

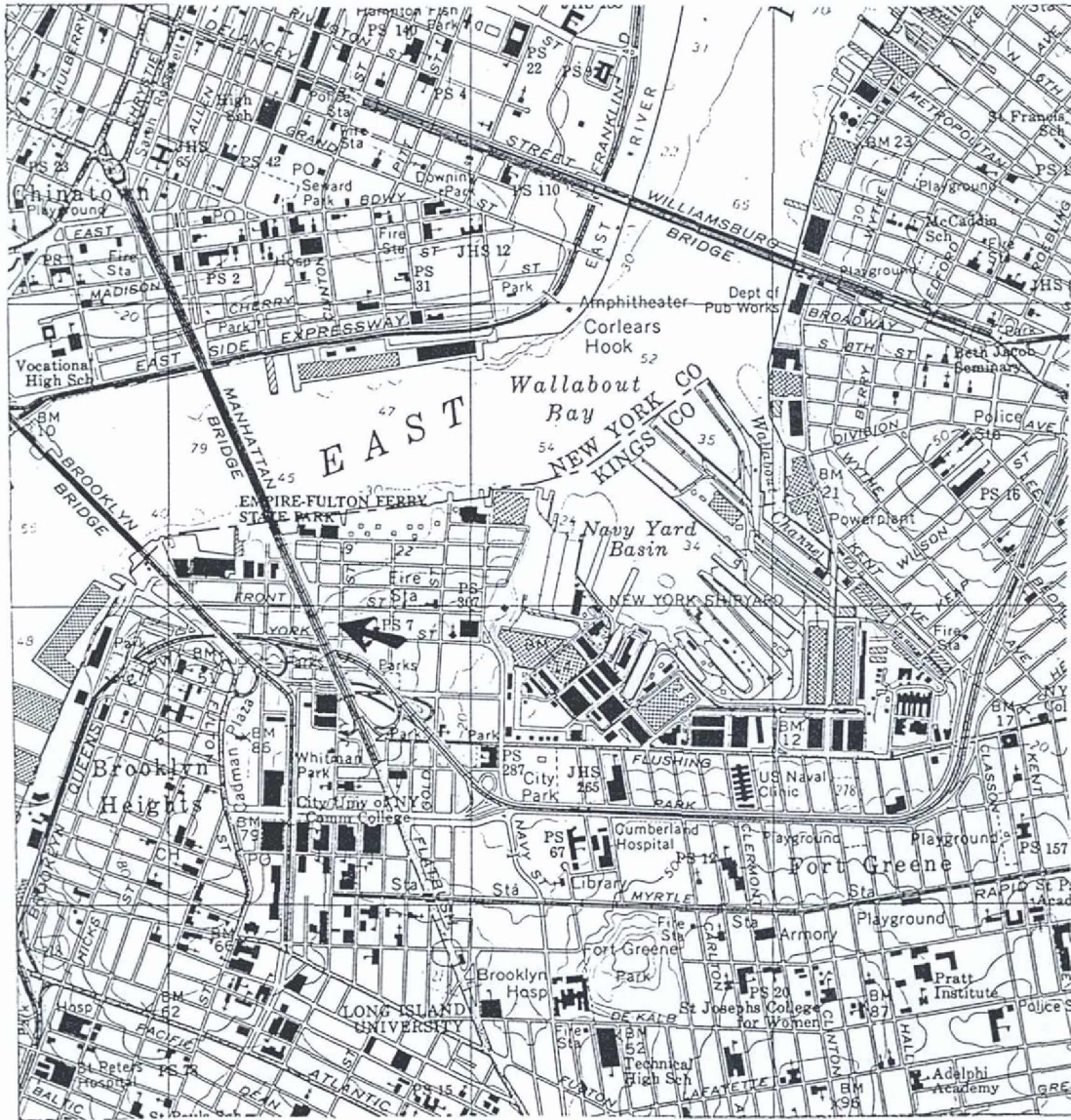
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Bergoffen

LIGHT BRIDGES AT 100 JAY STREET REZONING
BLOCK 53, LOTS 3, 6, 21, 24, 25, 26, 27
BROOKLYN, NEW YORK
PHASE IA ARCHAEOLOGICAL ASSESSMENT REPORT



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I. EXECUTIVE SUMMARY

This report is an assessment of the potential archaeological sensitivity of Block 53, lots 3, 6, 21, 24, 25, 26 and 27 (henceforth the "project site"), in the D.U.M.B.O. section of Brooklyn (front cover, figs. 1-6).

The LPC has found that the project site may possess archaeological sensitivity for remains of 19th century occupation. Accordingly, the object of this report is to determine whether significant archaeological remains may be present, and if so, whether or not successive construction episodes in the past have negatively impacted them. In general, if a phase IA archaeological assessment finds no evidence of subsurface disturbance and the research determines that possible remains have the potential to yield significant historical information, a recommendation for field testing is made in order to determine the presence or absence of such remains on the project sites.

In this report, an overview of the prehistoric and contact period history of the project site area, which includes a description of the environmental setting, is followed by a discussion of the 18th and 19th century history of the area, including data on the project site's 19th century residents gleaned from the Brooklyn Directories, and on the houses and manufacturing establishments that existed here. The evaluation of the construction history and its impact on possible archaeological remains is presented in section V of this report.

The repositories consulted for this report included:

the Brooklyn Building Department,
the Brooklyn Public Library,
the Brooklyn Sewer Department (tap records),
the Brooklyn Topographic Bureau, Borough Hall, Brooklyn (street openings),
the Landmarks Preservation Commission,
the Municipal Archives (tax assessments),
the New York Historical Society library,
the New York Public Library: Map Division, Local History and Genealogy, and
the Office of the City Register, Brooklyn (deeds and conveyances).

The report concludes that lots 24, 26 and 27 are sensitive for 19th century archaeological remains.

II. DESCRIPTION OF THE PROJECT SITE AND PLANNED DEVELOPMENT

The New York City Department of City Planning (DCP) proposes to rezone Blocks 52 and 53 in Brooklyn to a special mixed use district that will facilitate the development of a mixed-use building on approximately 331,855 square feet on the eastern two-thirds of block 53 (front cover, figs. 1-6). That part of block 53 under review for archaeological sensitivity in the present report is currently occupied by a 153-space public parking lot on lots 3, 6, 21, 24, 25 and 26, and a one-story warehouse. A 23-story building proposed for this site would have a maximum length of about 274 feet and an average width of about 98 feet. It would include approximately 153 residential units, 88,040 square feet of office space, and 33,515 square feet of neighborhood retail. Two cellar levels would contain retail space and, on 33,5000 square feet, a parking garage for about 273 vehicles.

West of the project site on block 53 are residential lofts on lot 9, at the northwest corner of the block; a subway substation (NYC Transit) on lot 29, at the southwestern corner of the site, and a truck parking lot under the Manhattan Bridge on lot 1 (NYC Department of Transportation). Block 53 and its neighbor to the west, block 52, are situated under the Manhattan Bridge, and two of the bridge's piers stand immediately west of the project site on block 53, lot 1.

Opened in 1909, the Manhattan Bridge is listed on both the State and National Registers of Historic Places as is the district in which the project is located, called D.U.M.B.O., "Down-Under-the-Manhattan-Bridge-Overpass". This district is largely occupied by commercial or manufacturing establishments, many converted to artists' lofts. The area in the project site's immediate vicinity is comprised mainly of late 19th and early 20th century industrial and warehouse buildings. The block east of block 53 is undeveloped, while an unenhanced park takes up the block southeast of it. Immediately to the north of block 53 is the New York City landmarked Fulton Ferry Historic District, bounded by the East River, Doughty Street, Water Street and Main Street and bisected by the Brooklyn Bridge. The old ferry landing, which spurred the commercial development of the area in the 19th century, is now marked by the restored fireboat house. East of D.U.M.B.O. is the Vinegar Hill district, named after the site of the final battle in the Irish Revolution of 1798. Like D.U.M.B.O., this area is primarily commercial and industrial with a number of artists' studios.

III. ENVIRONMENTAL SETTING, PREHISTORIC TO CONTACT PERIOD HISTORY

Before landfilling began, ca. 1795, the Brooklyn shoreline ran much closer to the project site, approximately midway between Water and Front Streets as far as Dock Street (Map 1776-77; fig. 7). East of the project site was the tidal marshland surrounding the Wallabout Bay. The location of the old shoreline is visible today in the terrain's leveling off at Front Street after a steep descent that begins around Prospect Street. The project site lies at the bottom of the hill shown on the Ritzer map (fig. 7). Today, the terrain still falls as much as 15.4 feet between the southeast (37.1 feet above msl.) and the northeast (21.70 feet above msl.) corners of the site, and 16.7 feet on the west side (33.4 and 16.7 feet above msl.; Brooklyn Topographic Bureau). Between Jay and Bridge Streets, the shoreline swung out to Jay Street.

The Indians of the Archaic Period (ca. 8,000-1,000 B.C.) might have favored such a location for food processing. They preferred coastal locations on islands, at the head of estuaries, or by the seashore, particularly elevated, well-drained tracts of land. Marshlands, rivers and bays offered plentiful supplies of shellfish, fish and wild fowl. With the development of agriculture during the Woodland Period (ca. 1,000-1,600 A.D.) the Indians created large, permanent or semi-permanent palisaded settlements although they still traveled seasonally to their hunting or fishing camps on the shore, the latter identified by middens, huge piles of discarded shells.

For the Indians, as later for the Europeans, the shore west of the project site was also the principal landing place for river traffic. They paddled from the creek that debouched at Peck Slip to the site of the later Fulton Ferry at the foot of Fulton Street. The East River here is at its narrowest. Their main path to the interior of Brooklyn commenced at the boat landing, running along the line of later Fulton Street, then just east of Flatbush Avenue, across the Eastern Parkway, to the Prospect Park reservoir (Armbruster 1919, 5ff.; Bolton 1922, 131; Cropsey 1925). The Indian trails, taken over by the Europeans, provided the outline for Brooklyn's modern road system.

At the time of the European conquest, the area of present-day downtown Brooklyn was settled by the Marechkawiek Indians, one of the Long Island Canarsee groups possibly related to Delaware subtribes (Bolton 1920, 271; Bolton 1922, 132). South of Wallabout Bay, a neck of land jutting into the East River was called the "Cape of the Marechkawieck" (Stiles 1867, 307), and the 1639 Manatus map shows a Marechkawieck longhouse in this area (Grumet 1981, 27). One of the Marechkawieck settlements was discovered in 1826 on a hill on Bridge Street, between Front and York Streets, only one block east of the project site (Bolton 1922, 133). Bolton suggested that another Indian settlement, called Werpos or Wopus, should be located near Warren and Hoyt Streets (Ibid., p. 137). Cropsey (1925) placed the longhouse buildings mentioned above at Borough Hall and Fort Hamilton. Stiles (1869, 35) reported that Indian artifacts were found "on the right of the Old Ferry" (HPI 1984, 5). There are, however, no site reports to accompany any of these findings. The SHPO sensitivity map also records sites east and southwest of the Brooklyn Bridge, on or near the waterfront (Sensitivity map A0047-01-0074, A047-01-0179, A047-01-

0102). Yet in their 1984 report on a site immediately south of the Brooklyn Bridge, HPI consulted Solecki, who was then excavating in the Fulton Ferry area and he stated that he had found no prehistoric remains (HPI 1984, 7).

Although in principle the project site area would be a favorable location for prehistoric food processing or settlement potential prehistoric remains would have been destroyed by intensive urbanization during the 19th century, when the project site was developed both for housing and for industry. Accordingly, it is not considered archaeologically sensitive for prehistoric remains.

IV. 17TH TO EARLY 20TH CENTURY HISTORY OF THE PROJECT SITE

By 1640, the Dutch West India Company had acquired most of the Indian land in western Long Island and established the first European settlement at what would become Brooklyn Heights on Marechkawiek Indian territory (Bolton 1922, 135). In 1637, Joris Jansen de Rapelje, one of the Walloon immigrants who arrived with the first settlers in 1623, bought the tract on the shore which included the project site (Schechter 1970, 5; Office of the City Register, Brooklyn, deeds and conveyances). By 1642, a ferry service, by row boat, was launched between Manhattan's Peck Slip and the ferry slip at the foot of Fulton Street. The first ferryman on record, Cornelis Dirksen, ran an inn near Peck Slip and also owned land on Long Island near the Fulton Street ferry (Stiles 1870, p. 80).

The village of Brooklyn remained largely farmland through the 17th and 18th centuries, as seen on the 1766-67 Ratzer map (fig. 7). On the eve of the Revolutionary War, there were only 56 buildings (Brooklyn Directory 1822, 63). The project site, located east of the "Road to the Ferry", was still farmland. Following the old Indian trail, the ferry road became one of the principal arteries of Brooklyn. It was laid out by Lord Cornbury in 1704 and called the "Kings Highway". In 1817, it was renamed Fulton Street, in honor of Robert Fulton. During the Revolutionary War, the Wallabout was defended by a fort that stood on the elevated ground within present-day Fort Greene Park (between Myrtle and Dekalb Avenues).

The Ratzer map also shows the original shoreline and the site of the "Brookland Ferry". In 1795 the residents of the district that included the project site launched a "new ferry" and built a new road, Main Street, to reach it (Armbruster 1929, 8). Steam ferry service was introduced in 1814 by Robert Fulton. In the early 19th century, ferry services linking Brooklyn to Manhattan, its principal market, proliferated and the area of the ferry landing became the heart of Brooklyn's commercial district. To create order out of the chaos of timetables, all the operations were eventually merged under the New York and Brooklyn Ferry Company in 1839. Ferry service between Brooklyn and Manhattan only came to an end with opening of the Brooklyn Bridge in 1883.

John Rapelje esq. was a loyalist, and so, by an act of attainder passed by the New York State legislature on October 22, 1779, he was declared a traitor and his property confiscated to the state's use. In 1785, the land was granted to Comfort and Joshua Sands. Joshua Sands (1757-1835) was an eminent man: a state senator, twice a member of congress, Collector of the Port of New York, County Judge, and President of Village Trustees (Armbruster 1929, 9). Joshua Sands teamed up with another important figure in Brooklyn history, John Jackson, to lay the foundation for the area on which the project site is located.

John Jackson, the originator and President of the Wallabout Bridge Company, owned the other large estate near the shore that formerly belonged to the Remsens. Bringing together the former Remsen and Rapelje estates, Jackson and Joshua Sands began in 1788 to develop the area by

laying out streets. This district roughly east of Brooklyn Heights has been known by many names including Vinegar Hill, Irishtown, and the Navy Yard Section (Schechter 1970, p. 3). The Irish came at the end of the 18th century as refugees from the failed Irish rebellion. But the early settlers were a large group of related families from Connecticut who were involved in shipbuilding and maritime trades (Armbruster 1929, 3). These "affiliated families" became the backbone of the labor force that shaped the industrial character which this district maintains to the present day.

From the beginning of the 19th century, the area of the project site was a manufacturing center especially for products related to shipping such as rope and cables. In 1801, John Jackson sold a tract of land at the Wallabout Bay to the U.S. Government and the navy yard opened. In that year the fire district and fire department were begun and a cage and stocks set up (Armbruster 1929, 8). Sand, who had mercantile interests and needed to produce rigging for his ships, imported machinery and skilled labor from England and started the first extensive ropewalk in the Brooklyn (Armbruster 1929, 7). The area also contained distilleries (and a high concentration of taverns). Besides ropemakers, Olympia was populated by small mechanics, carpenters, coopers, masons, and laborers (Schechter 1970, 18; Directories). Most of the project site block's residents in the 1820s were employed in one of these trades.

The town's "wonderful career of progress" was given a boost in 1824 with the building of a market and the creation of municipal institutions such as courts and a watch (Manufacturers 1886, 56). In 1816, Brooklyn had been incorporated as a village and divided into seven districts. Between 1814 and 1820, it doubled in size.¹ The project site was now in "The Ferry" district which extended from the Wallabout mill pond to Joralemon Street and included the first five of the nine wards of Brooklyn that were created in 1834 when the village was incorporated as a city (Manufacturers 1886, 58). Today, the project site is in the 2nd ward.

The first Brooklyn Directory in 1822 includes a map that shows the project site block within the built-up area of the town. Jay Street was opened from the East River to the ropewalks, York Street was opened from Main Street to the Navy Yard, and Front Street from Fulton Street to the Navy Yard. According to the record of street openings at the Brooklyn Topographic Bureau, the land for both York and Front Streets, from Main to Jay Streets, was ceded in September 1824. There are no records, however, for the opening of the sections of Peal and Jay Streets between Front and York Streets. Although Front Street was paved by 1822, the road by the project site, in this working class, industrial area "east of Main Street...requires much repair and is scarcely passable for carts or carriages" (Brooklyn Directory 1822, 36).

An ordinance passed in 1822 enjoined residents to number their houses as directed by a superintendent (Brooklyn Directory, p. 68). Some of the addresses in the early directories, however, are still given as "Jay near Front" or "corner of Pearl and Front", leaving unclear which block was meant. But by 1822 street addresses and residents on the project site block are recorded on lots 6 and 21. For the most part, those who lived on the project site were tradesmen

¹ Brooklyn Directory 1822, 51, census of 1820.

and laborers, including a shoemaker, pocketbook maker, ropemaker, mason, tailor, carpenter, and blacksmith. A U.S. Navy Captain, a shipmaster, a mariner, and an oysterman also lived on block 53 in the early 19th century. There were only a few "white collar" workers such as Henry Conklin, an accountant who lived at 79 Pearl Street in 1834-35, and J.R. Waldron, an inspector of customs, who resided on Pearl Street in 1840-41.

There were also free blacks living on or across the street from the project site block. By 1820, there were roughly as many free blacks (882) as slaves (879) in Brooklyn (Davis 1995, 1076). Gilberts Gilbert, listed as a "black doctor" in 1822 to 1824, lived on "Jay near Front". And two other individuals, listed as "black" without a profession, Davis David, and John Wilson, lived on "Jay near Front" and "Jay corner Front", respectively. In 1823 or 1824, David moved to Fulton Street and became a carpenter. Dr. Gilbert's widow lived at Jay near Front for a year on her own after her husband died in 1824 or 1825.

Unfortunately, there are no detailed maps of the area for these decades, nor any tax assessments before 1866 that could provide more information about the number and dimensions of the buildings. The directories, however, indicate that there were multiple-family dwellings and a residential (?) hotel on the project site by 1840. In that year, four residents are listed at 120 Front Street (on block 53 but not part of the project site), and four at 74 Jay Street (lot 21). There was also R. McDermott's 2nd Ward Hotel, listed without a street address, on the north side of York Street between Pearl and Jay Streets.

A number of addresses from the 1820s were located on lot 6. In 1822, the ropemaker Thomas Oxx and the carpenter Simon Pettit resided at 72 Jay Street, on the southern end of lot 6, bordering lot 21 (to understand the location of these lots, see the 1855 Perris map, fig. 8). Moving to the next lot north, at 70 Jay Street, was another carpenter, William Walton. In 1824, John Albert, a ropemaker, moved in next door at 70 Jay Street. Pettit was joined by another carpenter, John Stringham (Oxx is no longer listed). In 1826, Benjamin C. Matthews, a mason, lived at 68 Jay Street. The shipmaster Samuel Nichols resided at 60 Jay Street, on the corner of Front Street, in 1824. At 73 Pearl Street was the cooper Theophilus Hardenbrook. The 1855 Perris map shows that this western part of lot 6 was covered by a Boiler Maker Shop by that time.

One of the first attested addresses on the project site, on lot 21 at 76 Jay Street, was occupied in 1822 by John Abbot, a shoemaker. In the 1830s, it was the home of John Conison and Peter Williams, both laborers. The longest resident on the project site, the hack driver Silas Crawford, lived here from 1840-41 to 1865. This continuous occupancy indicates that the same house existed on the site throughout this period, probably the building shown on the 1855 Perris and 1869 Dripps maps (figs. 8 and 9). The neighboring house at 74 Jay Street, also on lot 21, was occupied in 1824 by Andrew Dezendorf, a marketman; in 1834-35 by Thomas Dunn, an oysterman, and John Sherrad, a laborer. In 1840-41 a crowd of tenants lived at this address: the barber George C. Brown, the mariner William Abrams; J. Williams, and Thomas Dunn. No professions are listed for these last two. Perhaps Dunn had retired by that time.

From 1870 to 1874, the houses on lot 21 were converted into a "Home for Friendless Boys"² but in 1874 the owner, the Church of the Assumption, filed a permit to build a new, 5-story structure with a basement measuring 43 feet in the front and rear and 95 feet in depth (Brooklyn Building Department, Block and Lot files). This building was to be occupied by the Young Mens' Catholic Association. According to the maps, the institution evidently underwent many transforms although the building seems to have remained unchanged. In 1880 it served the Assumption Life Insurance Company (fig. 11); In 1893 it was a church (fig. 12); from 1887 to 1912 it was the Assumption Literary Institute (fig. 10), and in 1920 it was converted into a shop (fig. 16). The 1904 Sanborn (fig. 15) notes it as "Literary Institute (R.C. Church of the Assumption)". The Roman Catholic Church of the Assumption, built in 1842, stood on the corner of York and Jay Streets, opposite the project site.

Evidence for houses on lots 24 through 27 before the sewer system was operational has been gleaned from the Brooklyn Directories and the 1855 Perris map (fig. 8). The houses on lots 25 and 26 were among the first to be connected to the sewer system, in the late 1850s or 1860s, as their permits were recorded in the first book of permits. Unfortunately this book has been lost, as has the third book in the series, in which the permits for lots 24 and 27 were recorded.

From ca. 1851 to 1855, Peter Horton, a plasterer lived on lot 25, at 81 York Street.³ He was succeeded in 1856-57 by William Mullen, an assessor of the 2nd ward, and his wife Jane, who either rented or purchased the property and ran a grocery here until 1862, when they moved out. After the Mullens, Patrick Doherty, a Morocco dresser (leather worker), lived at 81 York Street from ca. 1866-67 to 1870-71. In 1870-71 Directory, his profession is listed as "fire department". The 1855 Perris map shows a brick building, ca. 35 feet deep and a shed at the end of the yard (fig. 8).

In 1893, the building on lot 25, now 101 York Street, was replaced by a five-story brick tenement with cellar of "dumbbell" type that covered 90 feet of the lot (figs. 12, 14-16). Typically, these old law tenements contained four apartments on each floor, two each end, with stairways and shared waterclosets in the middle (Plunz 1990, 24-25). In 1925, the building on lot 25 accommodated eighteen families and a store; in 1929, there were twenty families and a restaurant.⁴ Although the tenement no longer appears on the 1958 Sanborn map (fig. 19), there is a certificate of occupancy

² Stiles (1870) makes no mention of this institution.

³ The Directories have not been exhaustively searched. Two buildings only, without street addresses, are listed in the 1840 cross directory: one is R. McDermott's 2nd Ward Hotel, the other the residence of the tailor A.R. Turner and the auctioneer and commercial merchant J.S. Noble. The latter moved out by 1845.

⁴ Brooklyn Building Department, block and lot files: Application for Minor Structures, Alterations & Repairs, 1925, Appl. 5404, Permit 4156; Application for Minor Structures, Alterations & Repairs, 1929, Appl. 1344, Permit 133.

for 18 families dated May 29, 1975 (Brooklyn Building Department, Block and Lot fine, No. 212291).

In 1862-63 the Mullens moved to the corner house next door at 83 York Street, lot 24, and opened a drygoods store. William died in 1864, but Jane continued to run the drygoods store until 1865-1866, when she moved out. But she is listed as the owner from 1866 to 1886. In 1866-67, Thomas McElroy, a Smith, moved into 83 York Street. The drygoods store apparently no longer existed. The 1855 Perris map shows a ca. 30 feet deep house on the corner, and three other frame buildings, north of it on the same lot (fig. 8). The tax assessments record two houses measuring 40 X 24 and 24 X 40 feet, and indicate that there were three houses on the lot (1874-78).⁵

Mary Ellsinger owned the 24 x 35 foot, three-story building on lot 26 at 99 York Street (formerly 79 York Street), from at least as early as 1866 to 1886 (Tax Assessments), but she lived here with her husband Adam, a smith only from 1866 to 1868. Her building may well be the same as the brick house of the same dimensions shown on the 1855 Perris map (fig. 8). Although the building appears unchanged on insurance maps up to 1929, an application for minor alterations and repairs dated November 20, 1934, records the dimensions of the building at 99 York Street as 30 feet deep.

M. Cassin, a boot maker who had his shop at 77 Wall Street in New York, resided at 77 York Street (lot 27) in 1852-53. In 1854-1855 his widow, Margaret, and three laborers, James Carragan, Robert Congdon and Thomas Gray were listed at this address. The 1855 Perris map (fig. 8) shows a frame building, approximately 24 X 37 feet deep, and two small brick buildings in the rear of the lot. Patrick Crean is the first owner listed of the property, in 1866-69. At that time there were also three houses on the lot, at least one of which had four stories. The houses on the back of the lot were demolished between 1870 and 1874 (tax assessments). The address was then 95/97 York Street. Mary Ellsinger acquired the house on York Street ca. 1875 and continued to own it until 1886. The tax assessments record a single four-story brick building measuring 30 X 48 feet (1878-1882 tax assessments). This matches the building shown on the 1887 Sanborn map (fig. 10) and all later maps up to 1929 (figs. 11-17). There appear to have been actually two semi-detached houses. A demolition notice of April 4, 1934 for 97 York Street gives the dimensions of the building as 12 feet in the front, 30 feet in the rear, and, inexplicably, only 40 feet deep (Brooklyn Building Department, block and lot files). The maps show that the house was bisected to allow for the right-of-way of the Manhattan Bridge (figs. 13, 14, and 17).

Lot 3 was the backyard of the homes at 75 and 77 Pearl Street, later 101 and 103 Pearl Street. In 1870-71, Owen Doherty, a cooper, was listed in the Brooklyn Directory at 103 Pearl Street, but the tax assessments of 1866-69 and 1870-74 record him as the owner of 105 Pearl Street. In 1870-74, Mary Carroll owned a two-story house at 101 Pearl Street, and Michael McElroy

⁵ The owner's name is difficult to read: Dennis Farrier(?) 1866-69; Maria E. Furman, 1870-74; Heirs Dennis (Farrier? Fernen?), 1875-78; William A. Farren, 1878-1882, 1882-86, 1886-1890, no assessment 1886-90; William A. Far[ren] 1894-98.

owned 103 Pearl Street (there is no description of a building). In 1887 there was a wagon maker's shop in a building on the rear half of the lot of 103 Pearl, on present-day lot 3 (fig. 10), and in 1904, this one-story building was still being used as a wheelwright's shop (fig. 15).

In the mid-19th century, Brooklyn was divided into pump and well districts and the residents would have obtained their water from these public facilities (Brooklyn Directory 1824, 42). The 1854 Hearn's Directory (p. 599) records the existence of a public cistern on York Street near Pearl that could have been used by those living on the project site block although it primarily served in case of fire. Following the incorporation of the Nassau Water Company in 1855, work began in 1856 on the excavation of a reservoir in the area of present-day Prospect Park. But it was not until 1859 that water from the reservoir was introduced into the city mains (Manufacturers 1886, 60).⁶ It must therefore be assumed that there were privies and cisterns on the project site between ca. 1820 and the early- to mid-1860s. The houses on lots 25 and 26 were among the first to be connected to the sewer system but unfortunately, the book in which their sewer permits were recorded, the first in the series, is missing, as is the third book of sewer permit records in which the permits for lots 24 and 27 were recorded. It may be noted that between 1867 and 1869, the water and sewer system grew exponentially: from 16 to 150 miles of water pipes, and 14 to 224 miles of sewer pipes.⁷ The earliest records for the project site date to 1874 (book 6), by which time sewers had been installed in all the streets around block 53 (Adams 1875).

Although the building boom ceased in 1854, Brooklyn continued to grow as an industrial and commercial center (McCullough 1983, 34). By 1870, most of lot 6 was occupied by commercial enterprises (tax assessments 1870-74).

The large, brick "Boiler Maker Shop" shown on the 1855 Perris map on the western side of lot 6 (fig. 8) replaced the house at 73 Pearl Street. During the 1880s, the boiler shop was occupied by Norman Hubbard Engines (figs. 10 and 11). What was no doubt the same brick building was still standing on this site in 1904 when it was occupied by the T.D. Carpenter Machine Shop (fig. 15). By 1908, the building had been torn down (fig. 13).

From ca. 1870-71 part of the north side of lot 6, on Front Street, was the site of by John L. Hasbrouk's rectifying plant, which produced spirits (tax assessments). The 1887 Sanborn notes "Rectifying of Spirits" on the plant at 134-140 Front Street (fig. 10). By this time, the Atlas Iron Works had moved in next door at 142-144 Front Street and E.W. Bliss, a well-known industrialist who invented the Whitehead torpedo, owned both properties. On the 1904 Sanborn, the rectifying

⁶ The first 36 inch water main from the Ridgewood reservoir was laid in 1858; a second, 48 inch main was added in 1867; Ostrander 1894, 146.

⁷ Manufacturers 1886, 63: 1867: 16 miles of water pipes, 14 miles of sewers; Jan 1, 1868: 210 miles of water pipes, 134 miles of sewers; Jan 1, 1869: 224 miles of water pipes, 150 miles of sewers. Drain pipes, however, existed earlier: Stiles (1870, 596) records that before 1857, there were already 5,055 miles of pipes that collected rainwater from the low-lying areas.

building is marked "wholesale liquor", while the Atlas Iron Works was now a smith. Both buildings were torn down between 1908 and 1912 (figs. 13 and 14).

By the time of World War I, this now poor working class district had become a slum, and its old commercial buildings were slowly crumbling (Schechter 1970, 18). The remaining buildings on the project site were torn down by 1934, leaving the empty lots that still exist today.

V. BUILDING HISTORY OF THE PROJECT SITE

Old Block & Lot numbers: Block 53 was formerly block 12; Lot 6 included part of lot 9 and lots 12 and 15; Lot 3 was lots 3 and 4; Lots 21 and 24 to 27 did not change.

LOT 3

Addresses: Backyards (south to north) of 77 and 75 Pearl Street, later 103 and 101 Pearl Street.

Building history: The first plan is the 1855 Perris map showing a backyard at 75 Pearl Street and part of the backyard of 77 Pearl Street with a building in it (fig. 8). The tax assessments for 103 Pearl Street (77 Pearl Street) from 1875 to 1898 call the building a shed or a shop. At 101 (75) Pearl Street was a 2 story building (tax assessments 1875-78). Both backyards were covered by one-story buildings by 1887 (fig. 10). At 103 Pearl Street was a Wagon maker's shop, then a stable (fig. 12), then a wheelwright's shop (fig. 15). In 1904, the former backyard of 101 Pearl Street was covered by a two-story frame building of the "Plants Mineral Water Works". Both buildings were demolished by 1908 and lot 3 remained vacant until the present time. It is likely that the buildings would have disturbed any potential backyard features.

Archaeological Sensitivity: None.

LOT 6

Addresses: 60 to 71 Jay Street, later 80 to 90 Jay Street; 73 Pearl Street, later 93-99 Pearl Street; 134 to 144 Front Street.

Building History: The 1820s Brooklyn Directories provide the earliest evidence for buildings on lot 6 at 72, 70, 68, and 60 Jay Street and presumably the backyard of 73 Pearl Street. This last was covered by 1855 (if not earlier) by a "Boiler Maker Shop", a three-story brick building with basement (fig. 8). The boiler maker shop continued in use until it was torn down between 1904 and 1908 (figs. 15 and 13). All the former backyards of the early 19th century houses on the remainder of the lot were covered beginning in 1869 with the acquisition by G.H. Hoffman & J.L. Hasbrouk of the two three-story houses at 134 Front Street, and G.H. Hoffman's purchase of the buildings at 136-140 Front Street, where he set up his distillery (tax assessments 1870-74 and 1878-1882). The 136-140 Front Street property increased in value from \$3500 in 1869 to \$4375, so we may assume that additions were made to the original structure at that time. Hoffman's distillery was a 2-story building with basement, 77 feet wide on the front (tax assessments 1878-

1882). These buildings were torn down between 1904 and 1912 (figs. 15 and 14) and the lot remained vacant until 1951 when a one-story brick building measuring 73 feet 2 3/4 inches by 66 feet 1 inch by 81 feet 11 inches was erected at the southwestern end of lot 6 and on the western part of lot 21 (Brooklyn Building Department, block and lot files). This building, which still stands, is a truck and trailer maintenance and repair shop and office. The industrial buildings either destroyed or would have disturbed any potential archaeological features.

Archaeological Sensitivity: None.

LOT 21

Addresses: 74 and 76 Jay Street, later 92 and 94 Jay Street.

Building History: The 1820s Brooklyn Directories provide the earliest evidence for buildings on lot 21 at both 74 and 76 Jay Street. In 1874, these buildings were replaced by a new, 5-story building with basement measuring 43 feet in the front and rear and 95 feet in depth (Brooklyn Building Department, Plans and Specifications for New Buildings No. 170, June 26, 1874). The 1887 and 1904 Sanborns (figs. 10 and 15) show that the building was set back from Jay Street so that it ran back to the middle of the block, covering the former backyards of the earlier buildings. This would have destroyed any potential backyard features.

Archaeological Sensitivity: None

LOT 24

Addresses: 83 York Street, later 103 York Street; 78 and 80 Jay Street.

Building History: The earliest evidence for a building on this lot is the 1855 Perris map which shows a ca. 30 feet deep house --smaller than its neighbors at 101 and 99 York Street-- on the corner, and three other frame buildings, two numbered 78 and 80 Jay Street, north of it on the same lot (fig. 8). The nearest building, approximately 18 feet behind the house, is probably a shed. It measures some 24 X 8.5 feet deep. The buildings on Jay Street are not recorded in the tax assessments of 1866-69 or 1870-74. But in the 1875-78 tax assessments, Jane Mullen, who ran the drygoods store with her husband at 83 York Street first listed in the 1862-63 directory, is named as the owner of 3 houses on this lot. Only the dimensions of two are given 40 X 24 and 24 X 40 feet, and these new houses are shown on the 1887 Sanborn as a store and a residence, the latter at 100 Jay Street (fig. 10). The new corner building covered part of the former backyard of the house shown on the 1855 Perris. The shed could be the third building recorded in the 1875-78 assessments. It now stood exactly in the middle of the lot, with approximately 4 to 4.5 feet

between it and the walls of the two adjoining buildings. This 4 to 4.5 foot strip has not been impacted by subsequent constructions and a privy or cistern could well have stood here, in front of the shed (rather than directly behind the house). (The shed shown on the 1904 Sanborn stood over the old shed, fig. 15).

Archaeological Sensitivity: The 4 to 4.5 foot sections of lot 24 beginning 30 feet north of York Street described above is sensitive for 19th century archaeological remains.

LOT 25

Addresses: 81 York Street, then 101 York Street.

Building History: The 1851-52 Brooklyn Directory provides the earliest evidence for a house at 81 York Street. The 1855 Perris map shows a brick building about 24 X 35 feet deep and a shed, at the northern end of the lot, that measured approximately 24 by 10 to 10.5 feet deep (fig. 8). In 1893, a 5 story tenement building with basement, measuring 90 feet in depth, was built over the entire area of the former backyard of 101 York Street (tax assessments 1894-1898; fig. 12). This would have destroyed any potential backyard features.

Archaeological sensitivity: None.

LOT 26

Addresses: 79 York Street, then 99 York Street.

Building History: The earliest evidence for a building on lot 26 is the 1855 Perris map which shows a brick building that matched its neighbor on lot 25 (fig. 8). It measured 24 X 35 feet and had a basement (tax assessments 1875-78). It also had an identical shed at the northern end of the lot measuring approximately 24 by 10 to 10.5 feet deep. The 1887 Sanborn shows the addition of two one-story brick wings at the rear of the building measuring a total of 10 X 39 feet deep (fig. 10). The 1912 Sanborn shows that the first wing was now approximately 14.5 X 19 feet deep (fig. 14). The second brick wing was replaced by a frame shed measuring approximately 8.5 X 24 feet deep. The approximately 11.5 X 24 feet of yard between this shed and the shed at the back of the lot shown on the 1855 Perris has not been impacted by subsequent construction. Nor has the strip of former back yard on the western side of the lot, varying in width from approximately 10 to 14 feet to 24 feet in width by 54.5 in depth.

Archaeological sensitivity: The area of the lot beginning 35 feet north of York Street, as described above, is sensitive for 19th century archaeological remains.

LOT 27

Addresses: 77 York Street, then 95/97 York Street.

Building History: The earliest evidence for a building on lot 27 is the 1852-53 Brooklyn Directory that lists M. Cassin, a boot maker at this address. The 1855 Perris map shows a frame building approximately 30 X 37.5 feet deep and two brick buildings approximately 12.5 feet behind it on the western side of the lot, measuring together approximately 17 X 50 feet deep (fig. 8). These buildings reappear on the 1893 Bromley map (fig. 12) but are otherwise not shown on any map after the 1855 Perris. In the 1870-74 tax assessments the notation "3 houses" was crossed out, so the back buildings were probably demolished in those years. According to the 1875-78 tax assessments, a new four-story building at 95/97 York Street measured 30 X 48 feet. The 1886-90 tax assessments record that this building had a basement. It survived until 1934 (Brooklyn Building Department, block and lot files, Demolition notice). There was no other building on the lot. The 30 X 48 foot building ran over the yard immediately behind the house shown on the 1855 Perris map and would have destroyed any potential features there. However, the privies used by the residents in the 1850s may well have been sited in the area east of the brick houses on the back of the lot in an area measuring approximately 9 feet wide by 50 feet deep.

Archaeological sensitivity: The area 9 feet by 50 feet beginning 50 feet north of York Street, as described above, is sensitive for 19th century archaeological remains.

VI. CONCLUSIONS

Lots 24, 26 and 27 are sensitive for 19th century archaeological remains as the houses on these lots must have been initially equipped with privies and cisterns. There were buildings on lots 24 and 26 at least as early as 1855 and on lot 27, at least by 1852. Sewer service began only in 1859. The house on lot 26 was connected early on, but those on lots 24 and 27 were not connected until some years later, probably during the 1860s. We know the names and professions of most of the individuals who lived on these properties. They were the working class people whose skill and labor supported the manufacturing industries that characterized this neighborhood from its beginnings. But their lives are not recorded in the history books. Indeed, with the exception of Armbruster's efforts (1929) to trace the genealogy of the Connecticut families that settled here in the late 18th century, there is little information on the neighborhood's inhabitants. An investigation of the archaeological remains connected with the working class people who lived on the project site block in the mid-19th century could shed light on the neighborhood's economy and the quality of life of its residents at an important juncture in the area's history, the beginning of the modern era.

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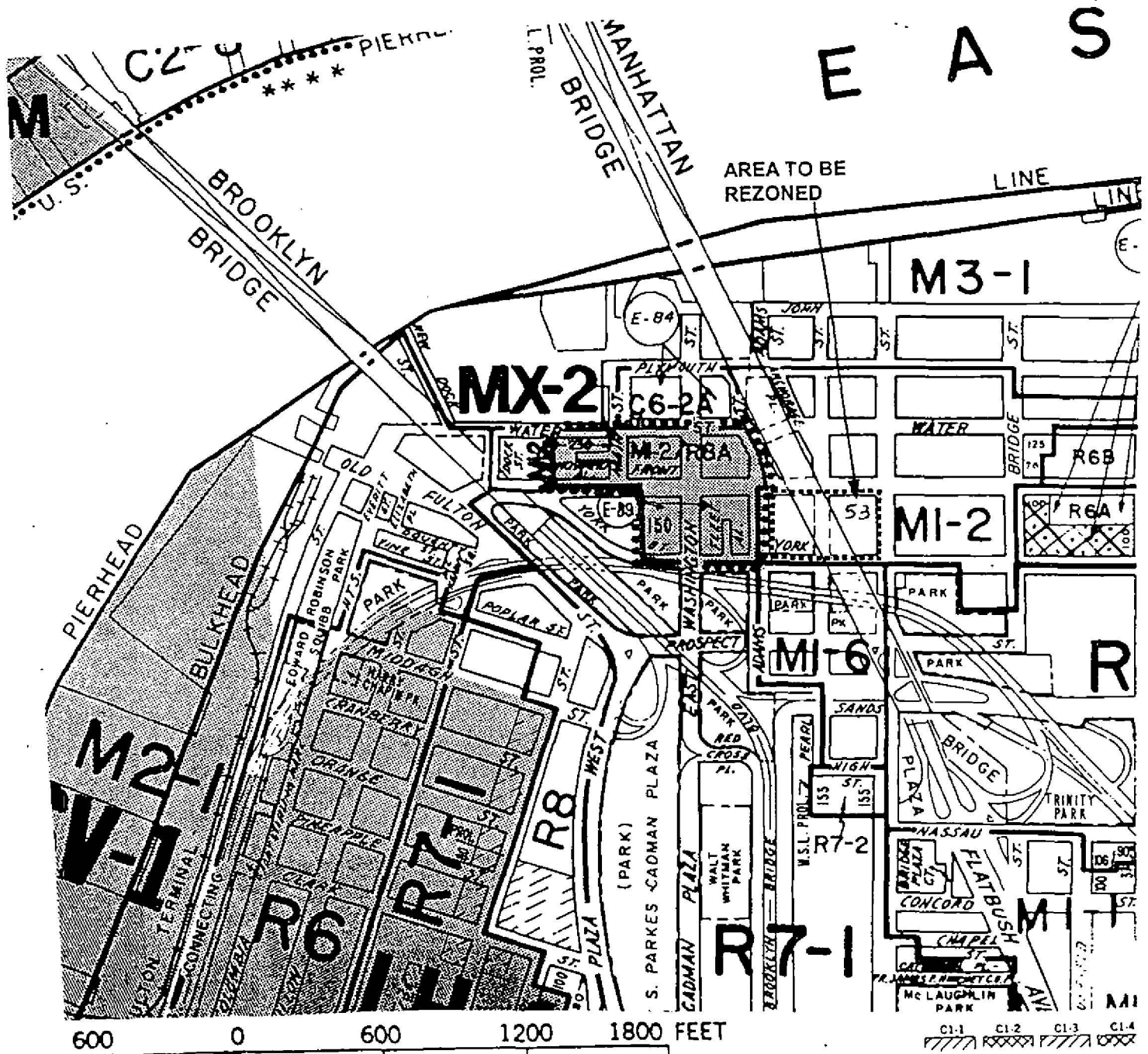


Fig. 1. Zoning map showing the location of the project site (*Light Bridges at 100 Jay Street Rezoning Environmental Assessment Statement, Philip Habib & Associates, fig. 3*).

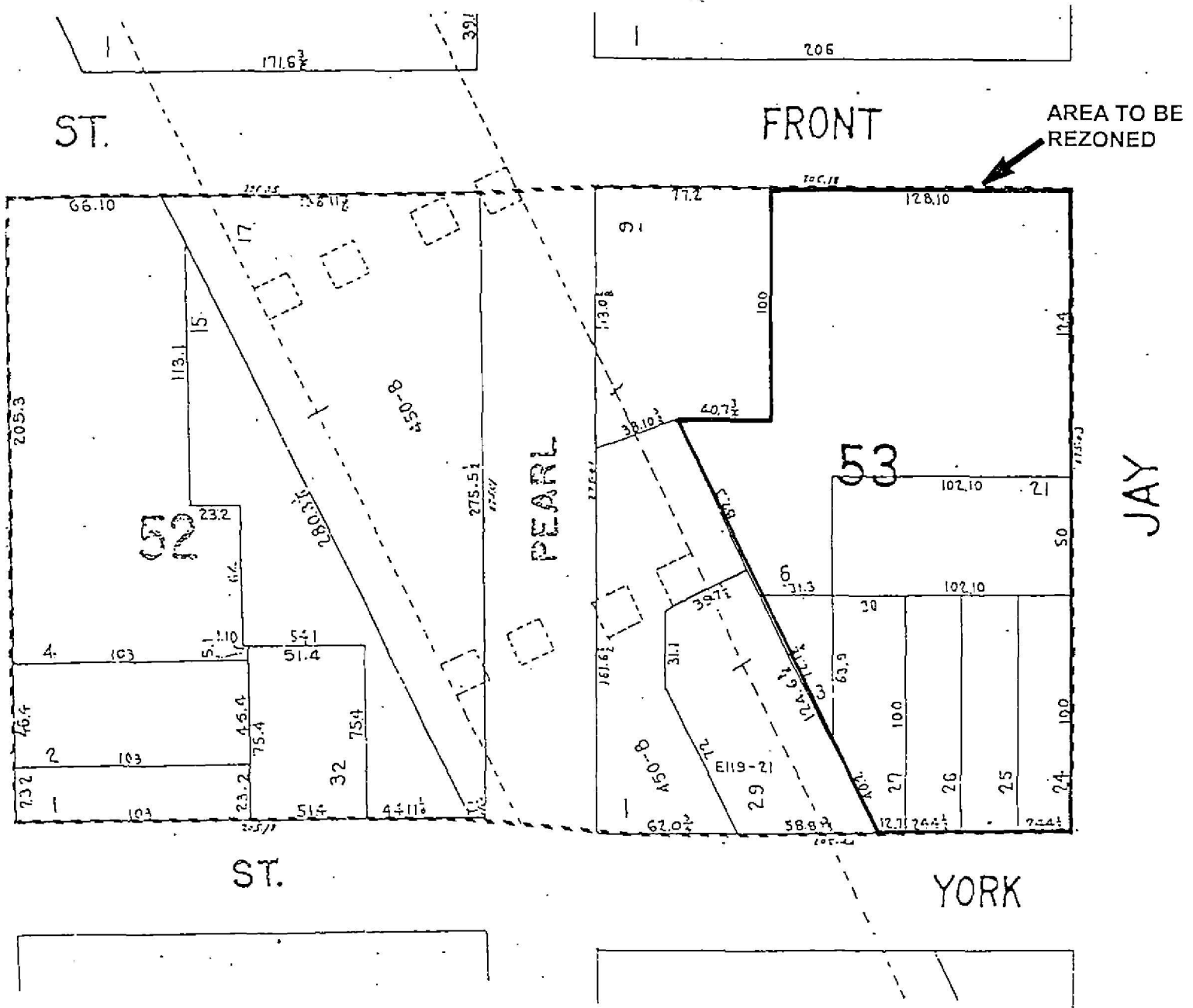
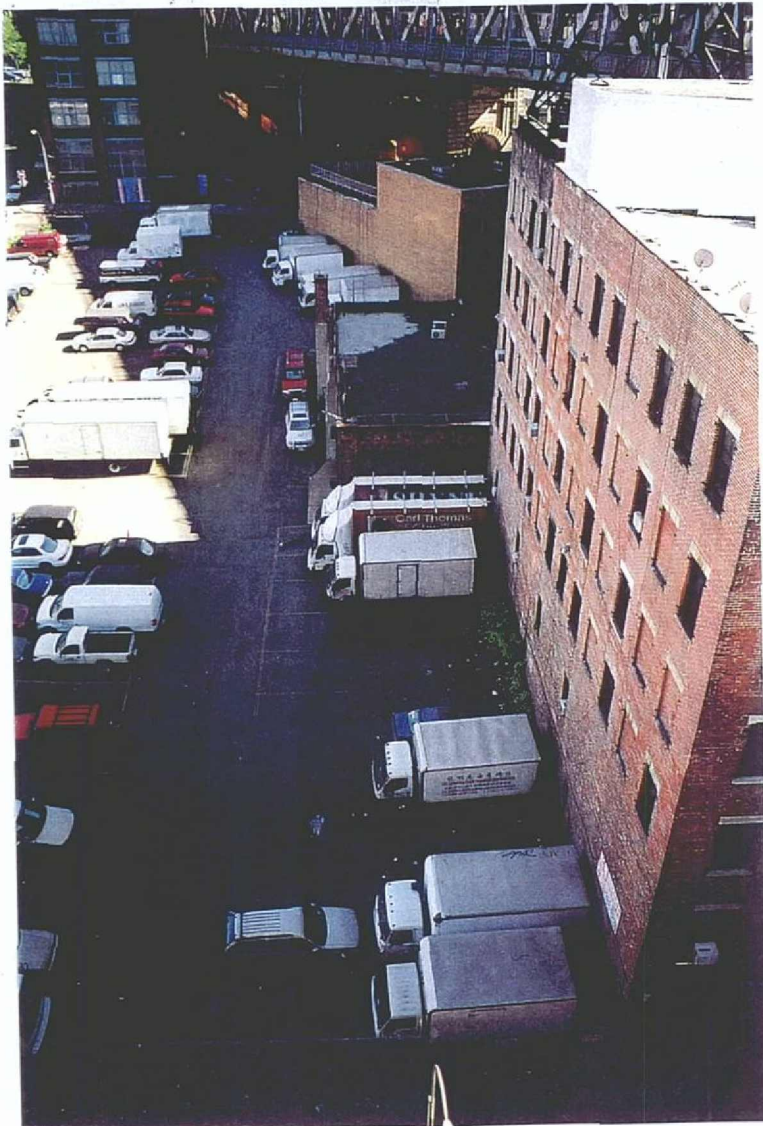


Fig. 2. Tax Map showing the location of the project site (*Light Bridges at 100 Jay Street Rezoning Environmental Assessment Statement*, Philip Habib & Associates, fig. 2)



Figs. 3 (above) and 4 (below)
View of the project site
from above looking south.



Fig. 5. View of the project site from the corner of Front and Jay Streets looking south southwest.



Fig. 6. View of the project site from the corner of Jay and York Streets looking northwest.

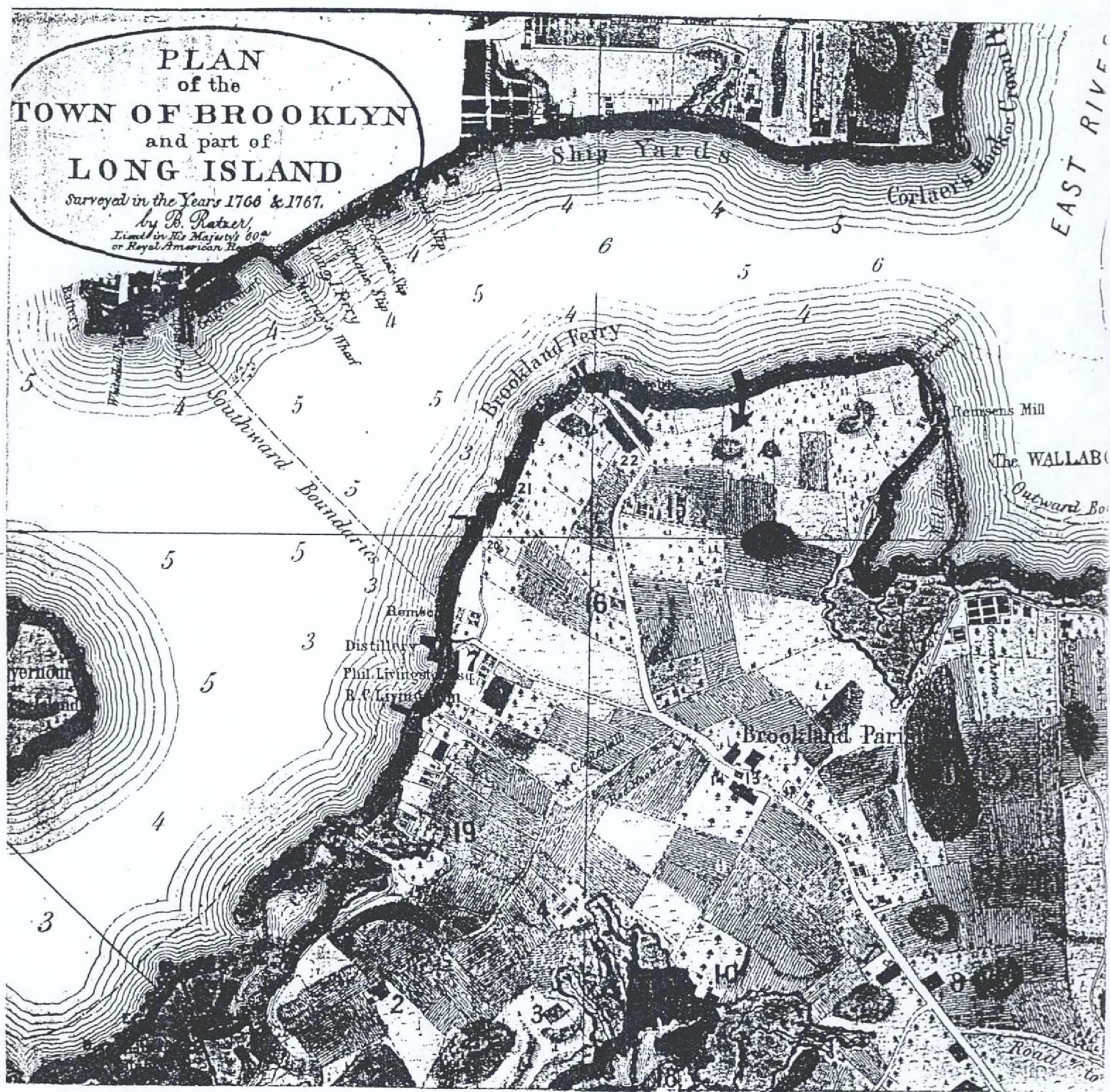


Fig. 7. Detail of the *Plan of the Town of Brooklyn and part of Long Island* surveyed in the years 1766 & 1767 by B. Ratzer showing the location of the project site.

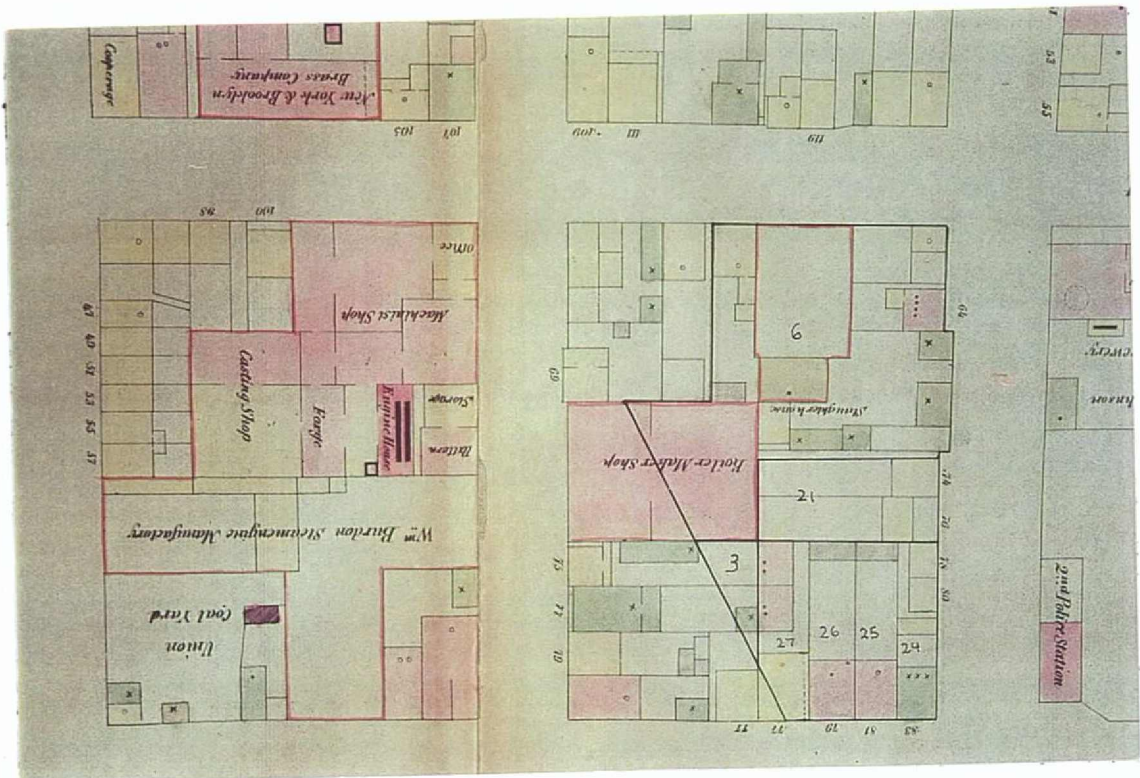


Fig. 8. 1855 Perris map showing the location of the project site .

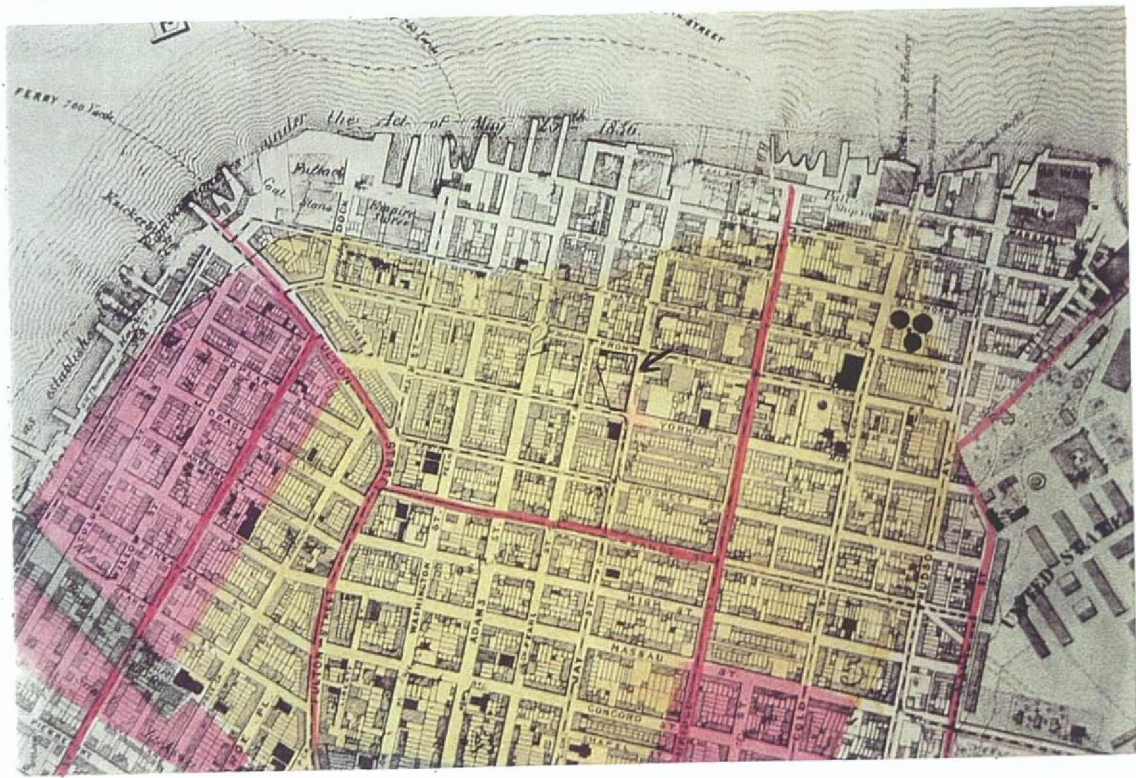


Fig. 9. 1869 Driggs map showing the location of the project site .

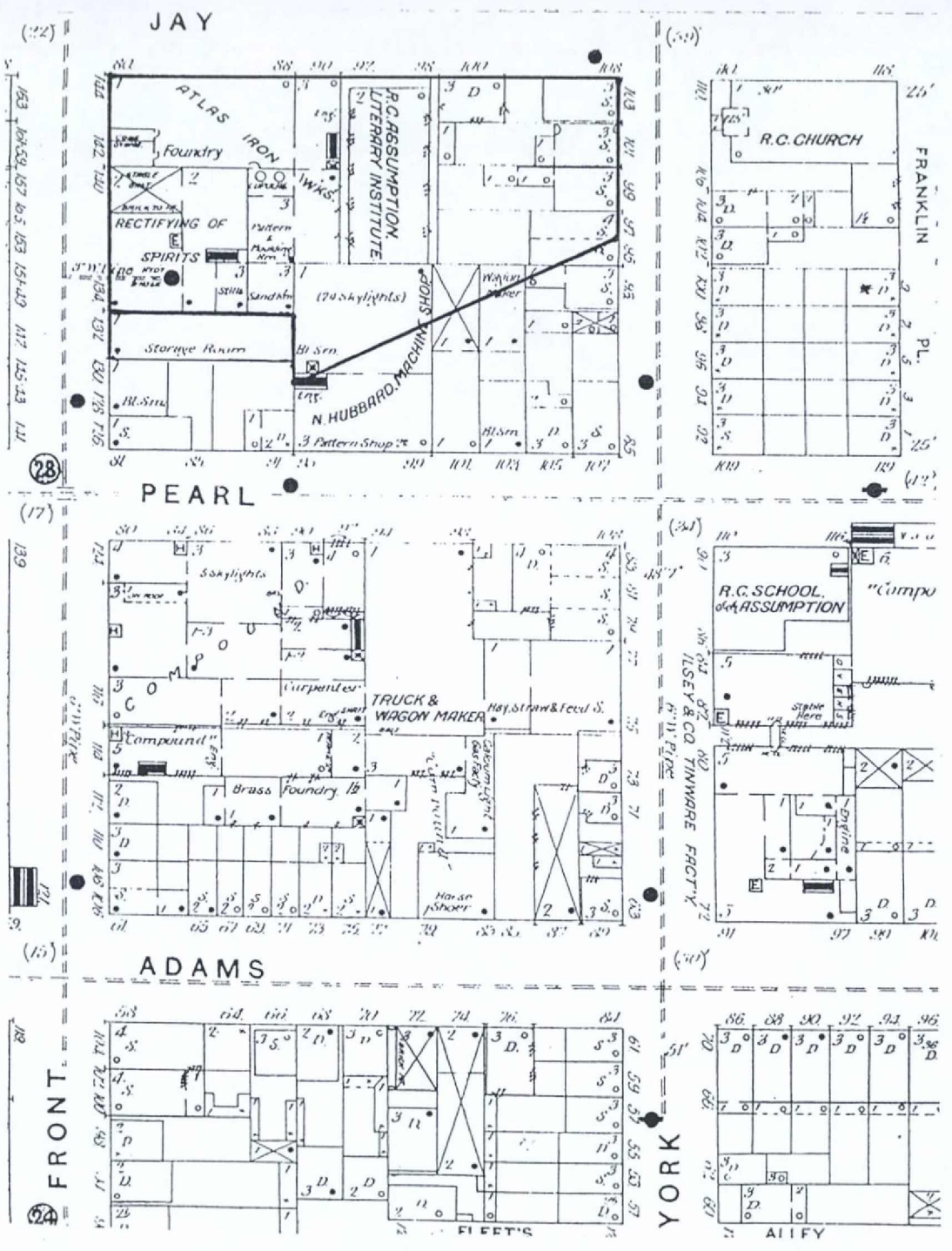


Fig. 10. 1887 Sanborn map showing the location of the project site.

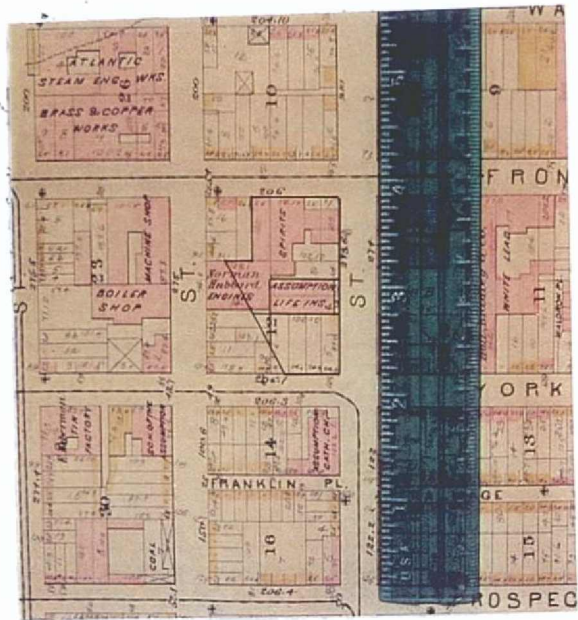


Fig. 11. 1880 Bromley map showing the location of the project site.

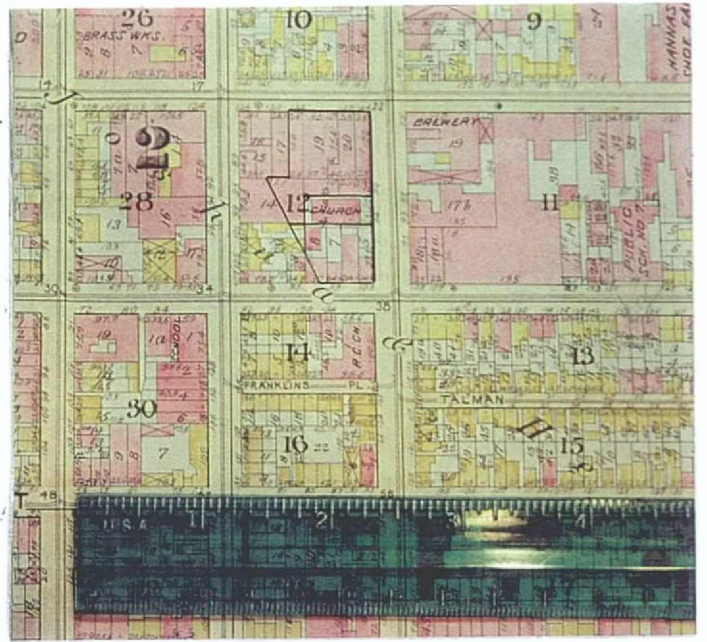


Fig. 12. 1893 Bromley map showing the location of the project site.

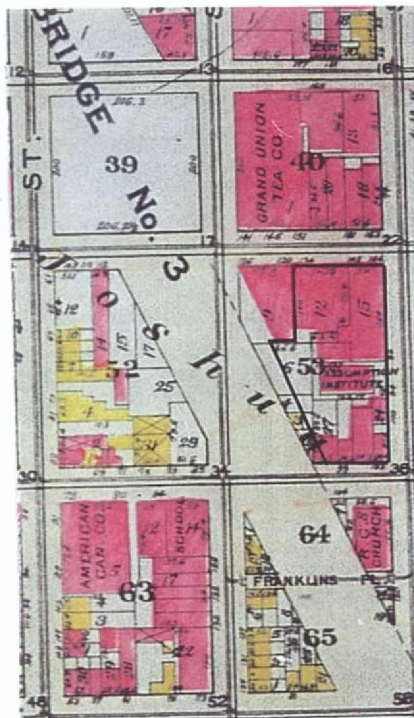


Fig. 13. 1908 Bromley map showing the location of the project site.

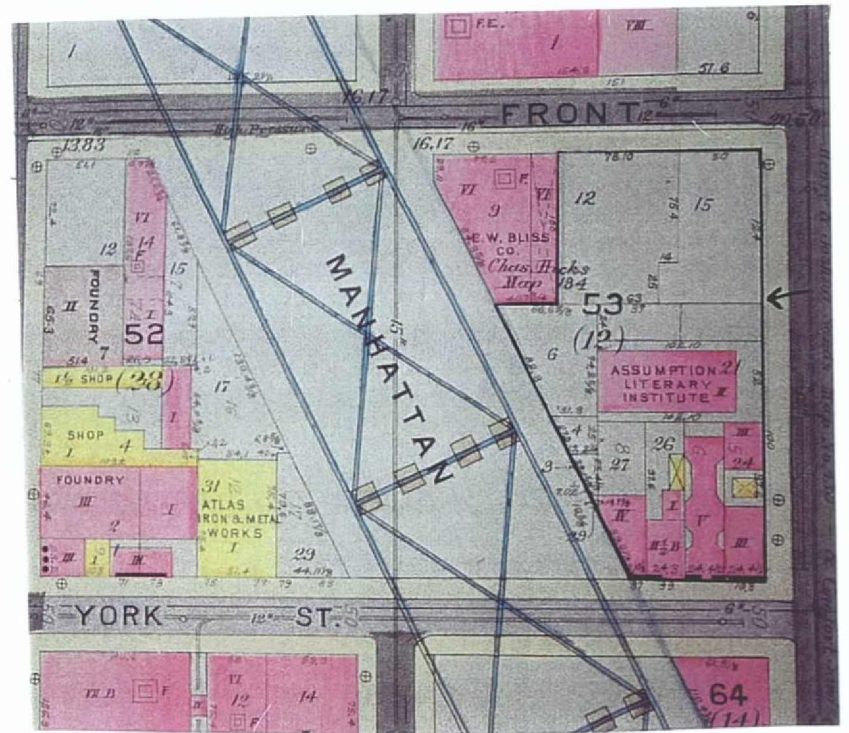


Fig. 14. 1912 Hyde map showing the location of the project site.

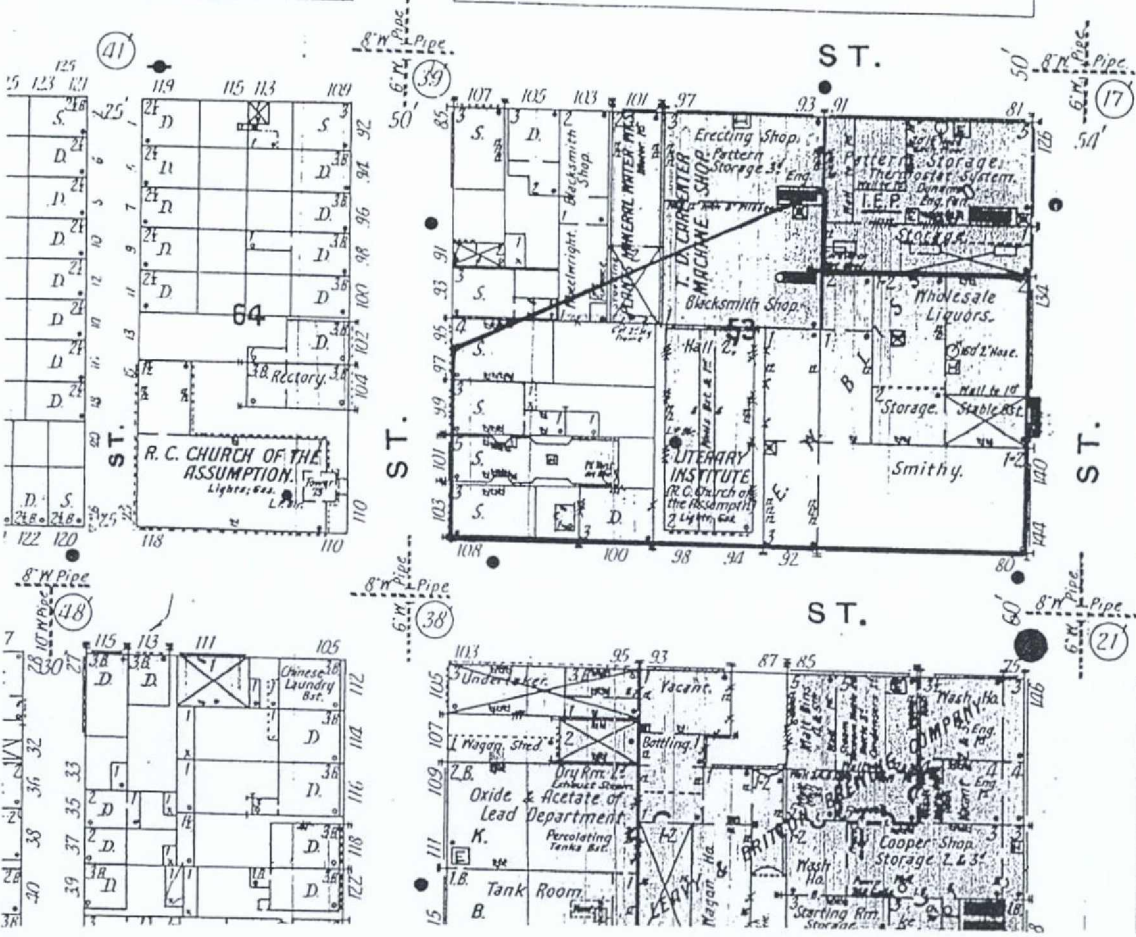
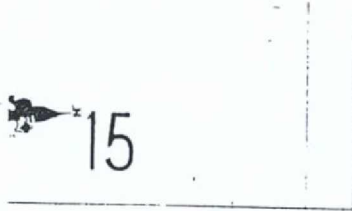


Fig. 15. 1904 Sanborn map showing the location of the project site.

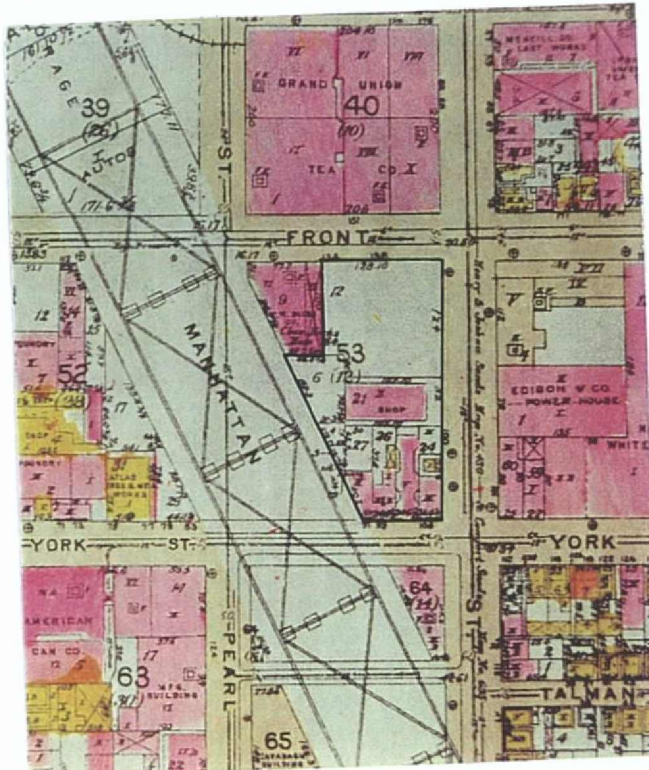


Fig. 16. 1920 Hyde map showing the location of the project site.

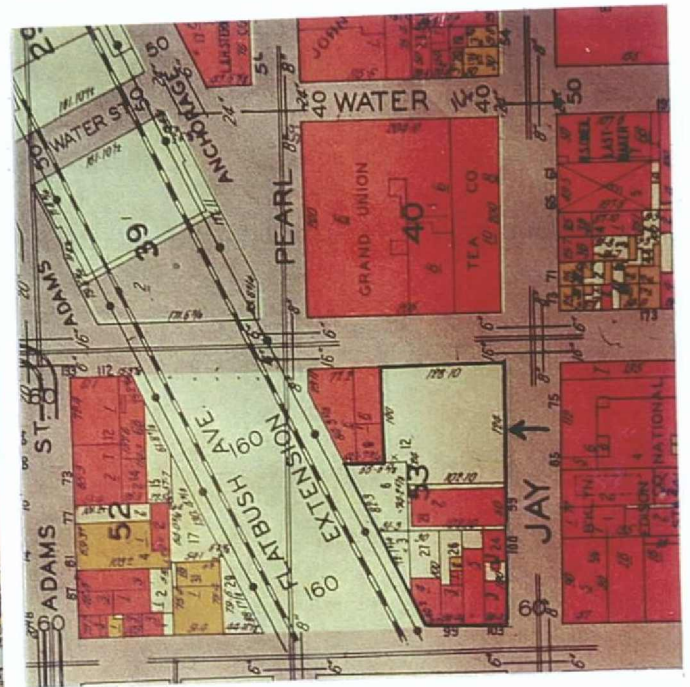


Fig. 17. 1929 Hyde map showing the location of project site.

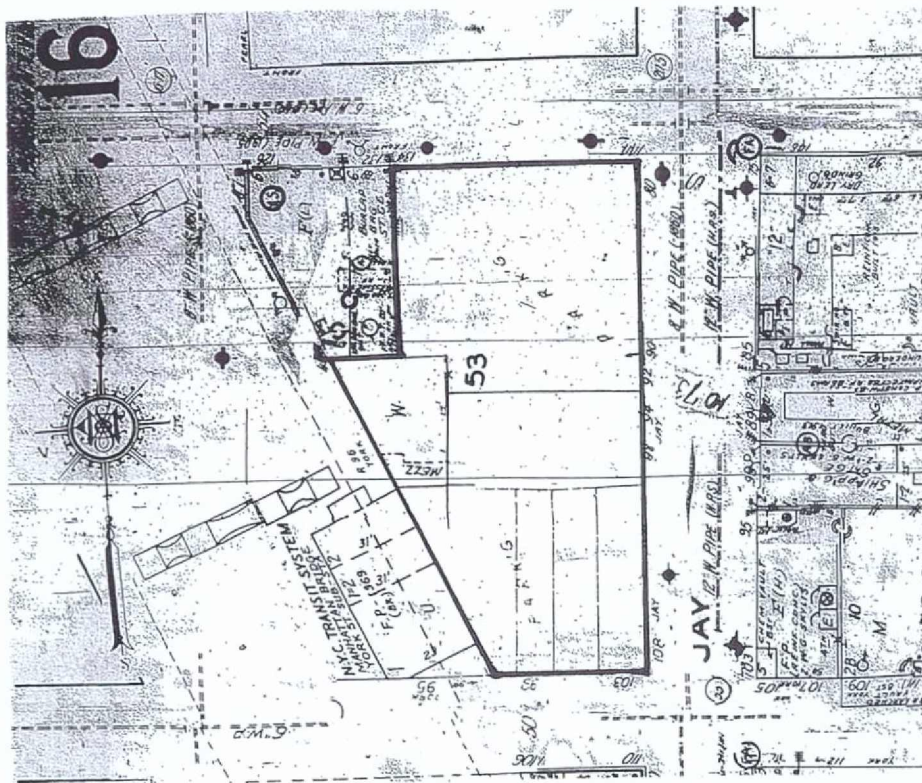


Fig. 18. 1930 Sanborn map showing the location of the project site.

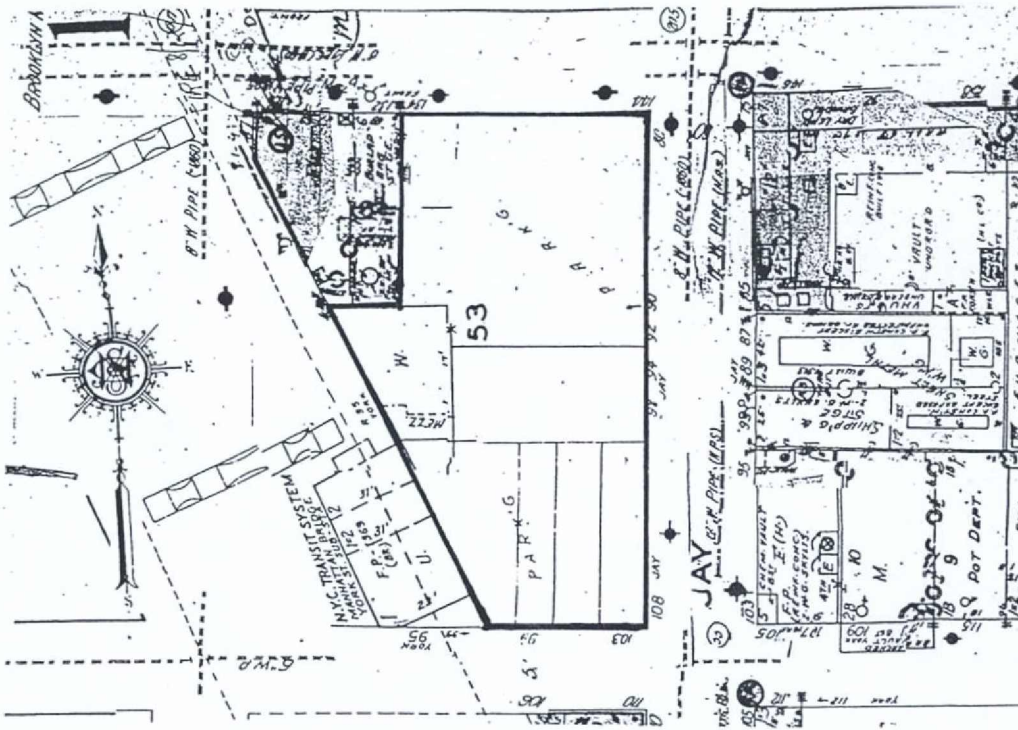


Fig. 19. 1958 Sanborn map showing the location of the project site.

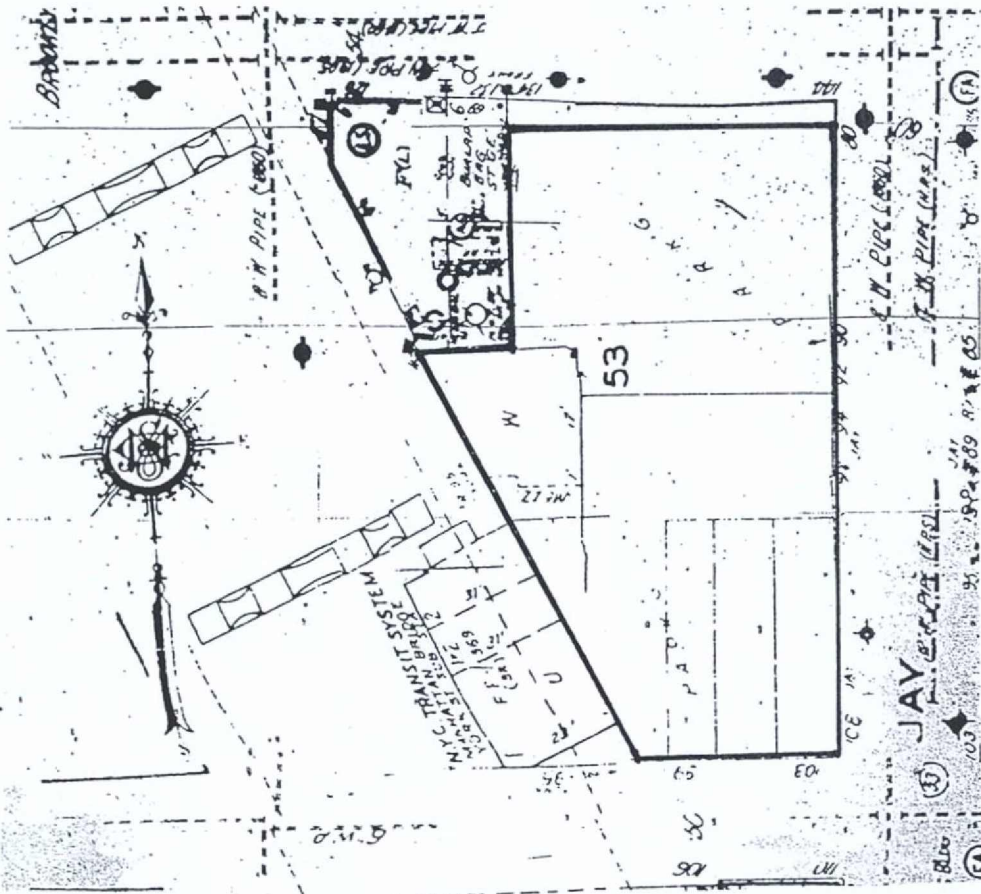


Fig. 20. 1982 Sanborn map showing the location of the project site.