.

This project is being conducted under the continuing authority of the Flood Control Act of 1946 which allows for limited funds to be provided for emergency shoreline and streambank protection and stabilization. The funding was received from the Continuing Authority Program, Section 14 emergency shoreline protection authority.

III. Procedures

Research on the prehistory and history of the project area was conducted through the following institutions:

The New York Public Library, Map, General Research and U.S. History, Local History and Genealogy Divisions.

New York City Landmarks Commission Library and files

The Environmental Analysis Branch Library, New York District, U.S. Army Corps of Engineers.

U.S. Lighthouse Society, San Francisco, California

U.S. First Coast Guard District, Boston, Massachusetts

The New York State Museum and the New York State Office of Parks, Recreation and Historic Preservation were also contacted regarding project area prehistoric archaeological sensitivity.

IV. Previous Research

No previous cultural resource studies have been undertaken that focus on Rikers Island itself. A number of studies have been completed in the project area vicinity, including one on nearby North Brother Island as well as several others on both shores of the East River (Historical Perspectives, Inc 1987a-c, 1989, 1991; Greenhouse Consultants, Inc. 1988; Geismar 1989; Allee, King, Rosen & Fleming, Inc. 1991; Boesch and Perazio 1993; Boesch, Bianchi and Perazio 1993).

A history of Newtown, Queens, written by a Riker family member, was published in 1852. This work includes several brief mentions of the family holdings on Rikers Island (Riker 1852).

A number of studies have been completed, or are on-going, on the accumulation of made land and on the process of landfilling in the New York City area. As Rikers is primarily a man-made land mass its expansion has been documented by these works (Walsh, personal communication 1994; Squires, personal communication 1994).

V. Study Area Prehistory

The earliest detection of human presence in the northeast is generally accepted as beginning approximately 12,000 to 13,000 years ago. The chronological sequence of prehistoric occupation is divided into three major cultural periods: Paleo-Indian (circa 12,500-8,000 B.P.), Archaic (circa 8,000-3,000 B.P.) and Woodland (circa 3,000 B.P.-A.D. 1600). Many overviews of the prehistory and the paleoenvironment of the New York/New Jersey metropolitan area have been published (e.g., Ritchie 1980; Kraft 1986) and will not be reiterated here.

No prehistoric archaeological sites have been documented on Rikers Island. There is however an historical account of a colonial inhabitant having been driven from the island by Indians (Riker 1852).

A number of sites have been recorded along the shoreline of the East River in the project vicinity. Several of these sites are extensive and include campsites and burials. More commonly, these reported sites consist of shell middens and scattered prehistoric artifacts. Many of these sites were documented early this century and lack details on important points such as artifact types and stratigraphy (Skinner 1919; Parker 1920; Bolton 1972). Intensive development of the metropolitan area has destroyed much information on the prehistoric occupation of this region which makes even this limited information valuable. Legislatively mandated

archaeological investigations conducted in the last two decades have yielded additional information on prehistoric populations along this stretch of the East River shoreline (Boesch and Perazio 1993).

An overview of sites documented in the five boroughs of New York through recent cultural resources studies notes that most sites were located on or near the East River or Hudson River-New York harbor shorelines. Evidence of Native American occupation has been recovered from sites on several off-shore islands such as Ellis and Liberty (Lenik 1992).

Consultation with the New York State Office of Parks, Recreation and Historic Preservation, Historic Preservation Field Services Bureau indicates that there are presently no known prehistoric archaeological sites on Rikers Island. Their file search indicates that two sites were documented nearby, on the shoreline in the Steinway section of Queens. These sites were identified by Arthur C. Parker early this century. Site NYSM 4532 was a human burial. A shell mound was found at Site NYSM 4539. No information is available on the cultural affiliation of these sites (Wellman, personal communication 1994).

The NYSM has evaluated the project area as having a high sensitivity for prehistoric sites. This assessment is based on the similarity of terrain to other areas in the vicinity where sites have been documented. The physiographic characteristics of the island also suggest a high probability. This evaluation assumes that deeply buried intact deposits may remain under fill and/or may be submerged below the water table (Wellman, personal communication 1994).

VI. Study Area History

Abraham Ryken (Riker) obtained Rikers Island by patent in 1664. The ownership of the island had initially been held by the Hewlett family of Long Island. It is purported that an ancestor of the Hewlett's had lived on the island but "had been driven from it by the Indians, with the destruction of his house and property" (Riker 1852:65). Riker, a merchant, was one of the original freeholders of Newtown in Queens County and was involved in forming the town's charter in 1686. Rikers Island was originally part of Newtown (Riker 1852; Munsell 1882; WPA 1939; Smith 1962).

Abraham's son, Andrew, acquired the island from his father and at Andrew's death in 1765, the estate was advertised for public sale. The property included "half of Hewlett's (Rikers) Island, which is well timbered, and has the convenience of a good watering place." Meadow and marsh,

access to good fishing and abundant shellfish and close proximity to the New York markets were emphasized in the advertisement (New York Mercury, March 11, 1765 in Onderdonk 1865:36).

In 1785 Andrew Riker, Abraham Riker's grandson, "bought half of Rikers Island, erected a house there, and made it his residence, subsequently purchasing the other half of the island." Andrew Riker died in 1815 leaving the island to his two sons, Abraham and Peter. Abraham, who died in 1843, spent most of his life on the island. The son of Abraham, Peter, lived with his father on Rikers. The property remained in the Riker family until at least 1851, when Peter died (Riker 1851:8).

Rikers Island is depicted on several 18th and early 19th century maps of New York Harbor and East River. No structures or topographic features of the island are indicated on these early cartographic representations. It is known, through secondary sources, that members of the Riker family occupied the island from the seventeenth century until 1851 and possibly thereafter, indicating that a dwelling and other support structures must have been present on the island.

The first detailed depiction of the island found during the course of this research is a hydrographic chart of New York Harbor from 1874 (Figure 3). Rikers Island is shown as five separate "islands," or areas of higher ground, connected by shallow shoals. The largest of these land masses is the island to the north, on which the present study area is located. Surrounding the cluster of islands is an area of shallow water ranging in depth from two and a half to eleven feet in a configuration and size similar to the present perimeter of the island. The bulk of this shallow zone runs east and southeast of the island cluster.

Two structures are depicted on the largest parcel of land. The smaller of the two buildings was located on higher elevation while the second, larger structure sat slightly downslope. These structures were probably a dwelling and barn. What appears to be a cultivated stand of trees, possibly an orchard, is also shown. A small pier extended from the northwest point of the island and harbored boats providing access to the island. The pier is shown to extend to the limit of the bulkhead and pierline as established by an Act of Legislation in 1857, the legal extent of which is shown surrounding the island in Figure 3.

The City of New York acquired the Rikers Island in 1884 for \$180,000. It was then considered part of the 23rd Ward of the City (Stokes 1928; WPA 1939; New Yorker, 28 June 1947).

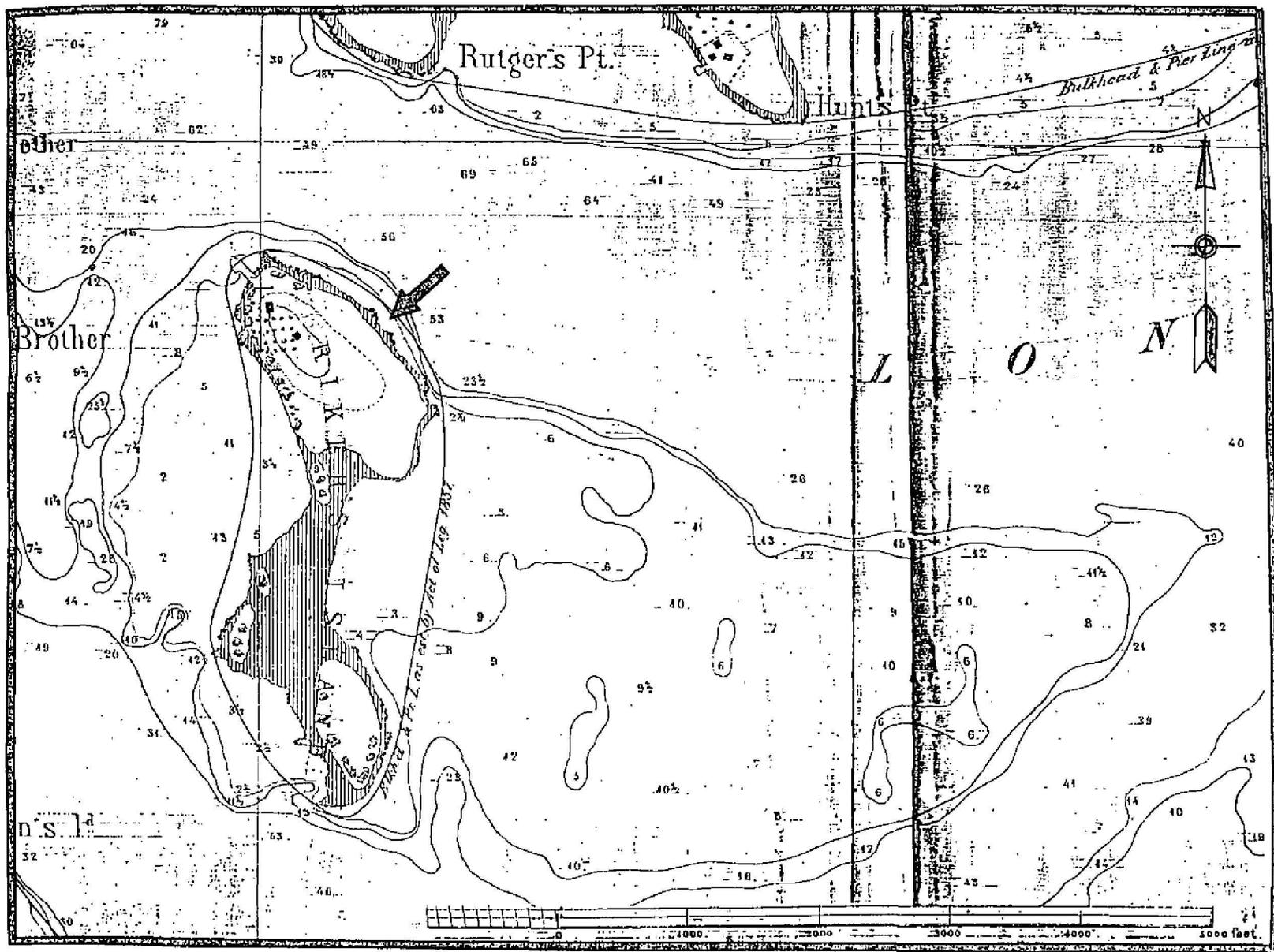


Figure 3. "Hydrographic Chart showing pier and bulkhead lines from Hallet's Point to Willet's Point." 1874. Arrow points to project area.

Robinson depicts Rikers Island in his Atlas of the City of New York in 1885 in a very simplified form (Figure 4). It shown as a single piece of land. The two structures depicted in 1874 are no longer extant but by 1885 a small building was constructed nearby the earlier pier, which itself, or a replacement, was still standing. This structure may have been the boat house on which the federal government established a red lantern navigation light in 1889 (Wheeler, personal communication 1994). The western-most point of the island had been filled and modified as can be ascertained by its angular configuration. A second pier was built off of this shoreline. Two large structures were constructed nearby. The size of these structures suggests a commercial use.

In 1893 the City Aldermen decided that "it has long been a reproach to this city that the sick and unfortunate who are legitimate objects of charity are sent to Blackwell's Island, which is generally associated in the public mind with a penal institution. The growth of the city demands larger accommodation for its charitable institutions" (Proceedings of the Board of Alderman, CCIX, 10-19, in Stokes 1928). It was suggested at that time that the penal institution on Blackwell's Island be moved to Rikers.

That same year, 1893, the War Department expanded the legally permitted extent of the pier and bulkhead line around Rikers Island (Figure 5). The new line circumscribed the entire area of shallow waters surrounding Rikers. The "island" is again depicted as a cluster of islands. The land masses were altered somewhat from the 1874 depiction, particularly in the center portion of the shoals where an entire landmass had been constructed with fill.

The northernmost island was extended to the southeast. A large uniform stand of trees is shown along the western edge of this island and is probably an extension of the orchard associated with the former structures. The shoreline of the westernmost island retained the angular shoreline depicted in 1885, but the dock and structures were no longer extant. Significant landfilling had occurred in this section of Rikers Island. A United States Coast Survey (USCS) station was established on the southernmost island. This point probably aided in the survey of the new pier and bulkhead line.

An L-shaped feature is indicated along the western shore of the newly-filled "island". This configuration is not shown connected to the higher, fast land but possibly represents a pier built off of the "beach" surrounding the island, as indicated by a fine dotted line.

The following year, in 1894, the City built one thousand lineal feet of crib-bulkhead at Rikers Island. It was

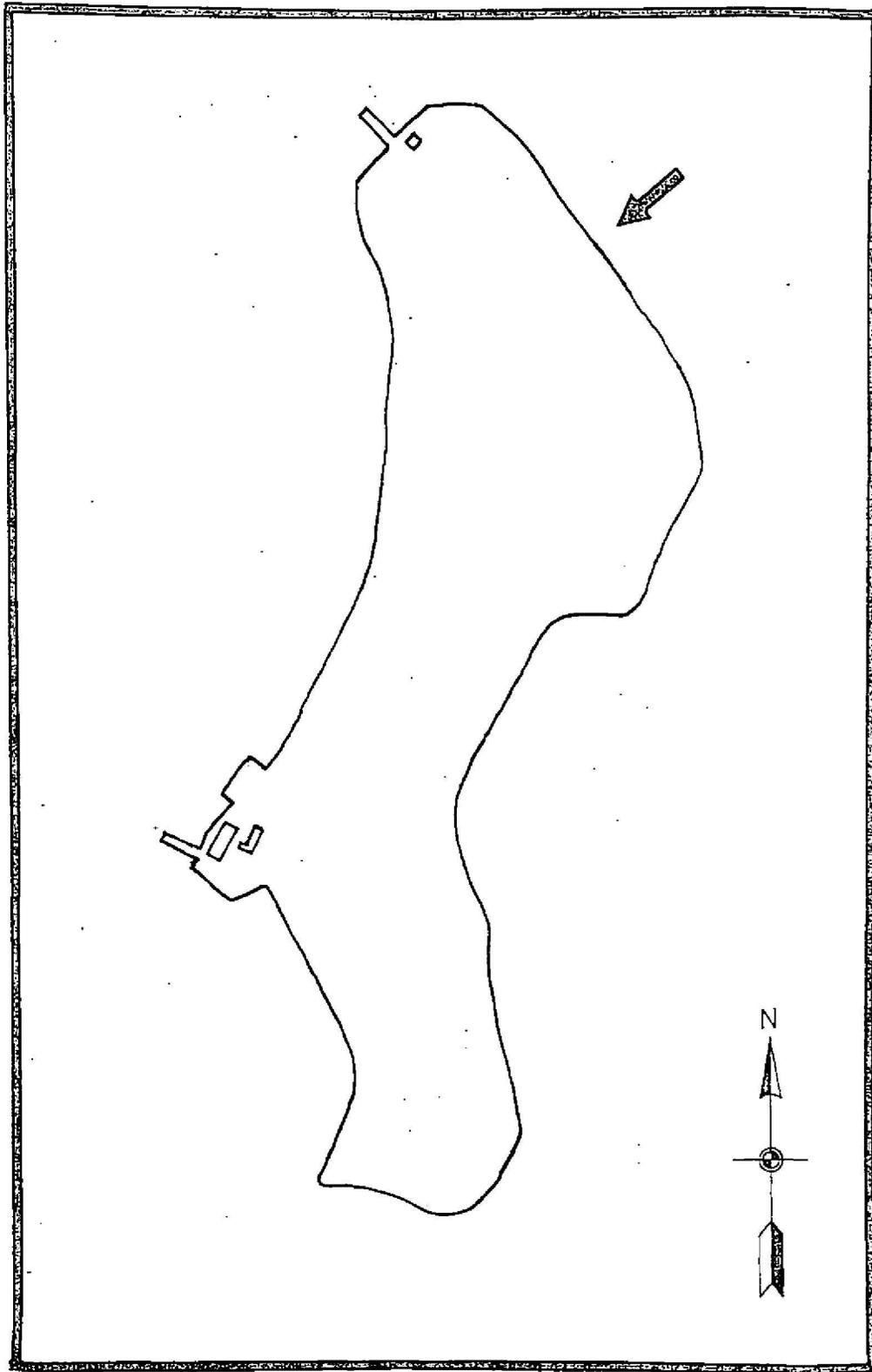


Figure 4. Rikers Island traced from Elisha Robinson, Atlas of the City of New York. Plate 7. 1885. Scale: 1 inch=600 feet. Project area indicated by arrow.

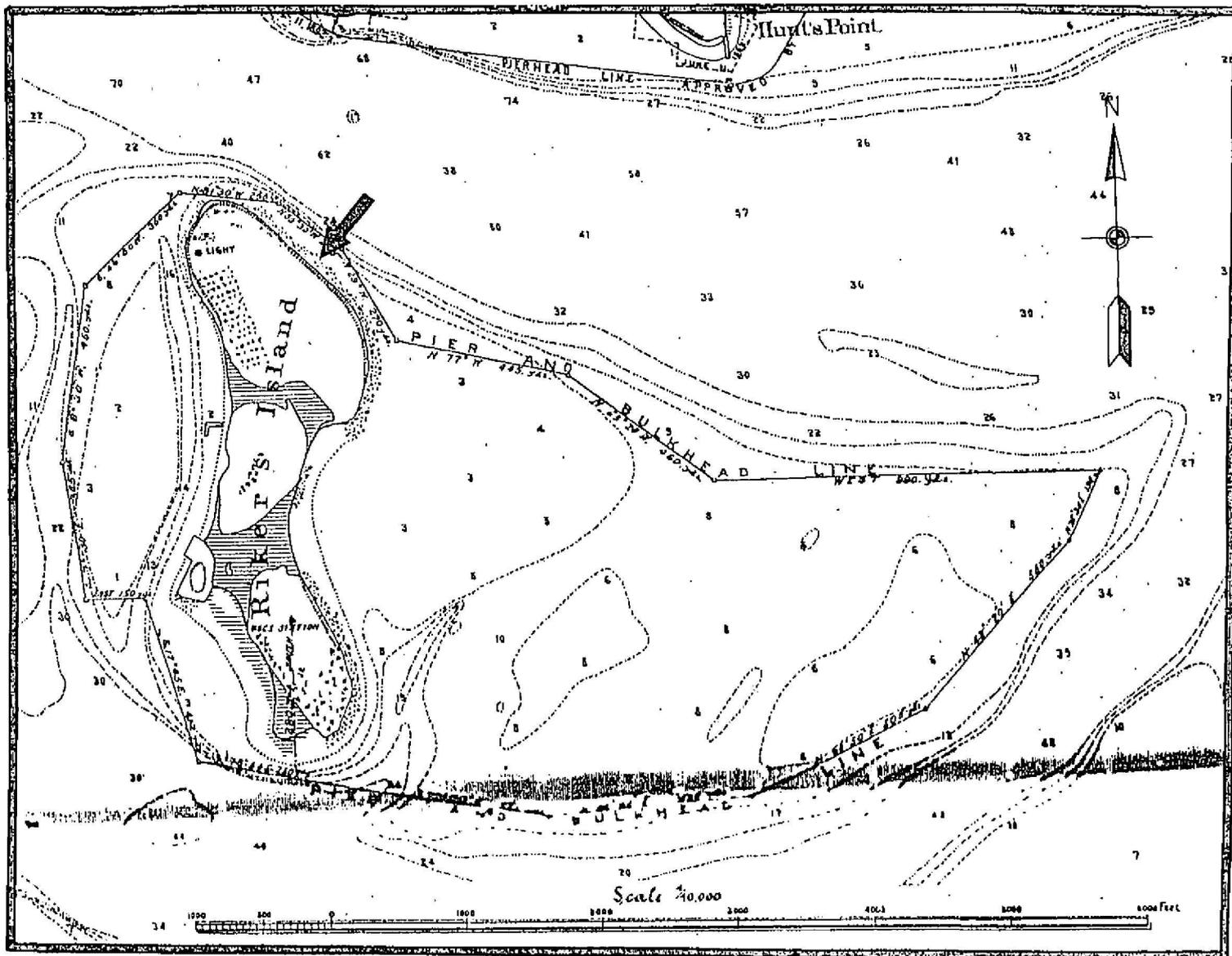


Figure 5. "Modification of the Pier and Bulkhead Line around Riker's Island, East River, New York, as recommended by the New York Harbor Board." 1893. Project area indicated by arrow.

calculated that 3,000,000 cubic yards of "ashes and street refuse" would be dumped behind the bulkhead line and form approximately 64 additional acres of land. Figure 6 clearly depicts this massive landfilling effort (Proceedings, Board of Alderman, CCXIII, 16-29, in Stokes 1928).

The island was again expanded in 1909 when the City of New York built 8,000 feet of stone wall around the easterly end of Rikers Island "forming a basin within which the Department of Street Cleaning is depositing the City's Refuse." This action was hoped to create about 150 acres of land for the city (Proceedings, Board of Alderman (1909), I, 18-219, In Stokes 1928; Squires, personal communication 1994). The island, as depicted on the 1910 map (Figure 7), does not reflect this new shoreline but the expansion of the island is obvious in Figure 8, which dates to 1924.

The City continued to dispose of the city's solid waste on Rikers Island until 1935 when the city began to incinerate its garbage. Most landfills in the City were filled to just ten feet above sea level but on Rikers the garbage was mounded as high as 125 feet in the eastern landfill. In 1935, 14 miles of railroad track traversed the island and 12 locomotives and 30 flat cars were employed in the distribution of the landfill material. A large quantity of fill was removed from Rikers to use in the expansion of LaGuardia Airport (Walsh, personal communication 1994; Squires, personal communication 1994).

The first penitentiary on Rikers Island was completed in 1933. The new prison consisted of twenty-six fireproof brick buildings which cost \$9,106,000 to construct. The capacity of the institution was 2,500 and annually 25,000 prisoners were housed here. The facility included a hospital and laundry facilities. A sixty acre farm was established on the island which produced over fifty thousand pounds of pork per year. Initially the island was thought to be escape proof and little attention was paid to securing its perimeter. The new prison was known for its "unique" and "scientific" approach regarding the treatment of prisoners and was considered one of the most innovative institutions of its type (WPA 1939; The New York Times, 19 April 1980).

In 1940, a nursery was planted on Rikers Island to provide trees and other plants for city streets and parks. Initially, the heat and methane gas generated by the decaying waste forming the bulk of the island killed off many young saplings. This was remediated by installing pipes to allow gas to escape and be burnt off. The refuse also attracted rats which were at one time thought to "outnumber the human population of Greater New York" (New Yorker, 28 June 1947).

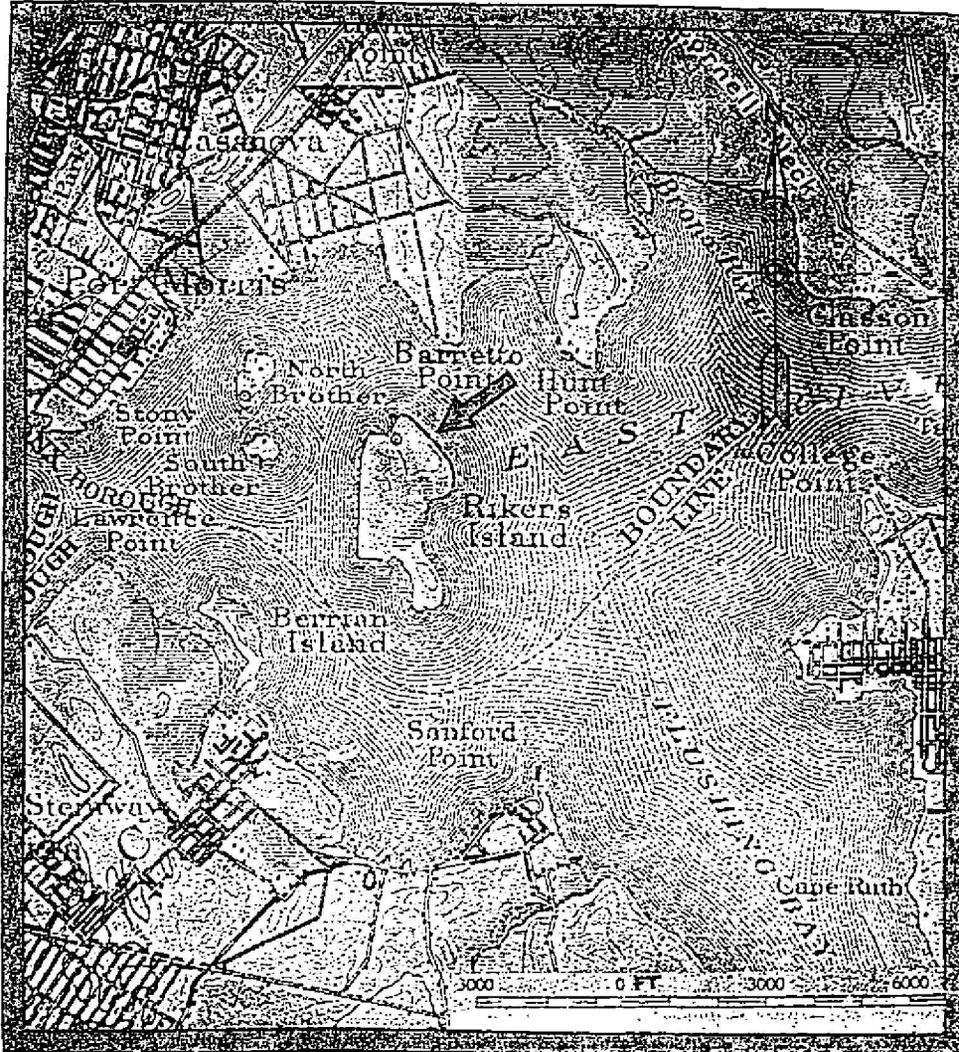


Figure 6. Rikers Island. Source: USGS Harlem, NY quadrangle. 1896. Project area indicated by arrow.

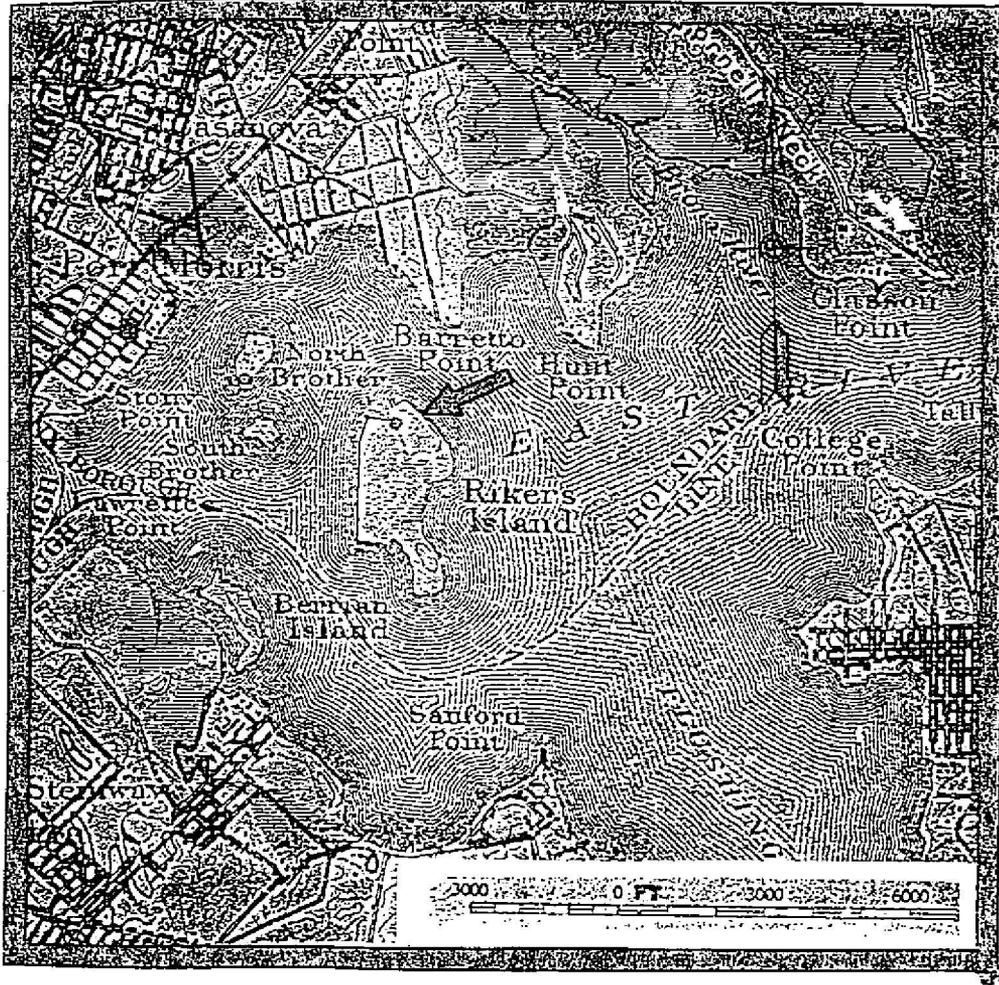


Figure 7. Rikers Island. Source: USGS Harlem, NY quadrangle. 1910. Project area indicated by arrow.

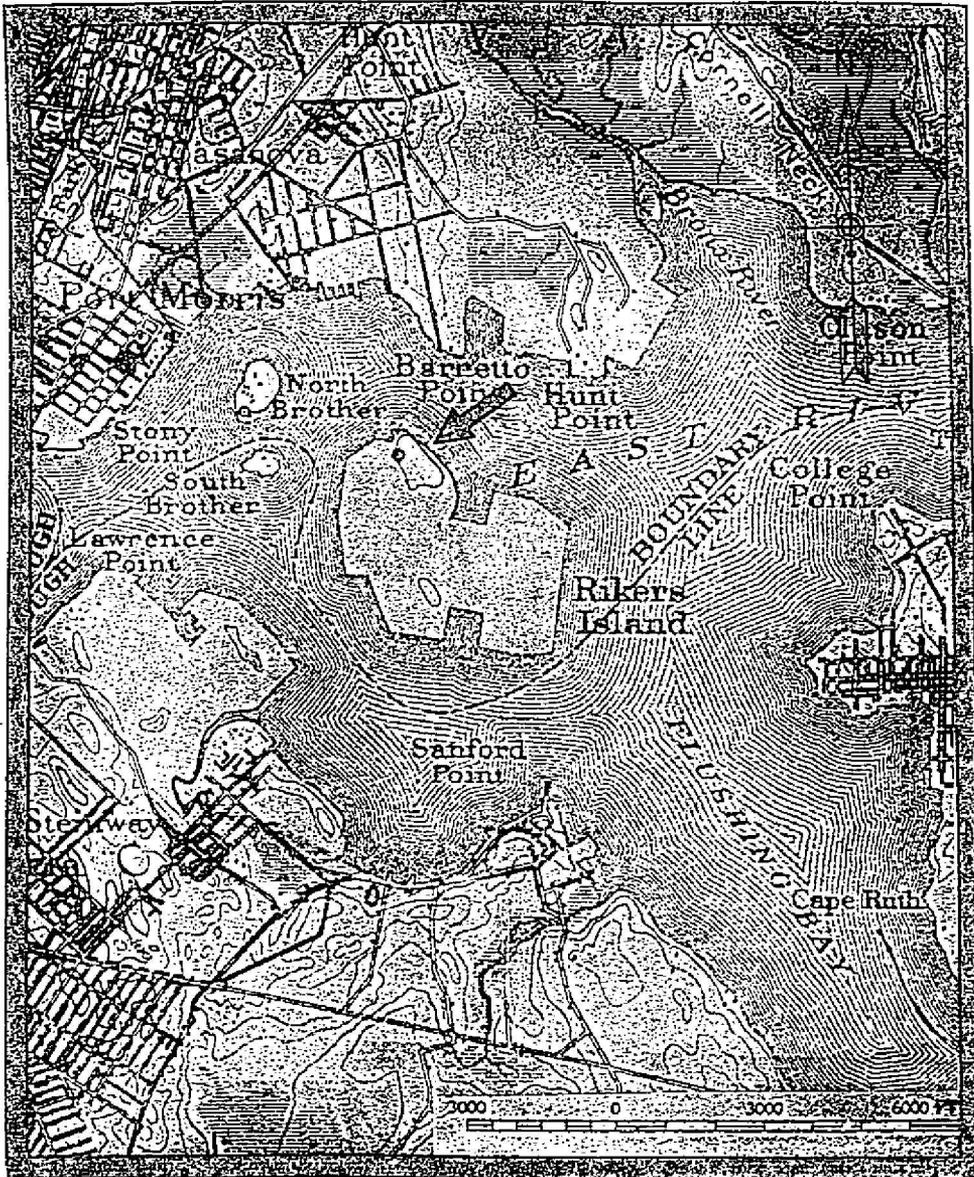


Figure 3. Rikers Island. Source: USGS Harlem, NY quadrangle. 1924. Project area indicated by arrow.

The city stopped dumping its garbage on the island in 1943. Rikers Island was brought near its present size of 432 acres at this time (Figure 9) (New Yorker, 28 June 1947; Smith 1962). The prison has continued to expand its facilities and presently most of the island is developed (Figure 10). The pump station was constructed recently.

The seawall immediately in front of the pump station was destroyed by storm action and none of it remains. Sections of the seawall are present on the southeastern edge of the project area. This wall consists of massive boulders and cut stone topped with four layers of a timber crib-like structure. The round timber stretchers are whole while the headers are halved logs which extend into the shoreline fill. Several of the stretchers are notched. Iron bolts hold the timber together. The structure appears to be of 20th century construction.

The East River serves as an important marine link between New York Harbor and New England, however, the currents in the vicinity of Rikers Island can be dangerous. Many shipwrecks have been documented in this stretch of the River.

In 1867, a schooner, the "H.A. Barnes" sunk off of Rikers Island while on a run between New York and New Bedford, Connecticut. Later documented shipwrecks on the island include the "Plymouth" which was grounded during a fog in 1899. The 600 passengers on board were rescued and the ship was later repaired. The following year the schooner, Margaretta, sunk off the island (Rattray 1973).

The National Ocean Service's Automated Wreck Obstruction Information System (AWOIS) indicates that over fifteen wrecks of various periods have been documented in the Rikers Island area. None of these appear to be in the immediate project vicinity.

VII. Discussion of Potential Cultural Resources

The potential for encountering prehistoric remains on the natural land forming part of Rikers Island was probably high prior to construction of the correctional facility. Significant land disturbances associated with the construction of the prison structures and utilities would have disturbed many of these resources, if present.

As can be ascertained from the cartographic evidence, little landfilling has taken place on the northeast side of the island in the project area. Moderate shoreline modification may have occurred between 1874 and 1885 as indicated by the depiction of a more uniform, straight, shoreline on historic maps (see Figures 3, 4 and 5). The filling possibly occurred after the city acquired the island in 1884.

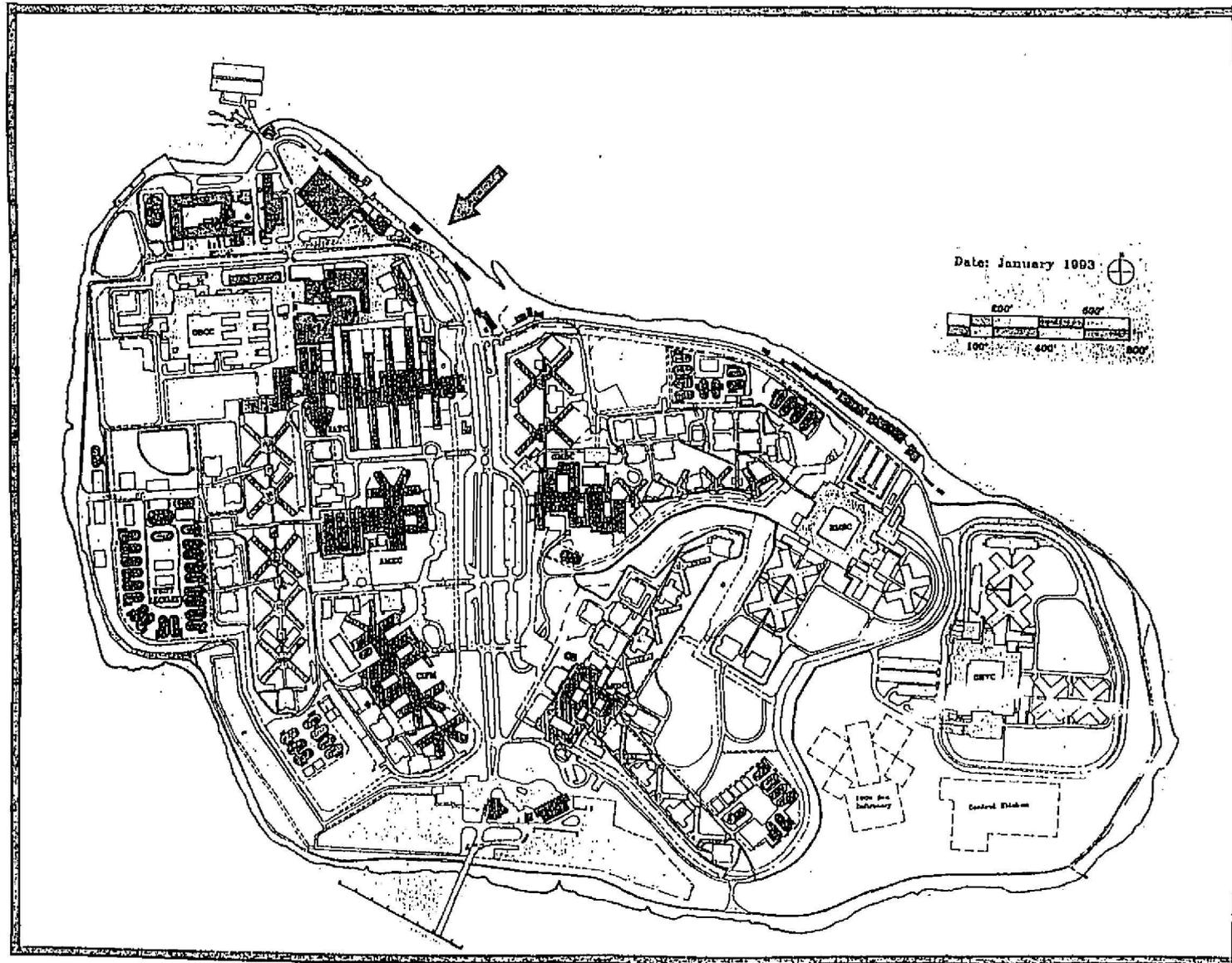


Figure 10. Rikers Island. 1993. Source: Silver & Ziskind for the Department of General Services, Department of Correction.

The remnant of the bulkhead in the vicinity of the project area does not appear to be of a late 19th century design based on comparisons with other seawall structures in the New York Harbor from that time (Raber Associates 1984; Hunter Research, Inc. 1993). The haphazard construction technique suggests a twentieth century structure. The shoreline may have been extended beyond its 19th century bounds at this time or the present structure may have been constructed to replace an earlier bulkhead. A short segment of this structure survives in the project area itself.

Soil borings excavated in 1991 along Wagner Avenue in advance of construction of the north pumping station indicate that at least five feet of fill material is present in the vicinity of the immediate project area (City of New York Department of General Services 1991).

Numerous shipwrecks have been documented in the Rikers Island area. Scouring of the shoreline has been great during times of storm and it is unlikely that any structural remains of vessels are present in the project area.

VIII. Effects of Study Plans on Cultural Resources

Project plans call for the construction of a 300-foot long revetment wall which will be roughly centered around the pump station. The armor and toe protection will consist of two layers of stone with a weight of 1-ton, underlain by two layers of 200 pound bedding stone. Filter cloth will separate the structure from existing ground. The wall will have a cross-section width of approximately 45 feet.

Preparation for this structure will involve the excavation of 4,200 cubic yards of rock, rubble and river bottom. A temporary rock construction berm will be built to provide access to the construction area, and will be incorporated into the completed stone revetment structure. All fill material and stone will be barged to the project site.

Extensive beach erosion, which has left only gravels, boulders and glacial till along the Rikers shoreline, would have removed any relict surfaces that may have yielded prehistoric resources and would have also scoured away any potential historic shipwreck remains. Erosion has also destroyed most of the bulkhead in the project area. The presence of fill, which is at least five feet deep, on the landward side of the project area should protect any resources that might be present in the vicinity of project construction access areas. It is unlikely that the project, as proposed, will disturb any cultural resources.

It is in the opinion of the U.S. Army Corps of Engineers that this shoreline protection project will have no effect on any National Register of Historic Places properties or on any properties eligible for the Register. The New York State Historic Preservation Office has concurred with the Corps' determination of no effect.

REFERENCES CITED

- Allee, King, Rosen & Fleming, Inc.
1991 Assessment of Archaeological Sensitivity, Phelps Dodge Site, Long Range Sludge Management Plan, GEIS III, Maspeth, Queens. On file, New York City Landmarks Commission.
- Bolton, Reginald Pelham
1972 Indian Life Long Ago in the City of New York. Harmony Books: New York. Originally published by the author in 1934.
- Boesch, Eugene, Leonard Bianchi and Philip A. Perazio
1993 Phase IA Cultural Resource Investigation of the St. Raymond's Cemetery Expansion Area, Bronx County, New York. On file, New York City Landmarks Commission.
- Boesch, Eugene and Philip A. Perazio
1993 A Phase IB Cultural Resource Investigation of the St. Raymond's Cemetery Expansion Area, Bronx County, New York. On file, New York City Landmarks Commission.
- City of New York Department of Corrections
n.d. "Fact Pact," unpublished manuscript on Rikers Island.
- City of New York Department of General Services
1991 North Pump Station & Force Main, Rikers Island, Borough of the Bronx. Record of Borings; Sheets B-1 and B-2. .
- Garrow & Associates, Inc.
1991 Iroquois Gas Transmission System, Phase II Archaeological Evaluations, Volume 5. Long Island.
- Geismar, Joan H.
1989 Historic and Cultural Resources of the Sea Breeze Estates Site, City Island, The Bronx. On file, New York City Landmarks Commission.
- Greenhouse Consultants, Inc
1988 Stage 1A Archaeological/Historical Sensitivity Study, Castle Hill Development Project, NY. On file, New York City Landmarks Commission.
- Historical Perspectives
1987a Phase IA Archaeological Assessment Report on the Shorehaven Project, The Bronx, New York. On file, New York City Landmarks Commission.
- 1987b Shorehaven Project, CEQR87-010X, Second Level Documentary Study, The Bronx, New York. On file, New York City Landmarks Commission.

Historical Perspectives, Inc., Cont.

1987c Shorehaven Project, Phase IB Archaeological Fieldwork Report 1987, The Bronx, New York. On file, New York City Landmarks Commission.

1989 Department of Corrections, Prison Barge Proposal, Project Data Statement: Archaeological Assessment. On file, New York City Landmarks Commission.

1991 The New York City Long Range Sludge Management Plan. Generic Environmental Impact Statement III. North Brother Island, Phase IA Archaeological Assessment.

Hunter Research, Inc.

1993 Archaeological Investigations in Connection with the New Wall of Honor, Ellis Island, City of New York, New York County, New York.

"Hydrographic Chart Showing pier and bulkhead lines from Hallet's Point to Willet's Point"

1874 On file, New York Public Library, Map Division

Kraft, Herbert C.

1986 The Lenape. New Jersey Historical Society, Newark, NJ.

Lenik, Edward J.

1992 "Native American Archaeological Resources in Urban America: A View from New York City." In The Bulletin - Journal of the New York State Archaeological Association. No. 103.

"Modification of the Pier and Bulkhead Line around Riker's Island East River, New York, as recommended by the New York Harbor Board"

1893 On file, New York Public Library, Map Division

Munsell, W.W. & Co.

1882 History of Queens County, New York. W.W. Munsell & Co.: New York.

New Yorker

1947 "Island Nursery." 28 June 1947.

Onderdonk, Henry. Jr.

1865 Queens County in Olden Times. Charles Welling: Jamaica, New York.

Parker, Arthur C.

1920 "The Archaeological History of New York." New York State Museum Bulletin. Nos. 235/236. July/August.

Pickman, Arnold

1993 Cultural Resources Reconnaissance Atlantic Coast of Long Island, Jones Inlet to East Rockaway Inlet, City of Long Beach, Village of Atlantic Beach, Lido Beach and Point Lookout Areas, Town of Hempstead, Long Beach Island, Nassau County, New York.

Raber Associates

1984 Cultural Resources Reconnaissance Edgewater, New Jersey Reach: New York Harbor Collection and Removal of Drift Project. On file, Environmental Analysis Branch Library, US Army Corps of Engineers, New York District.

Rattray, Jeanette Edwards

1973 Perils of the Port of New York. Dodd, Mead & Company: New York.

Riker, James

1851 A Brief History of the Riker Family. D. Fanshaw: New York.

1852 The Annals of Newtown in Queens County, New York. D. Fanshaw: New York.

Ritchie, William A.

1980 The Archaeology of New York State. Harbor Hill Books, Harrison, NY.

Robinson, Elisha

1885 Atlas of the City of New York. Robinson. New York.

Schuberth, Christopher J.

1968 The Geology of New York City and Environs. The Natural History Press. Garden City, New York.

Skinner, Alanson

1919 "Exploration of Aboriginal Sitings at Throgs Neck and Clasons Point, New York City." In Contributions from the Museum of the American Indian (Heye Foundation). Vol V, No.4.

Smith, Thelma E.

1962 "The Islands of New York City" in the Knickerbocker Scrapbook in the Municipal Reference Library Notes. Vol. XXXVI (6).

Stokes, I.N. Phelps

1928 The Iconography of Manhattan Island. Vol. 5. Robert H. Dodd, New York.

The New York Times

1980 "Rikers Island's Future." 19 April 1980.

United States Army Corps of Engineers
1992 Atlantic Coast of New York - Rockaway Inlet to Norton
Point, Coney Island Area Shore Protection Project,
Final Design Memorandum, Vol.1.

United States Coast Guard
1988 Supplement to the Draft Environmental Impact
Statement/4(f) Evaluation, Davids Island Project,
New Rochelle, New York. Vol. 1.

United States Geological Survey
1896 Harlem, NY quadrangle

1910 Harlem, NY quadrangle

1924 Harlem, NY quadrangle

1947 Central Park, NY quadrangle

1947 Flushing, NY quadrangle

WPA
1939 WPA Guide to New York. The Guilds Committee for
Federal Writers' Publication, Inc., New York.

INDIVIDUALS CONSULTED

Bills, Lt. Keith
United States Coast Guard, First Coast Guard District,
Boston, MA. Personal communication, 18 May 1994.

Squires, Dr. Donald
University of Connecticut. Personal communication,
12 May 1994.

Walsh, Daniel C.
New York State Department of Environmental Conservation.
Personal communication, 17 May 1994.

Wellman, Beth
New York State Museum, Archaeology Survey. Personal
communication, 16 May 1994.

Wheeler, Wayne
U.S. Lighthouse Society, San Francisco, CA. Personal
communication, 18 May 1994.

Windsor, Mel
Correction Department, New York City. Capital
Policy and Development. Personal communication,
2 June 1994.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

August 1, 1994

Environmental Analysis Branch
Environmental Assessment Section

Mr. J. Winthrop Aldrich
New York State Office of Parks,
Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, P.O. Box 189
Waterford, NY 12188-0189

Dear Mr. Aldrich,

The U.S. Army Corps of Engineers, New York District (Corps), is studying the feasibility of implementing an emergency shoreline protection project on Rikers Island, Bronx County, New York. This work is needed to stabilize the shoreline from further erosion which threatens the stability of a new pump station that serves the island. The study has been authorized under Section 14 of the 1946 Flood Control Act.

To date, no prehistoric archaeological sites have been documented on Rikers Island, however, the New York State Museum has assessed portions of the island to be sensitive with regard to Native American cultural resources. This determination is based on topographic similarities to areas in the East River and along its banks that have yielded evidence of prehistoric occupation. An historical account notes that a colonial settler was driven off the Rikers Island by "Indians."

The first European occupants of Rikers Island were the Hewlett family who held it until 1664 when Abraham Ryken (Riker) acquired the island. It remained occupied by the Riker family until the mid-19th century. The island was actually a cluster of five small islands at that time.

The City of New York bought Rikers Island in 1884 and began a program of landfilling. A series of bulkheads were constructed in the late 19th and early 20th centuries and hundreds of acres of land were made with city refuse.

The island experienced limited expansion in the project vicinity. This filling probably occurred soon after the city acquired the island. The bulkhead in the project area

appears to be of 20th century construction and most of this structure has been removed by storm action.

Numerous shipwrecks of various periods have been recorded in the East River around Rikers Island. None of these appears to be in the project vicinity. Intense scouring of the shoreline by wave action would have likely removed evidence of vessels.

Project plans call for the construction of a 300-foot long revetment wall which will be roughly centered around the new pump station. The armor and toe protection will consist of two layers of stone with a weight of 1-ton, underlain by two layers of 200 pound bedding stone. Preparation for this structure will involve the excavation of 4,200 cubic yards of rock, rubble and river bottom. A temporary rock construction berm will be built to provide access to the construction area, and will be incorporated into the completed stone revetment structure.

Extensive beach erosion, which has left only gravels, boulders and glacial till along the Rikers shoreline, would have removed any relict surfaces that may have yielded prehistoric resources and would have also scoured away any potential historic shipwreck remains. Erosion has also destroyed most of the bulkhead in the project area. The presence of fill, which is at least five feet deep, on the landward side of the project area would protect any resources that might be present in the vicinity of project construction access areas. It is likely that the project, as proposed, will not disturb any cultural resources.

On the basis of current project plans and pending review by your office, the Corps is of the opinion that the Rikers Island Section 14 Emergency Shoreline Protection Project will have no effect on historic properties. No further cultural resource activities will be necessary if project plans remain as proposed. Please provide us with section 106 comments as pursuant to 36 CFR 800.5.

If you or your staff require additional information or have any questions, please contact Lynn Rakos, Project Archaeologist, (212)264-4663. Thank you for your assistance.

Sincerely,


Stuart Piken, P.E.
Chief, Planning Division



Joan K. Davidson
Commissioner

New York State Office of Parks, Recreation and Historic Preservation
Historic Preservation Field Services Bureau
Peebles Island, PO Box 189, Waterford, New York 12188-0189

518-237-8643

November 4, 1994

Stuart Piken, P.E.
Chief, Planning Division
Environmental Analysis Branch
U.S. Army Corps of Engineers
New York District
Jacob K. Javits Federal Building
New York, New York 10278-0090

Attn: Lynn Rakos

Re: CORPS
Rikers Is. Shoreline Stabil.
Bronx County
94PR0579

Dear Mr. Piken:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO) with regard to the proposed shoreline stabilization project at Riker's Island. We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966 and the relevant implementing regulations.

Based upon this review, it is the SHPO's opinion that this project will have No Effect upon cultural resources in or eligible for inclusion in the National Register of Historic Places.

If you have any questions or comments on this matter, please contact me at 518/237-8643, ext. 280.

Sincerely,


James Warren
Program Analyst
Field Services Bureau

JPW:jw



Photo 1. A view of a Support bldg. at the beginning of Reach A.

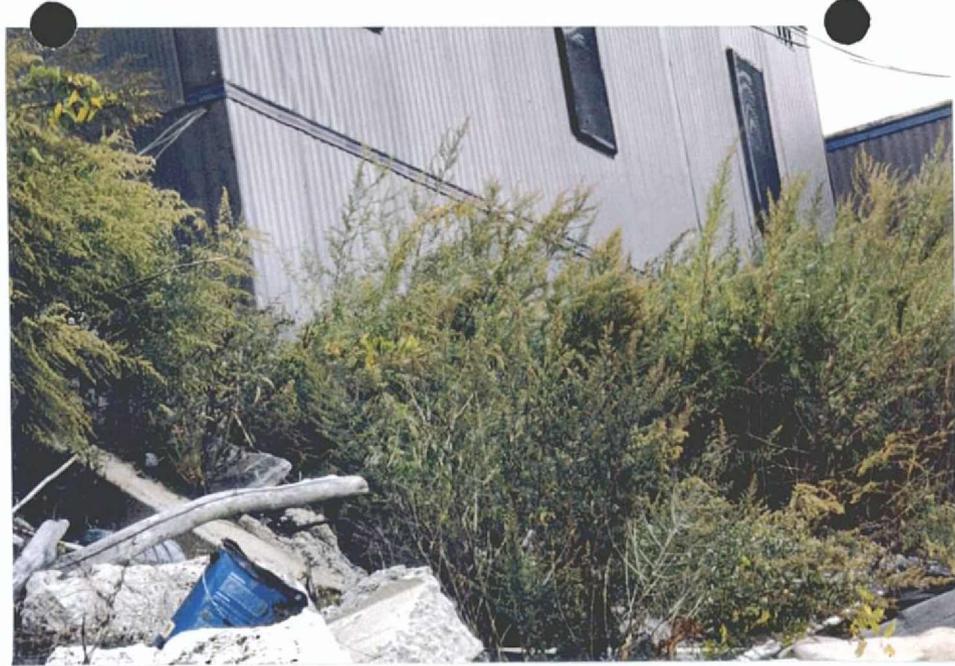


Photo 2. A view of a Support trailer indicating the need for an emergency action.



Photo 3. A western view of a portion of Reach A. Note the position of the bldg.

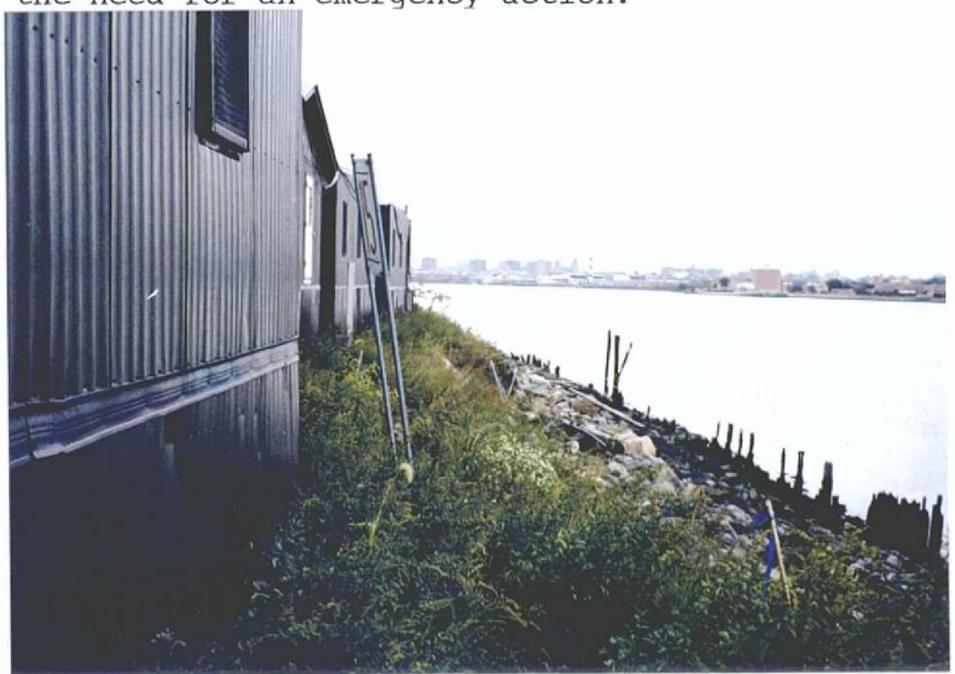


Photo 4. A western view of the remaining section of Reach A.

Attachment 4



Photo 5. View looking northwest at the Riker
Island shoreline in Area A
(Photographer: Lynn Rakos, June 10, 1994).



DEPARTMENT OF THE ARMY
NEW YORK DISTRICT, CORPS OF ENGINEERS
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, N.Y. 10278-0090

January 10, 1996

REPLY TO
ATTENTION OF

Environmental Assessment Section
Environmental Analysis Branch

Dr. Daniel Pagano
New York City Landmarks Preservation Commission
100 Old Slip
New York, New York 10005

Dear Dr. Pagano,

The U.S. Army Corps of Engineers, New York District (Corps) has been assisting the City of New York Department of Correction (DOC) with the design of an emergency shoreline protection measure for Rikers Island, Bronx County, New York (Attachment 1). As this work is not a Federal undertaking the project does not require Section 106 review. This cultural resources assessment is provided for your information.

The proposed work will be conducted along the north shore of Rikers island where several administration buildings are in danger of collapse due to recent erosion (Attachment 2). The work will entail the construction of 1655 feet of stone revetment, with 1480 feet of revetment in Area A and 175 feet of revetment in Area C. The areas of proposed construction depicted on Attachment 2 have been modified. Area A will span 1480 feet instead of 1400 and Area C will be limited to the 175 foot segment labelled "place stone revetment." Material excavated from Areas A and C will be placed in Area B and C above the mean high water line.

The protection proposed for Areas A and C will consist of a stone revetment structure with buried toe. The existing slope will be graded to 1 vertical for 2 horizontal in Area A and 1 vertical to 1.5 horizontal in Area C. Armor stone and underlayer stone will be placed over geotextile material. This work is anticipated to be conducted from the land however the use of water borne construction equipment is not precluded. Staging areas have not yet been determined.

The Corps conducted a cultural resources assessment of the Rikers Island shoreline in 1994 in connection with an emergency shoreline protection project. This work focused on the area in front of a new pump station also on the northern side of the island, immediately west of Area C. New York City Landmarks Preservation Commission staff and project

reports were consulted as part of this work. Section 106 coordination with the New York State Historic Preservation Office (SHPO) was completed for this undertaking. The Corps' study concluded that the proposed project would have no effect on historic properties and the SHPO concurred with this evaluation of the study area. The Corps' cultural resources report and the SHPO correspondence are attached (Attachment 3).

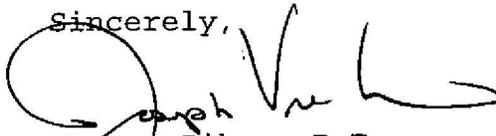
Rikers Island, originally a cluster of five small islands, experienced considerable expansion in the project vicinity which is entirely on fill. Land reclamation in the western portion of the project area appears to have occurred in the late 19th century with additional filling between 1910 and 1924. The island was brought near its current configuration by 1947 when most of Area A was created (see Attachment 3, Figures 3 through 10).

Numerous shipwrecks of various periods have been recorded in the East River around Rikers Island. None of these appear to be in the project vicinity. Intense scouring of the shoreline by wave action would have likely removed evidence of the vessels.

Extensive beach erosion, which has left only gravels, boulders and glacial till along the Rikers Island shore, would have removed any relict surfaces that may have yielded prehistoric resources and would have also scoured away any potential historic shipwreck remains. Erosion has also destroyed the bulkhead in Area C. The western end of Area A is lined with timber pilings (Attachment 4). The pilings may be remnants of the bulkhead built between 1924 and 1947. The SHPO concurred with the Corps' previous assessment that the bulkheading in this section of the island is not eligible for the National Register of Historic Places. The presence of fill, which is at least five foot deep, on the landward side of the project area would protect any resources that might be present in the vicinity of project construction access areas. It is likely that the project, as proposed, will not disturb any cultural resources.

If you or your staff require additional information or have any questions, please contact Lynn Rakos, Project Archaeologist, (212)264-4663. Thank you for your assistance.

Sincerely,

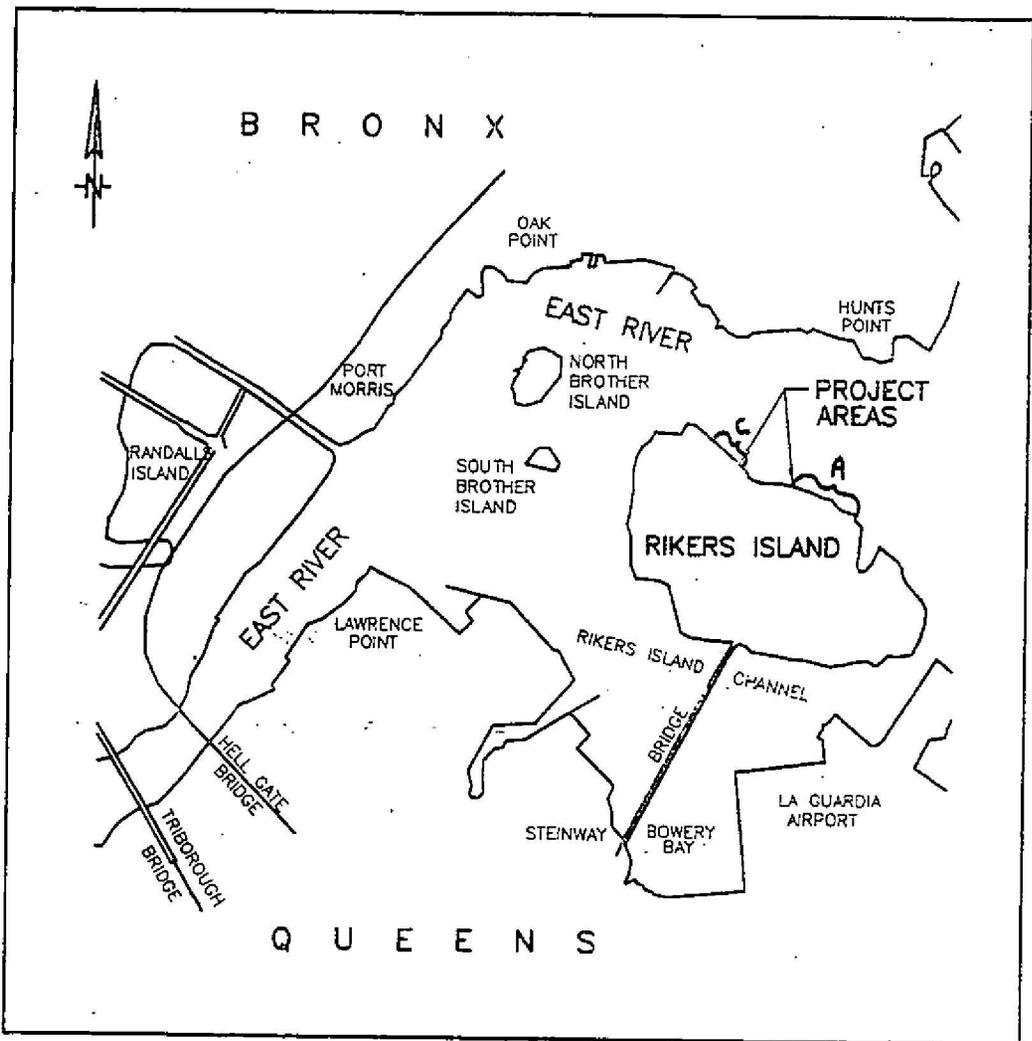


Stuart Piken, P.E.
Chief, Planning Division

Attachments

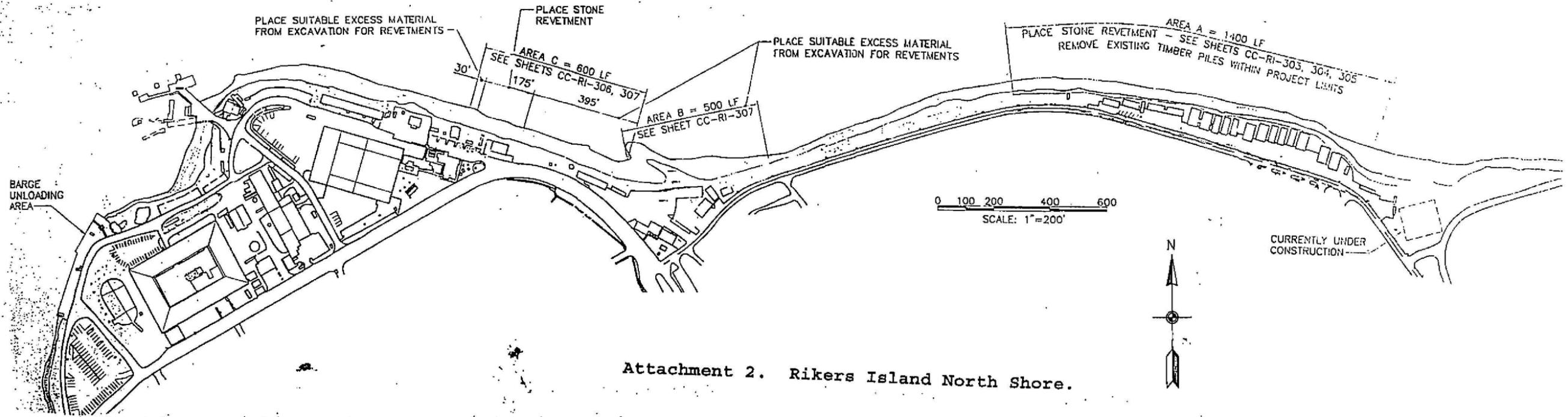
cf: Peter Shaver, NYSOPRHP

Attachment 1.



LOCATION MAP

NOT TO SCALE



Attachment 2. Rikers Island North Shore.