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# SHAFT SITE 21B

CEQR No. 89-119K

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ENVIRONMENTAL REVIEW

MAR 14 1989

LANDMARKS PRESERVATION  
COMMISSION

NEW YORK CITY  
DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
CITY TUNNEL NO. 3, STAGE 2

PHASE IA  
ARCHAEOLOGICAL  
ASSESSMENT  
REPORT

225

HISTORICAL  
PERSPECTIVES INC.



P.O. Box 331 Riverside, Connecticut 06878

RECEIVED  
ENVIRONMENTAL REVIEW

MAR 14 1989

LANDMARKS PRESERVATION  
COMMISSION

PHASE 1A ARCHAEOLOGICAL REPORT  
for the  
SHAFT SITE 21B, BROOKLYN, NEW YORK  
(CEQR No. 89-119K)

Prepared

FOR: New York City Department  
of Environmental Protection

BY: Historical Perspectives, Inc.  
P. O. Box 331  
Greenwich, CT. 06878

DATE: February 21, 1988



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## I. INTRODUCTION

As part of the City Environmental Quality Review process for the proposed construction of a concrete shaft at 901-913 Kent Avenue in Brooklyn (CEQR #89-119K), the New York City Department of Environmental Protection is responsible for an archaeological assessment of the site based on documentary research (Figure 1). According to a letter from Jeremy Woodoff of the New York City Landmarks Preservation Commission (November 21, 1988), the NYCLPC is concerned that Water Shaft Site 21B may be archaeologically significant because of its association with the settlement of East Brooklyn in the early nineteenth century.

Current plans for the shaft construction entail limited subsurface impact to Blocks 1912 and 1898. As proposed, the 40 foot diameter shaft will be topped by a partially buried concrete chamber 70 feet by 35 feet. According to Mr. Walter Fitzpatrick of the Bureau of Water Supply and Wastewater Collection (January 17, 1989), the primary impact zone has been determined to be a 150-by-90-foot plot fronting on Kent Avenue (Figure 2). Only construction-related activities (vehicular traffic and temporary construction offices) will affect the remainder of the block.

The following assessment, completed by Historical Perspectives, Inc., addresses the expressed concern for historical sensitivity at the Shaft 21B Site. As detailed below, our evaluation is based on an overview of the site's history and development. According to historical research, the Project Area lies outside of the East Brooklyn area and settlement did not occur until the third quarter of the nineteenth century. Further research indicated that intact archaeological remains associated with a blue collar Irish residential population probably exist within the Project Area. HPI suggests that these cultural resources are significant and further archaeological investigation is warranted.

## II. METHODOLOGY

Historical Perspectives, Inc. completed six separate tasks in the process of satisfying the New York City Landmarks Preservation Commission's (NYCLPC) requirements for assessing archaeological potential for the Project Area. These tasks were necessary to address the following concerns:

1. What is the potential that the Shaft 21B site hosted significant prehistoric and/or historical resources.

and,

2. What is the likelihood that these resources survived the subsurface disturbances associated with urbanization.

### Documentary Research

A review of both primary and secondary literature was conducted in order to reconstruct the prehistoric and historic land use patterns within the Project Area and its neighboring areas. The following repositories were consulted in the course of this research: New York Public Library, New York Historical Society, Brooklyn Historical Society, the James A. Kelly Institute for Local Historical Studies at St. Francis College in Brooklyn, and the NYCLPC files on previous archaeological work conducted in New York City.

Municipal records for Brooklyn and New York City were consulted for information pertaining to city services and land records. These include materials on sewer and water facilities, deed records, tax records, soil boring records, and block and lot records.

Archaeological documentation was sought through consultation of published reports, journal articles and books on previous archaeological investigations undertaken in Brooklyn and the surrounding area.

### Cartographic Research

Historic maps and atlases were consulted at the Brooklyn Historical Society, the New York Public Library, the New York Historical Society, and the County Clerks Office. Map research was conducted to determine the original topography of the Project Area and the surrounding neighborhood and to document the presence of standing structures and historic features within the Project Area throughout history. This research aides in determining the nature of historic structures and the type and extent of disturbances.

### Informant Interviews

To supplement the documentary and cartographic research described above, local amateur and professional archaeologists and historians knowledgeable in Brooklyn prehistory and history were consulted.

### Site File Review

Site file reviews were conducted by the New York State Office of Parks, Recreation, and Historic Preservation and the New York State Museum Education Department, to determine if prehistoric or historic resources had been identified within or near the Project Area. Both of these agencies provided an assessment of archaeological sensitivity based on previously developed models. This correspondence can be found in Appendix A of this report. City inventories and National Register inventories were also reviewed.

### Field Visit and Photographic Record

No subsurface investigations were performed. Photographs of the site were taken in January 1989 as a record of current conditions.

### III. ENVIRONMENTAL SETTING

The Coastal Plain extends along the Atlantic Ocean. The Embayed Section, which extends from North Carolina to Cape Cod, is almost completely underwater with Long Island as an exception. The Plain is joined to the Continental Shelf below the Ocean. More than half the Plain is less than 100 feet in elevation (Eisenberg 1978:7).

Much of Long Island was glaciated during the Wisconsin episode of the Pleistocene. When the ice began to recede about 16,000 years ago, the glaciers left two terminal moraines along the Coastal Plain with deposits of till and outwash, mostly coarse gravels (Sirkin 1974:432). The Harbor Hill Moraine formed the north side of Long Island (Snow 1980:102). Deglaciation of the Project Area probably occurred between 15,000 and 16,000 years ago. The post-glacial environment was characterized by a spruce-pine forest, slowly giving way to a mixed hard-wood forest.

Sea levels rose slowly as the environment warmed. The Brooklyn area slowly became covered with a mixed hard wood forest, along with salt marshes, estuaries and bays. Diverse communities of plant and animal life established themselves in the rich environment as the warming process continued.

At the time of European contact, the Project Area was situated southeast of what would become known as Wallabout Bay. Wallabout Creek, which empties into the Bay, was also located north of the Project Area. On a Map showing the Original High and Low Grounds, Salt Marsh and Shore Lines, dating from 1776-1777 (Report of the Board of Health), the Project Area is located three to four blocks into solid, well-drained land south of a small creek feeding into Wallabout Bay.

Currently the vacant lots forming the Project Area are located at the southeast corner of Kent and Willoughby Avenues (Figure 2, Photographs 1, 2, and 3). A two-story frame house stands on the adjacent southern property (Photograph 4). The area currently functions--mainly as a garbage collection site as neighborhood trash is indiscriminately deposited here.

#### IV. PREHISTORIC

It is now widely accepted that people first entered the Americas between the great ice ages over 40,000 years ago. They came across Beringia, a large land mass that narrowed to become the Bering Strait. These early people, called Paleo-Indians, were big game hunters who pursued now extinct animals such as mammoth, mastodon, giant sloth, ancient horse and camel.

At the end of the Wisconsin ice age, following the retreating glacier which had covered the northeastern United States, they reached New York State between 13,000 and 10,000 years ago. Traces of these Paleo hunters are found on high points of land where they could spot the migrating big game or at low-lying sites near water. These low areas were covered by the rising sea level caused by the melting glaciers, and are submerged today.

The Project Area is located on a knoll sixty feet above sea level, one of the highest points of land in the area except for two elevations of seventy feet slightly over a mile to the west (Figure 1). A nearby hillock, in Fort Greene Park, was in part created by landscape architect Frederick Law Olmsted toward the end of the nineteenth century and may not have been part of the Paleo environment (NYCLPC 1983: n.p.). Recent soil boring data indicates that the site was most probably a well-drained location prehistorically.

As of 1973, Kings County was the only Long Island county where fluted points, diagnostic of the Paleo-Indian period, had not been found. Probably this is because of the early and extensive development of the area and does not necessarily mean that the resources of Brooklyn were not exploited by prehistoric people (Saxon 1973:259). If indeed Paleo hunters had ranged over what is now Kings County, the Project Area would have been a choice place for a hunting camp.

As the glacier melted and the sea level rose, the coastline of New York came to be much as it is today, or was before being so drastically altered by modern man. The big game disappeared and hunters relied on white-tailed deer and other small animals, on fish and fowl, and on various nuts, seeds, and berries. They also showed a growing preference for shellfish, leaving many shell middens along the shore in the western part of Long Island, not far from Kent Avenue.

This period, lasting from about 10,000 to 2,700 years ago, is called the Archaic Period and is subdivided into Early, Middle and Late stages. The Archaic people made seasonal rounds to take advantage of the food resources of different locations, and the sites they left are "numerous, small, nearly always multi-component sites, variously situated on tidal inlets, coves and bays, particularly at the heads of the latter, and on fresh-water ponds" (Ritchie 1980:143).



Present-day maps show the Project Area to be about 3,000 feet southeast of Wallabout Bay, the nearest waterfront, with no fresh water sources noted. However, observers in the early seventeenth century described a place called Rinnegachonck, translated as "pleasant land" or "delightful place," with a small stream that ran through it. Grumet places Rinnegachonck "along the southeastern side of Wallabout Bay in the present Brooklyn Navy Yard in downtown Brooklyn" (Grumet 1981:46; Figure 3). The Project Area is probably too far north and east of this stream, at half a mile away, to have made it a practical place for more than a temporary camp for early man. Also, there is no indication that the site was ever in direct proximity to a large-scale wetland, a known prehistoric settlement preference.

About 2,700 years ago, the Woodland Period followed the Archaic. Also divided into Early, Middle and Late stages, it ended with the arrival of Europeans in the early seventeenth century, the so-called Contact Period. Woodland peoples developed ceramic vessels and began to cultivate the soil, becoming more and more settled as they did so.

One such settlement was called Marechkawieck, variously translated as "sandy place," "fortified or palisaded house" and Widgeon Bay" (Grumet 1981:26). Several early sources place it southwest of Wallabout Bay, west of the stream mentioned above, with a settlement across the East River near New Amsterdam as well. The Project Area lies slightly over a mile to the northeast from Marechkawieck and is not in proximity to the two north-south running Indian trails in this part of Brooklyn (Grumet 1981:70).

Another site, "a sand hill, with buried pottery, arrowheads and broken clay pipes" lies just over a mile southwest of the proposed shaft location (Bolton 1934:45). This may be the same location as Site 3606, which was inventoried by the New York State Museum, Anthropological Division (Historical Perspectives 1986: n.p.).

Although file reviews conducted at the New York State Museum/Education Department and the New York State Office of Parks, Recreation and Historic Preservation did not reveal inventoried prehistoric sites within a one mile search area of the shaft site, the two Albany agencies designated the site as, respectively, having "average probability of producing prehistoric archaeological data" and being "in an area that is archaeologically sensitive" (Appendix A). Despite these notations and the fact that there are some prehistoric sites known for Kings County, it is unlikely that the shaft site was ever settled intensively by Woodland people, unless it was a productive nut grove or hunting spot. It is located too far from a source of fresh water for most long-term activities.

If it is hypothesized that the Project Area has a limited degree of potential as a hunting camp site, the next question is whether

the soil remains relatively undisturbed. A study of various maps shows an elevation of 60 feet at the southwest corner of the Project block that remains constant back to 1886. The northwest corner, on the other hand, has been shaved down almost six feet over the years. In 1988 the northwest corner elevation was 42.83 feet (Sanborn 1988). In 1904 and 1929, it was 47.83 feet; in 1898, 47.90 feet and in 1886, 48.60 feet (Hyde 1904, 1929, 1898, and 1886). The surface elevation at the soil boring on the site of the proposed shaft was 58.85 feet in September 1988 (Appendix B), less than two feet lower than the nearby southwest corner. It is very possible that A and B Horizon soil in that amount has been removed from the Project Area since we know the northwest corner has been severely graded. As detailed in the following section, the historical development of the block for nineteenth century housing stock has severely disrupted large portions of the proposed shaft site.

The Project Area was flagged by LPC for potential historical resources. However, HPI has included this prehistoric overview and assessment for potential sensitivity. Although the potential for prehistoric remains exists within the Project Area boundaries, the likelihood of recovering such remains is deemed extremely slim. Because of the site's distance from a source of fresh water, it is unlikely to have been used by Native Americans for any type of long-term encampment of village site. The brief use of the site as a hunting or harvesting area probably would not have resulted in cultural deposits sufficient to justify further archaeological investigation of the site.

## V. HISTORIC ERA

### General Brooklyn History<sup>1</sup>

The seventeenth century Dutch colony of New Netherland encompassed most of the present-day area of New Jersey, New York, and Connecticut. The administrative and commercial center of the Dutch West India Company colony was located at New Amsterdam on Manhattan Island. Nearby areas, including present-day Brooklyn, developed into agricultural areas. By 1664, the date of the English conquest of New Netherland, six towns, including Brooklyn, Flatlands, New Utrecht, Bushwick, Flatbush, and Gravesend had been established.

Wallabout Bay and the Wallabout section of Brooklyn were named for early Dutch settlers referred to as Walloons (East Brooklyn Savings Bank 1922:8). The Walloons, originally Belgic Province Huguenot refugees in Holland, came to New Netherlands in 1623 on the first Dutch West India Company ship.

In 1637 Joris Jansen de Rapalje, one of the original Walloon settlers, purchased 335 acres from the local Indian tribes (Stiles 1884:80). This parcel of land, which included the Project Area, was bounded by Wallabout Bay, and present-day Nostrand and Grant Avenues. Rapalje did not occupy the land, however, until 1655.

Other Dutch settlers moved into the Wallabout area in the early 1640s. By the end of the decade, a small settlement had been established near Wallabout Bay.

The town of Breuckelen was chartered in 1646 while Bushwick was officially recognized by the Dutch West India Company in 1661. The Project Area, as can be seen on Figure 4, is located approximately at the boundary between the two towns.

The conquest of New Netherland by the English in 1664 did not radically alter life in the small rural communities which were based on agricultural economies. Their political structure changed slightly when the English established Kings County in 1683. Life in these rural communities remained essentially unchanged through the eighteenth century.

By 1800 Brooklyn's population had grown to 2,400 and the area located near the ferry landing was becoming more urbanized. Between 1800-1834 Brooklyn became both a suburb of New York City and an important urban area in its own right. With the growth and development of New York City, Kings County rapidly gained population during this period with most of the new residents living in the towns of Brooklyn and Bushwick. In 1816 the

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<sup>1</sup>Much of the following discussion of Brooklyn History has been drawn from Ment 1979.

growing town was officially recognized as the Village of Brooklyn, in 1834 it became the City of Brooklyn.

With the introduction of regular ferry service to New York City in 1814, Brooklyn became a viable residential option for the city's businessmen. The rapidly growing population resulted in the construction of many new homes in the 1820s. Village improvement of streets and city services quickly followed. Along with the increasing residential areas, the commercial and industrial areas of the town were growing.

A small private shipyard, located on Wallabout Bay, was purchased by the United States Navy in 1801. The shipyard functioned as a repair shop and supply depot for the Navy during the War of 1812. Shipbuilding began on the site in 1815 and continued for 150 years.

By 1834 Brooklyn had outgrown its designation as a village and the state legislature issued a new charter for the City of Brooklyn. The City of Brooklyn's first 30 years saw the city develop into an urban center of national importance. Its growth can be tied to a number of factors, including the large-scale immigration of Europeans to the United States during this period with many settling in the eastern urban areas; improvements in industry which increased production and lowered costs; and improvements in the transportation industry that allowed both a larger supply area and a larger market for finished goods.

With the increase in population and industry, the city expanded out into the adjoining farmland. This involved the construction of new neighborhoods, the extension of transportation services, and the development of new or increased municipal services. By 1839, a state-appointed commission had produced a map indicating the location and widths of new city streets. As the large farms were subdivided into smaller lots, the city streets were built, generally following the commissioners' map.

Transportation improvements included the expansion of ferry service to New York City and the establishment of horsecar services. The city underwent a transformation from a walking city to one of streetcar neighborhoods with the population traveling fairly long distances to work. The Brooklyn City Railroad Company brought the horsecar to the city in 1854. A pair of horses pulled a forty-passenger coach along railroad tracks laid in city streets. This allowed the development of residential neighborhoods, such as Bedford, extending up to three miles from City Hall. Business, industrial, and residential neighborhoods became separate entities as a result of the new transportation system. Neighborhoods also began to be divided by class, with the working-class neighborhoods separated from the middle class neighborhoods.

Expanding municipal services included water supply, fire and police protection, and street lighting. Water supply had the

largest impact on the Project Area neighborhood. In the mid-1850s the city began developing a program of reservoirs and aqueducts.

Through the middle of the nineteenth century, speculative builders constructed, enmasse, rows of houses in many outlying areas (McCullough 1983:30). Frequently the builder made his development attractive to buyers by offering a congregation a free site for a church.

In the period from 1865 to 1898 the city of Brooklyn grew because of the phenomenal growth of New York City. Tremendous numbers of immigrants from abroad and migration from rural areas of the United States continued to bring new groups of people into both cities. England, Ireland and Germany provided the majority of the new residents throughout the period with Norwegians, Swedes, Poles, Italians, and Eastern Europeans adding significant numbers in the late 1890s. Industry also continued to grow in Brooklyn and, in 1880, the city was the nation's fourth largest industrial city. Typical Brooklyn businesses required much space and facilities for shipping bulky goods.

Transportation advances also allowed Brooklyn to continue to expand throughout the period. During this period, the horsecar tracks were laid in nearly every major street in the city and out into the adjoining towns. New neighborhoods were quickly populated as the new routes provided easy access to and from work. Steam railroads were constructed in the 1860s and 1870s providing additional sources of transportation. In 1883 the completion of the Brooklyn Bridge supplemented the ferries in providing transportation into New York City. Elevated railroad lines were constructed in the late 1880s, replacing the outdated horsecars in some locations. By the 1890s these routes extended from downtown Brooklyn out into the developing neighborhoods of East New York and New Utrecht. Formation of the Brooklyn Rapid Transit Company, which consolidated the different elevated and surface streetcar lines into one firm, allowed the electrification of this transportation system to be completed. By 1900 the transportation network covered all of Brooklyn, providing access to all the new neighborhoods that had sprung up during the 1880s and 1890s as a result of the growth in the city's population.

Brooklyn, Bronx, Manhattan, Queens and Richmond were incorporated into one city in 1898. During the period from 1898 to 1940 Brooklyn continued to grow in terms of both population and industry. Immigrants continued to make up much of the increase in population until the passage of new U.S. immigration quota laws in the late 1910s and early 1920s. Large numbers of Americans from rural areas also arrived, including large numbers of blacks from the south seeking better opportunities in the northern city. By the 1930s large neighborhoods had developed that were primarily associated with one ethnic group. Brooklyn was attractive to new arrivals due to its low population density as compared with Manhattan and the availability of cheaper and



larger apartments. At the same time, these Brooklyn homes were within commuting distance to Manhattan.

Transportation facilities continued to improve and provide better service to the still underdeveloped areas in Kings County which surrounded Brooklyn. The bridges, tunnels, and rail network that is in use today was virtually completed by 1940. At the same time these public facilities were being completed, the automobile became commonplace. Suburban growth followed both developments in transportation. New neighborhoods developed along the new suburban public transit routes and new automobile-oriented suburbs were created in parts of Flatlands and Canarsie.

The new suburban neighborhoods became the residential areas of choice for middle class families. Many of their former neighborhoods became homes to blue collar workers in the 1920s and 1930s. With the Depression, many of these workers could no longer pay rent and landlords either closed their buildings or allowed them to deteriorate. Real estate and building speculators, in the late nineteenth and first third of the twentieth centuries, had also over-estimated the market for expensive homes located in the intercity (New York City Planning Commission 1969:40). Following the Depression, many lending institutions foreclosed on these expensive houses and real estate values quickly dropped.

At the same time that real estate values began to drop, the industrial area began to spread. It had traditionally been focused in a narrow band located around the Brooklyn Navy Yard and along shore of the East River. Either causing the real estate values to drop, or as a result of the drop, industries were able to locate south and east of this area. Although heavier industries remained concentrated closer to the shore, light industry moved even farther south and east out of this band.

The falling real estate prices and the availability of employment at the Brooklyn Navy Yard brought many blue collar blacks into the Bedford-Stuyvesant area during the years of World War II (New York City Planning Commission 1969:40). Scheiner (1965:30) has suggested that blacks had to wait until there was no demand from other groups for a building before it was open to their occupation. The falling real estate prices and the movement of the middle class white population to the suburbs explains why blacks were allowed to occupy much of the area formerly occupied by whites. The construction of a direct subway line connecting this section of Brooklyn to Harlem also made movement from crowded Harlem to Brooklyn attractive. Workers could afford better homes, have more open space, and still easily visit old friends and family left behind in Manhattan.

Post 1940 development in Brooklyn has seen the continuing redistribution of the population with the white population moving into the suburbs, leaving the intercity areas to the growing poor

black population. To begin with, the available housing in Brooklyn was superior to what blacks could afford in other areas of New York City but this situation changed as the intercity housing began to deteriorate (Scheiner 1965:34). By 1970, more blacks had made the Bedford-Stuyvesant area home than lived in Harlem.

Along with a shift in the population distributions, industry had also been redistributed. It has become decentralized, following the general New York City shift to a more service-oriented economy. Opportunities for employment on the docks, in manufacturing enterprises and at the Brooklyn Navy Yard have decreased or disappeared recently.

### Project Area History

The Project Area was part of the original 335 acres of land purchased by Joris Jansen de Rapalje in 1637 (East Brooklyn Savings Bank 1922:6-14). The Rapalje farm stood near the site of the later Naval Hospital located at the mouth of Wallabout Creek. The Project Area location, however, is south of the seventeenth century settlement, sometimes referred to as Wallabab, that grew up in the vicinity of the Rapalje farm.

No documentation of the seventeenth and early eighteenth century use of the Project Area land was obtained. It is likely, however, that the land remained fallow for much of this period. The 1767 Plan of the Town of Brooklyn and Part of Long Island (Ratzer 1767) indicates that the Project Area remained uncultivated farmland at that date.

Figure 5 indicates the changing boundaries of the town and city of Brooklyn and the Project Area's relationship to these boundaries. For the first third of the nineteenth century, the Project Area and its immediate neighborhood remained rural.

By 1830 the Wallabout area and south of it were included in a section known as East Brooklyn (East Brooklyn Savings Bank 1922:16-18). This area was included in Brooklyn when it was chartered as a city in 1834.

Following the general Brooklyn pattern, several streets in the vicinity of the Project Area were opened when General Jeremiah Johnson's land was broken down into smaller lots (Figure ). Johnson had purchased this land from Martin Schenck in 1811 (Farm Plan B54). Opened in 1835, Kent and Myrtle Avenues were the first streets opened in the immediate Project Area (Dikeman 1870:21 and 33). Although Willoughby Avenue appears on the official 1839 city street map, it was not opened in the Project Area vicinity until 1858 (Dikeman 1870:67). Notes included with the Johnson Property Map (Figure 6) indicate that Johnson was beginning to sell off a number of parcels in the Project Area block in 1836.



Most of the development included in East Brooklyn was north of Myrtle Avenue until the 1840s because it remained concentrated around Wallabout Bay. The earliest documented development in the Project Area may be found on two mid-nineteenth century maps. The 1846 Map of the City of Brooklyn and the Village of Williamsburgh (Butt 1846) and the 1849 Map of the City of Brooklyn (Colton 1849) both indicate that there was a house located at the intersection of Willoughby and Kent Avenues. This structure appears to have been located on a parcel of ground immediately south of the Project Area. Later maps, including Dripp's Map of the City of Brooklyn dating to 1850 (Figure 7) and Higginson's Plan of the City of Brooklyn, Long Island dating to 1864, both indicate that the only development on the Project Area block was located on the Myrtle Avenue side of the block. Either these two 1840s maps are in error or this early structure was removed by the 1850s. There is one good indication that they are inaccurate. Both indicate that there were other structures located south of Myrtle Street, particularly at the intersections of streets. In nearly every case, these structures do not appear on 1850s maps, including the Dripps Map that is quite detailed. It seems highly unlikely that all of these early structures would have been removed so quickly when development was so slowly encroaching into these areas. Also substantiating the idea that there was no development on the Project Area in the 1840s is a letter written by the Reverend Jonathan Greenleaf in 1860 which contains his recollections of East Brooklyn in the early 1830s. He wrote that

At that time the whole space from Division avenue to Fort Greene, and from Myrtle avenue to Jamaica turnpike, being a tract of ground about two miles in length from east to west and one mile in breadth from north to south, contained only thirty houses (Johnson 1893:41).

Early development in the Project Area may be due to its inclusion in a new East Brooklyn parish of the Roman Catholic Church organized in 1842. The new Wallabout Church was erected in 1848 (Howard 1893:586). Rededication of the church, in 1856, changed the name to St. Patrick's. (Photographs 5 and 6 show St. Patrick's Church and Academy as it appears today.)

One of the earliest residents on the Project Area block was Jeremiah Johnson, Jr., the grandson of General Jeremiah Johnson. When Jeremiah married, his grandfather erected a three-story brick house for the newlyweds that was located on the south side of Myrtle Avenue, 25 feet east of Kent Avenue (Johnson 1893:53). Jeremiah and his wife occupied the house until 1853. This house is probably one of the ones showing up on Figure 7.

The Brooklyn City Railroad Company's completion of the horsecar route along Myrtle Avenue in 1854 probably lead to the development of the Project Area because it provided nearby public transportation to future neighborhood residents. In addition, the rapidly growing population created such pressing housing

needs that speculative builders quickly took advantage of the newly accessible neighborhoods. The development of the Project Area fits into this settlement pattern identified for the former farmland surrounding downtown Brooklyn.

The exact date of construction of the houses on the Project Area lots could not be determined. It is likely, however, that a number of these houses were completed by the late 1860s since House Sewer Connection Records for Brooklyn indicate that 903, 905, 907, 911, and 913 Kent Avenue were all connected to the city sewer system in either 1867 or 1868. The records for 909 were missing but it is probable that this house was also connected at the same time. The last connection in the Project Area occurred when 901 Kent Avenue was finally connected in 1889. The 1873 tax records indicate that all of the individual lots did include a house by that date.

The 1870 United States Census was consulted. Unfortunately the census taker in this area of Brooklyn did not indicate any type of street designation as he proceeded on his route. Therefore, no residential patterns could be determined. The 1880 census is more helpful, however, suggesting that most of the construction in the Project Area was undertaken by speculative builders. It appears that only one owner ever occupied the house he erected. Instead, they chose to make a profit on their investments by renting their houses to one or more families.

As discussed above in the section on Brooklyn history, the population that created the need for new housing developments was the result of a massive European immigration to this country in the second half of the nineteenth century. The Project Area population, as listed in the 1880 census, reflects the presence of these immigrants in Brooklyn - every household but one had at least one member who was either foreign-born himself or descended from Europeans. Generally, the residents of the Project Area at this time were employed as blue collar laborers with occupations such as porters, clerks, mill workers, printers, factory workers, house painters, machinists, among others.

Throughout the 1880s and into the 1890s, the neighborhood around the Project Area was characterized by a mixture of brick and wood buildings. Although residential use of these buildings was most common, many commercial enterprises were also indicated on the maps and atlases dating from this period.

The residential patterns apparent in the 1880 census continue in the 1900 census. Every household had at least one member with some tie to the British Isles. Only two owners actually resided in their own homes. The residents continued to be employed as blue collar laborers. Only one family, who resided at 913 Kent Avenue, continued to live in the same location as it had in the 1880 census.

In the early twentieth century, the general Project Area neighborhood began to change. According to maps and atlases from the period, more industry had moved into the area although the Project Area block itself had not changed significantly.

Examination of the 1910 census reveals that the residential patterns associated with the Project Area continue to reflect the general Brooklyn developments occurring in the early twentieth century. Every household but two again had at least one member with a European background, but the most common homeland had changed from the British Isles to Italy. The two families not having foreign-born members had migrated to the city from the southern United States. Both are identified as black. Two families actually lived in their own homes and one family remained at the same address that it had occupied in 1900. Again the occupations of residents can be classified as blue collar.

One of the residential patterns identified for Brooklyn in the 1920s and 1930s was the movement of the middle class out of the downtown areas to the suburbs. The Bedford area of the city was one of the neighborhoods recognized by historians as a middle class neighborhood that slowly changed as the population changed. As discussed above, the majority of Project Area residents had blue collar occupations from the very beginning. This probably occurred because of the proximity of the industrial zone located near the shore of the East River, just a short distance north of the Project Area. This neighborhood was never as attractive to middle class residents as the more rural, idyllic area located farther from the industrial areas. In addition, many blue collar residents in this neighborhood probably found this area attractive because they could walk to their jobs.

The mixed residential-industrial use of the Project Area neighborhood that began in the 1930s and 1940s continues today. Like much of the Bedford-Stuyvesant area, the condition of the neighborhood gradually deteriorated in the mid-twentieth century until it became part of a huge urban slum. The buildings on the site were demolished in the recent past and the Project Area remains an open lot at this time (Figure 8). Although there has been a great deal of urban renewal occurring in the general area, the Project Area itself continues to function primarily as a dumpsite for garbage (Photographs 1, 2, and 3).

## Lot Specific Histories

### 901 Kent Avenue

The first development at 901 Kent Avenue probably occurred while James Irwin owned the property. According to deed abstracts on file at the Brooklyn Historical Society, he acquired the property in December 1860 (Deed Book 543:480 and 499). The 1873 tax records, the earliest obtained for this property, indicate that Irwin owned both 901 and 899 Kent Avenue. The two properties,

each with a three-story frame building, were assessed together as having a value of \$5300. According to the tax records, Irwin continued to own the Project Area property until 1891. The assessment on the houses and properties remained the same until 1886 when it jumped to \$6300. The following year the value of the two fell, however, to \$5600 and remained at this value until Irwin sold the properties. The assessment may have increased when Irwin added a rear addition to the original structure. As can be seen in Figure 9, the construction of the building occurred in three stages. The 1886 Robinson Atlas indicated that the first addition had been completed by the date of the map.

Although Irwin owned the property, he did not reside on it in 1880. The census from this date revealed that the Muldoon family and John Gwine occupied the house at 901 Kent Avenue. Gwine's occupation was listed as a doctor while Muldoon was a porter. Both Muldoon and his wife came to the United States from Ireland and Gwine's parents were both Irish.

According to the tax records for 1891, 901 Kent Avenue had become Charles McGuinness' property. At this time, the house and property were assessed a value of \$2200. McGuinness owned the property until at least 1905. While he owned it, the assessed value gradually rose to \$3000. Part of the reason the value increased was the addition McGuinness made to the rear of the original structure (which appears on Figure 9). The tax records indicate that the original house measured 18 by 40 feet, which included the first addition mentioned above, and the new addition measured 18 by 114 feet.

Although McGuinness owned the property in 1900, he did not occupy it. John and Mary Worrick, from Ireland, were the only residents according to the 1900 census. John earned his living as a stone setter.

This building seems to be the only former Project Area structure that housed both a business and residence. In a building permit filed in 1907, the original, front section of the structure housed a store and two families. The large, rear addition, one-story and frame, housed a bowling alley. The foundation on the house was seven feet deep. Salvatore Imperiale, who was listed as both the owner and an occupant of the house, filed the permit because he proposed to add a nine foot deep extension across the front of the house that would be occupied as a store.

According to the 1910 census, only one family resided at 901 Kent Avenue. Four members of the Risano family had been born in Italy to Italian parents. The remaining seven children were born in this country after the parents immigrated. Andrew Risano, who rented 901 Kent Street as both a home and business, worked as a tailor. One daughter worked with him as a dressmaker while another worked as a school teacher.



The addition that Imperiale erected apparently increased the value of the property because the tax assessment had risen by another \$1000 by 1915. Imperiale continued to own the property because he paid the taxes again in 1925. At this date the assessed value had dramatically risen to \$9000. In 1935, the property value had dropped to \$5800 and F. La Vita paid the taxes. The value continued to slowly drop for the next ten years and in 1945 it was assessed with a value of \$5500.

A demolition permit on 901 Kent Avenue was filed in 1967. It listed a three-story frame building occupied by a store and two families. As mentioned above, this is the only Project Area lot that has virtually no continuously open backyard space associated with it because of the additions made to the rear of the original structure.

### 903 Kent Avenue

The house located on this property could have been constructed by either James Croak or Mary J. R. Newton. Croak, according to deed records, owned the property from 1863 to 1867 before selling it to Newton (Deed Books 602:329 and 759:106). By 1873, when Newton paid the taxes on this property, it had a three-story building on it. The value of the lot and house was listed as \$2500. In 1876 the assessed value of the house and lot dropped to \$2300 where it remained until 1883 when it rose to \$2700.

The 1880 census listed two households as occupants of 903 Kent Avenue for that year. Lewis Richard was employed as a clerk in a law office. He was born in the United States to parents who were also native born. His wife's background was English. The other extended family included a household head, Benoist Cox, who made his living as an office clerk. Cox's English mother and his brother lived with him and his child. The younger brother was employed as an entry clerk.

Newton continued to own this property and pay the taxes on it until 1891. The assessment was raised to \$3200 in 1886 but dropped back down to \$2800 the following year where it remained until 1891. At that time it had a value of \$3000. After James Hillen acquired the property, the value dropped back to \$2600. The first rise in the value might be attributed to the construction of the two-story frame addition shown in Figure 9. According to Robinson's 1886 Atlas, this addition had been completed by that year.

The 1900 census listed three separate households as residing at 903 Kent Avenue. The first was an extended family with Peter Connelly as the household head. His wife, two sons, two daughters, a grandchild, and his brother-in-law lived with him. Their ethnic background was listed as Irish. Connelly made his living as a glass blower, one son was an actor, the other a laborer, and one daughter was an operator. The second family was probably

related to the owner of the property since their last names are identical. The head of the family was Mary Hillen, however, and not James. Her three children and her older sister completed the household. Mary's parents were listed as being born in Ireland. The last household was also an extended one and it was also headed by a woman of Irish background. Three adult daughters also lived in the house. Their livings were given as operator, cashier, and bookkeeper while a sister was employed as a laundress.

Hillen continued to be listed as the owner of 903 Kent Avenue in the tax records for 1905 and 1915. The value of the property and house was again \$3000 in 1905 and rose to \$4400 by 1915.

Two black families and their boarders rented the house from Hillen in 1910 according to this census. James Boone and his wife rented part of 903 Kent Avenue. Both were American born with American born parents. He was employed as a building fireman. Matthew McKee, also with American parents, lived with the Boones as a boarder. He was employed as a horseshoer at a blacksmith shop. The Steward family also rented part of this house. All five members of this family were born in Virginia to parents also born in the southern United States. James Steward worked as a porter in an office building. Isaac and Ella Holloworth, both from the southern United States, boarded with the Stewards. Isaac was listed as a laborer doing street work.

By 1925 a new owner of the property was listed in the tax records. G. Finella paid a tax based on an assessed value of \$5300 in 1925 and on \$5000 in 1935. A 1930 building permits identified the Finella family as occupants of the house. This permit described the house as occupied by one family on each of the three floors. The dimensions of the building at that time were 22 feet wide by 30 feet deep, indicating that the rear addition had been removed at some point, possibly accounting for the slight drop in assessed value.

In 1945 the owner of 901 Kent Avenue, F. A. La Vita, also owned 903 Kent Avenue. This lot and house was assessed with a value of \$4000.

A demolition permit for the three-story frame building was filed in 1967. With the exception of 901 Kent Avenue, this property, with its original three-story frame building and two rear additions, had the least amount of open space associated with it. There remained, however, a strip along the southern edge and at the rear of the property that appears to have remained open throughout the twentieth century. Figure 10, the plot plan associated with the 1930 building permit, illustrates the area that probably remained open space.

## 905 and 907 Kent Avenue

For much of their history, these two properties were considered one and, for purposes of clarity, their histories are combined in this section.

At the time when the original two houses were constructed on this one large parcel, the owner of the property was probably Rulef Duryea. He purchased the property in 1860 (Deed Book 537:46). The 1873 tax records listed him as the owner of two two-story houses with basements that had an assessed value of \$5000. The placement of these two houses is apparent on Figure 11. Duryea apparently owned both properties until 1886 when he deeded them to Thomas McKenna. The assessed value of the two remained a constant \$5000.

Two families rented 905 Kent Avenue according to the 1880 census. Frank Curman, who headed one family, worked in a mill. Benjamin Bennett was employed as a printer. All family members were born in the United States to American parents with the exception of Bennett's wife. Caroline's mother was listed as English.

Two families also rented 907 Kent Avenue. Martin Corcoran supported his nine-member family as a laborer. Several adult children also had employment out of the home; one as a dress-maker, one as a worker in a store, and two others as factory workers. Both of the parents had Irish backgrounds. The second family was headed by Edward Spooner. His parents were English while his wife's were Irish. He was employed as a house painter.

The assessment on 905 and 907 Kent Avenue went up to \$6500 when McKenna purchased the properties in 1886. The value dropped, however, in 1888 and remained at a constant value of \$5600 until 1897.

The 1900 census listed two families for 905 Kent Avenue. The Keating family, from Ireland originally, was headed by Garratt Keating, a carpenter. His adult son worked as a salesman. The Joseph Roth, a barber, was the other household head. He also had an Irish background. His wife, three children and sister completed the family. Two boarders resided with the Roths.

Two couples occupied 907 Kent Avenue; all were originally from Ireland. One man worked as a laborer while the other had a job as a pealer.

The 1905 and 1915 tax records listed J. C. Tracy as the owner of both properties. The 1905 records indicated that there were three houses on the large lot although only two were described (as two-stories) and only two showed up on the 1904 atlas (Figure 9). The buildings and lots were given a value of \$6500 in 1905 and \$9500 in 1915.



Two families and a boarder occupied 905 Kent Avenue in 1910. Robert Short, with parents from Ireland and England, was married to a woman of German background. Short was employed as a sawdust manufacturing merchant. The second family was headed by Harry Jones, a railroad motorman. Both he and his wife had English parents. Their Irish boarder was a dressmaker in a tailoring shop.

Two families rented 907 Kent Avenue. William Keating, with English and Irish parents, and Daniel McIntosh, with English parents, were the heads of these families. Keating worked as a porter in a printing house, while McIntosh worked as a lithographer in a print shop. McIntosh's adult daughter was employed as an operator in a shop.

By 1925 Tracy had retained ownership of only 907 Kent Avenue. V. Giovanello was listed in tax records as the owner of 905 Kent Avenue, assessed at \$5100. Tracy paid taxes based on an assessment of \$4200.

In 1926 an application was filed for the erection of a three-car garage to be located at the rear of 905 and 907 Kent Avenue. The foundation for this new building was expected to be four feet deep and the building was to cover a 30 foot wide by 19 foot deep area at the rear center of the backyard. Two two-family residences remained at the front of the property. Figure 12 shows the one-story garage although accuracy of the map is suspect because it does not show the two front houses in their proper locations. Although the three buildings covered much of the property, there remained a 40 foot area between the front and rear structures that continued to function as the open space.

In 1945 there was a new owner for both properties. V. Curcio was listed as owner of 907, assessed at \$4000, while N. Pelizzi owned 905, valued at \$6000.

The garage apparently was the only remaining building in 1984 because a demolition permit was recorded for it at that time. No record of the demolition of the houses was obtained.

#### 909 Kent Avenue

The ownership of 909 Kent Avenue at the time the original house was constructed cannot be identified at this level of documentation because information from the deed abstracts does not correspond to information in the tax records. It appears likely, however, that either Esther Cartwright or Mary Laidlow owned the property when construction occurred. Cartwright received the property in 1864 (Deed Book 650:419) and passed it on to Laidlow sometime in the 1870s. The deed records indicated a date of 1875 for this transaction (Deed Book 1225:152), although the tax records showed Laidlow as the owner by 1873.

In any case, by 1873 Laidlow paid taxes on 909 Kent Avenue based on an assessed value of \$2500. The value decreased to \$2400 in 1876. The assessment did not change until Laidlow deeded the property to George Underhill in 1883.

One household with three boarders occupied the house in 1880 according to the census. Sarrah L. Smith headed the household. Her son made a living as a house painter. One boarder was also employed as a house painter while another was a hatter. All members of the household had American born parents.

Charles D. Conway purchased the property from Underhill in 1884. Until at least 1905, the value fluctuated between \$2400 and \$2800. Why this occurred is not known.

Two families occupied 909 Kent Avenue in 1900 according to the census for that year. Conway and his family occupied one section while the Cassidys occupied another. Conway was listed as a bricklayer. Both of his adult daughters had occupations as seamstresses. Cassidy had been a fireman and his daughter was a school teacher. Both families were Irish in background.

By 1910, the Conways were the only residents on the property. Two interesting facts are evident when the 1900 census entry is compared to the 1910 entry. In 1910 the Conways were all listed as having an English background. Apparently a differentiation between English and Irish was not consistently made on the part of the census takers. The second detail involves the ages of the adult daughters. In ten years time, both daughters only aged five years according to the official record. Perhaps they were still hoping to avoid spinsterhood.

According to tax records, Conway remained the owner of the property until sometime after 1925. In 1915, the assessed value had risen to \$3500. By 1925, it was \$4400. Frank Aloisio must have purchased the property by 1931, however, because he was listed as the owner on two 1931 building permits.

These permits indicated that Aloisio planned to install a bathroom in 909 Kent Avenue. He wanted to remove the present water closet, located in the yard, and install one in the basement and one on the second floor. He was apparently installing these for his own use as well as for the family who rented the other section of the house from him, because he was listed as an occupant. The installation of the bathroom may account for the \$100 dollar increase in the assessed value of the property and house in 1935. Aloisio's assessment remained \$4500 in 1945.

This frame, two-story house with a basement measured 20 feet wide by 30 feet 6 inches deep. The remaining rear yard, approximately 20 feet by 45 feet, appears to have remained open through time. A demolition permit was filed for the house in 1980.

## 911 Kent Avenue

John Ross was probably responsible for the construction of 911 Kent Avenue. Deed abstracts indicated that he acquired the property in 1864 (Deed Book 628:165). He also appeared as the owner of the property on the 1873 tax rolls. At that date, the two-story house with a basement was valued at \$2500. The value dropped to \$2400 in 1876 and remained constant all through his ownership and his heirs ownership.

The 1880 census indicated that Margaret Ross had become head of the Ross family. She and her three daughters occupied one section of the house. Margaret was listed as being a Scot. The second family also had a Scottish background. The head of the household, David Knox, made his living as a toolmaker. His brother, a machinist, lived with David and his family.

In 1884 Ruth R. Hutton acquired 911 Kent Avenue from the Rosses. The value of the lot and house rose to \$2800 in 1886 and retained that value until at least 1905.

The 1900 census indicated that this house was occupied by one 13-member family and a boarder. The Burduci parents had Irish parents; they, however, were born in this country as were their children. John, the head of the house, was employed as a painter. One adult son was a fireman, another a chair caner, and one daughter was a dyer. The boarder was also a fireman.

The house was described as a two-story frame house with a basement in a 1906 building permit. The new owner, Salvatore Imperiale, planned to add one story to the dwelling. The dimensions of the house were listed as 20 feet wide by 34 feet deep, again leaving a large, open backyard area.

The 1910 census listed three families, all with Italian backgrounds, as the occupants of 911 Kent Avenue. It appears that part of the house was occupied by the owner of the house and his wife while another part was occupied by his son's family. A third family was also listed as renters. The owner of the house, Imperiale, was listed as a broker in the contracting business. His son was a law clerk and the head of the other family was listed as a contractor of odd jobs.

Imperiale was also listed as the owner of the house and lot in the 1915 tax records. The property, at that date, had a value of \$4000. It is interesting to note that he was also the owner of 901 Kent Avenue at the same time.

The demolition permit for this structure was filed in 1980.

## 913 Kent Avenue

Mathew Conroy probably erected the original house on 913 Kent Avenue. He acquired the property in 1861 (Deed Book 548:339) and sold it to Michael A. Ward in 1876 (Deed Book 1232:357). Again the deed records and the tax records do not agree because the 1873 tax records indicated that Ward was already the owner of the property at that date.

In 1873, the tax records listed an assessment of \$2200 for the lot and three-story building. Both the ownership and the assessment remained the same until 1883.

According to the 1880 census, two families occupied the house at that date. Jeremiah McCarthy, who had Irish parents, was married to Johanah, whose parents were Irish and Austrian. They and their children had all been born in the United States. McCarthy was employed as a store clerk. The second family was headed by Mrs. Kelley, who was born in Ireland. Her daughters were employed as workers in a hat factory, while her son worked as a bartender.

Annie E. Kelly was listed as the owner of 913 Kent Avenue in the 1884 tax records. Again the house and lot were assessed at a value of \$2200. By 1886, the assessed value had risen to \$2600. Ward reacquired the property in 1888. The value of the house increased in 1890 to \$2800. Ward retained ownership of the house and lot as it gradually increased and then decreased in value. In 1905, the assessment was based on a value of \$2300. By 1915 the value had increased to \$3000. The 1925 value was \$3900. Between 1925 and 1935, the value decreased slightly to \$3700.

The 1900 census listed two separate households at 913 Kent Avenue at that date. Mary Kelly, an Irishwoman, headed one. Her two adult daughters who worked as dressmakers, her son who worked as a bank clerk, and her brother, Michael Ward, completed the family. Ward was listed with an occupation of painter. The second household apparently consisted of only one individual, Mary Reynolds. Reynolds, who also came from Ireland, earned her living as a saleswoman.

There was no listing for this property in the 1910 census.

The tax records for 1945 indicated that Ward had finally sold the property to another owner, J. Mineo. The assessed value at that date was \$3700.

Two families occupied 913 Kent Avenue when a certificate of occupancy was filed for the property in 1963. At that date the owner was listed as the Ace Investing Company. A one-story addition had been added to the rear of the original three-story frame building some time in the past but the depth of the building on the lot remained only 36 feet, leaving an open backyard area of 64 feet in depth. This structure stood until

c. 1983 when a demolition permit was filed at the municipal offices.

## VI. CONCLUSIONS AND RECOMMENDATIONS

There is evidence that the former backyard areas of 901-913 Kent Avenue may include undisturbed historic archaeological deposits such as fill associated with wells, cisterns and privies and sheet midden deposits representing past yard surfaces. As discussed in the historical background section above, the development of these lots apparently occurred in the late 1860s. With the exception of 901 Kent Avenue, historical documentation suggests that all of the lots retained at least a portion of their original open yard areas throughout the historic period. Figure 13 shows this open space area graphically. Because no deep disturbances could be documented as occurring in this area, it is likely that undisturbed archaeological deposits remain.

Although the potential for prehistoric remains exists within the Project Area boundaries due to the lack of historic disturbance, the likelihood of recovering such remains is deemed extremely slim. Because of the site's distance from a source of fresh water, it is unlikely to have been used by Native Americans for any type of long-term encampment or village site. The brief use of the site as a hunting area or harvest area probably would not have resulted in cultural deposits sufficient to justify further archaeological investigation of the site.

As mentioned above, intact historic deposits are likely to remain within the boundaries of the Project Area. The survival of such a large historic surface, totaling approximately 6,500 square feet, is rare in an urban context and the archaeological significance of the associated cultural remains must be evaluated with this fact in mind. The significance, however, must also be evaluated in terms of the potential for these resources to yield important information pertaining to current research issues as defined by archaeologists, anthropologists, and historians (e.g., Salwen 1982, Dickens 1982, and Glassman, et al. 1988). These research issues include the following: 1) the process of urbanization, 2) settlement patterns and their change over time, 3) socioeconomic status or class, 4) ethnicity, 5) trade and commerce, 6) consumer choice, and 7) comparative analysis. The Project Area resources, dating from c. 1868 to the present, must be evaluated for significance in terms of these research issues. HPI suggests that these potentially in situ resources have high significance because it is likely that archaeological investigation will yield important information pertaining to a number of these issues.

The Project Area neighborhood, located in the northern Bedford area of Brooklyn, did not undergo urbanization until the mid to late nineteenth century when residents began to move into this then attractive bucolic suburban area. Its settlement can be viewed as the direct result of this urbanization process since the area only developed as the growing Brooklyn and Manhattan intercity populations began looking for new homes outside of the crowded cities. As Brooklyn continued to develop into one of the



country's largest industrial cities, the Project Area continued to function as a residential area. The neighborhood around it changed, however, when the industrial area located north of the Project Area around the Navy Yard began to spread to the south and east. Because of its nearness to the industrial belt, the residential population of the Project Area came from the lower economic class often described as blue collar. These residents could walk to work in the nearby industries or take the convenient public transportation to other sections of Brooklyn or even as far as Manhattan.

Although single households did not occupy the Project Area homes for long periods of time, documentation suggests that the archaeological deposits are associated with a particular group of individuals having the same ethnic background - British Isles - and class background - blue collar. This group of residents can be documented as occupying the Project Area homes from 1870 until the first decade of the twentieth century. This pattern of residential continuity is very unusual in an urban environment, particularly in a blue collar ethnic neighborhood where residents generally move frequently. Archaeological remains associated with these long-term occupants may allow archaeologists to identify settlement patterns related to class/status and ethnicity.

Land use patterns, which are also related to settlement patterns, might be examined using these resources. Although documentation reveals that the Project Area homes were all connected to the city sewer system at an early date, it is possible that an early privy may exist as well as cisterns, wells and other backyard features. The changing yard function over time may become an important issue in urban studies and the undisturbed nature of the Project Area backyards may provide important insights into how a lower class group of people used their backyard areas. NB

Socioeconomic status/class, ethnicity, trade and commerce, and consumer choice research issues should all be considered in light of the potential Project Area resources. Because the population type of the Project Area remained essentially unchanged for forty years, the resulting resources should provide a great data set for this population living in a developing city. Archaeological indicators or markers of the particular socioeconomic class/status of these residents should be apparent through comparison with other archaeological assemblages from other sites with different associations. Patterns in consumer choice should also be apparent through comparative analysis.

Although patterns associated with ethnicity are not easy to recognize in the archaeological record, the resources from Site 21B should be examined for such patterns. The long-term occupation by these residents may have resulted in an identifiable ethnic pattern. This research issue should probably not be the main focus of further archaeological investigation on this site, however.



The importance of this site as a basis for future research must be stressed. The integrity of the site and the close, long-term association of the site with a particular group of people make this an extremely unusual urban site. Archaeological research should reveal basic patterns for this group of people that may be endemic to an Irish/English-working-class-group-in-Brooklyn. The patterns associated with this site might also have broader implications which might be revealed through comparison with data from other sites in Brooklyn, Greater New York City, and other urban areas with comparable sites. Possible examples in the New York City area include information to be obtained from the Metropolitan Technology Center in Brooklyn (Kardas and Larrabee 1984) and research conducted in Brooklyn Heights (Levin and Askins 1980) and Weeksville (Askins n.d.). Recent work in Philadelphia, Wilmington, Washington, D.C., Baltimore, and Boston has been focused on these research issues and should provide comparable data.

If additional research is deemed appropriate prior to field testing the integrity of the resources, it is suggested further secondary research pertaining to the Irish (e.g., Clark 1973) and blue collar class (e.g., Greenberg 1981) might be productive. Additional primary documentation does not appear necessary or productive at this point in time until the existence and integrity of the resources is examined through field investigation.

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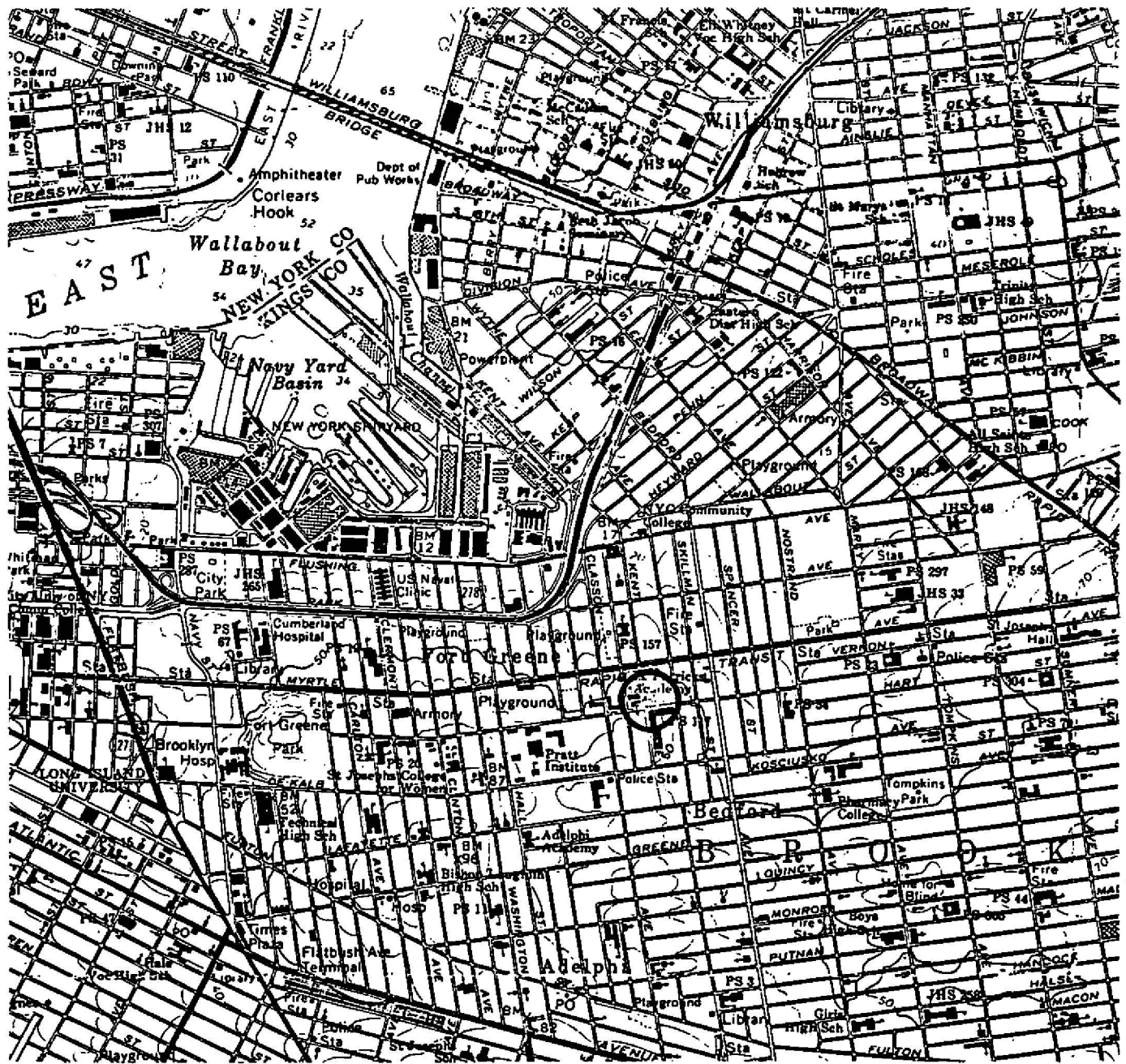
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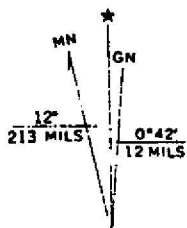
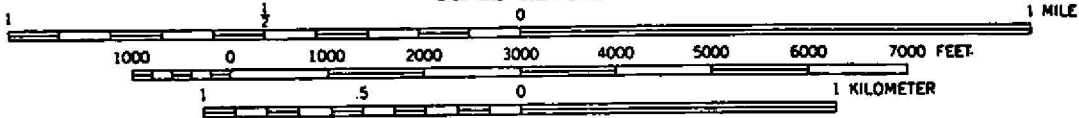
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- 1986 When Brooklyn Was the World, 1920-1957. New York: Harmony Books.

Figure 1 34



SCALE 1:24 000



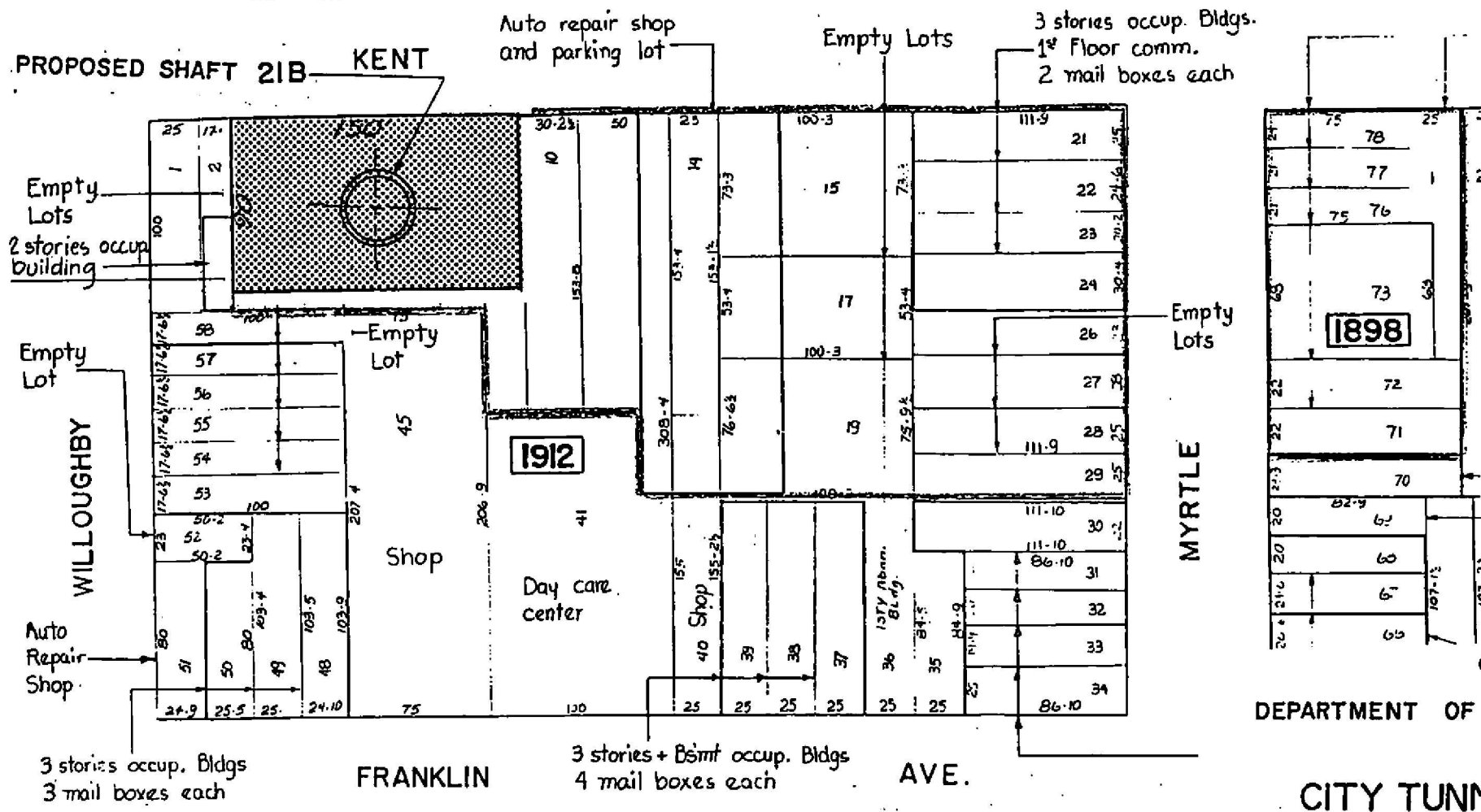
Brooklyn Quadrangle



Project Area



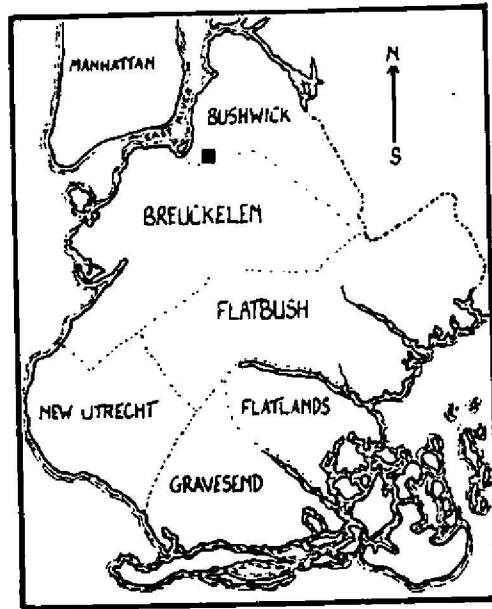
Figure 2



Project Area Map Supplied by Client

Impact Area is Shaded





Photocopied from THE SHAPING OF BROOKLYN  
(Ment 1979:16)

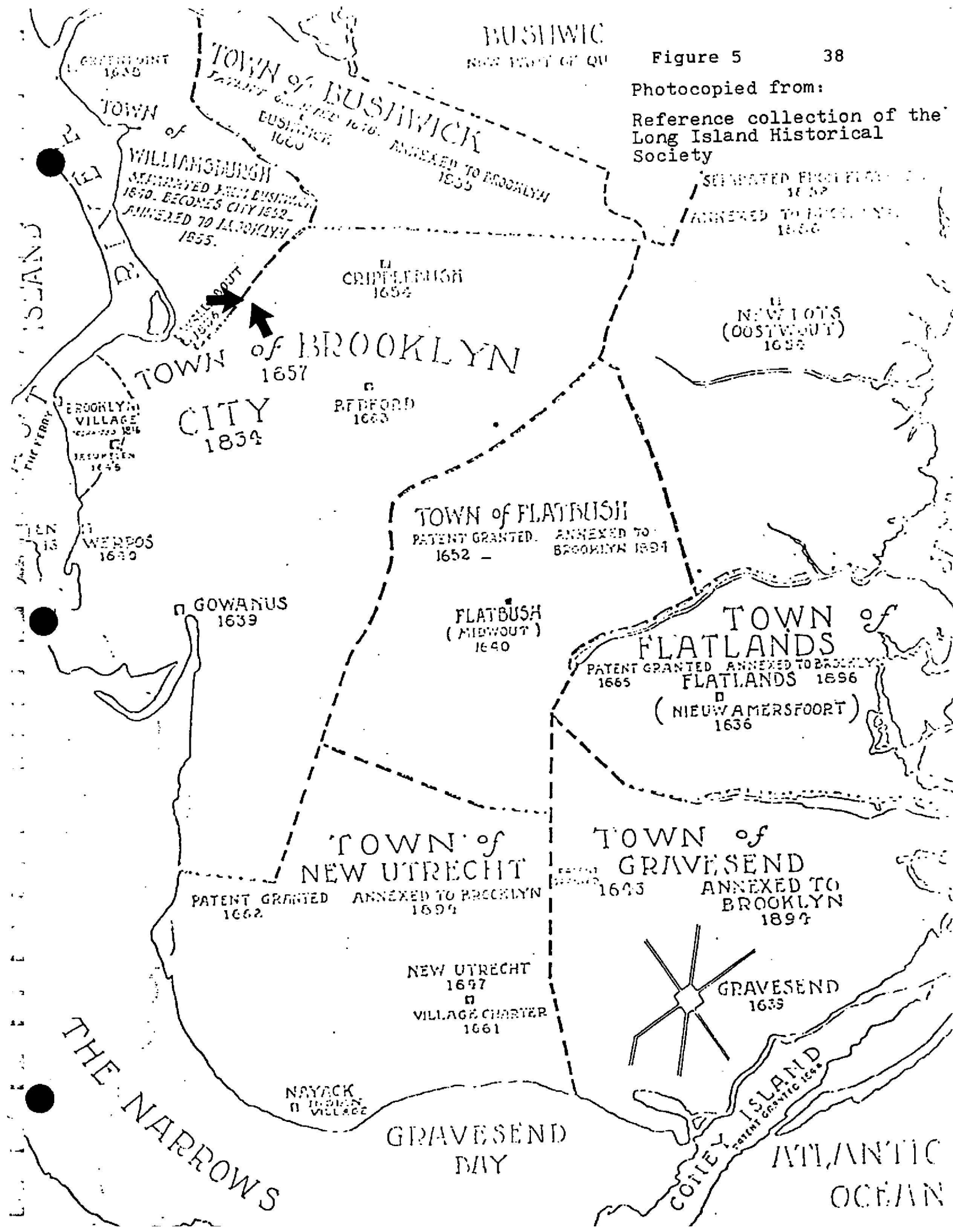
BUSHWICK  
NORTH PART OF QU

Figure 5

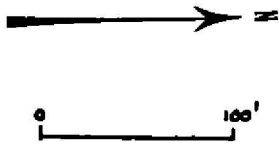
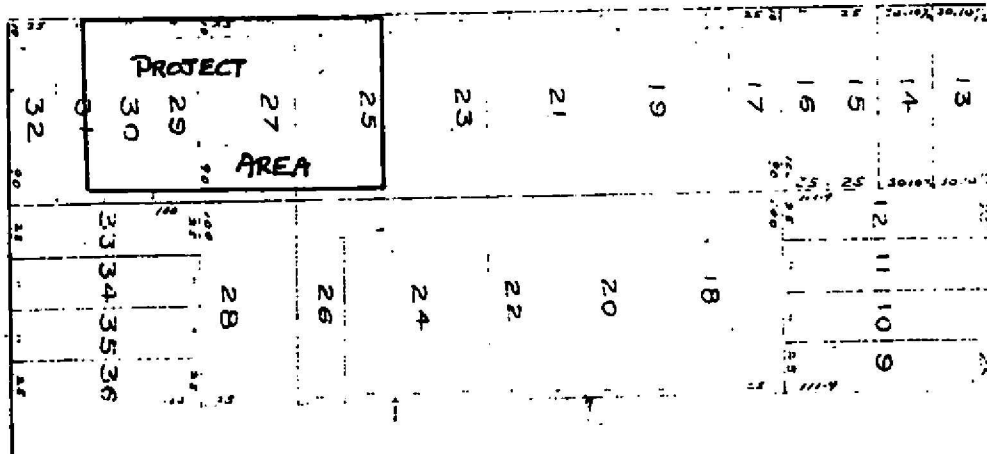
38

Photocopied from:

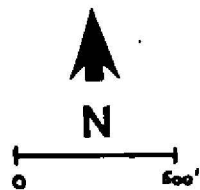
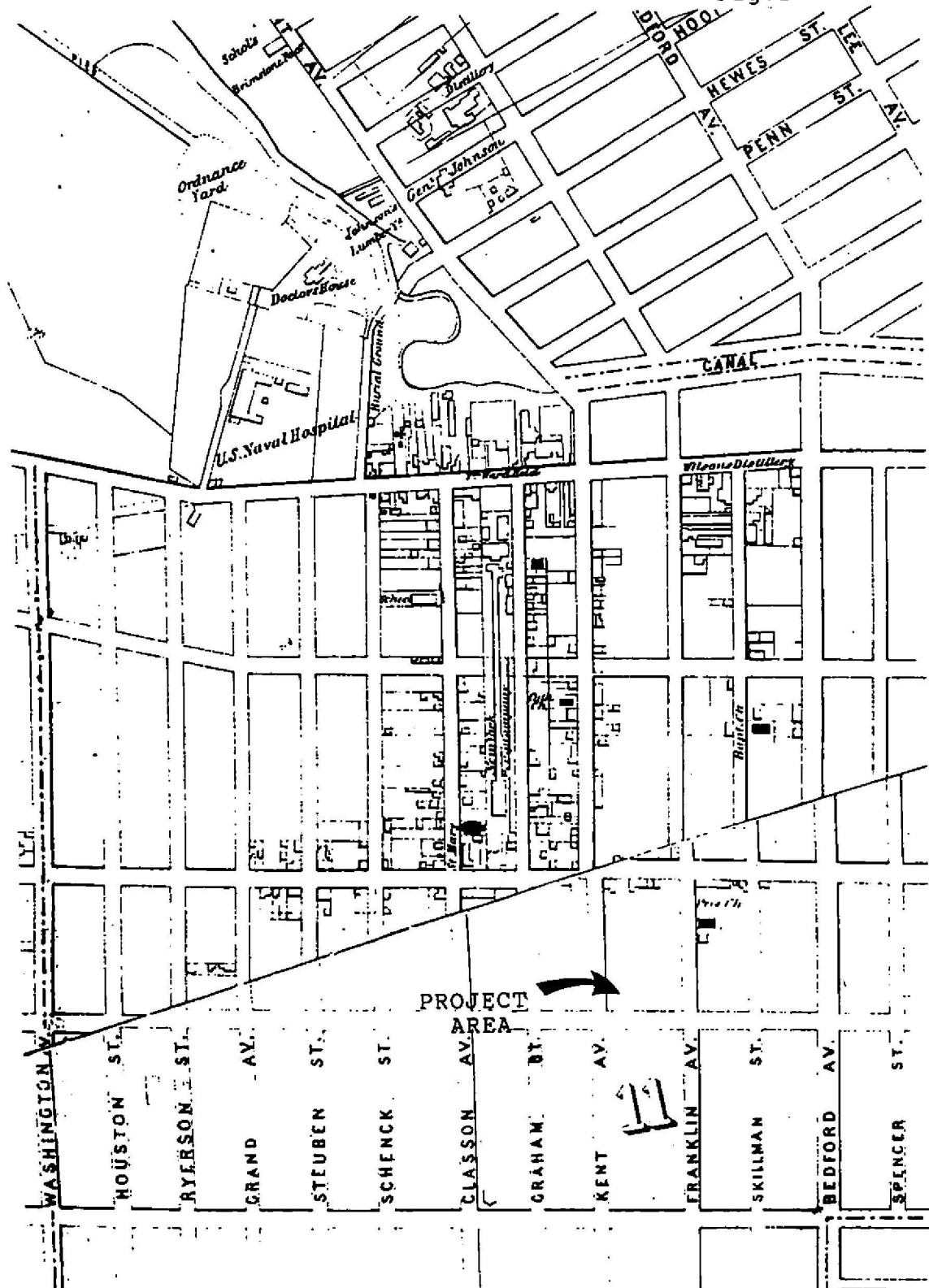
Reference collection of the  
Long Island Historical  
Society



## KENT

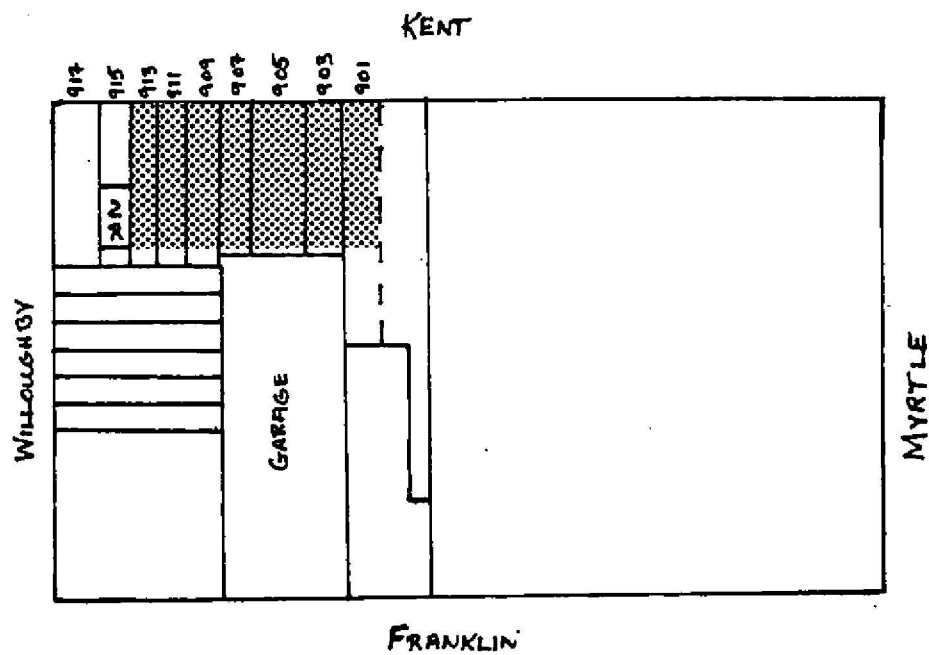


MAP OF PROPERTY IN THE 7TH  
WARD OF THE CITY OF BROOKLYN  
BELONGING TO GENERAL JEREMIAH  
JOHNSON, APRIL 1836 (Volume 5,  
Plate 246, County Clerks  
Office).

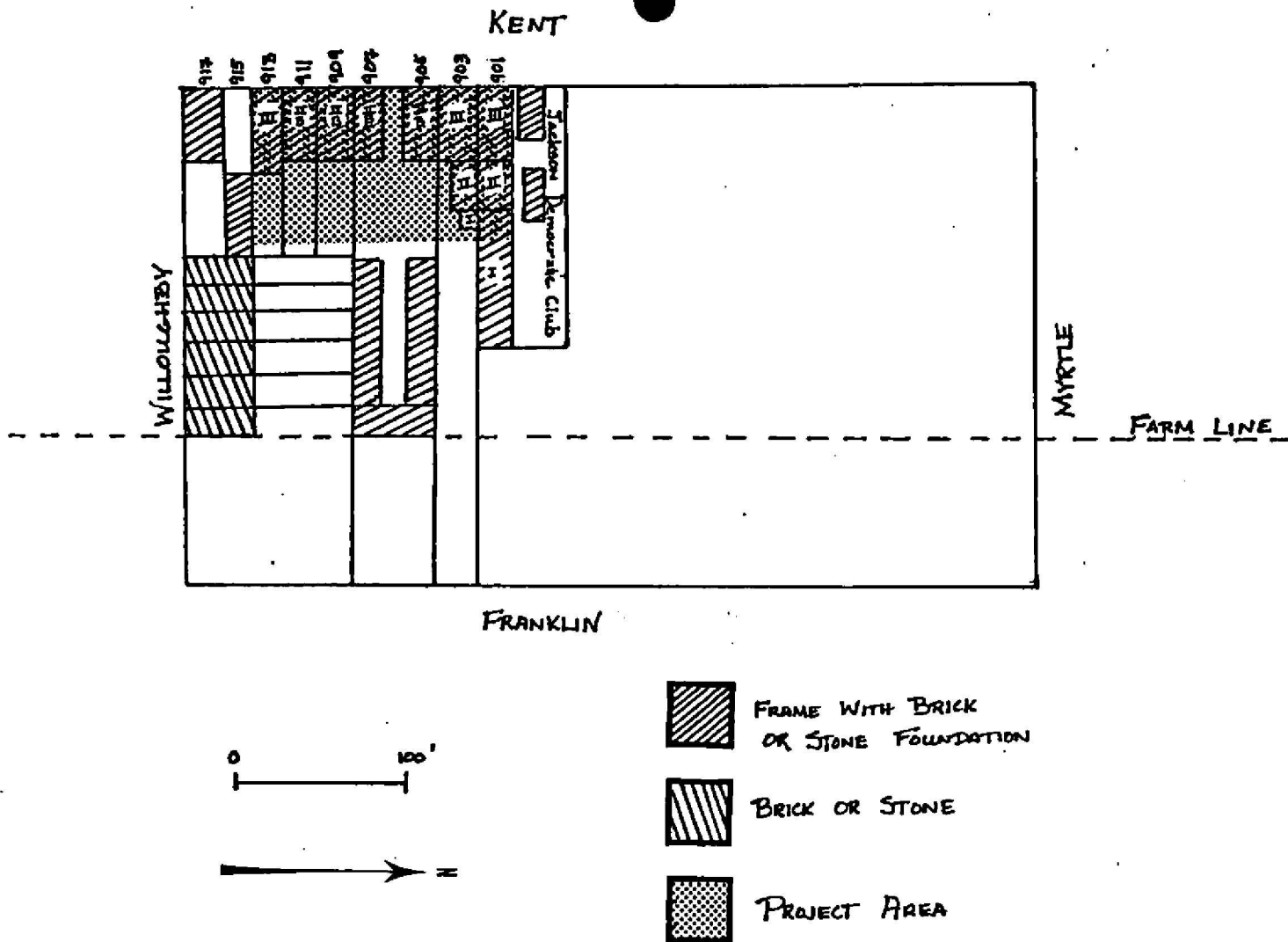


MAP OF THE CITY OF BROOKLYN  
M. Dripps: New York. 1850.



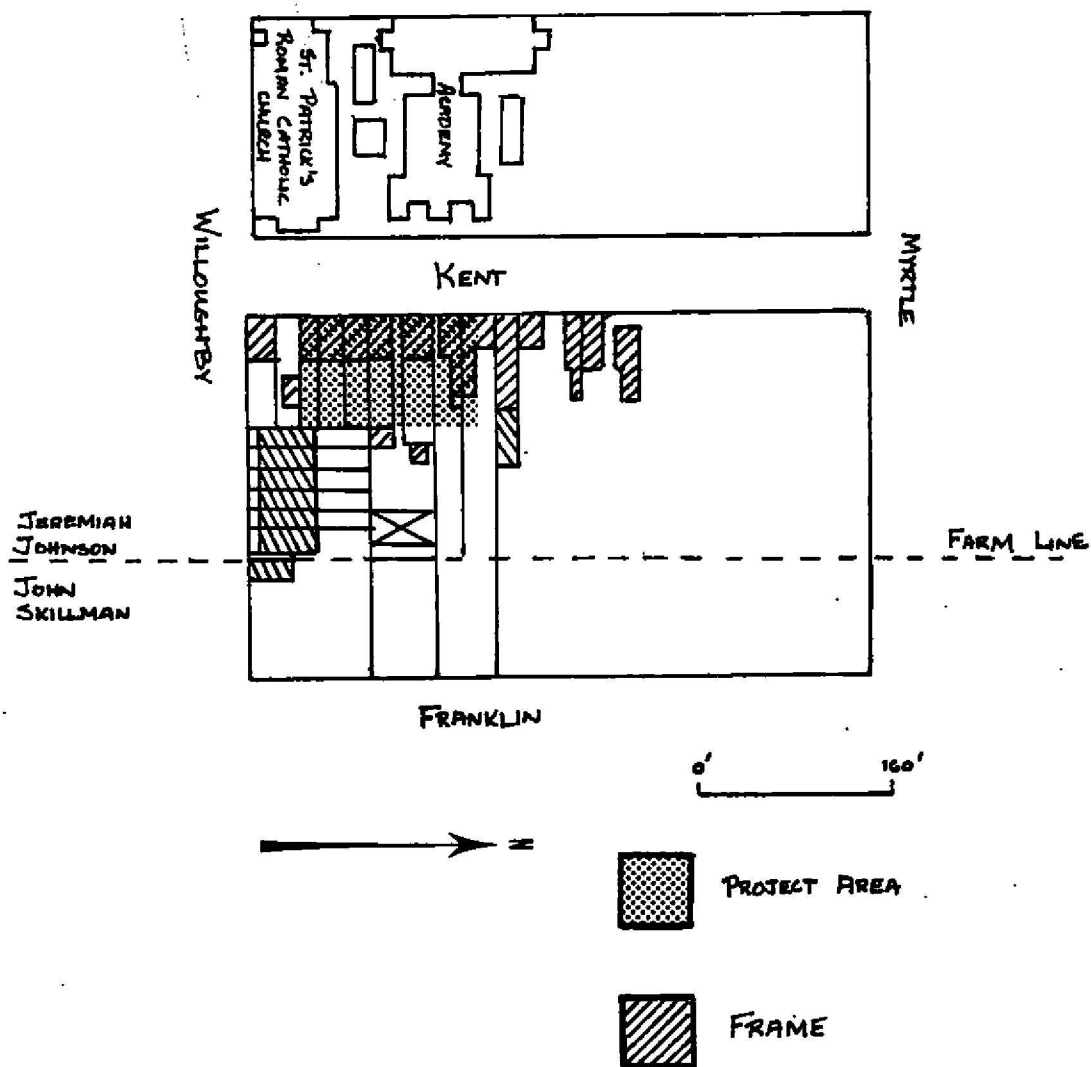


Tracing of SANBORN BUILDING & PROPERTY ATLAS OF BROOKLYN  
 Real Estate Data: New York. 1988. Volume 3, Plate 50.



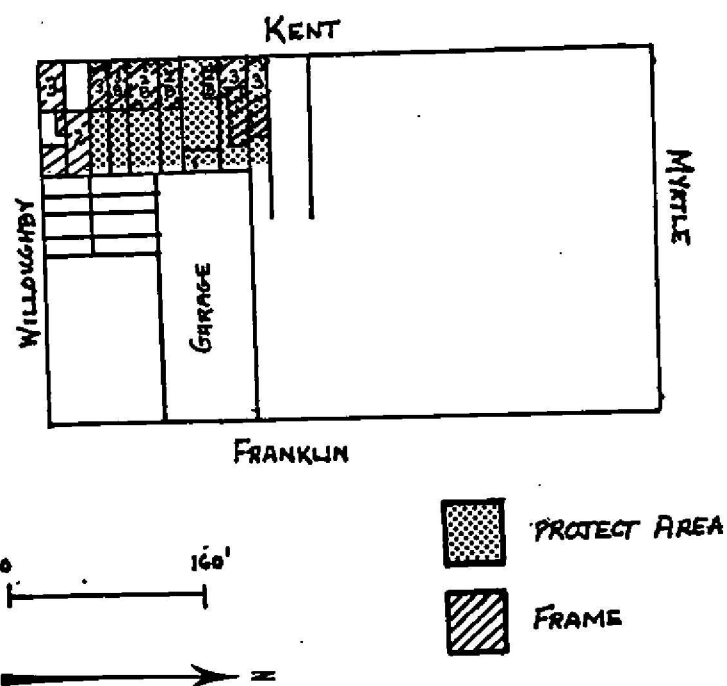
Tracing of ATLAS OF BOROUGH OF BROOKLYN  
 E. Belcher Hyde: New York. 1904. Plate 10.



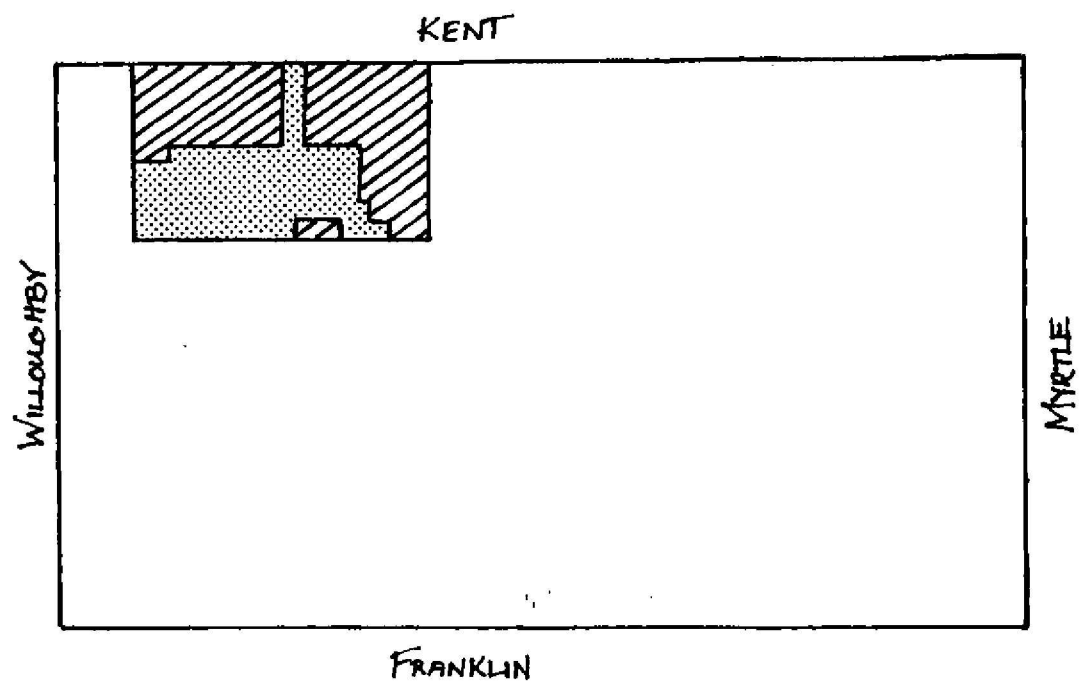


Tracing of ATLAS OF BOROUGH OF BROOKLYN

E. Belcher Hyde: New York. 1898. Volume I, Plate 29.



Tracing of Desk ATLAS OF BOROUGH OF BROOKLYN  
E. Belcher Hyde: New York. 1929. Volume I, Plate 143.



0 100



AREAS FORMERLY  
COVERED WITH BUILDINGS



AREA IDENTIFIED AS  
HISTORIC OPEN YARD AREAS

Detail of Project Area Indicating Potentially  
Intact Historic Open Yard Areas



## Photographs 1 and 2

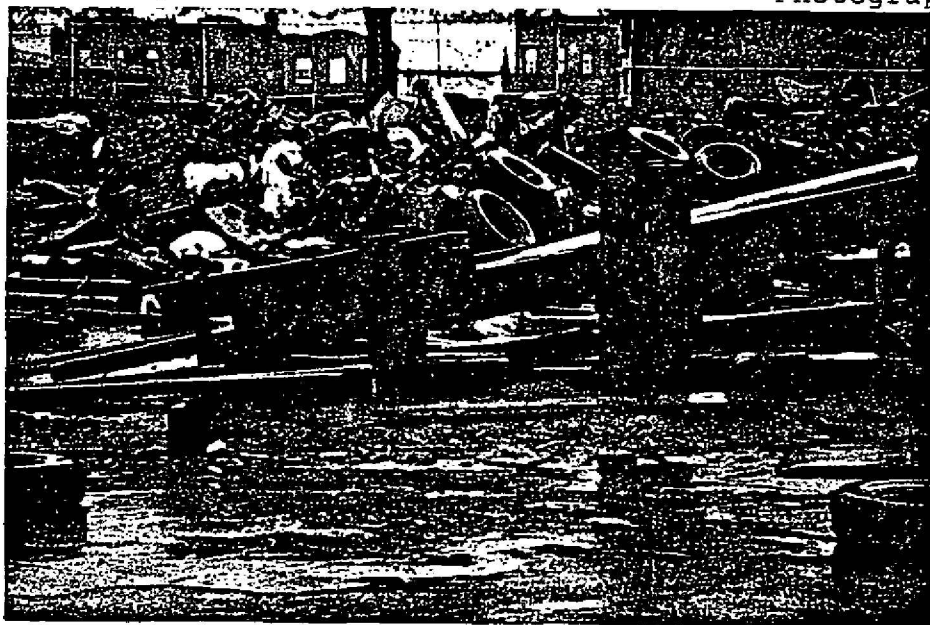


Photograph 1 Project Area Looking East



Photograph 2 Project Area Looking Northeast

Photographs 3 and 4



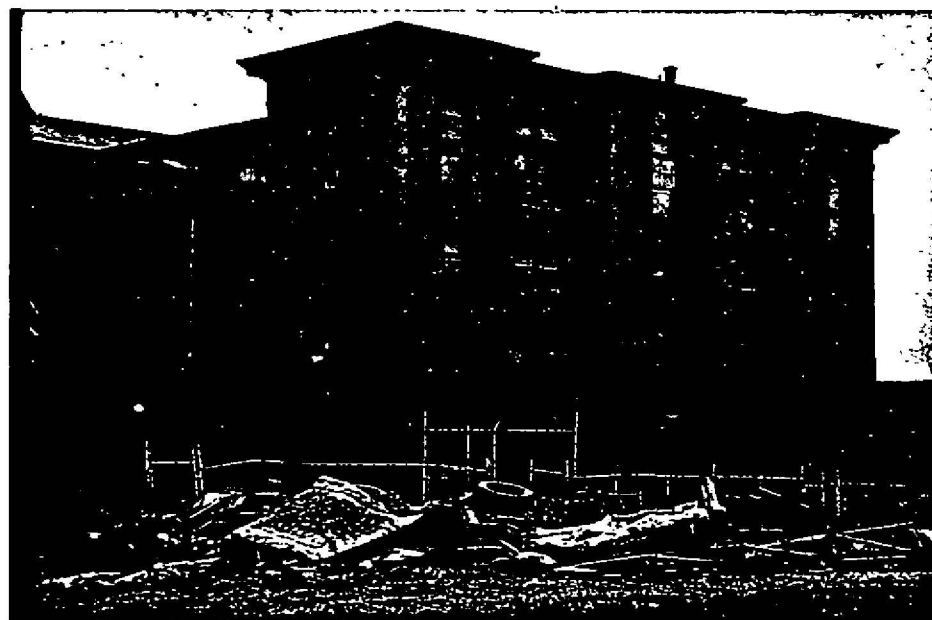
Photograph 3 Close-up of Garbage on Project Area

Photograph 4 Close-up  
of 915 Kent Avenue

## Photographs 5 and 6



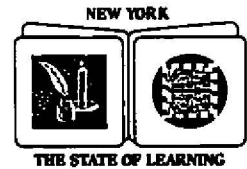
Photograph 5 St. Patrick's Church



Photograph 6 St. Patrick's Academy

APPENDIX A

Correspondence with the New York State  
Museum/Education and the New York State Office  
of Parks Recreation and Historic Preservation



THE STATE EDUCATION DEPARTMENT / THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, N.Y. 12230

NEW YORK STATE MUSEUM  
DIVISION OF RESEARCH AND COLLECTIONS

Please direct correspondence to:

NEW YORK STATE MUSEUM  
Prehistoric Site File  
Cultural Education Center, RM 3122  
State Plaza  
Albany, N.Y. 12230

Search Results:

Date: January 10, 1989

To: Cece Kirkorian  
Historical Perspectives Inc.  
P.O. Box 331  
Riverside, Connecticut 06878

Area Searched: Brookly 7.5', (see attached map).

In response to your request our staff has conducted a search of our data files\* for locations and descriptions of prehistoric archaeological sites within the area indicated above.

The results of the search are given below. Please refer to the NYSM site identification numbers when requesting additional information.

If specific information requested has not been provided by this letter, it is likely that we are not able to provide it at this time, either because of staff limitations or policy regarding disclosure of archaeological site data.

Any questions regarding this reply can be directed to Philip Lord, Jr., at (518) 473-1503 or the above address, mark as Atten: Site File.

\*[NOTE: Our files normally do not contain historic period sites or architectural properties. Contact: The Survey Registration & Planning Unit, Office of Parks, Recreation & Historic Preservation, Agency Building #1, Empire State Plaza, Albany NY, at (518) 474-0479 to begin the process of collecting data on these types of sites.]

**RESULTS OF THE FILE SEARCH:**

The following sites are located in or within one mile of the project area:

None.

Code "ACP" = sites reported by Arthur C. Parker in The Archeology Of New York, 1922, as transcribed from his unpublished maps.

SEARCH CONDUCTED BY: B.W. (initials)  
Staff, Office of the State Archaeologist

**EVALUATION OF ARCHAEOLOGICAL SENSITIVITY FOR PREHISTORIC (INDIAN) SITES**  
Examination of the data suggests that the location indicated has the following sensitivity rating:

- ☐ HIGHER THAN AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.
- ☒ AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.
- ☐ LOWER THAN AVERAGE PROBABILITY OF PRODUCING PREHISTORIC ARCHAEOLOGICAL DATA.
- ☐ MIXED PROBABILITY OF PRODUCING PREHISTORIC ARCHEOLOGICAL DATA.

The reasons for this finding are given below:

- ☐ A RECORDED SITE IS INDICATED IN OR IMMEDIATELY ADJACENT TO THE LOCATION AND WE HAVE REASON TO BELIEVE IT COULD BE IMPACTED BY CONSTRUCTION.
- ☐ A RECORDED SITE IS INDICATED SOME DISTANCE AWAY BUT DUE TO THE MARGIN OF ERROR IN THE LOCATION DATA IT IS POSSIBLE THE SITE ACTUALLY EXISTS IN OR IMMEDIATELY ADJACENT TO THE LOCATION.
- ☐ THE TERRAIN IN THE LOCATION IS SIMILAR TO TERRAIN IN THE GENERAL VICINITY WHERE RECORDED ARCHAEOLOGICAL SITES ARE INDICATED.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A HIGH PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☒ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION SUGGEST A MEDIUM PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE SUCH AS SUGGEST A LOW PROBABILITY OF PREHISTORIC OCCUPATION OR USE.
- ☐ EVIDENCE OF PRIOR DESTRUCTIVE IMPACTS FROM CULTURAL OR NATURAL SOURCES SUGGESTS A LOSS OF ORIGINAL CULTURAL DEPOSITS IN THIS LOCATION.
- ☐ THE PHYSIOGRAPHIC CHARACTERISTICS OF THE LOCATION ARE MIXED, A HIGHER THAN AVERAGE PROBABILITY OF PREHISTORIC OCCUPATION OR USE IS SUGGESTED FOR AREAS IN THE VICINITY OF STREAMS OR SWAMPS AND FOR ROCK FACES WHICH AFFORD SHELTER. DISTINCTIVE HILLS OR LOW RIDGES HAVE AN AVERAGE PROBABILITY OF USE AS A BURYING GROUND. LOW PROBABILITY IS SUGGESTED FOR AREAS OF EROSIONAL STEEP SLOPE.
- ☒ PROBABILITY RATING IS BASED ON THE ASSUMED PRESENCE OF INTACT ORIGINAL DEPOSITS, POSSIBILITY UNDER FILL, IN THE AREA. IF NEAR WATER OR IF DEEPLY BURIED, MATERIALS MAY OCCUR SUBMERGED BELOW THE WATER TABLE.
- ☐ INFORMATION ON SITES NOT RECORDED IN THE N.Y.S. MUSEUM FILES MAY BE AVAILABLE IN A REGIONAL INVENTORY MAINTAINED AT THE FOLLOWING LOCATION(S). PLEASE CONTACT:

COMMENTS:





Hist Perspectives  
rec 12/19

Shaft Site. 21B

Brooklyn Quad



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

The Governor Nelson A. Rockefeller Empire State Plaza  
Agency Building 1, Albany, New York 12238-0001

January 4, 1989

Ms. Cece Kirkorian  
Historical Perspectives, Inc.  
P.O. Box 331  
Riverside, Connecticut 06878

Dear Ms. Kirkorian:

**Re: Information Request  
Shaft Site 19B and Shaft Site 21B  
Brooklyn, Kings County**

The Field Services Bureau of the New York State Office of Parks, Recreation and Historic Preservation/State Historic Preservation Officer has received your request for information on properties or sites which are included in or may be eligible for inclusion in the National and State Registers of Historic Places.

Based upon the information which you provided and a file search conducted by our staff, we have been able to determine that:

- I. ☐ The project area has been comprehensively surveyed by a qualified professional and reviewed by this office. To the best of our knowledge, the project area contains no buildings, objects, or districts which are eligible for or included in the National or State Registers of Historic Places.
- II. ☐ To our knowledge, the project area has not been professionally surveyed for historic resources. We recommend that any buildings or structures proximal to or within this area should be documented and evaluated for potential importance. Any information we do have on file from sources other than a comprehensive survey are noted on the following page.

III. ☐ The project area has been comprehensively surveyed by a qualified professional and reviewed by this office. The following resources have been reported to our office and are located in or in the vicinity of the project area which you identified:

A. ☐ National/State Register of Historic Places listed or eligible properties:

B. ☐ Properties included in Statewide Inventory:

IV. ☒ No architectural information requested.

V. ☒ Archaeology

A. ☐ With regard to archeology, it is the opinion of this office that your project lies in an area that is archaeologically sensitive. This determination is based upon our office's archaeological sensitivity model. Archaeologically sensitive areas are determined by proximity to known archaeological sites, as well as the area's likelihood of producing other archaeological materials. It is our opinion that unless substantial ground disturbance can be documented, an archaeological survey should be undertaken to determine the nature and extent of archaeological resources in your project area. If you wish to submit evidence regarding ground disturbance, it should include statements concerning the nature and date of the disturbances as well as a map indicating the locations and depths of such activities. Photographs of recent construction activities keyed to a map are very useful in this regard. Once we have had an opportunity to review the additional information provided as the evidence regarding prior disturbance or as a result of the archaeological survey, we will be able to complete our review of this project and issue our final comments.

Ms. Cece Kirkorian  
January 4, 1989  
Page 3

B. ☐ At the present time, there are no previously reported archaeological resources in your project area or immediately adjacent to it. This finding is based upon our office's archaeological sensitivity model. Archaeologically sensitive areas are determined by proximity to known archaeological sites, as well as the area's likelihood of producing other archaeological materials.

C. ☒ Regarding your request for site file information, the following archaeological resources are located within or proximal to the project area (Keyed to map):

Shaft 19B - Site A081-01-0108 (Vander Ende - Onderdonk House Site, National Register Listed.)

Shaft 21 B - Sites A047-01-0074, 0179, and 0102. Site 0102 is Paker #9, unfortunately the information for the other two sites is (as of this writing) missing from our files.

Both project areas we considered sensitive for the presence of archeological resources.

VI. ☐ Additional Comments:

Should you have any further questions, please contact our Project Review staff at (518) 474-3176.

Sincerely,

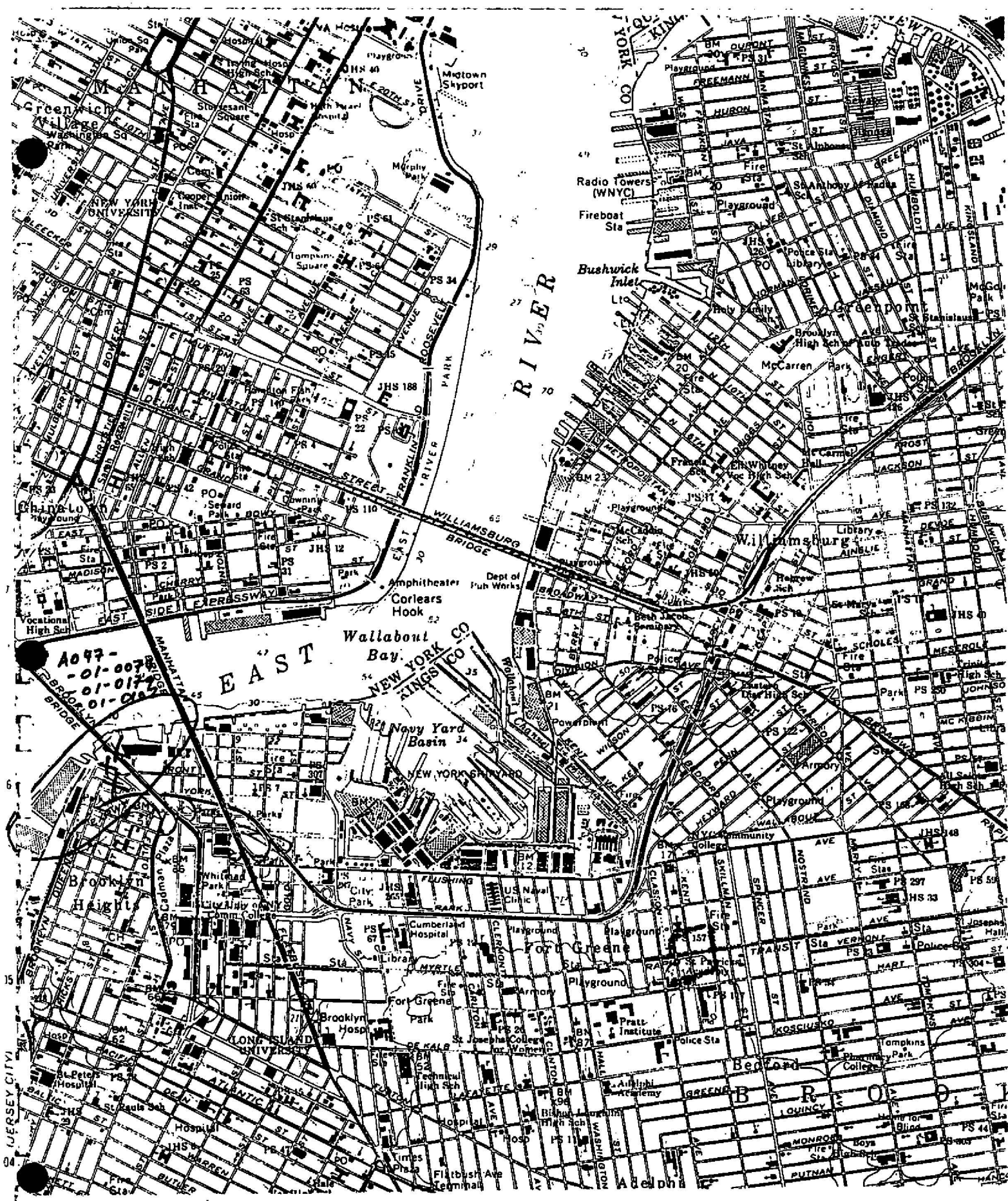


David S. Gillespie  
Director  
Field Services Bureau

DSG/BF/VJD:rz  
#2a (6/88)

Enclosures: 2 maps





Shaft Site 21B  
Brooklyn Quad

**Note:**

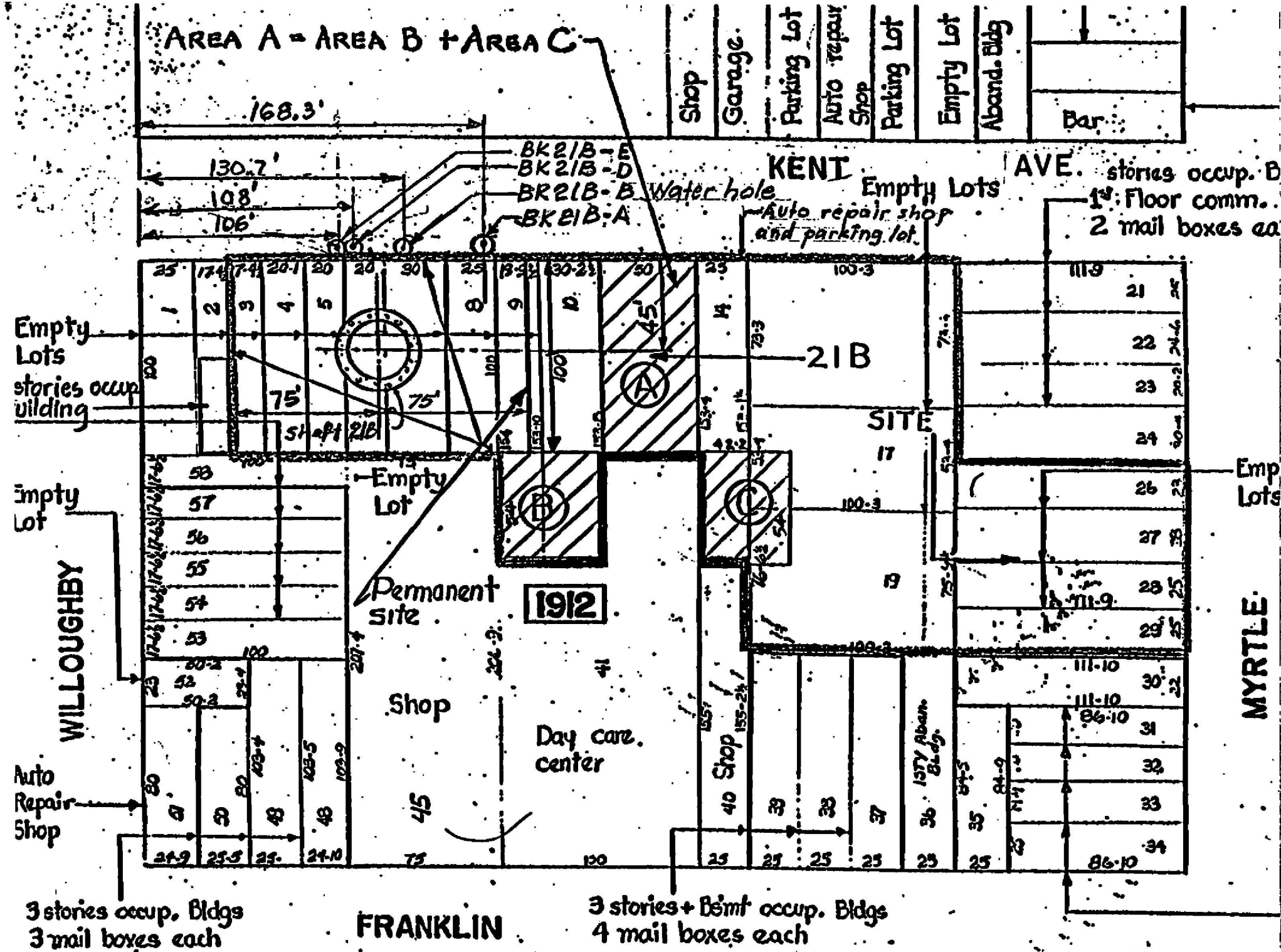
Historical Perspectives, Inc. has on file a copy of each of the inventory files referenced by NYSOPRHP. Each of the reference numbers is identified with a historic site report. #0102 is a Solecki report of the late 1970s and not a Parker #9 site.

APPENDIX B

Information from Soil Borings Conducted at  
Shaft 21B Site



AREA A = AREA B + AREA C



FRANKLIN

MYRTLE

3E

BORING NO. BK 21-A

5.50

DATED 09/19/88

LOCATION Kent Ave

COORDIN

N.

COMPLETED

E.

FLANEOUS	Working Days	Depth	70	MATERIAL	
3° split spoon					SURFACE ELE
					ROCK ELEV.:
(5.00-7.00)		5	20	Br Sndy soil w/ med amt of gvl (C-F)	DEPTH IN EAP
54.85-53.85			21		DEPTH IN RO
			22		TOTAL DEPT
					LEGEND
(7.56-11.56)		10	24	Br Sd w/ fair amt of clay	LOST WATER
49.29-47.29			25	Sd: Clr-wh gtz gravel, (pred'le) w/ F <sub>9</sub> amt of VC gvl	DYNAMITE US
			26	Ang, Tr 11br siltst rd-sft, Tr mic, Tr mafic.	Geologist John
			27	(10% Clay 11br-buff)	
(14.80-16.80)		15	29	Br Sd w/ occ clay & silt Sd: Clr-wh gtz pred (2F-upF): Subang	
41.05-42.05			30	Tr Mic, Tr blk-dk grey mafic, 5% siltst dk grey blk med h-sft	
			31	Tr ss-ch gtz mc, ang w/ siltst (5% clay 11br)	
(19.65-21.65)		20	31	Br Clay Sd pred Clr-wh gtz (VCup = VF low) Ang-subang	
39.20-37.20			32	(15% Clay 11br-buff) Tr 11br-grey siltst, ss cl gtz F w/ siltst	
			33		
			34		
		25			
(25.80-27.80)			34	Qtz Sd Clr-wh, pred (Fup-m low occ VC) Ang-subang	
33.05-31.05			35	med amt of mus mica, Tr amt of 11br-grey siltst med h.	
			36	Occ pl: 5cm, (5% Clay 11br-buff)	
(30.57-33.00)		30			
(28.28-25.85)				No penetration with split spoon	
(33.00-36.14)				Core sample taken w/ 5' minitube (Sand and clay lost in the wash	
(23.05-22.71)		35		contained well rounded cobble & boulders fragments of varied geologic	
				Core - (AA) 70% recovery	
(36.19-37.64)					
(22.71-21.21)			39	Attempted to sample spoon at Dp 36.14 w/ 1.0' of penetration, no recover	
			40	(Possibility of gravel & cobble)	
		40			
(40.00-45.94)				Core sample w/ only 10% recovery (Gravel well rounded)	
(18.85-12.86)				(Possibility of sand and gravel due to large % of loss in the wash)	
		45			

BY WARREN, GEORGE  
UNDER C550BORING NO. 21 B-D

COORDINATES

BORING STARTED 12/29/88  
BORING COMPLETED 1/10/89LOCATION Kent Ave.

N

161/8 ABANDONED (Bit unscrewed in H&E.)

MISCELLANEOUS		Working Days	Depth of Bore	MATERIAL			
			300				
						SURFACE ELEV.	
						ROCK ELEV.	
SAMPLE #1	3" 9/16"-3.000	5	300	7/8"	Brown Sand predominately coarse w/ abundant amount of pebbles.	DEPTH IN EARTH	
DEPTH	4.05 TO 5.10	1				DEPTH IN ROCK	
						TOTAL DEPTH	
SAMPLE #2	Core 2.00 14/81	2	10	140	50	LEGEND	
DEPTH						LOST WATER	<input checked="" type="checkbox"/>
						DYNAMITE USED	<input checked="" type="checkbox"/>
			15				
SAMPLE #3	Core 15.05 TO 17.25		300	1/2"	Brown Sand as Above. (A/A)		
DEPTH	15.05 TO 17.25						
			20				
SAMPLE #4	Core 14.00 TO 15.00		20	1/2"	Brown Sand poorly sorted w/ occasional pebbles		
			25				
SAMPLE #5			25	1/2"	Brown Sand poorly sorted w/ 50% pebbles		
			30				
SAMPLE #6	Core 20.00 TO 22.00		30	1/2"	Brown Sand w/ moderate amount of pebbles, predominately coarse grading to medium in places.		
			35				
SAMPLE #7	Depth 22.00-23.14	11/88	4	1/2"	Broken & cobbles w/ coarse Brown Sand		
SAMPLE #8	Depth 23.00-23.33	11/88	4	1/2"			
SAMPLE #9	Depth 23.75		40	1/2"	Broken & cobbles w/ coarse Brown Sand and abundant amount of pebbles		
			45				
SAMPLE #10	Depth 41.10-41.93	11/88	5	1/2"	Brown Sand A/A w/ occasional cobbles.		
			50				
SAMPLE #11	T.D. 50.20	T.D.	50	1/2"	Brown Sand Coarse grading to pebbles in places w/ occasional cobbles.		
Depth	50.00-50.50						
			55				
			60				
			65				
			70				

PRELIMINARY Report

Not checked

DMD.

PRELIMINARY REPORT NOT CHECKED DMD

BY WARREN, GEORGE

BORING NO. BK 21B-E

COORDINATES

UNDER C-559

BORING STARTED 1/11/89

LOCATION KENT AVENUE

N.....

BORING COMPLETED

S 108' North of Willoughby Ave.

E.....

MISCELLANEOUS	Port Days	Depth ft	Time min	MATERIAL
				SURFACE ELEV. 60.20
				ROCK ELEV. ....
Sample #1		5		See Hk 21B-D, No Duplicate Samples were taken
				DEPTH IN EARTH.....
				DEPTH IN ROCK.....
				TOTAL DEPTH.....
Sample #2		10	30	M to C Sand & pebbles
DEPTH 10.00 TO 10.50 W/M				1/4 Brown
				2/4
				3/4
		15		
Sample #3				See Hk 21B-D, No Duplicate Samples were taken
Sample #4		20		See Hk 21B-D, No Duplicate Samples were taken
Sample #5		25		Dr. F to M Sand
DEPTH 25.00 TO 25.50 W/M				3/4
		30		
Sample #6				Dr. Sand w/ some pebbles
DEPTH 30.00 TO 30.50				3/4
		35		Boulders & cobbles
Sample #7				Sand w/ some pebbles
DEPTH 35.00 TO 35.50 W/M				3/4
		40		
Sample #8				NO SAMPLE
DEPTH 42.40 TO 43.06 W/M				
ELEV. +17.88 TO +17.64				
		45		
Sample #9				COBBLES & PEBBLES
DEPTH 45.30 TO 45.46 W/M				Some SAND
ELEV. +14.90 TO +14.74				
		50		
Sample #10				No SAMPLE
DEPTH 50.0 TO 50.42 W/M				
ELEV. +14.20 TO +14.78				
		55		
Sample #11				No SAMPLE
DEPTH 54.85 TO 56.85				(PEBBLE stuck in spoon)
ELEV. +3.35 TO +3.35				
Sample #12				Dr. SAND C. w/ some pebbles
DEPTH 58.0 TO 59.20				3/4
ELEV. -2.2 TO -2.0		60		
		65		
Sample #13				Dr. Coarse SAND w/ some pebbles
DEPTH 65.10 TO 66.40 W/M				3/4
ELEV. -4.90 TO -6.20				
Sample #14		70	30	C. SAND & pebbles

↑  
CORE  
Boulders  
&  
Cobbles