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9th Avenue Rezoning Project

TECHNICAL REPORT #2
PHASE 1A SENSITIVITY EVALUATION

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Jennifer Flood	-	Word Processor

INTRODUCTION

The purpose of this Phase IA Sensitivity Study is to document the potential prehistoric and historic sensitivity of the Ninth Avenue Rezoning project area, Borough of Manhattan, New York City, through the review of the existing archival, cartographic and published references. In order to provide a context for evaluating any identified resources within the parcel itself, this survey shall include a synthesis of published and unpublished prehistoric resources in the immediate locality surrounding the project area and a synthesis of the history of the parcel and its vicinity.

PHYSICAL SETTING AND CURRENT CONDITIONS

The Ninth Avenue Rezoning project area is located in Manhattan on portions of eleven blocks along sides of Ninth Avenue south of 41st Street and north of 35th Street. Included are the eastern ends of Blocks 733 through 738 and the western ends of Blocks 759 through 763. See Figure 1 for the location of the project area.

Greenhouse Consultants visited the Ninth Avenue project area on 14 December 1990. The entire project area was inspected on foot and photographs taken. Buildings cover nearly all of the project area with two exceptions. A parking lot exists on Block 733 at the southwestern corner of project area, and access ramps for the Lincoln Tunnel occupy the central portions of Block 734, 735 and 736 which form part of the project area's western boundary. Plates 1 through 7 provide views of the project area.

PREHISTORIC SENSITIVITY

As part of the project evaluation process, this sensitivity study has surveyed published and unpublished resources in the files of the New York State Museum Division of Historical and Anthropological Services, the Research Branch of the New York Public Library, and the Historic Preservation Field Services Bureau of the New York State Office of Parks, Recreation and Historic Preservation.

There are no confirmed New York prehistoric sites located within two miles of the project area. No such sites are listed in the files of the New York State Museum. Former New York State Archaeologist Arthur C. Parker's text and map for Manhattan (New York County) also show no sites in this location (Parker 1922:626, Plate 192).

The only location within two miles of the project area that may have supported prehistoric occupation is suggested on the basis of linguistic evidence by Robert Steven Grumet in his book *Native American Place Names in New York City*. This work provides the name "Sapokanikan" for an area north of Houston Street and south of West 14th Street in western Greenwich Village. Grumet notes cultivated fields here with a habitation site along the north side, which indicate an occupation during the Woodland Period. The location of this settlement and its associated fields is shown on Figure 2 as two ovals. The Ninth Avenue Rezoning project area is located north of these former planting fields. Unfortunately, no archaeological evidence exists to confirm this location as a former field. Grumet supplies several other native place names within two miles of the project area, but these evidently refer to geographic features and not settlements (Grumet 1981:49-67). See Figure 2 for the location of "Sapokanikan".

In terms of potential prehistoric sensitivity, the project impact area was evaluated from two points of view:

1. the proximity of known prehistoric sites in or near the project area; and
2. the presence of freshwater drainage courses in general, and particularly the identification of river or stream confluence situations, where two or more drainages come together, providing access to both water and food supplies of both systems.

An examination of the Commissioners Map which was surveyed in 1807 when the street grid for Manhattan was designed shows that a source of fresh water was available within the Ninth Avenue project area. A stream formerly existed that had an outlet very close to the present intersection of the Eleventh Avenue and 42nd Street. Two branches fed this outlet from their confluence just east of Tenth Avenue and 40th Street. The southern branch originated within the project area along the north side of 38th Street west of Ninth Avenue and flowed northwest to the confluence (Commissioners Map 1811).

This survey has documented the reported location of one possible area of prehistoric use within two miles of the Ninth Avenue project area. This location is not within or immediately adjacent to the project area, but is near a former stream course. Evidence exists for one stream course on or adjacent to the project area. Although the project area is near a location known from the seventeenth century linguistic evidence as a location cultivated during the Late Woodland Period, no concrete evidence of this cultivation or its associated settlement has yet been found. The existence of a stream within the northern end of the project area indicates that the portion of the project area west of Ninth Street from 37th Street to the northern boundary could have supported prehistoric occupation.

HISTORIC SENSITIVITY

Physical Geography of the Project Area

The 1782 British Headquarters Map, the 1811 Commissioner's Map, the 1879 Bromley Map, and the 1874 Viele Map were all used in determining the physical geography of the project area prior to the 1850s. Of primary interest was the stream, called Great Kill, which entered the island from the Hudson River at what is now 42nd Street. A branch of this stream entered the project area west of the Ninth Avenue between 40th and 39th Street, passed through the intersection of 39th Street and Ninth Avenue almost to 38th Street (see Figures 3, 4 and 5).

In addition to this stream, there appears to have been a surface depression to the west of Ninth Avenue. The 1782 British Headquarters Map shows a swamp or marsh in this depression fed by another tributary from the Great Kill. Although no other maps show this tributary or swamp, Viele's 1874 Map shows a depression which is similar to that shown on the 1882 Map. Additionally, the streets today tend to slope down in the same vicinity (see Figures 3 and 5).

Historic Development of Project Area Prior to 1840

The earliest known use of land within the project area was for primarily agricultural purposes. This land was purchased from a Sir Peter Warren in the 1720s by George and Elizabeth Rapelje. George Rapelje was the grandson of Joris Rapelje, one of the earliest Dutch settlers in New York (see Appendix A for early history of Rapelje family). George and Elizabeth's house as well as what are no doubt various structures were built in the southwestern corner of the estate overlooking the Hudson River. From reviewing a 1782 British Army Map of New York, a 1811 Commissioner's Map of New York, surveyed in 1807, and a 1873 Map of the Glass House Farm, it appears that throughout the Rapelje family's ownership of this property, dwellings and other structures remained concentrated in this corner of the estate, except for several small structures along Norton's Road to the north, the Fitz Roy Road to the east. No structures appear to have been located directly within the project area prior to the late 1820s (see Figure ?). A single access road connecting the Rapelje home to the Fitz Roy Road passed through the project area. This road most likely was not heavily travelled, as compared to the Fitz Roy Road which is just outside the northeastern corner of the project area.

George and Elizabeth Rapelje had at least two sons, Rem and George, as well as several daughters, all born in the 1720s and 1730s. George and his sons George and Rem, both of whom remained on the family estate, were merchants as well as farmers. D.T. Valentine's 1852 Map of the City of New York, J.B. Holmes' 1873 Atlas of the City of New York all list the Rapelje estate under the name Glass House Farm. Apparently in the late 1760s, a glass house was built on the estate. The extent or duration of this operation is unknown,

however, an advertisement in the New-York Gazette and Weekly Mercury on October 9, 1769 lists a Garrit Rapalje appealing for broken glass, as well as, a "person that is thoroughly acquainted with the Process of making Red Lead..." (see Appendix B for complete text). It is unknown whether Garrit is a nickname for the older or younger George, or for that matter even Rem. What is clear, however, is that in 1769 the glass house was new and that the Rapeljes were looking for an experienced lead maker in order to manufacture leaded glass. This glass house was most likely located near the dwellings on the southwestern corner of the property (Allaben n.d.; Innes 1902; New York Historical Society 1938, n.d.; New York Public Library n.d.).

In 1805 Rem Rapalje died and his son and daughter-in-law, George and Susanna became the heirs to the Glass House farm. Rem's father, George drowned in the Hudson River in 1781, his brother, George, and nephew, George also drowned in 1799 and 1795 respectively (see Appendix C for an abbreviated Rapalje genealogy). George, who was born in 1771, graduated from Columbia in 1791 and established a successful law practice. Beginning in the late 1820s George and Susanna began to sell off various sized parcels of their estate to different individuals. Within the project area, some dozen or so individuals bought different lots along Ninth Avenue (Holmes 1873, New York City Register of Deeds; New York Public Library n.d.).

On April 3, 1807 the New York Legislature appointed a group of Commissioners to develop a plan for a rapidly growing New York City. Manhattan Island was surveyed and by 1811 a plan which laid out a series of numbered streets in a north-south and east-west grid was adopted. This plan is shown in the 1811 Commissioners Map of the City of New York. Despite being adopted, this plan was not immediately carried out. In addition to a lack of funds for the construction of these streets, much of the land, including the project area, was comprised of large estates where these streets would have been of little immediate value. The plan did effect property transactions, such as the sale of parcels of Glass House Farm in the 1820s and 1830s, by requiring that lots sold conform to the grid, despite the non-existence of the graded streets. The task of filling and grading streets over an uneven landscape was slow, and by 1839 Ninth Avenue only extended north to 35th Street (southern border of project area). The grading of the streets within the project area was accomplished in the 1840s. The roads were actually paved with Belgian Block at a later date (Note: 38th Street was the only street within the project area that was paved with cobblestone instead of Belgian Block) (Boyer 1965; Willensky 1988).

Historic Development of Project Area After 1840

During the 1840 and 1850s the portion of the West Side where the project area is located saw a dramatic change from an almost pastoral landscape to a populated industrial and residential area. Although there are no detailed maps to document the development of the project area between 1811 and 1859, it can be assumed that the earliest possible structures could not have been

built until at least 1828, when the first sections of Glass House farm were sold. Despite these early land acquisitions, construction was most likely minimal until the 1840s for two reasons - one, the streets were not graded within the project area until this time; and two, lower Manhattan was not yet undergoing a severe housing shortage (Boyer 1965; Lyman 1964).

German immigrants, brought to America in the mid-1830s as workers for massive Croton Aqueduct, were the predominant group to settle in and around the project area in the 1840s. The Croton Aqueduct was completed in 1842, after which, many of the German workers found employment building the Hudson River Railroad up the eastern side of the Hudson River to Albany from 1842 until 1849. Without work after 1849, many of these immigrants settled on the Lower West Side. Most of the structures built during the 1830s and 1840s were probably small wooden shanties (Byrnes 1918; Herries 1954; Herald Tribune 1934; New York World 1934).

Although no visual documentation was available showing the project area during this time period, comparisons can be made with photos of the Upper West Side prior to any extensive development. The streets are graded but the lots contain small wooden dwellings of which sometimes sit as far as ten feet below the street level. It can be assumed that the conditions depicted in these photos were probably similar to those of the project area during the 1840s (Miscellaneous photographs on file at the New York Historical Society).

One of the primary catalysts of the development of the project area and its surrounding environs was the completion of the Hudson River Railroad in 1849. This railroad extended north to Albany from a terminal between 34th Street on the north, 30th Street on the south, Eleventh Avenue on the east, and the Hudson River on the west. This railroad, which later became part of the New York Central Railroad, was a link in a chain of railroads that stretched to Chicago. The area surrounding the Hudson River Railroad's terminal quickly attracted industries, primarily slaughterhouses and meatpackers. Livestock could be transported quickly and efficiently to these industries from locations as far as Chicago (Byrnes 1918; O'Conner 1958).

Most of the slaughterhouse and meatpacking plants were concentrated along the railroad which ran down the center of Eleventh Avenue, although by 1859 a slaughterhouse and a hide/fat house were located within the project area on the east side of Ninth Avenue between 37th and 38th Street. Livestock was probably brought from the rail terminus at 34th Street and through the streets to the facility. This slaughterhouse remained in operation until the 1880s (Bromley 1879; Dripps 1863, 1868, 1873 and 1879; Galt and Hoy 1879; Ferris 1859).

Other than this single industry, the project area emerged as a residential and retail center for the many workers employed by the railroad, slaughterhouses, meatpackers and other industries. By the early 1850s small

wooden shanties began to be replaced by brick tenement buildings to house the growing German and Irish workforce. Most of these tenements, built by real estate speculators who rarely resided in the buildings, were designed and constructed to house large numbers of people, cheaply. The buildings were usually a simple box, three to five stories high, with a courtyard in the rear. In the project area, most of the tenements along Ninth Avenue were built with a store or stores on the first floor. The apartments inside were small and many lacked windows (see Plate 1). Disease and vermin rapidly spread through these dwellings, fueled by overcrowding, insufficient sanitary facilities and inadequate ventilation (Bromley 1879; Dripps 1863, 1868, 1873 and 1879; Galt and Hoy 1859; King 1892; New York Times 1881; Perris 1859).

The 1859 Perris Fire Insurance Map indicates that over half the structures within the project area were brick tenements. By 1883, E. Robinson's Atlas of the City of New York indicates that brick tenements comprised over eighty percent of all structures within the project area, and by 1890, according to a Sanborn Fire Insurance Map (see Figure 5), the project area was almost entirely brick tenement buildings. The project area today is almost identical to that depicted in the 1890 Sanborn other than the obvious demolition of many of the buildings for parking lots, a Burger King, modern shops, the Lincoln Tunnel, and the Port Authority Bus Terminal. The only buildings not shown on the 1890 Sanborn are two dumbbell tenements built in the vacant lot shown on Ninth Avenue between 38th and 39th Streets, built in the late 1890s, and the project area's only manufacturing/office building, the Markey Building, built at 356 and 358 West 40th Street in 1907 (see Appendix D for a complete structure inventory).

Historic Development of Transportation Systems Within the Project Area

The first form of public transportation to reach the project area were the Ninth Avenue horse-drawn street cars. This line was chartered in 1859 and tracks were laid down the center of the avenue during the early 1860s. The tracks stretched all the way to City Hall in the south. By the 1880s tracks were laid in every east-west street connecting the Ninth Avenue line with the Tenth Avenue line. With the construction of the elevated line in the 1870s the street cars lost much of their traffic, and by the turn of the century they were completely eliminated (King 1892; Lyman 1964).

The elevated railroad, owned and operated by the New York Elevated Railroad Company, was completed by 1875 along the west curb line of Ninth Avenue, within the project area. The elevated railroad began in 1866 as an experimental line between Battery and 30th Street. The cars were propelled by a wire cable running under the tracks. The cable failed frequently causing delays, and by 1870 the line, which was in financial trouble was purchased by Jay Gould. Gould abandoned the cable and purchased small, coal-burning steam locomotives to pull passenger cars. While these locomotives were much more reliable, they were extremely noisy and dirty. Hot ashes and cinders fell to the street, smoke blackened the buildings along Ninth Avenue,

and tenements were rattled with noise for most of the day. The second elevated track was added along Ninth Avenue in 1877 to handle the increased traffic and in 1880, the line was completely rebuilt to run directly down the center of Ninth Avenue. The line had stations at 34th Street and 41st Street, both just outside the project area. Around the turn of the century, the line began to use the cleaner and quieter trains. The elevated was eventually eliminated and removed in 1941 (Black 1976; Kahn n.d.; King 1892). The western edge of the project area is bounded by the Lincoln Tunnel and its access roads. The tunnel, which connects New York to Weehawken, New Jersey, was opened in December of 1937. The tunnel and Dyer Avenue, its access road, were built at a cost of \$75,000,000 and required the demolition of many of the old tenements west of the project area. The location of this tunnel, prompted the Port Authority to build a bus terminal in 1950, just north of the project area. The access ramp to the terminal passes directly over the northwestern corner of the project area. An upper deck and an additional ramp were added in 1963 (Elliss 1966; New York Times 1939; Willensky 1988).

Economic and Social Development of Project Area

As previously noted, the Hudson River Railroad was an important catalyst in the development of the project area. In addition to attracting industry and creating jobs, the railroad also became a source of income for the criminal element. By the 1860s organized gangs began to emerge in the area around 39th Street and between Ninth Avenue and the River, which became known as Hell's Kitchen. The gangs specialized in raids on the Hudson River Railroad Yards, but were also engaged in river thievery, extortion, breaking and entering, and highway robbery. The most notorious gang, the Gophers had their headquarters on 39th Street just west of the project area. Thirty-ninth Street, between Ninth and Tenth Avenues, was lined with saloons, gang club houses and brothels, and was known locally as "Battle Row" (see Plate 4). The 1939 WPA Guide to New York City states that Hell's Kitchen was "a district that bears one of the most lurid reputations in America". They went on to describe it as "one of the most dangerous areas on the American continent". By 1910, the railroad reached its breaking point and launched a massive counter attack in conjunction with the New York Police Department which virtually destroyed the gangs. Those that did not go to prison continued to function through prohibition, but never on the scale of the late 1800s (Byrnes 1918; Herries 1954; McConnon 1959; New York Times 1881).

Despite the lack of industry, the project area was a principal retail district. As previously noted, almost every tenement had a store on the first floor. Additionally, in the 1880s a pushcart market known as "Paddy's Market" developed on Ninth Avenue underneath the elevated line between 38th and 42nd Street. This market was closed by Mayor LaGuardia in 1939 because of its shabby appearance (see Plate 5 and 6) (Asbury n.d.; McConnon 1959; O'Conner 1958; Willensky 1988).

Throughout the history of the project area, its inhabitants were primarily immigrant workers making less than average incomes, however, the ethnic background of this population was constantly changing. The Germans were the first group to occupy the project area, but by the late 1800s the Irish became the dominant ethnic group. The Irish were fiercely opposed to any other groups and occasionally riots in the late 1800s and early 1900s were directed at Blacks and Greeks. Eventually, the Greeks did settle within the project area in numbers. By 1940, the project area was predominately populated by people of Irish and Greek background (Byrnes 1918; Welfare and Health Council of New York City 1953).

Architectural History of the Project Area

For the most part, within the project area there were three primary phases of construction. The first took place during the 1830s, 1840s and early 1850s. This phase involved the construction of wooden frame houses and shanties to house mostly German immigrant workers. The second phase took place between the 1850s and early 1870s. During this phase three to five story brick tenement buildings were erected to house a growing immigrant/worker population. The tenements were a simple box and lacked proper ventilation and space. The external architectural embellishments were limited, confined primarily to terra cotta soffits and cornices above the windows. By the mid-1870s America was in a depression, and construction of new buildings most likely slowed down or completely stopped (Boyer 1985).

By the 1880s many social reformers, appalled with conditions inside the tenements pressured the city to impose restrictions on the way tenements could be built. The outcomes of these reforms was a tenement that was shaped like a dumbbell (see Plate 1). The indented sides provided room for windows to increase the amount of light and ventilation within the tenement. Unfortunately, however, many times these air shafts were used as garbage dumps. This last phase of construction did not begin within the project area until the mid to late 1880s. These structures tended to replace the few remaining frame buildings (see Map 5). On some of these structures the architectural detailing was a little more extensive than on earlier tenements (see Appendix D for complete structure inventory) (Riis 1890).

CONCLUSIONS AND RECOMMENDATIONS

The above text had documented that the Ninth Avenue Rezoning project area potentially may preserve archaeological evidence from the prehistoric period. This location is considered sensitive to the preservation of prehistoric archaeological remains because it is topographically similar to locations of documented prehistoric sites. Although no sites are known to exist within a two mile radius of the project area, many other sites are on relatively elevated land near to freshwater, a description which characterizes locations within the northwestern portion of the Ninth Avenue project areas. Although

no prehistoric artifacts have been reported from this location, it is our opinion that its physical condition would have been conducive to its use and/or occupation during prehistory, probably in the Woodland and/or Archaic periods.

It is also our conclusion that the Ninth Avenue project area is not sensitive to the preservation of historic archaeological evidence. The project parcels remained undeveloped and were evidently used primarily as farmland prior to the 1840s. The standing structures in the project area are mostly nineteenth century buildings although some more recent structures exist. The surviving nineteenth century structures are mostly old style tenements built during the third quarter of that century. Scattered among these buildings are some new style tenements dating to the 1880s or 1890s. These two styles of tenements built of brick and three to five stories high replaced earlier wood frame structures of which none survive. Some of the standing structures may provide good examples of the exterior architecture of the old and new tenements, but a number of other examples exist within New York City. The project area was evidently not associated with any famous persons or events. The project area formed part of the infamous Hell's Kitchen neighborhood, but the location of the headquarters of the most notorious gang was west of the project area. There are no New York City Landmarks within the project area (New York City Landmarks Preservation Commission 1979, 1989). The project area was occupied by successive groups of immigrants during the nineteenth century and no long term occupations by particular families or homogeneous groups of people were found during the course of this research. It is the conclusion of the Principal Investigator that the Ninth Avenue Rezoning project area is not sensitive to the preservation of significant historic evidence.

It is our recommendation that no archaeological testing of the Ninth Avenue Rezoning project area is necessary. The only potentially sensitive location is part of the northwestern section of the project area which may have been used during prehistory. According to information received from the New York City Landmarks Preservation Commission Staff, extensive disturbances from nineteenth and twentieth century construction of numerous buildings, streets and the approach to the Lincoln Tunnel make it likely that any prehistoric remains have been destroyed or redeposited.

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British Headquarters

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Dripps, Matthew

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1868

1873

1879

D.T. Valentines Manual

1852 *Map of the City of New York Showing the Original High Water Line and the Location of the Different Farms and Estates.*

Galt & Hoy

1879 *View of New York City.*

Holmes, J.B.

1873 *Map of the Glass House.*

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APPENDIX A
Early History of Rapelje Family

Joris Rapelje arrived passage with Dutch West Indies Company and arrived in New Amsterdam (later New York) in 1623. Almost immediately, he relocated to Fort Orange (Albany), where he spent three years before returning to New Amsterdam. In June of 1637 Joris purchased a tract of land in what is now Brooklyn and relocated there to operate a farm. The Rapelje family grew in number and by the early 1700s, descendants of Joris were living as farmers and merchants in Brooklyn, New Jersey, Staten Island and New York.

APPENDIX B

Advertisement from the New York Gazette and Weekly Mercury

October 9, 1769

Garrit Rapalje - Broken Flint Glass, single or double is wanted, and if brought by any Persons to Garrit Rapalje, shall receive for the same Two Pence per Pound. As it is intended again to be worked up here, at a new Glass-House, it is hoped all Lovers of American Manufacture will encourage what is in their Power, and particularly on this Instance save, collect and send such broken Glass as above directed. N.B. No Duties Here:

There is also wanted at said Glass House, a Person that is thoroughly acquainted with the Process of making Red Lead: he will meet with good Encouragement at the said Manufactory.

APPENDIX C
Abbreviated Rapelje Genealogy

Joris

Tunis

George (d.1781) - Elizabeth

Rem (b.1728 d.1805)

George (d.1799)

George (b.1771) - Susanna

George (d.1795)

APPENDIX D
Structure Inventory

Ninth Avenue

- #450 Single story store of recent construction (1950-). Lot formerly contained a three story wood framed structure with a masonry front. Former framed structure built prior to 1859 with brick front added by 1883.
- #451 - #467 Parking Lot
Lot formerly contained five, four and three story tenements with stores on the first floor.
- #452 Five story brick tenement building. Store of first floor. Courtyard and two story wood frame structure in the rear. Built 1860-1880.
- #454 Five story brick tenement building. Store on first floor. Air shaft on north and south sides. Elevator. Small courtyard in rear. Built 1860-1880.
- #456 Five story brick tenement building. Store on first floor. Air shaft on north and south sides. Elevator. Small courtyard in rear. Built 1880s, prior to construction a brick and framed structure occupied lot.
- #458 Single story store. Recent construction using composite materials. Formerly lot occupied by a four story brick tenement. Former structure built 1860-1880. Prior to 1859, wood framed structure.
- #460 Four story brick tenement building. Store on first floor. Courtyard on rear half of lot. Built 1850s.
- #462 Five story brick tenement building. Store on first floor. Air shaft on north and south sides. Small L-shaped courtyard. Built 1870-1880. Formerly framed structure.
- #464 Five story brick tenement building. Store on first floor. Air shaft on south. Shares L-shaped courtyard with #462. Built 1870-1880. Formerly framed structure.
- #469 - #483 Contemporary single story fast food store (Burger King) and parking lot.

- #468 Four story brick tenement building. Store on first floor. Small courtyard in rear. In 1911 - drug store occupied first floor. Built 1850s.
- #470 Four story brick tenement building. Store on first floor. Small courtyard in rear. Built 1850s.
- #472 Five story brick tenement building. Store on first floor. Small courtyard in rear. Front built 1850s. Rear addition (with skylights) by 1883.
- #474 Five story brick tenement building with stone facade. Store on first floor. Small courtyard in rear. Built 1860/70s. prior to 1859 small frame building with store on first floor.
- #476 Two story contemporary store/office built of composite materials. Originally, lot occupied by three story brick tenement built in the 1850s.
- #478 Three story brick tenement building. Store on first floor. Courtyard in rear. Three story brick structure on rear of lot. Built - 1850s.
- #480 - #482 One story contemporary store built using composite materials. Lot formerly contained two four story brick tenements built in the 1850s.
- #484 Five story brick tenement building. Store on first floor. Built late 1880s. Previously location of slaughterhouse complex (see text).
- #485 Four story brick tenement building. Store on first floor. Small courtyard in rear. Built 1850s.
- #486 Five story brick tenement building. Store on first floor. Built late 1880s. Previously location of slaughterhouse complex (see text).
- #487 Four story brick tenement building. Store on first floor. Built 1850s. In 1911, paint store located on first floor.
- #488 Five story brick tenement building. Store on first floor. Built 1860s - 1870s. Previously location of slaughterhouse complex (see text).
- #489 Four story brick tenement building. Store on first floor. Built 1850s.

- #491 Four story brick tenement building. Store on first floor. Built 1850s.
- #492 Five story brick tenement building. Store on first floor. Built 1860s - 1870s. Previously location of slaughterhouse complex (see text).
- #493 Five story brick tenement building. Store on first floor. Air shafts on north and south sides. Built 1880s. Formerly lot contained a wood frame structure.
- #494 Five story brick tenement building. Store on first floor. Courtyard in rear. Built 1860s - 1870s. Formerly a brick Hide and Fat House. Part of the slaughterhouse complex (see text).
- #495 Five story brick tenement building. Store on first floor. Air shafts on north and south sides. Built 1880s. In 1911 Carpenters shop located in basement. Formerly lot contained a wood framed structure.
- #496 Five story brick tenement. Store on first floor. Built 1860s - 1870s. Rear addition added 1890s. In 1911 first floor occupied by a provisions store. Formerly a wooden frame structure.
- #497 Small five story brick tenement. Store on first floor. Built 1880s. Formerly frame structure. Courtyard in rear.
- #498 One story contemporary store. Built of composite materials. Formerly a three story frame structure.
- #500 Five story brick tenement. Store on first floor. Built 1860s - 1880s. Formerly wood frame structure.
- #501 Five story brick tenement. Store on first floor. Built 1850s.
- #502 Vacant lot. Formerly four story wood frame tenement building. Built 1840s - 1850s.
- #503 Five story brick tenement. Store on first floor. Built 1850s. Small rear addition built 1890s.
- #504 Five story brick tenement. Store on first floor. Built 1860s - 1880s. Formerly wood frame structure.

- #505 Five story brick tenement. Store on first floor. Built 1850s. Drug store on first floor in 1911.
- #506 Five story brick tenement. Store on first floor. Air shafts on north and south sides. Built 1880s. Previously part of the Dutch Reformed Church (1860s - 1880s). Prior to Church lot contained four small frame buildings.
- #507 Five story brick tenement. Store on first floor. Built 1850s.
- #508 Six story brick and stone tenement. Store on first floor. Built 1890s. Different stone window treatment on each floor. Cornice on top of building embossed with "Oregon". High level of architectural detailing. Previously lot was part of a Dutch Reformed Church (1860s - 1880s). Prior to Church, lot contained a single frame building.
- #509 Five story brick tenement. Store on first floor. Built in 1880s. Air shaft on north and south sides. Small courtyard in rear. Lot previously occupied by a wood frame structure.
- #510 Six story brick and stone tenement. Store on first floor. Built in 1890s. Different stone window treatments on each floor. Cornice on top of building embossed with "Maine". High level of architectural detailing. Previously lot was part of a Dutch Reformed Church (1860s - 1880s). Prior to Church, lot contained a single frame building.
- #511 Three story brick tenement. Store on first floor. Built between 1860s and 1880s. Rear added later. Formerly frame building on lot.
- #513 - #521 Parking lot. Formerly lots contained three and four story brick tenements. Stores on first floors in 1911 included drug store, bakery and moving picture club house. Built 1850s.
- #516 Four story brick tenement. Store on first floor. Built 1850s. Two story rear addition added in 1890s.
- #518 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#518 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#518 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#520 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#522 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#523 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#524 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#525 Five story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#526 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#527 Four story brick tenement. Store on first floor. Built 1860s - 1870s. Small courtyard in rear. Formerly small frame structure.

#528 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#529 Four story brick tenement. Store on first floor. Built 1860s - 1870s. Very small courtyard in rear. Rear addition with skylights, 1880s. Wood frame structure prior to 1860s.

#530 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#531 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.

#532 Four story brick tenement. Store on first floor. Built 1880s. Courtyard in rear. Formerly small frame structure in center of lot.

#533 Four story brick tenement. Store on first floor. Built 1850s. In 1911 first floor contained a canteen.

- #534 Five story brick tenement. Store on first floor. Built late 1880s. Courtyard in rear. Lot formerly vacant other than small brick structure in rear.
- #535 Four story brick tenement. Store on first floor. Built 1850s. In 1911 first floor contained a bakery.
- #536 Five story brick tenement. Store on first floor. Built late 1880s. Courtyard in rear. Lot formerly vacant other than small brick structure in rear.
- #537 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.
- #538 Single story contemporary store. Made of composite materials. Formerly three story tenement built in 1850s.
- #539 Four story brick tenement. Store on first floor. Built 1850s. Courtyard in rear.
- #540 Single story contemporary store. Made of composite materials. Formerly three story tenement built in 1850s.
- #541 Four story brick tenement. Store on first floor. Built 1850s.
- #542 Four story brick tenement. Store on first floor. Built 1850s.
- #543 Four story brick tenement. Store on first floor. Built 1850s.
- #545 Four story brick tenement. Store on first floor. Built 1850s.
- #547 Four story brick tenement. Store on first floor. Built 1850s.
- #549 Port Authority bus ramp supports. Formerly three story brick tenement built in 1850s.

35th Street

- #369 Three story brick tenement. Street level basement. Built 1850s.
- #371 Three story brick tenement. Street level basement. Built 1850s.

36th Street

- #362 Five story stone and brick tenement. Store on first floor. Small courtyard in rear. Built in 1850s.
- #365 - #367 Four story brick tenement. Store on first floor. Facade remodeled recently. Built 1850s.
- #408 Five story stone and brick tenement. Built in late 1880s. Airshafts on east and west walls. Formerly lot contained several wood frame and brick structures.
- #410 Five story stone and brick tenement. Built in late 1880s. Airshafts on east and west walls. Formerly lot contained several wood frame and brick structures.
- #412 Five story stone and brick tenement. Built in late 1880s. Courtyard and rear brick building. Rear building built during the 1850s.

37th Street

- #354 Contemporary three story brick structure. Replaced earlier four story brick tenement built in late 1880s. Courtyard in rear.
- #356 Four story brick tenement. Courtyard in rear. Built in late 1880s.

38th Street

- #354 Five story brick tenement built in 1860s or 1870s. Store on first floor. In 1911, store was occupied by Chinese laundry.
- #356 Five story brick tenement built in 1860s or 1870s. Store on first floor. Formerly a small frame structure occupied the site.
- #355 - #359 Vacant lot. Formerly five story brick tenements.
- #405 - #407 Parking lot. Formerly five and four story brick tenements with first floor stores. In 1911, a roofer occupied the first floor of 407 and a Chinese laundry occupied 405's first floor.

39th Street

- #352 Four story brick tenement. Store on first floor. Store occupied in 1911 by a junk dealer. Structure was built in the 1850s.
- #354 Two story brick structure probably dating to the 1940s - 1950s. Replace a four story brick tenement built in the 1850s.
- #355 Four story brick tenement with stores on first floor. Built in 1850s. New facade built within the last forty years.
- #357 Four story brick tenement with store on first floor. Built 1850s. Doctor's office of first floor in 1911.
- #403 Four story brick tenement. Courtyard in rear. Built in the 1850s.
- #405 Four story brick tenement. Courtyard in rear. Built in the 1850s.
- #406 Five story brick tenement. Built during 1860s or 1870s. Replaced an earlier frame structure.
- #407 Five story brick tenement. Built during 1860s or 1870s. Courtyard and two story brick building on rear of lot. Replaced an earlier frame structure.
- #408 Five story brick tenement. Built during 1880s. Replaced another brick tenement in the 1860s and an earlier frame structure built in the 1850s. Structure has airshafts on the east and west sides. Many architectural embellishments on the front facade. Very small courtyard in rear.
- #409 Five story brick tenement. Built during 1860s or 1870s. Courtyard and two story brick building on rear of lot. Replaced an earlier frame structure.
- #411 Five story brick and stone boarding house built in the late 1880s. Previously, lot occupied by a brick tenement built 1850s.

40th Street

- #356 - #358 Six story brick office/light manufacturing building. Called the Markey building. Built in 1907. Built on lot that contained several small frame structures in 1800s.
- #401 Five story brick tenement built during 1860s or 1870s. Store on first floor. Lot was vacant prior to construction of building.
- #402 Two story contemporary brick building. Built on site of four story brick tenement built in 1850s.
- #403 - #405 Four story brick tenement with a street level basement. Built during 1860s or 1870s. Buildings in rear of lots built in 1850s.
- #404 Four story brick tenement built in 1850s. Modern facade added in last several decades. Courtyard in rear.
- #406 Three story brick tenement built in 1850s.
- #407 Four story brick tenement built during 1860s or 1870s. Street level basement. Courtyards in rear. Rear three story brick building built in 1850s. Front of lot vacant during the 1850s.
- #408 - #412 Stone and brick church built in 1920s on site of several three story brick tenements. Metro Baptist Church.

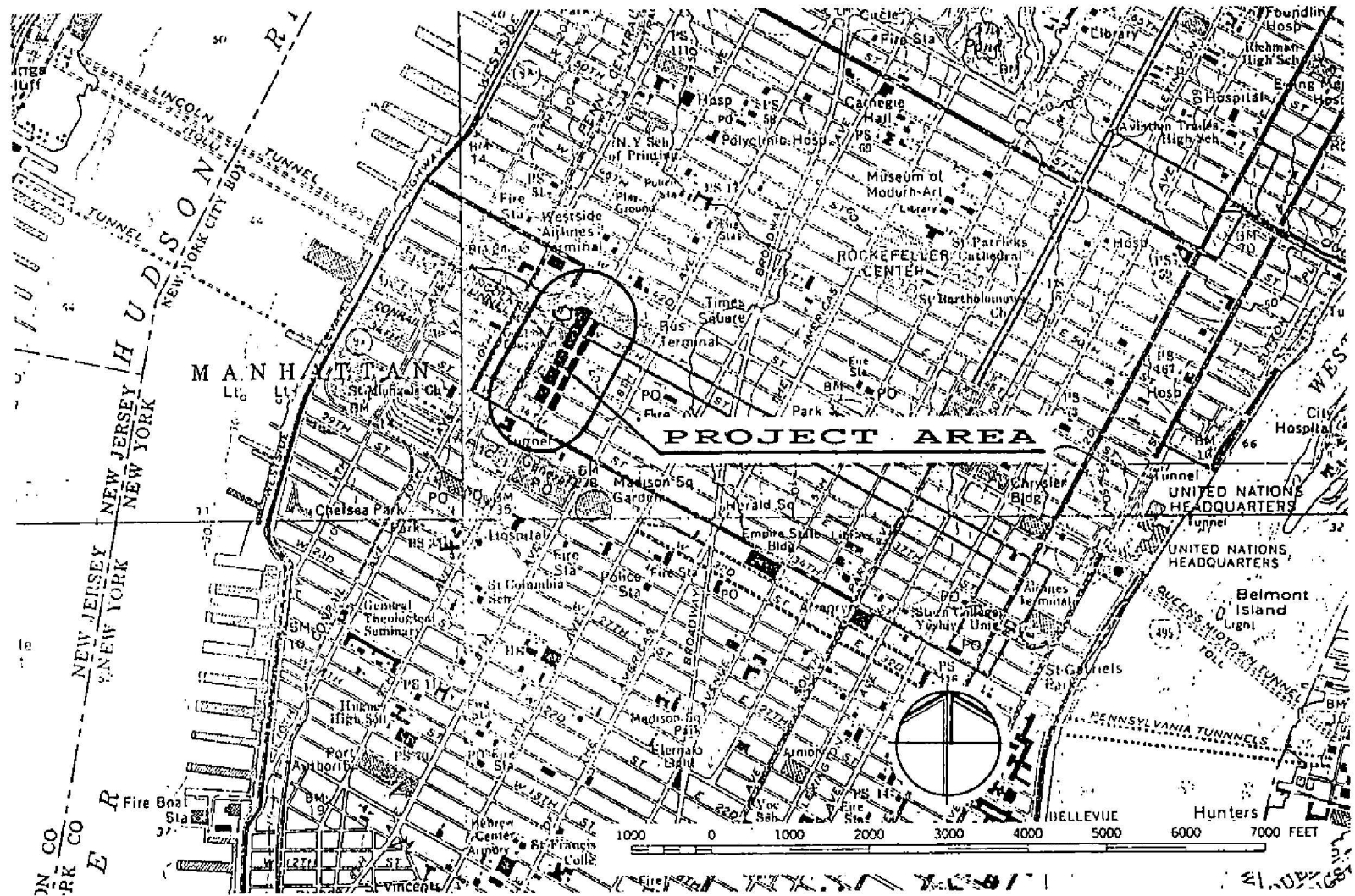


Figure 1

Location of the project area shown on portions of the U.S.G.S. 7.5 minute series Central Park, New York and Weehawken, New Jersey Quadrangles.



Figure 2 Known prehistoric sites within a two mile radius of the project area.



Figure 3 From the British Headquarters Map of New York and Environs, 1782.

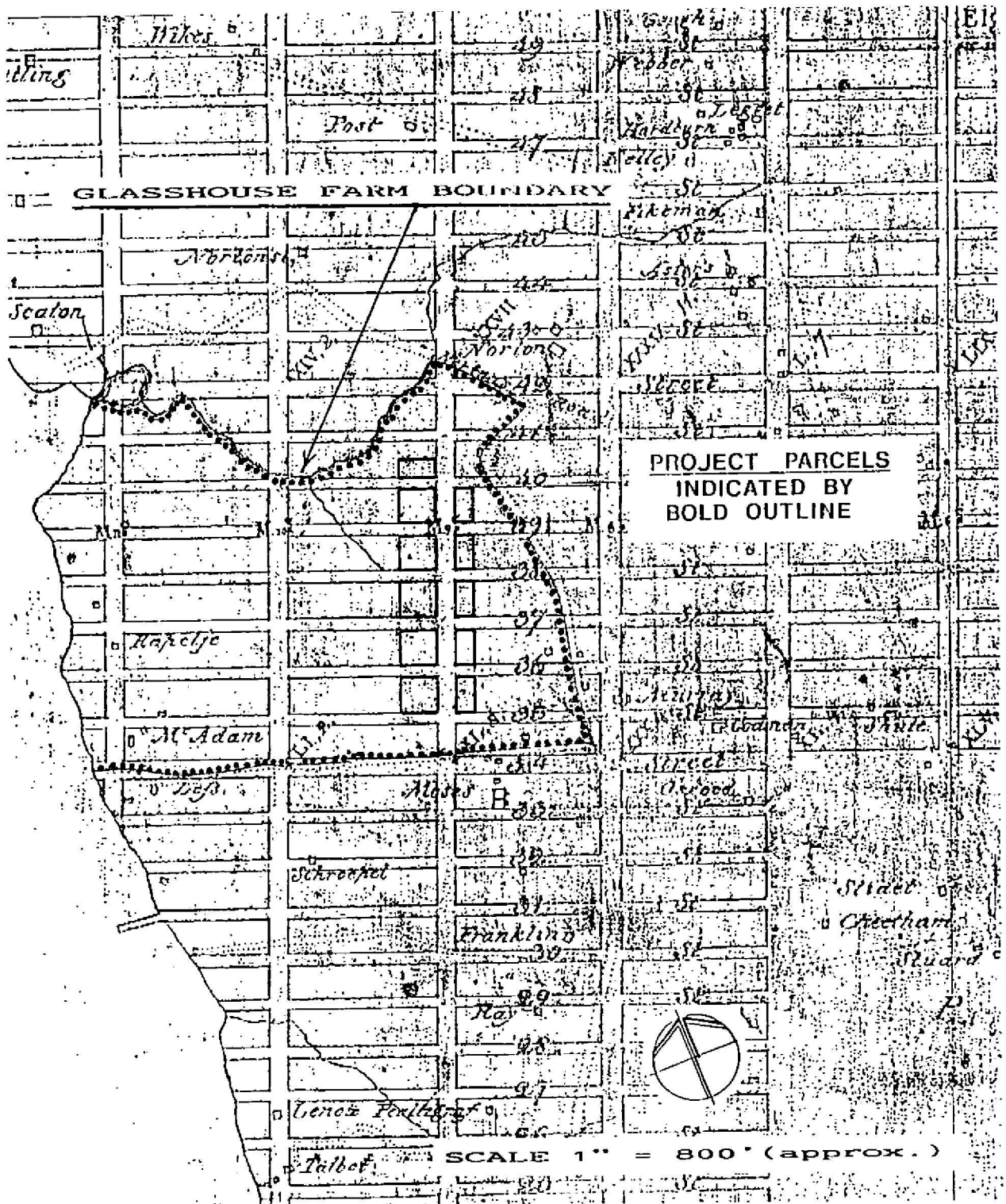


Figure 4 From the Commissioner's Map of the City of New York, 1811.

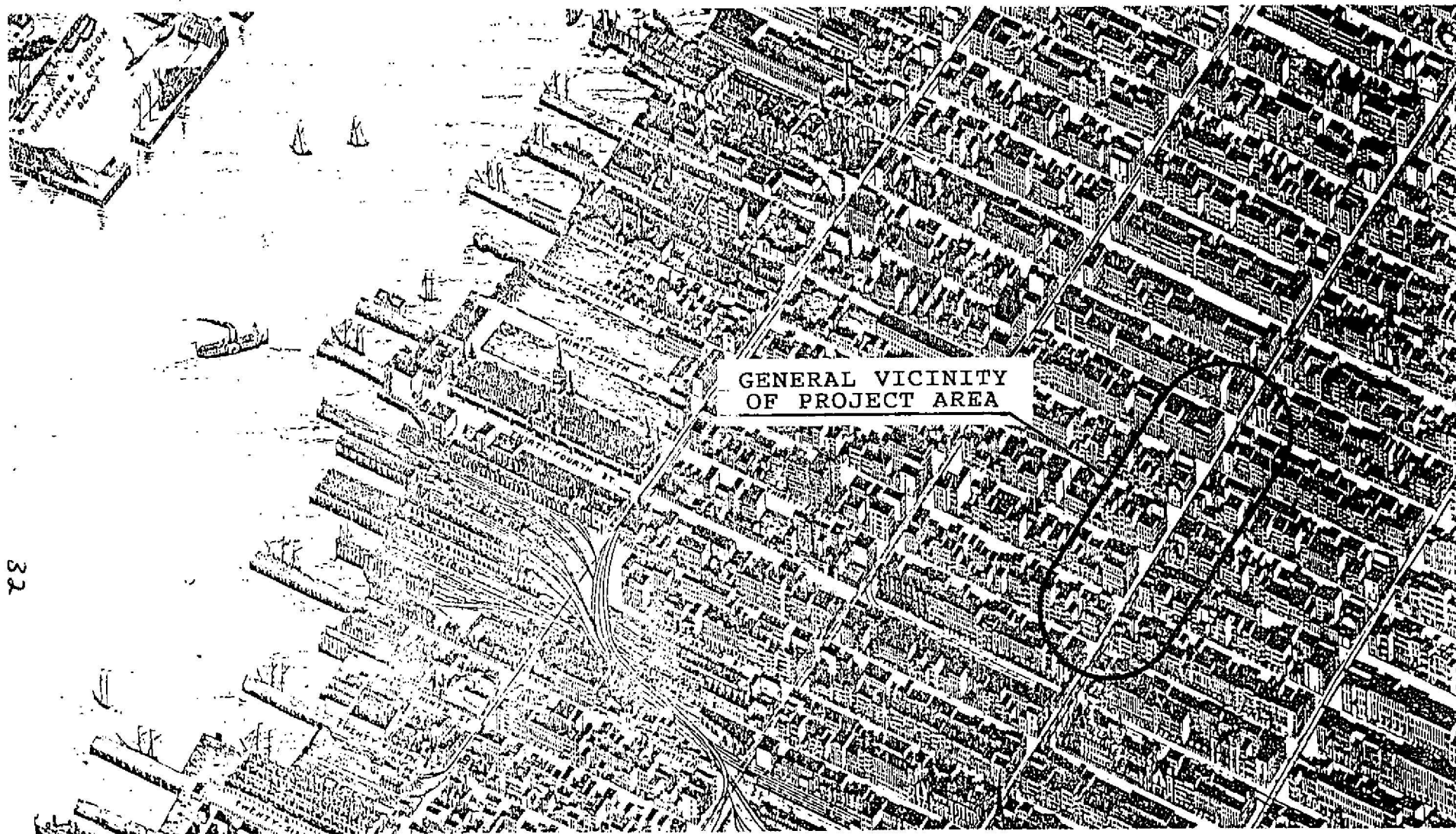


Figure 5 From Galt & Hoy's 1879 View of New York City.

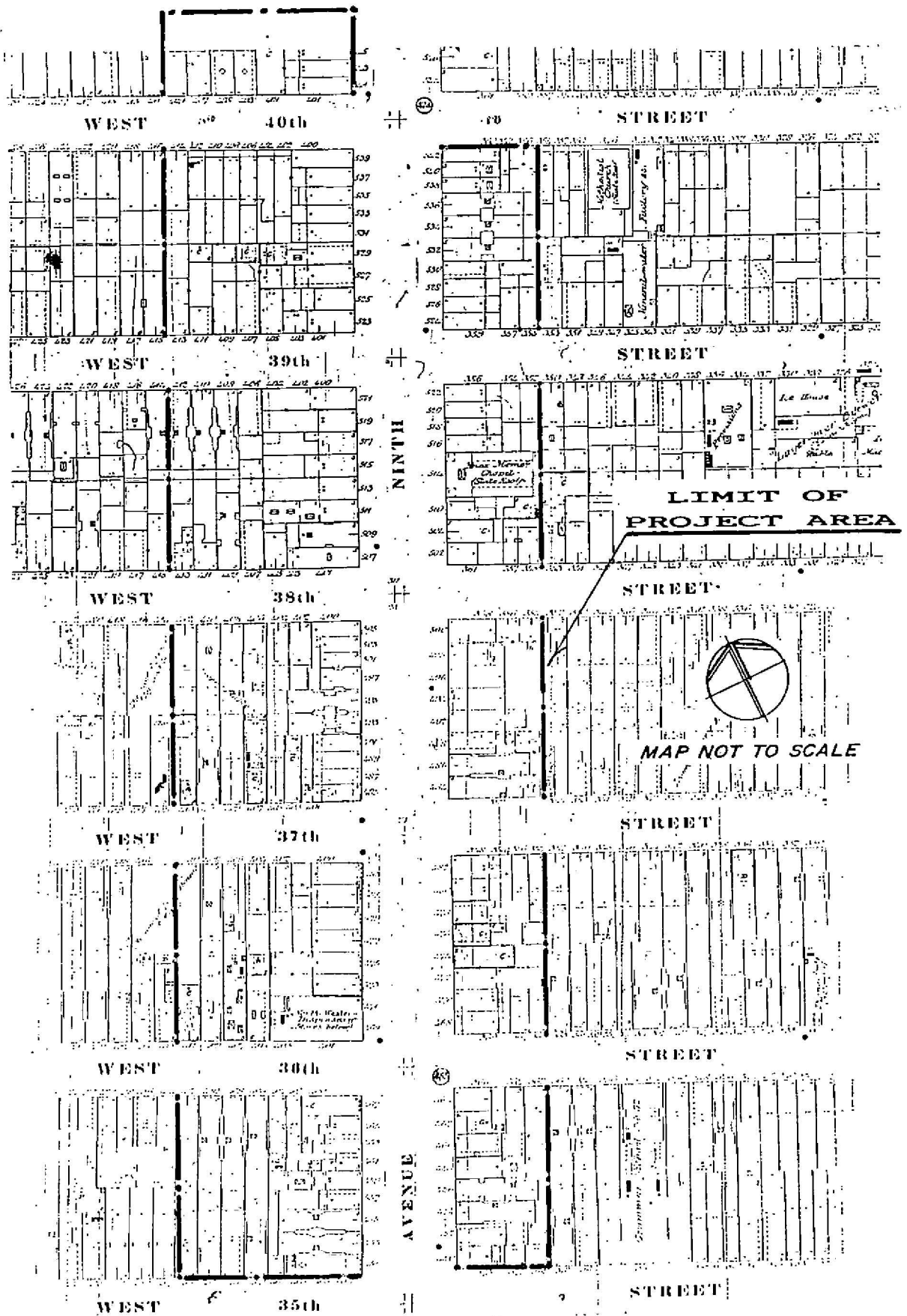


Figure 6 From the 1890 Sanborn Fire Insurance Map.

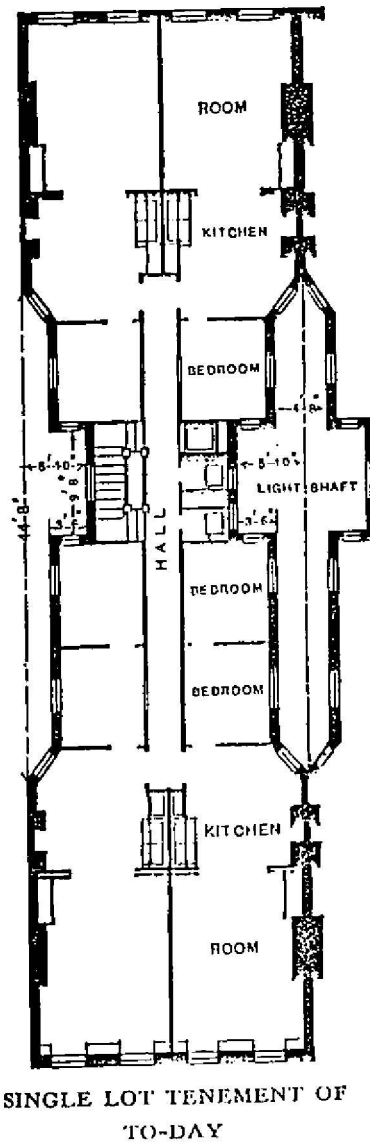
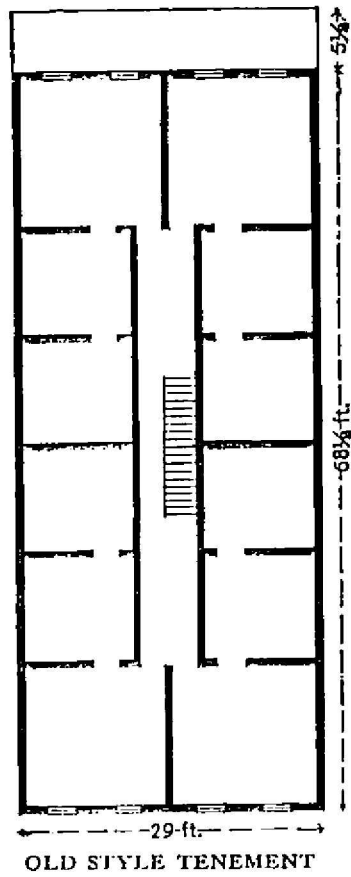


Plate 1. The evolution of the tenement.

Kummer 7
33rd Street looking north

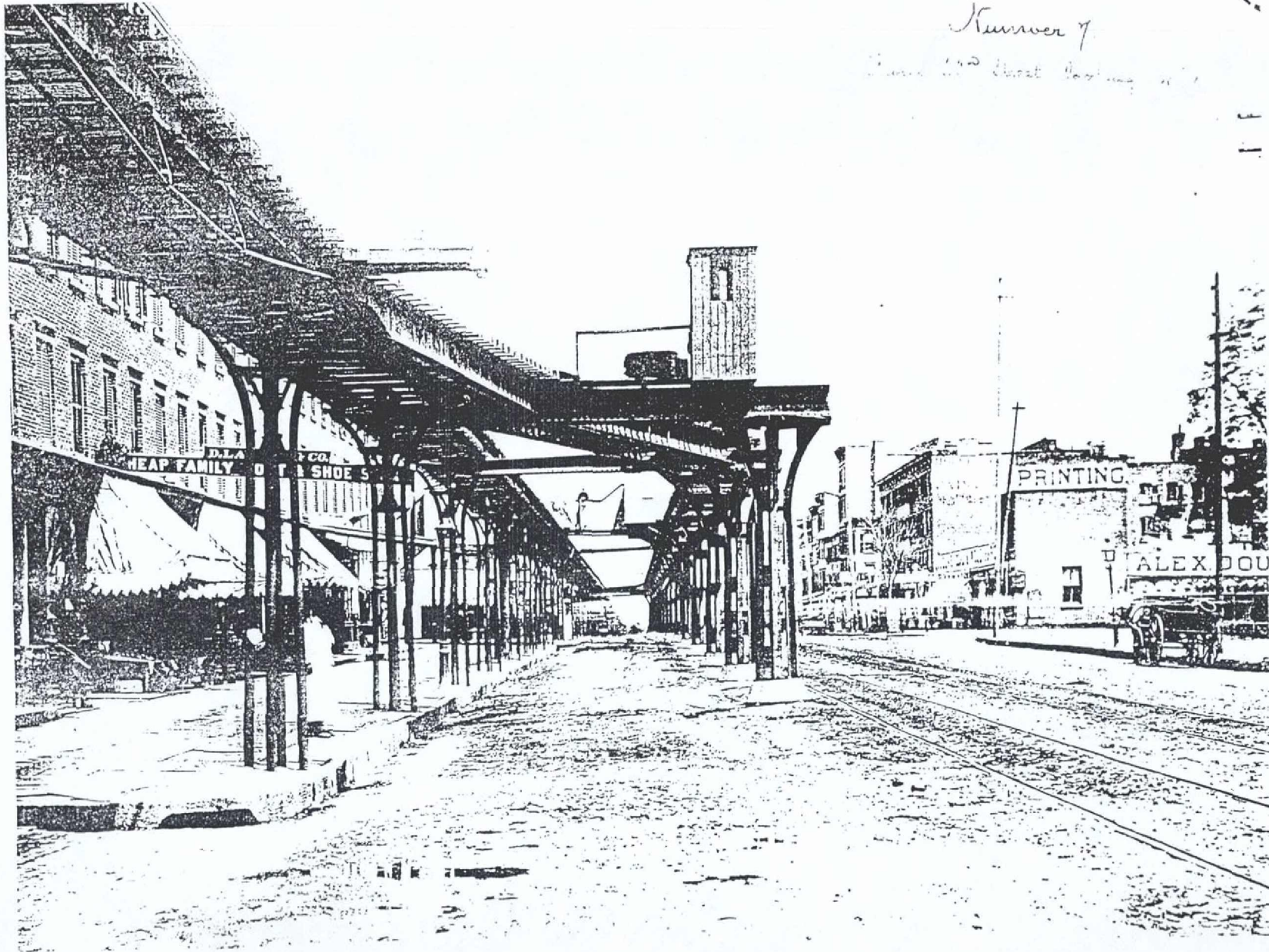


Plate 2. 33rd Street and Ninth Avenue looking north, 1879.

35

Number 8.
From 41st St looking North.



Plate 3. The elevated railroad station at 41st Street, 1876.

36

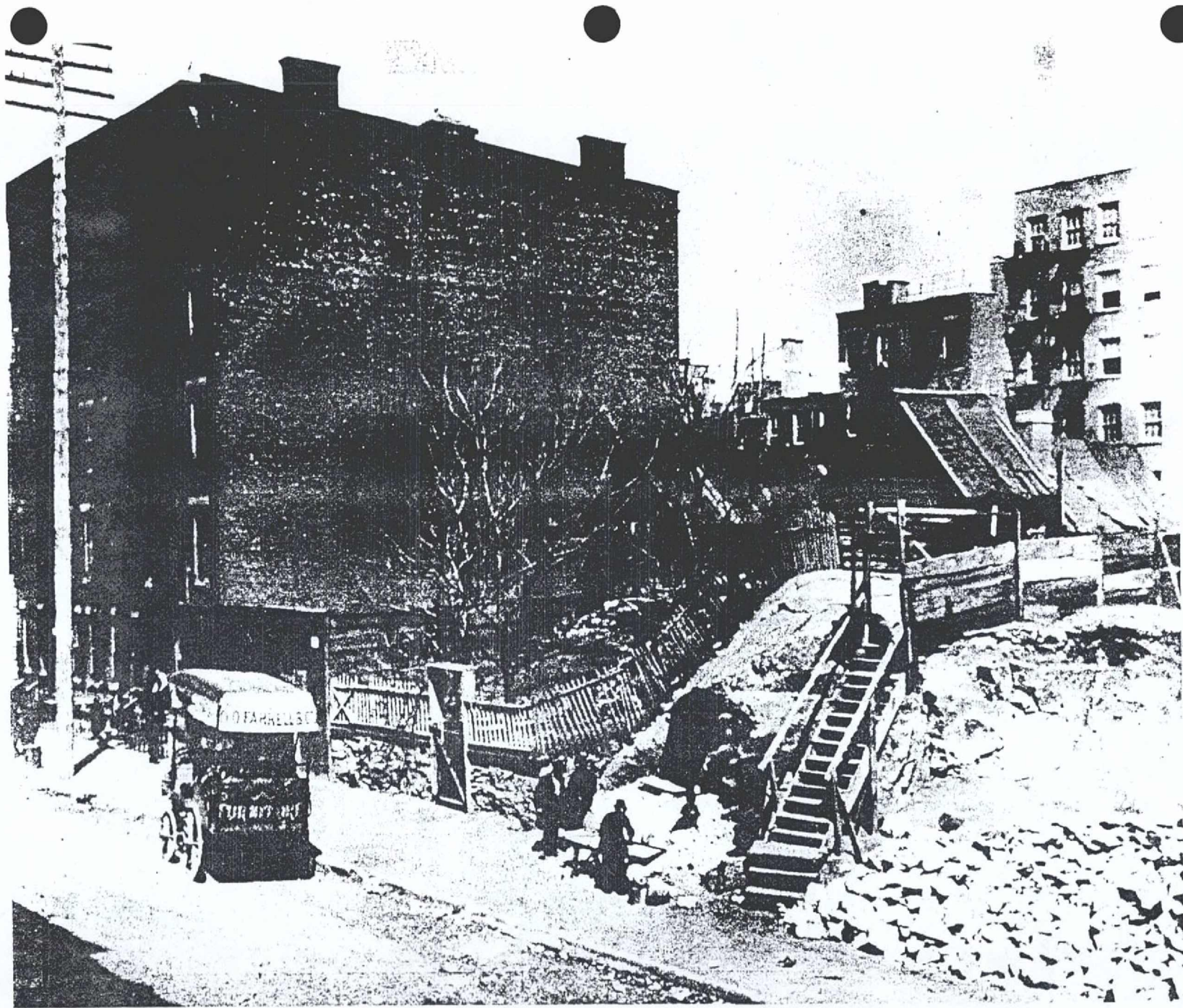


Plate 4. 39th Street, immediately west of 9th Avenue.



Plate 5. General view of project area along Ninth Avenue taken from the Port Authority Bus Terminal looking southwest.



Plate 6. View of buildings in the project area along Ninth Avenue between 35th and 36th Streets looking east.



Plate 7. View of buildings in project area at the southeast corner of Ninth Avenue and 36th Street.



Plate 8. View of buildings in the project area at the northeast corner of Ninth Avenue and 36th Street.



Plate 9. View of Lincoln Tunnel entrance looking northeast from Dyer Avenue and 36th Street.



Plate 10. View of part of the project area looking southwest from the intersection of Ninth Avenue and 37th Street.



Plate 11. View of buildings in the project area at the northwest corner of Ninth Avenue and 37th Street.

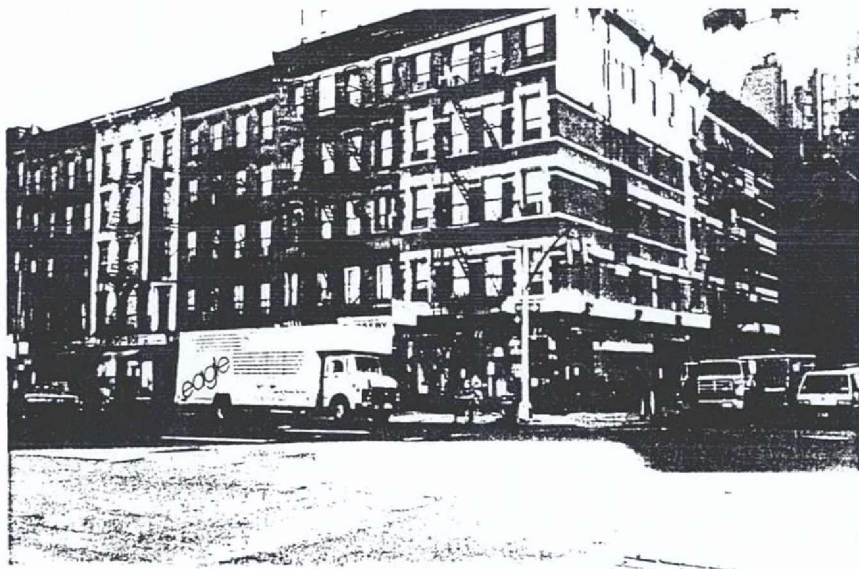


Plate 12. View of buildings in the project area at the northeast corner of Ninth Avenue and 37th Street.



Plate 13.

View of buildings in the project area at the southeast corner of Ninth Avenue and 38th Street.



Plate 14.

View of buildings in the project area at the southwest corner of Ninth Avenue and 38th Street.



Plate 15. View of buildings in the project area at the northwest corner of Ninth Avenue and 38th Street.

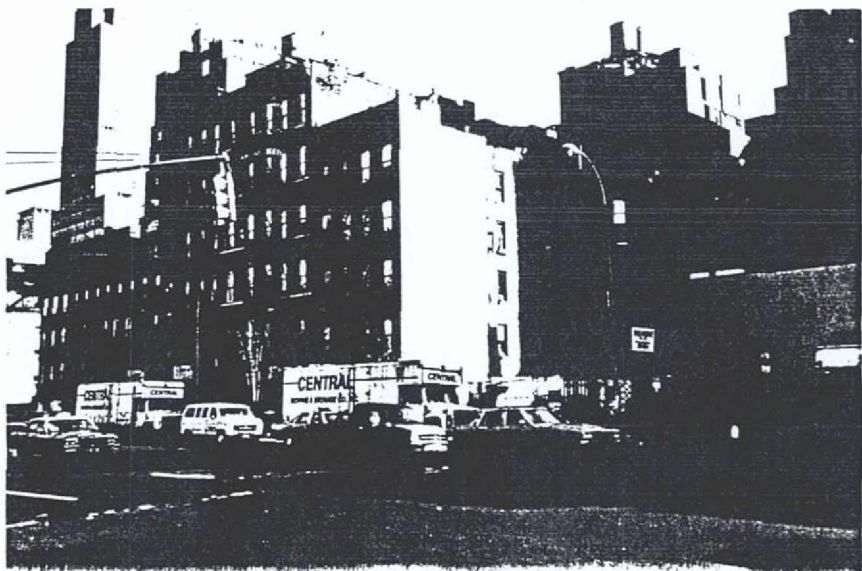


Plate 16. View of buildings in the project area at the northeast corner of Ninth Avenue and 38th Street.



Plate 17. View of buildings in the project area at the southeast corner of Ninth Avenue and 39th Street.



Plate 18. View of buildings in the project area at the northeast corner of Ninth Avenue and 39th Street.



Plate 19. View of part of the project area along West 39th Street west of Ninth Avenue looking south.



Plate 20. View of buildings in the project area at the northwest corner of Ninth Avenue and 39th Street.



Plate 21. View of buildings in the project area at the southwest corner of Ninth Avenue and 40th Street.



Plate 22. View of buildings in the project area at the northwest corner of Ninth Avenue and 40th Street.



Plate 23. View of buildings in the project area at the southeast corner of Ninth Avenue and 40th Street.