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1425-1445 GATES AVENUE, BLOCK 3335, LOTS 1, 56-59
BOROUGH OF BROOKLYN, NEW YORK



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PHASE IA ARCHAEOLOGICAL ASSESSMENT REPORT

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August 25, 1997

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I. INTRODUCTION

A. ARCHAEOLOGICAL RESEARCH DESIGN AND EXECUTIVE SUMMARY

Generally, in order to make a recommendation for archaeological testing, it is necessary first to determine whether successive construction episodes have negatively impacted archaeological remains and further, following a careful review of documentary and secondary sources, whether such remains may be of historical significance.

Research of the development history of the project site through historic maps and Brooklyn Building Department records revealed that there was only one building episode on each of the project site's lots and no evidence of subsequent disturbance on the backyard areas associated with the buildings on lots 58, 57 and 56.

With respect to prehistoric periods, the map of inventoried prehistoric archaeological sites compiled by the Office of Parks, Recreation and Historic Preservation, shows that the likelihood of prehistoric use of the project site is very low, as no prehistoric sites have been located within a one-mile radius of it. Research of secondary sources revealed that there is no evidence for Indian settlement anywhere in Bushwick.

With respect to historic periods, it was found that the project site area remained farmland until late in the 19th century and was not developed until public transportation made the area more accessible and therefore desirable for the construction of private dwellings. This began circa 1885 when the Lexington Avenue Elevated

Railroad started to run to Broadway and Gates Avenue. The first building on the project site was erected between 1880 and 1886 on lot 57, those on lots 56, 58 and 59 in ca. 1886-88, and the dwelling on lot 1, in 1900. These buildings represent the only construction episodes on the site.

Although there has been no subsequent construction on the project site since the destruction of the above-mentioned buildings and therefore no disturbance of potential archaeological resources associated with them, it was determined that the buildings probably did not possess any backyard features of archaeological significance. An 1875 plan of the Brooklyn sewer system indicates that waste pipes were either already installed under the streets surrounding the project site by this time or would shortly be introduced, and it is likely that the pipes were laid before the construction of the buildings on the project site. We do not therefore expect that any cisterns or privies were associated with these structures. The building erected in 1900 was equipped with indoor bathrooms. The CEQR (City Environmental Quality Review) requirements for determining the significance of 19th century residences state that those dwellings "constructed after City services (water and sewer) were available are generally not considered archaeologically significant" (CEQR Manual, section 321.2 part 5, p. 3F-9).

The present report concludes that there are no potential archaeological remains of historic significance on the project site and therefore does not recommend mitigation prior to development.

Resources consulted for the present report include:

Department of Buildings, Brooklyn: Block and Lot files
Landmarks Preservation Commission
Municipal Archives: Bushwick Town Records
Municipal Reference Library
New York Historical Society Library
New York Public Library: Map Division
Local History and Genealogy
Office of the City Register, Brooklyn:
Deeds and Conveyances
Tap Records, Brooklyn

I.B. SITE AREA

The Ridgewood Bushwick Senior Citizens Council, Inc. (RBSCC) proposes to develop, construct, own and operate a low-income apartment building in the Bushwick section of Brooklyn. This multi-family rental project will be built on a vacant, city-owned urban renewal site located at 1425-1445 Gates Avenue, lots 1 and 56 to 59, on block 3335, which is bounded by Gates Avenue on the southeast, Irving Avenue on the northeast, Linden Avenue on the northwest, and Knickerbocker Avenue on the southwest (Figs. 1 and 2). The building will be a newly constructed six story, multi-family structure, built with pre-cast concrete plank floor system with masonry load-bearing walls and an elevator. Amenities will include an outdoor recreation space and off-street parking.

Currently, the empty, grass-grown area of the project site on lot 1 slope from northeast to southwest, showing signs of disturbance at the lowest point near the corner of Gates and Knickerbocker Avenues (Figs. 16 and 17). The three vacant lots adjoining lot 1 to the northwest, along Knickerbocker Avenue, are bounded by a three story tenement at number 553. Lots 56 to 59, on Gates Avenue, are bounded on the northeast by a three story clapboard house at 1449 Gates Avenue (Fig. 18). The separately fenced, tarred-over area immediately to the southeast of the residence is being used as a parking lot. There is a small shed in this parking lot, fronting on Gates Avenue (Fig. 19).

The south side of Knickerbocker Avenue, opposite the project site, is occupied by a block of town houses owned by the New York City Housing Authority. There is a playground on the south corner, and on the east corner of Knickerbocker and Gates Avenue, a fenced, empty lot used for parking. One block from the project site, on the south corner of Palmetto Street and Knickerbocker Avenue, stands St. Paul's Lutheran Church, built in 1888.

II. PREHISTORIC ERA

A. PREHISTORIC CULTURES

The earliest occupants of the Greater New York area are thought to be descended from Siberian groups who migrated across the Bering Land Bridge to Alaska during the Late Pleistocene or Ice Age more than 12,000 years ago. From the end of eastern North America's last ice age until the appearance of the Holocene environment, ca. 10,000 to 8,000 B.C., the presence of Paleo-Indian period groups is signaled by their chipped stone tools, in particular, the fluted javelin head or spear point known as "Clovis." These nomadic people hunted mammoth, mastodon, caribou and musk ox and collected oysters. Their small encampments, food processing and tool-making stations were of a temporary nature. Paleo-Indian remains have been found in the New York Area only in Staten Island.

In the Archaic Period, ca. 8,000-1,000 B.C., the melt waters of the disappearing glaciers subsided and the large herbivores of the Late Pleistocene became extinct. An environment of swamps and mudflats emerged that attracted migratory wildfowl and beaver. Mixed forests of hickory, oak, beech, elm and chestnut augmented the earlier conifers and provided a habitat for edible plants and other game such as white-tailed deer, wild turkey and moose. The Archaic Indians invented a wider range of equipment, including plant processing tools such as grinding stones, mortars and pestles, and, towards the end of the period, they created stone vessels. They

settled in small groups on islands, at the head of coastal estuaries, or by the seashores, places which offered plentiful supplies of shellfish.

The Woodland Period, beginning ca. 1,000 B.C., is characterized by the appearance of smoking pipes, bows and arrows, which replaced spears and throwing sticks, and pottery, which superseded soap stone wares for everyday use. The development of agriculture, particularly from about 1,000 A.D., supported large, permanent or semi-permanent, palisaded settlements. Woodland period groups also still travelled seasonally to their hunting or fishing camps, the latter identified by huge piles of discarded shells called "middens." They hunted wildfowl, muskrat, raccoon, turkey and deer.

II.B. CONTACT PERIOD

The Indians called the western part of Long Island Seawanhacky, the "Place of Seawant [wampum]," after the shells found there in abundance which they used as a medium of exchange.¹ European explorers and settlers arriving in the 17th century encountered the Marechkawick or Mareyckawick in Brooklyn, one of the Long Island Canarsee groups that archaeologists believe were related to Delaware subtribes.² Here, in later Brooklyn Heights, the Dutch planted the first white settlement on Long Island.³

According to Bolton, the Marechkawick also claimed the area later known as Bushwick, but it was three chiefs of the Keskaechquerem, named Kakapoteyno, Menqueuw and Suwirau, who deeded this land to the West India Company, represented by Governor William Kieft, on August 1, 1638.⁴ The property extended from Rennegackonck, a small stream emptying into the Wallabout Bay, to Newton Creek, and from the East River to "Mespachtes," a locality whose name was later corrupted to Maspeth. The Indians received in payment, "8 fathoms of duffels, 8 strings of wampum, 12 kettles, 8 chip axes, 8 hatchets, some knives, beads and awls."⁵ The center of the old town of Bushwick, founded in 1660, was near the present intersection of Bushwick and Metropolitan Avenues (Fig. 1).⁶

The southeastern part of Bushwick, where the project site is located, was purchased from the Indians for pasture land some ten years after the founding of the town, on May 14, 1670. The grantors, three sachems named Peter Elmohar, Job Makaquiquas and Shamese, "late

of Statin Island," received "100 Guilders Seawant [wampum], half a tun of strong beer, 2 half tuns of good beerr, 3 Guns long barrells with each a pound of powder and lead, proportionable 2 barrs to a Gun, 4 match coates."⁷ Governor Nicolls had forbidden the sale of liquor to the Indians in 1664, but evidently, the law was not enforced.⁸

The Indians claimed the use of the inland portions of Brooklyn for hunting but resided on or near the southern coast. Writing in the 1920s, Bolton noted that there were "no records or observations" of Indian settlement along Flushing Avenue, in Bushwick, Williamsburg or Greenpoint.⁹ There is still no evidence for Indian settlement in these areas. In 1987, Salwen, Dublin and Pickman checked the files of the Museum of the American Indian and the American Museum of Natural History for Indian finds from Brooklyn and discovered that with the exception of one site near the Brooklyn Bridge, all the prehistoric collections derived from sites on the southern shore.¹⁰ While prehistoric peoples tended to inhabit locations such as the head of tidal inlets or on elevated areas near streams or wetlands, there are no streams in the interior of Brooklyn and no sites have been discovered at Wallabout Bay, the head of the Bushwick inlet, or in the vicinity of Newton Creek, the wetland nearest the project site (Fig. 3).¹¹

Although they did not reside in the interior, the Indians nevertheless left an indelible imprint on Brooklyn because their paths paved the way for its modern road system. It traces its origins to an Indian trail that became one of Brooklyn's principal east-west

arteries, now called Fulton Street.¹² To reach their old tribal council place at Bedford, Indians who had fled to New Jersey during the war of 1643-45 had to paddle over the Hudson River, across Manhattan Island via a creek that ran from near Christopher Street to Peck Slip, then over the East River to Long Island where they arrived at the site of the later Ferry terminal, at the foot of Fulton Street.¹³ The trail split near Atlantic Avenue, the Flatbush Avenue branch running south to Keshkechqueren, the Canarsee's main village on Jamaica Bay, the other branch, Fulton Avenue, heading to Bedford (Figs. 3 and 4). After crossing the hills near this locality, it became the Rockaway Footpath path, leading to the village Rechonwhacky on Rockaway Bay.¹⁴ The Europeans widened the road for carts and under Governor Cornbury, in 1704, laid it out as the "Kings Highway." The highway appears on the 1781 Taylor and Skinner map running by Bedford (Fig. 3). In 1817, it was renamed after Robert Fulton, developer of the steam-powered ferry.¹⁵

Another old Indian trail, the Cripplebush road, now Bedford Avenue, became one of the branch roads of the Kings Highway.¹⁶ It connected Bedford to the Cripplebush or Kreuplebush settlement which lay near present-day Nostrand and Flushing Avenues (Fig. 1, 3 and 4).¹⁷ In 1805, the Cripplebush road was extended to the Bushwick Crossroads --a settlement near the intersection of Flushing and Bushwick Avenues-- where it joined the Newton Road (Figs. 1, 4 and 6 upper left-hand corner). By 1807, residents of Bushwick could travel to Brooklyn either by the Kings Highway or along the Newton Road to the Wallabout Road, the latter beginning at the Wallabout Mill Pond,

at North Elliot Place and Flushing Avenue, and joining the Newton Road at Nostrand Avenue (Figs. 1 and 4). Together, these two roads were first known as the Brooklyn and Newton Turnpike, then in 1850, as Flushing Avenue.¹⁸

The Indian trail nearest the project site, running approximately along the line of Bushwick and Evergreen Avenues, became the farm road that led to the town's meadow and pasture land. Because these parcels were called the "New Lotts of Bushwick," the road became known as the "New Bushwick Lane" or "The Narrow Lane." In 1792, "New Bushwick" road --"new" because it ran through the New Lots-- was formally laid out by the road commissioners.¹⁹ Both the Cripplebush Road and the New Bushwick Lane appear on the 1781 Taylor map (Fig. 3).

II.C. SITE FILE RESULTS

According to the map of inventoried prehistoric archaeological sites compiled by the Office of Parks, Recreation and Historic Preservation on the basis of site file records, no prehistoric sites have been identified within a one-mile radius of the project site (Fig. 5).

III. HISTORIC PERIOD

A. 17TH AND 18TH CENTURIES

In 1640-41, following William Kieft's land purchase, Swedes, Norwegians and Dutch farmers took out patents in Bushwick for parcels that they had already been occupying and cultivating for some time as squatters.²⁰ In 1660 they were joined by several Huguenots who settled by permission of Governor Stuyvesant on the lands that became the old town of Bushwick, "between Mespath Kil [Newton Creek] and Norman's Kil [Bushwick Creek]."²¹ In the same year, Stuyvesant decreed that because of war with the Indians, the "outside people" must "unite in removing their dwelling places into the towns." Fourteen Frenchmen, with Dutchman Pieter Jansz Widt acting as interpreter, asked the Lord General to found a town for them.²² Stuyvesant came with his Official Surveyor, Jacques Cortelyou, who laid out 22 house lots in the area between present-day Union, Morgan, Meeker and Metropolitan Avenues. The center lay near Wood Point Road between Skillman Avenue and Conselyea Street.²³

Returning to the newly founded town on March 14, 1661, the Governor named it Boswyck, "The Town of the Woods," and appointed a subaltern court and magistrates to administer the affairs of the twenty-three families settled in the now officially recognized town.²⁴ In 1663, according to the Bushwick Town Records, the inhabitants were busy building a palisade against the Indians. Two years later, they contributed 150 staves towards the building of

Manhattan's palisade along Wall Street.

As soon as the town was created, Boswick's three commissioners of justice presented a petition on behalf of the inhabitants requesting the building of roads and the allotment of pasture and meadowlands. In the same year, they were granted additional parcels which became known as the "New Bushwick Lots" or "New Bushwick." These lands, which lay either side of the "Green Hills," the ridge that runs across the island approximately along the line of Eastern Parkway had been reserved by the Indians for use as hunting grounds (Fig. 3). But when they abandoned the area during the Indian war, the Dutch divided up the land among the towns of Kings County and the parcels became known as the "New Lotts" of each municipality. The New Lotts of Bushwick extended approximately along the Newton boundary line (the present borough line) to the Cemetery of the Evergreens and included the area of the project site area, which was purchased in 1670, as described above (Fig. 1).²⁵ Each Bushwicker received on average 20 acres from which to gather fuel and salt hay for their cattle.

The first owner of the land in which the project site is located did not immediately obey the Governor and move into the town. In his letter to the Commissaries of Boswyck, Hendrick Barentz Smidt explained that he had been unable to transplant his dwelling into the town due to the "freezing weather," and would need a few additional months until "the last of April next" to "build and take up his residence, as is befitting."²⁶ Henrich Barens Schmit or Hendrick B. Smith --as his name also appears-- became a prominent Bushwick

citizen. In 1665, he was one of the seven men appointed to administer the court of justice and in 1666, he was elected Constable.²⁷

Captain Peter Praa was also a prominent civic figure and "one of the three outstanding personalities in the history of the Town."²⁸ A record of July 28, 1713, states that he paid 228 bushels of wheat "quitt rent" to the Town of Boswyck for a tract of land that included the project site.²⁹ Born in 1655 in Leyden, Peter emigrated with his family in 1659. The affluent Praas farmed 68 acres in 1706 and kept cattle. They also owned as many as nine slaves in 1738, more than any other family in the area. At different times, Peter served as the Town Assessor, Magistrate and Commander of the Town Militia. There is an amusing anecdote concerning his encounter with the ferocious Rachel Dirck and her sister, Jonica Schamp. For causes unknown, on January 24, 1693, the two ladies assaulted the Captain and "teare him by the hair as he stood at the head of his company, at Boswyck."³⁰ They were heavily fined for the offense. The Praa farmhouse, a stone building, stood on the north side of Freeman Street, east of Oakland Avenue.³¹ Their descendants built houses all around the old homestead until the family occupied the entire area of later Greenpoint.³²

During the remainder of the 18th century, the land containing the project site belonged to Aaron Stockholm, described in the deed as a cordwainer from the city of New York.³³ He purchased the property from Andres Stockholm, a farmer residing in Bushwick, and his wife Hanna.

Bushwick remained a small town throughout this period. From approximately 300 residents in 1698, by 1810 the population had grown

only to 798, including the population of the much more densely settled Williamsburgh (1844-45 map).³⁴

III.B. 19TH CENTURY

According to Armbruster, the New Lotts of Bushwick were cultivated as market gardens until the late 19th century, in spite of the poor quality of the sandy, gravelly soil and frequent large boulders:

...as late as 1883 there was an open country east of Flushing Avenue, with farm houses, with residences of a few who wanted to live in the open and the cottages of laborers (...) there was no sign of a boom beyond Broadway and Flushing Avenue, when the Brooklyn Bridge had been opened.³⁵

No houses are shown east or north of the few hugging the New Bushwick Road on the 1844-45 U.S.G.S. map (Fig. 4). This road followed a winding course along what would later become present-day Bushwick Avenue and that section of Evergreen Avenue east of Menahan Street. In parts it swung even further east to Central Avenue and beyond. In 1852, the New Bushwick Road was straightened and renamed Bushwick Avenue, while the parallel street running southwest of it and consisting of a portion of the New Bushwick Road and its new continuation, today's Bushwick Avenue, was in 1852 called Evergreen Avenue, because it led directly to the eponymous cemetery (Figs. 6 and 7). The names therefore of Bushwick and Evergreen Avenues were the reverse of what they are now (compare with Fig. 1).³⁶ Bushwick Avenue appears on the 1852 Conner map under its old name, the New Bushwick Road, but this road, it must be remembered, is present-day Evergreen Avenue (Fig. 6). Division Street, which existed as a farm road from around 1840, became modern Broadway.³⁷

The 1852 Field map shows the Methodist Protestant Cemetery that opened in 1851 two blocks southeast of the project site on a square plot of ground bounded by Irving, Knickerbocker and Putnam Avenues and Palmetto Street (Fig. 7, below). It closed in 1897, when the bodies were moved to Cedar Grove Cemetery.³⁸

Both maps show that at this time the land including the project site belonged to William Henry Furman, heir of William J. Furman, who died in 1849 and left the property to his wife, Maria E. Furman, and his son (Figs. 6 and 7).³⁹ William J. Furman owned extensive property both in Brooklyn and in Manhattan. It is likely that this is the same William Furman who established the "New" or Catherine Street Ferry in 1795, and was the first president of the Brooklyn, Jamaica and Flatbush Turnpike Company, incorporated in 1809. This company paved Main and Old Ferry Streets in Brooklyn.⁴⁰

Watson Bowron, whose name also appears on both maps, "laid out his land on Bushwick Parkway [Bushwick Avenue] and Evergreen Avenue in building lots, calling his development Bowronville."⁴¹ In the later 19th century this name was applied to the entire area east of the Cross Roads (the intersection of Bushwick and Flushing Avenues, Fig. 6). Bowron is also credited with laying out Palmetto Street in 1850 and Grove Street in 1858.⁴²

The 1855 Colton map shows that the streets in the area of the project site were laid out by this date (Fig. 7). In the previous year, Bushwick, Williamsburg and Brooklyn had been consolidated and divided into eighteen wards, with Bushwick, the outermost, being the eighteenth.⁴³ Gates Avenue was opened from Broadway to Myrtle Avenue

between 1851 and 1871; Linden Street opened to the city line by 1880; Irving Avenue opened in 1892, and Knickerbocker at approximately the same period.⁴⁴

Renamed in honor of Horatio Gates (1729-1806), an American General of the Revolutionary war, Gates Avenue was formerly known as Magnolia Street north of Broadway. That the area was still only sparsely built up at this time may be seen on the 1869 Dripps map, which records but a few dwellings north of Evergreen Avenue (shown here in its present-day location, Fig. 8). The outlines of the old William Henry Furman farm still appear on this map although, according to the City Register, the property had been sold to the Van Nostrand family by this time.⁴⁵ According to Armbruster, in 1868 there were only six houses on Gates Avenue between Broadway and Throop Avenue.⁴⁶ The latter street was the terminus of the horse cars that ran from the Ferry along Greene and Gates Avenues. To reach Bowronville, one transferred at Throop Avenue to a stage coach. By 1872, however, horse cars started to run regularly as far as Broadway.

Many of the German immigrants who came to Brooklyn after the Civil War settled in the 18th ward and a number of businesses in the vicinity of the project site were owned by German proprietors. These included Eppig's Brewery, on Central Ave between Grove & Linden Streets; John Reimel's Milk dairy, on Wyckoff Avenue at the corner of Putnam Avenue, later known as Klein Deutschland Park, and Andrew Schmidt's wagon making establishment, located in 1890 a few doors away from the project site at 1465 Gates Avenue.⁴⁷ Germans from the

same town or region formed social clubs, "Landsmanschaften," like the Schwaebische Saenger Bund, which erected its own meeting hall in 1899 in the neighborhood of the project site at the junction of Knickerbocker, Myrtle and Greene Avenues.⁴⁸ Saint Paul's Lutheran Church was built in 1888 on the south corner of Palmetto Street and Knickerbocker Avenue, one block southeast of the project site.

An 1875-76 "Plan Exhibiting the System of Sewerage in the City of Brooklyn," indicates that sewer pipes were probably laid at approximately this time, since the area would shortly be developed for housing (Fig. 9). The lines denote the various thicknesses of pipes. The width of the pipes in the streets surrounding the project site block are: Magnolia Street (Gates Avenue), 15 inches; Irving Avenue and Linden Street, 12 inches, and a 72 inch pipe along Knickerbocker Avenue.⁴⁹ Unfortunately, the Brooklyn tap records for these lots do not go back before 1918.⁵⁰

By 1880, the eastern two-thirds of the project site block, numbered 1112 on the Bromley plan, was divided up into lots (Fig. 10). The unequal length-wise division of the block --which survives to this day-- was based on the northwestern boundary line of Furman's old farm, shown on the plan. In 1880, there were still no houses on the project site block. The edge of the developed area was along Central Avenue (two blocks south of Knickerbocker), where only a handful of frame buildings had been erected.

Armbruster dates the beginning of the building boom in the project site area very precisely to June 1885, when the Lexington Avenue Elevated Railroad line started to run to Broadway and Gates

Avenue.⁵¹ He points out that between 1888 and 1894, the price of a lot north of Broadway rose from \$300 to \$1800, and on Knickerbocker Avenue, from \$500 to \$2000.⁵² But the 1886 Robinson map shows that the boom was probably already well on its way by this time, as a number of buildings appear on the project site block and those surrounding it (Fig. 11).

Between 1880 and 1886, a frame dwelling, the first structure on the project site, was erected at no. 1443, lot 57 (Fig. 11).⁵³ On the 1886 Bromley, the lot number is given as 3 and the house number as 293. Within two years, buildings were erected on project site lots 59, 58 and 56 as well (Fig. 12). The 1888 Sanborn and 1904 Belcher Hyde are nearly identical, save that the latter gives a more detailed picture of the construction (Figs. 12 and 13). In every case, the buildings were frame structures with brick facing. On lot 59 two edifices stood back-to-back: a three story building with commercial premises on the ground floor that fronted on Gates Avenue, and a longer, one story structure which may have given on to an alley way that ran nearly the entire length of the block behind the Gates Avenue lots. The one-story back building appears on the Belcher Hyde map but not on the Sanborn which indicates it was added between 1888 and 1904. There was a three story dwelling on lot 58 and on lot 56, a three story building with a store, with a one story building that is labelled "car pit" behind it, at the back of the lot (Fig. 12). The building on lot 57 appears as a three story dwelling on the 1888 and later Sanborn maps, but is shown with only two-and-a-half floors on the 1904 Belcher Hyde (Figs. 12, 13, 14 and 15).

Between 1888 and 1904, the ash station of the American Railway Transit Company was built on lot 50, a short distance up Gates Avenue from the project site (Figs. 13 and 14). This company was one of a number of independent operations that were gradually absorbed by the Brooklyn Rapid Transit Company (B.R.T.) after its formation in 1896.⁵⁴ By 1907, the facility had become the "B.R.T. Ash Dump" (Fig. 14).

The first building on lot 1, fronting on Knickerbocker Avenue, was erected in 1900 (report cover).⁵⁵ According to plans of the building preserved at the Building Department, the residence measured 65 by 25 feet and was three-stories with a basement. There was a store on the first floor and four families living on the upper two stories. The two railroad-style apartments on the second floor consisted of a parlor fronting on Knickerbocker Avenue followed by two bedrooms, then a dining room and behind it, the kitchen and adjoining bathroom with bath tub. In 1926 there was a drug store in the space fronting on Knickerbocker Avenue, and by 1935, a pool room was added behind the store.

Two manufacturing operations were installed on the project site during the late 1920s or 1930s. The 1951 Sanborn map records a knitting mill at 1433 and 1435 Gates Avenue and a dress manufacturer at 1437 Gates Avenue (Fig. 15). According to an alterations document dated December 24, 1952 (no. 4729), there was a boiler and dressing rooms in the cellar of 1437 Gates Avenue while the manufactory was installed on the ground floor. The archaeological visibility of these industries is negligible as the manufacturing apparatus and fixtures

would have been installed above ground level. Consequently, surviving evidence of these buildings, consisting solely of their foundations, is of no research value relating to the early 20th century textile or dress-making industries.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. Prehistoric Potential and Recommendations

The potential for prehistoric uses of the project site is very low. No prehistoric remains have been discovered within a one-mile radius or anywhere in Bushwick, Williamsburg or Greenpoint. Further investigation of the project site for potential prehistoric remains is therefore not recommended.

B. Historic Potential and Recommendations

Research conducted for the present report demonstrated that although there was only one building episode on each of the project site's lots and no subsequent disturbance of backyard areas associated with the buildings, sewer pipes had probably been laid in the streets adjacent to the project site before the properties were developed and it is therefore very unlikely that residents here ever used privies or cisterns. In the case of 19th century dwellings, the presence of these features are a criterion of archaeological significance under the definition provided in the CEQR Manual. In the absence of such historic features, further investigation of the project site is not recommended.

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NOTES

1. Bolton 1920, p. 270.
2. Bolton 1920, 271 and 1922, p. 132.
3. Bolton 1922, p. 135.
4. Stiles 1867, p. 26; Bolton 1922, p. 32; Pickman 1992, p. 5.
5. Kramer 1971, p. 3.
6. Stiles 1867, p. 26; Bolton 1922, p. 134-135; Pickman 1992, p. 5.
7. Office of the City Register, Brooklyn, Deeds and Conveyances, Liber 3 page 242B.
8. Bolton 1920, p. 300.
9. Bolton 1922, p. 145.
10. Pickman 1992, p. 3.
11. Bolton 1922, p. 130; Pickman 1992, p. 4.
12. Bolton 1922, p. 131; Armbruster 1919, pp. 5 ff.
13. Armbruster 1942, pp. 54-55.
14. Armbruster 1919, p. 7; Pickman 1992, p. 6.
15. Fulton died in 1815. Fulton Street in Manhattan was similarly renamed in his honor in 1816.
16. Bolton 1922, p. 145.
17. Stiles 1869, p. 371; the Cripplebush Road became Bedford Road, (which also absorbed the Clove Road, another feeder line of the Kings Highway), between Fulton and DeKalb Avenues, and Nostrand Avenue, between DeKalb and Flushing Avenues, Armbruster 1942, pp. 54, 56, 143.
18. Armbruster 1942, pp. 41, 44, 143, 154.
19. Bushwick Town Records, Municipal Archives.
20. Kramer 1971, p. 3; Stiles 1867, p. 29.
21. Stiles 1867, p. 113; Bushwick Savings Bank 1923, pp. 9, 12; Kramer 1971, p. 4.

22. Bushwick Town Records, Municipal Archives.
23. Stiles 1867, p. 114; Brooklyn Eagle 1946, p. 7.
24. Stiles 1867, p. 118.
25. Bushwick Town Records, Municipal Archives; Office of the City Register, Brooklyn, Liber 3, page 242B; Armbruster 1942, p. 33; Pickman 1992, p. 5.
26. Office of the City Register, Brooklyn, Deeds and Conveyances.
27. Bushwick Town Records, Municipal Archives.
28. Along with Pieter Jans De Witt and Dirck Volckertszen, according to Provost, 1949, p. 68.
29. Office of the City Register, Brooklyn, Deeds and Conveyances.
30. Stiles 1869, p. 352; Provost 1949, p. 104.
31. Stiles 1869, p. 353; Provost 1949, pp. 63-64.
32. Armbruster notes that until the 1840s, Greenpoint "had been in the possession of five families, descendants of Captain Pieter Praa. The brothers Meserole, Abraham and Jacob, Jonathan Provoost and Jacob Bennett, were all four grandsons of Captain Praa; Jacob Colyer had married a granddaughter of the captain" 1942, p. 39; Provost 1949, p. 67.
33. Office of the City Register, Brooklyn, Deeds and Conveyances.
34. Bushwick Savings Bank 1923, p. 23, gives 293 residents; Armbruster 1942, p. 32, counts 301.
35. Armbruster 1942, p. 128.
36. Armbruster 1942, pp. 127-128, 152.
37. Armbruster 1942, p. 5.
38. Armbruster 1942, pp. 199.
39. Office of the City Register, Brooklyn, Deeds and Conveyances.
40. Stiles 1869, pp. 378, 391.
41. Armbruster 1942, p. 127.
42. Armbruster 1946, pp. 191, 272.
43. Dikeman 1870, pp. 12-13.

44. Armbruster 1942, pp. 171, 199; Dikeman 1870, p. 83; Kramer 1971, pp. 36, 41, 44, 46.
45. Office of the City Register, Brooklyn, Deeds and Conveyances.
46. Armbruster 1942, p. 171.
47. Armbruster 1942, pp. 137, 172, 215, 319.
48. Armbruster 1942, pp. 214-215.
49. The double, broken lines equal 18 inches; the solid line with a broken line, as on Hamburg Street (now Wilson Avenue), equals 84 inches.
50. Personal communication with Fima Kats, June 13, 1997. Available information for dates of services provided to the properties in question was: 1433 Gates Avenue and 561 Knickerbocker Avenue, 1962; 1437 Gates Avenue, 1960; 1441 Gates Avenue, 1929 (destruction of old tap, installation of new service); 1443 Gates Avenue, 1922 (installation of a new tap); 1447 Gates Avenue, 1918 (repair).
51. Armbruster 1949, p. 128.
52. Armbruster 1942, p. 37.
53. The block and lot file for this lot could not be located at the Building Department, Brooklyn (the Brooklyn Historical Society is closed for renovations).
54. Hood 1993, p. 150.
55. Building Department, Brooklyn, block and lot file.



Fig. 1. Hagstrom Maps 19 and 21 (1994), Showing the Location of the Project site

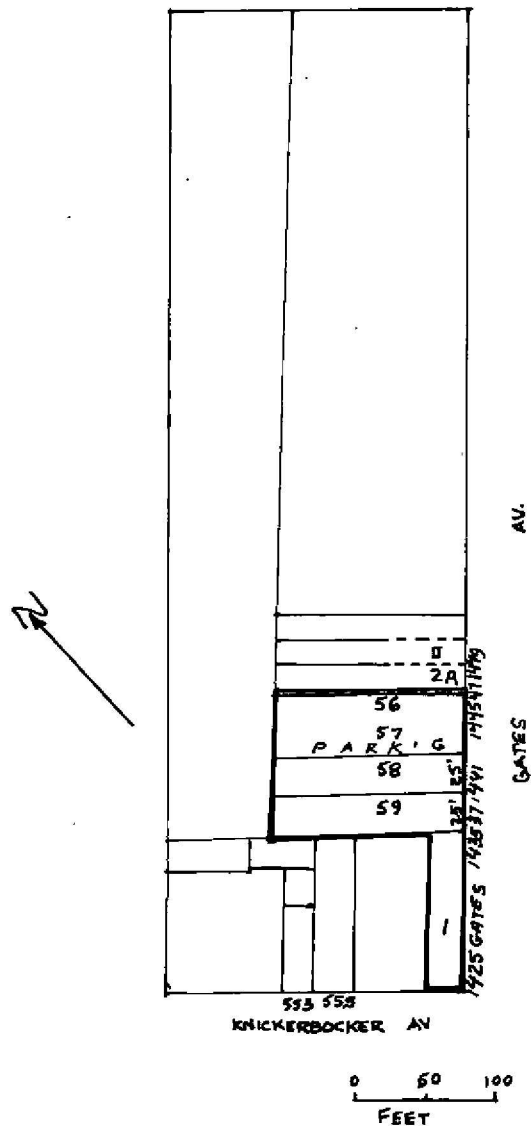


Fig. 2. 1995 Sanborn Map of Block 3335, vol. 9, pl. 41, , Showing the Location of the Project Site



Fig. 3. 1781 "Map of New York & Staten Island And Part of Long Island...," Showing the Location of the Project Site, (Coll. New York Public Library)

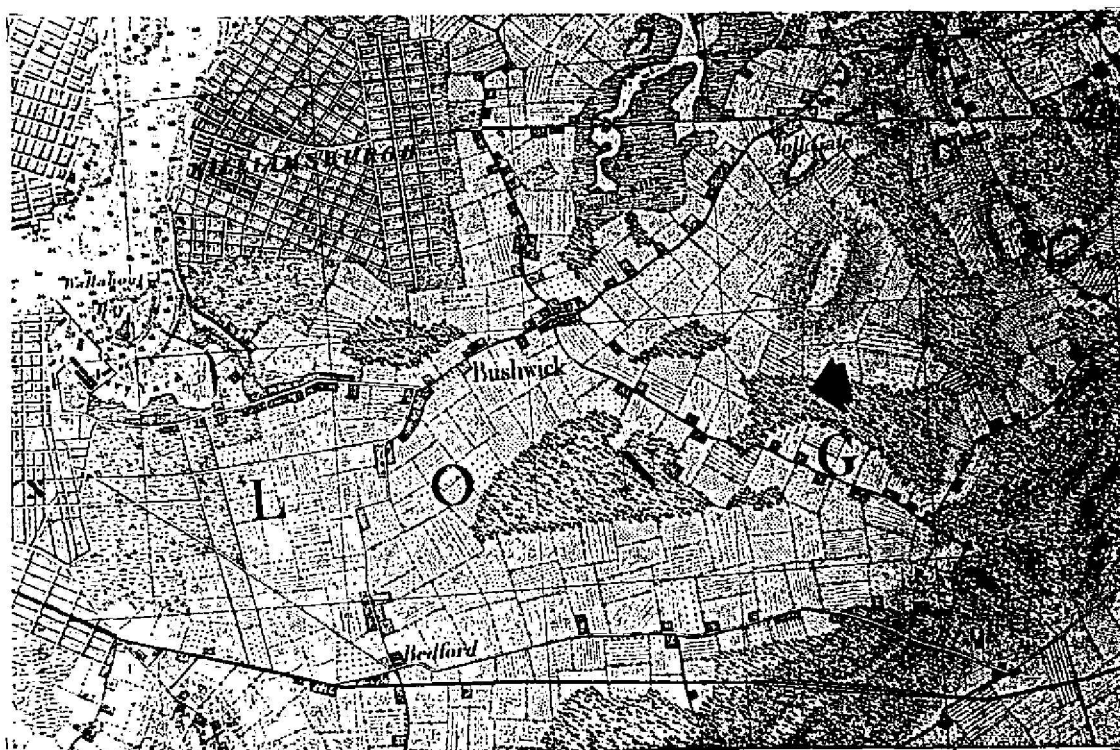


Fig. 4. 1844-45 United States Coastal Survey, "Map of New York Bay and Harbor....,"
Showing the Location of the Project Site, (Coll. New York Public Library)

1 degree

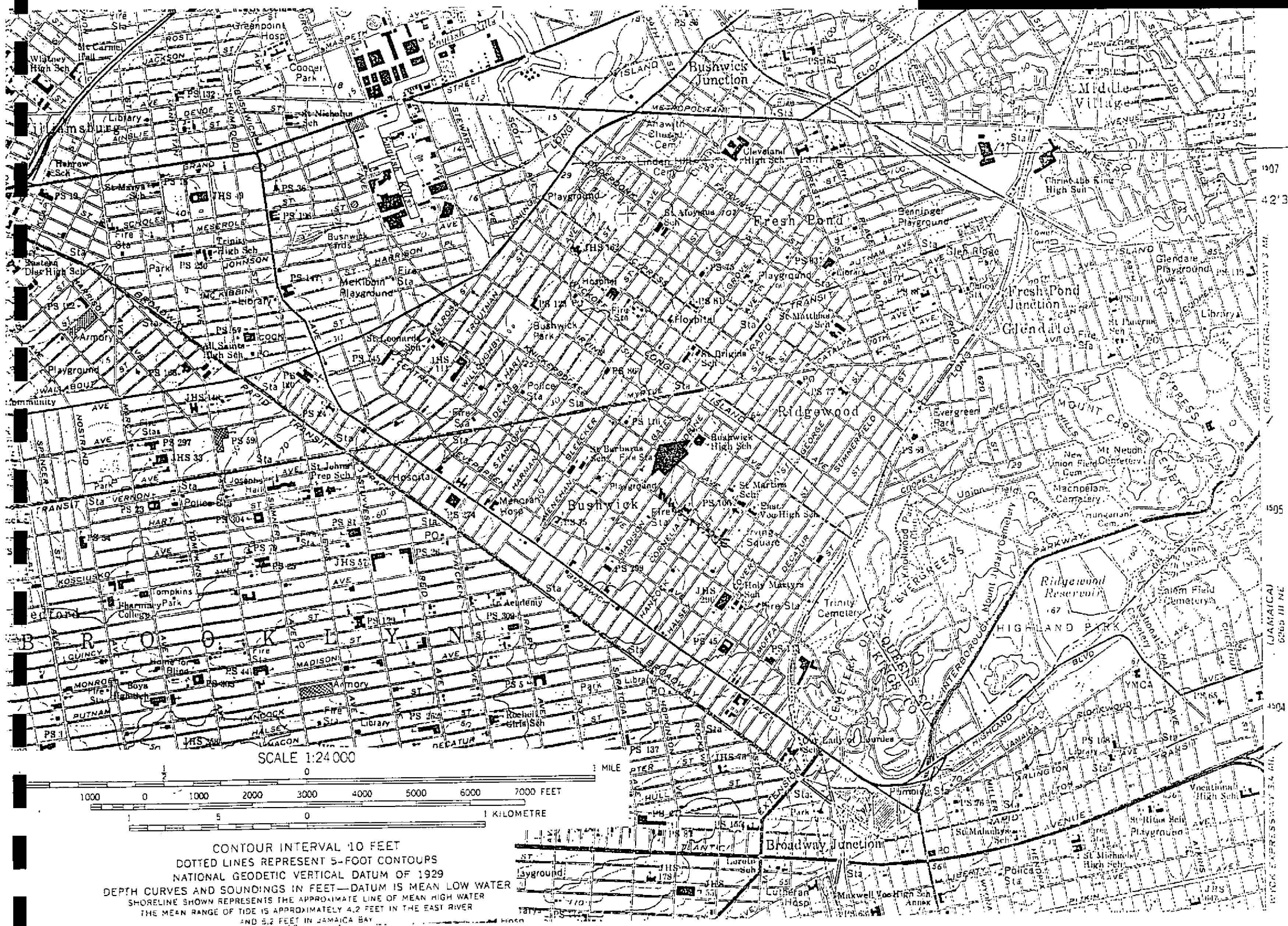


Fig. 5. U.S.G.S. Map Showing the Location of Prehistoric Sites in Brooklyn, Compiled by the State Historic Preservation Office, and Showing the Location of the Project Site, (Landmarks Preservation Commission)

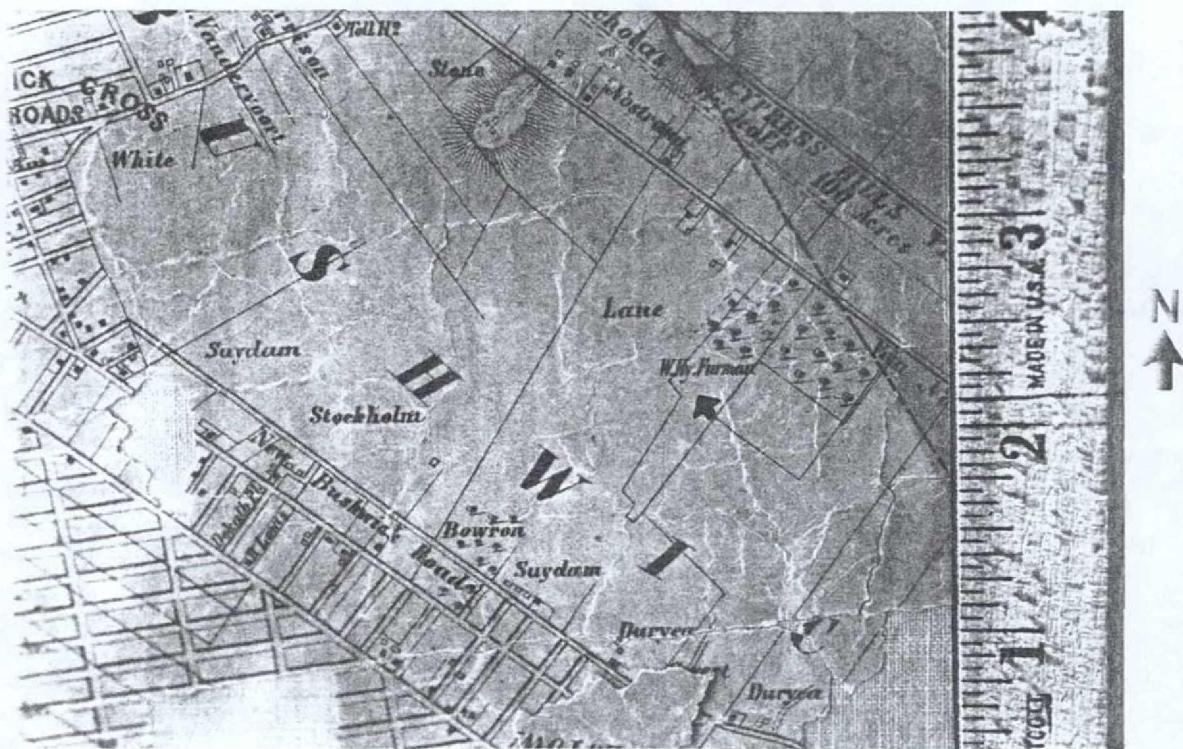


Fig. 6. 1852 Connor "Map of Kings and a Part of Queens Counties...." Showing the Location of the Project Site, (Coll. New York Public Library)

6.75" = 2mis.

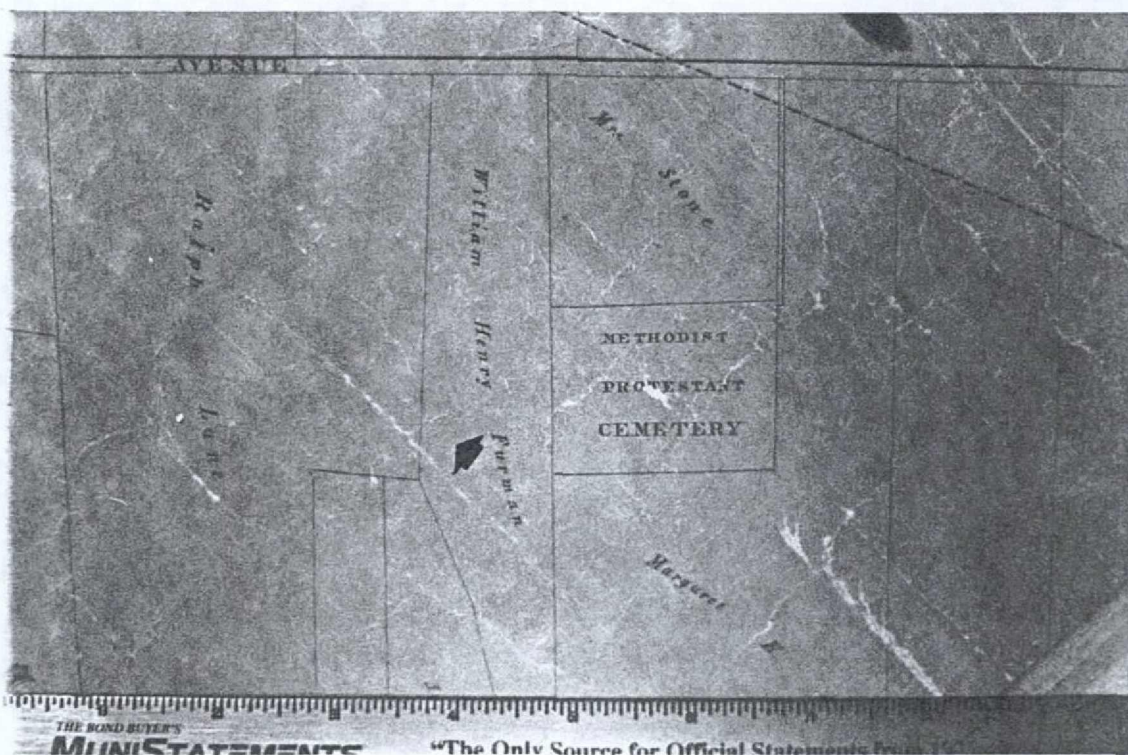
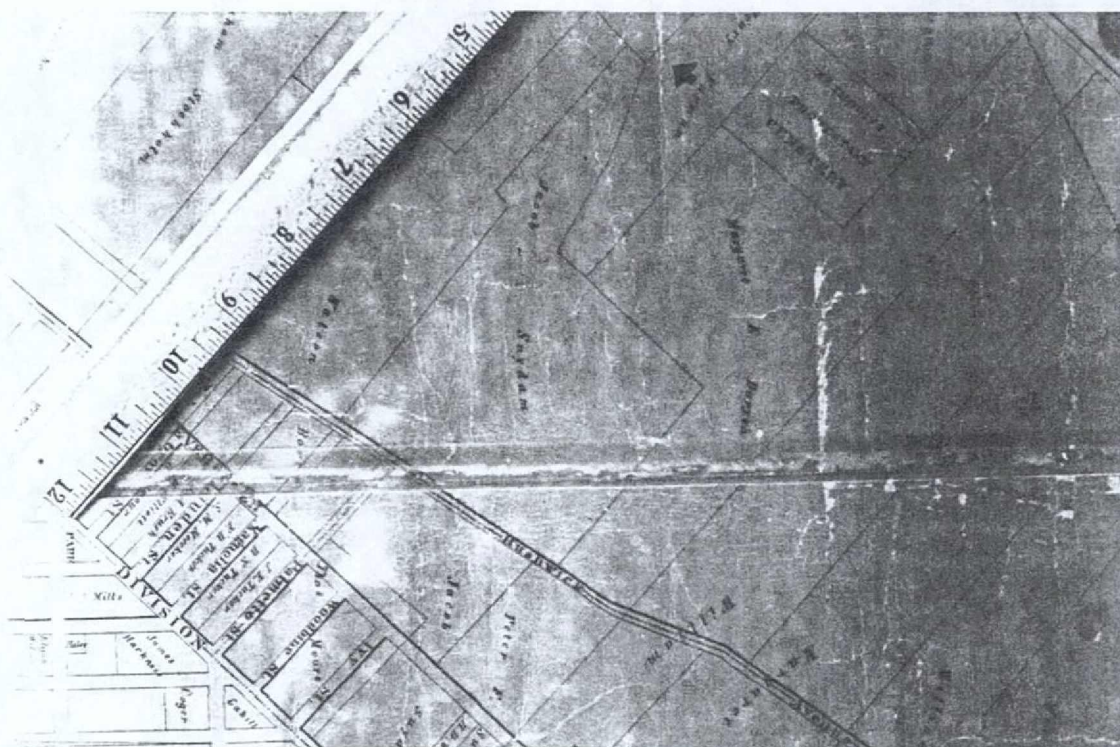


Fig. 7. 1855 Colton "Map of the City of Brooklyn...." Showing the Location of the Project Site, above: Detail of Same, below. (Coll. New York Public Library)

1"= 800'

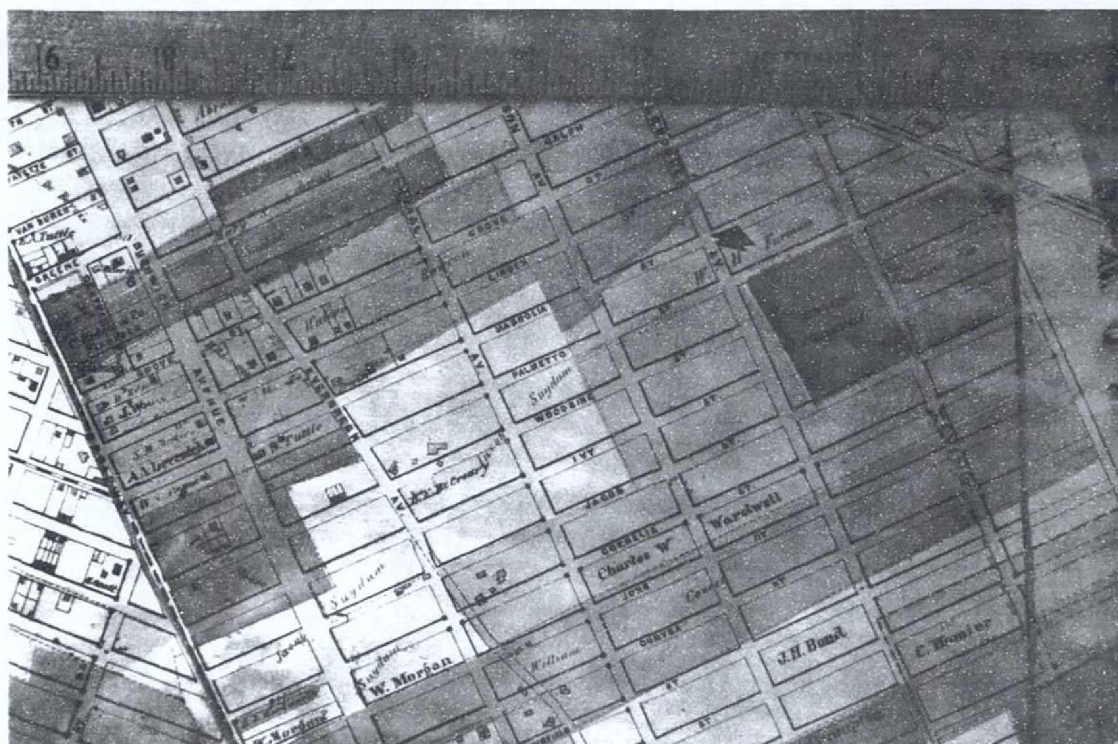


Fig. 8. 1869 Dripps "Map of the City of Brooklyn...", Showing the Location of the Project Site, (Coll. New York Public Library)

1" = 600' approx.

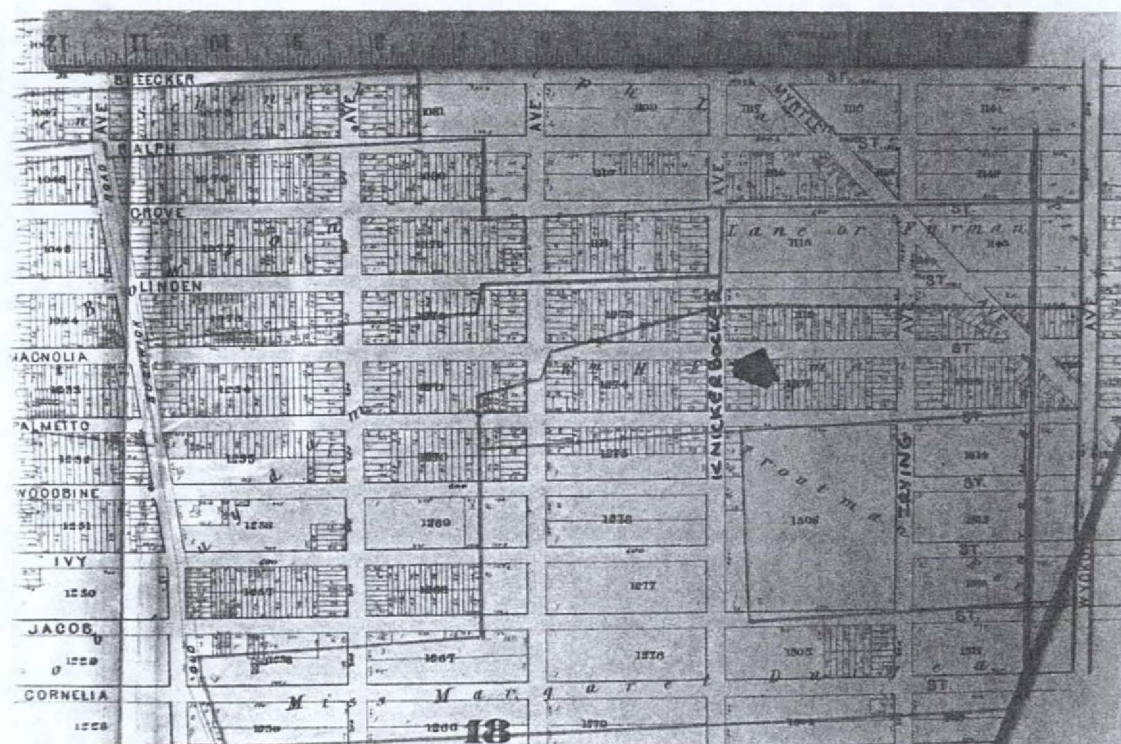


Fig. 10. 1880 Bromley Map, "Part of Wards 18 & 25 City of Brooklyn," pl. 32. Showing the Location of the Project Site, (Coil. New York Public Library)

1"=300'

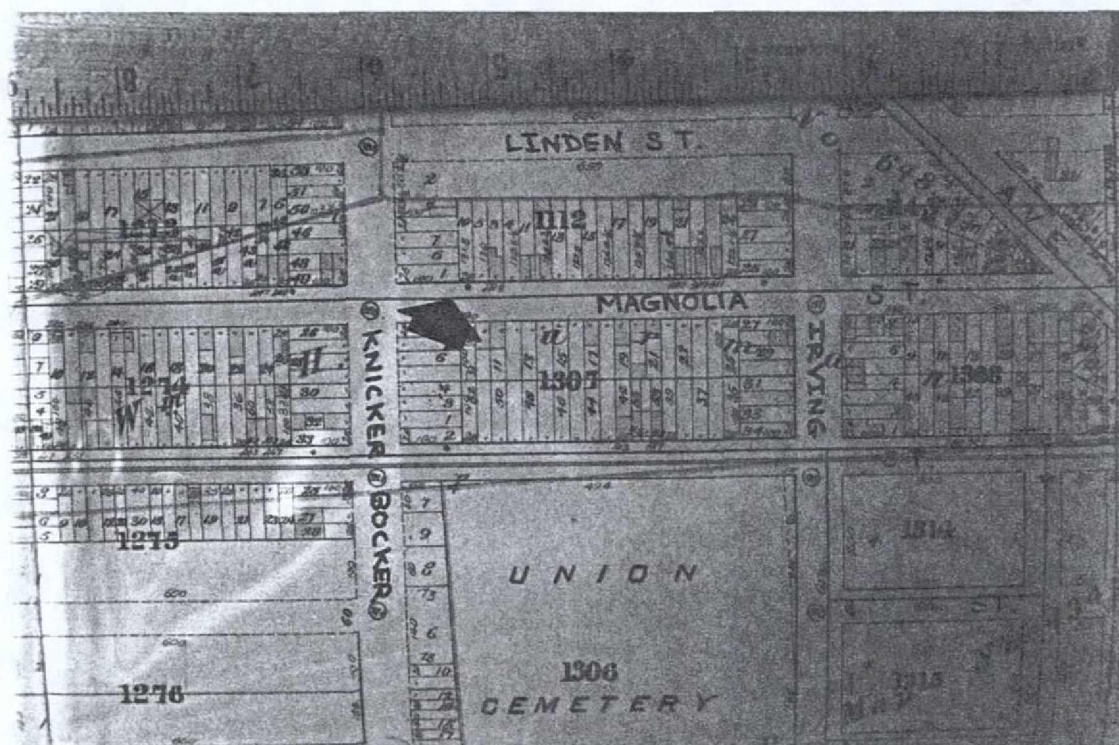


Fig. 11. 1886 Robinson Map, "Part of Ward 18, Brooklyn," Showing the Location of the Project Site, (Coll. New York Public Library)

1"=200"

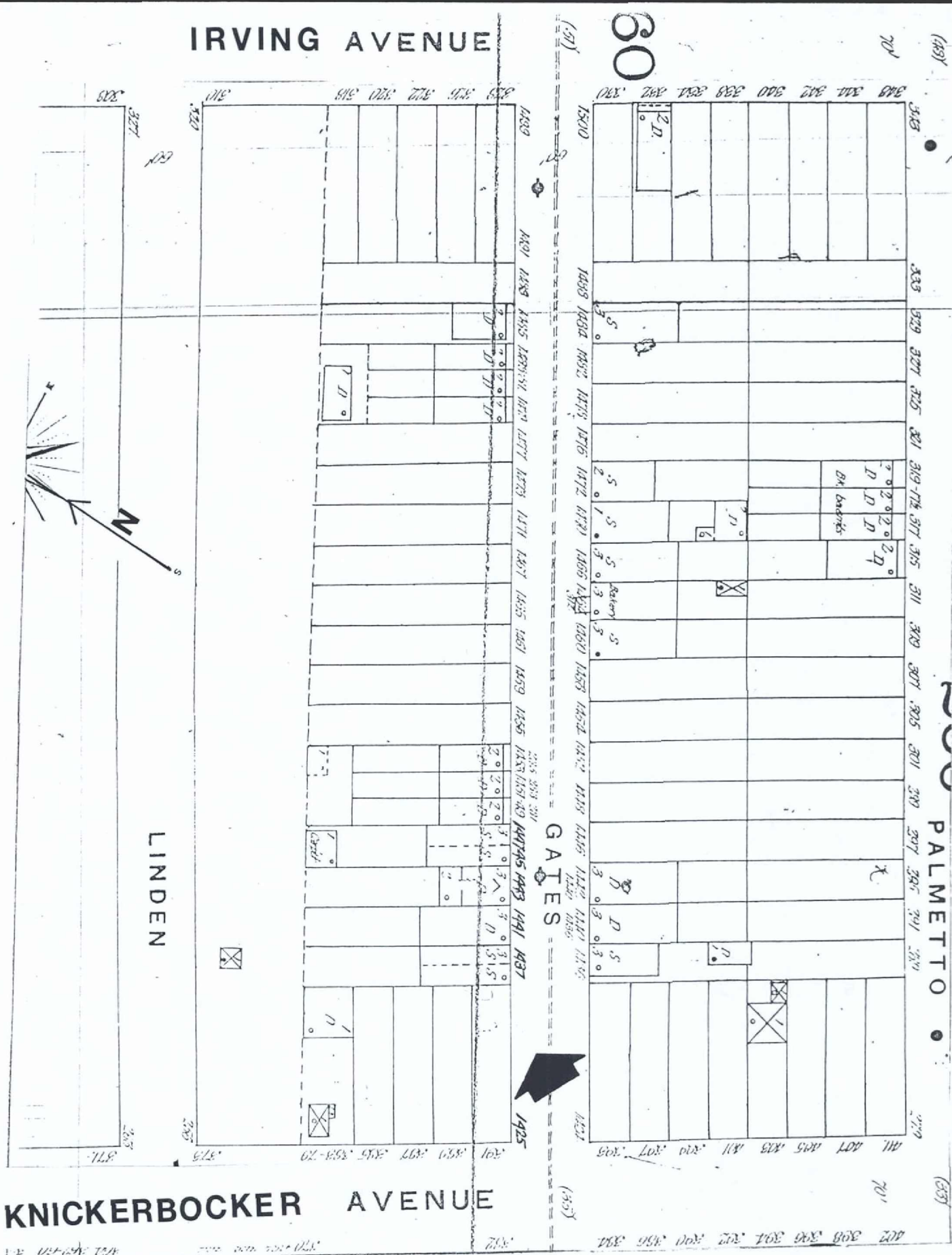


Fig. 12. 1888 Sanborn Map of Block 3335, vol. 9, pl. 258, Showing the Location of the Project Site, (Coll. New York Public Library)

0 50' 100'
FEET

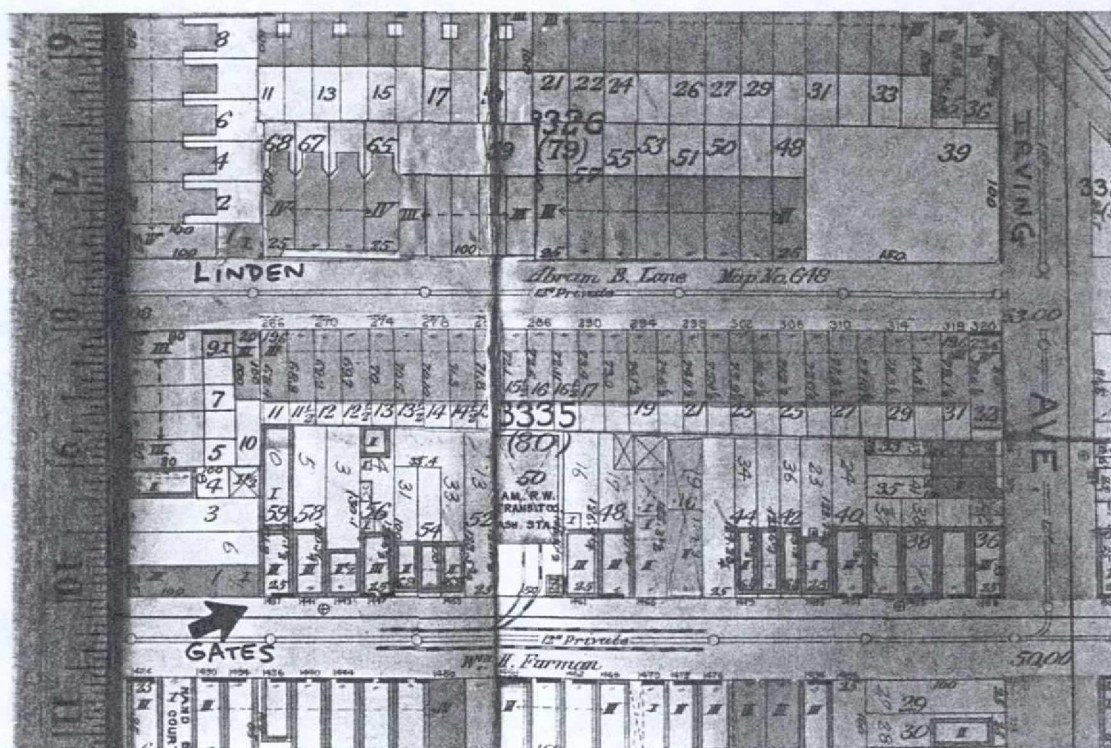


Fig. 13. 1904 Belcher Hyde, "Atlas of the Borough of Brooklyn," vol. 3, pl. 28. Showing the Location of the Project Site. (Coll. New York Public Library)

Scale: 1"=100'

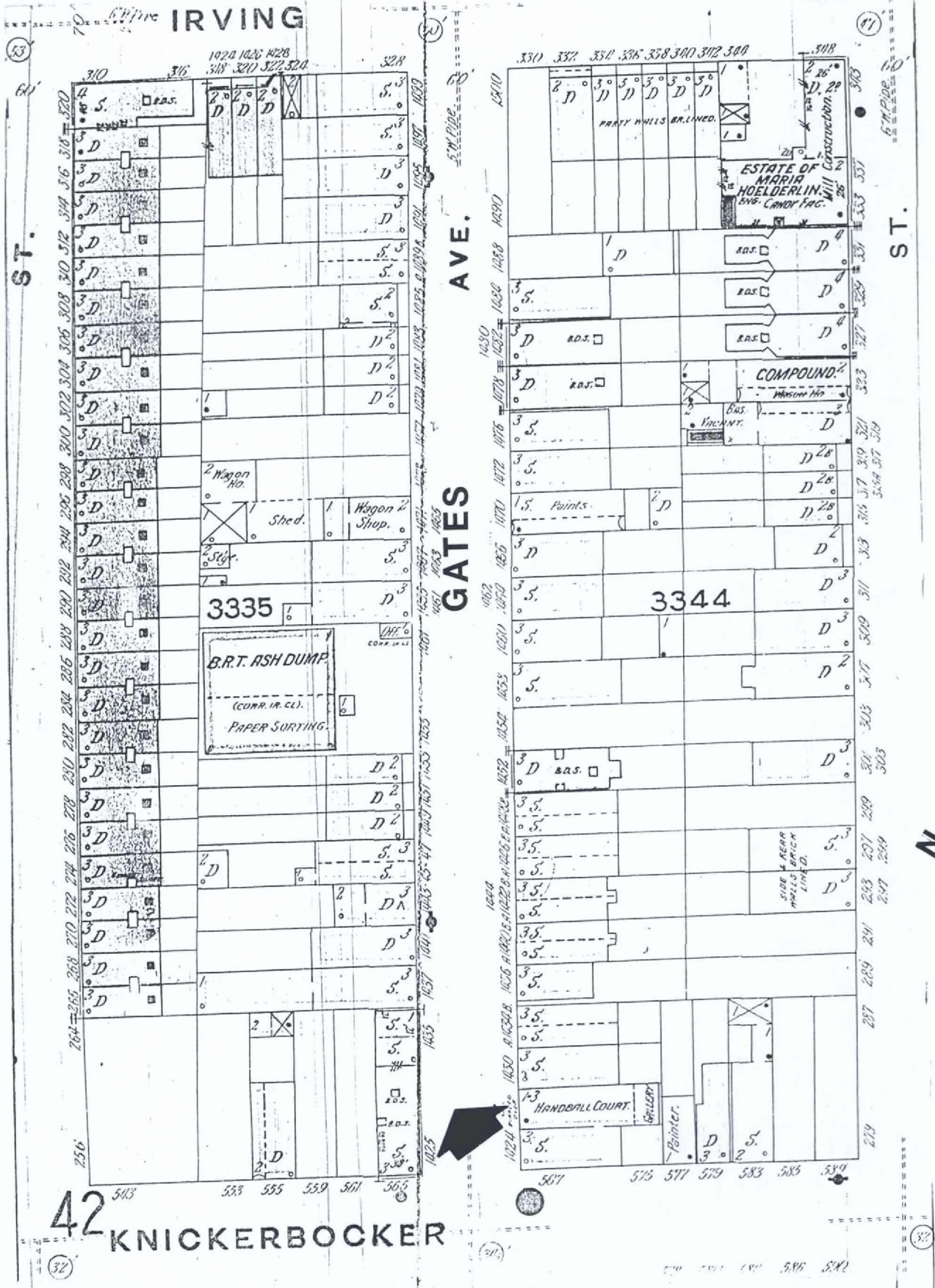


Fig. 14. 1907 Sanborn Map of Block 3335, vol. 9, pl. 43, Showing the Location of the Project Site, (Coll. New York Public Library)



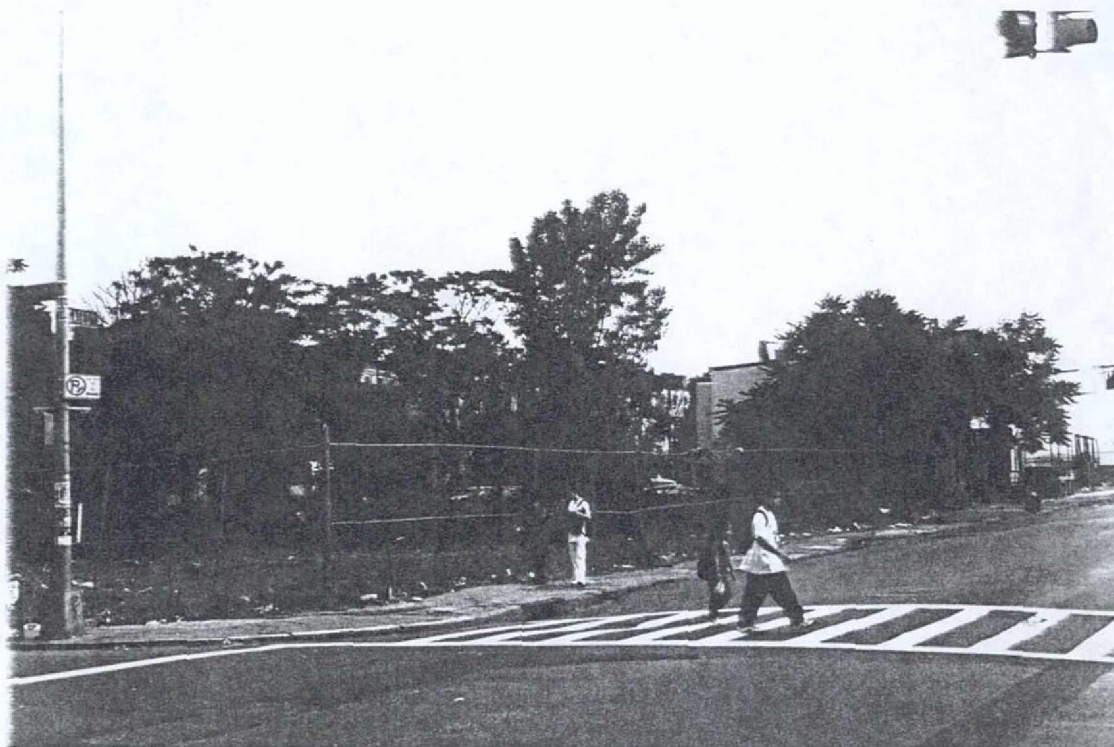


Fig. 16. View of the Project site from the south corner of Gates and Knickerbocker Avenues, looking towards the north

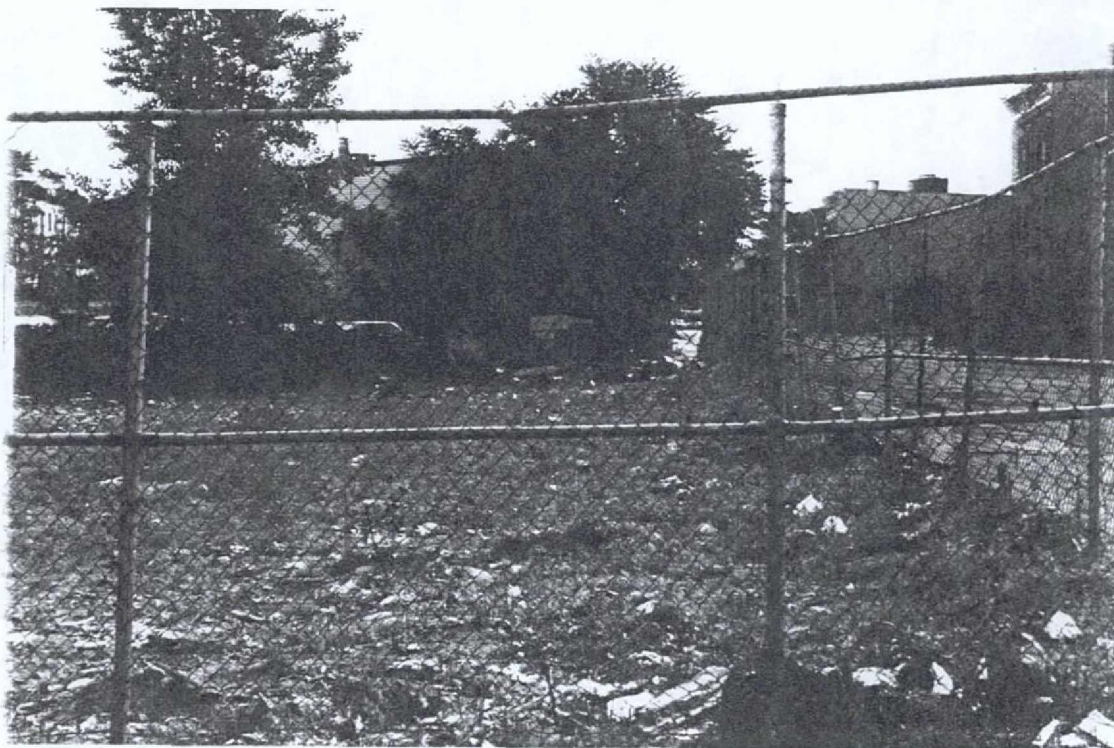


Fig. 17. View of the Project site from the north corner of Gates and Knickerbocker Avenues, looking towards the northeast (Gates Avenue is on the right)

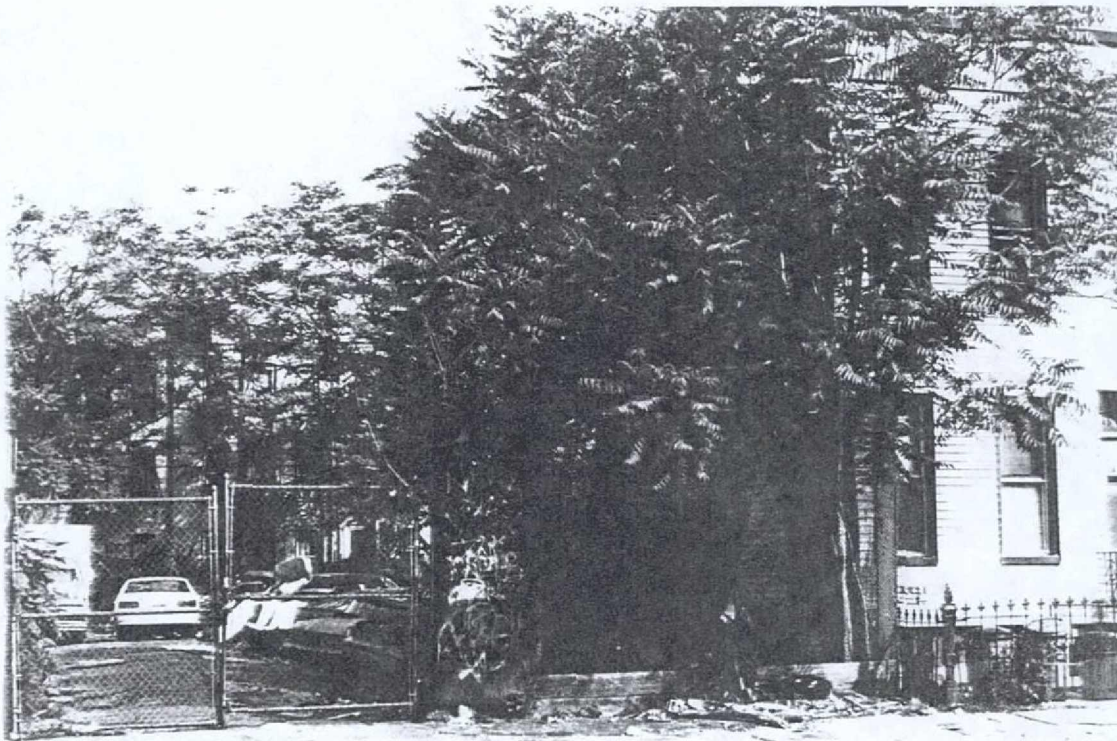


Fig. 18. View of the Parking Lot on the Project site and the Residence at 1449 Gates Avenue, from the southeast Side of Gates Avenue, looking towards the northeast

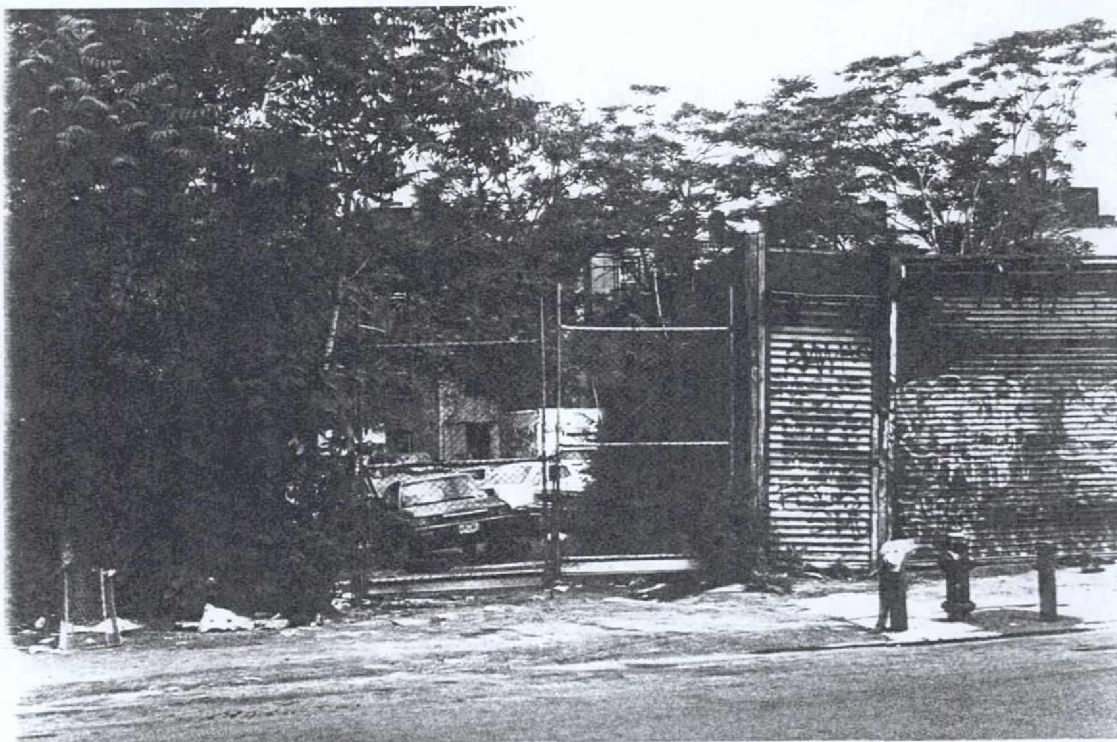


Fig. 19. View of the Parking Lot and Shed on the Project site from the southeast Side of Gates Avenue, looking towards the northeast