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**REVISED**  
**SELFHELP HOUSING FOR  
THE ELDERLY**

**140-16, 18, 20 45TH AVENUE.  
FLUSHING. QUEENS COUNTY, NEW YORK**

**DCP-CEQR 1993 048Q**

**ULURP 930584 ZMQ**

**PHASE 1A ARCHAEOLOGICAL AND HISTORIC  
SENSITIVITY EVALUATION AND  
PHASE 1B ARCHAEOLOGICAL FIELD SURVEY**

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# **SELFHELP HOUSING FOR THE ELDERLY**

**140-16, 18, 20 45TH AVENUE  
FLUSHING. QUEENS COUNTY, NEW YORK**

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## EXECUTIVE SUMMARY

The site of the proposed project is located at 140-16, 18, 20 45th Avenue in the Borough of Queens, Queens County, New York. The site contains 10,000 square feet, of which at least half has been disturbed by the construction and subsequent demolition of two structures that have been identified as 140-20 and 140-18 45th Avenue. The history of the construction and demolition of the structures will be discussed in the body of the report. According to materials submitted to the New York City Planning Commission, 140-20 45th Avenue was demolished prior to 1981. 140-18 45th Avenue was demolished prior to 1991. Map research indicates that the western portion of the site has never contained any structures. Selfhelp Housing for the Elderly, which owns property immediately south of the project area, proposes to build 66 units of affordable housing for senior citizens.

Correspondence from the New York City Landmarks Preservation Commission (dated June 24, 1993) indicated that the proposed project area had the potential to contain archaeological remains associated with Native American use and occupation, and required that a documentary study be undertaken. (Appendix E) In response to this request, City/Scape: Cultural Resource Consultants was retained to perform a Phase 1A Archaeological and Historic Sensitivity Evaluation and Phase 1B Archaeological Reconnaissance Survey for the site and adjacent areas. The purpose of these studies has been to evaluate the potential for the site to yield prehistoric cultural resources, and, based on this evaluation, to determine whether the site contains such resources.

Research consisted of a review of existing documents pertinent to prehistoric and historic land use on and near the subject property, as well as a brief examination of the history of Flushing. Research was conducted at the New York Public Library, the Map Division of the New York Public Library, the Queens Borough Library (Long Island Room), the Brooklyn Historical Society, and the New York City Landmarks Preservation Commission. Special attention was given to historic maps to determine whether, in addition to possible prehistoric cultural resources, the site had the potential to yield significant historic cultural resources. Archaeological reports focusing on previously report prehistoric archaeological sites were examined to determine what environmental factors, such as proximity to the tidal marsh bordering Flushing Creek and Mill Creek, springs, streams or other water bodies, may have contributed to the location of these sites. In particular, a report prepared by Grossman and Associates for the Flushing Manor Geriatric Center site, also located in Flushing, was reviewed.

Based on this research, it appears that the following factors suggest that the project area contains the potential to yield prehistoric cultural resources:

1. the proximity of the project area to the tidal marshland that bordered Flushing Creek and Mill Creek; a focus for many of the reported prehistoric sites in the area

2. the location of the project area on an alluvial bench above the level of the flood plain that abuts the tidal marshland bordering Flushing Creek and Mill Creek; another focus for prehistoric sites
3. the presence to the west and north of the site of a fresh water spring that existed in 1852 (See Map 3) and may appear on the 1912 Final Maps of the Borough of Queens (Plate 63)
4. the presence to the south and east of the site of a small fresh water pond as late as 1891 (See Map 5)

With respect to historic cultural resources, an examination of 19th and 20th century maps indicates that no structures were constructed on the project area until the early years of the 20th century. Historically, the land was associated, first with the Hedger family, early inhabitants of Flushing, and with the Smart family, whose dwelling stood on the west side of present-day Kissena Boulevard, but there is no indication that any farm structures or outbuildings associated with either family stood on the site. Sanborn Insurance Maps from 1904 indicate that the entire site was open land at that time. (See Map 7) However, a Sanborn map dated 1917 show two structures located on the eastern portion of the site. (See Map 8) An examination of a series of topographical maps located in the New York Public Library and the Queens County Topographical Bureau indicate that the elevations associated with the site in the mid-19th century and those associated with the site in 1911, the year that the street topography in this area of Queens was finalized, are virtually the same as the present elevations of the site. This indicates that, although inconsequential changes in grade may have taken place within the project area over the last 150 years, no major changes, such as filling episodes that would have buried prehistoric cultural resources, have occurred during the last eighty to ninety years.

Given the fact that some portions of the site appear never to have been built upon and thus may contained the potential to yield prehistoric cultural resources; and that the elevations within the project area appear to have remained relatively constant, it was concluded that a testing strategy employing hand dug shovel tests would be able to reach sterile subsoil throughout the undisturbed portions of the site. The Stage 1B Archaeological Reconnaissance Survey was undertaken on November 21, 1993. No prehistoric cultural material was recovered during this investigation. The results of the survey are reported in the Phase 1B portion of this document.

As a result of the Phase 1A Archaeological and Historic Sensitivity Evaluation for the site and adjacent areas it has been determined that no historic cultural resources are associated with the project area. However, the presence of other archaeological sites in the vicinity of the project area and the relationship of the project area to a number of environmental features known to have been of importance to Native Americans necessitated Phase 1B Archaeological Reconnaissance Survey. The Phase 1B survey employed a 20' grid to ensure that the project area was thoroughly examined. No prehistoric cultural resources were recovered during the investigation. It is, therefore, concluded that the project area does not contain prehistoric cultural resources and that no further archaeological examination is warranted.

# **SELFHELP HOUSING FOR THE ELDERLY**

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**PHASE 1A ARCHAEOLOGICAL AND HISTORIC  
SENSITIVITY EVALUATION**

## **1A.1 INTRODUCTION**

The site of the proposed project is located at 140-16, 18, 20 45th Avenue in the Borough of Queens, Queens County, New York. (Map 1) The site contains 10,000 square feet, of which approximately one half has been disturbed by the construction and subsequent demolition of two structures identified as 140-20 and 140-18 45th Avenue. (Map 2) The history of the construction and demolition of the structures will be discussed below. According to materials submitted by the client to the New York City Planning Commission, 140-20 45th Avenue was demolished prior to 1981 and 140-18 45th Avenue was demolished prior to 1991. Map research indicates that the western portion of the site has never contained any structures. *Selfhelp Housing for the Elderly*, the entity that owns this property and the property immediately south of the project area proposes, to build 66 units of affordable housing for senior citizens on the site.

Correspondence from the New York City Landmarks Preservation Commission (dated June 24, 1993) indicated that the proposed project area had the potential to contain archaeological remains associated with Native American use and occupation, and required that a documentary study be undertaken. (Appendix E) In response to this request, City/Scape: Cultural Resource Consultants was retained to perform a Phase 1A Archaeological and Historic Sensitivity Evaluation and Phase 1B Archaeological Reconnaissance Survey for the site and adjacent areas. The purpose of the Phase 1A study was to evaluate the potential of the site to yield prehistoric cultural resources, and, based on the conclusion that the site had the potential to yield prehistoric cultural resources, to perform a Phase 1B survey to determine whether the site contained such resources. The Phase 1B survey, undertaken on November 21, 1993, indicated that there were no prehistoric cultural resources associated with the site. (See Phase 1B report)

## **1A.2 THE PROJECT AREA**

The proposed project area is located on the south side of 45th Avenue between Kissena Boulevard and Union Street. According to current plat maps of the area, it is located in Block 1106 in the Flushing section of the Borough of Queens, located in Queens County, New York. As noted, the site contains 10,000 square feet, of which approximately 5000 square feet has been previously disturbed. At the present time, the site contains no standing structures. However, map research indicates that prior to 1991 two structures, and perhaps a garage or shed, stood on the eastern half of the project area. Map research indicates that the project area was open land as late as 1904, but that two structures had been built on the eastern portion of the site by the year 1917.

## **1A.3 THE MAP RESEARCH**

According to the map research and the literature review undertaken as part of the Phase 1A evaluation of the *Selfhelp Housing for the Elderly* site, until the late years of the 19th century this area of Flushing remained essentially a rural area on the outskirts of the village. During the later years of the 19th century, families from New York City began to transform Flushing into a suburban community. Following World War II, the area was gradually transformed into the more urbanized one that it is today, with apartment complexes to the north, south and west, and numerous businesses on either side of Kissena Boulevard.

An examination of historic maps permit us to make some statements concerning the environmental setting and the land use patterns of the project site and the area that surrounds it. In general, it may be stated that, based on the map research, it has been determined that the project area was not crossed by any streams nor did it contain any body of water. At the present time, the project area may be characterized as flat, although there is evidence of the foundations of the two structures that formerly stood on the eastern portion of the site. (See Appendix D: Photographs) Although the maps do not indicate any other structures on the site, surface evidence suggests that there was once a shed or some other type of ephemeral outbuilding located behind 140-20 45th Avenue. It appears that the elevation of the project area has not been significantly altered during the last 100 years. However, it does appear that there are a number of features nearby that suggest that the project area may have the potential to yield prehistoric cultural resources. These include:

1. the presence to the south and east of the site of a small pond seen on the 1852 Connor/Dripps map (See Map 5) that could have served as a source of fresh water for Native American peoples,
2. the presence to the north and west of the project area of a spring, mentioned in early 18th century deeds and also found on the 1852 Connor/Dripps map, that could also have served as a source of fresh water for Native American peoples,
3. the presence of Mill Creek and Flushing Creek to the west of the project area, both of which would have provided food resources, such as fish and shellfish, for Native American peoples,
4. the tidal marshes located on either side of the streams which would have provided both food resources, including migratory birds, and rushes for housing for Native American peoples.
5. and the location of the project area on a flat alluvial bench above the tidal marshland.

Although there are maps of the village of Flushing dating to as early as 1666, and maps that include the project area dating to the years of the American Revolution, the earliest map to clearly show the *Selfhelp Housing for the Elderly* site is the Connor/Dripps map, dated 1852. (Map 3) A close examination of the Connor/Dripps map provides a wealth of details about Flushing in the middle of the 19th century, just prior to the time that easier access to New York City by rail began to change the village and surrounding area from a place famous for its nurseries and orchards to a place where well-to-do New Yorkers built "genteel residences". The Connor/Dripps map shows a number of the nurseries, including Prince's Linnaean Garden to the north and west of the project area, the Parson's and Company Commercial Garden and Nursery on the former farm of the Bowne family immediately north and east of the project area, and the King and Ripley Nursery, farther east along the Flushing and Bayside Plank Road, one of several toll roads that linked Flushing with Brooklyn and the ferries to Manhattan. At the time, the Jamaica Road (present-day Kissena Boulevard) was a toll road that ran from Flushing to Jamaica along the eastern edge of the saltwater marshes that lined Flushing Creek. These saltwater marshes were an important source of fodder for the farmers of the area, while at the same time being an impediment to easy transportation. The Connor/Dripps map defines the general boundaries of these marshes, which were salt below the bridge that carried the Jamaica Road across Mill Creek, a tributary of Flushing Creek, and fresh water marshes above it. The area above

the bridge was, consequently called, Fresh Meadows. The map also identified a series of springs, including one that was located near the banks of Mill Creek to the west of the project area. Grist mills, a feature of every early community in North America, were also noted. One, owned by the Bowne family in 1852, was located neat the intersection of Lawrence Street, Ireland Road, and the road running across the tidal marshes to Newtown.

The Connor/Dripps map identifies the property containing the project area as belonging to William Smart, identified in the *Historical Collections of the Borough of Queens* as a real estate agent in Flushing. His house was located on the west side of the Jamaica Road (now Kissena Boulevard). In 1852 the Smart farm contained 110 acres. The land across the Jamaica Road from the house, on which the project area is located, was shown as open land, with a scattering of trees on the eastern and southern boundaries. There was a small pond located on the southern edge of the farm. Today this pond, if it were extant, would be located approximately one block south and one block east of the project area. To the north of the William Smart property was Sanford Hall, which by 1852 was an asylum for the insane operated by the MacDonald family. Sanford Hall, built in 1836, by Chancellor (and then Senator) Nathan Sanford, was described as a large Colonial-style structure, built of marble, surrounded by a considerable woodland. Surrounding the house there were extensive landscaped grounds, and, where today apartment buildings block the view to the west, there was a vista across the tidal marshes and Flushing Creek that encompassed the setting sun. To the east of the property was Long Lane (present-day South Parsons Avenue), an old and established roadway, that can be identified on the 1781 Taylor and Skinner *Map of New York and Staten Island and Part of Long Island*. (See Map 16)

Seven years later, in 1859, Flushing was beginning to undergo important changes as a result of the construction of the railroad as far as the village in 1854. The railroad, known at that time as the Flushing and North Shore Railroad (the present-day Long Island Railroad), ran along Newtown Creek, across the salt marshes and Flushing Creek, to a terminal located at the intersection of Main Street and present-day Kissena Boulevard. From this time forward, Flushing began to lose its rural character as farmers and large landowners subdivided their land into building lots. However, in 1859 the land surrounding the project area had not yet changed and was still the property of W. Smart. (Map 4) The 1859 map provides some information not noted on the 1852 map, including the location of one of the toll gates on the Jamaica Road just south of the Smart property. This map also identifies the boundaries of the tidal marshes. Several of the nurseries identified on the 1852 map are still shown, including Parson's and Company Nursery and King and Ripley's Nursery. Others, such as O. D. Kimber's Nursery, and D. Higgins Nursery, appear to have been established in this seven year period. One, the Prince Linnaean Garden and Nursery, is no longer shown, and by the late 19th century, the land on which it had been located was opened for the use of school children, who called it "the wild nursery".

The Julius Bien topographical *Map of the Metropolitan District and Adjacent Country*, although it lacks the names of property owners and fails to indicate the location of structures, provides evidence of the on-going development of Flushing and the surrounding area, for it shows that by this date the open land associated with the William Smart farm had been subdivided into lots and the streets opened and named. (Map 5) At that time, present-day 45th Avenue was named

Whittier Street, while the street immediately to the south was Tennyson, followed by Longfellow. The pond shown on the Connor/Dripps map of 1852 is indicated by a small circle on the west side of Milton Street south of Tennyson Street. This map, like several others, also indicates the boundary of the tidal marshland along Flushing Creek and its tributaries, and indicates the division between the tidal marshland and the fresh water marsh. An examination of the topographical Bien map indicates that the project area was located on an alluvial bench approximately 63 feet above sea level. Although the spring mentioned above is no longer shown, it would have been located approximately 5 feet above the level of the tidal marsh to the north and west of the project area.

Having looked at a series of maps that show the project area in the context of its surrounding landscape, we now turn to a series of maps that show the project area within the street grid. The earliest map included is the Sanborn Insurance Map for the Borough of Queens, dated 1898. (Map 6) The block was bounded by Jamaica Avenue (formerly Jamaica Road and now Kissena Boulevard) on the west, Queens Avenue (formerly Tennyson Street and now Holly Street) on the south, Union Street (formerly Union Avenue) on the east, and Forest Avenue (formerly Whittier Street and present-day 45th Avenue) on the north. The size of the lots located in this block varied considerably in 1898, with the largest, located on Queens Avenue, spanning the entire block, and the smallest ones, located on Union Avenue, being approximately the size of a standard 25 by 75 foot city lot. Two lots are shown on the south side of Forest Avenue, one approximately half the size of the other. The middle portion of the larger of the two lots contains the project area. At the end of the 19th century, as is shown by this map, the area was sparsely built with only five of the lots in the block containing structures. None of these structures were located on the south side of Forest Avenue.

Little changed in the block between 1898 and 1904, when E. Belcher Hyde published the *Atlas of the Borough of Queens*, except that the large lot located at the corner of Forest Avenue and Jamaica Avenue had been divided into two lots running east and west. (Map 7) No structures are shown on the south side of Forest Avenue. Only minor changes had occurred on the occupied lots in the block, including the construction of one or two outbuildings and the demolition of one or two others. North of Forest Avenue, one dwelling had been built. This property and the house located on the northwest corner of Forest Avenue facing Jamaica Avenue abutted a lot containing a large house with a circular drive and a barn in the rear. That property in turn abutted the Sanford Hall property, shown as a generally cruciform building with a circular drive and a barn in the rear. A comparison of the 1852 Connor/Dripps map with the 1904 Hyde map indicates that the three lots north of Forest Avenue facing Jamaica Avenue existed in 1852, as they did in 1904, and that the smallest of the lots, abutted the William Smart farm property line. From this information, it appears that Forest Avenue was opened along the Smart property line. By 1904 the New York and Queens Company Railroad (a street railroad or trolley line) ran south along Bowne Avenue, turning eastward on Forest Avenue three blocks from the project area. Like the construction of the Flushing and North Shore Railroad (the present-day Long Island Railroad), the increased ease of transportation provided by a street trolley would have encouraged development along Forest Avenue and in the adjacent areas.

By 1917, the Sanborn Insurance Map for Flushing indicates that Forest Avenue's name had been changed to Franconia Avenue, and that the eastern portion of the project area now contained two houses, identified as 95 and 97 Franconia Avenue. (Map 8) The western portion of the project

area continued to be vacant. At this date, the houses and garages now located on the lots facing Jamaica Avenue (present-day Kissena Boulevard) had not yet been built.

The addresses of the houses identified as 95 and 97 Franconia Avenue in 1917 had been changed to 140-18 and 140-20 Franconia Avenue (45th Avenue) by 1934, but otherwise the configuration of the buildings in the project area remained the same. (Map 9) The map shows that the four houses facing Kissena Boulevard and their garages, which abut the western edge of the project area, had been built by this date. According to the Sanborn maps, the structures located in the project area were standing in 1940 and in 1951. (Map 10 and Map 11)

Information supplied by the client and confirmed by the Sanborn maps indicates that 140-20 45th Avenue (formerly 140-20 Franconia Avenue) was demolished by 1981, and that between 1981 and 1991 140-18 45th Avenue (formerly 140-18 Franconia Avenue) was also demolished. According to information supplied by Breeze Demolition, the basement of 140-18 45th Avenue "extended 8' below street grade." Since 140-20 45th Avenue was the virtual twin of 140-18 45th Avenue, it is assumed that the basement level also extended the same distance below the level of the street.

Map research indicates that the topography of the project area has not been altered significantly in the last 100 years. As noted above, the elevation of the site in 1891, after the streets had been opened and, presumably, any leveling that was needed to lay out the streets had been completed, was given as 65 feet above sea level. (See Map 5) An examination of the historic topographical maps and current topographical maps at the Queens Topographical Bureau indicate that the elevation of the project area has remained relatively consistent, with the finer grid map prepared as the Final Maps of the Borough of Queens in 1912 showing the project area at between 50 and 55 feet above sea level. (Map 12) On this map, the project area appears as a flat area rising approximately 5 feet from a place to the south of the southern boundary of the property to a spot on the north side of Franconia Avenue (present-day 45th Avenue). This information is extremely important, because, while it suggests the possibility that the site has been lowered by approximately 10 feet, it demonstrates clearly that the site has not experienced a filling episode. It may, therefore, be anticipated that prehistoric cultural resources, should they be located on the undisturbed portion of the site, would be accessible by hand excavation with a shovel. It also suggests that it should be possible, during a Phase 1B Archaeological Survey, to excavate the shovel test pits to sterile soil, thereby permitting the investigators to determine with certainty that they have reached below the level at which prehistoric cultural material would be recovered.

## **1A.4 GENERAL HISTORY OF FLUSHING**

According to histories of Queens County, the first settlement of the area now known as Flushing took place in 1643, when a group of Englishmen, primarily from the Massachusetts Bay Colony, requested permission to establish themselves on land under the control of the Dutch West Indies Company. Although the division of Long Island was a subject of some controversy between the Massachusetts Bay Colony, which claimed the eastern end of Long Island, and the Dutch, who claimed control of all the land west of Oyster Bay, these Englishmen determined to settle among the Dutch. Their reasons for doing so have traditionally been described as religious, since many of the inhabitants of Flushing espoused a view of freedom that did not conform to the definitions in general

use in the 17th century, either in New England, nor, as was proved by subsequent events, in New Amsterdam, but there were, perhaps, other reasons that compelled them, including the depression in agricultural prices experienced in the Massachusetts Bay Colony just prior to the beginning of the English Civil War, the inhospitable New England terrain that seemed to grow more stones than crops in some areas, and the fact that many towns did not have sufficient land to support the next generation of young men. (Roberts 1973)

While settlement may have not taken place before 1643, the Dutch had initiated the purchase of the land surrounding Flushing Bay from the Indian proprietors in the 1630's. As often happened with ancient documents, the earliest records of Flushing have been destroyed, but we learn the particulars surrounding the purchase of the land from a later 18th century document that cites the earlier conveyance. In this conveyance the land is delivered and

*. . . made over in a true, just and free possession. . . on the condition that the said Mechowod [Chief Sachem of the Massapeaque] . . . may remain to dwell, to plant Indian corn, to fish, and to hunt in the said lands. . .* (Thompson 1918 III 3-4)

A further stipulation was that the local Indians were to be allowed to cut the reeds that grew in the tidal marshland, presumably because, as described by Jaspers Danckers in 1679-80, these reeds provided the covering for their long houses.

The settlement at Flushing became official in 1645, when Director General Kieft granted a patent for approximately 16,000 acres of land to a group of men, among whom were Thomas Farrington, John Lawrence, and Henry and John Townsend. Flushing was called Vlissingen in 1660 when the "Danckers" or "Visscher" map was drawn. (Map 13) Six years later, and two years after the English had obtained New Amsterdam, renaming it New York, a map of Flushing indicated that the village had several streets and many houses. Flushing Bay and Flushing River (later Flushing Creek) are shown, along with the boundary of the tidal marsh on the north side of the village. Broadway ran east and west. Main Street ran south to connect with the road to Hempstead and the road to Jamaica. Running north from Broadway was Spring Street, which, as its name suggests, gave access to a spring located just above the tidal marsh. (Map 14) One of the houses shown on this map is the John Bowne House, which played a significant role in the history of religious freedom in the United States and still stands.

Members of the Society of Friends, or, as we commonly call them, Quakers were considered an anathema in both the Massachusetts Bay Colony, from which many inhabitants of Flushing had come, and among the Dutch in New Amsterdam, who insisted that no matter what a man's beliefs he must support the local authorities and pay his proper share of the tax toward the maintenance of the minister or Domine of the officially sanctioned Dutch Reform Church. The inhabitants of Flushing, many of whom had come to Flushing to avoid the heavy hand of church authority, took umbrage at the tax, and in 1648 several members of the community, including John Townsend, Edward Hart, Thomas Styles, John Lawrence and John Hicks, refused to pay it. They were identified by Stuyvesant as ". . . the principle persons who resist the Dutch mode of choosing sheriffs . . . and who refuse to contribute their share to the maintenance of the Christian, pious Reformed minister. . . ." (Munsell 1882: 76)

Whatever the particulars of the case, all of the inhabitants of Flushing seem to have agreed that the Governor, Peter Stuyvesant, was acting in an authoritarian and arbitrary manner. Although the men capitulated, other acts of resistance followed, culminating, with the arrival of Robert Hodgson, a leader of the Society of Friends, in a series of private meetings of persons who were either Quakers or sympathetic to members of the Society of Friends being held in Flushing and Jamaica. . . Stuyvesant's stated position was that Quakers were not to be tolerated in New Amsterdam or the towns under Dutch control. Meetings of Quakers could not take place. Quakers could not be sheltered, even for one night. Those who disobeyed his orders were to be fined, and possibly imprisoned. In every community there are men who bridle at such commands, and the English towns in Queens County had such a man in Henry Townsend, who in 1657 was condemned by the Dutch authorities for calling together just such a meeting. For this act, he was arrested and fined so heavily that twenty-eight inhabitants of Flushing and two from Jamaica prepared and signed a document that has come to be known as the "Flushing Remonstrance." This document said that the signers, despite the regulations of New Amsterdam, would not apprehend Quakers, send them to New Amsterdam to be imprisoned, or otherwise lift a hand against them, and furthermore that it was their considered opinion that God was the only judge in matters of conscience. When this document was delivered to Stuyvesant by the Sheriff of Flushing, Tobias Feake, he was arrested, demoted, fined and threatened with banishment. Stuyvesant banned all town meetings in Flushing ". . . except for highly interesting and pressing reasons." He then appointed his own sheriff, and selected a seven member tribunal composed of "the most reasonable and respectable inhabitants" with whom the sheriff and magistrate were to consult on matters concerning the town. Taxes were to be collected to support the minister, ". . . and such as do not sign a written submission to the same in six weeks may dispose of their property at their pleasure and leave the soil of this government." (Munsell 1882:77)

Such actions were considered by the inhabitants of Flushing to be in violation of their town charter, causing them, in 1662, to consider swearing their allegiance to the English colony of New Haven. Two years later, the English took New Amsterdam and the inhabitants of Flushing were content to remain allied with their new government.

Descriptions of the appearance of Queens County and the area around Flushing for this time period may be found in Daniel Denton's *A Brief Description of New-York, Formerly Called New-Netherlands*, published in 1670, in which he reports that

*Long Island . . . is inhabited from one end to the other. On the West end is four or five Dutch Towns; the rest being English to the number of twelve, besides Villages and Farm houses. The Island is most of it of very good soil, and very natural for all sorts of English Grain; which they sow and have very good increase of, besides all other Fruits and Herbs common in England, as also Tobac, Hemp, Flax, Pumpkins, Melons, etc. . . . The greatest part of the Island is very full of Timber, as Oaks white and red, Walnut-trees, Chestnut-trees, which yield store of Mast for Swine . . . also Maples, Cedars, Saxifrage, Beech, Birch, Holly, Hazel, with many sorts more. . . . The Island is plentifully stored with all sorts of English Cattle, Horses, Hogs, Sheep, Goats, etc.; no place in the North of America better, which they can both raise and maintain, by reason of the large and spacious Meadows or Marches, wherewith it is furnished, the Island likewise producing excellent English grass, the seed of which was brought out from England, which they sometime mow twice a year. For wilde Beast, there is Deer, Bear, Wolves, Foxes, Raccoons, Otters, Muskrats and Skunks, Wild Fowl, there is great store*

*of, as Turkeys, Heath-Hens, Quails, Partridges, Pidgeons, Cranes, Geese, of several sorts, Brants, Ducks, Widgeons, Teal and divers others . . .* (Denton 1966:3-6)

Denton also described the streams and rivers which entered the oceans off Long Island, all abounding in fish, and the salt water areas where shellfish were harvested by the Indians to be taken to Manhattan to market. Denton described in some detail the lives of the Indians whom he found living on Long Island, and the types of crops grown by the farmers on Long Island during the last quarter of the 17th century, along with the types of animals raised, and the game animals and birds hunted by both the Indians and the European inhabitants. He identified the importance of the meadows and marshes that were mown for fodder, and the woods that provided timber for building, wood for the kitchens and homes of the farmers, and mast (acorns, walnuts and chestnuts) for the swine that ran free in them.

A few years later, another description of western Long Island, is provided by Jasper Danckers, a member of the Labadist sect, who traveled to North America with a companion to "scout" the American colonies for a place of settlement for their people. Although he and his companion visited many of the towns in Brooklyn, they did not travel to the English towns in Queens County. However, their general descriptions of the landscape, farms, farmers, and, particularly, the Indians living on western Long Island would hold true for Queens County as for Kings County. Danckers remarked repeatedly on the peaches, which grew every where in great profusion, and on the amount of wood that the inhabitants used in their fireplaces. Coming to a farm in Gowanus, near the Narrows, he says that there was a fire "half-way up the chimney" of oak and hickory. They were served roasted oysters, some up to a foot in length, and a 30-pound roasted haunch of venison, which had been purchased from the Indians who inhabited the area. He described the meat as "tender and good, and also quite fat. It had a slight spicy taste." At the same meal, they also ate wild turkey. They saw watermelons as large as pumpkins. (Danckers and Sluyter 1966:123)

Having spent the night at a farm near the Narrows, the next morning Danckers and Sluyter walked along a road that led to the Indian plantations, where they saw fields planted with maize, and between seven and eight families living in a long house. The house was described as:

*. . . low and long, about sixty feet long and fourteen or fifteen feet wide. The bottom was earth, the sides and roof were made of reed and the bark of chestnut trees; the post, or columns, were limbs of trees stuck in the ground, and all fastened together. The top, or ridge of the roof, was open about half a foot wide, from one end to the other, in order to let the smoke escape, in place of a chimney. On the sides, or walls, of the house, the roof was so low that you could hardly stand under it. The entrances, or doors, which were at both ends, were so small and low that they had to stoop down and squeeze themselves to get through them. The doors were made of reed or flat bark. . . . They built their fire in the middle of the floor, according to the number of families which live in it, so that from one end to the other each of them boils its own pot, and eats when it likes, not only the families themselves, but each Indian alone, according to his hunger, at all hours, morning, noon and night. By each fire are the cooking utensils, consisting of a pot, a bowl, or calabash, and a spoon also made of a calabash. These are all that relate to cooking. They lie upon mats with their feet toward the fire . . . Their other household articles consists of a calabash of water, out of which they drink, a small basket in which to carry and keep their maize and small beans, and a knife. The implements are, for tillage, a small, sharp stone, and nothing more; for hunting, a gun*

*and pouch for powder and lead; for fishing, a canoe without mast or sail, and without a nail in any part of it, though it is sometimes full forty feet in length, fish hooks and lines, and scoops to paddle with in place of oars. . . . All who live in one house are generally of one stock or descent, as father and mother with their offspring. Their bread is maize . . . mixed with water, and made into a cake, which they bake under the hot ashes. . . . They had dogs, fowls and hogs. . . They had, also, peach trees, which were well laden.*

Danckers also comments on the large meadows and the salt meadows, which were an important aspect of the landscape around Flushing. (Danckers and Sluyter 1966: 117-134)

During these years and into the Colonial Period, the pattern of occupation for communities in Queens County and for the rest of Long Island consisted of individually owned farmsteads on which each man built his house, barns, and outbuilding, and on which he planted his orchards and crops. In addition to their own farms, each member of the community also was entitled to the use of the common land on which were pastured the cattle and from which the farmers cut hay for fodder. Woodlots were the third division of land, providing timber for building and firewood for the kitchen and fireplaces, as well as mast for the swine.. The woodlots were often held in common, but in time were divided among the inhabitants of the various villages. Later these woodlots were further divided, with specific lots being allocated to each family. Finally, in communities in proximity to the ocean, as was Flushing, salt meadows were purchased in common and subsequently divided into lots which were assigned to individuals in the community. The salt meadows at the head of Flushing Bay, which covered several thousand acres, were always regarded as an import asset to the community, providing, as they did, ". . . an almost inexhaustible quantity of food for cattle and horses." (Thompson 1918:13)

When property in Flushing was inherited or sold the division of the salt meadows were carefully spelled out, as in this deed, dated 1725, in which John Rodman, Jr. sold his farm at Eagles' Nest Neck to J. Dickinson. The land described in this deed is located just north and west across Kissena Boulevard from the project area. Containing approximately 100 acres, the land had been surveyed by Rodman's father and Thomas Hicks, Jr. prior to the sale of the land to John Rodman, Jr. It was said to be:

*. . . bounded Easterly by a Lane or highway that goes from Flushing to Jamaica, Southerly by a Lane or highway that leads to a spring and by the Salt meadow or Marsh, Westerly by a salt marsh, and Northerly by the Land of James Clement and also one other parcel of woodland and swamp containing about Eleven Acres. . . near Burlings Mill Pond. . . and also one share of Salt Marsh or Meadow containing about ten acres . . . and also one other Parcle of Salt Marsh being the one half of a share . . . and a parcel of Salt Marsh purchased from John Ryder . . . and Juryan Ryder, which he purchased from Thomas Hinchman. (WPA 1938:182-83)*

From this deed we learn that as early as 1725 the Jamaica Road was an established highway. We also learn that the spring located on the farm was sufficiently important to be mentioned in a deed of sale, and that a lane provided access to it. The importance of the salt marshes is attested to by the detail with which each parcel belonging to John Rodman, Jr. was described. We also learn of a mill (Burling's Mill) and its associated mill pond, which probably impounded waters from Flushing Creek.

A number of small ponds on the edge of the tidal marshland are identified on 19th century maps, and it is likely that one of these small ponds was formerly Burling's mill pond.

This particular piece of property is later identified on a map prepared by the Topographical Bureau of the Borough of Queens in 1935 showing land ownership in Flushing in 1800. By that date, the land described in the 1725 deed was owned by Jeremiah Vanderbilt, who sold it to David Gardiner between 1795 and 1812. (Map 15) This same map shows that the land containing the project area, which had belonged to the Hadger family, one of the early Quaker families in Flushing, was sold by Thomas Hadger to John Morrill in 1760, while the land to the north that came to belong to the Sanford family in the 19th century was owned, like the farm across the Jamaica Road, by Jeremiah Vanderbilt, who sold it to David Gardiner at the same time that he sold the Eagle's Nest Neck farm.

Despite controversy, Queens County, including Flushing, was growing throughout this period, as was indicated by the late 17th and early 18th century census reports. In 1686, when the first census of Queens County was taken, the county contained 1465 males, 1350 females, 551 children, and 199 Negroes, all of whom were most likely slaves. In 1723, the county had 1568 males, 1599 females, 1530 children, and 1371 Negroes. By 1749, these figures were refined to show the relative ages of the inhabitants:

<u>Sex and Age</u>	<u>Whites</u>	<u>Blacks</u>
Males over 16	1659	300
Females over 16	1778	245
Males under 16	1630	429
Females under 16	1550	349
TOTAL	6617	1323

Agriculture was the mainstay of Flushing, with slaves providing the field hands and domestic servants. The ownership of slaves was a fact of life on Long Island during the 17th and 18th century, although in Flushing the Quaker community began to agitate against slavery as early as 1716. (Waller 1899:85, 92, 96) According to local historians, the attitudes of Quakers toward slavery led to Flushing becoming an early haven for free blacks.

Flushing, during this period, was famous for its wheat production, and grist mills to grind the grain were built along Flushing Creek and Mill Creek. Flushing, as seen in the discussion of the historic maps, was also renown for its nurseries and commercial gardens. The impetus for the development of the nursery business in Flushing is said to have been the influx of French Huguenots, who came to America following the revocation of the Edict of Nantes in the late 17th century. These

displaced Europeans are thought to have returned to France before the end of the 17th century, though it is more likely that they emigrated to other areas in North America and Canada than that they returned to their homeland. The earliest of the nurseries of which we have a record was that of William Prince, who owned land in the village and began to propagate fruit trees and then shade trees. According to the Munsell *History of Queens County* Prince's nursery is considered to be the first nursery in the country, beginning as eight acres and growing over the years to encompass 24 acres and finally, under the management of his son, to approximately 60 acres. This enterprise, called Prince's Linnaean Botanic Gardens was located northwest of the project area on both sides of Lawrence Street. The nursery was so famous that, during the American Revolution, General Howe, who had portions of his army stationed in Flushing, protected the garden from destruction at the hands of the British and Hessian troops. Business came to a stand still during the Revolution, but, following the end of hostilities, the inhabitants of Long Island and Manhattan immediately set about the business of repairing the damage that years of war had wrought. In 1789 President George Washington visited Prince's Linnaean Botanic Garden during his tour of Long Island, but it is reported in his diary that he was not impressed by the quality of the merchandise offered.

The Battle of Long Island on August 27, 1776 cut Long Island off from the rest of the continent, and, with the exception of whale boats raiding from Connecticut and towns like Rye in Westchester County, it remained cut off throughout the war. General Howe's troops were an occupying army that was quartered on the population of Flushing or encamped on its farmland. Historians report that DeLancey's brigade was quartered between Jamaica and Flushing, while troops were camped at Fresh Meadows, on the Bowne property, and on the Hoagland farm. A map prepared for His Excellency General Henry Clinton, Commander-in-Chief of His Majesties Forces of New York, Staten Island and part of Long Island in 1781, includes the area of Flushing. (Map 16) Flushing Bay and Flushing Creek, along with several tributaries are shown, as are the tidal marshes on either side of the streams. Several roads, including the Jamaica Road and Long Lane can be identified. The farm road (indicated by a dotted line) running between Long Lane and the Jamaica Road permits us to identify the general location of the project area.

During this period of occupation, despite being protected from the ravages of further battles, the inhabitants of Flushing suffered great deprivations, and there are many tales of individual citizens being subjected to outrageous acts of vandalism, theft and even murder. The descriptions provided for Long Island match in many details descriptions of Manhattan and the Bronx, which were also held by the British, and southern Westchester, called in those days, the Neutral Ground:

*{Queens County} during the war [was] wholly military ground . . . In 1786, after the occupation of the British, free range had been given to the pillaging propensities of the soldiery. Farms had been laid waste . . . woodlands were ruthlessly cut down for fuel, buildings were injured, fences removed, and boundaries effaced. Farmers were despoiled of their cattle, horses, swine, poultry, vegetables, and of almost every necessary article of subsistence, except their grain, which fortunately had been housed before the invasion. Their houses were also plundered . . . and much furniture was wantonly destroyed . . . stock became very scarce and dear, and the farmer . . . who owned a pair of horses and two or three cows was 'well off'. (Stiles 1884:100)*

The scarcity prevailing in the markets and the needs of the British troops for food for themselves and their horses, soon made it essential for the British commanders to restrain the troops, and to encourage agriculture. As a consequence, money was made, some were later to say at the expense of the country.

With the end of the war, Queens County began to recover. Homes were rebuilt. Boundaries were redrawn, and fences reestablished. The property of loyalists like the Colden family was confiscated, and it was considered proper that many of those who had enriched themselves at the expense of their country were now replaced by a new class of settlers. The map of Flushing in 1800 indicates the extent of the changes that had taken place, although not all of these sales were the result of forfeitures. (See Map 15 for sales in the vicinity of the project area) Despite prosperity and the growth of business, Flushing remained essentially rural at the beginning of the 19th century. Munsell provides us with a glimpse of the village of Flushing in the year 1800, reporting that:

*Main Street was a rough, hilly country road . . . The water front was a disagreeable swamp, and near the foot of Main Street, where is now the Town Hall, was a noisome frog pond. The entrance to Prince's nursery. . . and Bloodgood's nurseries were a long way out of town. . . Main Street had perhaps a dozen buildings on it, and in a radius of a mile might have been counted 50 dwellings. (Munsell 1882:103)*

Much of this rural quality was lost during the first half of the 19th century as large farms were divided and streets were opened to provide building lots. Flushing was close enough to Manhattan by water to provide, as did areas of the Bronx like Riverdale, locations for the country seats of well-to-do families from the city. Flushing became an incorporated village in 1837 as part of its effort to raise the money needed for improvements, including improvements in the transportation routes to Manhattan and other towns and villages on Long Island. William Prince, in keeping with his obvious entrepreneurial spirit, provided the impetus for several of these improvements, including the first bridge over Flushing Creek in 1800 and the construction of the Flushing-Newtown Turnpike, which made travel to the East River ferries easier. Another important event was the institution of stage service in 1801. The first stage traveled through Newtown to Bedford, and on to the Brooklyn ferries that connected Long Island with Manhattan. After 1823, packet steamboats carrying passengers and freight docked in Flushing Creek, which was repeatedly dredged and deepened during the 19th century. However, the most important change was the opening of the Flushing and North Shore Railroad (present Long Island Railroad) in 1854. The railroad carried agricultural products from Long Island to Brooklyn and Manhattan, returning with manure collected on the streets of the city that became the fertilizer that enriched the crops grown on farms of Long Island. A view of Flushing during this time, taken from Flushing Creek, is included in Munsell's *History of Queens County*. (Fig. 7) By the middle of the century, Flushing Creek, at least within the village of Flushing was lined with businesses such as lumber and coal yards, steamship docks, and stores such as ship chandlers. Inns and taverns would have been a feature of any waterfront. The lithograph shows one of the bridges crossing Flushing Creek, which could be opened to allow water traffic up stream. In the foreground is a wooden pier or dock on which a series of rowboats has been pulled up. Moored to the dock are several small catboats. In the middle ground is a lone man rowing a shell. Across the stream is a larger sailboat, while a steamboat, the "Florence", proceeds upstream toward one of the docks. On the far shore are numerous small sheds, and several more substantial structures. On the

hill one can glimpse a flat roofed villa, perhaps in the Italianate-style. The far shore is lined with trees, including elms and evergreens. It is likely that the older inhabitants of Flushing saw the development of the waterfront as an intrusion, but to our eyes the scene is still appears bucolic.

According to G. Henry Mandeville, better transportation and the beauty of the countryside combined to raise Flushing from a rural to a suburban community. "There are," he reported, "many charming sites for genteel residences, and they are rapidly being taken up and occupied by gentlemen of leisure, or of business from the city." (Mandeville 1860:74-74)

It was during this period that the project area came into the possession of William Smart. According to information gathered by the WPA project in 1938 and reported in *Historical Collections of the Borough of Queens*, William Smart was a real estate agent in Flushing by 1841, when an advertisement informed the public that a map of "valuable properties" in the village could be purchased at his office. In 1849 *Sidney's Map of Twelve Miles Around New York* shows William Smart as the owner of the project area. (Map not included) The house occupied by Smart, which was located on the west side of Jamaica Road, stood on the property sold by Matthew Farrington to Preserved Fish in 1802, while the land across Jamaica Road, on which the project site is located, was the land sold by Thomas Hadger to John Morrill in 1796. (See Map 15) Together these two properties make up the 110 acres that belonged to William Smart in 1852. (See Map 3) The house had been purchased at auction by Smart in 1832 for \$9000.00. The price suggests that the 100 acre farm was included in the sale.

The Smart family continued to occupy the house until 1895, when it was sold by his son, Frederick Smart. It can be only conjecture that William Smart purchased this 120 acre parcel of land with an eye to its development, but, as a real estate agent in Flushing, it is possible that the potential for future profits occurred to him. In any event, by 1891 the land on the east side of Jamaica Avenue had been subdivided and sold. (See Map 5)

The construction of the railroad and, subsequently, the street trolleys and subway system, the creation of Greater New York in 1898, the filling of Flushing Creek and the tidal marshes to create Flushing Meadow Park and Corona Park in the 1930's, along with the normal increase in density experienced throughout the city, all served to change the area surrounding the project area over a period of 100 years from a rural area of farms, orchards and commercial nurseries to an area of large villas and genteel residences, and, finally, to an area of modest houses and low-rise apartment complexes intermixed with retail businesses.

## 1A.5 POTENTIAL HISTORIC SENSITIVITY

An examination of historic maps dating to 1852 (the earliest date at which the project area is clearly identified) indicates that until sometime between 1904 and 1917 the project area was open land, and there is no suggestion in the literature that any structures stood on the project area before 1852. The Sanborn Insurance Maps for the Borough of Queens indicate that by 1917 two houses stood on the project area. At that time, they were identified as 95 and 97 Franconia Avenue. The address was subsequently changed to 140-20 and 140-18 Franconia Avenue, and then 140-20 and 140-18 45th Avenue. According to information obtained from the client, 140-20 45th Avenue was

demolished prior to 1981, and 140-18 was demolished prior to 1991. As noted, there are no standing structures currently located on the site.

Based on these facts, it is the opinion of the consultant that the project area does not contain the potential to yield historic cultural material other than items associated with the 20th century structures that stood on the site.

## 1A.6 POTENTIAL PREHISTORIC SENSITIVITY

Having examined the historic maps to determine the potential of the site to yield significant historic cultural resources and having reviewed the historic literature to elucidate the information provided by the historic maps, it is now necessary to consider the potential of the site to yield significant prehistoric cultural resources. As noted in the Map Research portion of this report, there are a number of factors that suggest the site has the potential to yield prehistoric cultural resources. To reiterate, these are:

1. the presence to the south and east of the site of a small pond seen on the 1852 Connor/Dripps map (See Map 3) that could have served as a source of fresh water for Native American peoples,
2. the presence to the north and west of the project area of a spring, mentioned in early 18th century deeds and also found on the 1852 Connor/Dripps map, that could also have served as a source of fresh water for Native American peoples,
3. the presence of Mill Creek and Flushing Creek to the west of the project area, both of which would have provided food resources, such as fish and shellfish, for Native American peoples,
4. the tidal marshes located on either side of the streams which would have provided both food resources, including migratory birds, and rushes for housing for Native American peoples.
5. and the location of the project area on a flat alluvial bench above the tidal marshland.

The potential of the project area was confirmed by information provided by the New York State Museum Archaeological Site File (NYSM) and the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) which showed several sites in the vicinity of the project area. (See Fig. 6) Immediately north and west and within a mile of the project area is NYSM Site #2524 which was identified by Beauchamp in 1900 as the Linnaean Garden site. This site was located on land that had once been part of the Prince's Linnaean Botanic Garden. This site was first reported in 1841 by Gabriel Furman, who stated that it was a burial site containing eleven skeletons. Parker recorded this location as Site 1 in 1920, also describing it as a burial site yielding 11 skeletons and citing Gabriel Furman. Bolton recorded the site in 1922, but, according to an extensive analysis undertaken by Dr. Joel Grossman of Grossman and Associates, placed it in a slightly different location from that described by Beauchamp and Parker. Some reports describe the skeletons as containing lead bullets, which raises the possibility that these skeletons are those of Americans or British troops who died during the American Revolution, rather than Native Americans. It is not impossible, however, that

skeletons of Native Americans of the Contact Period might contain evidence of bullet wounds. Whatever the case, the location of the burial site would be consistent with other known Native American burial sites on Long Island.

The information provided by the various sources concerning the burial site located in the Linnaean Garden illustrates one of the problems associated with virtually all of the studies consulted. None of the information is site specific. There are two reasons for this: the first is that much of the information was gathered by hearsay or from secondary sources rather than from direct field observation, the second is that the precise locations of the sites are kept general to prevent their destruction by vandals. Thus, while maps of prehistoric locations in Queens County may assist in the creation of a sensitivity model, they are only helpful in a general way. Beauchamp, the earliest archaeologist to undertake the study of Native American settlement patterns, did not provide a map and we must rely on his descriptions, many of which are taken from historical records. Parker, publishing in 1920, provided a map on which there are 14 sites noted in Queens County. (Fig. 1) These range from two burial sites (NYSM #4524/Parker Site 1 and NYSM #4525/Parker Site 2), a campsite (NYSM #4542/Parker "Campsite X") and a village site (NYSM #4526/Parker Site 3) at Flushing to shell heaps that were said to litter the shoreline of Whitestone and Powell's Cove (NYSM #4541/Parker "Traces of occupation"). College Point, another peninsula extending into the East River, is reported to have a village site (NYSM #4527/Parker Site 4) and two sites not reported by Parker that are of an undisclosed nature (NYSM #4540 and NYSM Old #719).

Bolton published another survey of Native American sites, including Queens County, in 1934. (Fig. 2) Calling the area the "Land of the Rockaway," Bolton used a series of circles to denote site locations on Flushing Bay, College Point, and at Whitestone. He also includes two sites that appear to be within the boundaries of Flushing, but the level of detail provided makes a positive identification difficult.

In 1941 Ralph Solecki published a pamphlet entitled "The Indians Lived Here." (Fig. 3) As with other surveys, the location of the various sites is generalized. However, it is clear that a number of sites existed along Flushing Bay and along Flushing Creek.

Carlyle Smith prepared two surveys that included Queens County, one in 1944 that focused on western Long Island and one in 1951 that examined all of Long Island. (Fig. 4 and 5) Of the sites identified by Smith, the closest sites to the project area are the Grantville site (OPRHP #A-081-01-0133) and the Wilkins site (Smith #20) located on the edge of Flushing Bay.

An examination of these sources and the Stage 1A Archaeological and Historical Sensitivity Evaluation prepared by Dr. Joel Grossman for the Flushing Manor Geriatric Center provides incontrovertible evidence that Native Americans occupied the lands in and around Flushing and heavily utilized the plant and animal resources provided by the East River, Flushing Bay, Flushing Creek and its tributaries, and the salt and fresh water marshes and meadows associated with these streams. The archaeological record is supported by the observations of Denton and Danckers and Sluyter, among others, who described the lifeways of the Native Americans living on western Long Island in the third quarter of the 17th century. While understanding that the details presented may contain inaccuracies and biases, the catalogue of the various animals and plants utilized by the Native

Americans, the basic form of their houses, and the utensils used by them in their daily life need not be discounted because the writers were not scientifically trained.

Accepting that Native Americans lived in and around Flushing, where specifically does Dr. Joel Grossman conclude we must look for their sites? First, along the 19th century tidal estuary marshlands, streams, and springs (many of which were clearly delimited on the Connor-Dripps 1852 map of Queens). Second, having located these spots, we should look for their sites on high ground adjacent to protected inlets or shore areas beside extensive tidal coves and marsh areas or along major Native American trails. Using these two criteria, he concludes that the sites were located on the edge of Flushing Creek at the head of Flushing Bay, on a protected spit of land near the mouth of the stream and marsh zone opening into Powell's cove, and finally next to a spring on the western shore of Little Bay. He further concludes that the sites along the shoreline where shell middens were extensive can be shown to be consistently restricted to not only the protected crux, or southern ends of coves next to either springs or streams, but also next to the tidal marshes and meadows which covered nearly a third of this section of Queens prior to being landfilled along Flushing Creek and between Powell's Cove and Flushing Bay. (Grossman and Associates 1993:18) The resources being exploited at these sites, according to Dr. Joel Grossman, were shellfish, shore birds, and the marsh grasses associated with the tidal zones. Not surprisingly, he has described many of the resources that both Denton and Danckers state were used by the 17th century Native American population of Queens County and Kings County.

Several of the features identified in the Flushing Geriatric Center report have been noted in the discussion of the 1852 Connor/Dripps map, but the conclusions of the report take the information to a higher level, combining the known sites, as reported by Beauchamp, Parker, Bolton, and Smith, and rationalizing these sites with the information contained in the New York State Museum Archaeological Site File. As a point of information, a copy of the Grossman/Connor/Dripps map is included in this report. (Map 17)

Based on environmental factors known to have been of importance to Native Americans, it is the conclusion of CITY/SCAPE: Cultural Resource Consultants that the project area may contain prehistoric cultural resources; however, it is of interest that when the criteria outlined in the Grossman report are applied to the project area, the potential for the site to yield prehistoric cultural resources is substantially reduced. Among the reasons for this are: 1) the site is located some distance above rather than adjacent to the tidal marshland and away from fresh water, such as the pond identified on the 1852 Connor/Dripps map, and 2) the site is not located near one of the seven springs in Flushing that appear to have been so attractive to Native Americans. One might ask then, "Why here rather than elsewhere?" It is, for example, far more likely that Native Americans would have camped near the spring that is recorded in the 1725 deed and is shown on the Connor/Dripps map, for it appears that this location would more closely conform to Dr. Grossman's criteria. Be that as it may, a Stage 1B Archaeological Field Survey is recommended to rule out the possibility that prehistoric cultural resources exist within the project area.

## 1A.7 CONCLUSIONS

The earliest evidence of structures within the project area has been found to be between 1904, when there were no structures on the site, and 1917 when 140-20 and 140-18 45th Avenue had been constructed. These structures are shown as the only buildings on the site, although field reconnaissance indicates that some kind of ephemeral structures was built behind 140-20 45th Avenue. At the present time there are no standing structures on the site. However, the foundations of 140-20 and 140-18 45th Avenue may be discerned as raised mounds in a generally flat landscape. Map research and historic accounts indicate that the project area was open land prior to the establishment of the street grid in the last years of the 19th century. Because of this, there is no potential for the site to yield significant historic cultural resources.

Although the historic potential of the site is insignificant, environmental models employed by archaeologists indicate that the site may have the potential to yield prehistoric cultural materials. Information obtained from the New York State Museum Archaeological Site File identifies no fewer than nine prehistoric site in the general vicinity of the project area. One, the Linnaean Garden burial site, is located within one mile of the project area. In addition, the project area is located in a topographical setting similar to ones where prehistoric sites have been identified. The project area is located near a tidal marshland known to have been of importance to Native Americans, and within a short distance of a natural spring, another important feature to Native American. Because of these facts, the potential of the project area to yield prehistoric cultural resources must be considered. Therefore, it is recommended that a Phase 1B Archaeological Survey be undertaken on that portion of the site that has not experience prior disturbance to rule out the presence of prehistoric archaeological resources.

# **SELFHELP HOUSING FOR THE ELDERLY**

**140-16, 18, 20 45TH AVENUE.  
FLUSHING. QUEENS COUNTY, NEW YORK**

**DCP-CEQR 1993 048Q**

**ULURP 930584 ZMQ**

**PHASE 1B ARCHAEOLOGICAL FIELD SURVEY**

## 1B.1 INTRODUCTION

On November 21, 1993 CITY/SCAPE: Cultural Resource Consultants completed a field reconnaissance level archaeological survey of the *Selfhelp Housing for the Elderly* site, 140-16, 18 & 20, 45th Avenue, Town of Flushing, County of Queens New York. (See 1A: Map 1 and 2)

Archaeological field work was carried out by Stephanie Roberg-Lopez, Gail T. Guillet, Luis Lopez and Bolivar Lopez. Preparation of the final report, laboratory analysis and preparation of the Field Reconnaissance Map were completed by Stephanie Roberg-Lopez, Principal Investigator. Preparation of shovel test excavation records and photographs were completed by Gail T. Guillet.

## 1B.2 PROJECT AREA DESCRIPTION

The *Selfhelp Housing for the Elderly* site is a 100' by 100' parcel of property located in a densely developed commercial/residential area of Queens. It is bounded to the northwest by 45th Avenue, to the west by four 100' by 25' building lots facing onto Kissena Boulevard, to the south by the Helen R. Sheuer Apartments and to the east by a residential home. (Photos 1-3) The parcel, in its present form, can best be described as a vacant lot, somewhat overgrown and exhibiting surface litter despite the presence of a large chain link fence erected to prevent trespassing. (Photos 4-7) A number of mature hardwood trees are present on the parcel, clustered around the perimeter and in the southern quarter of the site. The surface of the lot is extremely flat and uniform in elevation, indicating significant grading and surface disturbance.

The Phase 1A Archaeological and Historic Sensitivity Evaluation revealed the previous existence of two houses on the eastern one-half of the site. Each house had occupied a discreet 25' by 100' parcel. These two houses, now demolished, had been erected over substructures extending eight feet below ground. Depth of disturbance during demolition is estimated to have reached at least nine feet. A surface examination of the lot confirmed the historical research, and both foundations were identified. Surface inspection suggests that the houses were constructed virtually foundation to foundation, making at least 25% of the site disturbed to a depth of at least nine feet. In addition, in the course of the surface inspection a foundation was identified in the southeastern corner of the parcel which measured 20' by 12'. (Photo 8)

The entire eastern half of the site was therefore judged to be profoundly disturbed. The western half of the property, although clearly disturbed surficially, is the only part of the site on which building, and therefore profound subsurface disturbance, has not taken place.

## 1B.3 ENVIRONMENTAL AND ARCHAEOLOGICAL SETTING

The project area lies within the larger prehistoric archaeological zone identified as prehistoric New England (Map 1B: 1). This area is routinely divided for study into major river drainages, as these waterways and their associated lands comprised the geophysical and political boundaries recognized by the indigenous groups themselves. In addition to distinct waterways such as the

Hudson, the Connecticut, and the Housatonic, large island and peninsular areas such as Long Island and Cape Cod are treated as discreet environmental units (Snow, 1980:5) The majority of prehistoric New England as defined by Map 18 is generally treated as a single physiographic unit. Only Long Island, Nantucket, Martha's Vineyard and Cape Cod are identified as being northern expressions of the coastal plain that broadens and dominates the landscape to the south. (Snow, 1980:6)

The entire New England land surface was covered by the Wisconsin glaciation that receded only 12 to 10,000 years ago. The soils of Long Island are the direct result of this glacial episode, and are dominated by deep, strongly acid soils that have developed in unconsolidated sand and clay (Snow, 1980:6) The prehistoric forests of Long Island, unlike those of the mainland, were dominated by yellow pine and hardwood forests.

## 1B.4 PREHISTORIC BACKGROUND

New England, particularly Southern New England including the Hudson, Thames and Connecticut drainages, has emerged as one of the richest archaeological zones in the northeastern United States. The reasons for this are several, the most important being the cluster of prime waterways that enrich the landscape and the fertile seacoast that marks its southern border. The prehistoric inhabitants of this region had ready access to very high quality raw materials for tool making, and the moderating influence of the ocean maintained a climate significantly milder than those regions to the north.

As the first native Americans, indeed the first humans, entered the area during the Paleo Indian period some 12,000 years ago, their logical route would be along the mighty river systems that were the "super highways" of the times and along the open seacoast. Not only humans, but the post-Pleistocene mega fauna, the mammoth, the mastodon and the caribou that inhabited this tundra-like area would be logically drawn to these corridors (there is one documented mastodon find just south of the project area). (Map 1B: 2) As the great ice sheets began to retreat from southern New England both the hunter, the Paleo Indian, and the hunted began to move into this region.

Research indicates that the post glacial landscape was tundra-like, the colonizing grasses, sedges and herbs supporting a variety of large and small game animals. Among the fauna were mastodon, mammoth, giant beaver, giant ground sloth and horse, all of which became extinct, as well as the caribou, musk-ox and bison that persist to modern times.

Paleo-Indians, as these small bands of nomadic hunter-gatherers are called by archaeologists, appear to have entered the previously uninhabited northeast from the south and west. Their sites, identified primarily by characteristically fluted points, are found all over North America. It has traditionally been assumed that these nomadic peoples were strictly "big game" hunters; however that assumption has been called into question by the discover of fish, bird, small mammal bones and some plant remains found in association with Paleo-Indian sites. It now seems that in addition to the large animals that comprised their principal food source, the Paleo-Indians also hunted small game and gathered a wide variety of plants to support their diet. Paleo-Indian sites are quite rare in the archaeological record, and have been found in association with major waterways such as the Hudson,

in quarry zones such as the Wallkill Valley, and most notably for our present investigation, at the Port Mobil site on Staten Island. (Map 1B: 3)

The Archaic period in New England is better represented than the Paleo-Indian. It is divided into four stages: the Early Archaic; the Middle Archaic; the Late Archaic and the Terminal Archaic. In many important respects, the nature of life in the Archaic period was little different from the nomadic lives lived by the Paleo-Indians; however, during the time span of the Archaic significant changes in the environment occurred. The tundra-like landscape began to give way, first to spruce forest and then to a forest composed of various conifers, hemlocks and hardwoods. As the hardwood forests advanced northward, a new ecosystem became available, an ecosystem that provided a range of nuts (in particular the acorn), grasses and tubers that supported both the smaller game of the Archaic period and the human population as well.

Like the Paleo-Indian culture, evidence of Archaic man is found throughout New England. In eastern New York this time period is divided into a series of phases: Vergennes, Vosburg, Sylvan Lake, Wading River and Snook Kill. There are indications that Archaic man was by this time exploiting shell fish, a fact of particular importance on Long Island. The Archaic period, however, is still dominated by the hunting and gathering lifestyle.

The Archaic period on Long Island is followed by the Transitional Stage. Chief among the general characteristics that separate the Transitional Stage from the earlier period is the use of stone vessels. With soapstone being the usual raw material, these vessels were extremely heavy, and were later replaced by pottery vessels of various types.

Long Island takes front stage during the Transitional Period as the locus of the highly distinct Orient Culture. This Transitional phase is identified by the highly distinctive Orient Fishtail projectile point, by the use of soapstone vessels, whose raw materials were most probably quarried in Rhode Island and in Bristol Connecticut, by distinctive burials and by the intense exploitation of shellfish. It is possible that the supply of large game was being exhausted on Long Island as early as 900 BC. (Ritchie, 1980:166). We must take particular note of the fact that contact with mainland New England was clearly an easy and frequent occurrence. Sites in close proximity to the project area include Muskeeta Cove, Wilkins and Grantville B. (See 1A: Fig. 4)

The Woodland Stage, like the Archaic is divided into several substages, including the early Woodland Stage, the Middle Woodland Stage, and the Late Woodland Stage. Sites used by Woodland groups tend to be away from the major waterways and are frequently located on inland streams. In later periods there is some indication of the presence of palisaded villages. Around these sites, on the alluvial plains of nearby streams, the Indian fields were located. Horticulture, although practiced in other parts of North America at an earlier date, does not appear in this area until c. 1000 AD. The changeover to cultivation of a variety of domesticates, among them maize, beans, gourds, sumpweed and sunflower, created a marked change in the pattern of land use and settlement. With the advent of sedentary or semi-sedentary occupations, the character of sites changed.

On Long Island the Transitional, particularly the later period, is hallmarked by the Sebonac Phase. The Sebonac sites are large occupations located on well-drained sites on bays and tidal

streams, close to available sources of marine shellfish. Typical of these sites are deep shellfish middens and abundant pit structures. This implies stable communities with people living in circular rush wigwams made of grass or rush up to twenty feet in diameter.

The Sebonac Phase is followed on western Long Island by the Bowmans Brook phase of the East River tradition. Bowmans Brook sites are located on tidal streams or coves, and typically contain large village occupations with associated shell middens and pit structures. Unlike the Sebonac peoples, the Bowmans Brook culture did not focus on highly ritualized mortuary practices, although dog burials have been noted (Ritchie, 1980:271).

By the time the Europeans arrived the dominant indigenous groups on Long Island were the Montauk speakers of the eastern tip of the island, the Quiripi-Unquachog speakers of central Long Island (closely associated with Connecticut groups) and Munsee speakers on the western tip of Long Island, who were referred to by Johan de Laet as Nawaas (Snow, 1980:87). (Map 1B: 4) Population figures are difficult to calculate due to the lightening speed with which European diseases wiped out the indigenous population. Snow states that "There are almost no data on which to base a population estimate for the middle and lower Connecticut and central Long Island populations". With the coming of first the Dutch, then the British settler, the indigenous population of Long Island decreased to its current negligible size.

The setting of the *Selfhelp Housing for the Elderly* site comes very close to perfection in terms of what is understood to be the ideal habitat for the prehistoric peoples of Long Island. As the subsistence patterns of the indigenous inhabitants of the northeastern United States have become clearer to modern archaeologists, it has become increasingly accepted that not only the streams, but the associated tidal marshes, wetlands and their fringes were intensively exploited as one of the richest subsistence zones available. Wetlands and abundant streams provided aquatic life such as the fish, frogs, shellfish, water insects and water flora. Avian resources in the form of the birds that were themselves attracted to the teeming life of the wetlands abounded, as did the large game species that watered in these spots. The mosaic of food sources available to the inhabitants of the project area would have been quite rich. Literally within yards of the site, the tidal marsh provided all the fruits of the ocean. Nearby, the marsh turns from salt to fresh water, amplifying the diversity of the ecosystem. Since it is known that reed wigwams were the house structure of choice, the marsh supplied this vital resource as well.

In terms of the greater archaeological context, the *Selfhelp Housing for the Elderly* site rests in the center of a dense locus of prehistoric activity. (See 1A: Fig. 6) With the exception of Paleo Indian sites, virtually all prehistoric phases up to the contact period are represented.

The above assessment of ecological richness in addition to the proximity of known archaeological sites indicated that the *Selfhelp Housing for the Elderly* site possessed a high potential to yield prehistoric cultural resources. (See Appendix E: Correspondence) It should be noted that the paucity of land surface in the immediate area that has not been built upon amplifies the valuable nature of the site.

## 1B.5 TESTING STRATEGY

Testing strategy for the *Selfhelp Housing for the Elderly* site was structured around the knowledge that the property possessed a high probability to yield prehistoric cultural resources. Although the site is extremely small, it was believed that once sub surface testing reached the level of undisturbed strata, there was a potential to recover cultural material.

The area selected for subsurface testing was identified after careful examination of the documentary material available which traced the successive episodes of historic building on the property. It was then determined that the western 50' by 100' half of the parcel had not been disturbed beyond the level of surface leveling and filling. A major concern was determining if the site had been subjected to a major grading episode involving a much larger landscape and untraceable in the documentation specific to the site. To assess this possibility, all available historic maps showing elevation intervals were assembled and examined. This research indicated that the elevation of the site had held steady, or had lowered every so slightly in recent times, and that the added complication of testing through many feet of disturbed overburden would not be appropriate to the testing strategy; once underneath the disturbed strata on the surface of the site, the stratigraphy would be natural and undisturbed.

The area selected for subsurface testing was identified during a comprehensive walkover and visual assessment of the property. The designated test area was subjected to shovel testing at intervals of twenty feet along transects twenty feet apart. This particularly fine grid was selected to maximize the potential for recovering cultural material. The shovel tests were laid out using the northwest corner of the property as a reference point. Shovel tests 1, 6, and 11 were placed 10' from the fence line bordering 45th Avenue to avoid disturbance related to the construction of the fence. Elevations were based on the 1912 Final Maps of the Borough of Queens. For the same reason (to avoid disturbance associated with fence construction) transect 3 was placed immediately east of the fence dividing 140-20 and 140-18 45th Avenue from the portion of the site that had been undisturbed. The locations of the tests and disturbed areas were recorded on a Field Reconnaissance Map showing surveyed borders, structure locations and the project area boundaries. (See Appendix C: Archaeological Field Reconnaissance Map)

## 1B.6 FIELD METHODOLOGY

Field methodology for the *Selfhelp Housing for the Elderly* site consisted of several stages of investigation. These included:

1. A walkover and visual inspection of the site to assess areas of profound disturbance versus areas of potential sensitivity for prehistoric activity.
2. The excavation of a stratigraphic control test to establish the stratigraphy of the site and to identify the depth and composition of the sterile glacially deposited sub soils.
3. Shovel testing the area identified as having a potential sensitivity for prehistoric remains.

4. Photographic documentation of the overall site.

Because of the size of the site and in order to thoroughly investigate the potential of the site to yield prehistoric cultural resources, it was determined to employ a fine grid system (20' grid rather than the more standard 50' grid). Within the sensitive area identified 40 cm diameter shovel tests were excavated along the 20' grid system. Soils were passed through a 0.25 inch steel mesh screen and the materials remaining in the screens were carefully examined for historic and prehistoric artifacts. Items recovered were assigned to the stratum from which they were obtained. The stratigraphy of each test was recorded, including the depth and the soil description of each stratum. (Appendix B: Shovel Test Record)

## 1B.7 FIELD RESULTS

Once a testing strategy had been established, and areas unsuitable for testing eliminated from the survey, a single area with potential for cultural remains was selected. This area comprises the western one half of the site, a parcel of 100' by 50'. Three transects of six shovel tests each were established on a north-south axis. Two tests determined to be within the foundation of the westernmost historic house were eliminated resulting in a total of 15 shovel tests dug.

Shovel test six was determined to be in the area least likely to be disturbed and was excavated to a depth of 53 inches to establish the stratigraphic profile. (Photo 9) In this test five successive strata were identified. The first three layers consisted of varying types of soil from very dark brown organic to yellowish brown sandy soil. The first three strata were densely littered with household debris: window glass, bottle glass, burned coal, coal ash, white ware, pressed glass, asphalt shingle and various pieces of metal. A representative sample was collected, and the complete range of materials noted in the record. A profile of the wall of the shovel test yielded a swirling pattern associated with episodes of jumbled fill deliberately deposited. Stratum four exhibited an abrupt and dramatic change in soil type, consisting of a dark yellowish brown sandy clay that was completely devoid of cultural material. To ensure that the glacial sub soil had been reached, this stratum was completely excavated to stratum five, a layer of pale brown sandy clay, also sterile of cultural material, and clearly an alluvial deposit.

Shovel tests 2 and 5 terminated in root impasses. Shovel tests 9 and 15 terminated in rock impasses. Shovel tests 11, 12, 13 and 14 were located within the demolished foundation of the westernmost documented house site, and the soils were impassable due to densely deposited building debris. The transect containing shovel tests 11-14 was laid east of the house foundation to conform with the fence line between the portion of the property that had been unoccupied and the portion of the site on which 140-18 and 140-20 45th Avenue had been located. The debris encountered in the shovel tests on transect 3 indicate that the house abutted the fence, rather than having been placed east of it, and that the foundation mound was a cellar hole that had been backfilled with debris from the burned house. The remaining shovel tests, 1, 3, 4, 6, 7, 8, and 10 were excavated through the root mat, mechanically mixed soil, and sandy clay soil to sterile glacial sub soil. The depths of these shovel tests ranged from 23" to 53".

All of the seven tests excavated to sub soil exhibited consistent upper strata. The first stratum was a layer of dark brown organic soil representing the modern root mat. The second stratum, although varying widely in depth, was consistently a layer of brown soil densely littered with non-stratified debris. Coal ash, slag and unburned coal pieces were frequently noted in this layer, indicating that the vacant lot had been used as a dumping ground for spent ashes from coal stoves or furnaces. At depths ranging from 21" (shovel test 3) to 36" (shovel test 6) a stratum of dark yellowish brown sandy soil (Munsell value 10 YR 4/6) mixed with clay was encountered. The stratigraphic control test indicated this to be sterile glacial sub soil. No prehistoric cultural materials of any kind were encountered on the site.

## 1B.8 SUMMARY AND CONCLUSIONS

A walkover reconnaissance was completed on the *Selfhelp Housing for the Elderly* site, located in Flushing, Borough of Queens in the City of New York. A thorough review of the existing body of archaeological data relevant to the project area was undertaken and conclusions drawn concerning the probability of encountering prehistoric cultural remains on the site. Areas of prior disturbance were identified and the location potentially sensitive for prehistoric cultural resources was selected for archaeological testing. The location of previously existing structures on the property was identified, and the extent of the resulting disturbance assessed.

Using a fine 20' grid system, a total of fifteen shovel tests was excavated in the area considered to possess a probability of yielding prehistoric cultural material. With the exception of those shovel tests terminated by a root or rock impasse, all shovel tests were excavated to sterile subsoil. No prehistoric cultural material was recovered in any of the tests and no further archaeological testing is recommended for the *Selfhelp Housing for the Elderly* site.

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**APPENDIX A**

**MAPS AND FIGURES**

# PHASE 1A ARCHAEOLOGICAL AND HISTORIC SENSITIVITY EVALUATION

## MAP AND FIGURE LIST

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Map 1: Location Map USGS Flushing Quadrangle. Taken 1954. Revised 1966. (Scale: 1:24,000)



CHANGE 8 (INTERSTATE 495) 0.8 MI.

50'

599

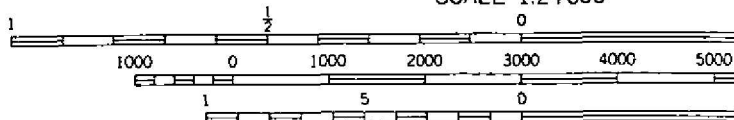
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(JAMAICA)

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SCALE 1:24,000

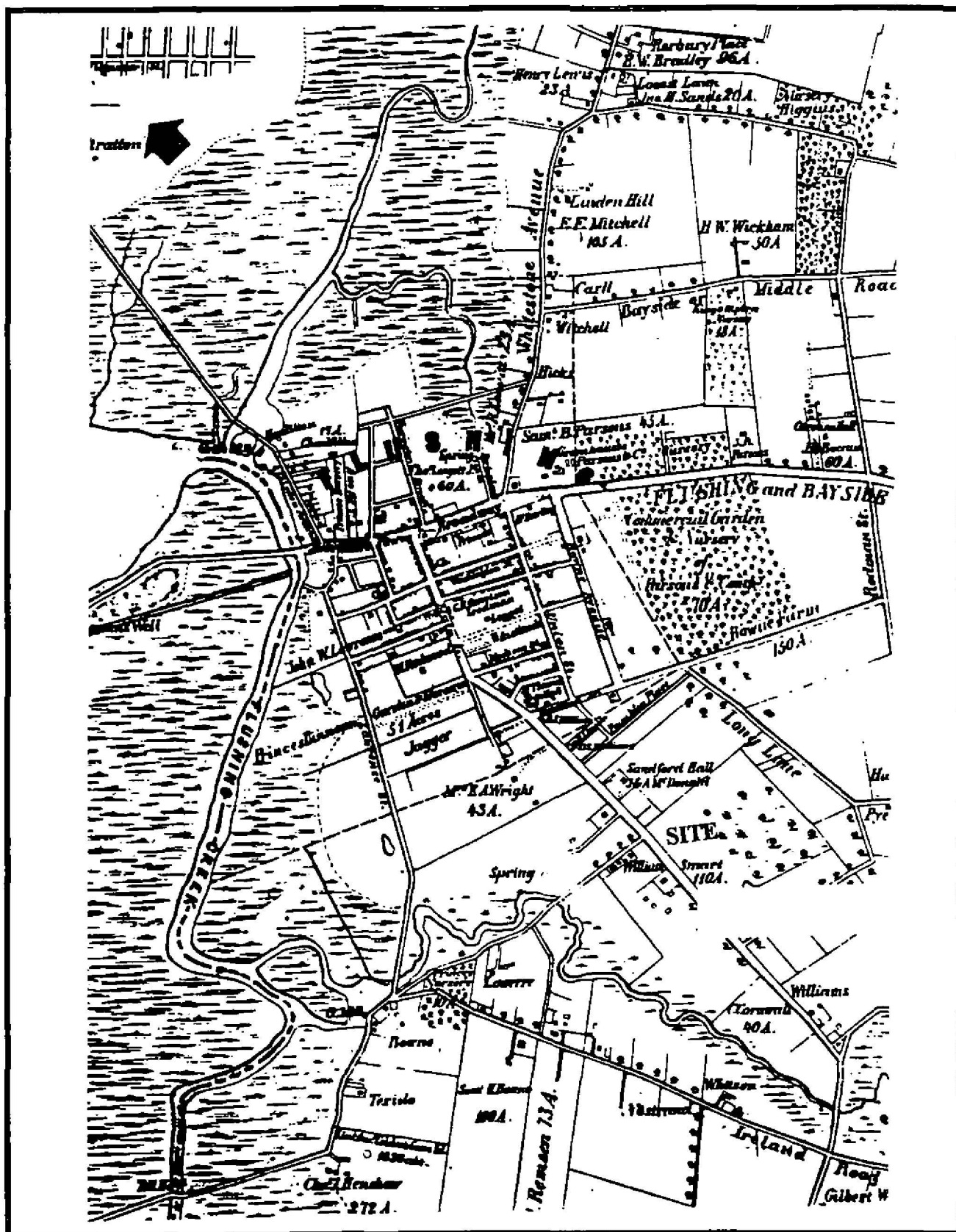
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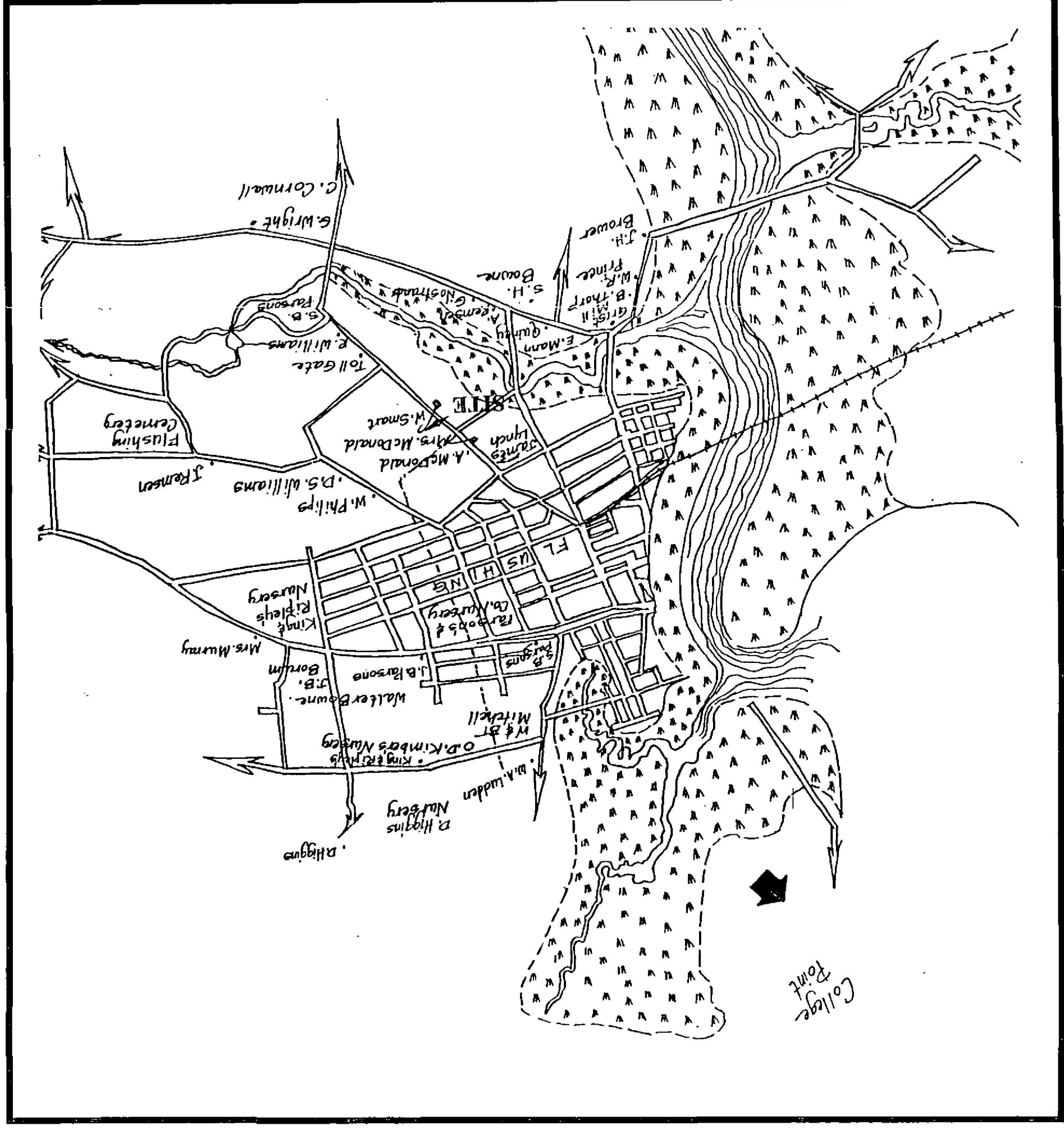


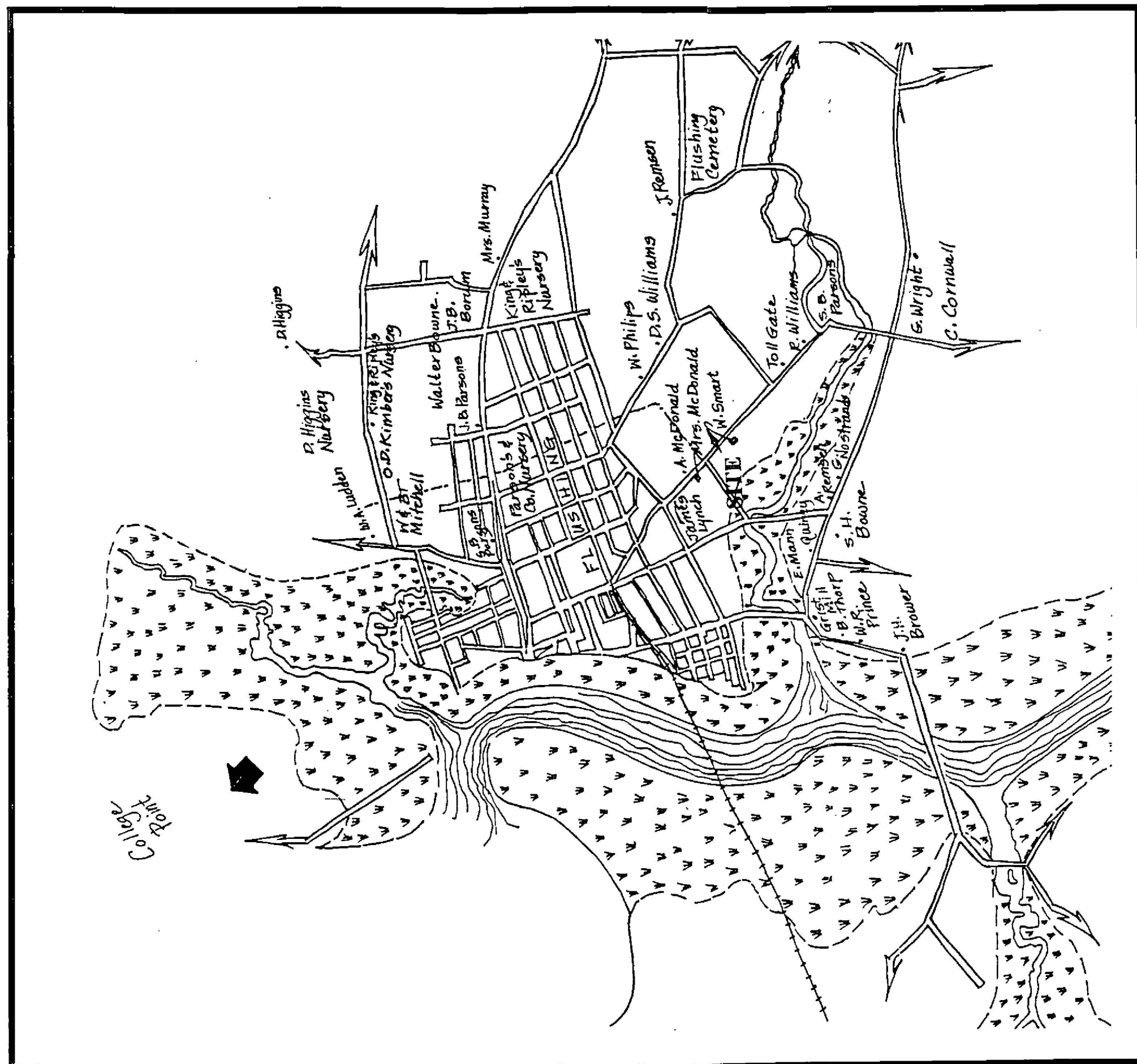
CONTOUR INTERVAL 10 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1925  
DEPTH CURVES AND SOUNDINGS IN FEET—DATUM IS MEAN  
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIA

An aerial photograph of a city block with a grid overlay. A large 'X' is drawn over a portion of the grid. Handwritten text 'KISSONA STREET' is visible on the right side, and 'SITE' is written at the bottom. A small circle with the number '3' is marked on the grid.

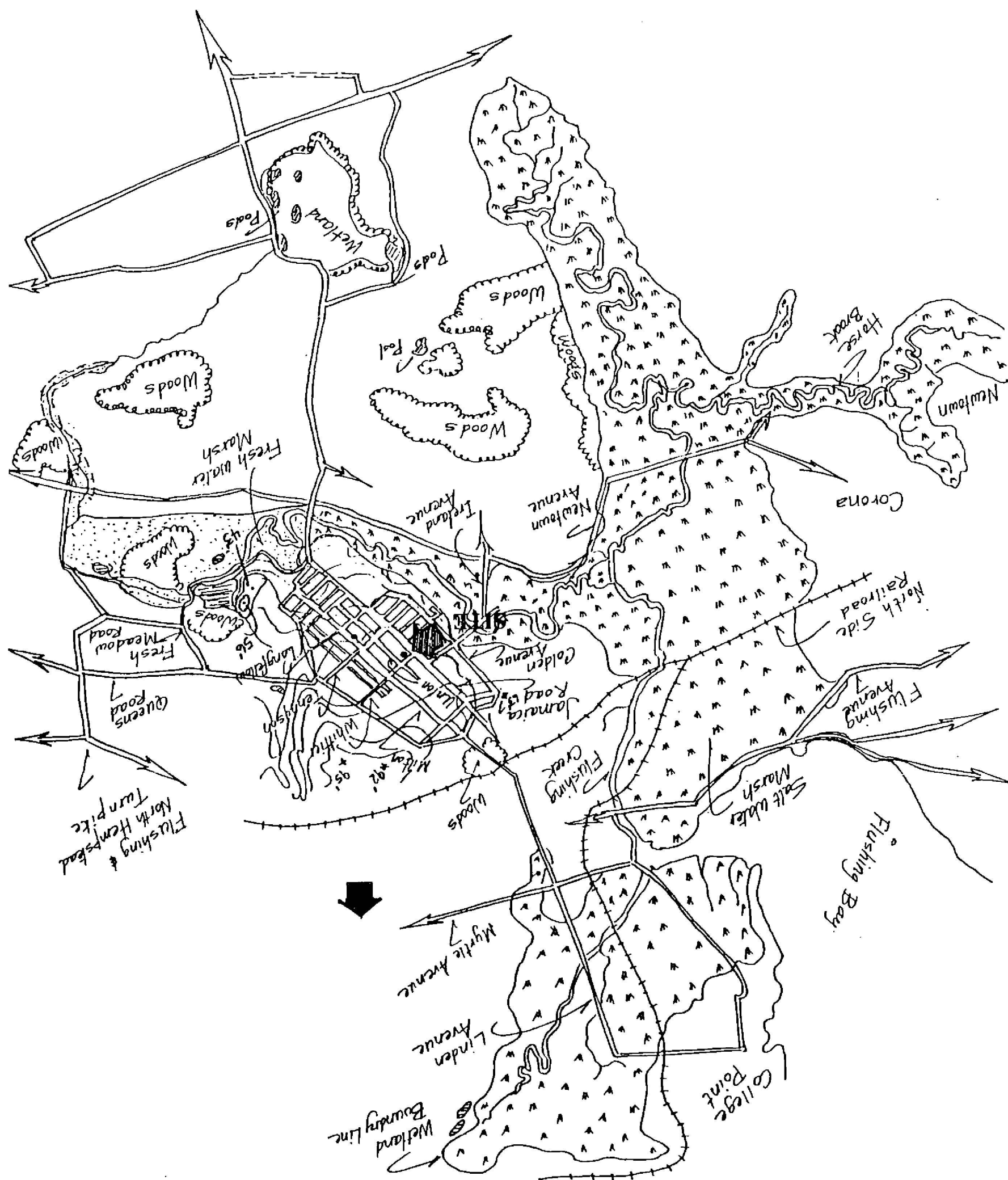
Map 3: 1852 Connor/Dripps Map of Kings and Part of Queens Counties, Long Island. (Scale: No scale)

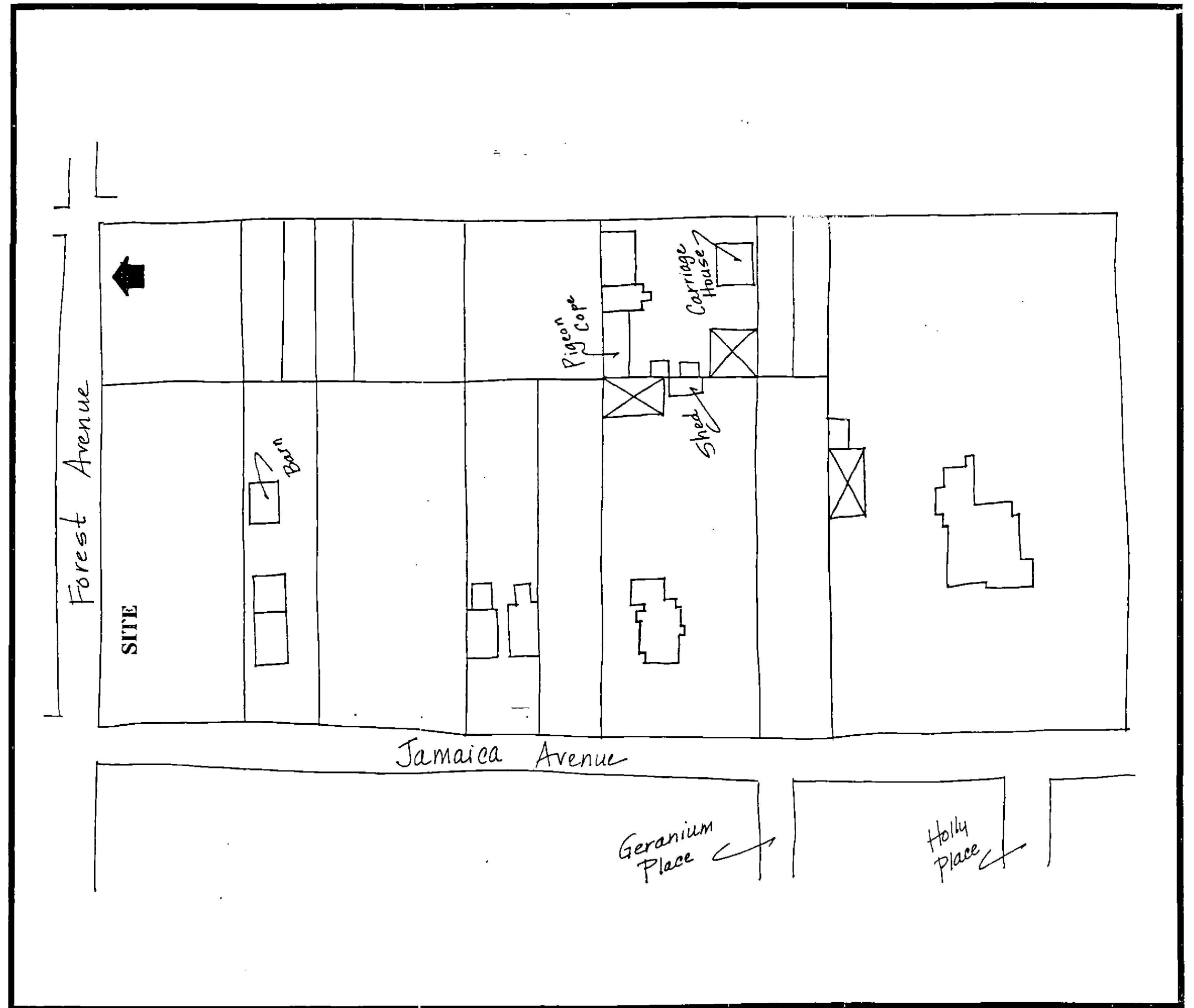


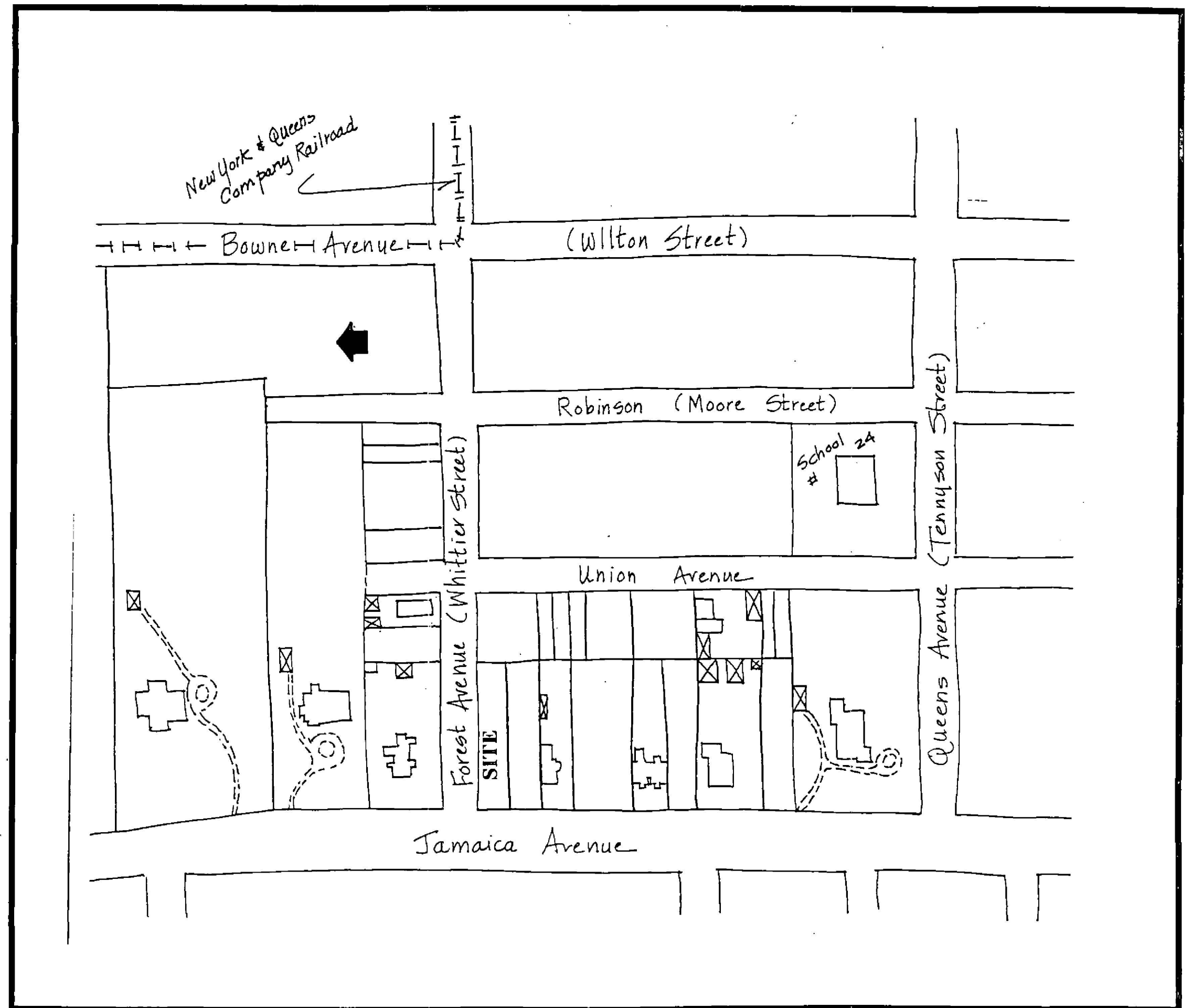




Map 5: 1891 Julius Bien's Metropolitan District and Adjacent Counties (Scale: 2 Inches=1 Mile)







KISSENA BLVD.

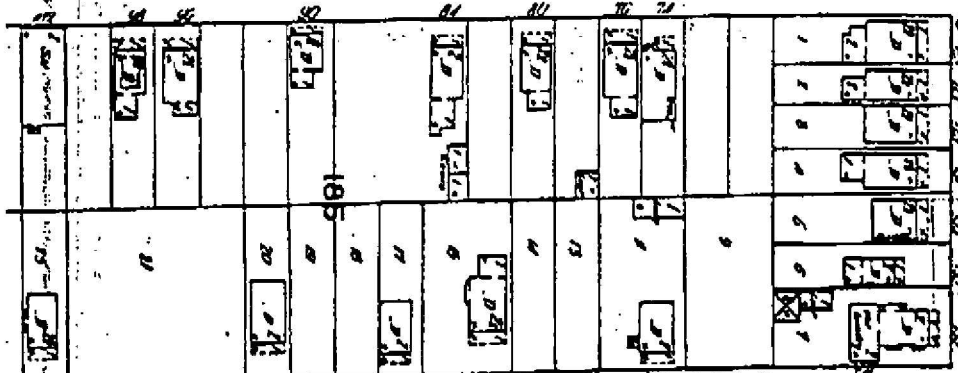
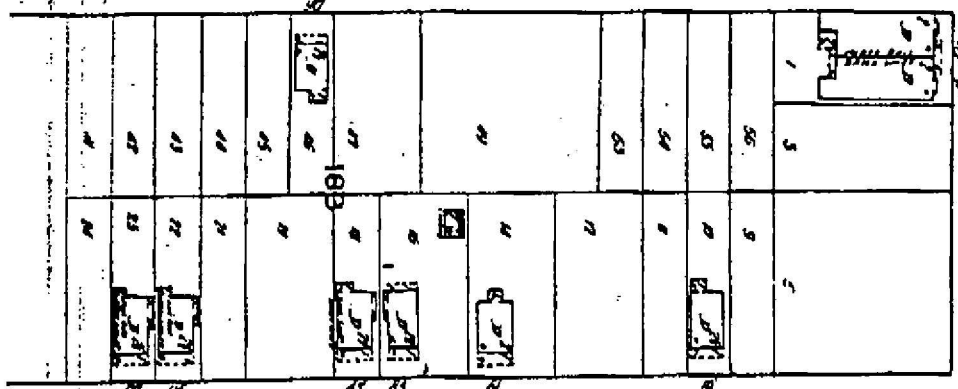
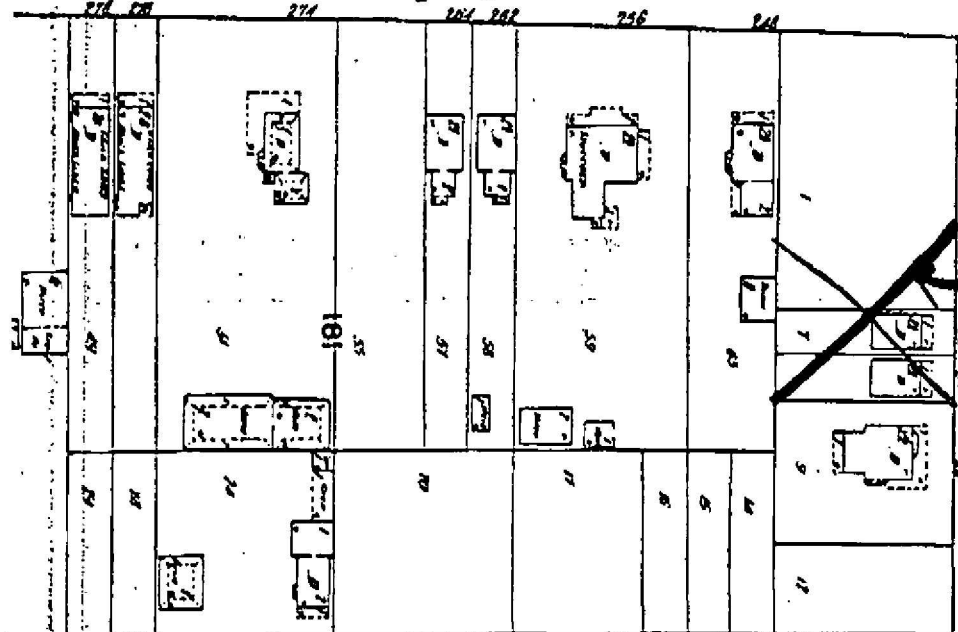
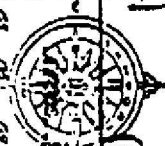
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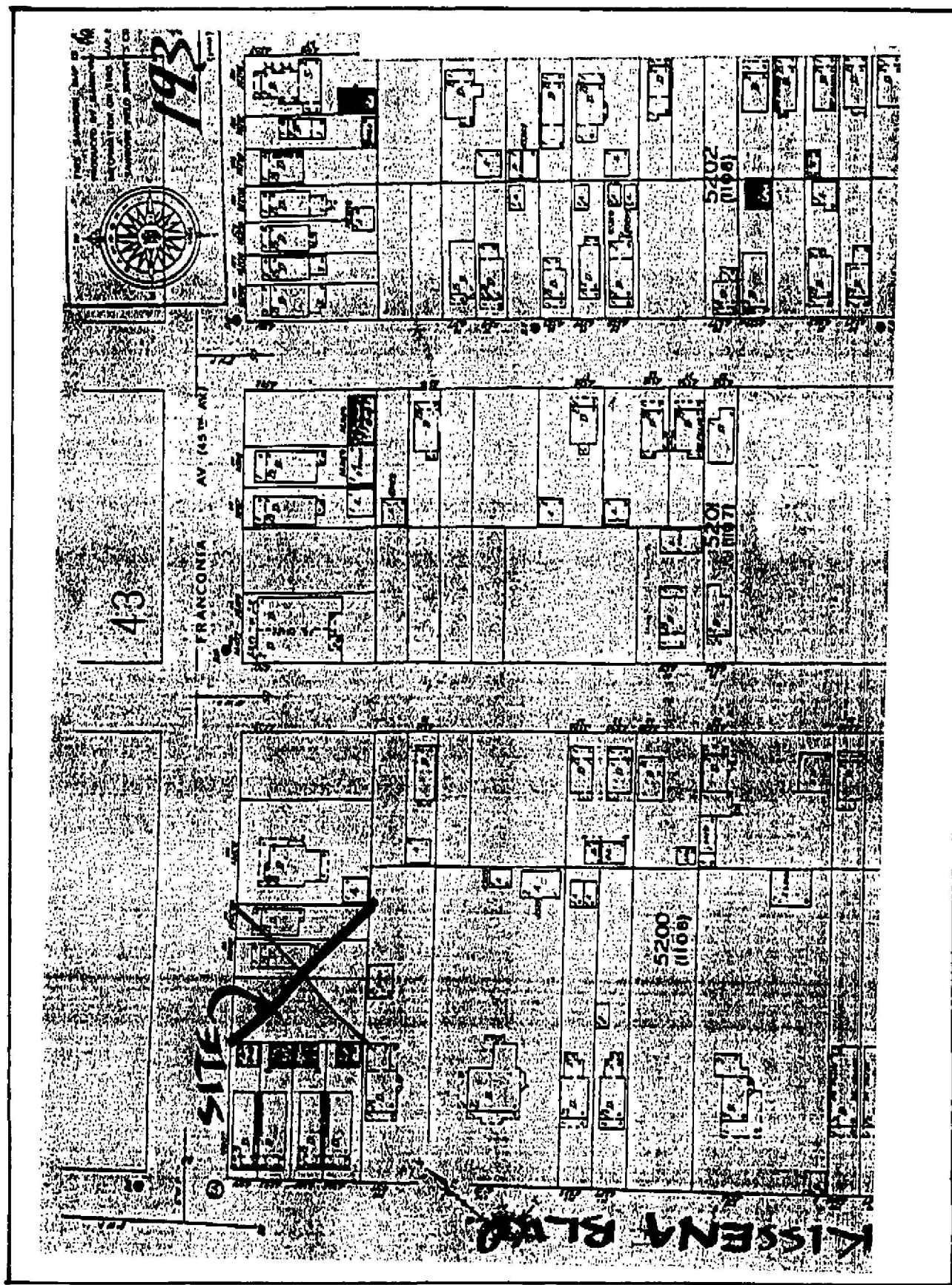
FRANCONIA

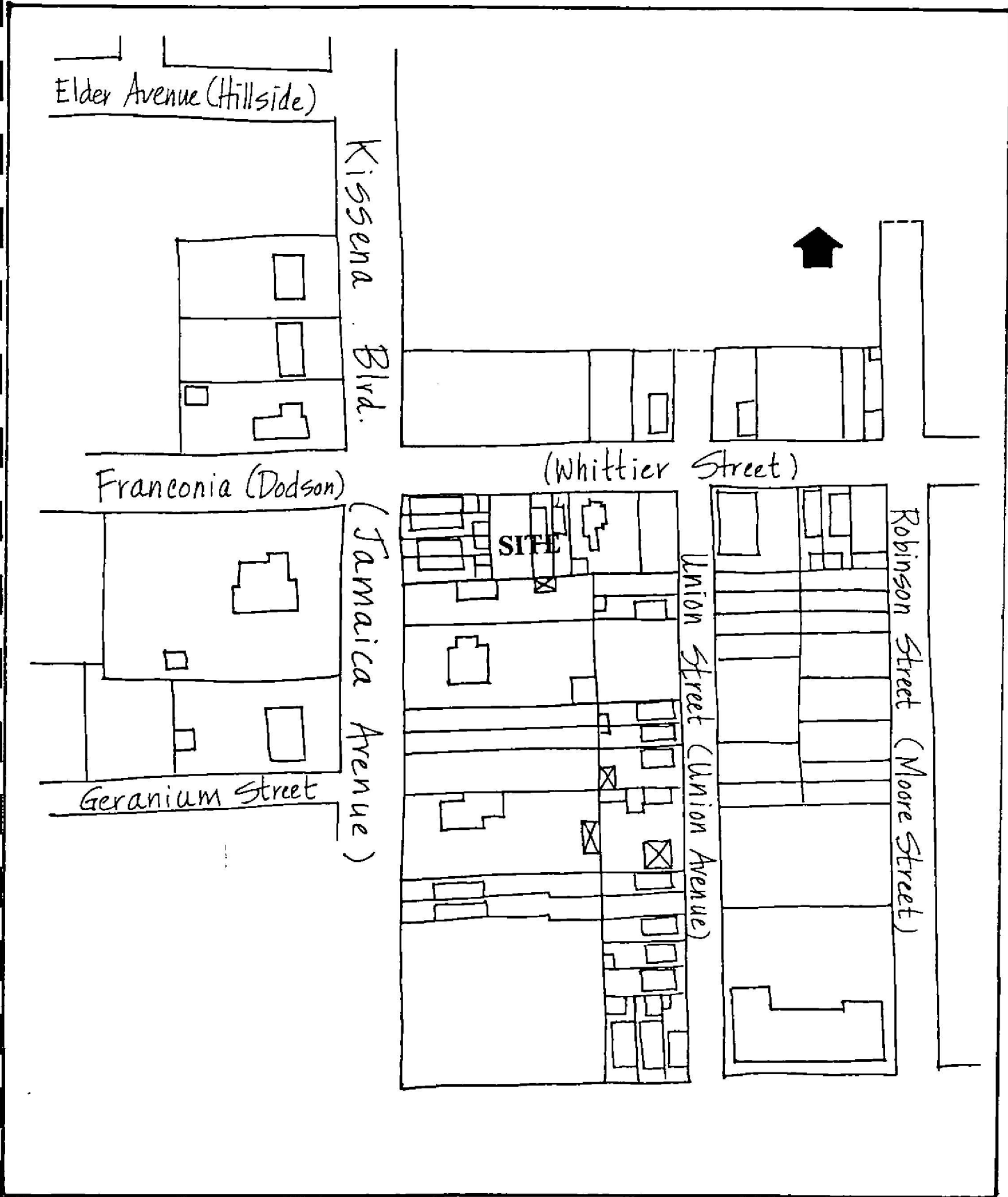
AV. (FOREST AV.)

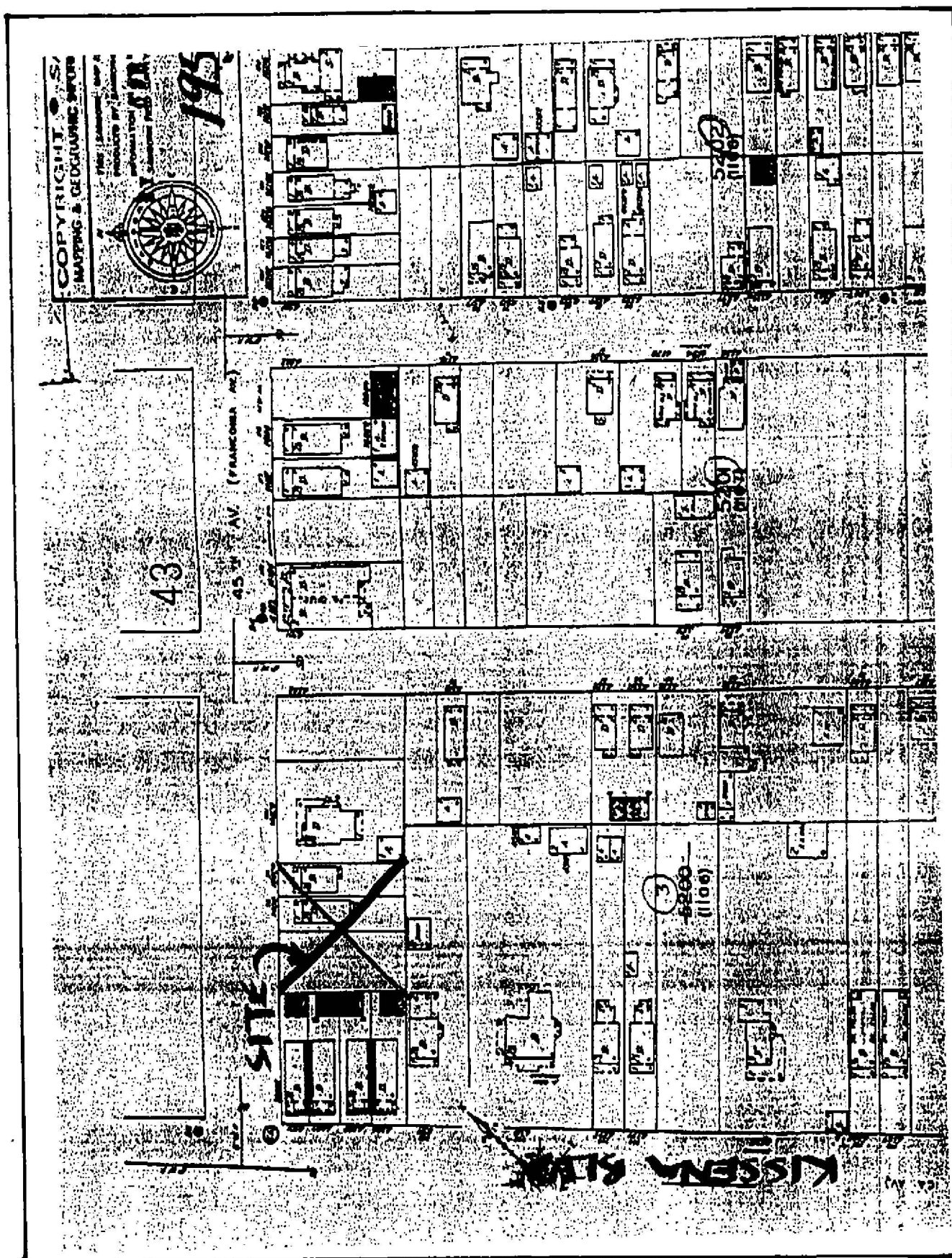
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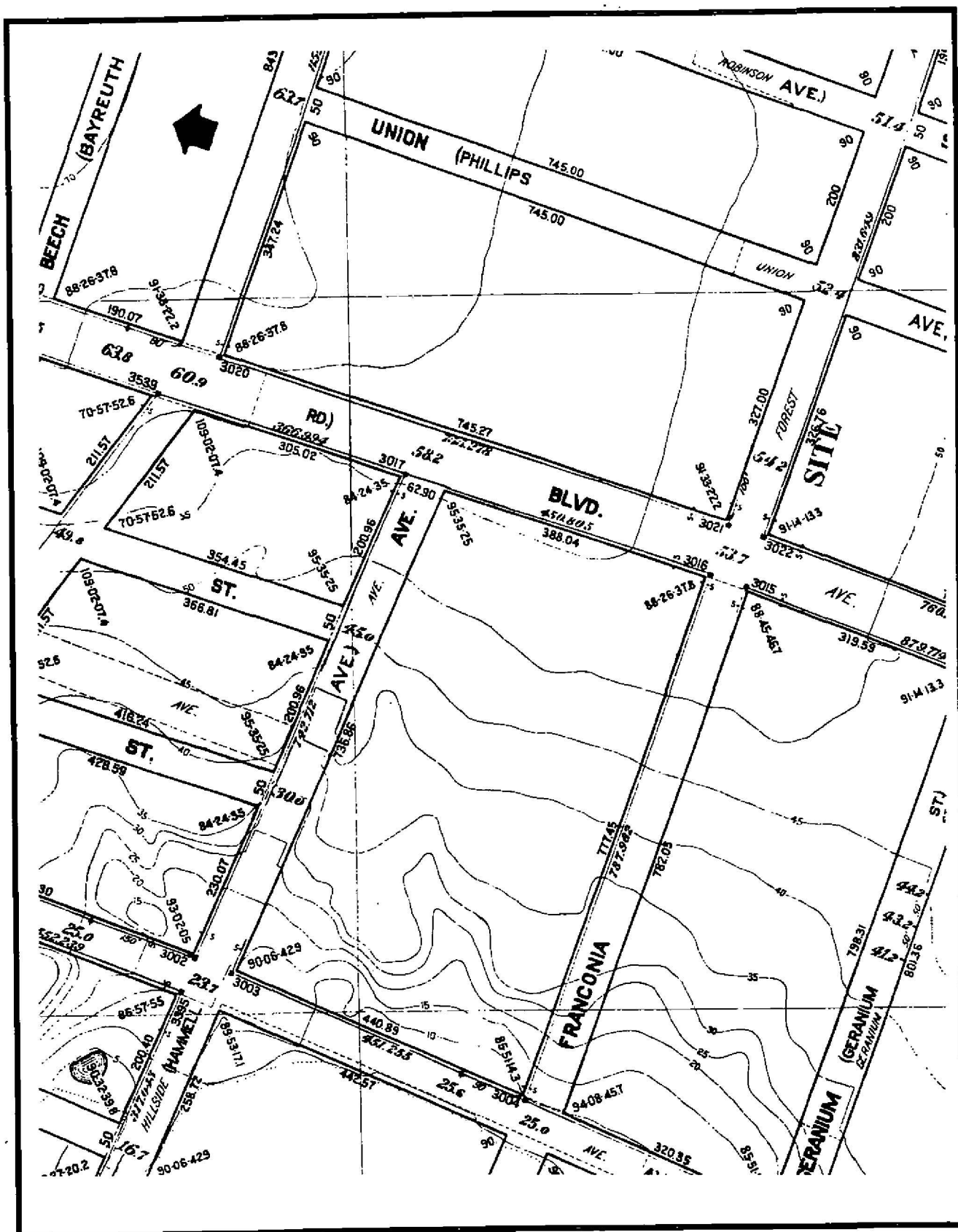
FLUSHING



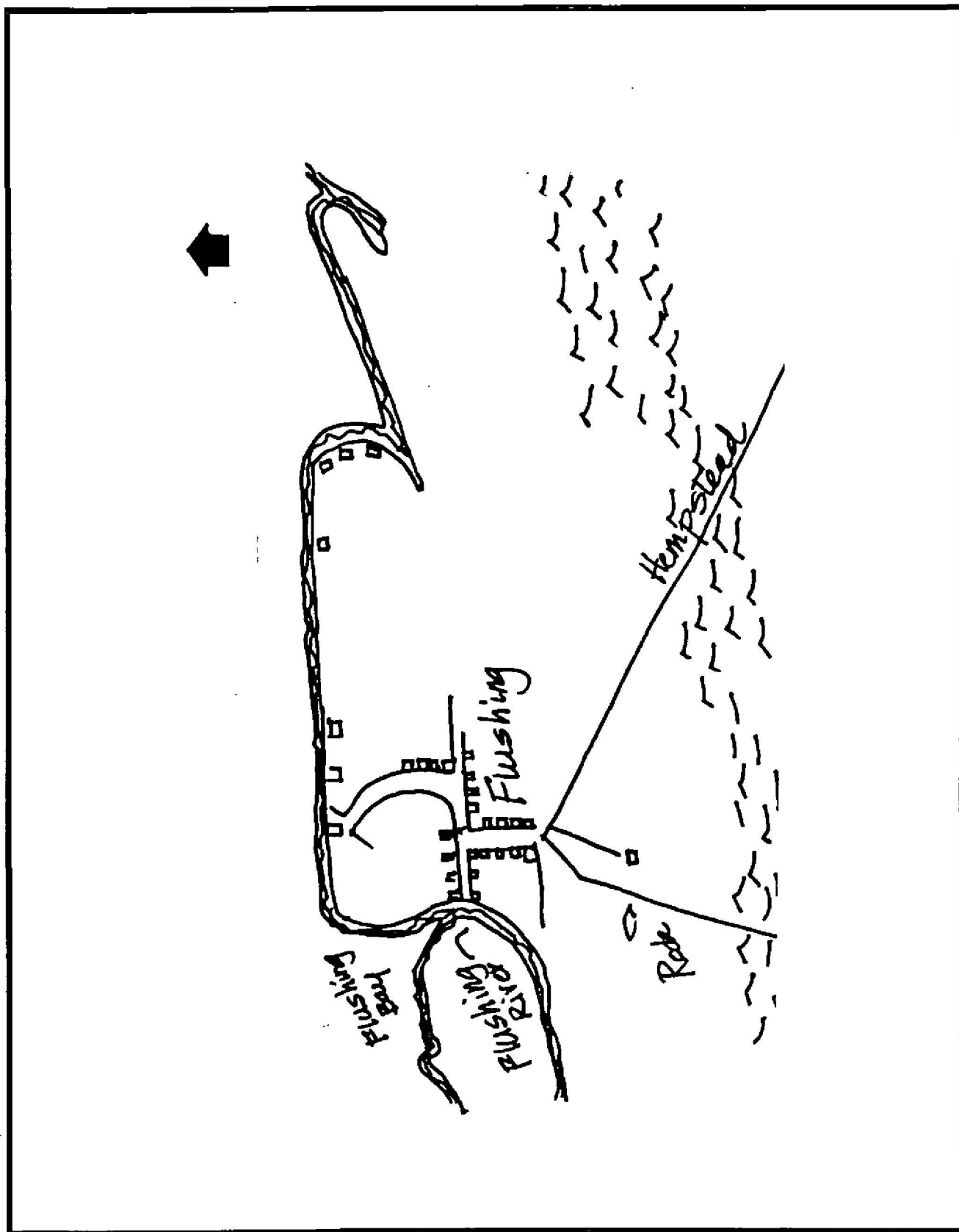


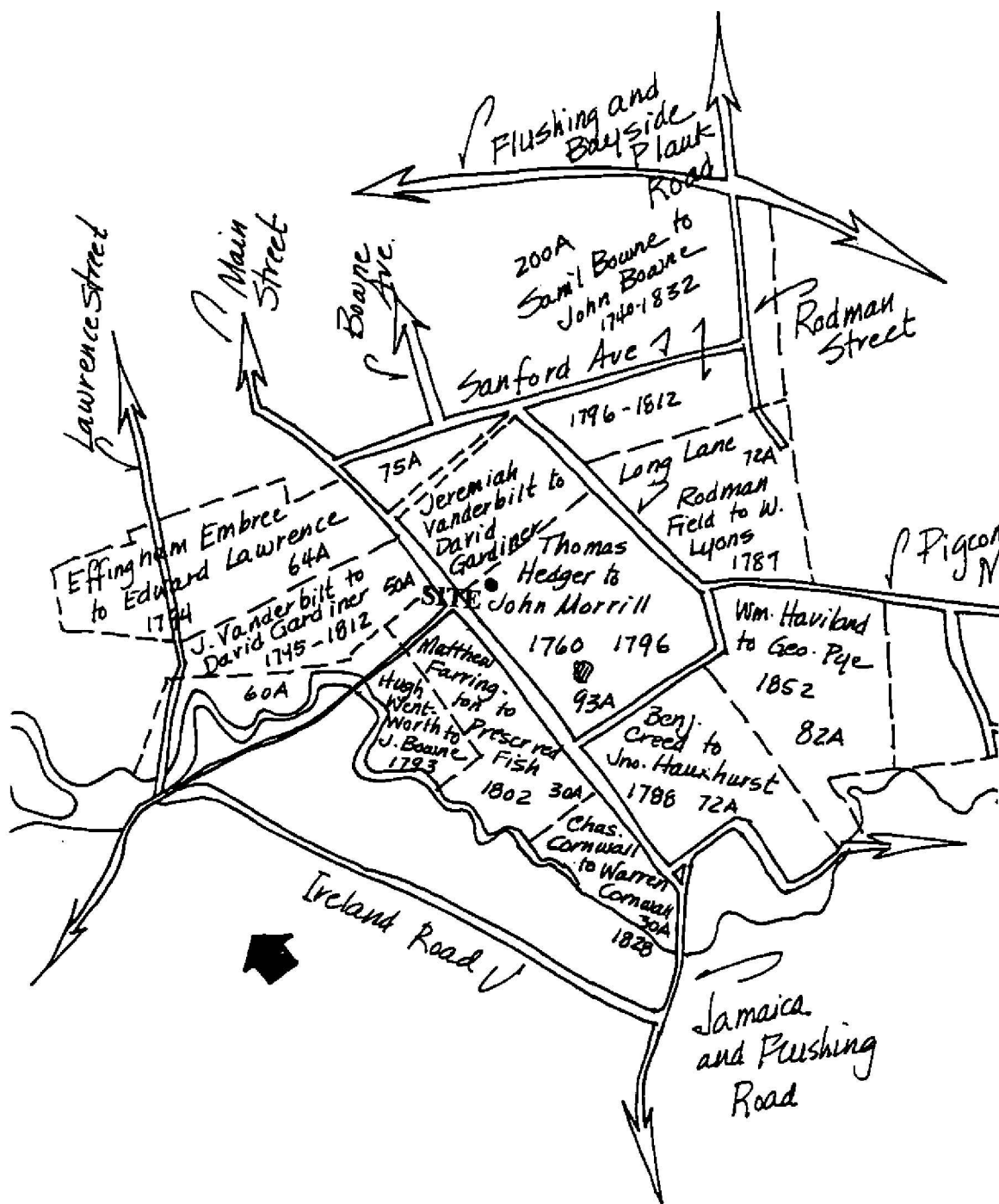




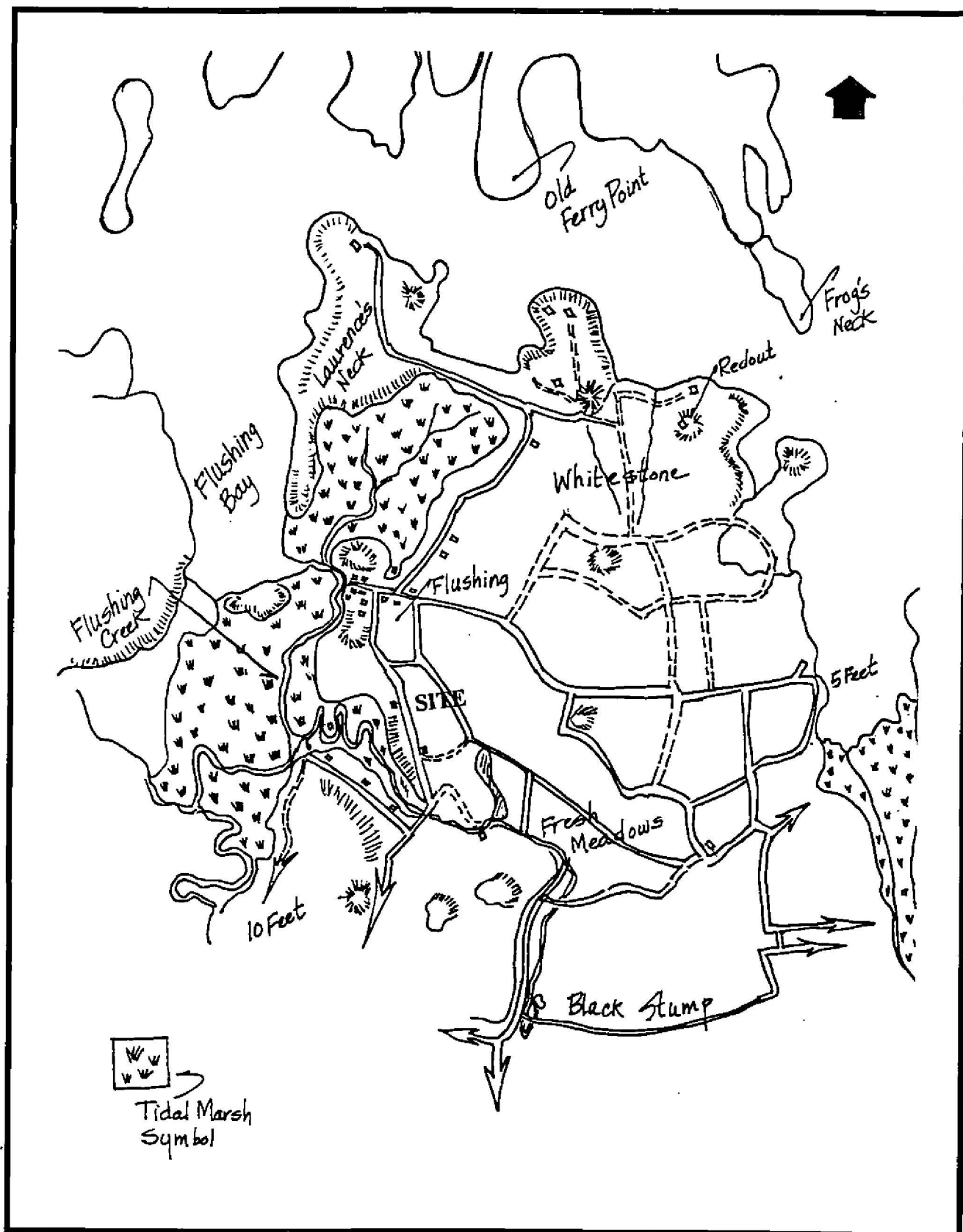








Map 16: 1781 Taylor and Skinner Map of ... Part of Long Island (Detail of Flushing Area)(1 Inch=1 Mile)



Map 17: Grossman and Associates Map of Historic and Prehistoric Archaeological Sites in Vicinity of Flushing  
(Derived from 1852 Connor/Dripps Map) (Enlarged: No scale)



## **FIGURES**

- Fig. 1            Prehistoric Sites in Queens. (Parker 1920: Plate 208)
- Fig. 2            Prehistoric Sites in Queens. (Bolton 1934: 148).
- Fig. 3            Prehistoric Sites in Queens. (Solecki 1941)
- Fig. 4            Prehistoric Sites in Queens. (Smith 1944)
- Fig. 5            Prehistoric Sites on Long Island. (Smith 1950)
- Fig. 6            Prehistoric site locations identified by the New York State Museum on the  
USGS Flushing, NY 7.5 minute quadrangle map. (Derived from NYSM  
maps and Grossman and Associates, Inc. report dated September, 1993)
- Fig. 7            Lithograph of Flushing from Flushing Creek (Taken from Munsell 1882)

Figure 1: Parker Sites in Queens County (Parker 1920: Plate 208)



Figure 2: Bolton's Prehistoric Sites in Queens County (Bolton 1934: 148)

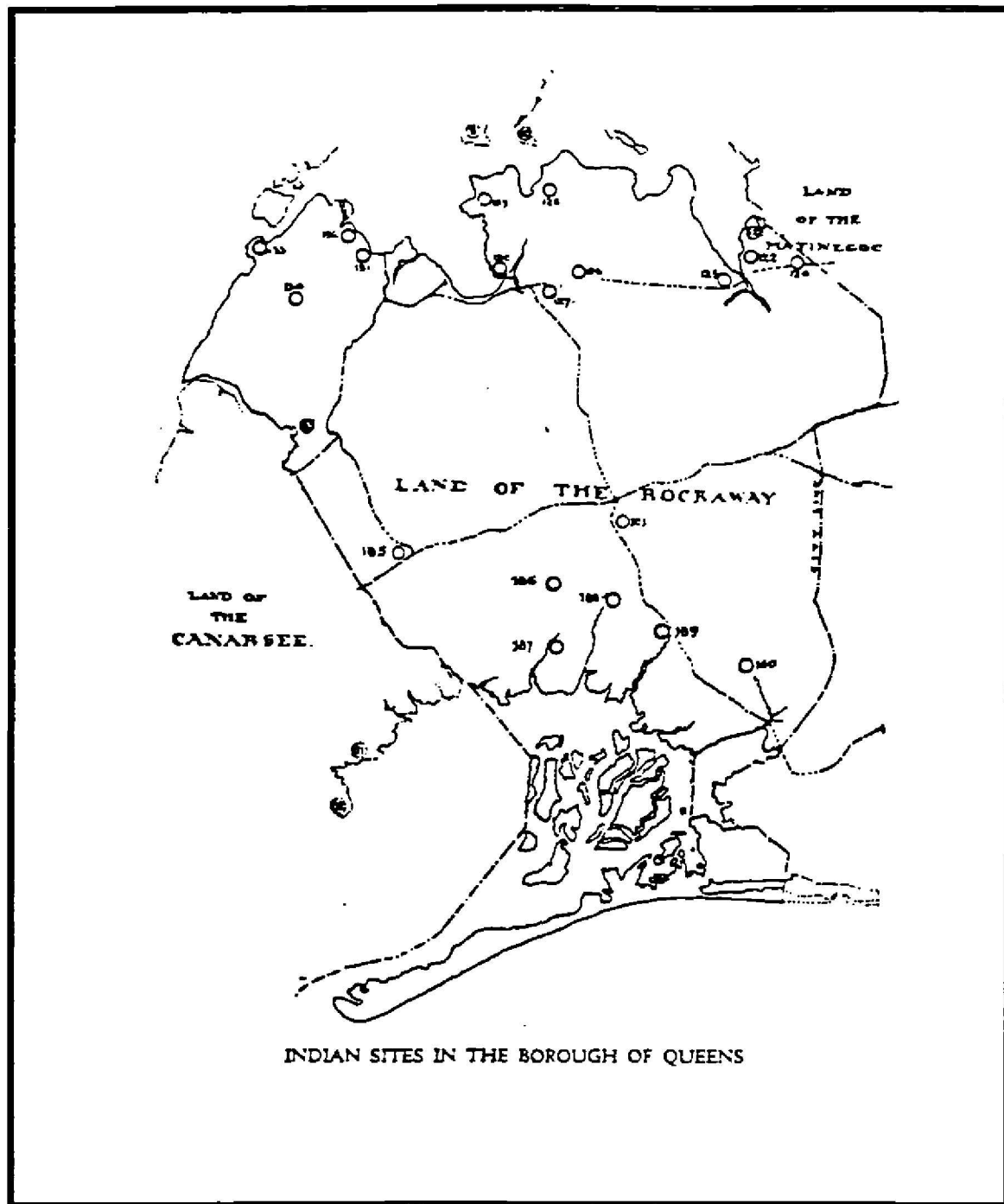


Figure 3: Solecki's Prehistoric Sites in Queens County (Solecki: 1941)

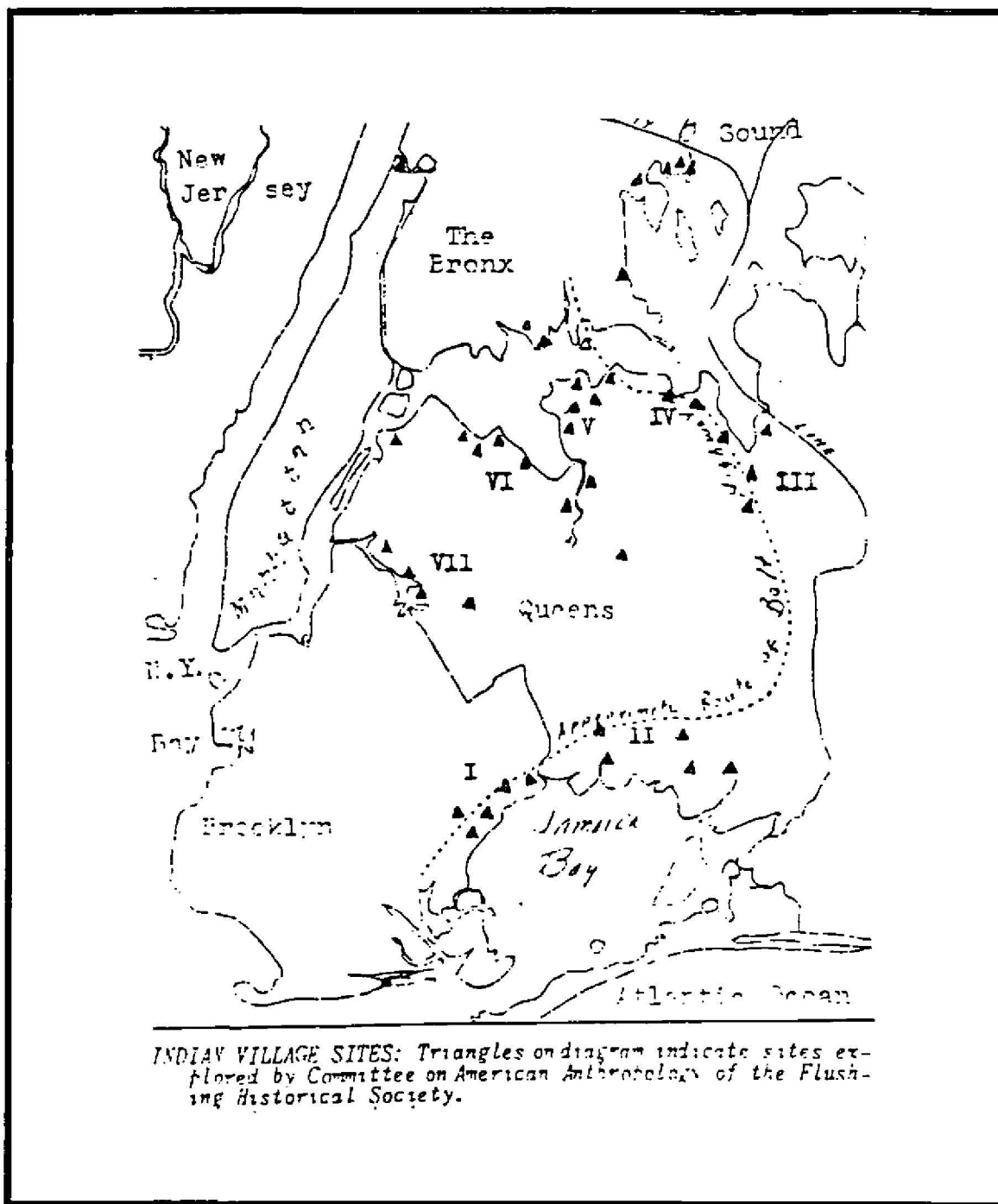
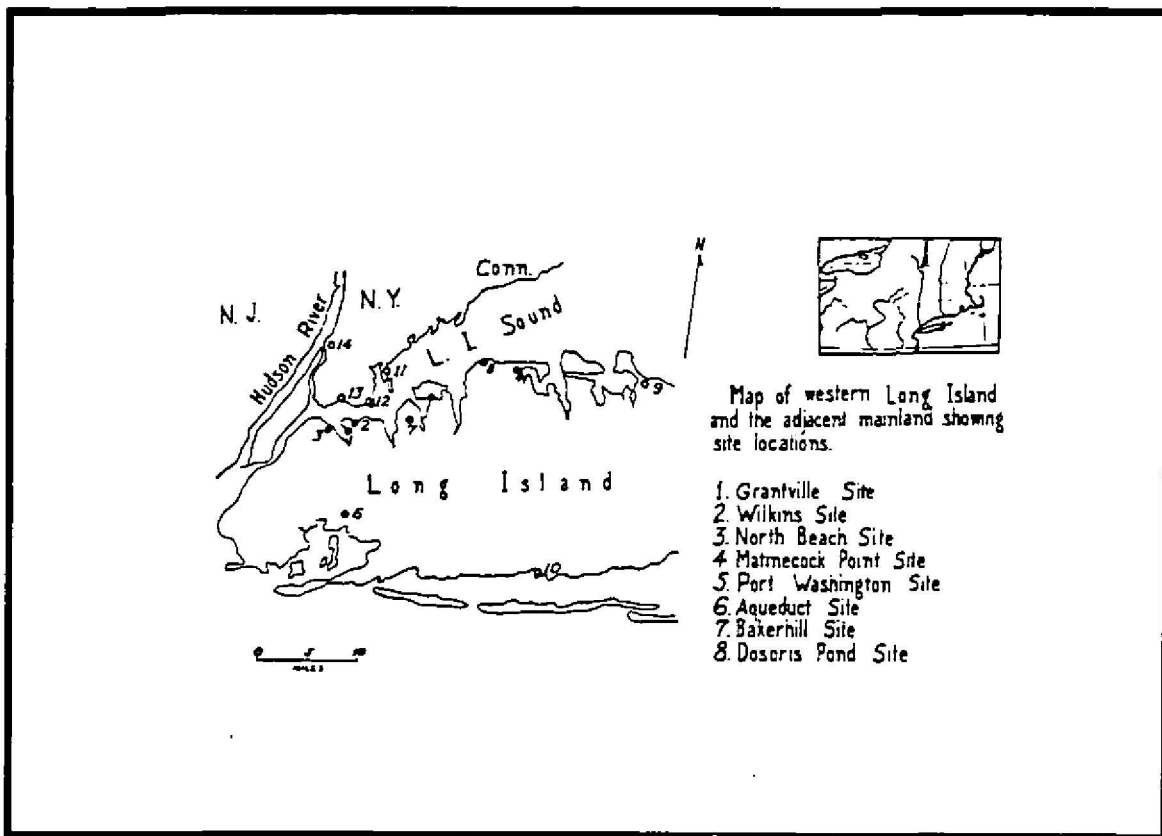


Figure 4: Smith's Prehistoric Sites in Queens County (Smith: 1944)



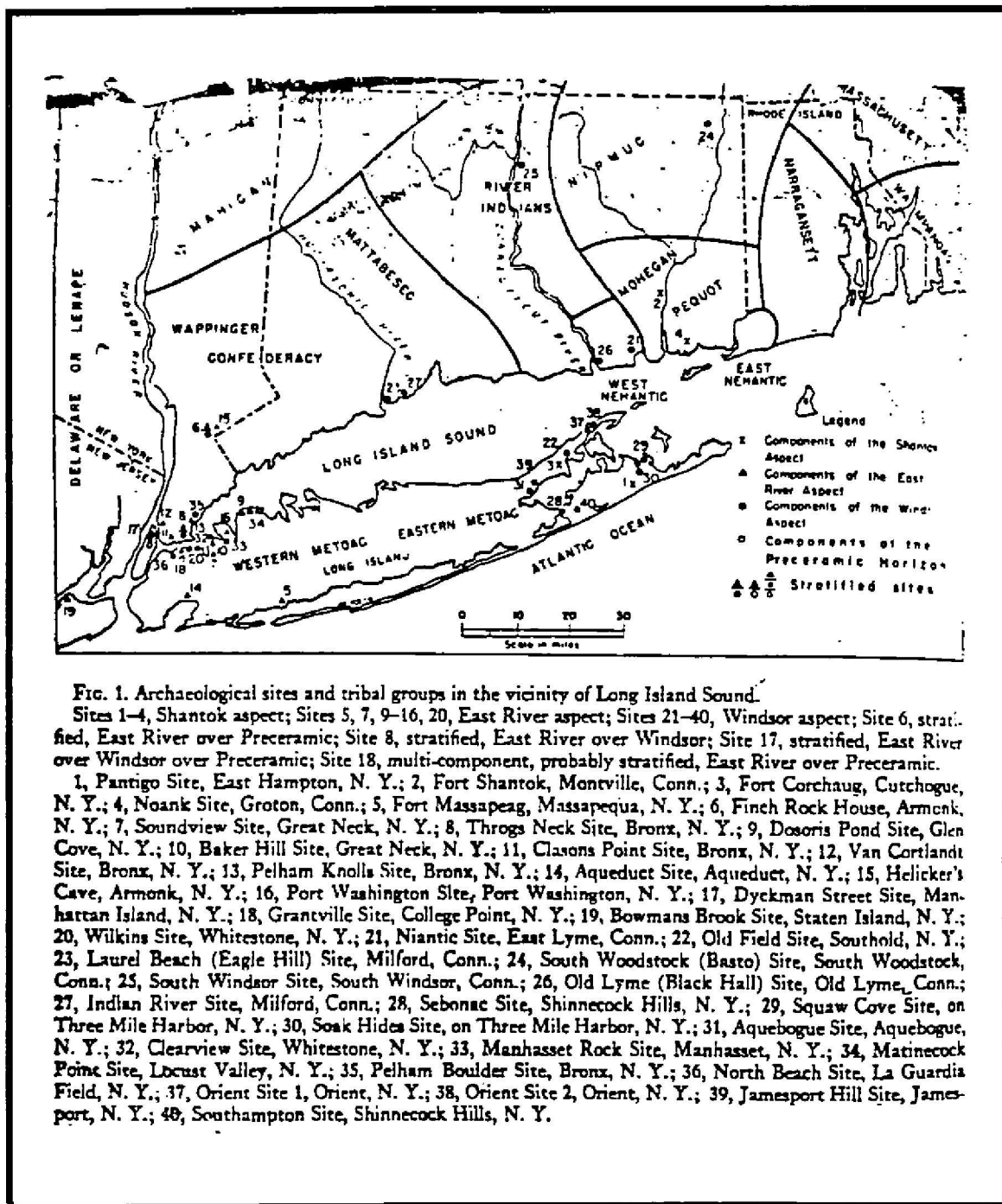
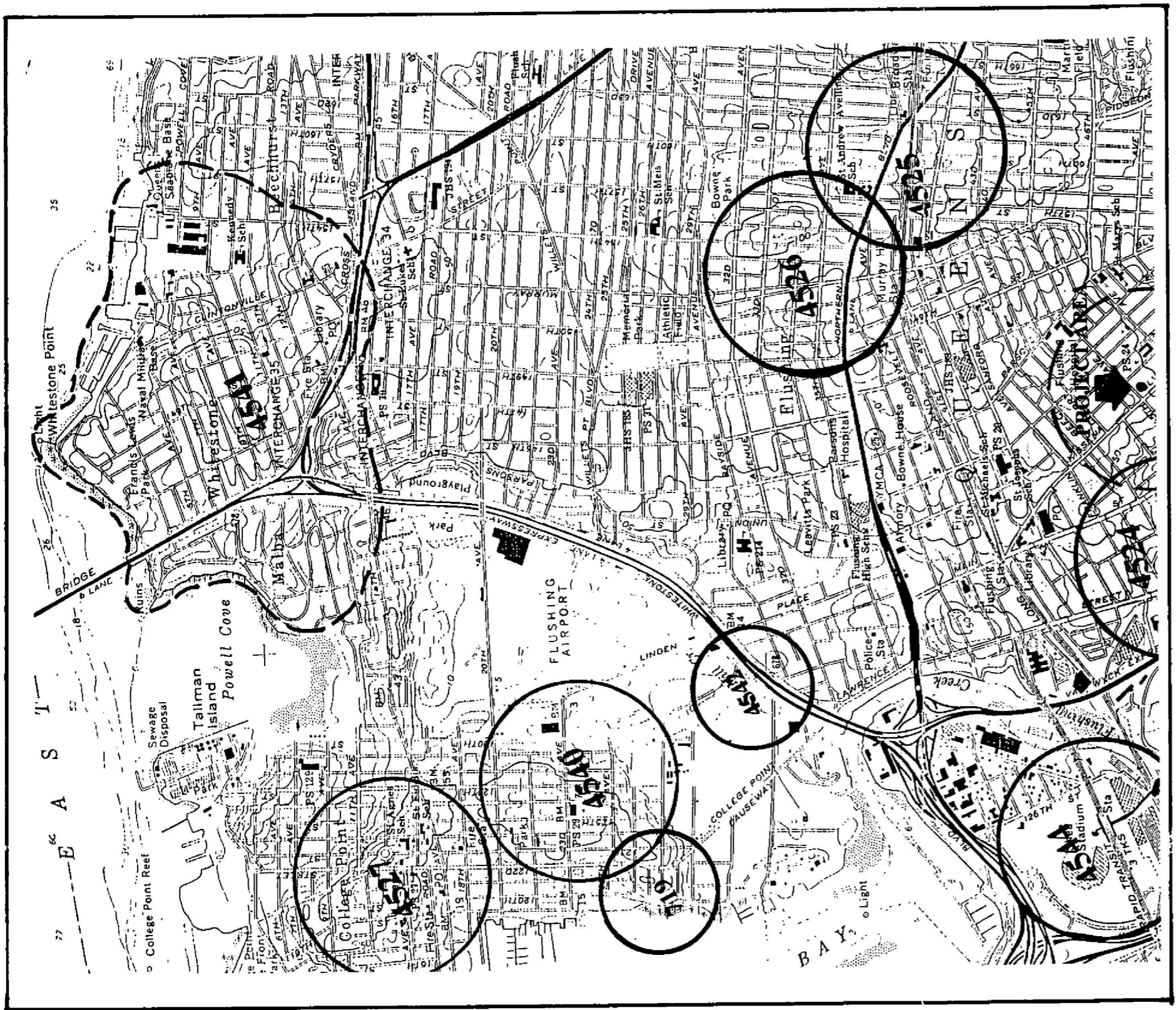


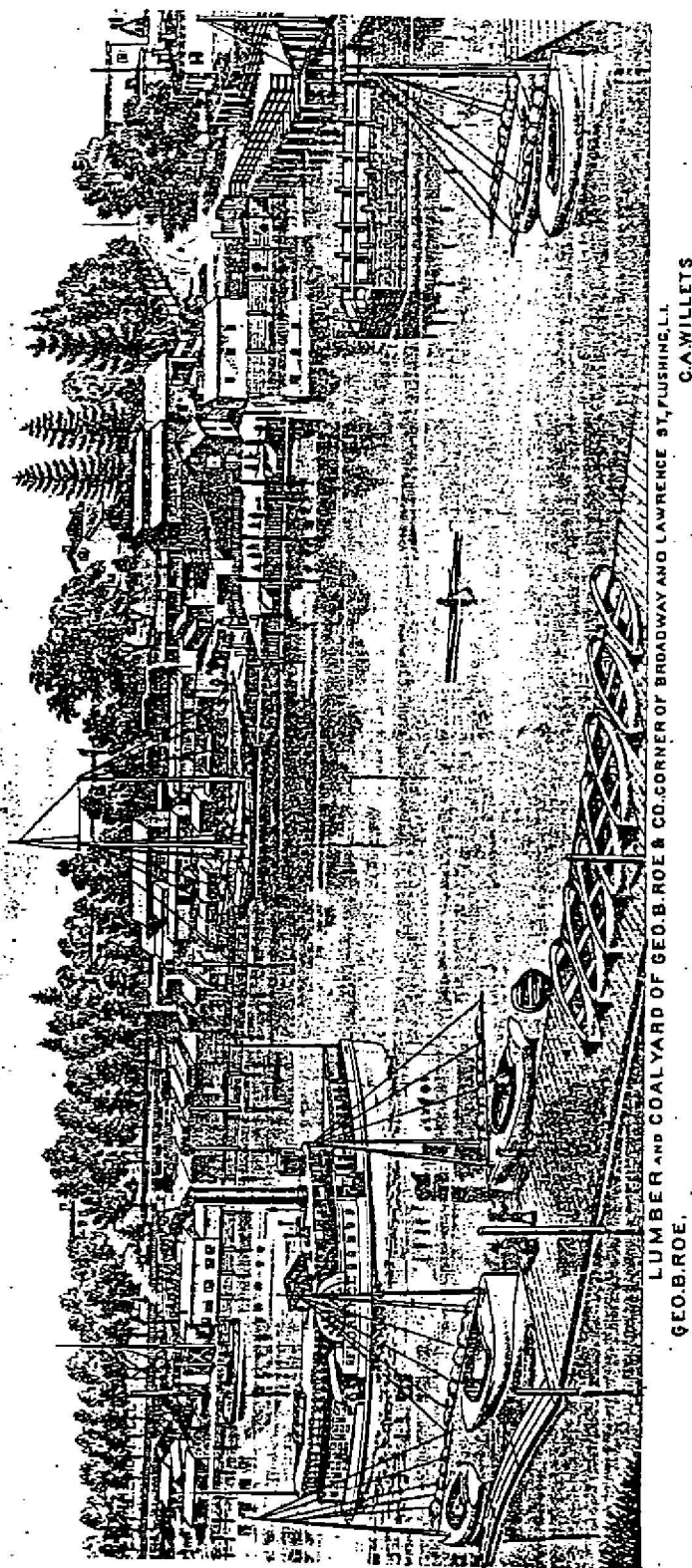
Figure 6: Prehistoric Locations in Vicinity of Flushing, Queens County, NY



Prehistoric site locations identified by the New York State Museum on the USGS Flushing, NY 7.5 minute quadrangle map. (Derived from NYSM maps and Grossman and Associates, Inc. report dated September, 1993)

NYSM SITE NO.	DESCRIPTION	SOURCES FOR SITE
Old # 719	#94 Graham Court (Nassau County Museum)	NYSM/Nassau County Museum
4524	Linnaean Garden: Burial site yielding eleven skeletons (reported in 1841 by Gabriel Furman)	NYSM/Beauchamp/Parker/Bolton
4525	Thomas P. Duryea Farm: Burial site located on Duryea farm (reported in 1880)	NYSM/Beauchamp/Parker/Bolton
4526	Large Matinicock settlements located at Flushing, Glen Cove and Cow Harbor	NYSM/Parker/Bolton
4527	Village site at College Point on E. Platt Stratton estate; skeleton excavated in 1861 at site of Knickerbocker Hall	NYSM/Parker/Bolton/Smith
4540		NYSM
4541	Area containing "frequent shell heaps"/"Fishing camp"/"Traces of occupation"	NYSM/Beauchamp/Parker/Bolton
4542	Campsite	NYSM/Parker/Bolton
4544	Campsite	NYSM/Parker
4545	"Traces of occupation"	NYSM/Parker

Figure 7: View of Flushing from Flushing Creek (Munsell 1882)

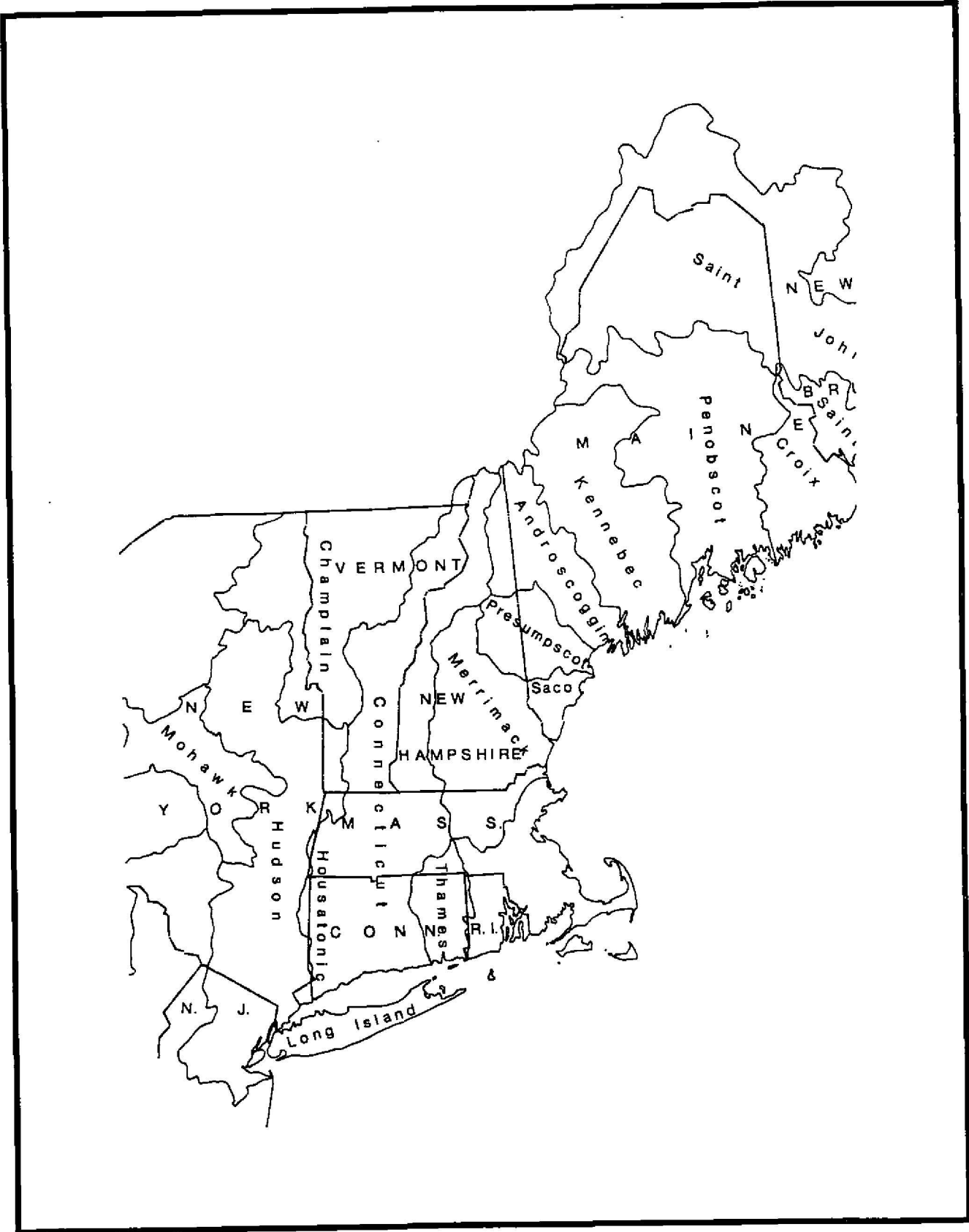


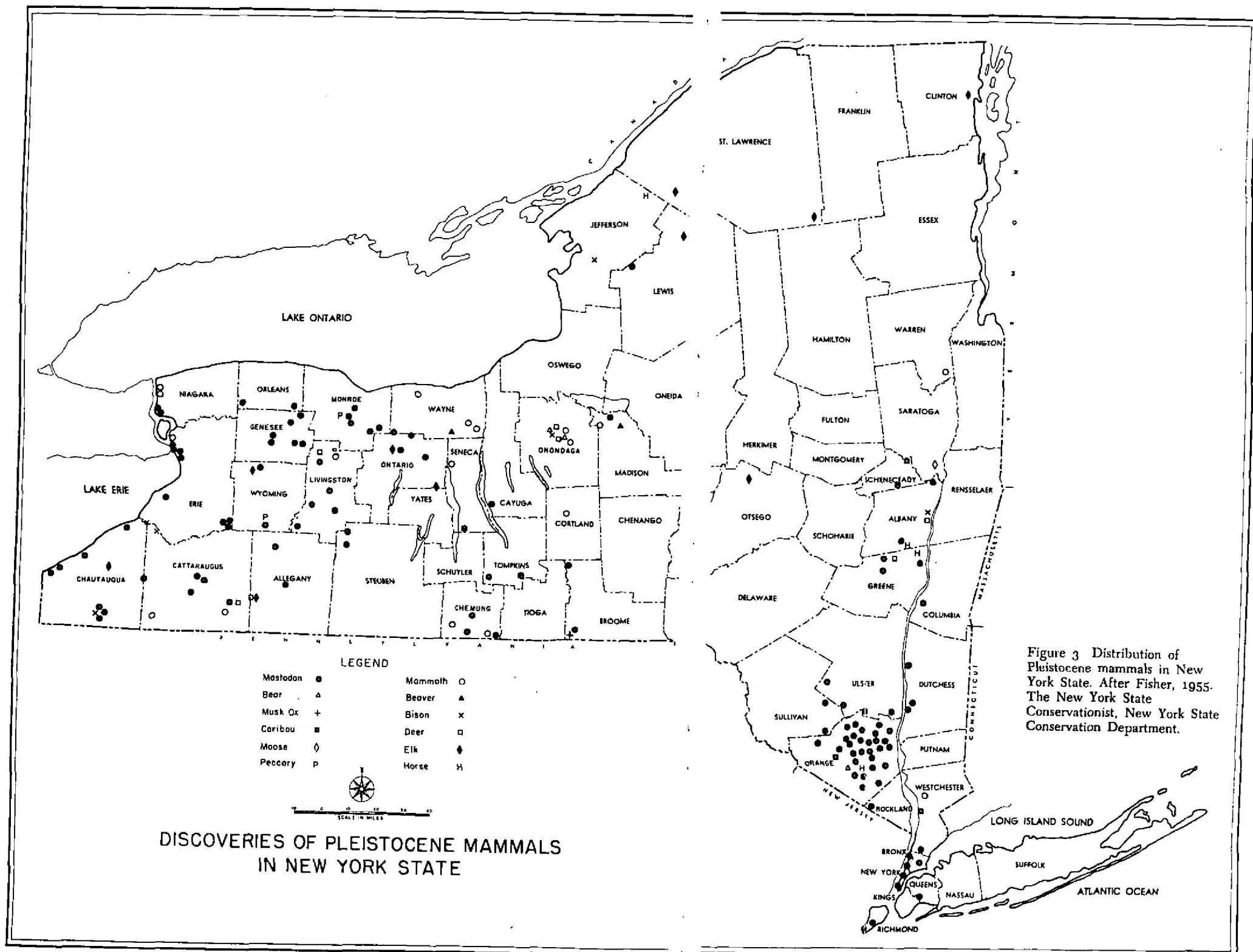
## **PHASE 1B ARCHAEOLOGICAL FIELD SURVEY**

### **MAP LIST**

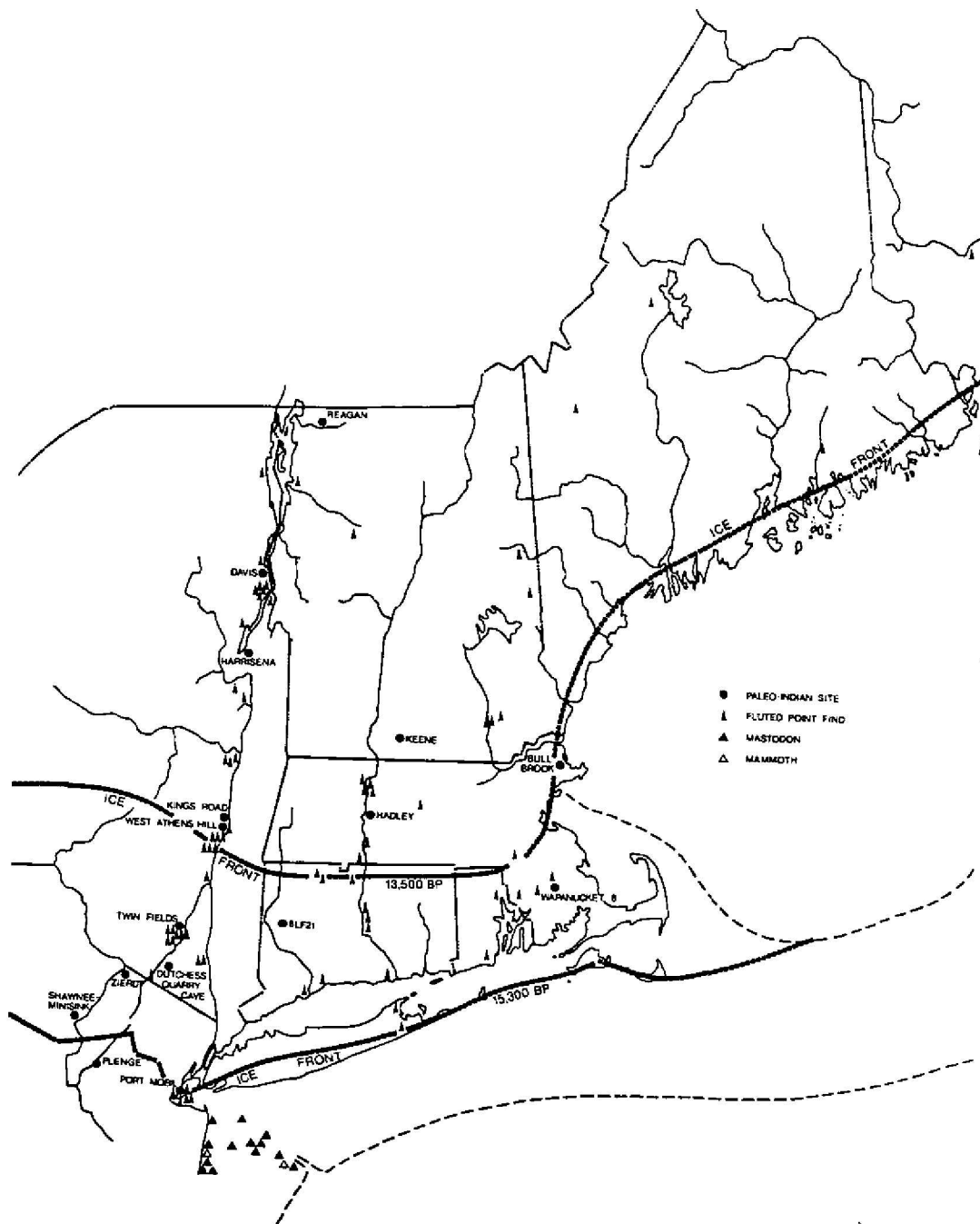
- Map 1B: 1 Modern political New England and prehistoric New England defined by its river drainages (Snow 1980)
- Map 1B: 2 Distribution of Pleistocene mammals in New York State. (After Fisher: taken from Ritchie 1980)
- Map 1B: 3 Excavated Paleo-Indian sites and published fluted point finds (Snow 1980)
- Map 1B: 4 Distribution of major cultural units in aboriginal New England around A.D. 1600 (Snow 1980)

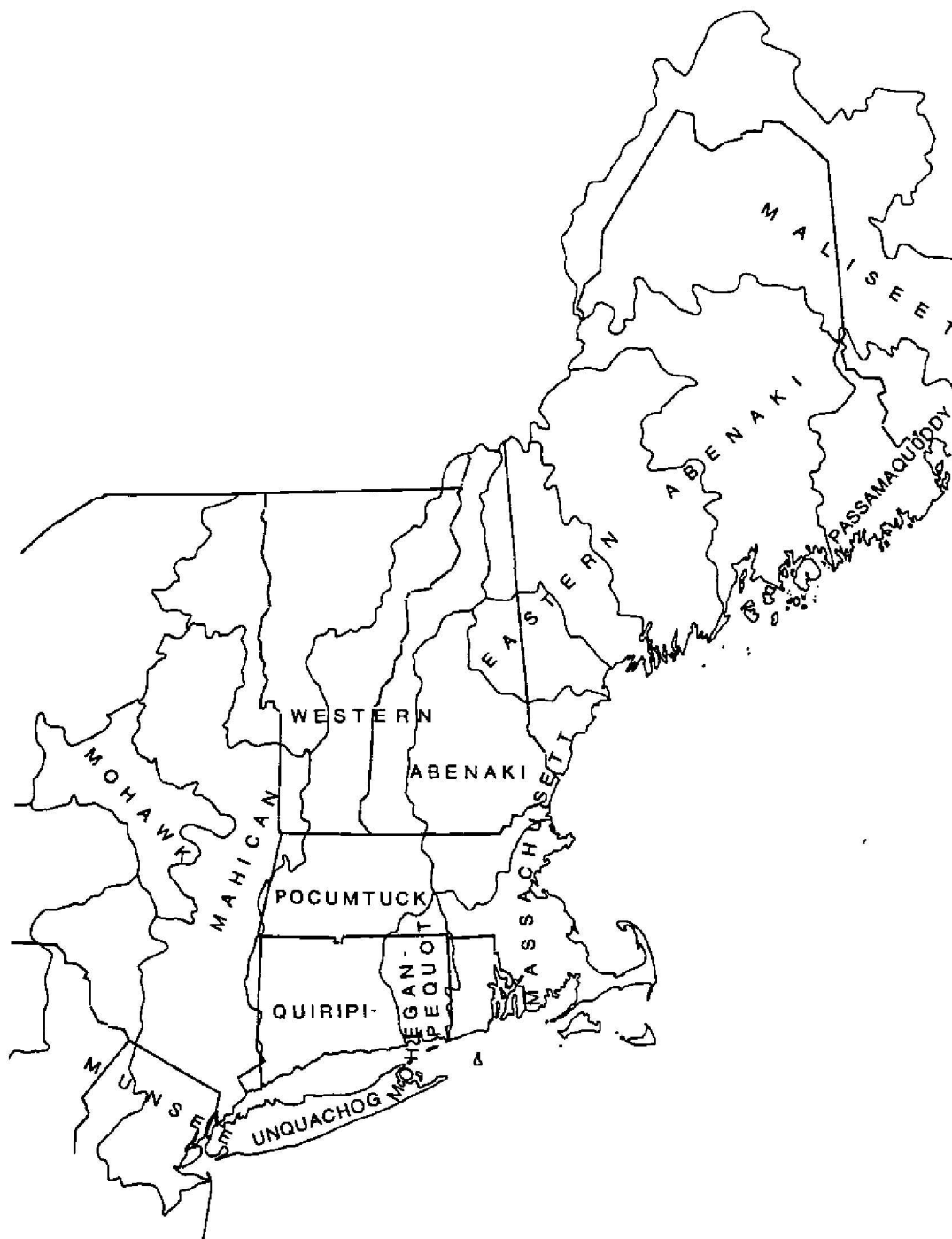
Map IB: 1 Modern political New England and prehistoric New England defined by river drainages (Snow 1980)





Map 1B:3 Excavated Paleo-Indian sites and published fluted point finds (Snow 1980)





**APPENDIX B**

**SHOVEL TEST RECORD**

SELFH

			SELFHELP HOUSING FOR THE ELDERLY		
			Shovel Test Record		
			Munsell	Soil Description	Cultural Material Recovered & Comments
TRANSECT 1	ST 1	0-7"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (green and white), burned coal,
		-			coal slag, ash throughout; quartzite klast; No prehistoric
		---			cultural material.
		7-9"	10YR 6/2	light brownish gray	ash lens - fragments of burned coal
		---			
		9-28"	10YR 5/6	swirled pattern of yellowish brown	window glass, bottle glass (green and white), burned coal,
		-----	& 4/2	and dark grayish brown soil -	coal slag throughout; asphalt shingle.
		-----		yellowish brown had sandy/clay	
		.		consistency; dark grayish brown	
		..		was silt; appeared to have been .	
		...		mechanically mixed.	
		28-30"	10YR 4/6	dark yellowish brown with a red	window glass, bottle glass (green and white), burned coal,
		*		hue clay mixed with sand; small	coal slag throughout; asphalt shingle.
		**		pebbles.	
		31-32"	10YR 4/6	yellowish brown sandy soil	NCM
	ST 2	***		alluvial deposit	
		0-6"	10YR 2/2	very dark brown organic soil	
	ST 3	-		Root impasse	
		0-6"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (green and white), burned coal,
		-			coal slag throughout.
		6-21"	10YR 5/6	yellowish brown sandy silt	window glass, bottle glass (green and white), burned coal,
		---			coal slag throughout.
	ST 4	21-23"	10YR 4/6	dark yellowish brown with a red	NCM
		..		hue clay mixed with sand	
		0-6"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (green and white), burned coal,
		-			coal slag throughout; pearl from necklace.
		6-8	10YR 6/2	light brownish gray	ash lens
	ST 5	8-26"	10YR 4/6	dark yellowish brown with a red	window glass, bottle glass (green and white), burned coal,
		..		hue clay mixed with sand	coal slag throughout.
		26-28"	10YR 4/6	yellowish brown sandy soil	NCM
		...		alluvial deposit	
		0-6"	10YR 3/2	very dark grayish brown organic	window glass, bottle glass (green and white), burned coal,
		-		soil mixed with coal ash & slag	coal slag throughout.

SELFH

			SELFHELP HOUSING FOR THE ELDERLY		
			Shovel Test Record		
			Munsell	Soil Description	Cultural Material Recovered & Comments
TRANSECT 1	ST 5	--		Root impasse	
TRANSECT 2	ST 6	0-6"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (green and white), burned coal, coal slag throughout.
		6-8"	10YR 4/6	dark yellowish brown sandy clay lens	green bottle glass; white ware, milk glass, fragment of pressed glass; asphalt shingle.
		8-36"	10YR 4/2 & 5/6	swirled pattern of yellowish brown and dark grayish brown soil - yellowish brown had sandy/clay consistency; dark grayish brown was silt; appeared to have been mechanically mixed.	window glass, bottle glass (green and white), burned coal, coal slag throughout; metal spring, metal strap; quartz cobble and several small quartz pebbles, quartzite pebble.
		36-50"	10YR 4/6	dark yellowish brown sandy clay	NCM
		50-53"	10YR 6/3	pale brown sandy clay - percentage of sand increased	NCM
	ST 7	0-6"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (green and white), burned coal, coal slag throughout.
		6-22"	10YR 4/2 & 5/6	swirled pattern of yellowish brown and dark grayish brown soil - yellowish brown had sandy/clay consistency; dark grayish brown was silt; appeared to have been mechanically mixed.	metal plumbing materials; piece of corroded pipe; pearl from necklace; red plastic button; coal slag and burned coal; window glass, bottle glass (white & brown), white ware milk glass; asphalt shingle.
		22-31"	10YR 4/6	dark yellowish brown sandy clay	NCM
	ST 8	0-6"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (white & brown), coal slag burned coal throughout
		6-31"	10YR 4/2 & 5/6	swirled pattern of yellowish brown and dark grayish brown soil - yellowish brown had sandy/clay consistency; dark grayish brown was silt; appeared to have been mechanically mixed.	window glass, bottle glass (white & brown), coal slag burned coal throughout; small piece of screening, asphalt shingle
		31-36"	10YR 4/6	dark yellowish brown sandy	NCM

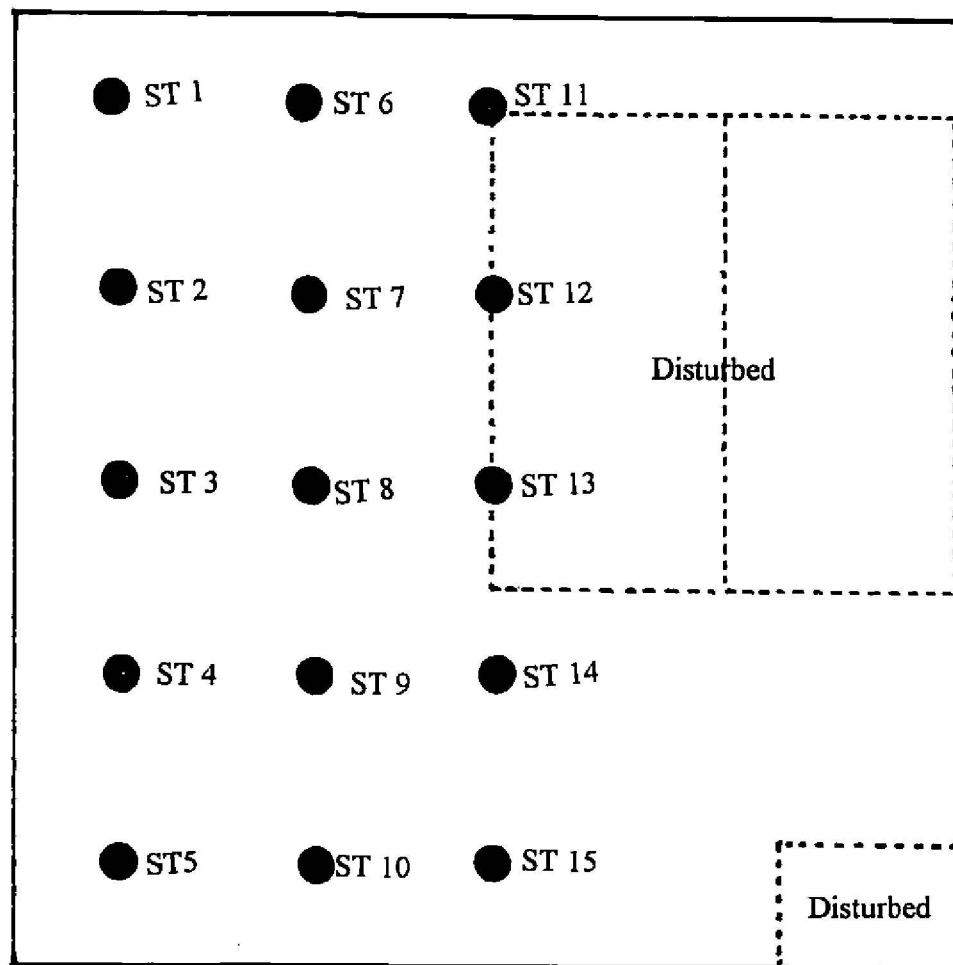
SELFH

			SELFHELP HOUSING FOR THE ELDERLY		
			Shovel Test Record		
			Munsell	Soil Description	Cultural Material Recovered & Comments
TRANSECT 2	ST 8	---		clay	
	ST 9	0-4"	10YR 2/2	very dark brown organic soil	window glass, bottle glass (white & brown), coal slag
		-			burned coal throughout
		4-7"	10YR 6/2	light grayish brown ash lens	ash lens
		7-21"	10YR 4/2	swirled pattern of yellowish brown	appears to be dump from coal furnace mixed with soil;
		.	& 5/6	and dark grayish brown soil - with	coal by-products predominate
		..		ash, burned coal and coal slag	
		...		throughout;	
		....		Rock impasse	
	ST 10	0-6"	10YR 4/4	dark yellowish brown sandy soil	overburden from fence construction
		6-18"	10YR 5/6	yellowish brown sandy soil	overburden from fence construction
		18-27"	10YR 6/2	light brownish gray	ash lens
		27-39"	10YR 4/6	dark yellowish brown sandy clay	NCM
TRANSECT 3	STP 11	0-6"	10YR 2/2	dark brown organic soil	burned wood; asphalt shingle; concrete
	STP 12	.			portion of house foundation
		0-6"	10YR 2/2	dark brown organic soil	House foundation; burned wood, nails, glass, asphalt
		..			shingle, piece of radiator, floor tile, fragment of
	STP 13	.			plaster wall with yellow paint
		0-6"	10YR 2/2	dark brown organic soil	House foundation; burned wood, nails, glass, asphalt
		..			shingle, floor tile.
	STP 14	0-6"	10YR 2/2	dark brown organic soil	Soil heavily mixed with coal slag and burned coal
		.			from coal furnace
		6-19"	10YR 4/6	dark yellowish brown clay soil	clay lens mixed with burned coal and ash
		19-21"	10YR 6/2	light brownish gray	ash lens
	STP 15	21-23"	10YR 5/3	brown clay soil mixed with ash	Soil heavily mixed with coal slag and burned coal
		.		Rock impasse	

**APPENDIX C**

**ARCHAEOLOGICAL FIELD  
RECONNAISSANCE MAP**

45th Avenue



SCALE: 1 Inch = 20 Feet

N

- Shovel Test
- Approximate location of historic foundation
- Project area boundary

**APPENDIX D**

**PHOTOGRAPHS**



**PHOTO 1:** View of project area from north side of 45th Avenue looking southwest to Kissena Boulevard. Chain link fence surrounds the project area to prevent trespassers from gaining access. The project area contains a number of trees along the boundaries of the site. The house to the east of the project area is currently used as a funeral home. It appears on the Sanborn Insurance Maps after 1917.



**PHOTO 2:** View of 45th Avenue and the apartments on the north side of the street from the project area. View is to the northeast. Photograph taken from area where 140-18 45th Street was located. Project area is generally flat, with two slightly raised mounds representing the cellar holes of 140-18 and 140-20 45th Avenue. Most of the project area is covered with low growing plant material.



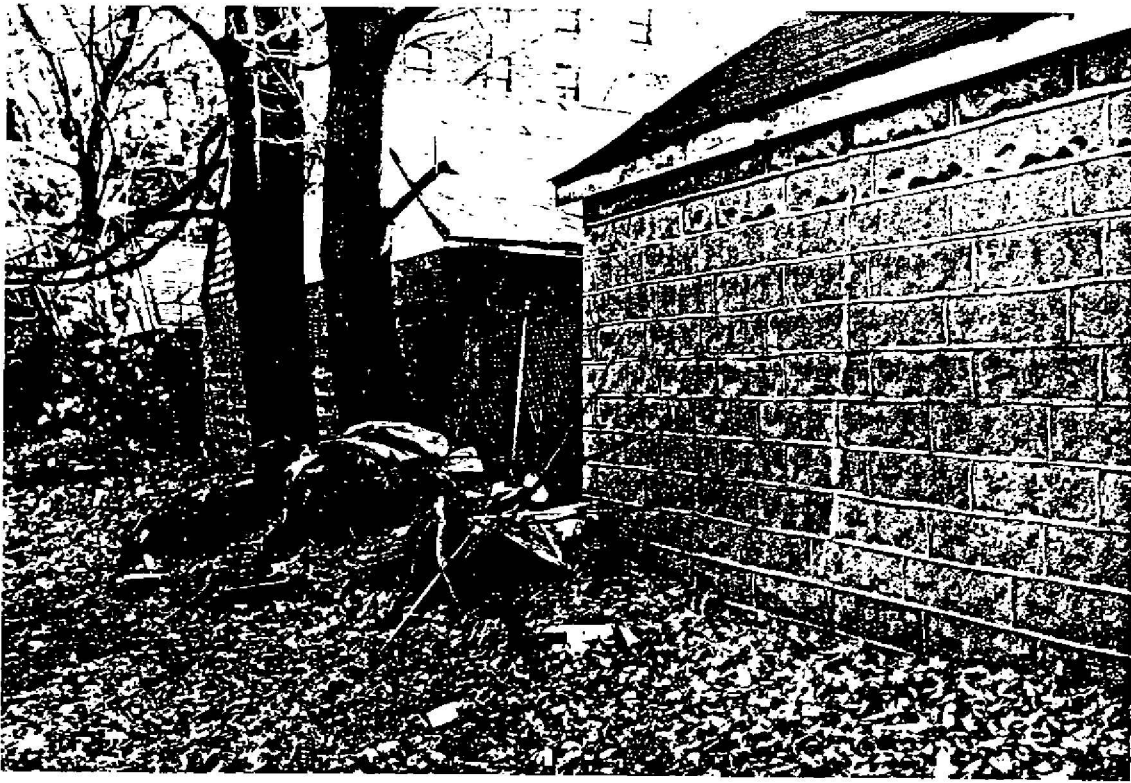
**PHOTO 3:** Photograph taken from southwest corner of Kissena Boulevard and 45th Avenue looking generally southeast. These four houses appear on the 1934 Sanborn Insurance Maps. The garages, located behind these house, abut the project area boundary line. (See Photo 6) To the south on Kissena Boulevard is a high-side apartment complex belonging to Selfhelp Housing for the Elderly.



**PHOTO 4:** View of project area looking northeast across the area where 140-18 and 140-20 45th Avenue were located. The cellar holes of the houses may be identified as slightly raised mounds. A chain link fence that divided the houses from the vacant lot can be seen lying in the grass. Field investigations show that 140-18 45th Avenue abutted this chain link fence. Virtually the entire site to the east of the chain link fence is severely disturbed.



**PHOTO 5:** View of project area looking southwest from the area where 140-18 and 140-20 45th Avenue were located. The rear of the garages located behind the houses at the corner of Kissena Boulevard and 45th Avenue and the brick apartment complex owned by Selfhelp Housing for the Elderly are seen on the western and southern edges of the project area.



**PHOTO 6:** View of western edge of project area at the rear of the garages located behind the houses at the corner of Kissena Boulevard and 45th Avenue. (See Photo 3) These structures abut the property line. Several dump areas are located along the western and southern edges of the project area.



**PHOTO 7:** View from project area looking west toward Kissena Boulevard. Photo places project area in context of surrounding buildings, which vary from the two and a half story houses immediately to the west to low-rise apartments on the western side of Kissena Boulevard to a high-rise apartment complex located a block to the north and west.



**PHOTO 8:** Photograph taken from area immediately behind site of 140-20 45th Avenue looking south to parking area and rear of Selfhelp Housing for the Elderly apartment complex. The two trees and the large tree root in the photo mark the corners of a depression. Although no structure is shown in this location on the Sanborn Insurance Maps, field investigation indicates that some type of ephemeral building once stood here. This area is, therefore, disturbed.

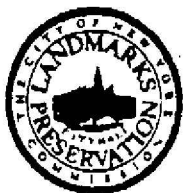


**PHOTO 9:** Shovel test six was determined to be in the area least likely to be disturbed and was excavated to a depth of 53 inches to establish the stratigraphic profile. Photograph includes shovel to indicate approximate depth of test pit. In this test five successive strata were identified.

<u>LEVEL</u>	<u>SOIL DESCRIPTION</u>
1	Dark brown organic soil densely littered with household debris, glass, building materials, white ware, milk glass..
2 & 3	Yellowish brown sandy soil mixed with darker organic soil, also densely littered with household debris. Swirled patterns in soil indicate mixing associated with depositional episode at some time in the past.
4	Dark yellowish brown sandy clay devoid of cultural material.
5	Pale brown sandy clay, sterile of cultural material. Alluvial deposit.

**APPENDIX E**

**CORRESPONDENCE**



THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION  
225 Broadway, New York, NY 10007 212/553-1100

553-1135

# ENVIRONMENTAL REVIEW

ER/HUD 202 NFA

6/24/93

PROJECT NUMBER

DATE RECEIVED

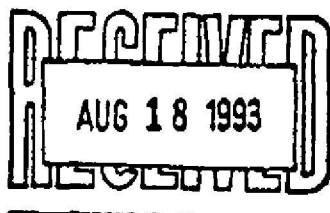
## PROJECT

140-16, 18 + 20 45<sup>th</sup> Ave. - Q

- ☒ No architectural significance
- ☐ No archaeological significance
- ☐ Designated New York City Landmark or within a Designated Historic District
- ☐ On or eligible for National Register of historic Places
- ☐ Appears to be eligible for National Register Listing and/or New York City Landmark designation
- ☒ May be archaeologically significant; documentary study required
- ☐ May be archaeologically significant; need site plan showing building basement depths and footprints of previous and proposed buildings

## COMMENTS

The project site has potential for archaeological remains associated with Native American use and occupation, based on its location above Flushing Mill Creek and its proximity to several reported sites (see NY State Museum site # 4524, 4544 reported by Parker).



*Eric Sauter*  
SIGNATURE

8/11/93  
DATE

**APPENDIX F**

**ARTIFACT CATALOGUE**

Shovel Test	Artifacts Recovered	Dimensions
<b>Transect 1</b>		
STP 1	numerous shards of window glass (sample collected)	average less than 1 mm x 1 mm
	green bottle glass fragments (sample collected)	average: 2 x 1.5 mm
	white bottle glass fragments (sample collected)	average: 2 x 1.5 mm
STP 3	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (sample collected)	
	white bottle glass fragments (sample collected)	
STP 4	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (sample collected)	average: 2 x 1.5 mm
	white bottle glass fragments (sample collected)	average: 2 x 1.5 mm
STP 5	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (noted, not collected)	
	white bottle glass fragments (noted, not collected)	
<b>Transect 2</b>		
STP 6	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (noted, not collected)	
	white bottle glass fragments (noted, not collected)	
	milk glass fragment	2.5 mm x 1.5 mm
	pressed glass fragment (flower pattern)	2 mm x 0.5 mm
	metal bed spring	30 mm x 10 mm
	metal strap	13 mm
STP 7	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (noted, not collected)	
	white bottle glass fragments (noted, not collected)	
	metal collar from plumbing fixture	11 mm x 11 mm
	piece of corroded pipe (plumbing material) (not collected)	25 mm x 5 mm
	plastic pearl (type from a necklace)	0.5 mm x 0.5 mm
	round red plastic button	1.5 mm x 1.5 mm
	fragment of white ware	1.5 mm x 1 mm
	fragment of milk glass	2 mm x 1.5 mm

Shovel Test	Artifacts Recovered	Dimensions
<b>Transect 2</b>		
STP 8	numerous shards of window glass (noted, not collected)	
	green bottle glass fragments (noted, not collected)	
	white bottle glass fragments (noted, not collected)	
	piece of screening	5 mm x 4.5 mm
STP 9	numerous shards of window glass (noted, not collected)	
	white bottle glass fragments (noted, not collected)	
	brown bottle glass fragments	6 mm x 3 mm
<b>Transect 3</b>		
STP 12	numerous shards of window glass (noted, not collected)	
	piece of radiator (noted, not collected)	
	floor tile (noted, not collected)	
	fragment of plaster wall with yellow paint (noted, not collected)	

Material recovered represented unstratified fill of undetermined origin; although material was consistent with the bulldozed debris expected from the types of structures that had formerly been located on the site. Material recovered was consistent with structures built between 1904 and 1917 that were demolished between approximately 1980 (140-20 45th Avenue) and 1991 (140-18 45th Avenue). White ware and pressed glass (19th century materials) may have been brought to the houses by previous owners, or may have been dumped on the site at an undetermined time. Construction debris constituted the majority of the material noted, including small fragments of window glass, small pieces of asphalt singles, fragments of concrete foundation material, etc. The size of the fragments suggests that the material was broken and churned and then spread over the site by bulldozers. Nothing found at the site suggests an archaeologically undisturbed historical deposit.