

USF
4508M
Sept 1, 1994

ER-M

ARCHEOLOGICAL SENSITIVITY STUDY



FARLEY / PENN STATION NEW YORK

PREPARED BY
HISTORIC CONSERVATION & INTERPRETATION, INC.

DE LEUW, CATHER & COMPANY
MCGINLEY HART & ASSOCIATES

SEPTEMBER, 1994

NCEBR

378

AN ARCHEOLOGICAL SENSITIVITY STUDY
OF THE PROPOSED PENN STATION
REDEVELOPMENT PROJECT
NEW YORK, NEW YORK

by

Patricia J. Condell
and
Edward S. Rutsch

of

Historic Conservation & Interpretation, Inc.
115 Route 519, Newton, NJ 07860

for

McGinley Hart and Associates
Boston, Massachusetts

SEPTEMBER 1994

CONTENTS

List of Illustrations	ii
I. INTRODUCTION	1
II. DOCUMENTARY RESEARCH	4
A. Prehistoric Era	4
B. Historic Era	7
1. James A. Farley Building Site	7
2. Amtrak's Service Building Site	9
III. INFIELD INVESTIGATIONS	20
A. James A. Farley Building Site	20
B. Amtrak's Service Building Site	20
IV. CONCLUSIONS AND RECOMMENDATIONS	22
A. James A. Farley Building Site	22
B. Amtrak's Service Building Site	22
V. BIBLIOGRAPHY	25

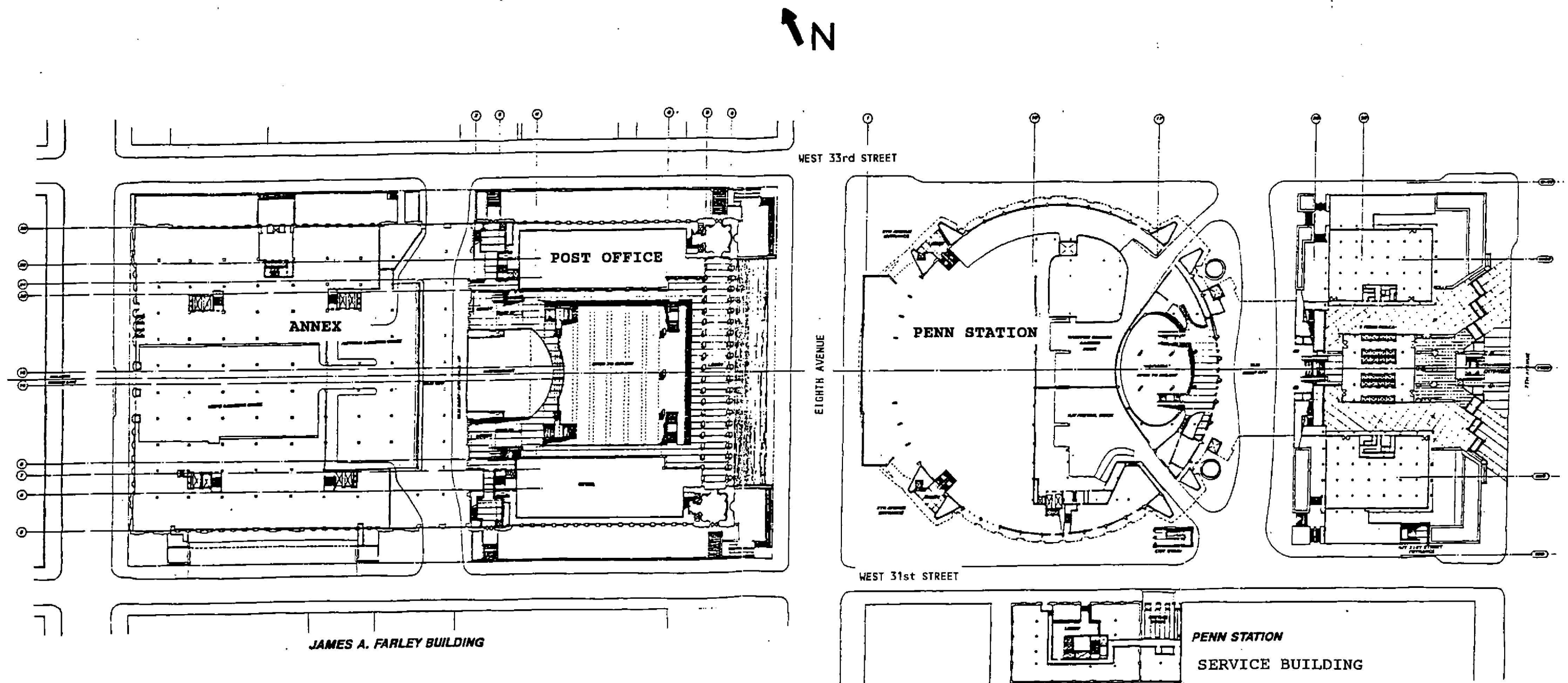
LIST OF ILLUSTRATIONS

FIGURE 1.	Map showing location of project area	2
FIGURE 2.	Portion of bird's-eye view showing the Farley Building site in 1879	10
FIGURE 3.	The Farley Building site in 1916	11
FIGURE 4.	Portion of 1859 map showing the Service Building site	13
FIGURE 5.	Map showing the Service Building site in 1902	16
FIGURE 6.	1916 map showing the newly constructed Service Building	17
FIGURE 7.	Map showing the Service Building site in 1955	18

I. INTRODUCTION

The following report contains the results of an archeological sensitivity study for the proposed Penn Station Redevelopment Project, New York, New York. The study was conducted in the Summer of 1994 by Historic Conservation and Interpretation, Inc. (hereafter also "HCI") of Newton, New Jersey for McGinley Hart and Associates of Boston, Massachusetts. The project area consists of two sites: the site of the James A. Farley Post Office Building, located on the entire block between 31st and 33rd streets and between Eighth and Ninth avenues and the site of Amtrak's Service Building, located at 250 West 31st Street (see Figure 1). The proposed redevelopment of Penn Station entails the creation of a new Amtrak station in the James A. Farley Building and the complete rehabilitation of Amtrak's Service Building. The purpose of HCI's work was to evaluate the two sites for the presence of potentially significant archeological cultural resources. In addition, HCI was to assess the significance of the Service Building and its industrial equipment and remains that are present within the structure.

The tasks performed as part of this study included documentary research, infield investigation, data analysis, and preparation of a final report. The documentary research



JAF

AMTRAK
JAMES A. FARLEY BUILDING
FEASIBILITY STUDY

PASA INC.

NEW YORK

FIGURE 1. Location map showing the project area in Midtown Manhattan (Map provided by McGinley Hart and Associates).

primarily entailed the perusal of historic maps for information concerning the development of the project area during historic times. However, background information pertaining to the use of the project area during prehistoric times was also gathered. Specifically, this research was conducted at the New York Public Library. HCI's own research files and library, which includes reports and data spanning 20 years of cultural resource management projects in Manhattan and the surrounding New York Metropolitan Area, were also examined. The infield investigation included the general inspection of both sites; special attention was given to the Service Building site because of its potential as a significant industrial archeological resource. All data collected during the course of this study were analyzed and summarized for presentation in this final report.

II. DOCUMENTARY RESEARCH

A. Prehistoric Era

An understanding of the original topography of Manhattan Island is essential in order to begin to predict the former locations of prehistoric occupation. Therefore, a short description of the island's physiography is presented before continuing with a discussion of the prehistory.

The Penn Station Redevelopment study area lies on Manhattan Island, which is at the southern end of a narrow peninsula (the Manhattan Prong) of the New England Upland Physiographic Province. The landscape of this province is characterized by very old, worn mountains and glacial debris (Hunt 1974:253-303). Manhattan's higher elevations are formed by a very old, hard underlying bedrock known as Manhattan schist. This schist contains a coarse mica and, in some locations, is exposed on the surface; in other portions of the island it is thickly covered by glacially deposited debris and topsoil. The most distinctive ridge or spine of this bedrock on Manhattan runs north-south along the western side of the island. The study area is located on this ridge where it lies well beneath the surface of the ground and the terrain is relatively flat. The ridge rises above the surface further downtown, although its elevation

is much lower than where it is exposed uptown (Schuberth 1968).

The deep bedrock (approximately -300 feet) found in part of Midtown Manhattan has had a profound effect on the city's growth since, until recent times, skyscrapers were expensive or impossible to build here because their foundations had to be anchored to the bedrock. As a result, most large buildings were found just to the north and far to the south of this locale. More recently, modern foundation designs have overcome many of the problems associated with the deep bedrock and it is now feasible to construct larger buildings without anchoring to the bedrock (Cross 1985:127-40).

The topography of the Penn Station study area gently slopes westward; here bedrock, which is between 260 and 279 feet below surface, is covered by glacial soils such as sand, gravel, and clay and originally was surmounted by a layer of humus-rich topsoil (McKim Mead & White 1910; Westinghouse et al. 1909). The study area formerly drained toward a small stream, located a block or two to the southwest, which then emptied into the Hudson or North River (Stokes 1918:Vol. 3, Plates 86 and 124).

Relatively little is known about the exact locations, settlement patterns, and site remains of prehistoric cultures in Midtown and Lower Manhattan because the area's intense urban development has so thoroughly altered the region's original landscape. Inferences can be made,

though, regarding probable prehistoric settlement from other prehistoric sites which have been researched in less developed parts of the region (Smith 1950; Ritchie 1969; Jacobsen 1980). Another important source of information is the documentary record left by the city's earliest European explorers and inhabitants. Such a summary of existing records was compiled by Alanson Skinner in 1919. He found several references to large prehistoric sites which were characterized by deep piles of shells, created by aboriginal food collecting. These sites clustered around a swampy meadow that almost bisected Manhattan Island in the area of Canal Street, nearly two miles south of the study area (Skinner 1919:51).

Skinner also analyzed locations with a terrain similar to what had once been on the present study area and concluded that "... all along the shore [of Manhattan Island], wherever one of the many springs or small brooks, shown on old maps, emptied into either the Hudson or East River, there were small, temporary Indian camps..." (Skinner 1919:12). Skinner further hypothesized that aborigines must have moved to a few well-protected parts of the island to camp during the winter months (Skinner 1919:12). Since a small stream is known to have originated a few blocks southwest of the study area, it is possible that a prehistoric camp might once have been situated along its banks.

In conclusion, analysis by culture historians indicates that the study area does not have great potential for containing intact buried aboriginal remains. If any infield studies of the Service Building site are undertaken, it should be taken into account that Native American cultural remains could exist if former, intact ground surfaces (A-horizons) are found. For a more detailed review of aboriginal site potential in Manhattan, the reader should consult the New York City Landmarks Preservation Commission's Toward an Archaeological Predictive Model for Manhattan: A Pilot Study (Baugher et al. 1982:10-12).

B. Historic Era

1. James A. Farley Building Site

The area of the Farley Building site, as well as the Service Building site, remained rural until the middle of the 19th century. In 1820, the Farley site was owned by John P. Decatur and a residence with two small outbuildings were present in the middle of what was to become the block between Eighth and Ninth avenues and 31st and 32nd streets. A small rural road, Fitz Roy Road, crossed the eastern end of the site and traveled in a north-south direction. In 1841, the area was still rural and was primarily in pasture or covered by woods (Stokes 1918:Vol. III, Plates 86 and 124).

The first development of the Farley site occurred between 1841 and 1851. By 1851, the site consisted of two

blocks on which several structures had been built. These buildings were located primarily on Eighth Avenue and 31st and 32nd streets. Also, a Presbyterian church had been built on the south side of 32nd Street in the middle of the block. Fitz Roy Road was no longer in existence. By 1859, the two blocks were completely developed, mainly with brick dwellings. The Presbyterian church no longer was located on 32nd Street; however, a new Presbyterian Church was built on the corner of Ninth Avenue and 31st Street. This church was labeled the North Presbyterian Church on an 1879 map (Dripps 1851; Perris 1854:Vol. 7, Plate 94; Perris 1859:Vol. 6, Plates 89 and 92; Bromley 1879:Plate 14; Stokes 1918:Vol. III, Plate 124).

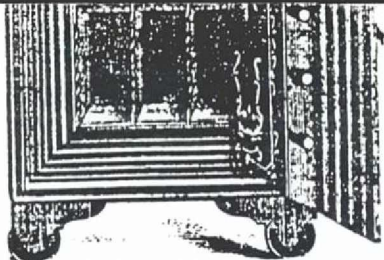
The Farley Building site remained residential throughout the remainder of the nineteenth century (see Figure 2). Between 1870 and 1885, many of the original dwellings may have been replaced or altered. In 1885, several brick buildings possessed stone facades, which were probably brownstone. These may represent entirely new structures or it is possible that stone facades were added to the existing buildings. Similar changes occurred to a few additional residences after 1885. The North Presbyterian Church was enlarged sometime between 1885 and 1890 and then again at the turn of the 20th century. This reflects the increasing population and growth of the neighborhood surrounding the Farley Building site (Dripps

1867:Plate 9; Bromley 1879:Plate 14; Robinson 1885:Plate 14; Robinson 1890:Vol. 3; Bromley 1902:Plates 15 and 20).

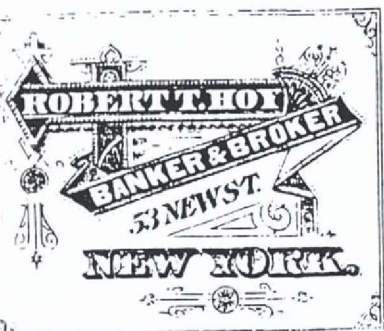
Plans were made at the turn of the 20th century for the construction of the Pennsylvania Railroad Station with connecting rail lines, in addition to a new post office. The two facilities were built in conjunction with one another. The post office was erected over rail lines, platforms, etc. Construction of the railroad station began in 1904 and the construction of the post office began within a few years afterward. At this time, 32nd Street was closed and the Farley Building site was excavated down into bedrock, thereby obliterating the remains of any cultural resources that once existed on the site. Penn Station opened in 1910 and the post office opened in 1914 (see Figure 3). As the 20th century progressed, larger postal facilities became necessary. During the early 1930's, an annex was built over the railroad on the property immediately behind or directly west of the original post office to accommodate this need. No other significant changes have occurred since then on the Farley Building site (Stokes 1918; Bromley 1916:Plate 59; McKim, Mead, and White 1910; Farley Post Office Photographs 1909-1935).

2. Amtrak's Service Building Site

As previously mentioned, the Service Building site remained rural until the middle of the 19th century. In 1820, the site was included in a tract of undeveloped



Steel Door Frame and Jamb
NO CAST IRON.
THE FINEST FIRE PROOF
SAFE IN THE WORLD.
Bank Safes, Vaults &c.



THIS
\$10.
MILLERS
WITH
CORNICE
Address
Price
MILLERS,
ST.
NEW YORK,
1010 2nd



FIGURE 2. Portion of bird's-eye view showing the residential nature of the Farley Building site in 1879 (Galt & Hoy 1879; No Scale).

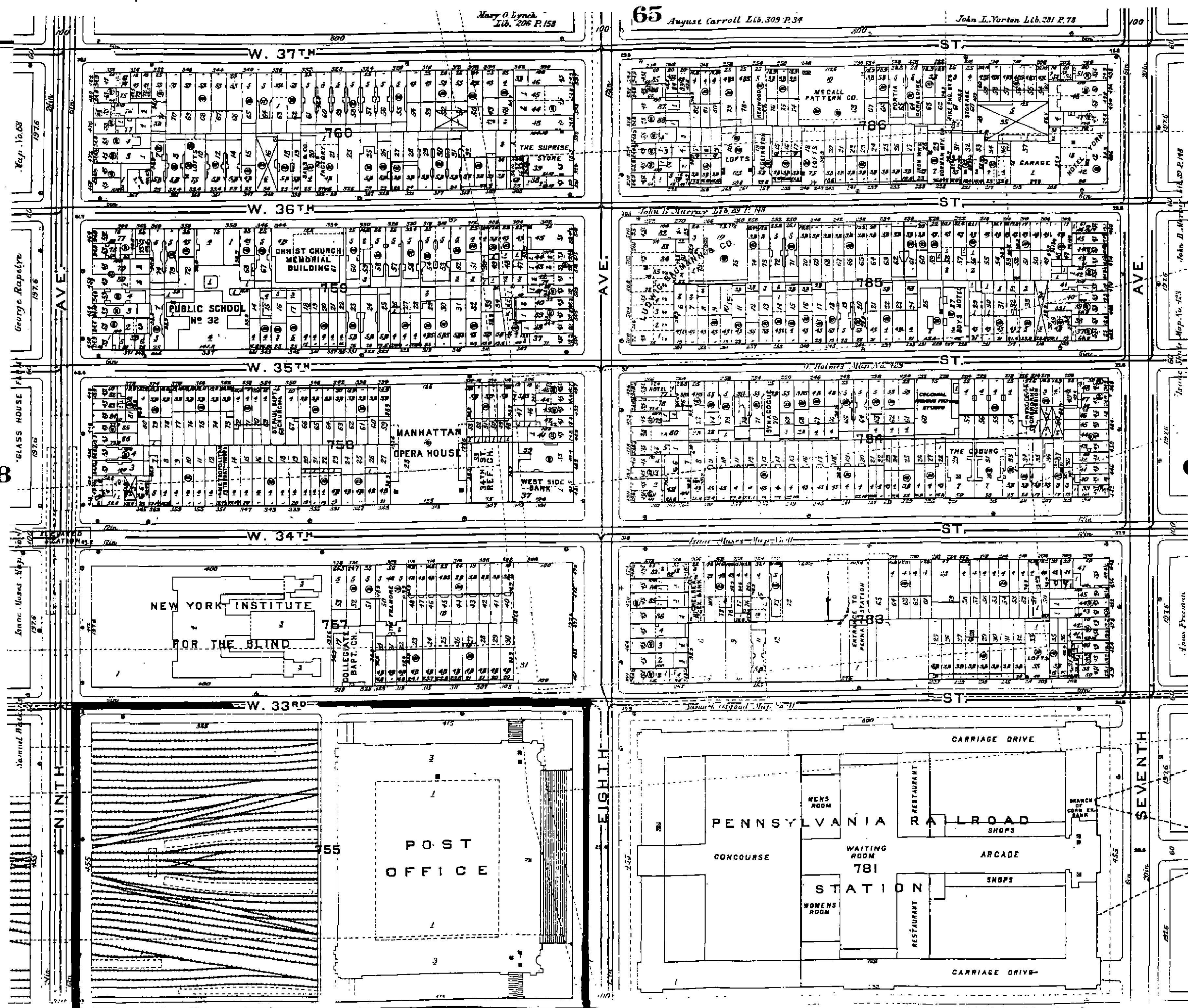
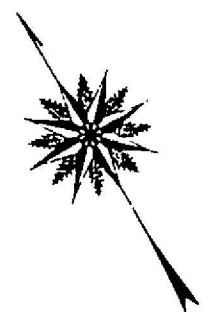


FIGURE 3. Map showing the layout of the newly constructed post office and railroad station in 1916. Note that the post office annex had not been built at this time (Bromley 1916: Plate 59).

PART OF
SECTION 3

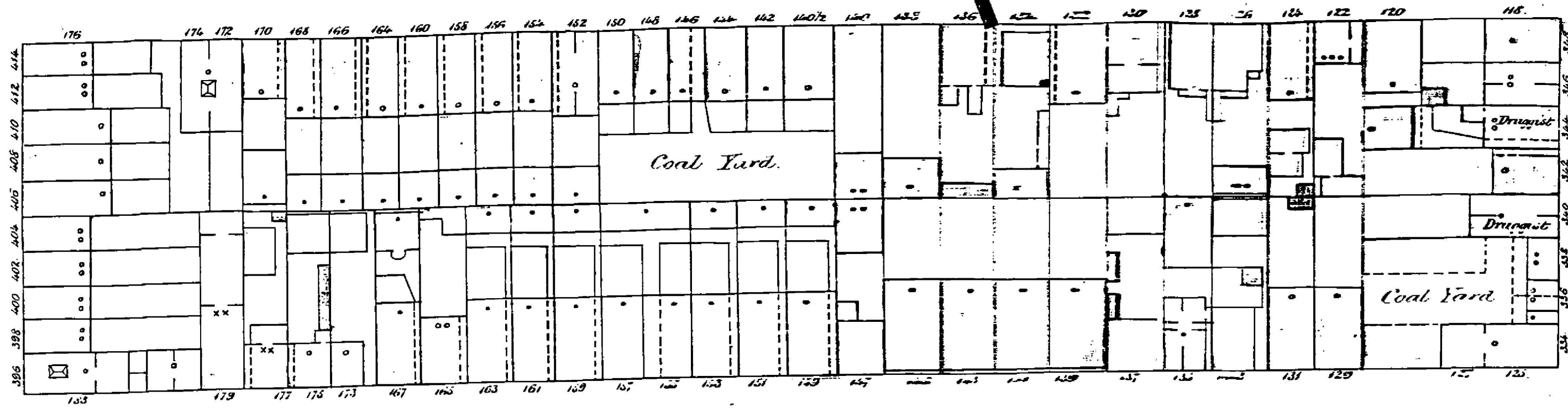
Scale 160 Feet to the Inch.



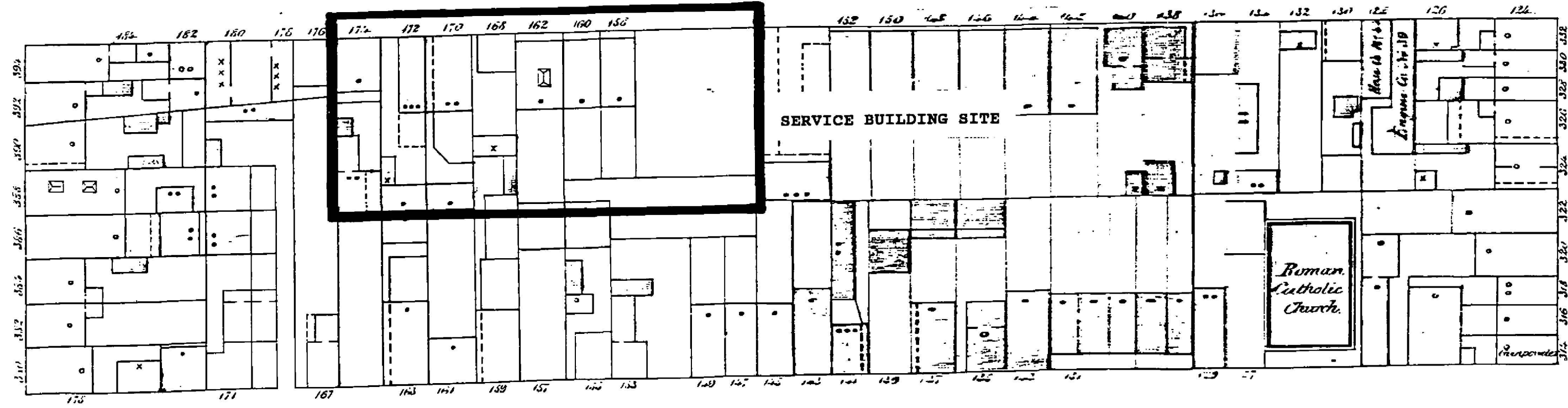
land owned by the heirs of James Stewart. The first development of the area occurred between 1840 and 1850. Streets were created, as well as city blocks, which were divided into lots. By 1854, approximately nine structures had been built on the Service Building site. Three separate structures had been built on the westernmost lot (presently vacant). The rear building was a brick dwelling, whereas the other two were used for small scale manufacturing or commerce businesses. The building that fronted 31st Street was constructed of brick and the structure in the middle of the lot was of frame construction. Five dwellings had been constructed by 1854 on the lots that presently are occupied by the actual Service Building. All but one of these residences were built of brick. The one exception was a frame structure. Lastly, two small connected frame structures, used for light manufacturing, had been built on the easternmost lots (presently vacant) of the Service Building site (Dripps 1851; Perris 1854:Vol. 7, Plate 90; Stokes 1918:Vol. III, Plates 86 and 124).

Several changes took place on the Service Building site between 1854 and 1859 (see Figure 4). The brick dwelling and the brick manufacturing structure were still present on the westernmost lot; however the frame manufacturing structure in the middle of the lot was no longer there. In its place, a small brick addition had been constructed on the front of the dwelling. Most of the buildings on the Service Building lots remained the same; however, two new

WEST 32ND STREET



WEST 31ST STREET



WEST 30TH STREET

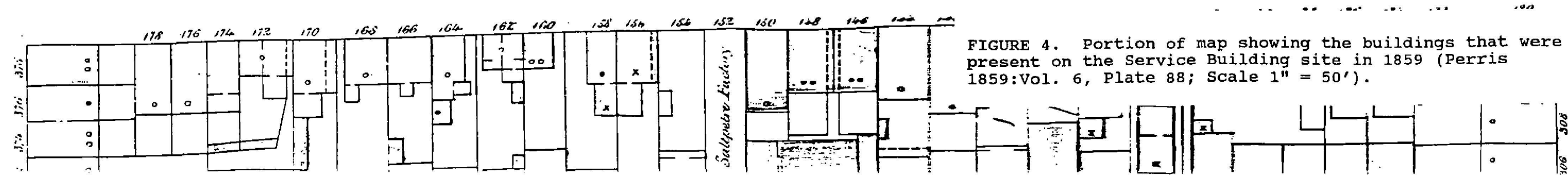


FIGURE 4. Portion of map showing the buildings that were present on the Service Building site in 1859 (Perris 1859:Vol. 6, Plate 88; Scale 1" = 50').

EIGHTH AVENUE

brick structures had been built next to the aforementioned lot to the east and were both used for small scale manufacturing purposes. Also, a small brick manufacturing structure was built behind one of the brick dwellings. In 1859, the small frame manufacturing structures were no longer present on the site's easternmost lots. These lots were vacant at this time (Perris 1854:Vol. 7, Plate 90; Perris 1859:Vol. 6, Plate 88).

The Service Building site continued to change throughout the rest of the 19th century. By 1885, a new larger brick structure had been built in the rear of the site's westernmost lot. The original brick structure that fronted directly on 31st Street was still present. The lots on which the Service Building is located had completely changed by 1885. A row of three similar brick dwellings had been built; they were 5 stories with stone facades that probably were brownstone. A three-story brick structure with a smaller brick rear building had been constructed directly east of the three dwellings. On the next three lots, a frame building, a three-story brick building, and a frame structure that occupied an entire lot had also been built. Lastly, the site's two easternmost lots that were vacant in 1859 had two five-story brick dwellings constructed on them by 1885 (Perris 1859:Vol. 6, Plate 88; Robinson 1885:Plate 14).

Only a few additional changes occurred to the Service Building site by the turn of the 20th century (see Figure

5). Between 1890 and 1902, a new four-story brick structure that encompassed the entire lot was built on the site's westernmost lot. One of the frame structures on the Service Building lots had been replaced with a three-story brick building with an attached frame addition between 1885 and 1890 (Robinson 1885:Plate 14; Robinson 1890:Vol. 3; Bromley 1902:Plate 15).

During the first decade of the present century, the Pennsylvania Railroad Station was constructed. To provide the power for this new facility, the extant Service Building was erected (see Figure 6). At this time, the structures that are shown on Figure 5 were demolished to accommodate the new power house. It is known that the specific lots on which the Service Building was constructed were excavated down into bedrock, thereby destroying the remains of any cultural resources that may have existed there. However, the amount of disturbance to the lots adjacent to the Service Building is not known (Westinghouse et al. 1907; Hyde 1913:Vol. 2, Plate 9; Bromley 1916:Plates 54 and 59).

The only development on the site since the Service Building was constructed took place on the westernmost lot. The lot remained vacant until sometime between 1934 and 1955. At this time, a one-story brick building was constructed (see Figure 7). This structure was a duplex which had a store in the western half of the building and the eastern half was used as a residence. It was torn down

PART OF
SECTION 3

Scale 160 Feet to the Inch.

59

PENNSYLVANIA RAILROAD STATION

ST

PENNA. R.R.
POWER HO.

SCHOOL

SERVICE BUILDING SITE

ST

W. 31ST

W. 30TH

W. 29TH

W. 28TH

W. 27TH

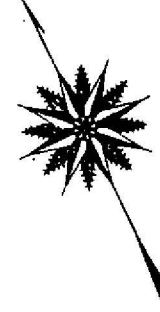
W. 26TH

AVE

EIGHTH

AVE

SEVENTH



55

FIGURE 6. Map showing the newly constructed Service Building in 1916 (Bromley 1916:Plate 54).

ST.

35.6

WEST 31st STREET

SERVICE BUILDING SITE

SCHOOL

ST. JOHN THE BAPTIST
R.C. CHURCH

SEVENTH AVENUE

FIGURE 5. Portion of a 1902 map showing the changes that had occurred on the Service Building site since 1859 (Bromley 1902:Plate 15; Scale: 1" = 80').

**BUILDING ZONE RESTRICTIONS
USE ZONES**

Properties fronting on streets in the
colored purple are used as business properties.
Properties fronting on streets in the
unshaded are restricted to dwelling use.
Those fronting on streets or avenues
colored brown are unrestricted.

**BUILDING ZONE RESTRICTIONS
HEIGHT ZONES**

All properties on this side of heavy line are in
zone 1/2 and the height of buildings is
restricted to 1/2 times the width of
the street or avenue on which they front.

**PART OF
SECTION 3**

Scale 160 Feet to the Inch

**BUILDING ZONE RESTRICTIONS
HEIGHT ZONES**

All properties this side of heavy line are in
zone 2 and the height of buildings is
restricted to 2 times the width of
the street or avenue on which they front.

59

PENNSYLVANIA RAILROAD STATION

Parcel drawn to J. H. P. Whitting, 111-139 P. 118

STRUCTURE

PENNA. R.R.
POWER HO.

SERVICE BUILDING SITE

GARAGE

ST. JOHN'S BAPTIST
P.C. CHURCH

PENNA. TERMINAL

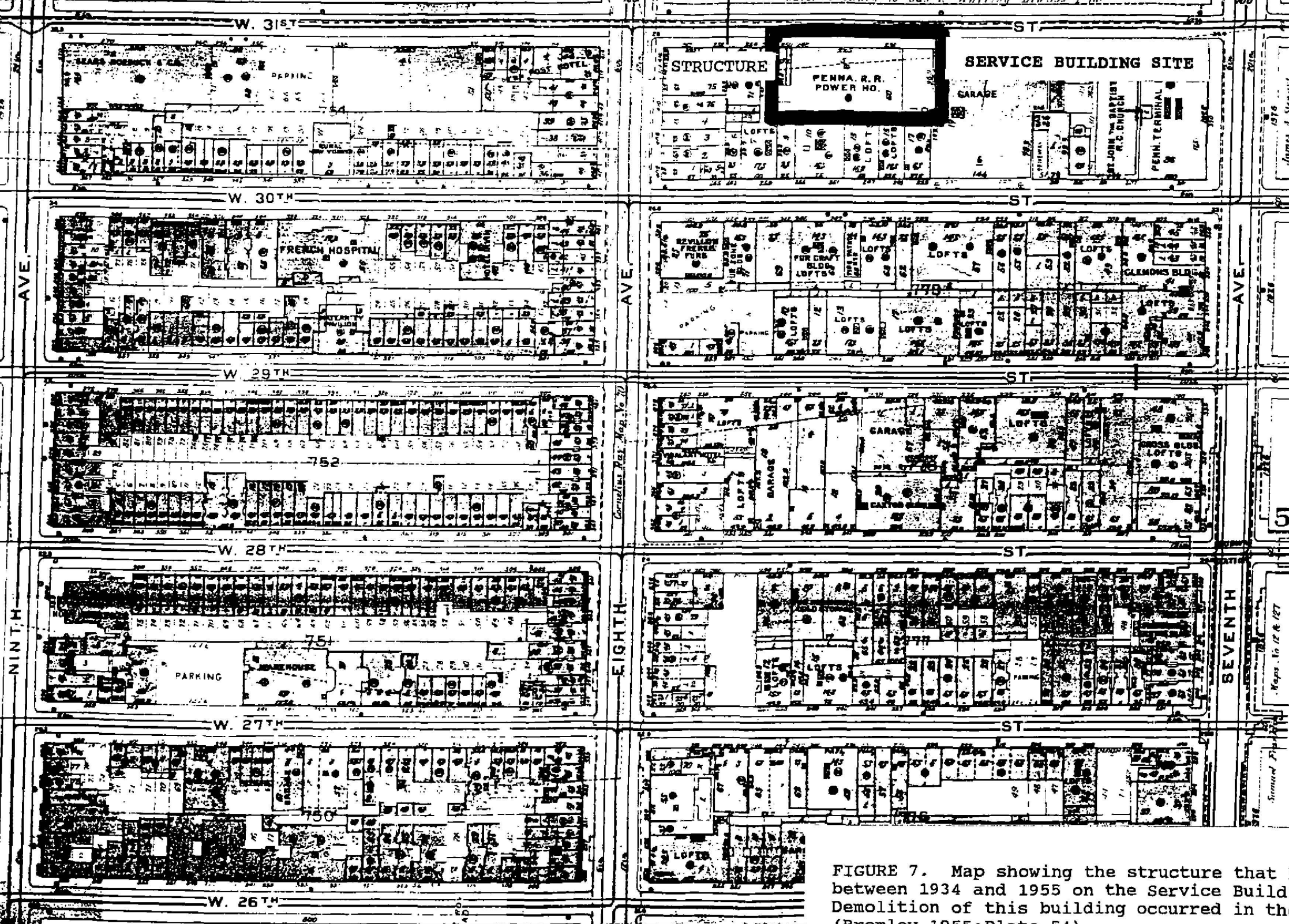


FIGURE 7. Map showing the structure that had been built between 1934 and 1955 on the Service Building site. Demolition of this building occurred in the late 1960's (Bromley 1955:Plate 54).

48

sometime between 1967 and 1969 (Bromley 1934:Plate 54;
Bromley 1955:Plate 54; Bromley 1967:Plate 54; Hyde 1969:Vol.
2, Plate 9).

III. INFIELD INVESTIGATIONS

A. James A. Farley Building Site

The infield investigations of the Farley Building site consisted of a tour around the grounds of the main post office and annex. It also included a walk-over survey of the railroad facilities located beneath both of these structures. From this inspection, it was seen that the disturbance from the construction of the railroad and post office was quite deep and extensive; therefore, any prehistoric or historic cultural remains that may have existed on the site were eradicated during the construction of both facilities.

B. Amtrak's Service Building Site

The infield investigations of the Service Building site consisted of a survey of the building's interior and an overall inspection of the exterior, including the vacant lots adjacent to the building on either side. HCI was asked as part of this project to assess the significance of the Service Building and its industrial equipment and remains that are present within the structure. Through the infield investigations, it was determined that the Service Building is a significant cultural resource because it contains a wealth of information concerning the layout and design of early electrical power plants.

Although it has been updated technologically (e.g. computers, compressed air), the original power system is evident throughout the structure. The remains of coal hoppers, boilers, steam engines, generators, etc. are still present, in addition to original breakers, wattmeters, and the electrical, water, and steam systems, much of which are still in operation. The original space designed for the power director on the eighth floor continues to be used as such to this day. All of this illustrates the significant history and evolution of electrical railroad power plants.

The lots adjacent to the Service Building are presently paved with asphalt. The shadow of the building that last stood on the western lot can be seen on the side of the Service Building. No other features were noted on these two vacant lots.

IV. CONCLUSIONS AND RECOMMENDATIONS

A. James A. Farley Building Site

Through the documentary research and the infield investigations, it can be concluded that there is no potential for any significant archeological cultural resources to be present on the Farley Building site. Any prehistoric or historic remains that may have existed were destroyed during the construction of the post office and Penn Station's railroad facilities in the early 20th century. At that time, the site was excavated down into bedrock. Since the disturbance is so great, HCI concludes that the proposed Penn Station redevelopment would not have an impact on any potentially significant cultural resources. Therefore, no further archeological investigations are recommended for the Farley Building site.

B. Amtrak's Service Building Site

From the infield investigations, it is clearly evident that the Service Building, itself, is a significant cultural resource. The structure, the 31st Street facade of which was designed by McKim, Mead, and White, was constructed as part of the original Pennsylvania Railroad Station and is still being used for the same function for which it was originally built - supplying power to the railroad. Much of

the original equipment, or remains thereof, are still present within the building and can provide valuable information concerning the layout and design of early electrical railroad power plants. Although in a different capacity, the structure is still being used for what it was originally intended, which illustrates the history and evolution of this type of railroad facility. If the proposed redevelopment plans for the Service Building are implemented, it is recommended that the building and the resources within it be fully documented according to HABS/HAER standards before any redevelopment takes place.

In addition, it can be concluded that there is no potential for any significant cultural resources to exist beneath the Service Building. When the structure was built, the area was excavated into bedrock, thereby destroying any cultural remains that might have existed. However, there is a possibility that potentially significant archeological resources might be present on the two vacant lots that flank the Service Building. These resources could include the remains of the residential or light manufacturing structures and their associated features that occupied the lots during the second half of the 19th century. In addition, prehistoric cultural remains could exist if former intact ground surfaces (A-horizons) are found. However, there is also a possibility that these remains were disturbed or obliterated during the construction of the Service Building. Nevertheless, if any impacts are made on the two adjacent

lots as part of the redevelopment of the Service Building,
it is recommended that archeological testing be done to
determine if these remains are in fact present and if so, to
evaluate their significance.

V. BIBLIOGRAPHY

Baugher, Sharene, Meta Janowitz, Mark Kodak, and Kate Morgan

- 1982 Toward an Archaeological Predictive Model for
Manhattan: A Pilot Study. New York City
Landmarks Preservation Commission, New York.

Bromley, G. W.

- 1879 Atlas of the Entire City of New York. G. W.
Bromley and Co., New York.
- 1902 Atlas of the City of New York, Borough of
Manhattan. G. W. Bromley and Co., New York.
- 1916 Atlas of the Borough of Manhattan, City of New
York. G. W. Bromley and Co., New York.
- 1920- Atlas of the City of New York, Borough of
1922 Manhattan. Volume 2. G. W. Bromley and Co.,
New York.
- 1930 Land Book of the Borough of Manhattan, City of New
York. G. W. Bromley and Co., New York.
- 1934 Manhattan Land Book. G. W. Bromley and Co., New
York.
- 1955 Manhattan Land Book of the City of New York. G.
W. Bromley and Co., New York.
- 1955
rev.1967 Manhattan Land Book of the City of New York. - G.
W. Bromley and Co., New York.

Cross, Wilbur

- 1985 75 Years of Foundation Engineering. The Benjamin
Co., Elmsford, New York.

Dripps, Matthew

- 1851 Map of the City of New York Extending Northward to
Fiftieth St. M. Dripps, New York.

1867 Plan of New York City... M. Dripps, New York.

Farley Post Office Photograph Collection

1909- Photograph collection of the construction of the
1935 Farley Post Office and Annex in the possession of
 the New York Postal Museum.

Galt and Hoy

1879 The City of New York. Galt and Hoy, New York.

Hunt, Charles B.

1974 Natural Regions of the United States and Canada.
 W. H. Freeman & Co., San Francisco.

Hyde, E. Belcher

1913 Atlas of the Borough of Manhattan, City of New
 York. Vol. 2. E. Belcher Hyde Map Co., Brooklyn.

1906 Atlas of the Borough of Manhattan, City of New
rev.1969 York. Vol. 2. E. Belcher Hyde, Brooklyn.

Jacobsen, Jerome

1980 Burial Ridge: Archaeology at New York City's
 Largest Prehistoric Cemetery. The Staten Island
 Institute of Arts and Sciences, New York.

McKim, Mead, and White

1910 Original architectural plans of the Farley Post
 Office Building. Data supplied by McGinley Hart
 and Associates, Boston, MA.

Perris, William

1854 Maps of the City of New York. Vol. 7. William
 Perris, New York.

1859 Maps of the City of New York. Vol. 6. William
 Perris, New York.

1969 The Archaeology of New York State. Natural History Press, Garden City, New York.

1885	<u>Atlas of the City of New York...</u> York.	E. Robinson, New
------	--	------------------

Schuberth, Christopher J.

Skinner, Alanson

Smith, Carlyle S.

Stokes, I. N. Phelps

Westinghouse, Church, Kerr & Co.

1909 P., N.Y. & L.I.R.R., New York Terminal, Service Plant. Original engineering plans prepared by Westinghouse, Church, Kerr & Co., New York. Copies supplied by McGinley Hart and Associates, Boston, MA.