New York City

Department of Environmental Protection

Water Quality Facility Plan

Paerdegat Basin, Brooklyn, New York

Phase 1A Archaeological Assessment

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HISTORICAL PERSPECTIVES INC.

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NEW YORK CITY DEPARTMENT OF ENVIRONMENTAL PROTECTION

WATER QUALITY FACILITY PLAN

PAERDEGAT BASIN, BROOKLYN, NY

PHASE 1A ARCHAEOLOGICAL ASSESSMENT

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I. INTRODUCTION AND METHODOLOGY

The New York City Department of Environmental Protection (DEP) proposes to construct a water quality facility for combined sewer overflow storage at the head of Paerdegat Basin in the Flatlands section of Brooklyn, Kings County, New York. The proposed project is to be located on a roughly L-shaped site, which includes Block 8338, Lot 300 and part of Lot 1 (north of the line of Avenue K); Block 8012, part of Lot 400, as far east as a continuation of the Paerdegat Basin bulkhead line, drawn parallel with E. 76th Street; and the section of proposed Bergen Avenue between Avenue K and Ralph Avenue, from its center line to Lot 1 of Block 8338. The project site is bounded by Paerdegat Basin, the southern section of Block 8338 Lot 1, the western half of unbuilt Bergen Avenue, Ralph Avenue, Flatlands Avenue and the eastern portion of Block 8012 Lot 400. (See Figs. 1 and 2)

The proposed facilities include the extension of existing overflow sewers, the construction of two buildings along Ralph Avenue, a building for screening and pumpback equipment and odor control equipment, a 30-million gallon underground water retention facility and an underground Combined Sewer Overflow (CSO) facility which will extend under a large proportion of the proposed site. Bergen Avenue, which is currently mapped but not built, will be constructed to its center line along the border of the project site.

The purpose of the following Phase 1A study is to determine the presence, type, extent and potential sensitivity of any archaeological resources which may be present on the Paerdegat Basin Water Quality Facility Site. This report is based on archival research which documents the probability that the project lots hosted any prehistoric or historical resources, and their likely survival of post-depositional disturbances, which may have accompanied subsequent development. It also considers the potential for adverse impact by the proposed action.

In order to address these concerns, various sources of data were investigated. Primary source material on the project site was collected to determine the lots' original topography, and to compile a building history and disturbance record. Particularly helpful was a plate from the 1873 Beers Atlas of Long Island (Fig. 8), which gave valuable pre-development topographical information. This and other historical maps as well as descriptions and early photographs of the project area were provided by the Map and Local History Divisions of the New York Public Library and the Brooklyn Historical Society. Local informants were sought and interviewed. Building and sewer records were researched in their respective departments at the Municipal Building in Brooklyn. Boring data for the project lots and the adjacent area were obtained from the Subsurface Exploration Section of the New York City Department of General Services. (See Appendix B)

To place the Paerdegat Basin site within an historical context, local and regional histories such as Stiles' History of Brooklyn and Thompson's History of Long Island were examined. An important source of data was Frederick Van Wyck's in-depth study of the early years of the Flatlands settlement, Keskachauge, or the First White Settlement on Long Island. William A. Ritchie's The Archaeology of New York State provided a valuable overview of Native American culture and lifeways during the prehistoric period. Other archaeological literature, available site reports and journal publications were researched for data specific to the project area, including Arthur C. Parker's "The Archaeological History of New York," William Beauchamp's Aboriginal Occupation of New York and Robert Grumet's Native American Place Names in New York City. Inquiries concerning inventoried prehistoric and historical sites were sent to the New York State Museum and the Division for Historic Preservation New York State Department of Parks and Recreation. (See Appendix A)

A site visit (5-26-93) and a photographic record of present conditions was made. (See Photos 1-12)

II. ENVIRONMENTAL SETTING

Long Island is the top of a Coastal Plain ridge formation that is covered with glacial drift, in reality an elevated sea bottom demonstrating low topographic relief and extensive marshy tracts. In the last million years, as glaciers advanced and receded three times, the surficial geology of the island, including the Paerdegat Basin Water Quality Facility Site was profoundly altered. "The glacier was an effective agent of erosion, altering the landscape wherever it passed. Tons of soil and stone were carried forward, carving and planing the land surface. At the margins of the ice sheet massive accumulations of glacial debris were deposited, forming a series of low hills or terminal moraines" (Eisenberg 1978:19). Circa 18,000 years ago, the last ice sheet reached its southern limit, creating the Harbor Hill moraine that traverses the length of Long Island. Before extensive alteration of the landscape during the nineteenth and twentieth centuries, a gently sloping plain extended south of the moraine to the series of tidal marshes draining into Jamaica Bay by a series of small creeks. (See Figs. 7 and 10)

One of these, Paerdegat or Bedford's Creek, wound a meandering course through the project site. The marsh around it was regularly inundated by high tides, rendering it impassable. During the 19th and 20th centuries, sections of the marsh were filled in, in preparation for the development of Jamaica Bay as a major port, which never occurred. The lower reaches of the creek were widened, regularized and dredged during the early 20th century, to form the present Paerdegat Basin, a polygonal slip for mooring small boats and barges. The filled sections of the project site presently range in elevation from 7.7′ to approximately 18′ in the southwest corner near Avenue K. Along the western shore of the basin, is an irregularly-shaped bank which slopes down to between +2′ and +3′. Beyond this bank, the project site is either underwater or marshland daily inundated by the tide. Here the elevations range between -3.0′ and -12.1′. (See Figs. 15a, 15b and 15c)

III. PREHISTORIC ERA

The prehistoric era on the south shore of western Long Island can be divided into three time periods, based on prehistoric man's adaptations to changing environmental conditions. These are generally known as the Paleo-Indian (c.12,000 to 10,000 years ago), the Archaic (c.10,000 to 2,700 years ago) and the Woodland (c.2,700 to 400 years ago). In order to be able to assess the project site's potential for prehistoric exploitation, it is first necessary to review these time periods and their associated settlement patterns. Additionally, it is critical to understand the changing environment along the southern Long Island shore and how prehistoric cultures adapted to the evolving eco-zones.

Paleo-Indian Period (c.12,000 y.a. - 10,000 y.a.)

Glaciers covered New England and southern New York for much of the Pleistocene period. Toward the end of the Wisconsin Glaciation, during the Late Pleistocene Epoch, the first humans wandered across the exposed land bridge which connected Siberia and Alaska. These small groups of hunters were probably following the roaming herds of megafauna which were their chief prey. The distinctive weapon in their chipped stone tool kit was the fluted point, which has been found in association with mammoth, mastodon, bison and horse remains at various sites in the southwestern United States. Although none of these "kill sites" is located east of the Mississippi, the discovery of campsites such as that at Port Mobil, Staten Island, suggest a scattered, highly mobile population in bands of approximately 20 individuals, who ranged across a vast area necessary to support lifeways organized around the hunting of migratory game (Ritchie 1980:1-3, 13). In the Northeast, the glacially lowered sea level exposed a broad coastal plain of which Long Island was a part. "Radiocarbon-dated sediment corings show that deglaciation began ca.17,000 years ago on Long Island. This is an important point because it shows that man could not have inhabited the present coastal area before 15,000 to 13,000 B.C. At that time Long Island was attached to the mainland, and New England extended many miles south onto the Atlantic Shelf" (Lavin 1988: 101).

The retreat of ice from Long Island approximately 18,000 years ago and a global warming trend circa 14,000 years before present, allowed Paleo-Indian settlement in the Northeast. However, paleoenvironmental research suggests that Long Island was a cold Arctic barren, with little carrying capacity for vegetation or man from initial deglaciation until about 13,500 to 12,500 years ago (Lavin 1988:101).

From the locations of recorded sites in the Northeast, Paleo-Indians exhibited a marked preference for well-elevated situations. However, 30% of sites were found on or near the margins of swampy ground. Environmental characteristics which appear to have been

attractive to Paleo-Indians include the proximity of major waterways, large fertile valleys and the coastal plain, where the densest population of desired food animals was supported (Ritchie 1980:7). Very importantly for the DEP site analysis, oysters occurred in "extraordinary abundance" on the southern Atlantic Shelf from ca.12,000 years ago - providing a food source for Paleo-Indian and subsequent culture groups (Lavin 1988:103).

The fluted, lanceolate points, two to five inches in length with channelled or fluted faces, presumably to facilitate hafting, exhibit a considerable range in shape and size. They were usually made from a high-grade silicious stone, often exotic to the region in which they are recovered, a function of their makers' seasonal migrations. Other artifacts in the Paleo-Indian tool kit include scrapers, knives, borers and gravers, tools which indicate extensive handiwork in wood, bone and leather (Ritchie 1980:3,6).

The post-glacial environment of spruce and pine underwent a gradual modification in favor of deciduous hardwoods such as oak and hickory, which have greater importance in terms of nutritional value to both animals and humans than do conifers. By 8,000 B.C., these deciduous species dominated forests along the eastern seaboard. In addition, the megafauna on which Paleo-Indian diet was based (mammoth, mastodon, musk ox, moose-elk, caribou, giant beaver and giant sloth) "were rapidly becoming extinct, and were being replaced by the temperate-climate fauna that are indigenous today" (Gwynne 1982:190-191).

The environment of the Paleo-Indian period changed drastically. The melting glacier created numerous streams whose waters poured into the Atlantic Ocean. The resultant rise in sea level, combined with the compression of the shorelands under the weight of the glacier, caused continual submergence of the coastline for the next 12,000 to 13,000 years. The rise in sea level, estimated to be from 75 to 80 feet, has submerged large numbers of these Paleo-Indian and later prehistoric sites (Witek 1992:31; Funk and Pfeiffer 1988:106-107).

Archaic Period (c.10,000 y.a. - 2,700 y.a.)

The warming trend at the end of the last glaciation completely transformed the northeastern coastal environment. Along the shore, the rapidly rising sea levels created barren islands, numerous bars and barrier ridges with open lagoons, bogs and broad mudflats difficult to traverse. The water and warmth, similar to today, would have promoted a dense insect population. "Present paleoenvironmental and archaeological data suggest that Paleo-Indian and earlier Archaic economies were based mainly on the hunting and gathering of interior food sources, particularly deer, nuts and freshwater fish. To this end, seasonal base camps were located around inland lakes and river falls. Shellfish

exploitation was a minor subsistence activity performed by task groups at special purpose, temporary campsites where the shellfish were processed and carried back to an interior base camp" (Lavin 1988:103-4).

As the Archaic Period progressed, the dwindling contribution of meltwater from disappearing glaciers and the reduced flow of streams and rivers promoted the formation of swamps and mudflats. These wetlands, like the one which once covered the project area, created a congenial environment for migratory waterfowl, and a host of edible plant species and shellfish. The new mixed hardwood forests of oak, hickory, chestnut, beech and elm attracted such mast-eating fauna as white-tailed deer, wild turkey, moose and beaver.

Although the Archaic diet was still based on hunting and gathering, due to the greater variety of plants available and exploited, excavated Archaic sites yield a wide array of plant processing tools, including grinding stones, mortars and pestles. The diagnostic tool was the grooved axe.

A number of middle to late Archaic shell midden excavations in the coastal areas have yielded data on temporary processing camps. The recovered tools and features have not produced unequivocal evidence of base camps along the southern New York shoreline (Lavin 1988:105). There is an argument, however, for a late, or terminal, Archaic shift from interior base camps to river drainage base camps.

By the late Archaic there were cooler climactic conditions following a warming trend, a decline in eustatic sea level rise, and a cessation of postglacial movements. "The end result was a dramatic reduction in the rate of sea level rise between 2,000 and 1,000 B.C. It promoted the development of extensive salt marshes along the coast and mouths of rivers" (Lavin 1988:108). These areas provided shellfish, small game, fish, salt hay and tuberous grasses, making larger more permanent settlements possible. Semi-nomadic life is still indicated, but wandering occurred within well-defined territorial limits, with seasonal movements between camps near exploitable resources. A dietary shift to shellfish in coastal New York near the end of the Archaic suggests a scarcity of large game, and a change from the early Archaic inland adaptation of forest hunting. Coastal sites show a principal reliance upon shellfish, especially oysters, hard and soft shell clams and bay scallops, which were easily gathered all around Long Island.

Characteristic of the Late Archaic were "fish-tailed" projectile points and soapstone bowls (Ritchie 1980:142,166, 167, 171). In contrast to conditions during the Paleo-Indian, Early and Middle Archaic, "by Late Archaic times sea level was so close to present levels that its subsequent small rise has failed to obliterate much of what remains on Long Island from that period"

(Gwynne 1982:192). Hence the Late Archaic Wading River complex, four sites on the north shore of Suffolk County, was found at the edge of a salt marsh, on dry ground ranging only two to seven feet above mean high water (Wyatt 1982:71).

Woodland Period (c.2,700 y.a. - 400 y.a.)

Pottery use became widespread following the use of soapstone vessels in the Late Archaic, and although copper tools were utilized during that period, the earliest copper ornaments, tubular beads, made their appearance during the Woodland. Stone or clay smoking pipes were also an Early Woodland innovation (Ritchie 1980:179-180).

Settlement patterns were substantially altered with the introduction of agriculture, the systematic cultivation of maize, beans and squash possibly beginning as early as 1000 A.D. During this time large villages within palisaded enclosures developed for the use of a semi-sedentary people, with groups moving seasonally, depending on exploitable food resources, between villages and camps of varying population concentrations. Preferred village/camp sites were in protected, elevated locations at the confluence of two water systems. "Nearly all the permanent sites are situated on tidal streams and bays on the second rise of ground above water." Despite the advent of agriculture, shellfish and small game remained an important component of the Woodland diet. Shellfish refuse heaps, termed "middens," reached immense proportions, covering from one to over three acres. Deer, turkey, raccoon, muskrat, ducks and other game were stalked with bow and arrows, replacing the spear and javelin, while dug-out boats, bone hooks, harpoons and nets with pebble sinkers were employed in fishing (Smith 1950:101; Ritchie 1980:180,267).

By the time of European settlement the project site was part of the tidal estuary of Paerdegat Creek, which wound its way to Jamaica Bay through the parcel. During the Paleo-Indian and the early Archaic periods the DEP Water Facility Project Site was most likely part of a barren mudflat system, providing little protection and/or resources other than oyster beds in the shallow bay waters. The subsequent stream and marsh biomes would have provided a resource-rich environment for Late Archaic, Woodland, and Contact Period Native American exploitation, with an abundance of fish, small mammals, waterfowl and also edible and useful reeds and shrubs. The stream was a ready source of fresh water, as well as providing water transportation routes. As outlined in the preceding section, Late Archaic and Woodland Indians preferred well-drained, elevated sites near a large-scale marsh biome. Although the project site provided a tempting natural resource, according to 19th-century maps, there were no dry loci providing sites for temporary camps or lithic processing areas after sea levels reached their relativel current status. (Figs. 8 and 10).

Archaeologists rely not only on past environmental components to assess site potential, but also on tales of "Indian relics," ethnographic accounts and published archaeological reports. At the time of the first European contact with Native Americans, the western end of Long Island is generally believed to have been inhabited by Munsee-speaking Canarsee Indians, members of the Delaware culture group. Historical narratives written by European travellers and settlers provide us with eyewitness descriptions of Indian customs and lifeways during the 17th century. Johannes de Laet, in his New World, or Description of West India, published in Holland in 1625 observed of the Canarsees:

> They were clothed in the skins of elk, foxes and other animals. Their canoes were made out of the bodies of trees; their arms were bows and arrows, and the arrows had sharp points of stone fastened to them with hard pitch (Thompson 1918:93-94).
>
> Some lead a wandering life, others live in bark houses, their furniture mainly mats and wooden dishes, stone hatchets, and stone pipes for smoking tobacco (Bolton 1972:16).

Contact with Europeans had far-reaching effects on Native American cultures. European goods such as metal and glass began to replace traditional materials, while warfare and European-introduced diseases against which the Indians had little protection decimated the population in the New York City area. This caused many groups to merge and remerge in complex ways in order to maintain viable communities. In 1670, Daniel Denton observed that the six towns on western Long Island had been reduced to two small villages (Thompson 1918:103). When the Canarsee are last mentioned in 1684 they are joined with the Rockaway and Massapequa groups. Although the Massapequa eventually moved further west on Long Island, many Canarsee lingered on at the fringes of European settlements until well into the 19th century (Grumet 1981:6-7).

Twentieth century research by Robert S. Grumet, Reginald Bolton and others into Indian toponyms, or place names, has revealed a strong Native American presence in the vicinity of the project area. One toponym is variously recorded as **Keskachane** (misread as Keskachauge - See Van Wyck 1924), **Keskaechquerem** and **Keshaechquereren**. The first of these appears on the 1639 Manatus Map, near the Flatlands settlement, with the legend, "In this sort of house live the wild [men?] Keskachane." A small drawing of a Canarsee longhouse, complete with curved roof was included. (See Fig. 5) Grumet's research suggests that Keskachane may have been the "council fire" or principal settlement of the Canarsee, but that the inhabitants may have been forced to abandon the area during the warfare of the early 1640s (Grumet 1981:18-19). Flatlands historians have long identified the site of Keskachane as the grounds of the Flatlands Dutch Reformed Church and graveyard

(at Kings Highway and Overbaugh Place, approximately 1.2 miles from the project parcel) (Van Wyck 1924:106-107; Ross 1903:313), and Bolton mentions the presence of an Indian burying-ground there (Bolton 1972:104). However, "No relics will be found here as all traces, save possibly a few shells have been obliterated" (O'Halloran 1950:64). This Canarsee settlement also lay at the intersection of two Indian paths. One of these, which became the route of present Kings Highway, passed about 2,000 feet northwest of the project site. This trail which connected Keskachane with other locations and Native American settlements to the east and west. The other path led north to the East River as well as south to Jamaica Bay. (See Fig. 3) A section of this road can also be seen on the 1873 map (Fig. 8), crossing the marshes to the shore of Bergen's Island, now known as Bergen Beach.

The Canarsee's maize fields, called as **Castuteeuw** (where grass is cut or mowed) were associated with the settlement, and have been identified as the three "flats" in the present Flatlands-Canarsie neighborhoods. The westernmost flat, the land of the original European patent, was called **Achtervelt** by the Dutch, and beginsapproximately one mile southwest of the project site marsh. (See Fig. 3 and compare Fig. 8) The other two begin about a mile east of the project lots in present Canarsie (Grumet 1981:7; Van Wyck 1924:15; Ross 1903 I:310).

Bergen's Island, known to the Canarsee as **Wimbaco** (a fine water place) or **Winnippague** (Grumet 1981:63), lies approximately one mile south of the project site, and has been identified as one of Long Island's largest centers of wampum production. Wampum, or sewan, were tiny (about 1/3" long) purple or white beads, the purple made from the shell of the quahog, or hard-shelled clam (**Mercenaria mercenaria**) and the white from the columella of the whelk (**Busycon sp.**). Since the purple beads could only be made from a small part of the clam shell, they were more highly prized. As John Josselyn wrote in 1633:

> there are two sorts, blue and white; the first is their gold and the latter their silver. These they work out of certain shells . . . They drill and string them to adorn the persons of their sagamores and principal men and young women . . . (Thompson 1918:113-114)

Presumably, wampum was manufactured by women, who cut, polished and bored the beads without the use of metal tools. Originally the beads were strung on sinew into belts and necklaces and exchanged between Indian groups as a show of good faith and friendship on important occasions. With the arrival of Europeans and the perennial lack of specie which plagued all of the American colonies, during the 17th century wampum was adopted by both the English and the Dutch as legal tender, and various colonial governors published rates of exchange between the beads and European currencies. Wampum was also highly prized by the Iroquois

of upstate New York, and its manufacture became a valuable industry 2for the Canarsee (Ibid.:116; Bolton 1972:100,102; Van Wyck 1924:108).

The wampum making center on Bergen Island, with its huge shell midden or refuse heap has been noted by many historians and archaeologists (Thompson 1918:124; Beauchamp 1978:79; Parker 1920:582; Stiles 1884:65). Bolton notes that there "are extensive shell beds on this island, and stone implements have been found there" (Bolton 1972:52). During the building of the Belt Parkway through the Bergen Beach area in the 1930s, archaeologist Ralph Solecki investigated the shell middens disturbed by the construction. (See Fig. 4) In 1950, another source describes the island as "about the only site left in the entire county where relics are still obtainable" (O'Halloran 1950:63). Other historians record the fact that Flatlands and its inhabitants mined the Bergen shell midden for fertilizer and road-building material as late as the 20th century (Van Wyck 1924:120; Thompson 1918:142).

Flatlands historian Frederick Van Wyck suggests that the wampum industry was centered on Bergen Island because of its easy defensibility. It was surrounded by water and swamp, and the elevated center of the island provided an excellent lookout. (See Fig. 8) The only land approach was past the Keskachane settlement, and the Canarsee men could form a line of defense across the flat, and place their women and children on the island (Van Wyck 1924:106-107). This scenario agrees with Daniel Denton's observation in 1670:

> In their wars they fight no pichtfields, but when they have notice of an enemie's approach, they endeavor to secure their wives and children upon some island, or in some thick swamp, and then with their guns and hatchets they way-lay their enemies . . . (Thompson 1918:105-105).

Another toponym, this time about a half mile to the north of the project site, was **Muskyttehool** or **Moshkeeto Hole** (place of rushes), a location, possibly a boundary at the intersection of the east-west Indian trail, now Kings Highway, and Paerdegat Creek (Grumet 1981:36-37; Bolton 1972:145). It may be significant that north of Moshkeeto Hole, the marsh is fresh water, and to the south, salt. (See Figs. 3, 8 and 12)

When the Canarsee abandoned their settlement at Keskachane during the 1640s, a large village site with an extensive planting field, also existed in the present Canarsie neighborhood, centered on East 92nd Street from Canarsie Beach Park to Avenue J (Bolton 1972:146). (See Fig. 3). This settlement area was on the second area of elevated ground east of Paerdegat Creek, once called Vischer's Hook or Canarsie Point (See Fig. 8), about a mile northeast of the project site. On the 1666 Hubbarde Map this area is labelled "Conarise Indian Field." (See Fig. 6) Immense piles

of shells have also been observed in Canarsie (Thompson 1918:124), and it is probable that wampum manufacture was associated with the Canarsie village as well.

A file search and sensitivity rating by the New York State Museum and the Division for Historic Preservation New York State Parks and Recreation (NYSPR), has identified four prehistoric sites, referred to by New York State Museum inventory numbers (NYSM#), within a one-mile radius of the proposed Paerdegat Basin Water Quality Facility Site. (See Appendix A) Two of these sites have been discussed above. NYSM#7391 (A.C. Parker Kings#3B)[1] refers to the "immense shell heaps" at Bergen Island, and NYSM#7390 (A.C. Parker Kings#3A) to the ones in Canarsie which were a center of Canarsee wampum manufacture. A Native American campsite, NYSM#3610 (no Parker #), was identified in Canarsie, within the area already identified as the Canarsee shell midden, planting fields and settlement. The fourth site identified, a Woodland Period shell midden and burials (NYSM 3608, A.C. Parker Kings#4), is not in Flatlands, but "on Avenue U, and near Ryder's pond and Sheepshead Bay" (Parker 1920:582). Avenue U in the Sheepshead Bay section of Brooklyn is approximately 3 miles southwest of the project lots. The NYSPR also identifies the Canarsee settlement in present Canarsie, which was discussed above. The museum's sensitivity rating, "HIGH PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA" is based on the presence of the above listed prehistoric sites in the vicinity of the project site, and the possibility that submerged prehistoric deposits may be intact beneath a layer of fill.

There is strong evidence of a Native American presence in the areas on all sides of the project site, as evidenced by the series of toponyms, and the siting of two Indian villages and shell middens within approximately 1.2 miles of the project site. However, based on topographical factors, the daily tidal inundation of the swampy Paerdegat Basin Site would not have presented an attractive environment for prehistoric Americans. The documentary and cartographic evidence is supported by the data from borings done on and around the project site. These show a thick layer of fill over the prehistoric and early historical surface, with the water table extending up into the fill layer. (See Appendix B) Although the rich resources of the creek and salt marsh environment, as described in the preceding pages, would have been exploited by Native Americans, the nearby presence of abundant level, dry ground in close proximity to these resources would have precluded the project site's use as a camp site and even a shellfish harvesting or lithic processing center. It is no coincidence that the major Canarsee centers were located on the

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[1]These numbers refer to site descriptions in Arthur C. Parker's 1920 work "The Archaeological History of New York" (Parker 1920:471-743).

dry, elevated flats where the European settlements of Canarsie and Flatlands first developed. Although the shell middens of Bergen Island are located in an area that was marshy, Bergen Island provided adjacent elevated ground for habitation and processing sites. The project area's salt marsh would have provided many resources to Native Americans, but oysters, clams, scallops, mussels and whelk were not among them. The collection of these saltwater bi- and uni-valves would have required a journey to the shores of Jamaica Bay, where their environmental requirements, such as still water, a large flat breeding and living area, and salt content, etc. were met. It is unlikely that prehistoric Americans would have transported their shellfish over one mile from Jamaica Bay to process them in a third, swampy location, before returning to their settlements. It is also unlikely that a shell midden, which might be several feet thick and range in size from one to three acres, has gone unnoticed over the centuries. In addition, no trace of the existence of even a small shell midden is evident in the borings done in and around the project lots. (See Appendix B)

The project site's potential for hosting prehistoric archaeological resources along with the available evidence showing the extent and impact of subsequent subsurface disturbance will be discussed further at the end of the Historical Period section (IV) and in Conclusions and Recommendations (Section V).

IV. HISTORICAL PERIOD

The 17th and 18th Centuries

The first recorded European landowners of the project area were Andries Hudde and his partner Wolfert Gerritsen,[2] who in 1636 purchased, under questionable legal circumstances, about 3,600 acres in the project area from two "chiefs," Penhawitz and Kakapeteyno, and their party of seven Indians. Apparently the meadowlands and the project site were included in the grant along with the high ground west of the marsh. Hudde was a member of Governor-General Wouter van Twiller's council, and seems to have used his political clout to secure illegal ownership of the desirable lands. In 1630 Gerritsen became the overseer of farms for the private colony or **patroonship** of Rennselaerswyck (Van Wyck 1924:15-16; Brodhead 1853:201,223,265).

The existence of several European place names in the study area suggests that undocumented and unauthorized settlement preceded this land grant. Most notable and relevant of these toponyms is Bestavaer's Kill, which is the early name for the Paerdegat outlet which ran through the study site (Van Wyck 1924:18). (See Fig. 6, where the Dutch name is transcribed as something akin to Bessdfatheres, a surname.) Brooklyn historian Henry Stiles wrote that "some rude settlement was probably formed here [Flatlands] as early as 1624" (Stiles 1884:65).

Hudde and Gerritsen's property was called **Achtervelt** (Dutch: beyond the plains), because as one approached it from New Amsterdam one had to pass through a prairie-like area (Stiles 1884:65). Apparently the partners hired someone else to begin farming their lands, because a 1638 inventory of their property describes the house of Teunis G. Bergen, a barn and a "bergh" - a peaked roof on posts for keeping hay dry. The roof could be raised or lowered as 22the haystack grew or diminished. These wooden buildings, approximately 1.2 miles west of the project site were surrounded by a protective palisade (Ostrander 1894:54). About 33 acres had been sown with "summer and winter grain" and a garden had been planted with fruit trees. Along with cattle, horses and farming implements, a yawl was listed, which could have been used to navigate through the project site (Van Wyck 1924:85). The 1639 "Manatus Map" shows "2 plantations and 2 farms of Wolfert Geritsz. and 2 of his partner."[3] Three buildings are identifiable, two of which have an attached bergh, and are probably barns or combination

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[2]Many Dutch employed patronymic surnames throughout the 17th century. Wolfert's father's given name was Gerrit, and by custom his son's "last name" would have been Gerritsen. Gerritsen's descendants eventually adopted the surname Kouwenhoven.

[3]A plantation was an unestablished but developing farm.

barn/dwellings, and the third could be a dwelling. (See Fig. 5) These structures, approximately 1.2 miles west of the study parcel, became the center of a settlement called Nieuw Amersfoordt, named for the Amersfoort near Utrecht where Gerritsen was born (Ibid.:15). Hudde was never a resident, and sold his interest to Gerritsen in 1647 (Ibid.:15,84). By the time the Hubbarde Map was drawn in 1666, the village had at least 22 structures (See Fig. 6), including the octagonal Dutch church which was completed in 1663 to house the congregation founded in 1654. The church was rebuilt on the same site in 1794 and 1848 (Stiles 1884:73), and still stands 1.2 miles west of the project site, at 3931 Kings Highway, between present Flatbush Avenue and East 40th Street. (See Photos 11 and 12) A school was also established, first mentioned when it was already fully-functioning in 1675. In *circa* 1694 the schoolhouse stood in what was and continues to be the burial ground of the church (Ibid.:75).

Until the 20th century, the project site and its surrounding area were salt meadow and creek bed. However, during the 17th and 18th centuries, this meadowland was considered very valuable. The harvested salt grasses were an important source of much-needed feed for domestic animals. The creeks were important for fishing and transportation. As visitors to Flatlands commented in 1679:

> There is toward the sea, a large piece of low flat land which is overflown at every tide, like the schorr [marsh] with us, miry and muddy at the bottom, and which produces a species of hard salt grass or reed grass. Such a place they call valey and mow it for hay, which cattle[4] would rather eat than fresh hay or grass. It is so hard they cannot mow it with a common scythe, like ours, but must have the English scythe for the purpose.
>
> All the land from the bay to 't Vlacke Bos [Flatbush] is low and level, without the least elevation.
>
> There is also a tract which is somewhat large, of a kind of heath, on which sheep could graze . . . This meadow, like all the others, is well provided with good creeks which are navigable and very serviceable for fisheries. (Van Wyck 1924:183; Dankers and Sluyter 1966:131).

Existing historical maps do not make any distinction between these two types of meadowland. Although the 1666 map shows a road connecting Flatlands with the adjacent village of Flatbush to the north (See Fig. 6), a path along the western shore of Paerdegat Creek was probably the only route to the east, until the King's Highway was built in 1704. The creek, now a basin, got its name because it drained a small pond, the Paerdegat. In Dutch,

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[4]"Cattle" refers to livestock, rather than simply bovines.

Paerdegat means horse hole, possibly a watering place for animals. Flatlands historian Frederick Van Wyck translated the term as horse gate, referring to the road along the creek, which became a bone of contention when Flatbush obstructed the path by fencing the surrounding lands during the 17th century (Van Wyck 1924:73-73). As noted above, the creek was also called Bestevaer's Kill, and later, Bedford Creek, since it began in Flatbush, for a time called Bedford. (See Fig. 8)

Flatlands underwent very little disturbance from the English conquest of New Netherland (1664). The English presence may have hastened the displacement of the settlement's Dutch name with the topographically descriptive term, Flatlands. The first English governor, Richard Nicholls, provided the town of "Amersfoort, alias Flatlands" with a charter, although Flatlands historians, jealous of the antiquity of their settlement, point out that the document recognized the existence of the town and did not create a new municipality. In 1667, Nicholls also confirmed the ownership of the Hudde/Gerritsen patent to Elbert Elbertsen Stoothoff, who had married the widow of Wolfert Gerritsen van Kouwenhoven's eldest son (Van Wyck 1924:16; Ross 1903:310,311). Stoothoff was required to raise and educate his Kouwenhoven stepchildren (Stiles 1888:66), who must certainly have inherited shares of their family's original estate, given the presence of Kouwenhoven landowners in the project area until at least 1899. (See Figs. 8 and 11)

The reason for the lack of disruption during the change of government was for the simple reason that the Flatlands settlers were farmers and artisans, not merchants with extensive trading contacts. They did prosper, and expanded their farmlands by acquiring the property on the east side of Paerdegat Creek in 1665. This area, called Varkin's Hook (Pig's Point), was a finger of elevated land between the Paerdegat swamp and the swamp around the European Canarsie settlement (See Figs. 6, 8 and 10) By 1683 there were 1,683 acres under cultivation in the town, and in 1698 the population of Flatlands was 256. The farm work was accomplished with the toil of 40 African slaves. Slave ownership was common among the 17th-century Dutch settlers. Of 37 families in Flatlands in 1698, 20 owned at least one slave, and the largest number in any family was five (Stiles 1884:68-69).

During the American Revolution, British and Hessian troops passed through the settlement in August of 1776, plundering most houses of foodstuffs. However, no troops were quartered there, and only a single guard was left in the town until the end of the war (Stiles 1884:70,72,73). Church services and school classes continued without interruption throughout the British 'occupation' (Ostrander 1918 II:33).

Several houses dating from the 17th and 18th centuries have survived until the present in the vicinity of the project area, of which the closest and most notable is the Pieter Claesen Wyckoff

House, built c.1641, which may be the oldest building in New York City (Willensky and White 19:715-716) (Clarendon Road and Ralph Avenue, about 0.9 miles north of the study parcel #4 on map in Appendix A). A file search conducted by the New York State Historic Trust Office of Parks and Recreation has identified six additional historical house sites, all approximately one mile away from the study lots. These file search results are included in Appendix A. The Van Wicklen Cottage and Mill Site (A047-01-0123, #5 on map), is incorrectly placed at the "Along Paerdegat Basin (near foot of former Crescent Street)." The Van Wicklen site is on Spring Creek in the adjacent town of New Lots, near the foot of **present** Crescent Street, approximately 3 miles to the northeast (Kearns, Kirkorian and Schaefer 1988:16-17,19-20).

The 19th and 20th Centuries

Flatlands retained its agricultural character throughout the 19th century, and during this period the salt meadows of the project area remained relatively unaffected. However there is a discernable change in perspective toward the marshes by the 19th century:

> Along the shore of Jamaica bay is an extensive salt marsh, which yields an abundance of hay of an inferior quality. With the exception of this marsh, their are no wastelands, the whole being divided into well cultivated and productive farms (Bailey 1840:34).

The marsh had become wasteland, and obviously the salt grasses had been replaced as a source of animal fodder. Still, unlike other areas of Kings County, the population of Flatlands was not expanding so rapidly that landowners felt it was necessary or profitable to fill in the meadows. When the 1859 and 1873 maps are compared, there is no significant change in the extent of the project area marshes. (See Figs. 7 and 8) The isolation of Flatlands is also exhibited in the still strong Dutch cultural presence c.1840. Many residents of the town still employed the Dutch language in their private conversations (Bailey 1840:36).

The first construction episode adjacent to the project site was the building of present Flatlands Avenue, which occurred by 1873 (See Fig. 8), forming the northern boundary of the project site. By the last decade of the 19th century, an ambitious street grid had been mapped out on the study lots, including Ralph Avenue and Avenue K. Paerdegat Avenue was also planned to run through the project site, along the western shore of the proposed Paerdegat Basin, which was not dredged until well into the 20th century. Early attempts to 'reclaim' the marshlands are evident in the presence of a drainage ditch to Paerdegat Creek which was dug by 1899, and the construction of a road to provide access to the ditch. (See Fig. 9)

In 1899 the project site was divided between the Ditmas estate, Peter G. Kouwenhoven and the Brooklyn Development Co., which had acquired the property directly east of the creek from the heirs of C. B. Kouwenhoven. (See Fig. 11) That a development company should be interested in these lands was the first sign of the impending destruction of the salt marsh environment. This was certainly encouraged by the growth brought to Flatlands by its absorption into Brooklyn in 1896, and of Kings County by New York City just two years later (Thompson 1918:146). The expanding population of Kings County required more efficient methods of eliminating its liquid and solid wastes, and the now useless marshes along the shore of Jamaica Bay were a convenient outlet for sewage. By 1907 a sewage outlet, complete with watchman's house had been constructed adjacent to the project site, at the intersection of Ralph and Flatlands Avenues, astride Paerdegat Creek. It discharged wastes directly into the little stream, and therefore into the wetlands. (See Fig. 13) A certain amount of filling must have been done prior to its construction, since that area was previously swamp. The structure was replaced by 1933, when a 2-story sewage pumping station, near the corner of Flatlands and Ralph Avenues (Block 8338 Lot 300) was erected. The pumping station was the first building on the project site, and is still in use today. (See Fig. 17) Another addition in the vicinity of the project site was an incinerator built in 1929. The "Brooklyn Ash Removal Co: Inc." complex was located on the block bounded by Flatlands Avenue, Avenue J, East 57th and 58th Streets, about 750 feet west of the project site. It was closed by the Department of Sanitation in a budget tightening effort in 1958 (Newton 1958). A Department of Transportation Bureau of Highways garage facility was built c. 1940 along Flatlands Avenue just east of the project site.

The atmosphere created by these facilities was not conducive to residential development in the vicinity. During the 1930s the Bergen Beach area to the south was the home to "pathetic communities of squatters, who live in makeshift houses, and eke out a living by fishing and scouring the near-by city dumps for odd necessities" (WPA 1939:502). Squatters were still present in the 1950s, when a small group of families were discovered living along Paerdegat Basin approximately 4,000 feet south of the project site, between Avenues U and V. One of the soon-to-be-evicted squatters claimed to have lived in his one-room frame shack for 20 years (New York World-Tribune 1956).

The transformation of Paerdegat Creek into Paerdegat Basin was part of a grandiose design for the development of Jamaica Bay as a deep water port, which had been proposed as early as 1890. (See Fig. 9) All the marshes were to be filled in with incinerator ash and refuse, and a series of basins were to be created to provide bulkhead and dock space. Many of the project area borings, especially borings 1 and 2, show large amounts of cinders in the fill. (See Appendix B) Although work on the basins was begun in

1912, a 1924 aerial photograph shows the creek intact (City of New York 1924:23a). By the last dredging episode in 1932 the first 2,000 feet of Paerdegat Basin at the bulkhead end had been dredged to 16 feet below mean low water, creating a channel 450 feet wide and 6,675 feet long (Hazen and Sawyer 1991:21-23), more than twice as wide as the 200-foot-wide basin shown in the 19th-century maps. (See Figs 9 and 11) It is not clear whether the dredged material was also piled in the project area to form the dry, elevated areas that presently exist on the project site. Apparently, the shores of the basin were never adequately filled, or the bulkheads have deteriorated greatly because sections of Block 8338 Lot 1 are still below the mean high water level, which is not noted in the insurance maps (Compare Figs. 15b, 15c and Fig. 17) Through the present, the deserted shores of the basin have been plagued by illegal dumping, and the whole Bay waterfront marred by the sewage odors emanating from the polluted water. Attempts at housing development directly east of the basin in Canarsie have been hampered because many of the structures began sinking into the formerly swampy ground. As a result, many apparently sound homes remain unsold (Connie Kaplan, personal communication, 5-27-93).

Between 1950 and the present, the project site section of Block 8338 Lot 1 was being utilized to store "Used Lumber," and boats, as well as hosting several structures, used for nursery sales and boat repair and sales. Two trailers are also present on Lot 1, on a dirt road running east from Ralph Avenue. They are used as the "City of New York Department of Transportation Bureau of Highway Operations Resident Engineers Office." During the 1960s there was a golf driving range on Lot 1, east of the intersection of Bergen Avenue and Avenue K. (See Figs. 16a and 16b) The other sections of the project site are still occupied by the Sewage pumping station, its parking and storage.

Building History

This building history of the Paerdegat Basin Water Quality Facility Site is based on historical maps and atlases, as well as on Brooklyn Sewer Records. Unfortunately, all relevant Building Department records for Block 8338, Lots 1 and 300 and Block 8012 Lot 400 have been either lost or destroyed. It should be remembered that only the section of Lot 1 north of Avenue K, and the section of Lot 400 bounded by Paerdegat Basin, Flatlands Avenue, Block 8338 and the property around the Bureau of Highways garage is included in the study parcel.

Block 8338 Lot 1 (Bounded by Bergen Avenue, Paerdegat Basin, Ralph Avenue and Flatlands Avenue, and Lot 300)

The construction of a drainage ditch across the project site and a short road to the ditch are the only recorded pre-filling construction episodes. (See Fig. 11)

No structures are recorded on this lot until 1950, when a three-sided shed appears, related to the used lumber storage that still occupies the part of the northern section of this lot. This shed was no longer present in 1962, but the used lumber yard was still in existence. (See Figs. 14 and 15a) At that time four structures appear along the lumberyard's Ralph Avenue frontage: a wooden shed, two sheet metal buildings which were probably sheds, and a 1-story L-shaped, concrete, corrugated metal, and shingled structure (which still stands, although it does not appear on the 1992 map - see Fig. 17). The sign on the building reads, "M. Grossman Lumber Co."

By 1962, the lot was being utilized for a variety of activities. Along Ralph Avenue, adjacent to the lumberyard on the north, a plant nursery was active. The nursery maintained two large hot houses, with the southern one connected to a 1-story clapboard building. Open-air earth and gravel storage were to the south of this structure, near the lumberyard, and north of the same building, on a "concrete slab." (See Fig 15a) Although these buildings do not appear on the maps after 1977, (See Figs. 16a and 17) part of the complex still stands on the project site, partially obscured by the dense growth. As of 1990, the leaseholder for this property was listed as "Fred Arbeitman (nursery)" (City of New York 1990). A small 1-story cinder block building was erected on Ralph Avenue, south of the original nursery buildings between 1962 and 1977. (See Fig.16a) This stuccoed structure, at 1901 Ralph Avenue, is presently being used for (plant) nursery sales.

To the south of the Grossman Co. building, two structures, which first appear in 1977, were also involved in nursery sales. (See Fig. 16b) One was an open-sided structure about 300 feet long. Remains of a decayed section of this long frame and open building are still standing. The smaller 1-story frame building to the east, with asbestos shingles, is also extant. Neither appears on the 1992 map. (See Fig. 17)

In the southwestern corner of Lot 1, near the intersection of Avenue K and Bergen Avenue, a golf practice range was created by 1962 - basically a flattened hill with an elevation of between 18' and 19'- as compared with the immediately adjacent sections of the study lot which range between 11.4' and 14.2'. (See Fig. 15c) The hill is littered with building debris - fragments of bricks, concrete, ceramic pipe, etc.

Near the high water line, which extends about 50' west of Paerdegat Basin's western pierhead and bulkhead line boat storage and repair business structures were erected. These were: a 1-story metal shed, approximately 80' by 20'; underground gas tanks; a small wooden shed and metal signpost. (See Fig. 15c) Approximately 120' further north was an additional metal shed, which appears to have been related to the boat business. A series of wood piles, docks and ramps extended to the water through the still marshy sections of the lot. (See Fig. 15b) A portion of the boat repair building, since c.1977 reconfigured into an L-shape, (See Figs. 16b and 17) stands on the still marshy section of the project site, and the supporting piers appear to be deteriorating. (See Photo 4)

The northern corner of Lot 1 was traversed by sewer connections between the storm sewer lines on Flatlands Avenue and Paerdegat Basin, as well as those between the "Reg. chamber housing - conc. platform" an installation which is shown on this section of the project lot in 1962 only, and the sewer lines on Ralph Avenue. (See Fig. 15a and 18)

Block 8338 Lot 300 (Bounded by Flatlands Avenue, Lot 1, Block 8012 Lot 400 and Paerdegat Basin)

The first structure on this lot was the Sewage Pumping Station on Flatlands Avenue, erected in 1933. This building will remain on the project site. (See Photos 1 and 2) No other aboveground buildings have been built here, although several sewer lines run through the lot. (See Fig. 18) A 138" storm sewer crosses the northern corner of adjacent Lot 1 and passes through the southwest

corner of Lot 300, emptying in to the basin. The grates of this line's gate chamber are presently visible in the southern section of the lot. (See Photo 4)

A second sewer line takes the flow of 186" and 168" storm sewers and a 108" combined sewer, running on both sides of the eastern boundary of Lot 300 with Lot 400, from Flatlands Avenue to Paerdegat Basin. Also, a 72" and 48" sanitary sewer passes through the northeastern and northwestern corners of Lot 300 connecting the Flatlands Avenue lines with the pumping station. There is also a 24" bypass line which appears to be under the sidewalk in front of the station. (See Fig. 18)

Block 8012 Lot 400 (Bounded by Block 8338 Lot 300, Flatlands Avenue, Paerdegat Basin and the remainder of Lot 400)

The first structures appear by 1950. (See Fig 14) The Department of Public Works erected a 1-story concrete block chlorine storage building with a control room near the edge of the basin. Although this structure appears on all subsequent maps (See Fig. 17), it is no longer extant. All that remains is its concrete slab base. (See Photo 3)

Also appearing in 1950 is a 1-story structure along Flatlands Avenue. This structure disappears by 1977. (Compare Figs. 14 and 16a) It is replaced by six structures along Flatlands Avenue. Two are labelled "iron," but most are drawn as three- or open-sided buildings, probably sheds. (See Fig. 16a) Although two of these (in the northeastern corner of the project site) still appear on the 1992 map, (See Fig. 17) the project site section of Block 8012 has no aboveground structures, and the area is used for parking and container storage.

Two sewer lines cross Lot 400, a major outlet to Paerdegat Basin which runs along both sides of the lot's entire western boundary with Block 8338 Lot 300. Discussed above, it funnels two 186" storm sewers and a 108" combined sewer into the basin. A second line passes through the northwest corner of the lot, connecting a sanitary sewer with the pumping station. (See Fig. 18)

Bergen Avenue (Eastern half, between Ralph Avenue, Avenue K and Block 8338 Lot 300)

Aside from a 19th century drainage ditch which crossed proposed Bergen Avenue (See Fig. 11), there is no evidence of construction ever occurring in the project site section of the proposed Bergen Avenue.

V. CONCLUSIONS AND RECOMMENDATIONS

Historical Potential and Recommendations

Although many important historical structures and sites have survived in the Flatlands and Canarsie areas, none is closer than 0.9 miles to the project site (See Appendix A), and none will be adversely affected by the proposed project. In addition, there is no documented historical residential occupation of the project site, and no non-residential occupation during the historical period until the construction of the Sewage Pumping Station in 1933. The modern structures then erected, mostly small commercial sheds and buildings post-dating 1950, and their remains, are not unique, and any archaeological information they would provide is available from documentary research.

There is no evidence to warrant further archaeological testing, field investigation or monitoring for archaeological deposits from the historical period.

Prehistoric Potential and Recommendations

Overwhelming evidence exists that Native Americans exploited the natural resources of western Long Island for thousands of years before the arrival of Europeans. It is also clear that the tidal marshland of which the proposed Paerdegat Basin Water Quality Facility Site is a part, offered a changing eco-zone profile for Native American exploitation over time. During the Paleo-Indian and early Archaic times, the site offered a landform for a temporary processing center for oyster harvesting. Subsequent Late Archaic and Woodland Indians would have exploited the site as an extremely rich source of food and raw materials. The presence of Indian toponyms (including Castuteeuw and Muskyttehool), planting fields and three important Canarsee settlements (Keskachane, Wimbaco and Canarsee) within a 1.5 mile radius to the north, south, east and west argue strongly for a prehistoric human presence in the immediate vicinity of the project site during the time of initial European contact. (See Fig. 3)

As described in the discussion of the prehistoric period, this evidence does not rely only on 17th-century documentary evidence of obscure place names, but the work of many historians and archaeologists (Benjamin Thompson, Frederick Van Wyck, William Beauchamp, Arthur Parker, and Reginald Bolton) who have painstakingly recorded the past and contemporary unearthing of "Indian relics" in Canarsie, Bergen Beach (Wimbaco) and Flatlands (Keskachane), and carried out excavations, such as Ralph Solecki's investigations along the route of the Belt Parkway near Jamaica Bay (Wimbaco and Canarsee - See Fig. 4 and Appendix A).

Settlement pattern data of the prehistoric culture periods reveal a strong correlation between habitation and processing sites and the confluence of two water courses, proximity to a major waterway, a marsh resource and/or well-drained, elevated land. In many cases prehistorically, a filled-in meander channel provided a habitation site for later peoople desiring to live close to an existing stream channel (McWeeney 1991:91). A review of the cartographic and historical evidence confirms that some of these criteria are met in the project site, namely, the presence of a marshland and of Paerdegat Creek. However, despite these assets which would have proven attractive to Native Americans, most of the site, itself a tidal wetland, can not be, and historically has never been, described as elevated or well-drained land. Four of the six borings on the project site (See Appendix B: 1, 2, B26, B27) indicate a layer of modern fill of between 10′ and 15′ thick, with the water table seeping several feet into the fill layer.

The fifth (B25) and the sixth borings (B13) which are adjacent, are the only two borings which do not conform to this pattern. Both exhibit large layers of fill, 10′ and 13′, respectively. However, between the water table and the fill are 4.5′ to 6.5′ of sand and silt. If the Borings Location Map (Appendix B) and Figure 11 are compared, it is evident that these two borings encountered the disturbance caused by the excavation of the drainage ditch and the construction of the small path c.1899, the only documented pre-fill disturbances. The presence of silt also suggests swift-running water which might be found in a rivulet or drainage channel, rather than the peat layers in the neighboring borings which indicate still water.

The other 17 borings, taken in the vicinity of the project site, provide a profile similar to the first four, with a fill layer ranging from 12′ (C9) to 20′ (C1) feet thick, and extending below the water level. Beneath the fill is often a layer of peat. Although it is likely that the estuarine resources of the site were tapped, these numbers indicate a project site that was too inundated a setting for an Indian campsite or processing station during the late Archaic and Woodland periods. The New York State Museum bases its "high probability" rating on the possibility that "if near water or deeply buried, materials may occur submerged below the water table," which suggests the combined action of rising sea levels and the compressing of prehistoric layers by heavy fill. However, the project site was recorded as a low-lying area, long before the introduction of fill. Prior to inundation, it is possible that it could have been an elevated site; however, because of the historically documented flatness of the project area and its vicinity, this would have created a dry plain, traversed by a few creeks. This sort of environment, from what we know of prehistoric settlement patterns, would not been a substantive habitation site preferred by Native Americans. It is possible that the site was used as a temporary shellfish processing station during times of a lowered sea level.

Although the lack of Building Department records makes it difficult to describe the extent of disturbance to the original project site surface, the depth of disturbance may be inferred from our knowledge of historical site conditions, and the types of structures that were erected there during the 20th century. Archaeologists often refer to a layer of fill as a "protective layer," because the fill absorbs the brunt of construction disturbance, and leaves the more deeply buried archaeological remains untouched. Because of the presence of a thick fill layer on the Paerdegat Basin site, the large number of historical construction intrusions have caused little disturbance to the pre-fill surface of the project lots. Except for the Sewage Pumping Station, all the buildings have been single story frame or concrete block structures, many of them little more than sheds, with metal walls, or no walls at all. Even the former chlorine storage structure sat on a concrete slab. (See Photo 3) Foundations for such structures rarely penetrate beyond four feet, and basements rarely beyond ten feet. The borings show no fill layer thinner than 11'. Basements deeper than this would have been impractical, given the high water table. Basements would have been possible in areas of particularly deep fill, but again, this excavation would not have penetrated the pre-fill surface. Because of the size and massiveness of the Pumping Station, piles were certainly necessary, given the swampy nature of the original surface, and the above mentioned sinking of the recently-built dwellings on the same sort of swampland in Canarsie (Connie Kaplan, personal communication, 5-27-93).

The most extensive disturbance to the prehistoric surface is probably the sewer lines which cross the northeast corner of the project area, mainly on Lots 300 and 400. It is inconceivable that the line which receives the combined flow of a 186" (15.5'), 168" (14') and 108 (9') sewer, would not cause below-fill disturbance even in an area with eleven feet of fill (Borings 1 and 2, Appendix B). Furthermore, although sections of these sewer lines might be just below the present ground surface, at least their discharge openings into Paerdegat Basin would be substantially lower - at water level, given the existence of tide gate chambers on some of the sewer lines. (See Figs. 15a and 18) In addition, sewer lines would also require piles to prevent their sinking and rupturing from stress.

According to this scenario, aside from the 19th century drainage ditch and path, (See Fig. 11) disturbance is confined to Block 8338 Lot 300 and the northeast corner of Lot 1, as well as the western and northern sections of Block 8012 Lot 400. These areas are all beneath sewer lines and the pumping station, and except for the T-shaped "Reg. chamber" at the corner of Flatlands and Ralph Avenues, (See Fig. 15a) are delineated on the Brooklyn Sewer Records Map. (See Fig. 18)

The evaluation of historical disturbance indicates that large sections of the project site may be intact beneath a protective fill layer. It is possible that during the Paleo-Indian and early Archaic periods the project site area, exposed due to a lower sea level, could have supported a temporary shellfish processing station. Although the low-lying and inundated nature of the project site would have precluded habitation or processing sites during the late Archaic and Woodland periods, the salt marsh once there offered resources that certainly would have attracted Native American hunting, fishing, and gathering expeditions. It is possible that such a marginal area would have been used for refuse disposal up until the time of European contact.

These activities would result in limited processing resources from the earlier periods and only the stray lost or discarded artifact from the later periods, which, out of context, would provide little or no useful information regarding Indian culture, lifeways, or settlement patterns. The time, cost, and effort expended for support sheeting and dewatering in order to locate and excavate prehistoric cultural resources from any time period buried beneath at least 10' of fill and below the water table, as well as the danger to personnel involved, is not recommended without a closer examination of subsurface conditions. The limited probability of finding intact, substantive submerged deposits is not sufficient at this time to warrant archaeological field investigations.

Archaeological analysis of scheduled soil boring tests, to be conducted on the Water Facility site for foundation design purposes, would assist in determining the viability of further consideration for prehistoric cultural resources. Analysis of the test logs would aid in determining the degree and extent of actual disturbance by the installation of catch basins and sewers as well as dredging activities. Also, the test logs might include information on the presence/absence of a shellfish midden. More likely, the test borings would identify the areal extent and depth of a peat lens - indicating the presence of a marsh shoreline. Salt marshes may build up peat deposits as sea level rises. Generally, such a distinct lens of peat revealed in borings is interpreted by archaeologists as an indicator of a potential environmental resource base that would have been exploited by prehistoric peoples.

"Salt marshes are dynamic environments. Tides continually carry organic material (such as drift wood) from unknown contexts into the marsh; storms can deposit foreign material on and in the marsh; and ice movement can displace blocks of marsh peat. Tidal channels meander continually, eroding and redepositing material. As the marsh grows in depth with sea-level rise...its original relationship to sea level is distorted. Finally, some sampling techniques can displace or compact peat in the coring process" (Kellogg 1988:86). Each of these "distortion" factors must be

taken into consideration when interpreting the test results for archaeological indicators.

Although there is only limited potential for substantive prehistoric resources on the DEP site, the archaeological analysis and interpretation of soil boring tests to be conducted on the DEP site would assist in determining the advisability of archaeological monitoring of construction activities in the future. It is recommended that a large diameter core, continuous-tube soil sample (affording a minimum of compaction or distortion) be taken on the Water Facility site from the current grade through the first five feet beneath landfill deposits. Should the analysis of the boring logs indicate the site may host substantive prehistoric resources then a further testing program would be developed in coordination with the Landmarks Preservation Commission.

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1916
1931
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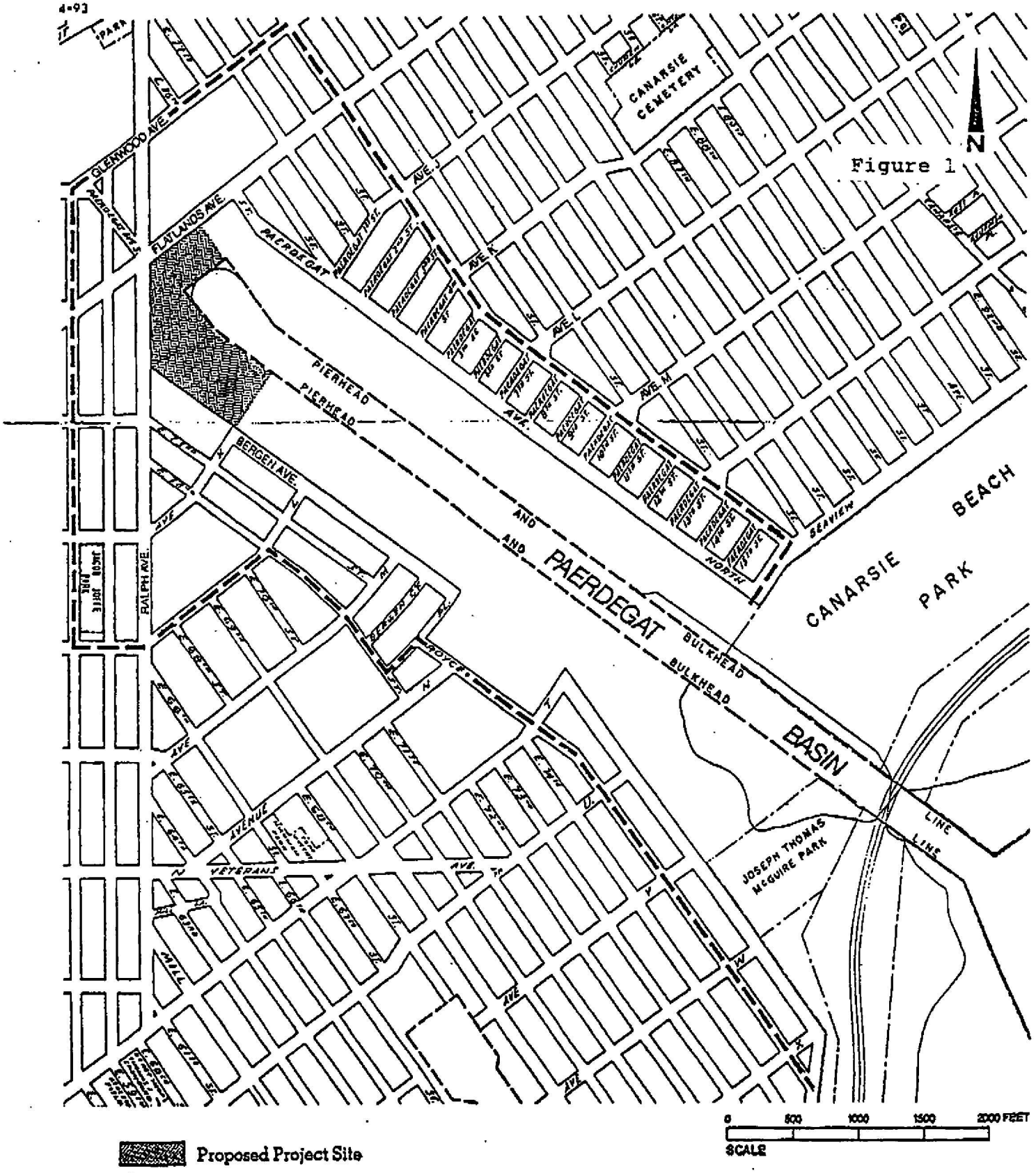
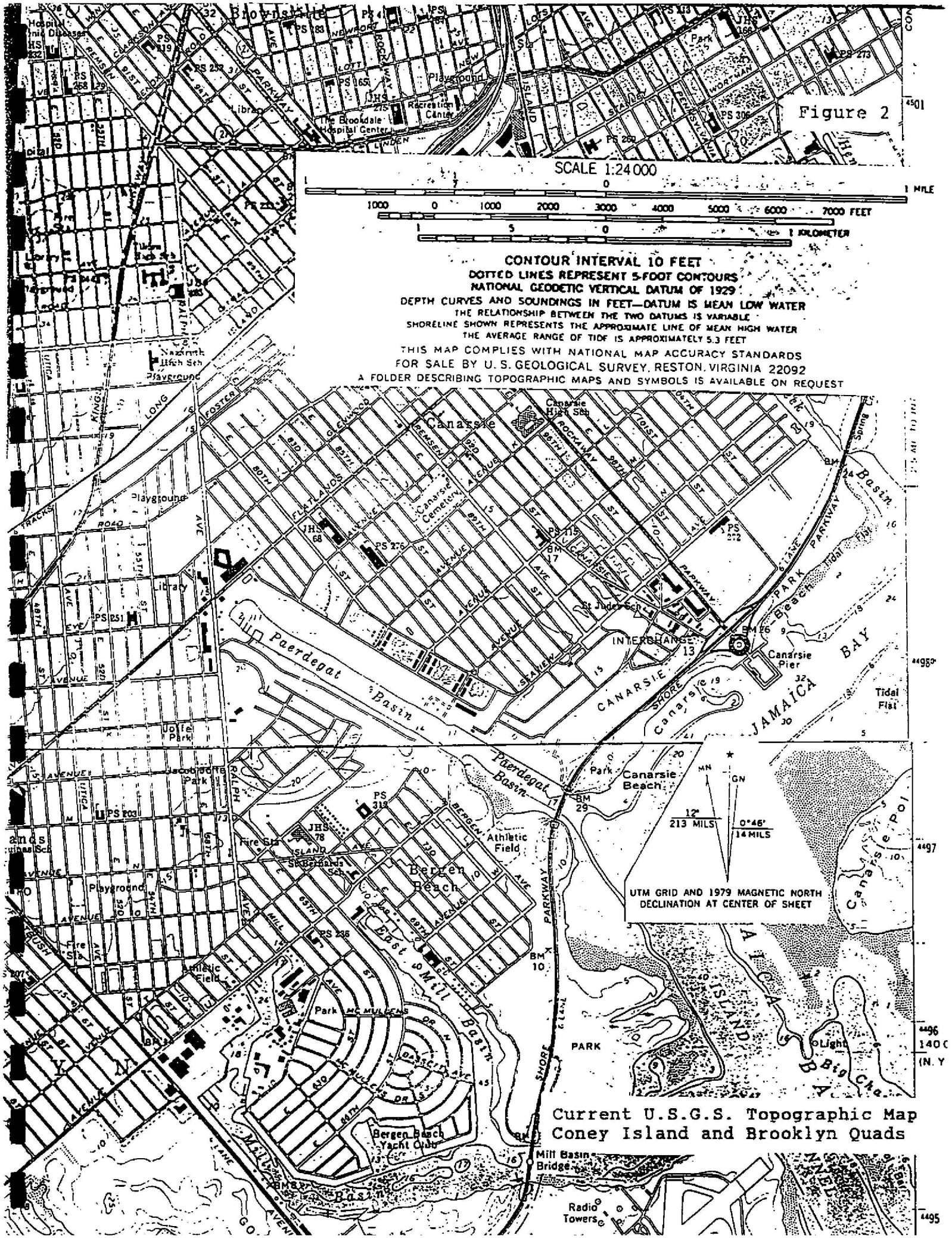
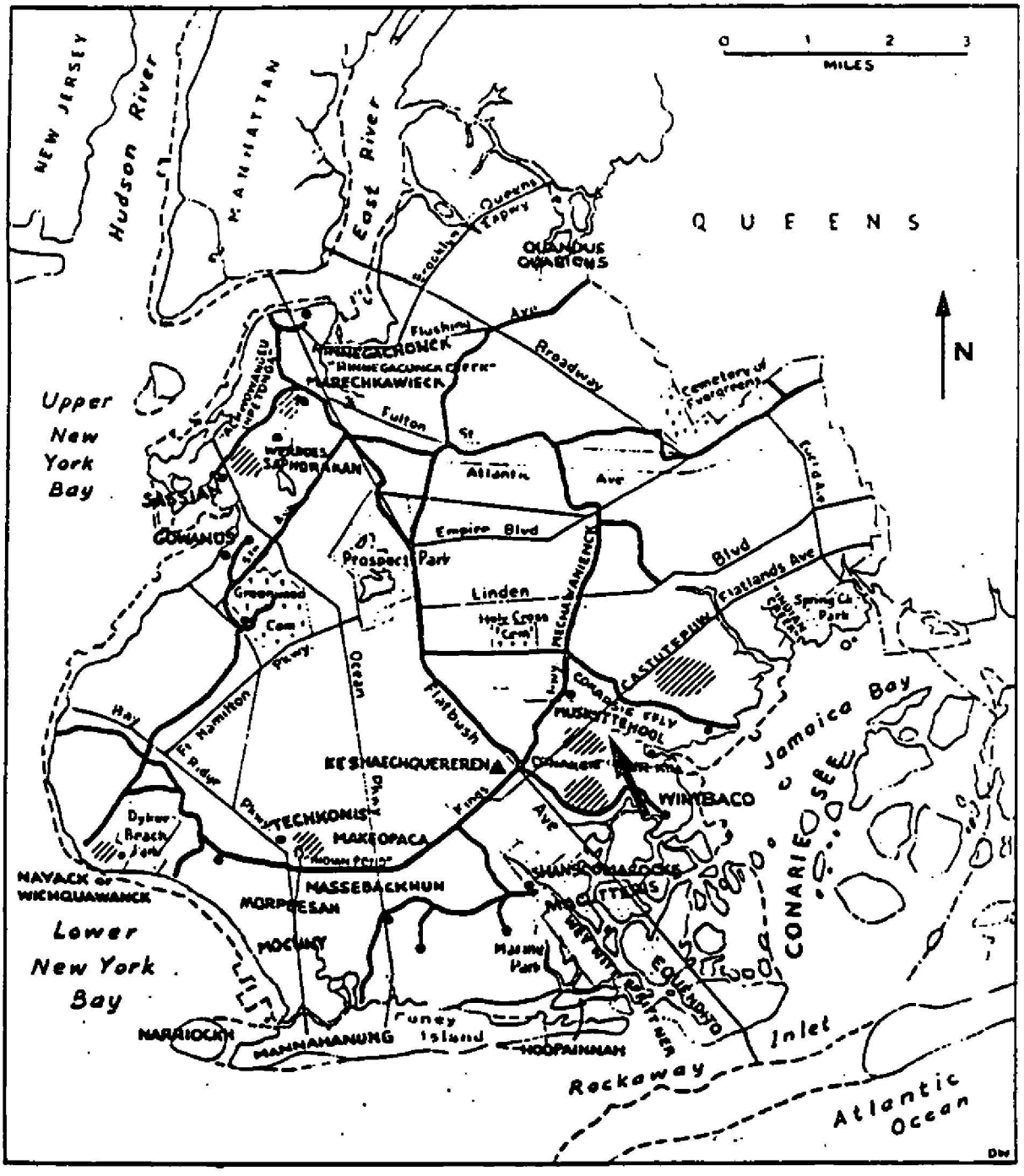


Project Site Location Map



Current U.S.G.S. Topographic Map
Coney Island and Brooklyn Quads

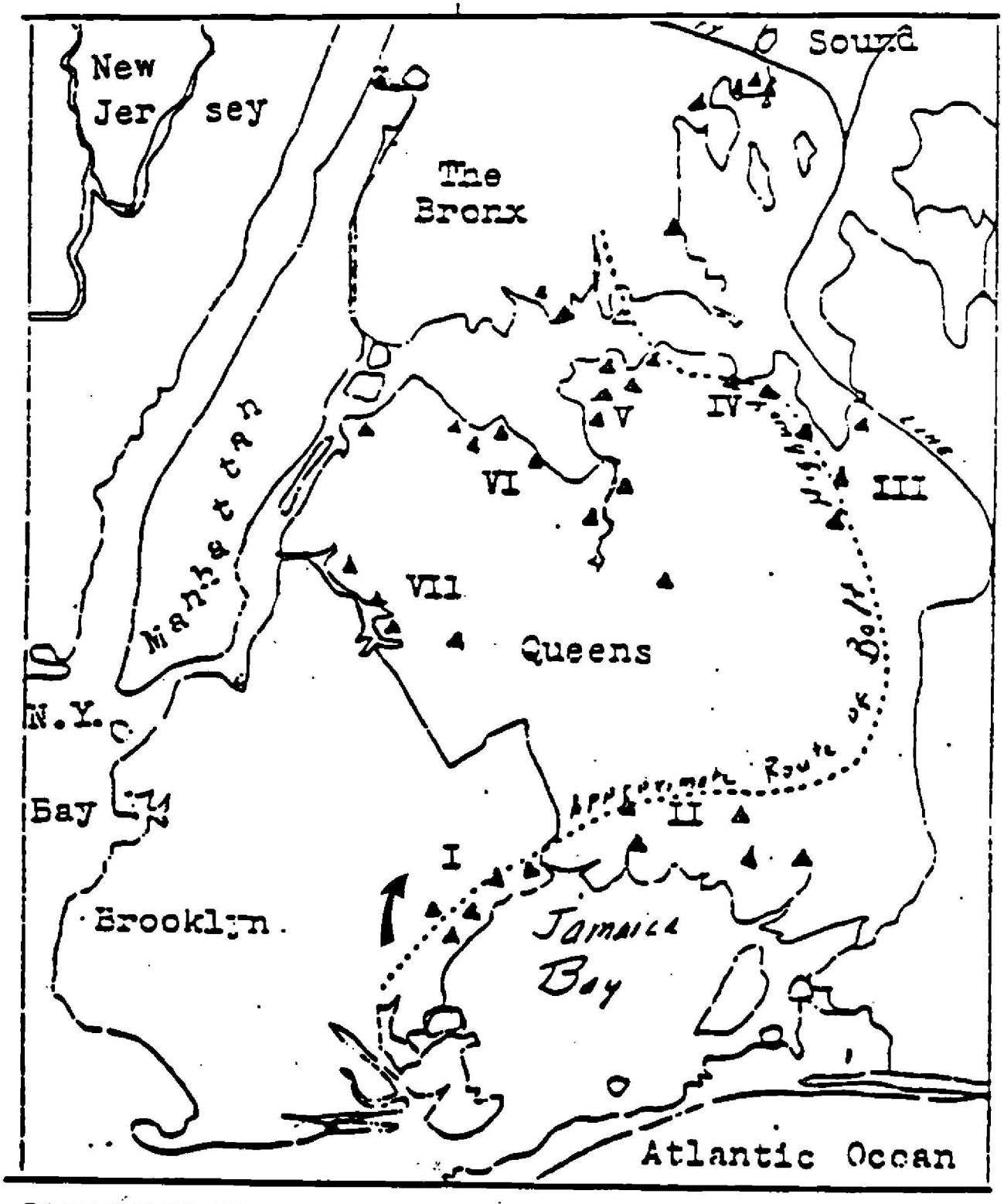
Figure 3



Map of Native American Trails, Planting Areas and Habitation Sites, with Indian Names of Local Origin (Grumet 1981:70)

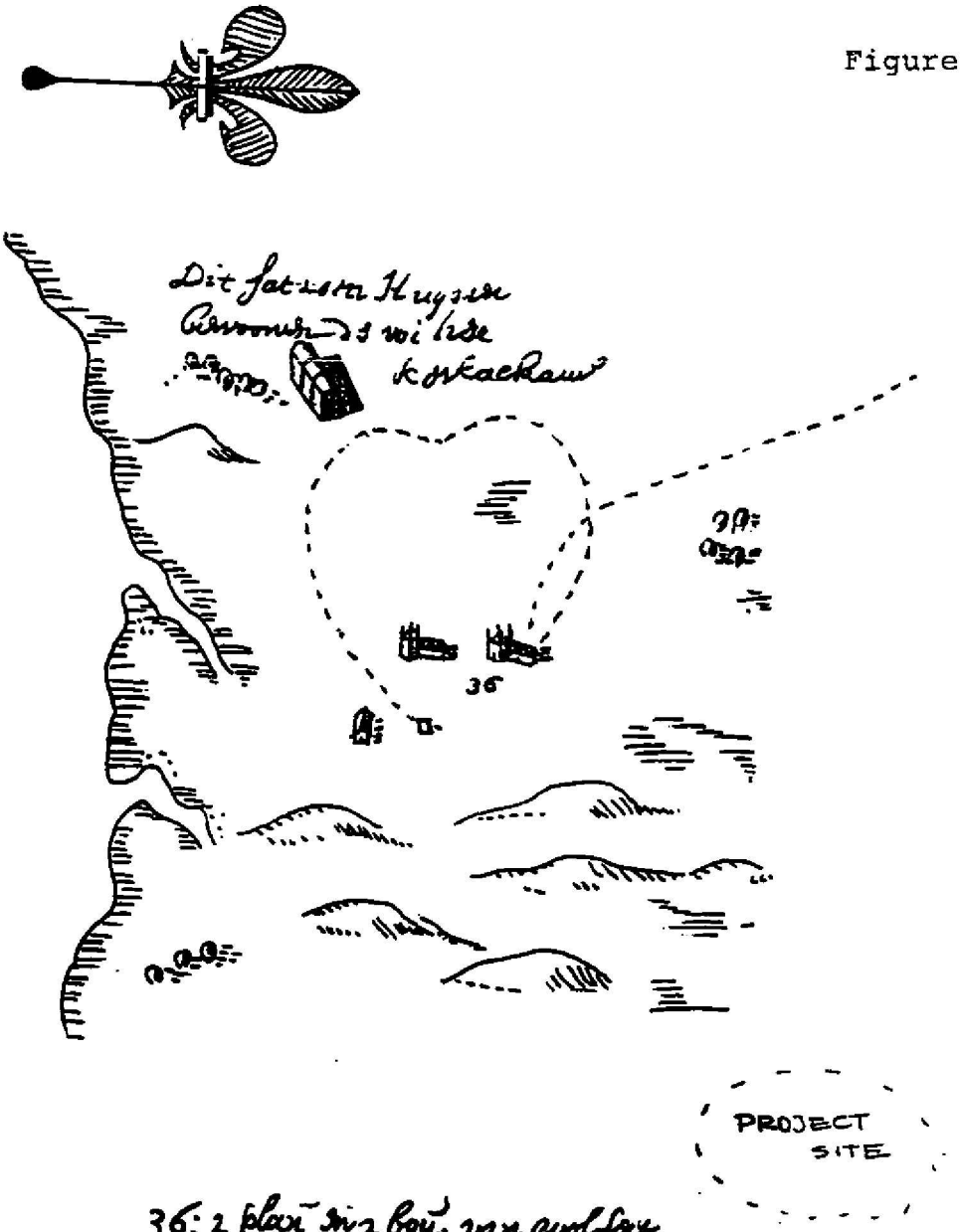
R. Solecki.
Indian Village Sites.

Figure 4



INDIAN VILLAGE SITES: Triangles on diagram indicate sites explored by Committee on American Anthropology of the Flushing Historical Society. Important locations described in accompanying article are numbered.

Figure 5



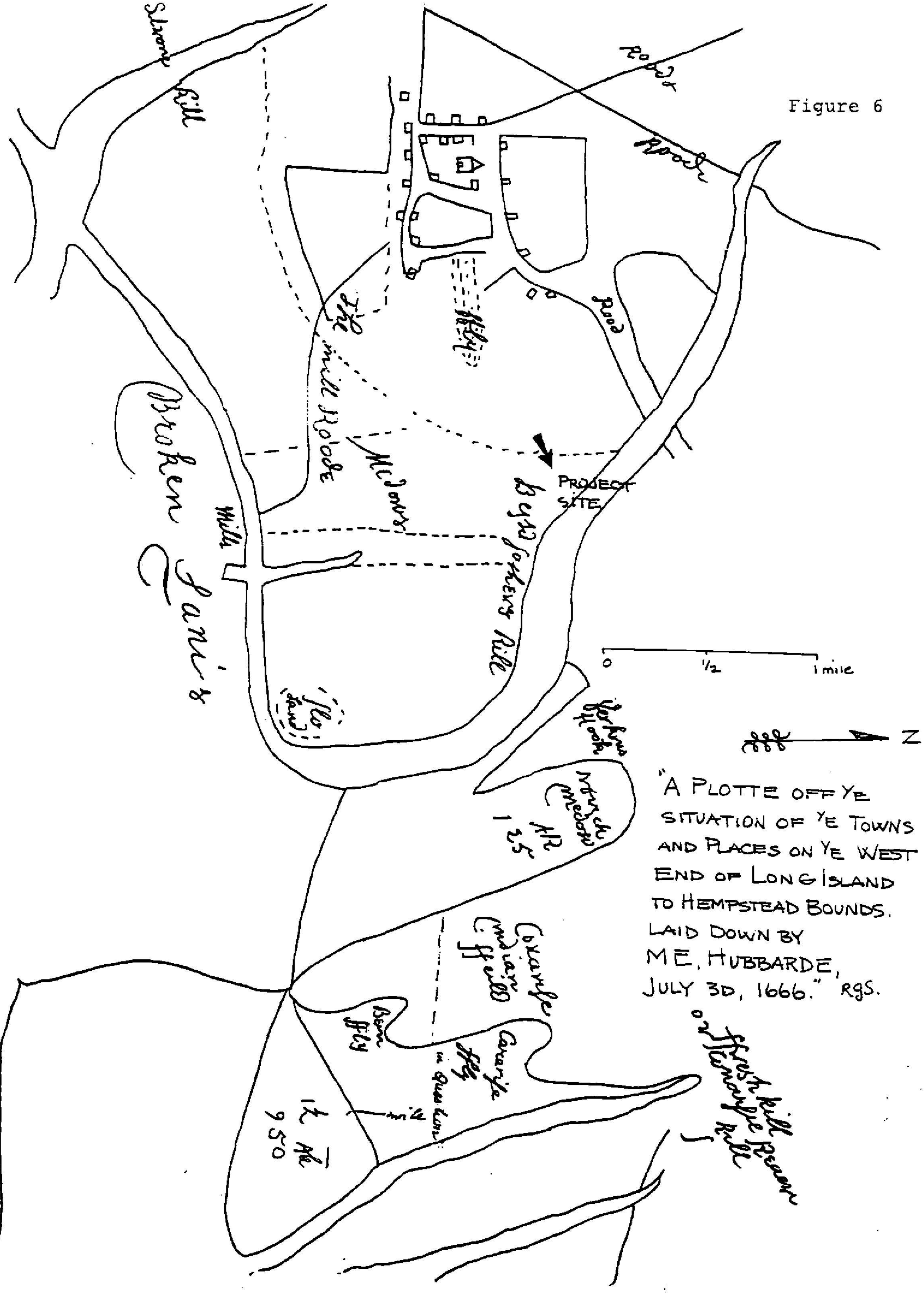
36: 2 plan~ en 2 bou. van wolfert
Geritsz mit 2 van syn consor

[36: 2 plantations and 2 farms of Wolfert
Geritsz. with 2 of his partner]

DETAIL FROM:
THE MANATUS MAP
J. VINGBOONS, 1639

LIBRARY OF CONGRESS COPY - FACSIMILE
NYPL. RGS

Figure 6



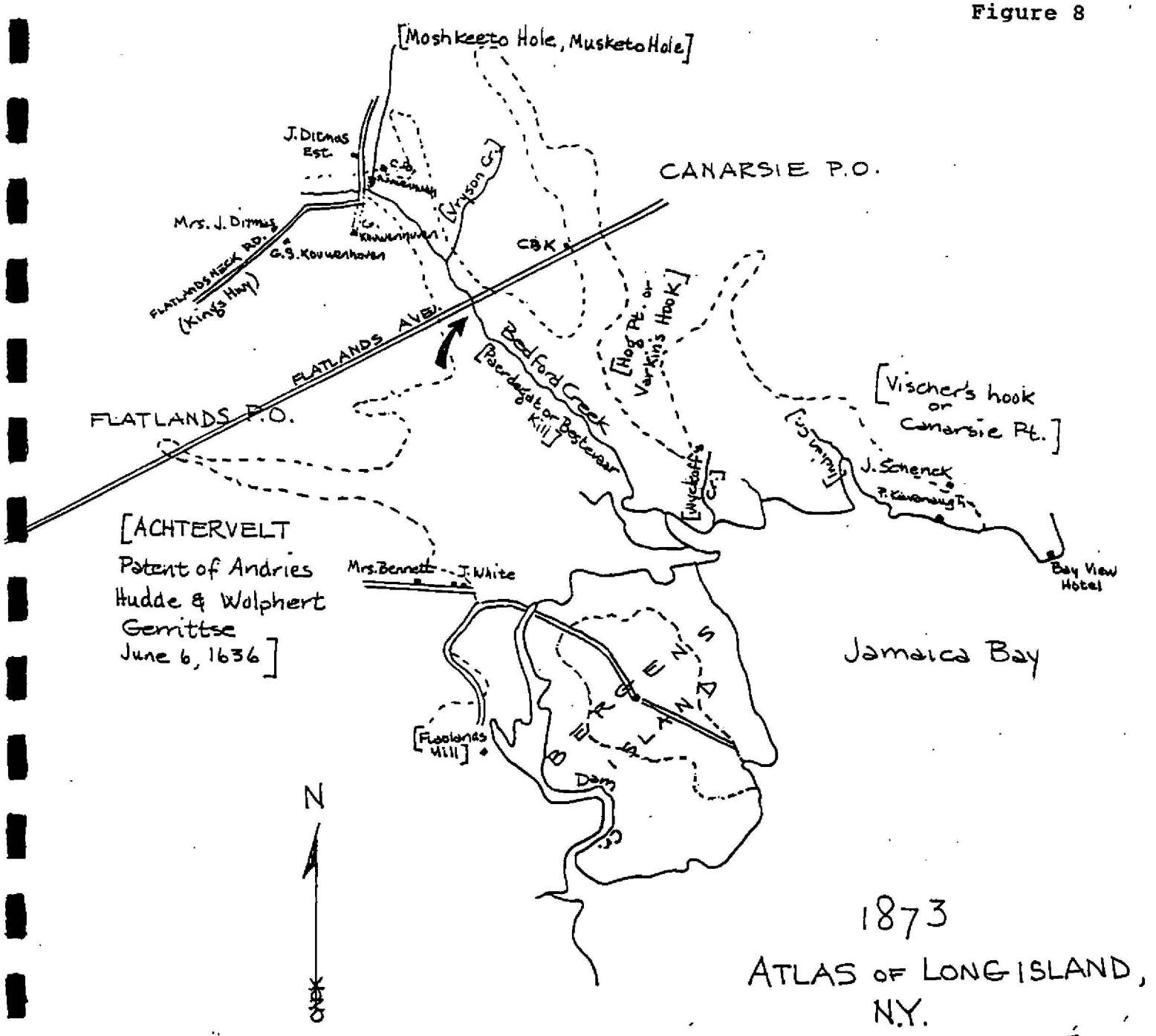
"A PLOTTE OFF YE SITUATION OF YE TOWNS AND PLACES ON YE WEST END OF LONG ISLAND TO HEMPSTEAD BOUNDS. LAID DOWN BY M.E. HUBBARDE, JULY 3D, 1666." RGS.

Figure 7

Walling. Topographical Map of Kings and Queens. 1859

Note: This map is a reproduction of a reproduction, hence the poor quality

Figure 8



1873

ATLAS OF LONG ISLAND, N.Y.

F.W. BEERS PL. 35

WITH PARENTHETICAL [] ADDITIONS FROM "AMERSFOORDT OR FLATLANDS' MS. MAP OF DUTCH LANDGRANTS DRAWN ON PLATE 35 OF BEERS' ATLAS OF LONG ISLAND BY H. Stebbins Smith."

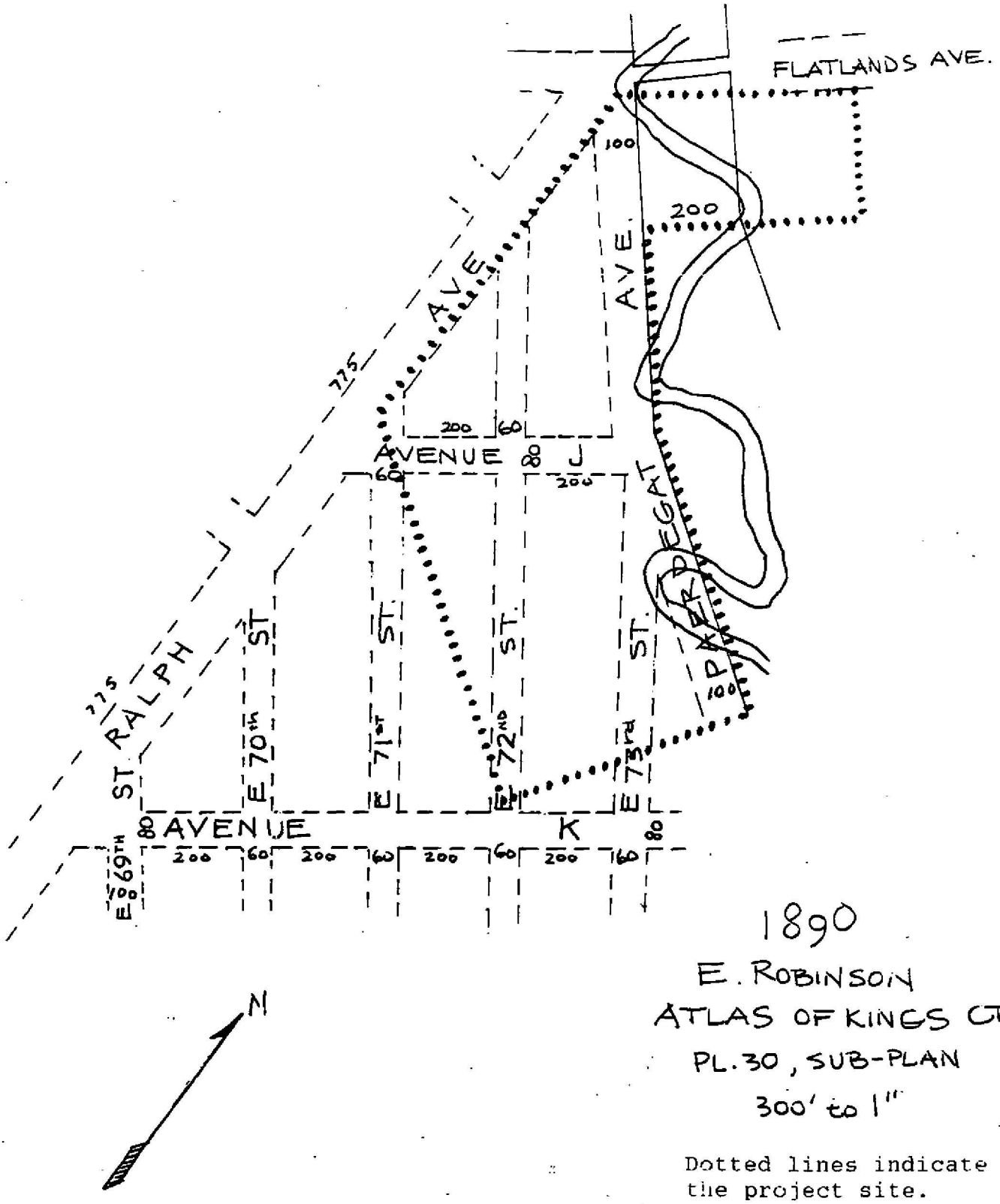
limits of swamp - - - -

ORIGINAL SCALE: 120 RODS (1,980') to 1"

0' 990' 1980'

RGS

Figure 9



1890

E. ROBINSON

ATLAS OF KINGS CTY.

PL. 30, SUB-PLAN

300' to 1"

Dotted lines indicate the project site.

Figure 10

U.S.G.S Topographic Map, 1897
Brooklyn Quad

Figure 11

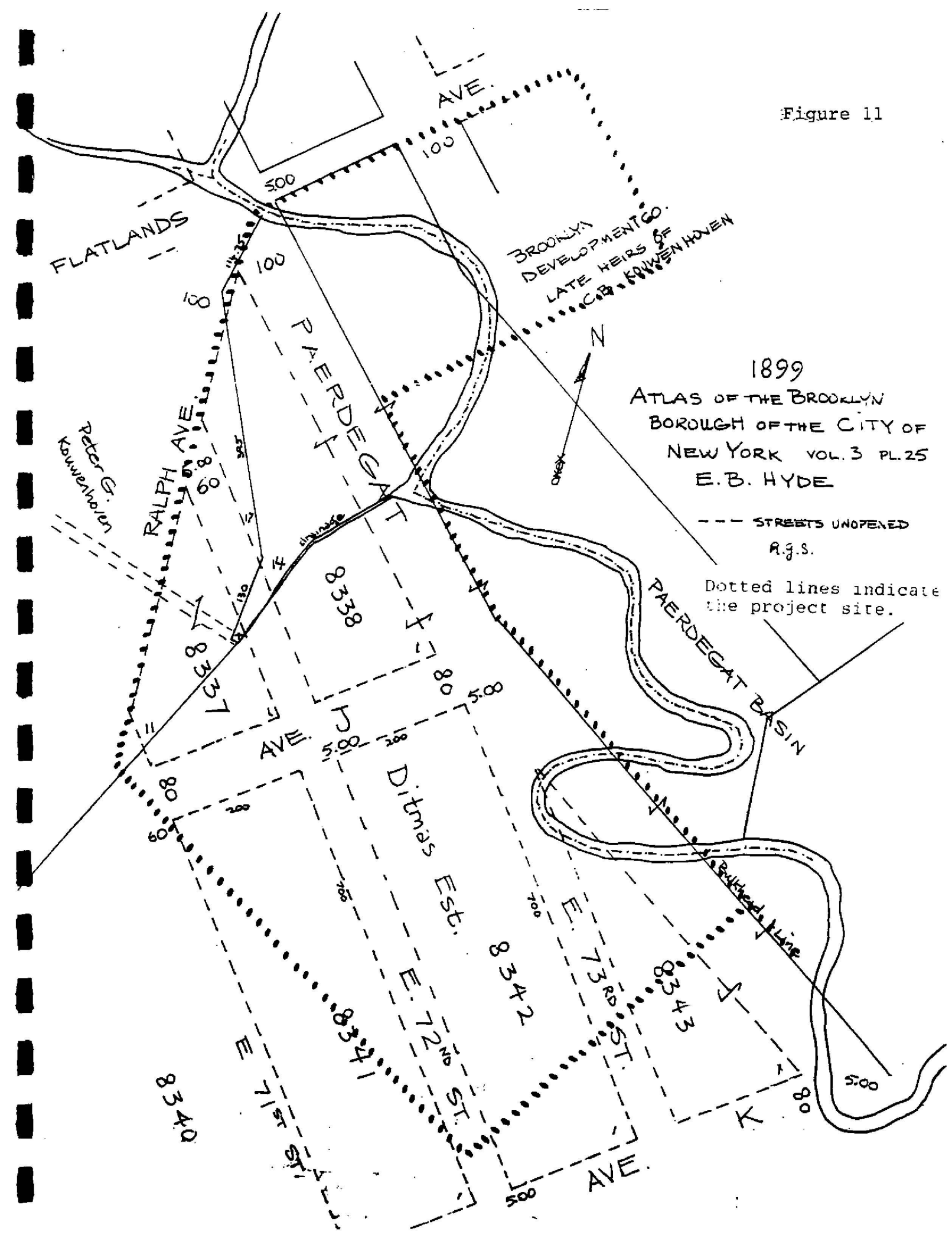
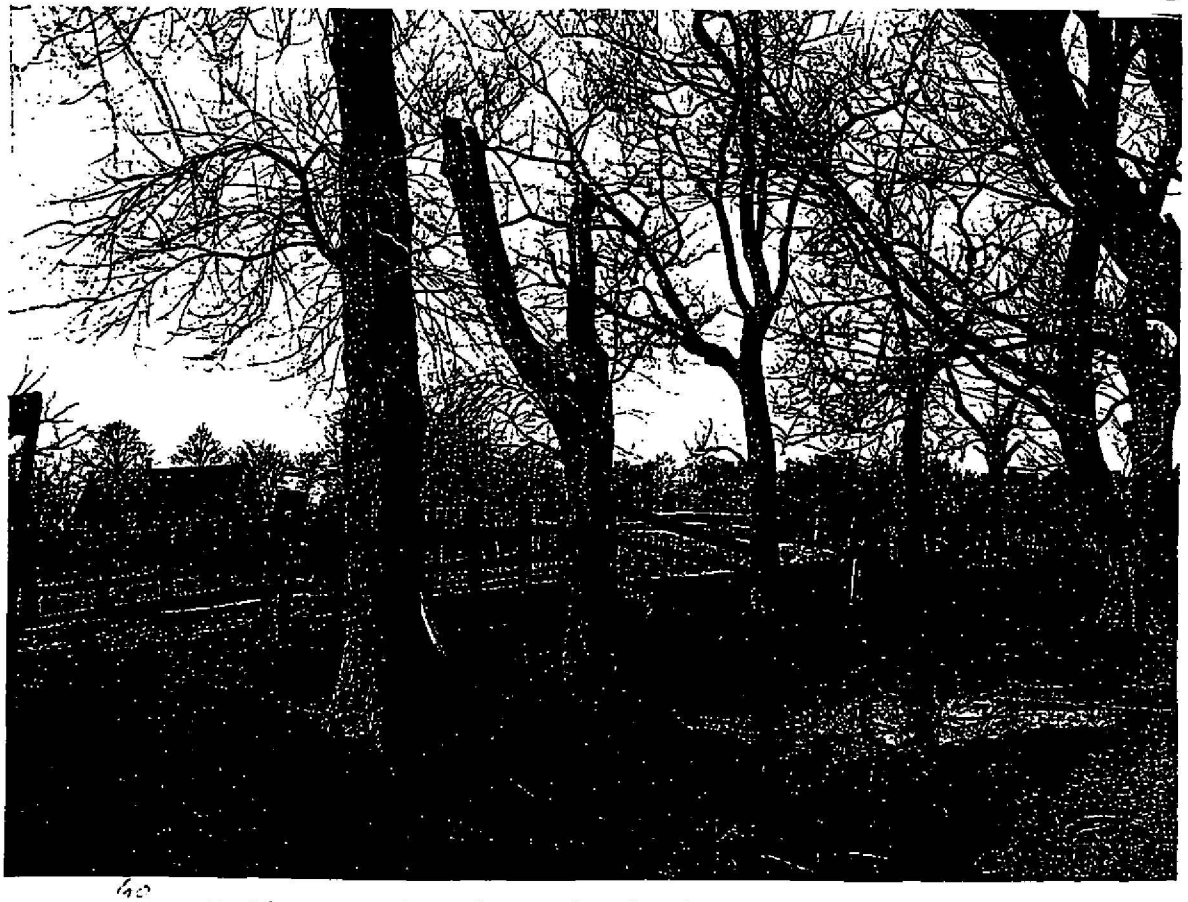

AVE.
100
500
FLATLANDS
100
80
PAERDEGAT
BROOKLYN DEVELOPMENT CO.
LATE HEIRS OF
CORNELIUS KRIKWEN HOVEN
N
1899
ATLAS OF THE BROOKLYN BOROUGH OF THE CITY OF NEW YORK VOL. 3 PL. 25
E. B. HYDE
--- STREETS UNOPENED
A.g.s.
Dotted lines indicate the project site.
RALPH AVE
Peter G. Kouwenhoven
8338
8337
8339
J
AVE.
80
5.00
200
Ditmas Est.
PAERDEGAT BASIN
Bulkhead Line
8342
E. 73RD ST.
8343
E. 72ND ST.
8341
E 71ST ST.
8340
K
AVE.
500

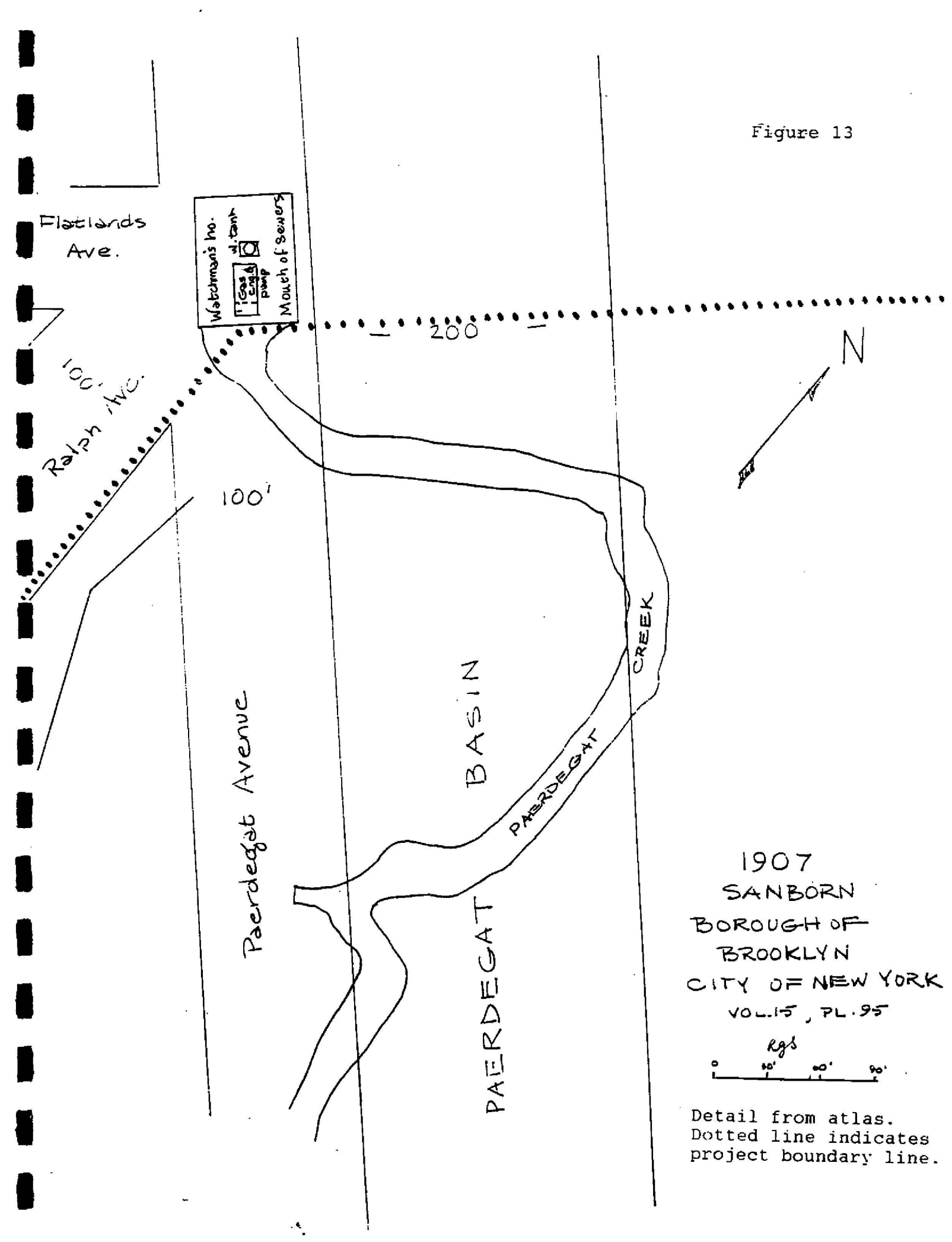
Figure 12



Bridge over Paerdegat Creek (c. 1900)
Collection of the Brooklyn Historical Society

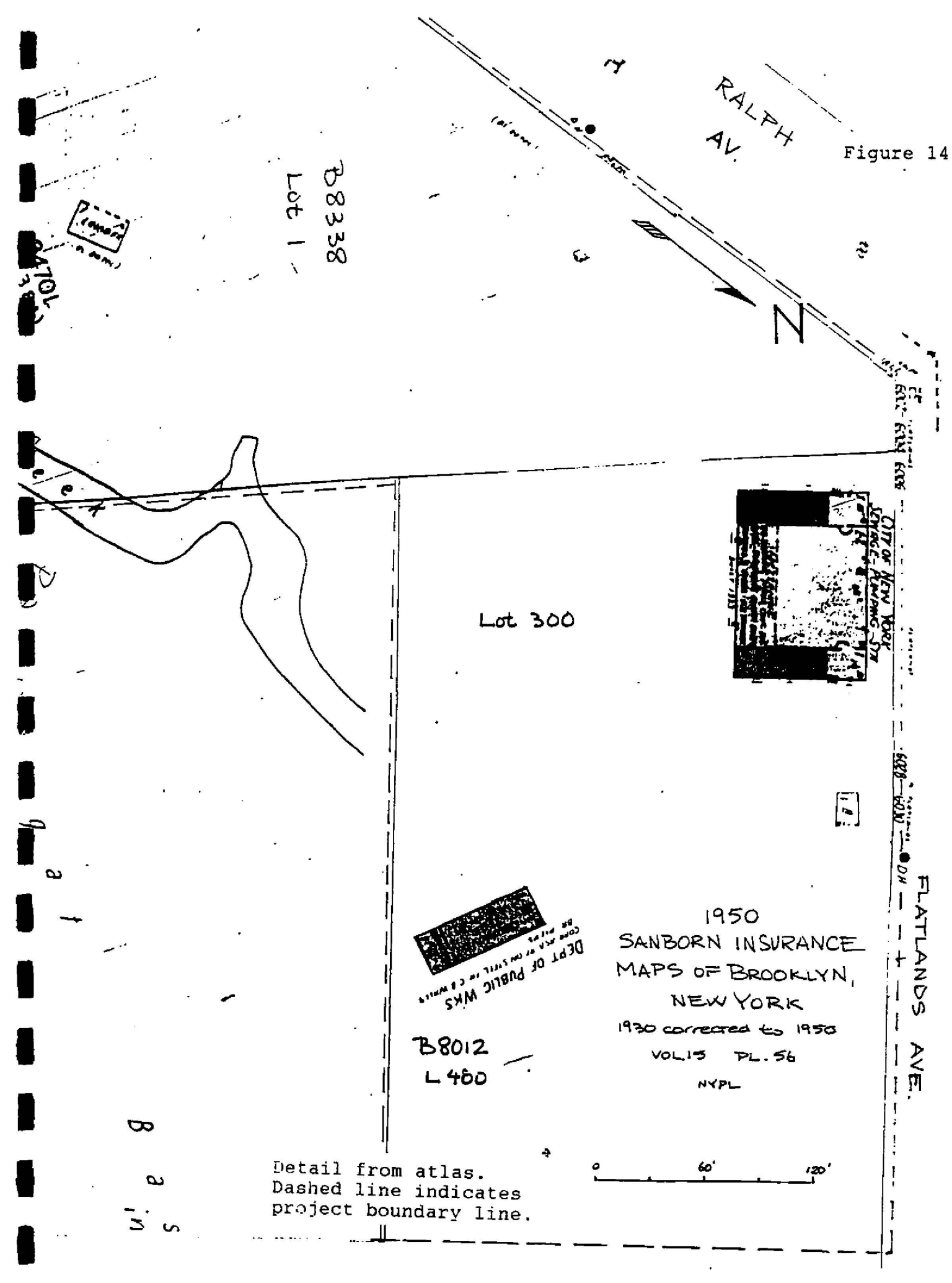
Paerdegat Woods and Stream. November 19, 1905
Collection of the Brooklyn Historical Society

Figure 13



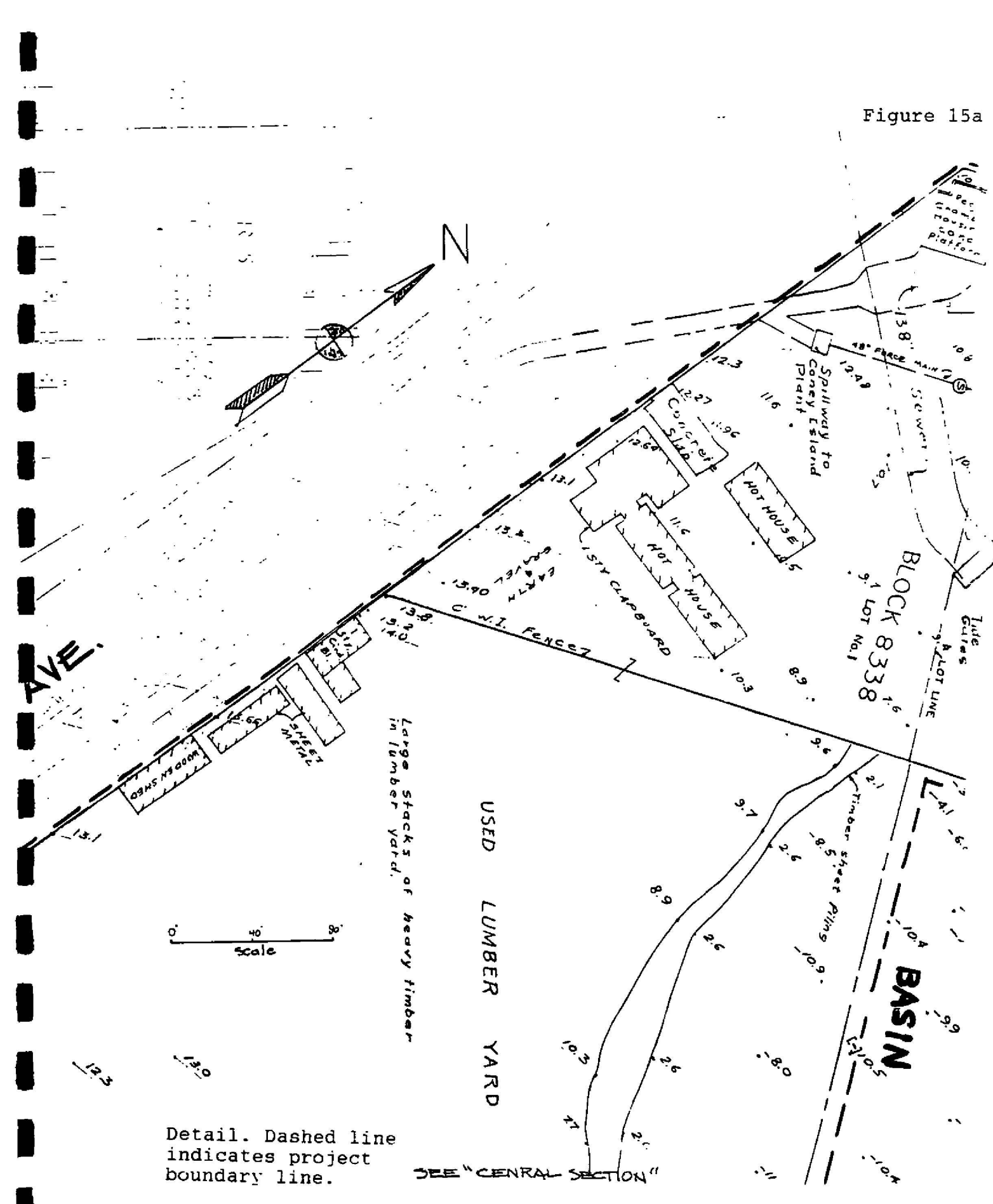
Detail from atlas.
Dotted line indicates
project boundary line.

Figure 14



Detail from atlas.
Dashed line indicates
project boundary line.

Figure 15a



Detail. Dashed line indicates project boundary line.

NORTHERN SECTION

Topographical Map for the Marginal P.C.P. Storm Water Treatment Plant Paerdegat Basin August 17, 1962. #468a - Sheet 2 of 5, City of New York. Engineering Services, Topographical Section

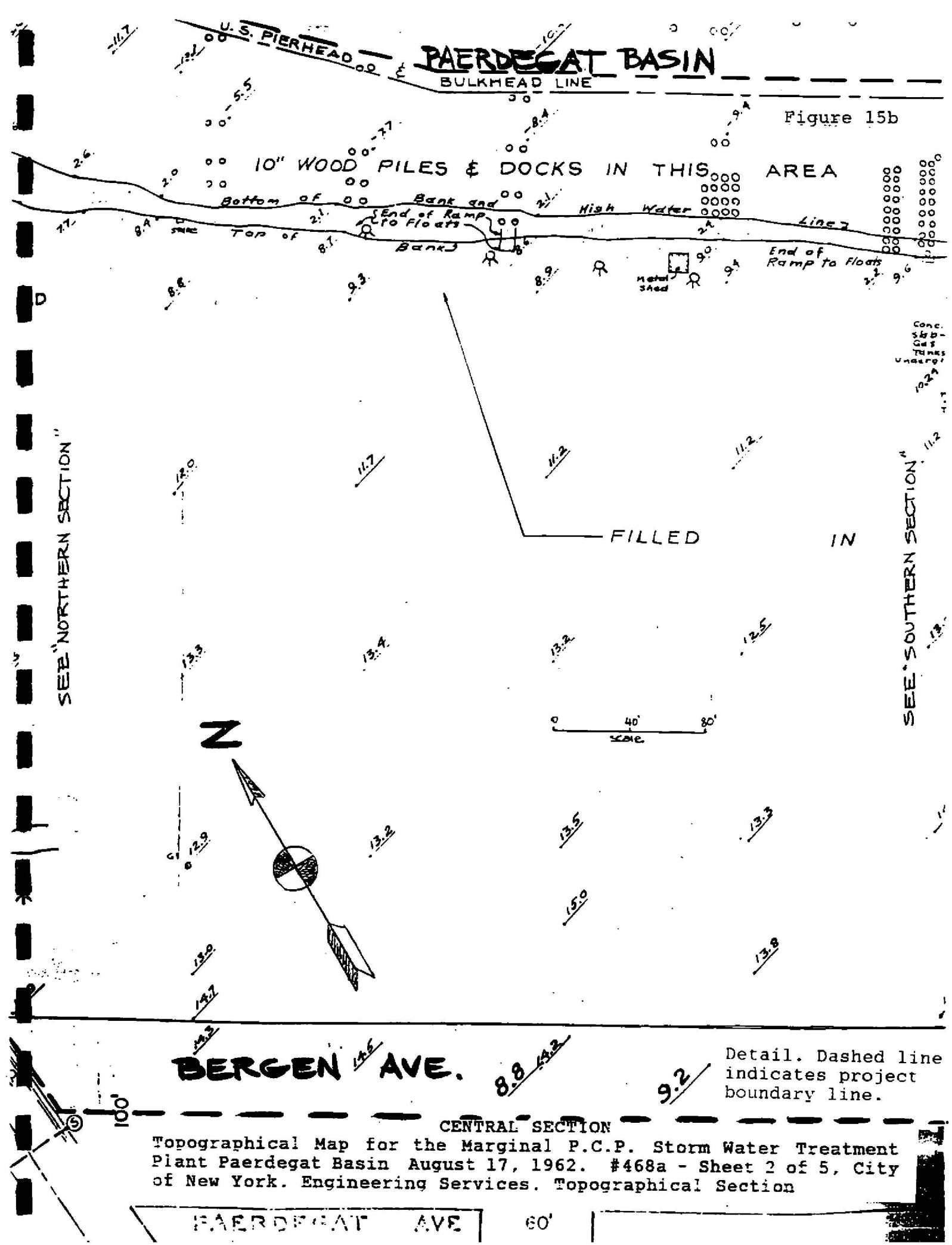


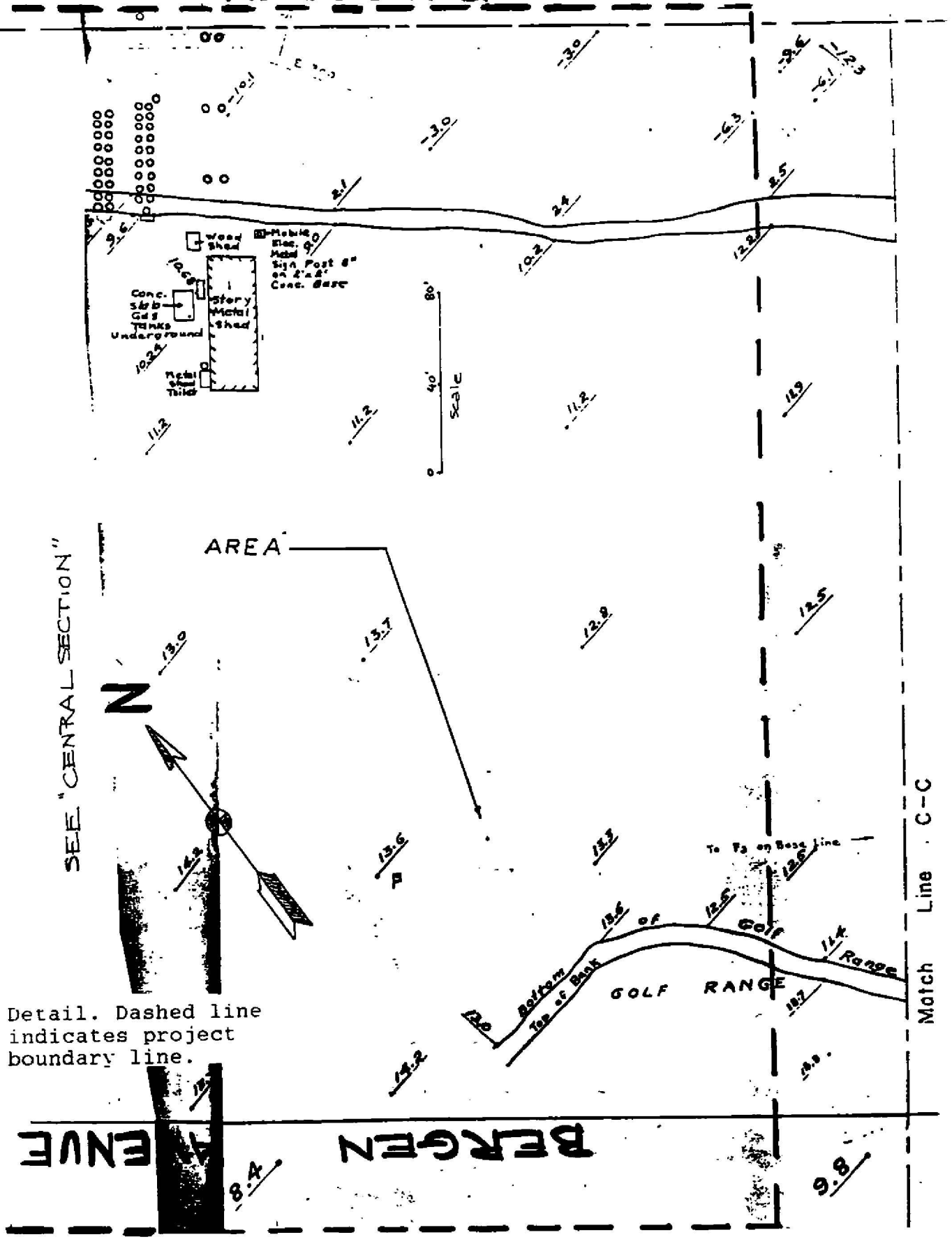
Figure 15b

Detail. Dashed line indicates project boundary line.

CENTRAL SECTION

Topographical Map for the Marginal P.C.P. Storm Water Treatment Plant Paerdegat Basin August 17, 1962. #468a - Sheet 2 of 5, City of New York. Engineering Services. Topographical Section

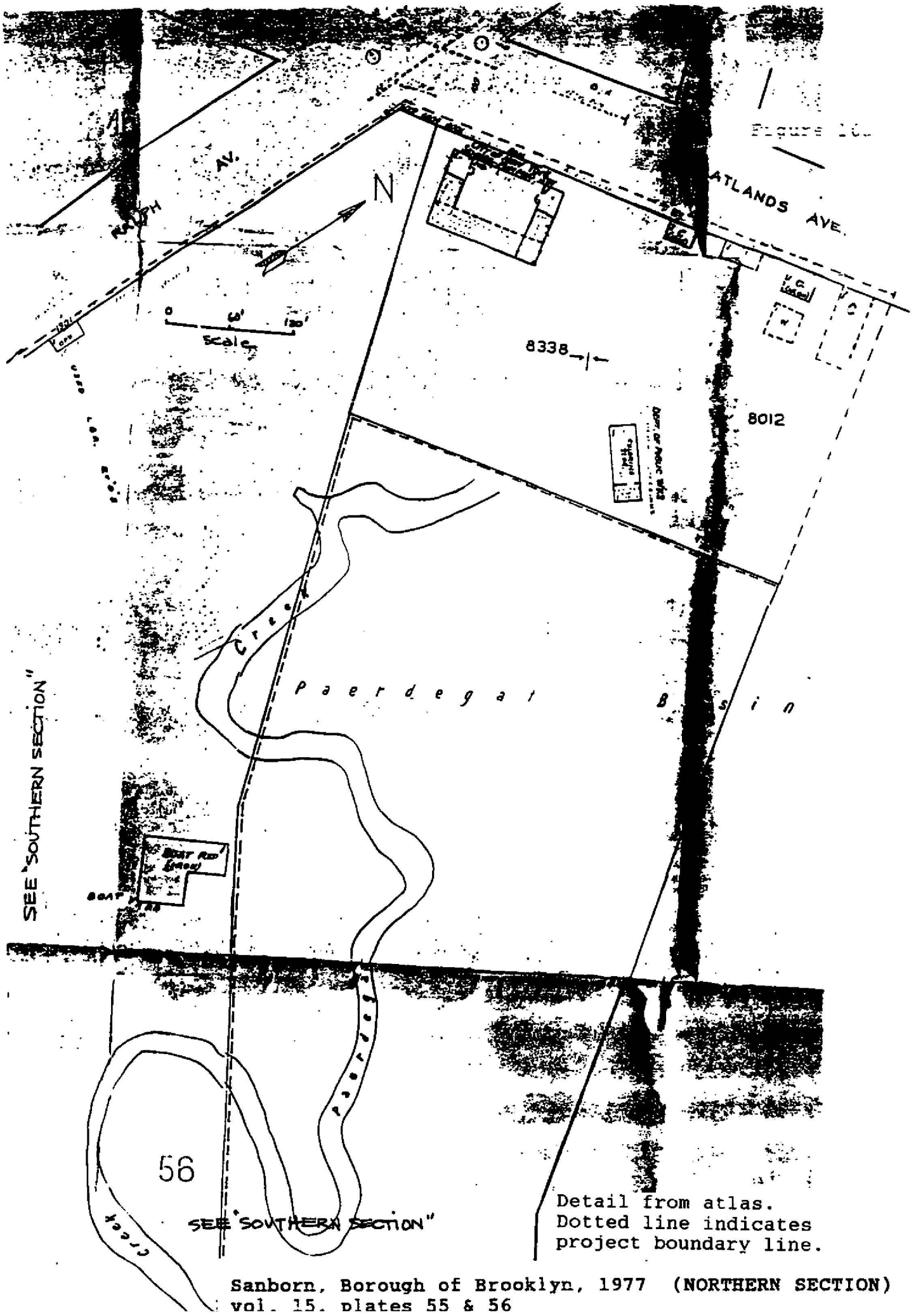
Figure 15c



Detail. Dashed line indicates project boundary line.

SOUTHERN SECTION

Topographical Map for the Marginal P.C.P. Storm Water Treatment Plant Paerdegat Basin August 17, 1962. #468a - Sheet 2 of 5. City of New York, Engineering Services, Topographical Section



Detail from atlas.
Dotted line indicates
project boundary line.

Sanborn, Borough of Brooklyn, 1977 (NORTHERN SECTION)
vol. 15, plates 55 & 56

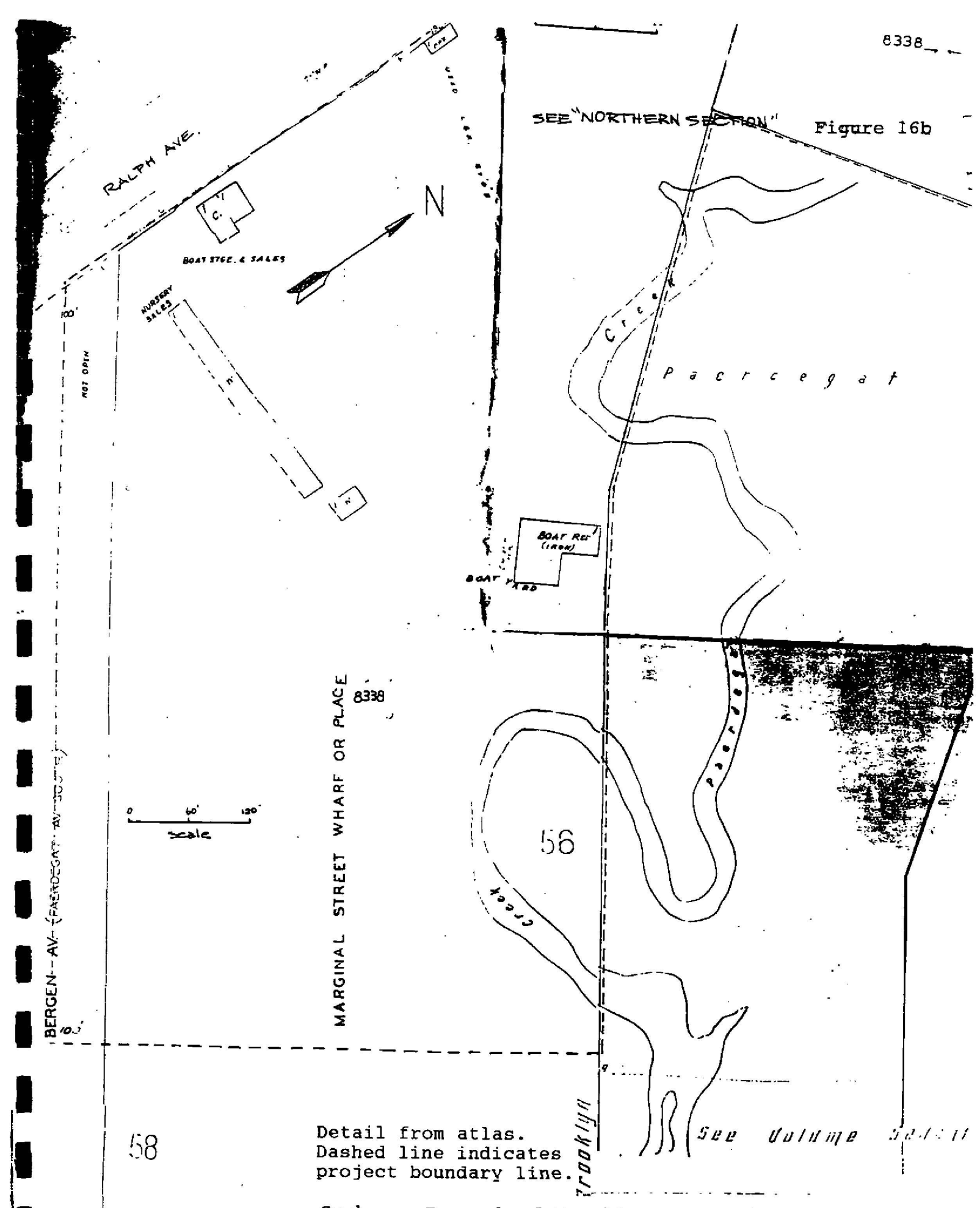


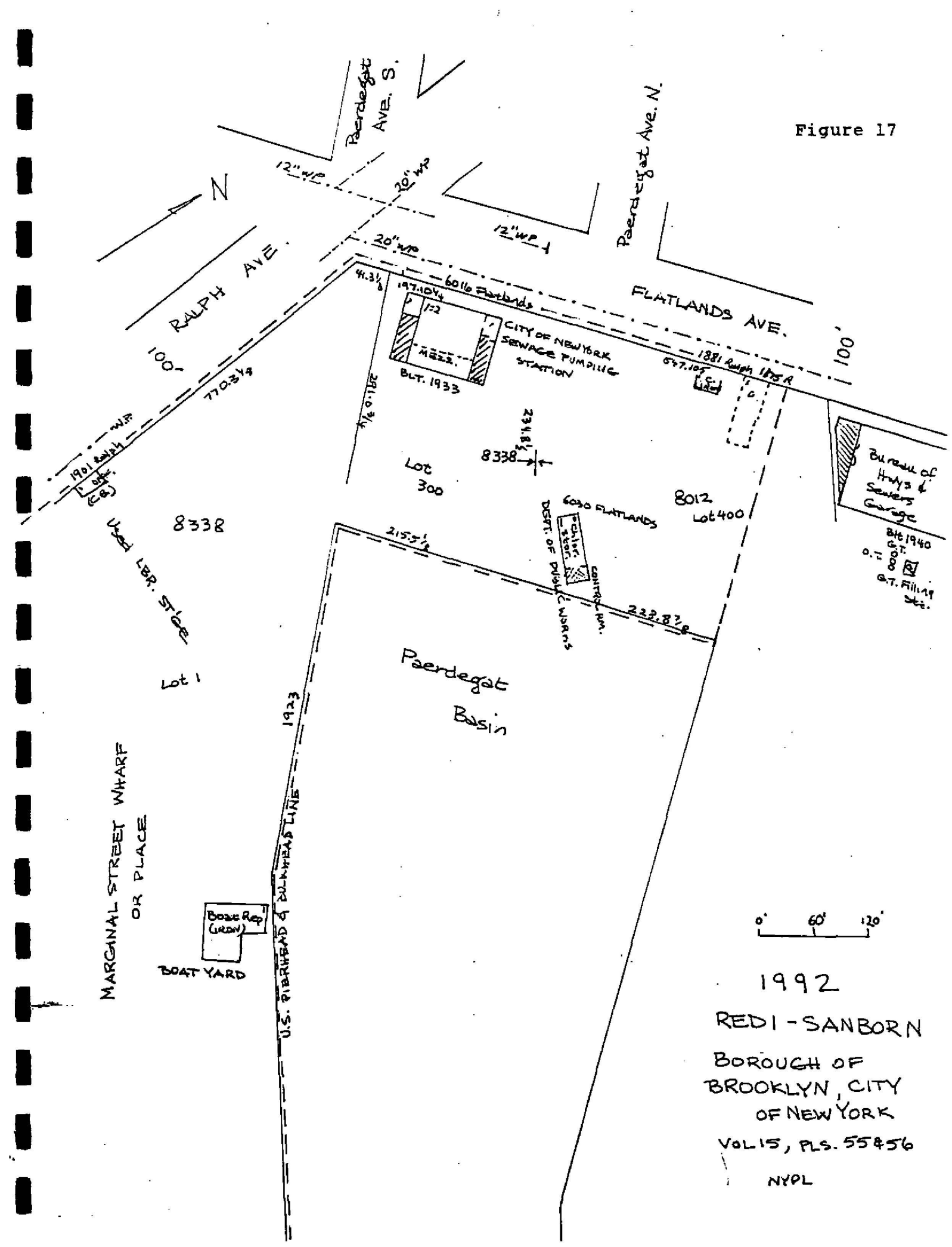
Figure 16b

58

Detail from atlas.
Dashed line indicates
project boundary line.

Sanborn, Borough of Brooklyn, 1977 (SOUTHERN SECTION)
vol. 15. plates 55 & 56

Figure 17



1992

REDI-SANBORN

BOROUGH OF BROOKLYN, CITY OF NEW YORK

VOL 15, PLS. 55&56

NYPL

Figure 18

Page 27
Page 26
FLATLANDS AVE.
Page 26
Paerdegat
168" Storm
Ave. North
Page 26
Page 26
72" Sanitary
54" Sanitary
108" Combined
Cont. 3378
236.50
301.0+/-
U.S. Pierhead Bulkhead Line
Paerdegat Basin
Gate Chamber
Overflow Chamber
138" St. 2 barrel
Cont. 3431
Plan 1164
Conn. for 48" force main
Cont. 350 & Plan 1117
RALPH AVE.
DD-2-54
Insp Tr. 6200
Sew. 3 barrel
Cont. 2621
Plan 1414
8'6" Conc. Combined Sewer
Cont. 350 & Plan
Brooklyn Sewer Records
Book DD. vol. 3, p.32

Photo 1: Sewage Pumping Station on project site at the intersection of Flatlands and Ralph Avenues. Looking southeast from Flatlands Avenue.

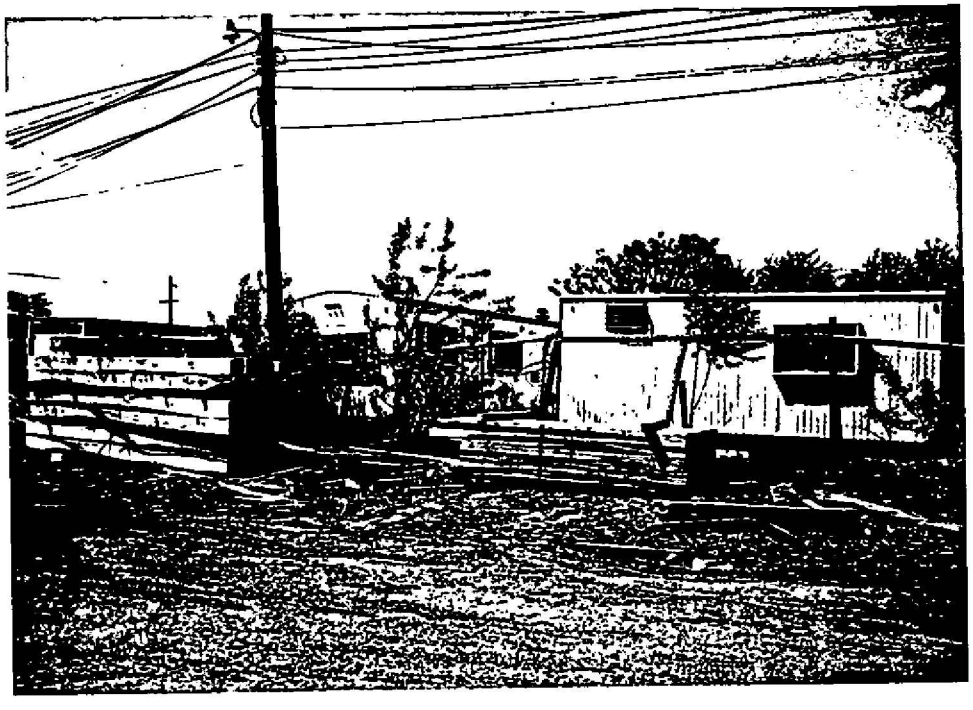
Photo 2: Sewage Pumping Station, looking south from Flatlands Avenue.

Photo 3: Paerdegat Basin, looking southeast to west shore from behind the pumping station. Note concrete slab in the foreground, site of former chlorine storage structure.

Photo 4: Paerdegat Basin, west shore, looking southeast from behind the pumping station. Note grate of gate chamber in foreground. White building along shore is the boat repair structure.

Photo 5: Section of used lumber yard, south of Flatlands Avenue, east of Bergen Avenue (dirt road). Trailer of Bureau of Highway Operations Resident Engineers Office at right.

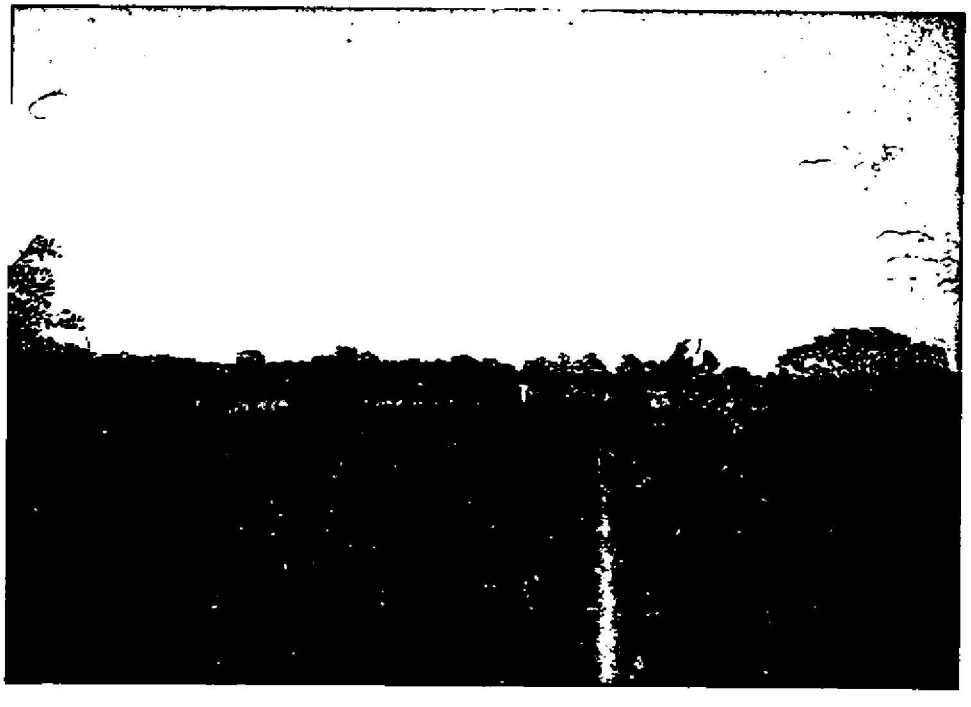
Photo 6: Trailers of the Bureau of Highway Operations Resident Engineers Office, south of used lumber yard.

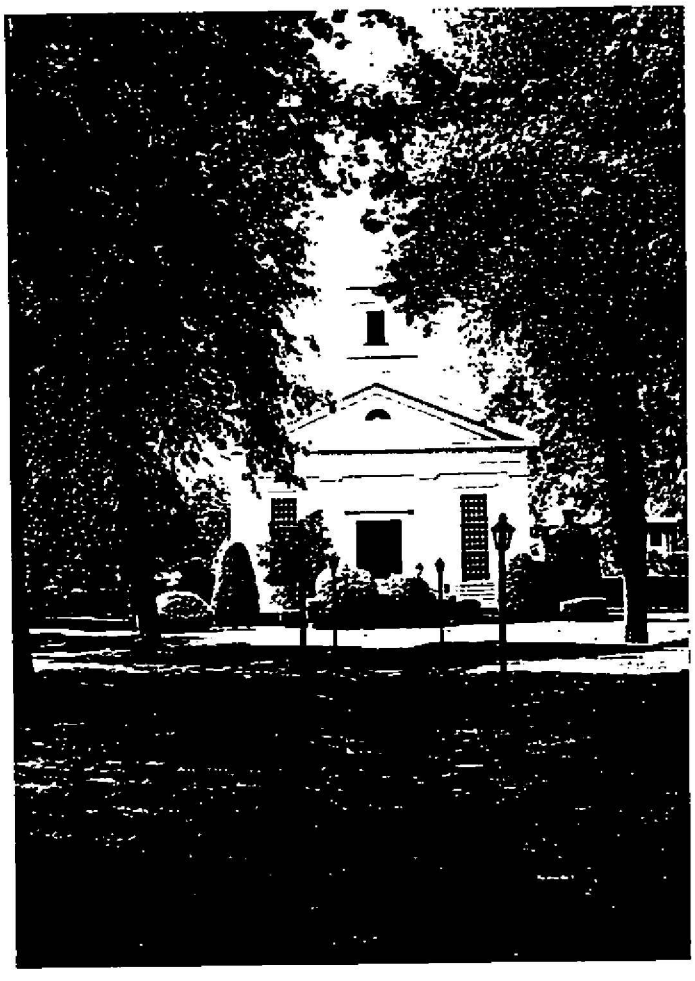


Photos 7 and 8: Nursery sales lot, south of used lumber yard and the remains of the long open-frame nursery building. Looking southeast toward proposed Bergen Avenue.

Photo 9: Paerdegat Basin Water Quality Facility Site looking north from elevated ridge of former golf range near the corner of Bergen Avenue and Avenue K. Stack to right of center is pumping station. Round white building is school across Flatlands Avenue from project site. Note building debris at midground.

Photo 10: View east toward Paerdegat Basin from golf range ridge near Bergen Avenue and Avenue K.





Photos 11 and 12: Flatlands Dutch Reformed Church and Graveyard, Kings Highway and Overbaugh Place, 1.2 miles west of project site. Third Dutch church on this site, first erected 1663, present building 1848. Church grounds and graveyard the site of Indian settlement and burial place known as Keskachane.

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0121
QUAD. Coney Island
SERIES 1 U.S.G.S 7½'
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): NPS Contract CX-2000-7-0010

DATE: 2/10/78

* *

1. SITE NAME: JB-74 John Eldert House Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: Belmont Ave. & Mill Road (Former streets just north of Mill Island - area between Mill Basin & East Mill Basin

4. PRESENT OWNER: _____

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See Attached Form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

_____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

NATIONAL HERITAGE

Historic Site Survey Record
Coney Island U.S.G.S. 7.5' Quadrangle (1966)

View:
Camera Facing:

UTM Grid 44 96,590m.N.
5 92,650m.E.

Note: Not specifically w/i the leg. boundaries of gateway. Due to the extreme nature of 20th cen. disturbance in this area, this location should not be taken to be precise.

1. NAME
Historic JB-74
Common John Eldert House

2. LOCATION
Street & No. Formerly just north of Mill Island Jamaica Bay

Zoning: _____ Map Reference Key # _____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO PUBLIC
___District ___Building X Site ___Structure ___Object	X Public ___Private ___Both Public Acquisition: ___In Process ___Being Considered	___Occupied X Unoccupied Work in Progress ___Pres. ___Altera.	Yes: X Restricted ___Unrestricted ___No

PRESENT USE (Check One or More if Applicable)

___Agriculture ___Commercial ___Educational
X Government ___Industrial ___Military
___Museum
X Park
___Private Residence (Owner Occupied)
___Religious
___Rental Residence
___Single Family
___Double
___Multiple
___Scientific
___Transportation
___Other

ORIGINAL USE: Residential Structure

4a. OWNERSHIP (Present)
Name:
National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known):
John Eldert

4c. BUILDER/ARCHITECT (If known):

5. DESCRIPTION Photographs on file at Long Island Historical Society

Features (exterior)	Materials
Facade Unknown	Unknown
Foundations	
Trim	
Roof Type: ___flat ___gable ___shed ___"French" ___gambrel ___hip ___other	
Chimney(s)	
Porch(es)	
Addition(s)	

Dimensions & Plan Unknown (Sketch):

Structural System:
___wood frame, interlocking joints ___wood frame, light member
___masonry load bearing walls ___log ___metal ___other

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___Excellent ___Good ___Fair ___Deteriorated X Ruins
INTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins

Integrity: a. X Original Site b. ___Moved If so, when and from where _____

c. Major alterations and dates (if known): _____

Site:
Frontage: Acreage:
Depth:
Related Outbuildings and Property: None Known
___barn ___carriage house ___garage(s) ___shop ___shed ___gardens ___orchards
___fencing (type)_____ ___walling (type)_____ ___other_____
Threats and/or intrusions to Building:
___none known ___zoning ___roads X development ___deterioration ___other_____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___Pivotal ___Positive X Neutral ___Negative
Relationship to Village: ___Pivotal ___Positive ___Neutral ___Negative

7. SIGNIFICANCE

Date of Initial Construction:
___c.1840 ___c.1850 ___c.1860 ___c.1870 ___c.1880 ___c.1890 ___c.1900
___c.1910 ___after 1910 Specific Date (if known)_____

Style: ___Frontier ___Italianate ___Neo-Classic Revival ___Art Deco
___Classic Revival ___Romanesque Revival ___English Eclectic ___Ranch Style
___Gothic Revival ___Queen Anne ___Federal Revival ___Split-Level
___Tuscan Villa ___Eastlake ___Bungaloid ___Utilitarian
___Second Empire ___Georgian Revival ___Western Stick Style ___Other

National Register Status:
Presently on National Register or nominated for:
___national significance ___state significance ___local significance X none

COMMENTS: (expand on next page)

A house was built in 1772 by John Eldert just north of Mill Island. Photographs on file at Long Island Historical Society indicate the house was extant in 1895.

Recorder: DGR Date of Inventory 7/77

Photographer: _____ Date of Exposure _____

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0126
QUAD. Coney Island
SERIES U.S.G.S. 7½'
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester, Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): N.P.S. Contract CX-2000-7-0010

DATE: 2/10/78

* *

1. SITE NAME: JB-73 Schenck-Crooke House & Mill Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: On former Mill Island, now land between Mill Basin & East Mill Basin, Jamaica Bay

4. PRESENT OWNER: _____

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See Attached Form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

_____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

9. HISTORICAL DOCUMENTATION OF SITE:

John Milner Associates
1978 "A Cultural Resources Inventory of the Gateway National Recreation Area, New York & New Jersey." Report prepared for the NPS. (Copy on file at the NYS OPRHP)

10. POSSIBILITY OF SITE DESTRUCTION OR DISTURBANCE:

11. REMARKS:

12. MAP LOCATION

7 ½ MINUTE SERIES QUAD. NAME: _____

15 MINUTE SERIES QUAD. NAME: _____

U.S.G.S. COORDINATES: _____

D.O.T. COORDINATES: (if known) _____

ATTACH SKETCH, TRACING OR COPY OF MAP

See above cited report, p. 116, Fig. 7.2

SOURCE OF MAP:

13. PHOTOGRAPHS (optional)

(ATTACH)

NATIONAL HERITAGE

Historic Site Survey Record
Coney Island U.S.G.S. 7.5' Quadrangle (1966)

View:
Camera Facing:

UTM Grid ^{44}96,160m.N.
^{5}92,810m.E.

1. NAME
Historic JB-73
Common Schenck-Crooke House and Mill

Note: Not specifically w/i legislated boundaries of gateway. Due to the extreme nature of 20th century disturbance in this area, this location should not be taken to be precise.

2. LOCATION
Street & No. Jamaica Bay

Zoning: _____ Map Reference Key #: _____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO PUBLIC
___District ___Building X Site ___Structure ___Object	X Public ___Private ___Both	Public Acquisition: ___In Process ___Being Considered	___Occupied X Unoccupied Work in Progress ___Pres. ___Altera.	Yes: X Restricted ___Unrestricted ___No

PRESENT USE (Check One or More If Applicable)

___Agriculture ___Government ___Museum ___Religious ___Scientific
___Commercial ___Industrial X Park ___Rental Residence ___Transportation
___Educational ___Military ___Private Residence ___Single Family ___Other
(Owner Occupied) ___Double
___Multiple

ORIGINAL USE: Oldest known residential structure in Kings County.

4a. OWNERSHIP (Present)
Name: National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known): Jan Martense Schenck

4c. BUILDER/ARCHITECT (If known):

5. DESCRIPTION Photographs and drawings on file at Long Island Historical Society.

Features (exterior)	Materials
Facade Unknown	Unknown
Foundations	
Trim	
Roof Type: ___flat ___gable ___shed ___"French" ___gambrel ___hip ___other	
Chimney(s)	
Porch(es)	
Addition(s)	

Dimensions & Plan Unknown (Sketch):

Structural System:
___wood frame, interlocking joints ___wood frame, light member
___masonry load bearing walls ___log ___metal ___other

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins
INTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins

Integrity: a. ___Original Site b. ___Moved If so, when and from where moved to site near Brooklyn Museum after 1940

c. Major alterations and dates (if known): _____

Site:
Frontage: Acreage:
Depth:
Related Outbuildings and Property:
___barn ___carriage house ___garage(s) ___shop ___shed ___gardens ___orchards
___fencing (type)_____ ___walling (type)_____ ___other_____
Threats and/or Intrusions to Building:
___none known ___zoning ___roads X development ___deterioration ___other_____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___Pivotal ___Positive X Neutral ___Negative
Relationship to Village: ___Pivotal ___Positive ___Neutral ___Negative

7. SIGNIFICANCE

Date of Initial Construction:
___c.1840 ___c.1850 ___c.1860 ___c.1870 ___c.1880 ___c.1890 ___c.1900
___c.1910 ___after 1910 Specific Date (if known) 1659 or Earlier

Style: ___Frontier ___Italianate ___Neo-Classic Revival ___Art Deco
___Classic Revival ___Romanesque Revival ___English Eclectic ___Ranch Style
___Gothic Revival ___Queen Anne ___Federal Revival ___Split-Level
___Tuscan Villa ___Eastlake ___Bungaloid ___Utilitarian
___Second Empire ___Georgian Revival ___Western Stick Style ___Other

National Register Status:
Presently on National Register or nominated for:
___national significance ___state significance ___local significance X none

COMMENTS: (expand on next page)

House and attendant mill built by Jan Martense Schenck on Crooke's Island (Later known as Mill Island). House and mill still extant in 1940, soon thereafter removed to site near the Brooklyn Museum.

Recorder: DGR Date of Inventory 7/77

Photographer: _____ Date of Exposure _____

APPENDIX B

Soil Borings Data

APPENDIX B - BORING LOGS

Borings at the Paerdegat Pumping Station
Ralph and Flatlands Avenues (Sheet 0369)

City of New York. Department of Public Works. Division of Engineering Services. Subsurface Exploration Section
October 18, 1960 (See attached map for location)

Abbreviations: tr.=trace. med.=medium. org.=organic. grav.=gravel. veg.=vegetation

1 water at +1.3'	2 water at +1.7'
Cinders +11' to 10'	Cinders +11' to 10'
Prob. fill, silt, some med. to fine sand. tr. grav., tr. veg. 10' to 0.	Misc. fill, brown med. to fine sand, brick, little grav., tr. silt 10' to 0.
Black org. silt, some med. to fine sand, tr. veg. 0 to -2'	Soft peat and org. silt. 0 to -1'
Compact med. to fine light - brown sand, little grav., tr veg. -2' to -6'	Compact coarse to fine gray-brown sand and grav., tr. of silt and black org. silt. -1' to -4.0'
Compact med. to fine light brown sand tr. of coarse sand and grav., tr. silt. -6 to - 21'	Compact coarse to fine brown sand and grav., tr silt. -4' to -9'.

APPENDIX B

Borings for Combined Relief Sewers in Avenue K, Bet. Flatlands & Ralph Aves., Ralph Ave. Bet. Avenue M & Bergen Ave. (Sheet 0584)

City of New York, Department of Public Works, Division of Engineering Services, Subsurface Exploration Section
February 26, 1968 (See attached map for location)

Abbreviations: conc=concrete, cind=cinders, br=brown
c-f=coarse to fine

B12 water -0.1'	B7 water -0.5'	B8 water -4.1'	B9 water -4.0'	B10 water -0.6'
Fill, sand silt, grav asphalt conc. +12.4' to -1.6'	Conc; Fill, sand, silt, grav, brick wood. +11.7' to -2.3'	Fill, sand silt, grav asphalt +11' to -4'	Fill, cind plaster, etc. +11.6' to -3.4'	Fill sand grav, silt steel, asphalt +11.2 to -3.8'
Compact med.-f gray sand, some silt, tr clay, tr peat to -7.6'	Peat to -6.3'	Peat to -6'	Peat to -5.4'	V. soft gray org. silt, some clay, some fine sand to -5.8'
Loose-compact c-f brown sand tr silt, tr grav. to -23.6'	Soft gray/br silt & clay tr c-f sand tr veg. to -10.3'	V. compact c-f gray sand, tr to little grav, tr silt. to -16'	Gray silt fine sand to -7.4'	Gray sand, tr. grav to -8.8'

APPENDIX B

Abbreviations: pen=penetrated

B11 water -3.5'	B13 water -4.2'	B25 water -3.5'	B26 water +0.8'	B27 water +1.9'
Fill sand, silt cind +11' to -4'	Fill sand, grav silt brick +13.3' to +0.3'	Fill brick, plaster +13' to +3'	Fill sand, silt, grav brick, plaster +11.9 to -3.1'	Fill sand, silt, brick +8.4' to -1.6'
Stiff, gray org silt some f sand, tr peat to -9'	Compact c-f br sand, tr silt, tr grav to -13.7'	Stiff dark br silt, tr c-f sand, pen. by conc fill to -1.0'	Peat to -5.1'	Peat to -4.6'
Compact c-f br sand little-some grav, tr silt to -14'	Loose c-med-f br sand, tr silt to -22.7'	Compact loose c-f brown sand, tr grav, tr silt to -23'	Compact c-f br sand, little-tr grav, tr silt to -24.1'	Compact c-med-f gray sand, tr-little grav tr silt to -11.6'

APPENDIX E

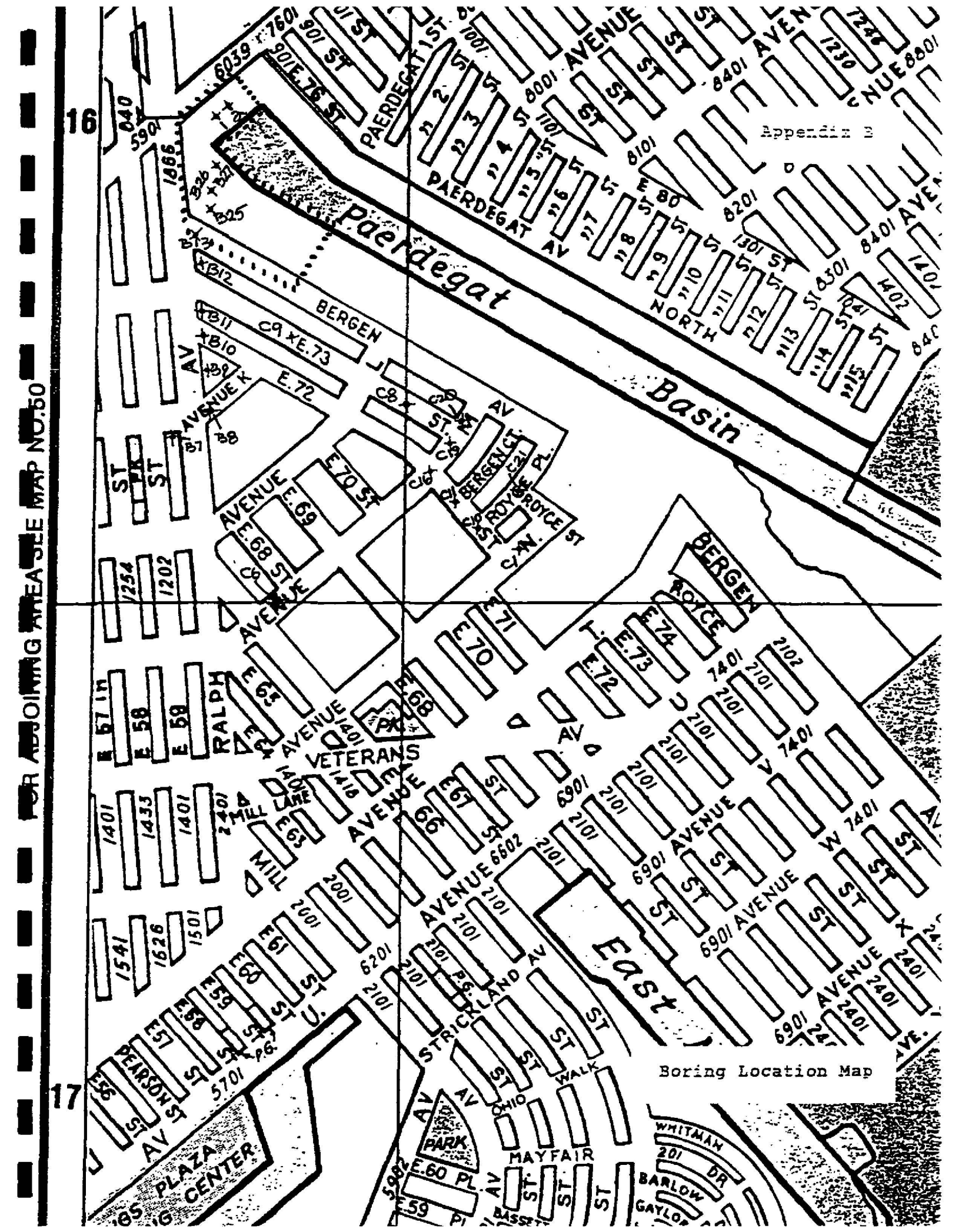
Borings for Reconstruction of Avenues L, M, N, etc., between East 68th and East 72nd Streets (Sheet 2181)

City of New York, Department of General Services, Division of Design and Construction Management, Bureau of Building Design
February 27, 1991 (See attached map for location)

C1 water +0.9' to -0.1'	C6 water +0.7' to +0.4'	C7 water 0.9' to -0.1'	C8 water +1.2' to 0
Blacktop & fill +11.7' to -8.3'	Asphalt, conc. & fill +10.9' to -7.1'	Blacktop & fill +10.9 to -4.1'	Asphalt, conc & fill +11.3' to -4.7'
F-med br sand, tr silt tr grav to -11.8'	F-med dark br sand, tr silt, tr grav to -12.1'	Br peat, some org silt to -6.6'	f-med-c br sand, tr to little silt, tr to little grav. to -7.7'

C9 water 0.0'	C11 water -0.5'	C20 water 4.0'
Asphalt, conc, fill +10.8' to -1.2'	Asphalt, conc, fill +11.6 to -6.4'	Asphalt, conc, fill +13.3' to -2.7'
Dark br peat, some org silt, tr grav to -5.2'	F-med br sand to -11.4'	F-med-c br sand, little grav, tr silt, cobbles to -8.8'
Gray/br silt, tr clay, little med-f sand, tr veg to -9.2'	F-med-c brown sand tr grav to -19.9'	F-med br sand, tr grav to -21.3'

C10	C16	C19	C21
Asphalt, fill +12.6'to -2.4'	Blacktop, conc, fill +13.4' to -0.6'	Blacktop, conc fill +10.2' to -3.8'	Asphalt, conc, fill +13.1' to -4.9'
Peat, org. silt, tr glass to -3.4'	Dark gray/brown org silt, peat, some clay, tr grav, tr metal, glass to -5.6'	F-med.-coarse brown sand, little grav, tr silt to -8.8'	F-med brown sand, tr silt, tr grav, org odor, f silty sand layers. to -18.4
Gray/brown silt f-med sand tr veg. to -5.4'	F-med brown sand tr silt, tr grav, tr veg. to -10.6'	F-med brown sand, tr grav to -21.3'	
F-med brown sand, tr silt, tr grav. to -18.9'			


Appendix B
Paerdegat Basin
Boring Location Map
FOR ADJOINING AREA SEE MAP NO. 50
16
17
PAERDEGAT 1ST ST
PAERDEGAT AV
E 80 ST
NORTH
BERGEN
AV
C9 XE.73
E.72
AVENUE K
C8
E 79 ST
AVENUE
E.69
E.68 ST
C6
BERGEN CT
ROYCE PL
EAST
ROYCE ST
C4 W.
E 71
E 70
E.74
E.73
E.72
BERGEN
ROYCE
AVENUE
VETERANS
RALPH
MILL LANE
AVENUE 66
AVENUE 6602
AVENUE
East
PARK
PG
STRICKLAND AV
WALK
OHIO
MAYFAIR
E.60 PL
WHITMAN
201
DR
BARLOW
GAYLO
PEARSON ST
PLAZA
CENTER
901 ST
E.76 ST
1001
1101
1201
1301
1401
1402
8001
8101
8201
8301
8401
8801
6039
590
840
1366
B26
B27
B25
B12
B11
B10
B9
B8
B7
1254
1202
1401
1433
1541
1626
1501
2401
2001
6201
5701
5981
2101
6901
7401
2102

APPENDIX A

Correspondence with the

New York State Museum

and the

New York State Office of Parks, Recreation, and Historic Preservation

SITE FILE SEARCH RESULTS

conducted by LSB

date 5/21

Project Paerdegat Basin

Village _____ Town Brooklyn

County _____

New York State Museum

Prehistoric archeological sites 4 (list on back)

Site sensitivity requested ✓

Office of Parks, Recreation and Historic Preservation

Archeological sites 8 AK 5/19/93

Building/Structure forms

National Register listing

Previous Surveys

Key To USGS Map Indicating Inventoried Cultural Resources

From the New York State Museum there are four prehistoric archaeological sites were reported by Arthur C. Parker. Their approximate locations are indicated by the numbers 7390, 7391, 3610, and 3608.

The Office of Parks, Recreation and Historic Preservation has eight sites in its files which are indicated by numbers 1 - 8 on the map. Copies of the site inventory forms - in that sequence - follow the map.

Brooklyn Quad (USGS 1967)

#1. A047-01-0125 Kings Bayview House, Canarsie Pier, Jamaica Bay
#2. A047-01-0118 Schenck House site near Jamaica Bay
#3. A047-01-0113 Canarsie site
#4. A047-01-0023 Wyckoff House in Flatbush

Coney Island N.Y. Quad (USGS 1066)

#5. A047-01-0123 Van Wicklen Cottage near Jamaica Bay
#6. A047-01-0119 Bergen House near Jamaica Bay
#7. A047-01-0121 John Eldert House site near Jamaica Bay
#8. A047-01-0120 Schenck-Crooke House site near Jamaica Bay

Brownsville
Jewish Hospital for Chronic Diseases
BROOKLYN STATE HOSPITAL
State University Medical Center
The Brookdale Hospital Center
New Lots Yards
East Flatbush
CEMETERY OF THE HOLY CROSS
Tilden High Sch
Nazareth High Sch
Sch of the Little Flower
McAuly High Sch
Paerdegat Park
St Jeromes Sch
St Vincents Sch
Amersfort Park
Auburn Academy
Flatlands
Joffe Park
Canarsie
Canarsie High Sch
Holy Family Sch
Canarsie Cemetery
St Judes Sch
Paerdegat Basin
Canarsie Beach
Bergen Beach
Athletic Field
Mill Basin
Bergen Beach Yacht Club
Mill Basin Bridge
PARK
CONEY ISLAND
1000 2000 3000
Polyconic projection. 1927
3608

New York State Museum sites:

NYSM#	other#	Name	time per.	type	source of data	project	quad
3608	ACP Kings 4		Woodland?	Burials + shell midd.	on Ave U near ... Ryder Pt + Sheph Bay		oyster shell, pottery, 12' ...
3610	ACP Kings no #		Wr	camp			
7390	ACP Kings 3A			Shell heaps	numerous heaps at Canarsie or Flatlands		
7391	ACP Kings 3B			Shell heaps	numerous heaps at ... Bergen Is		

Office of Parks, Recreation and Historic Preservation

Archeological Sites:

Building/Structure Forms:

National Register Listings:

listed

listed

Previous Surveys:

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0125
QUAD. Brooklyn
SERIES U.S.G.S. 7½'
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester, Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): NPS Contract CX-2000-7-0010

DATE: 2/10/78

* *

1. SITE NAME: JB-78 King's Bayview House Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: Vicinity of Canarsie Pier, Jamaica Bay

4. PRESENT OWNER: _____

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See attached form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

NATIONAL HERITAGE

Historic Site Survey Record

Brooklyn ~~Coney Island~~ U.S.G.S. 7.5' Quadrangle (1966)

View:

Camera Facing:

UTM Grid ^{44}97,350m.N.
^{5}93,500m.E.

Note: Due to the extreme nature of 20th century disturbance in this area, this location should not be taken to be precise.

1. NAME
   Historic JB-78
   Common King's Bayview House

2. LOCATION
   Street & No. Canarsie Pier
   Jamaica Bay

Zoning:_____ Map Reference Key #_____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO PUBLIC
___District ___Building X Site ___Structure ___Object	X Public ___Private ___Both Public Acquisition: ___In Process ___Being Considered	___Occupied X Unoccupied ___Work in Progress ___Pres. ___Altera.	Yes: X Restricted ___Unrestricted ___No

PRESENT USE (Check One or More if Applicable)

___Agriculture ___Commercial ___Educational
X Government ___Industrial ___Military
___Museum X Park ___Private Residence (Owner Occupied)
___Religious ___Rental Residence ___Single Family ___Double ___Multiple
___Scientific ___Transportation ___Other

ORIGINAL USE: Residential Structure

4a. OWNERSHIP (Present)
Name:
National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known):

4c. BUILDER/ARCHITECT (if known):

5. DESCRIPTION Drawing on file at Long Island Historical Society

Features (exterior)	Materials
Facade Unknown	Unknown
Foundations	
Trim	
Roof Type: ___flat ___gable ___shed ___"French" ___gambrel ___hip ___other	
Chimney(s)	
Porch(es)	
Addition(s)	

Dimensions & Plan Unknown (Sketch):

Structural System:

___wood frame, interlocking joints ___wood frame, light member
___masonry load bearing walls ___log ___metal ___other

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___Excellent ___Good ___Fair ___Deteriorated X Ruins
INTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins

Integrity: a. X Original Site b. ___Moved If so, when and from where _____

c. Major alterations and dates (if known): _____

Site:
Frontage: Acreage:
Depth:
Related Outbuildings and Property: None Known
___barn ___carriage house ___garage(s) ___shop ___shed ___gardens ___orchards
___fencing (type)_____ ___walling (type)_____ ___other_____
Threats and/or intrusions to Building:
___none known ___zoning ___roads X development ___deterioration ___other_____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___Pivotal ___Positive X Neutral ___Negative
Relationship to Village: ___Pivotal ___Positive ___Neutral ___Negative

7. SIGNIFICANCE

Date of Initial Construction:
___c.1840 ___c.1850 ___c.1860 ___c.1870 ___c.1880 ___c.1890 ___c.1900
___c.1910 ___after 1910 Specific Date (if known) 18th century

Style:
___Frontier ___Italianate ___Neo-Classic Revival ___Art Deco
___Classic Revival ___Romanesque Revival ___English Eclectic ___Ranch Style
___Gothic Revival ___Queen Anne ___Federal Revival ___Split-Level
___Tuscan Villa ___Eastlake ___Bungaloid ___Utilitarian
___Second Empire ___Georgian Revival ___Western Stick Style ___Other

National Register Status:
Presently on National Register or nominated for:
___national significance ___State significance ___local significance X none

COMMENTS: (expand on next page)

King's Bayview house was probably erected sometime in the 18th century. No further information available.

Recorder: DGR Date of Inventory 7/77

Photographer: _____ Date of Exposure _____

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0118
QUAD. Brooklyn
SERIES U.S.G.S. 7½'
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester, Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): NPS Contract CX-2000-7-C010

DATE: 2/10/78

* *

1. SITE NAME: JB-71 Schenck House Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: End of Remsen Ave. near Canarsie Pier, Jamaica Bay

4. PRESENT OWNER: _____

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See Attached Form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

_____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

NATIONAL HERITAGE

Historic Site Survey Record
Brooklyn ~~Coney Island~~ U.S.G.S. 7.5'Quadrangle (1966)

UTM Grid 4497,350m.N.
5 93,500m.E.

View:
Camera Facing:

Note: Due to the extreme nature of 20th century disturbance in this area, this location should not be taken to be precise.

1. NAME
Historic JB-71
Common Schenck House

2. LOCATION
Street & No. Vicinity of Canarsie Pier
Jamaica Bay

Zoning:_____ Map Reference Key #_____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO PUBLIC
__District __Building X Site __Structure __Object	X Public __Private __Both Public Acquisition: __In Process __Being Considered	__Occupied X Unoccupied Work in Progress __Pres. __Altera.	Yes: X Restricted __Unrestricted __No

PRESENT USE (Check One or More if Applicable)

__Agriculture __Commercial __Educational
__Government __Industrial __Military
__Museum X Park __Private Residence (Owner Occupied)
__Religious __Rental Residence __Single Family __Double __Multiple
__Scientific __Transportation __Other

ORIGINAL USE: Residential Structure

4a. OWNERSHIP (Present)
Name:
National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known):
Martin Schenck

4c. BUILDER/ARCHITECT (if known):

5. DESCRIPTION Photographs on file at Long Island Historical Society

Features (exterior)	Materials
Facade Unknown	Unknown
Foundations	
Trim	
Roof Type: __flat __gable __shed __"French" __gambrel __hip __other	
Chimney(s)	
Porch(es)	
Addition(s)	

Dimensions & Plan Unknown (Sketch):

Structural System:
__wood frame, interlocking joints __wood frame, light member
__masonry load bearing walls __log __metal __other

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___ Excellent ___ Good ___ Fair ___ Deteriorated X Ruins
INTERIOR ___ Excellent ___ Good ___ Fair ___ Deteriorated ___ Ruins

Integrity: a. X Original Site b. ___ Moved If so, when and from where _____

c. Major alterations and dates (if known): _____

Site:

Frontage: Acreage:

Depth:

Related Outbuildings and Property: None Known

___ barn ___ carriage house ___ garage(s) ___ shop ___ shed ___ gardens ___ orchards

___ fencing (type) _____ ___ walling (type) _____ ___ other _____

Threats and/or intrusions to Building:

___ none known ___ zoning ___ roads X development ___ deterioration ___ other _____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___ Pivotal ___ Positive X Neutral ___ Negative

Relationship to Village: ___ Pivotal ___ Positive ___ Neutral ___ Negative

7. SIGNIFICANCE

Date of Initial Construction:

___ c.1840 ___ c.1850 ___ c.1860 ___ c.1870 ___ c.1880 ___ c.1890 ___ c.1900
___ c.1910 ___ after 1910 Specific Date (if known) 1664

Style:

___ Frontier	___ Trallaimate	___ Neo-Classic Revival	___ Art Deco
___ Classic Revival	___ Romanesque Revival	___ English Eclectic	___ Ranch Style
___ Gothic Revival	___ Queen Anne	___ Federal Revival	___ Split-Level
___ Tuscan Villa	___ Eastlake	___ Bungaloid	___ Utilitarian
___ Second Empire	___ Georgian Revival	___ Western Stick Style	___ Other

National Register Status:
Presently on National Register or nominated for:

___ national significance ___ state significance ___ local significance X none

COMMENTS: (expand on next page)

House was still extant in 1936. There are five photographs on file at Long Island Historical Society. Van Wyck's map of Jamaica Bay area depicts the house and a nearby structure designated as the "Older Schenck House". Later structure owned by Martin Schenck. Built in 1664. House demolished early twentieth century.

Recorder: DGR Date of Inventory 7777

Photographer: _____ Date of Exposure _____

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0113
QUAD. Brooklyn
SERIES 7½' ✓ U.S.G.S.
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester, Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): NPS Contract CX-2000-7-0010

DATE: 2/10/78

* *

1. SITE NAME: Canarsie Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: Extended back from Canarsie Beach Park as far as Avenue J, centered on E 92nd Street

4. PRESENT OWNER: NPS

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See Attached Form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

_____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

NATIONAL HERITAGE

Prehistoric Site Survey Record

1. DESIGNATION
Number
Name Canarsie

2. LOCATION
Relation to Surroundings North Shore
Jamaica Bay
Brooklyn Quad.
Map Reference ~~Canarsie Coney Island~~
County U.S.G.S. 7.5' Quadrangle(1966)
Township _____ Range _____
_____ 1/4 of _____ 1/4 of Sec. _____
_____ up from lower right printed margin
_____ over from lower right printed margin

Photo Numbers:

Camera Facing:

UTM Grid ^{44}97,330m.N.
^{5}94,390m.E.

Note: Due to the extreme nature o 20th cen. disturbance in th area, this location should not be taken to be precise.

3. CLASSIFICATION

FUNCTION		PHYSIOGRAPHY	
___ encampment	___ mortuary	X Open	___ Other
X village	___ petroglyph	___ Rockshelter	
___ hunting	___ other	___ Cave	

PRESENT USE (check one or more as applicable)		OWNERSHIP	
___ Agricultural	___ Industrial	X Public	Public Acquisition
___ Commercial	___ Military	___ Private	___ In Process
X Government	X Park	___ Both	___ Being Considered
	___ Other		

4a. OWNERSHIP (present)
Name: National Park Service
Street & Number: _____
City or Town: _____

4b. OWNERSHIP (original, if known)
Name: _____
Street & Number: _____
City or Town: _____

5. DESCRIPTION
Dimensions: unknown
Vegetation: reed grasses
Elevation: 0 - 10 feet above sea level
Nearest Water: adjacent
Surface Soil: organic humus and landfill

5. DESCRIPTION (cont.)

Erosion/Deposition: probably erosion

Present Disturbance: landfilling

Impending Disturbances: none known

Structures:

Burials:

Other Features:

Artifacts Observed or Recovered:

6. SIGNIFICANCE

Tradition and Phase (if known): late prehistoric - early historic

Probable Dates of Occupation (if known):

National Register Status
Presently on National Register or nominated for:

___ national significance ___ state significance

___ local significance X none

Comments: Map on file at Long Island Historical Society (Kelly 1946) indicates that a village named Canarsie once stood northeast of Bergen Beach. Village may have been center of Canarsie Indians. Bolton (1934:146) described village as being extensive.

References Cited:

Bolton, Reginald Pelham
1934 Indian Life of Long Ago in the City of New York. New York: Harmony Books.

Kelly, James A.
1946 Map of Aboriginal Indian Villages in the Jamaica Bay Vicinity. On File at the Long Island Historical Society.

Recorder: DGR Date of Inventory: 7/77

Photographer: Date of Exposure:

Type: Residential
Theme: Individuals or groups
#10

ARCHEOLOGICAL SITE INVENTORY FORM

NEW YORK STATE HISTORIC TRUST
OFFICE OF PARKS AND RECREATION
ALBANY, NEW YORK (518) 457-3753

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0023
QUAD. Brooklyn
SERIES
NEG. NO.

REPORTED BY: Bert Salwen

YOUR ADDRESS: N.Y.U.Dept of Anthro. TELEPHONE: 212-598-2815

ORGANIZATION (if any): NYAC

DATE: March 21, 1973

* *

1. SITE NAME: Pieter Claesen Wyckoff House (17th c)

2. COUNTY: Kings TOWN/CITY: VILLAGE:

3. LOCATION: Corner of Clarendon Road and Ralph Ave
East Flatbush, Brooklyn, N.Y.

4. PRESENT OWNER: N Y C Dept of Cultural Affairs

5. OWNER'S ADDRESS: The Arsenal, Central Park, N.Y., N.Y.

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE:

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER Standing building; partially temp. stabilized

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM DATE

☒ TESTING BY WHOM N.Y.U. DATE 12/72

☐ EXCAVATION BY WHOM DATE

☐ NONE

PRESENT REPOSITORY OF MATERIALS: N.Y.U.

8. PREHISTORIC CULTURAL AFFILIATION OR DATE:

ARCHEOLOGICAL SITE INVENTORY FORM

DIVISION FOR HISTORIC PRESERVATION
NEW YORK STATE PARKS AND RECREATION
ALBANY, NEW YORK
518 474-0479

FOR OFFICE USE ONLY

UNIQUE SITE NO. A047-01-0123
QUAD. Coney Island
SERIES U.S.G.S. 7½'
NEG. NO. _____

REPORTED BY: John Milner Associates

YOUR ADDRESS: West Chester, Pennsylvania TELEPHONE: _____

ORGANIZATION (if any): NPS Contract CX-2000-7-0010

DATE: 2/10/98

* *

1. SITE NAME: JB-76 Van Wicklen Cottage & Mill Site

2. COUNTY: Kings TOWN/CITY: _____ VILLAGE: _____

3. LOCATION: Along Paerdegat Basin (near foot of former Crescent Street), Jamaica Bay

4. PRESENT OWNER: _____

5. OWNER'S ADDRESS: _____

6. DESCRIPTION, CONDITION, EVIDENCE OF SITE: See Attached Form

☐ STANDING RUINS ☐ CELLAR HOLE WITH WALLS

☐ SURFACE TRACES VISIBLE ☐ WALLS WITHOUT CELLAR HOLE

☐ UNDER CULTIVATION ☐ EROSION ☐ UNDERWATER

☐ NO VISIBLE EVIDENCE ☐ OTHER _____

7. COLLECTION OF MATERIAL FROM SITE:

☐ SURFACE HUNTING BY WHOM _____ DATE _____

☐ TESTING BY WHOM _____ DATE _____

☐ EXCAVATION BY WHOM _____ DATE _____

☐ NONE

PRESENT REPOSITORY OF MATERIALS: _____

_____

8. PREHISTORIC CULTURAL AFFILIATION OR DATE: _____

NATIONAL HERITAGE

Historic Site Survey Record

Coney Island U.S.G.S. 7.5' Quadrangle (1966)

View:

Camera Facing:

UTM Grid ^{44}97,350m.N.

^{5}93,500m.E.

Note: Due to the extreme nature of 20th cen. disturbance in this area, this location should not be taken to be precise

1. NAME
   Historic JB-76
   Common Van Wicklen Cottage and Mill
2. LOCATION
   Street & No. Banks of Paerdegat Basin
   Jamaica Bay

Zoning:_____ Map Reference Key #_____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO PUBLIC
__District __Building X Site __Structure __Object	X Public __Private __Both Public Acquisition: __In Process __Being Considered	__Occupied X Unoccupied Work in Progress __Pres. __Altera.	Yes: X Restricted __Unrestricted __No

PRESENT USE (Check One or More If Applicable)

__Agriculture __Commercial __Educational
X Government __Industrial __Military
__Museum
X Park
__Private Residence (Owner Occupied)
__Religious
__Rental Residence
__Single Family
__Double
__Multiple
__Scientific
__Transportation
__Other

ORIGINAL USE: Residential Complex

4a. OWNERSHIP (Present)
Name:
National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known):

4c. BUILDER/ARCHITECT (If known):

5. DESCRIPTION Photographs on file at Long Island Historical Society.

Features (exterior)	Materials
Facade Unknown	Unknown
Foundations	
Trim	
Roof Type: __flat __gable __shed __"French" __gambrel __hip __other	
Chimney(s)	
Porch(es)	
Addition(s)	

Dimensions & Plan Unknown (Sketch):

Structural System:

__wood frame, interlocking joints __wood frame, light member
__masonry load bearing walls __log __metal __other

NATIONAL HERITAGE

Historic Site Survey Record

Coney Island U.S.G.S. 7.5' Quadrangle (1966)

View:
Camera Facing:

UTM Grid ^{44}96,290m.N.
^{5}93,550m.E.

Note: Due to the extreme nature of 20th century disturbance in this area, this location should not be taken to be precise.

1. NAME
   Historic JB-72
   Common Bergen House
2. LOCATION
   Street & No. Formerly on Bergen Island Jamaica Bay

Zoning:_____ Map Reference Key #_____

3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP		STATUS	ACCESSIBLE TO PUBLIC
___District ___Building X Site ___Structure ___Object	X Public ___Private ___Both	Public Acquisition: ___In Process ___Being Considered	___Occupied X Unoccupied Work in Progress ___Pres. ___Altera.	Yes: X Restricted ___Unrestricted ___No

PRESENT USE (Check One or More If Applicable)

___Agriculture ___Commercial ___Educational
___Government ___Industrial ___Military
___Museum
X Park
___Private Residence (Owner Occupied)
___Religious
___Rental Residence
___Single Family
___Double
___Multiple
___Scientific
___Transportation
___Other

ORIGINAL USE: Residential Structure

4a. OWNERSHIP (Present)
Name:
National Park Service
Street and Number:
City or Town:

4b. OWNERSHIP (Original, if known):
Stoothoff

4c. BUILDER/ARCHITECT (If known):

5. DESCRIPTION Photographs on file at Long Island Historical Society

Features (exterior) — Materials

Facade Unknown — Unknown
Foundations
Trim
Roof Type: ___flat ___gable ___shed ___"French" ___gambrel ___hip ___other
Chimney(s)
Porch(es)
Addition(s)

Dimensions & Plan Unknown (Sketch):

Structural System:

___wood frame, interlocking joints ___wood frame, light member
___masonry load bearing walls ___log ___metal ___other

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___Excellent ___Good ___Fair ___Deteriorated X Ruins
INTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins

Integrity: a. X Original Site b. ___Moved If so, when and from where _____

c. Major alterations and dates (if known): _____

Site:
Frontage: Acreage:
Depth:
Related Outbuildings and Property:
___barn ___carriage house ___garage(s) ___shop ___shed ___gardens ___orchards
___fencing (type)_____ ___walling (type)_____ ___other_____
Threats and/or Intrusions to Building:
___none known ___zoning ___roads X development ___deterioration ___other_____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___Pivotal ___Positive X Neutral ___Negative
Relationship to Village: ___Pivotal ___Positive ___Neutral ___Negative

7. SIGNIFICANCE

Date of Initial Construction:
___c.1840 ___c.1850 ___c.1860 ___c.1870 ___c.1880 ___c.1890 ___c.1900
___c.1910 ___after 1910 Specific Date (if known) 1763

Style: ___Frontier ___Italianate ___Neo-Classic Revival ___Art Deco
___Classic Revival ___Romanesque Revival ___English Eclectic ___Ranch Style
___Gothic Revival ___Queen Anne ___Federal Revival ___Split-Level
___Tuscan Villa ___Eastlake ___Bungaloid ___Utilitarian
___Second Empire ___Georgian Revival ___Western Stick Style ___Other

National Register Status:
Presently on National Register or nominated for:
___national significance ___state significance ___local significance X none

COMMENTS: (expand on next page)

Mill erected in 1763, cottage at a later date. In 1924 the cottage was destroyed by fire, the mill was demolished in 1934.

Recorder: DGR Date of Inventory 7/77

Photographer: _____ Date of Exposure _____

9. HISTORICAL DOCUMENTATION OF SITE:

John Milner Associates
1978 "A Cultural Resources Inventory of the Gateway National Recreation Area, New York & New Jersey." Report prepared for the NPS. (Copy on file at the NYSOHP.)

10. POSSIBILITY OF SITE DESTRUCTION OR DISTURBANCE:

11. REMARKS:

12. MAP LOCATION

7 ½ MINUTE SERIES QUAD. NAME: _____

15 MINUTE SERIES QUAD. NAME: _____

U.S.G.S. COORDINATES: _____

D.O.T. COORDINATES: (if known) _____

ATTACH SKETCH, TRACING OR COPY OF MAP

See above cited report, p. 116, Fig. 7.2

SOURCE OF MAP:

13. PHOTOGRAPHS (optional)

(ATTACH)

5. DESCRIPTION (cont.)

Number of Stories Unknown

Other notable features: _____

Condition: EXTERIOR ___Excellent ___Good ___Fair ___Deteriorated X Ruins
INTERIOR ___Excellent ___Good ___Fair ___Deteriorated ___Ruins

Integrity: a. X Original Site b. ___Moved If so, when and from where _____

c. Major alterations and dates (if known): _____

Site:
Frontage: Acreage:
Depth:
Related Outbuildings and Property: None Known
___barn ___carriage house ___garage(s) ___shop ___shed ___gardens ___orchards
___fencing (type)_____ ___walling (type)_____ ___other_____
Threats and/or Intrusions to Building:
___none known ___zoning ___roads X development ___deterioration ___other_____

6. INTERRELATIONSHIP OF BUILDING AND SURROUNDINGS

Relationship to Street: ___Pivotal ___Positive X Neutral ___Negative
Relationship to Village: ___Pivotal ___Positive ___Neutral ___Negative

7. SIGNIFICANCE

Date of Initial Construction:
___c.1840 ___c.1850 ___c.1860 ___c.1870 ___c.1880 ___c.1890 ___c.1900
___c.1910 ___after 1910 Specific Date (if known)_____

Style: ___Frontier ___Italianate ___Neo-Classic Revival ___Art Deco
___Classic Revival ___Romanesque Revival ___English Eclectic ___Ranch Style
___Gothic Revival ___Queen Anne ___Federal Revival ___Split-Level
___Tuscan Villa ___Eastlake ___Bungaloid ___Utilitarian
___Second Empire ___Georgian Revival ___Western Stick Style ___Other

National Register Status:
Presently on National Register or nominated for:
___national significance ___state significance ___local significance X none

COMMENTS: (expand on next page)

House built sometime before the Revolutionary War, first occupied by ancestors of Olaf Stoothoff. 1791, ownership of house transferred to John Bergen. Soon after, island became known as Bergen Island. House still extant as late as 1924.

Recorder: DGR Date of Inventory 7/77

Photographer: _____ Date of Exposure _____