HUNTER RESEARCH

ARCHAEOLOGICAL INVESTIGATIONS
SELECTED LOCATIONS IN SENECA VILLAGE
SPECTOR PLAYGROUND AND
PATHWAY IMPROVEMENTS
CENTRAL PARK, NEW YORK

Prepared for:

Central Park Conservancy

Prepared by:

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MANAGEMENT SUMMARY

In December 2019 Hunter Research carried out a program of archaeological testing, supplemented with historical research, in support of the Central Park Conservancy's planned improvement within and around the West 86th Street/Spector Playground in Central Park. This playground is situated within the area of the former Seneca Village, the mixed African-American, Irish-American and German-American community that existed from the mid-1820s until the late 1850s when the Park began to be constructed.

Seneca Village, through historical and archaeological research performed by the Institute for the Exploration of Seneca Village History and Hunter Research since the mid-1990s, has been demonstrated as holding considerable archaeological potential. The Central Park Conservancy recognizes the historical and archaeological sensitivity of Seneca Village and now routinely undertakes assessments, surveys and mitigative actions, as appropriate, where Park maintenance or improvement actions run the risk of encountering archaeological remains. Work of this type is subject to the review and approval of the New York City Landmarks Preservation Commission as befits Central Park's designation as a National Historic Landmark and New York City Landmark.

In this instance, archaeological tests were manually excavated on or close to the sites of All Angels' Church, the Haff House and a greenhouse on the AME Zion Church property. Test locations were determined on the basis of detailed historic map analysis and the results of a ground-penetrating radar survey carried out in 2016.

At the site of All Angels' Church on West 85th Street, a structure erected in 1849 and disassembled and removed in 1858, two excavation units found no intact remains of the church foundations and minimal evidence of the church's former existence. No further pre-construction archaeological testing is considered necessary in connection with the proposed improvements; however, archaeological monitoring during construction is still recommended in the vicinity of the church.

A single excavation unit was dug within the sand play area of Spector Playground on or close to the site of the Haff House, a dwelling that is thought to have been erected in the late 1830s or 1840s and pulled down *circa* 1856-57. No trace of the house was observed and soils had been extensively disturbed by playground construction, although the full depth of the cultural stratigraphy was not penetrated. Archaeological monitoring is recommended during construction for ground disturbance in excess of two feet (60 cm) in the immediate vicinity of the house.

A single excavation unit was also located close to the site of a greenhouse that formerly existed in the mid-1850s at the western end of the AME Zion Church property. This test found only disturbed soils dating from the time of the park's creation and its subsequent modification (chiefly in the 1930s and 1970s). No trace was observed of the building, which was likely set on shallow footings, nor of any associated greenhouse-related activities. No further archaeological assessment of the greenhouse site is considered necessary within the context of the proposed playground improvements.

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ACKNOWLEDGMENTS

These historical and archaeological investigations were funded by the Central Park Conservancy. We greatly appreciate the support and interest of several members of the Conservancy staff, notably: Marie Warsh, Historian and Director of Preservation Planning; Sara Cedar Miller, Historian; David Turner, Construction Project Director; and Christopher Nolan, Vice President for Capital Projects. Ms. Warsh and Ms. Miller both contributed critical historical research information to this project and kindly assisted with the editing and writing of historical sections of the report. This work is subject to review by the New York City Landmarks Preservation Commission and we are grateful for the input and oversight of this agency's archaeologist, Amanda Sutphin.

We also wish to acknowledge the considerable interest and assistance of the Institute for the Exploration of Seneca Village History. Several members of this organization, most notably Diana Wall, Nan Rothschild, Meredith Linn, Herbert Seignoret, Cynthia Copeland and Celedonia Jones, generously shared the results of their own historical and archaeological endeavors and kindly made primary source materials available.

With regard to Hunter Research staff involvement, the project was conducted under the overall direction of Richard Hunter and James Lee. Archaeological fieldwork was performed by Andrew Martin, Alexis Alemy and Lucia Bianchi under the supervision of James Lee. Laboratory processing and cataloging of artifacts were performed by Joshua Butchko, Alexis Alemy and Andrew Martin. Report graphics were produced by Evan Mydlowski. Graphic design work and report layout were completed by Patricia Madrigal. This report was written by Richard Hunter and James Lee.

Richard W. Hunter, Ph.D., RPA
Principal/President

Chapter 1

INTRODUCTION

A. PROJECT DESCRIPTION AND SCOPE-OF-WORK

This report presents the results of archaeological investigations carried out in 2019 in connection with planned improvements to the Spector Playground and related pathways in the area of West 86th Street and the former Seneca Village in Central Park, Borough of Manhattan, New York City. The playground improvements will involve the installation of new play structures with footings, water features, benches and a steel perimeter fence. Utility upgrades (chiefly storm water drains and water lines) will also require excavation within the playground interior. The pathway improvements will involve installation of new curbs and benches, regrading, resurfacing and drainage modifications (Figure 1.1).

The Spector Playground and its associated pathways are located within the limits of the former mid-19th-century community of Seneca Village, an informal, largely African-American and Irish settlement that was displaced through the creation of the park in the late 1850s. Archaeological studies were performed owing to concerns that the playground improvements might encounter historically significant subsurface remains relating to the occupation of the village (Figure 1.2).

The archaeological investigations entailed targeted excavations at the sites of three former Seneca Village structures: All Angels' Church; the Haff House; and a greenhouse associated with the AME Zion Church. In each of these cases, archaeological tests were excavated manually in locations where historic map analysis indicated the former existence of buildings within Seneca Village within or close to the playground footprint and along the pathway alignments in areas where substantial ground disturbance was expected. In general terms, this work aimed to establish the presence, vertical and horizontal extent, and archaeological integrity of any surviving structural remains or deposits relating to the mid-19th-century occupation and abandonment of the village. At some future date, archaeological monitoring is also anticipated during construction at three additional locations: along West 85th Street where remains of the Croton Aqueduct infrastructure are projected to survive underground; on the site of the AME Zion Church; and on the site of the Josiah Landin Houses and Stable.

This work was performed by Hunter Research, Inc. under contract to the Central Park Conservancy. The scope-of-work involved the following tasks: familiarization with previous historical and archaeological research; testing by manual archaeological excavation; in-field documentation through scale drawings, notes and digital photography, recovery and analysis of artifacts; interpretation of findings; and preparation of this report.

Central Park is listed in the National Register of Historic Places and is also designated as a National Historic Landmark and New York City Landmark. In this instance, all archaeological work was conducted with the approval and under the oversight of the New York City Landmarks Preservation Commission.

B. PREVIOUS RESEARCH AND PRINCIPAL SOURCES OF INFORMATION

These archaeological investigations build on several earlier episodes of historical research and archaeological fieldwork undertaken by Hunter Research since 1995. In 1995-96 an historic map overlay was initially developed for the Seneca Village area of the park, identifying former building locations and property lines (Hunter Research, Inc. 1996). The historic cartography that formed the basis for this particular overlay of Seneca Village on to modern topography were the series of Central Park planning maps produced for the Common Council of the City of New York in 1853. Subsequently, a revised and more accurate overlaying of historic map data has been carried out using the Central Park Condemnation maps of 1856 (see below, Chapter 1C).

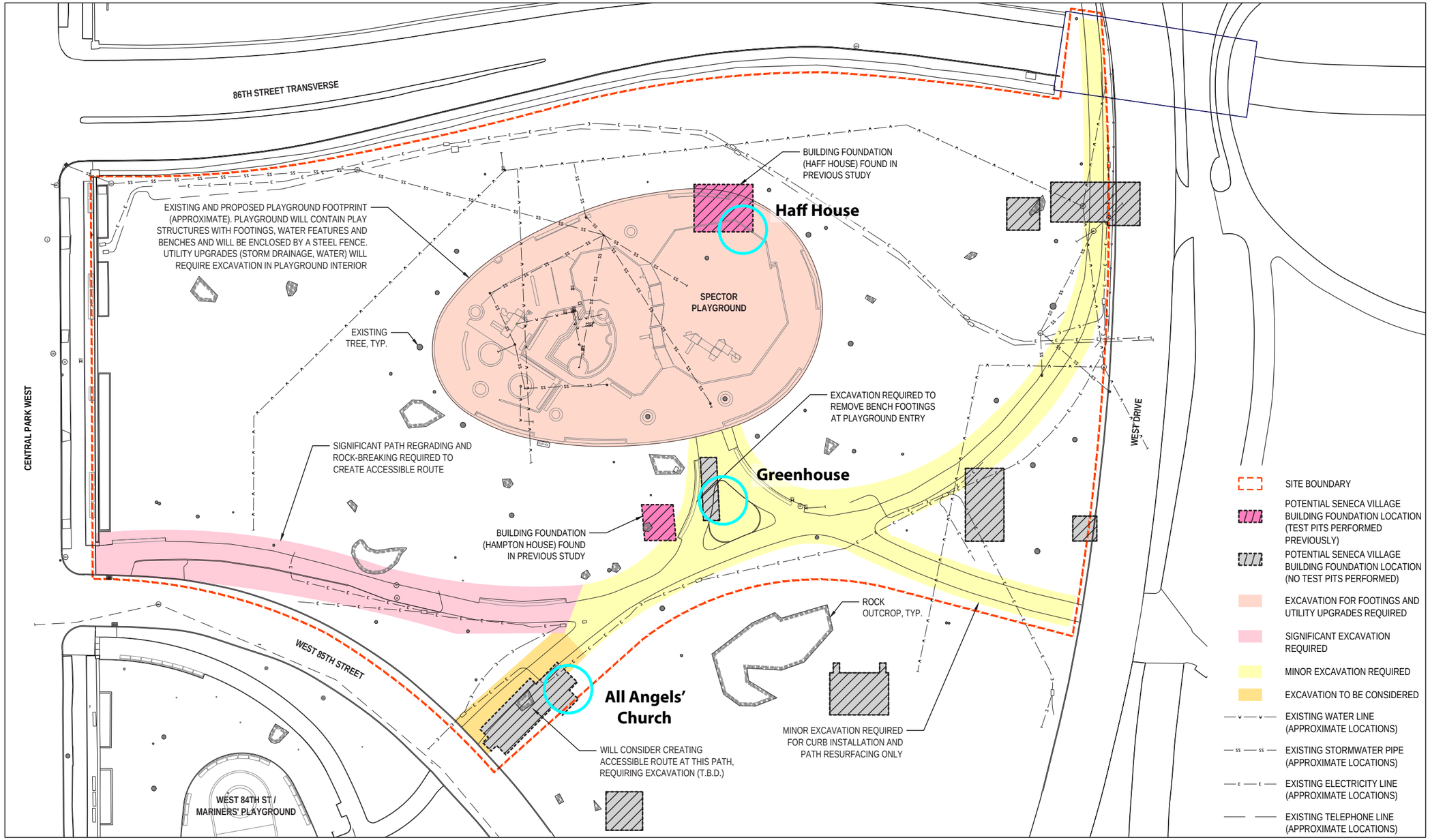
The earlier work of 1995-96 also entailed limited archaeological testing and monitoring in the area east of the West Drive between 83rd and 86th Streets (Hunter Research, Inc. 1996). More recently, in 2015-16, Hunter Research completed a program of archaeological testing and monitoring for improvements at the nearby Mariners' Playground at West 84th Street and also excavated test units on the sites of the Haff and Hampton (aka Hamilton) houses near the Spector Playground, in both cases finding evidence of foundations and small quantities of artifacts (Hunter Research, Inc. 2016).

In addition, the current investigations build on the recent research and fieldwork conducted by the Institute for the Exploration of Seneca Village History (IESVH) and by Central Park Conservancy staff (notably, by Central Park Historians Marie Warsh and Sara Cedar Miller). The IESVH, founded in the late 1990s, has carried out extensive primary archival research, soil testing, remote sensing and targeted archaeological excavation, including, in 2010-11, test units in the portion of the village lying west of the West Drive not far from the playground and pathways that are the focus of the present studies. As part of the current investigations, Hunter Research and Central Park Conservancy staff have consulted with the IESVH and been fortunate in having access to relevant research materials and reports generated by this organization. Members of the IESVH have kindly supplied archival data and other historical information pertaining to the All Angels' and AME Zion churches and to Seneca Village residents who occupied structures in the immediate vicinity of the Spector Playground. Conservancy staff provided much valuable genealogical, census and land ownership data for the same village residents and this section of the park.

In terms of background historical information on Seneca Village and the Park, these investigations have drawn heavily on recent publications, notably Roy Rosenzweig and Elizabeth Blackmar's *The Park and the People: A History of Central Park* (1992) and Sara Cedar Miller's *Central Park, An American Masterpiece: A Comprehensive History of the Nation's First Urban Park* (2003), as well as historical data, annual reports and mapping held by the Central Park Conservancy. The websites of the Conservancy, the IESVH and the New-York Historical Society are also a valuable source of historical data relating to Seneca Village, while the IESVH has also posted online details of past archaeological work. Also instructive are online and published materials relating to the New-York Historical Society's 1997 exhibit "Before Central Park: The Life and Death of Seneca Village."

C. GEOPHYSICAL SURVEYS

Over the past two decades a number of geophysical surveys, all making use of ground-penetrating radar (GPR) equipment, have been performed in sections of Seneca Village (Figure 1.3). These have been valu-



WEST 85TH STREET / SPECTOR PLAYGROUND
SITE ANALYSIS - EXISTING CONDITIONS
01/22/19

Figure 1.1. Site Plan Showing Proposed Improvements, Areas of Likely Ground Disturbance and Archaeological Testing Locations in the Vicinity of Spector Playground. Source: Central Park Conservancy 2019.

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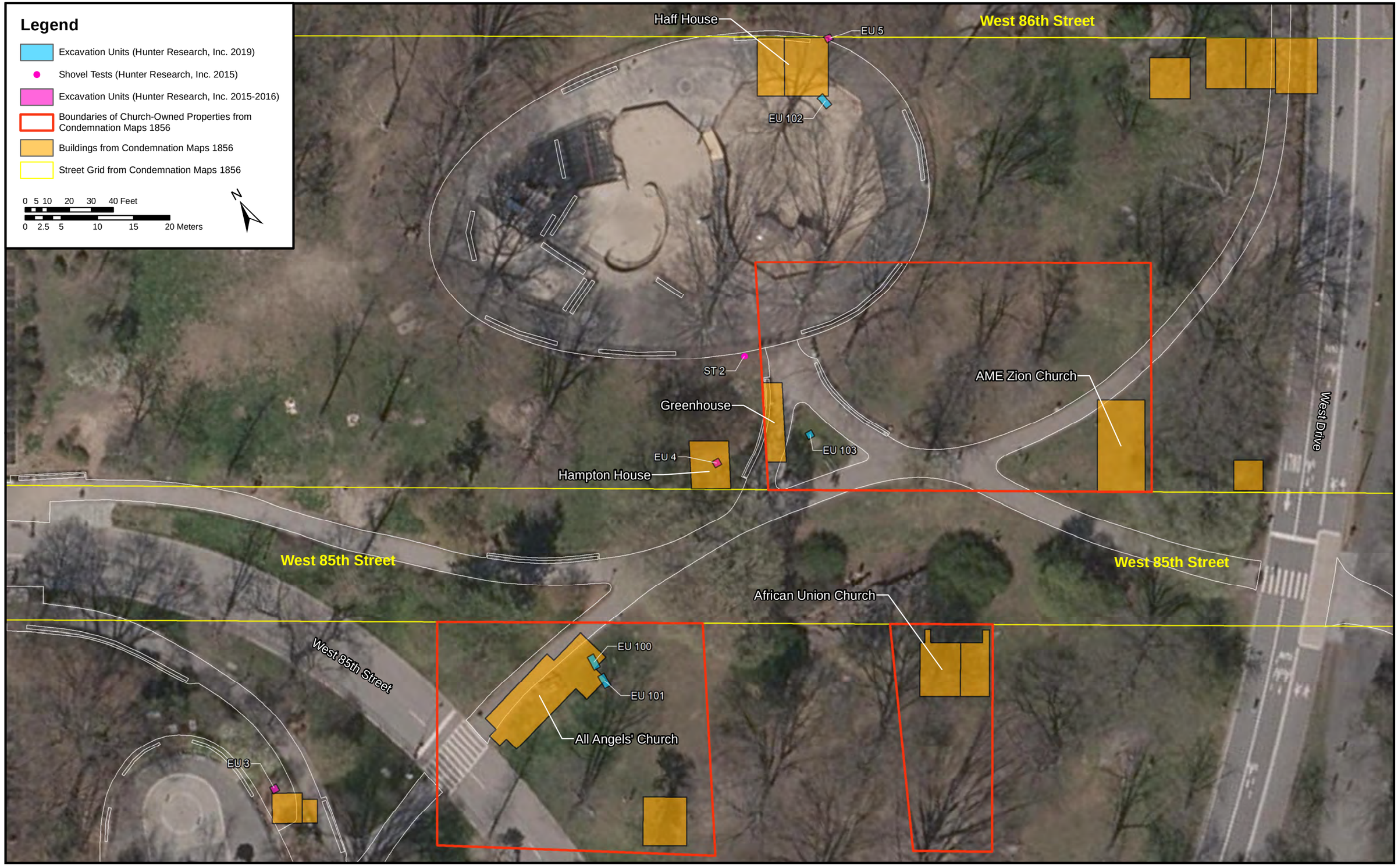

Figure 1.2. Aerial Site Plan Showing Projected Locations of Principal Buildings and Church Properties as Shown on the Condemnation Maps of 1856. Source: Sage 1856; GIS.NY.GOV 2020.

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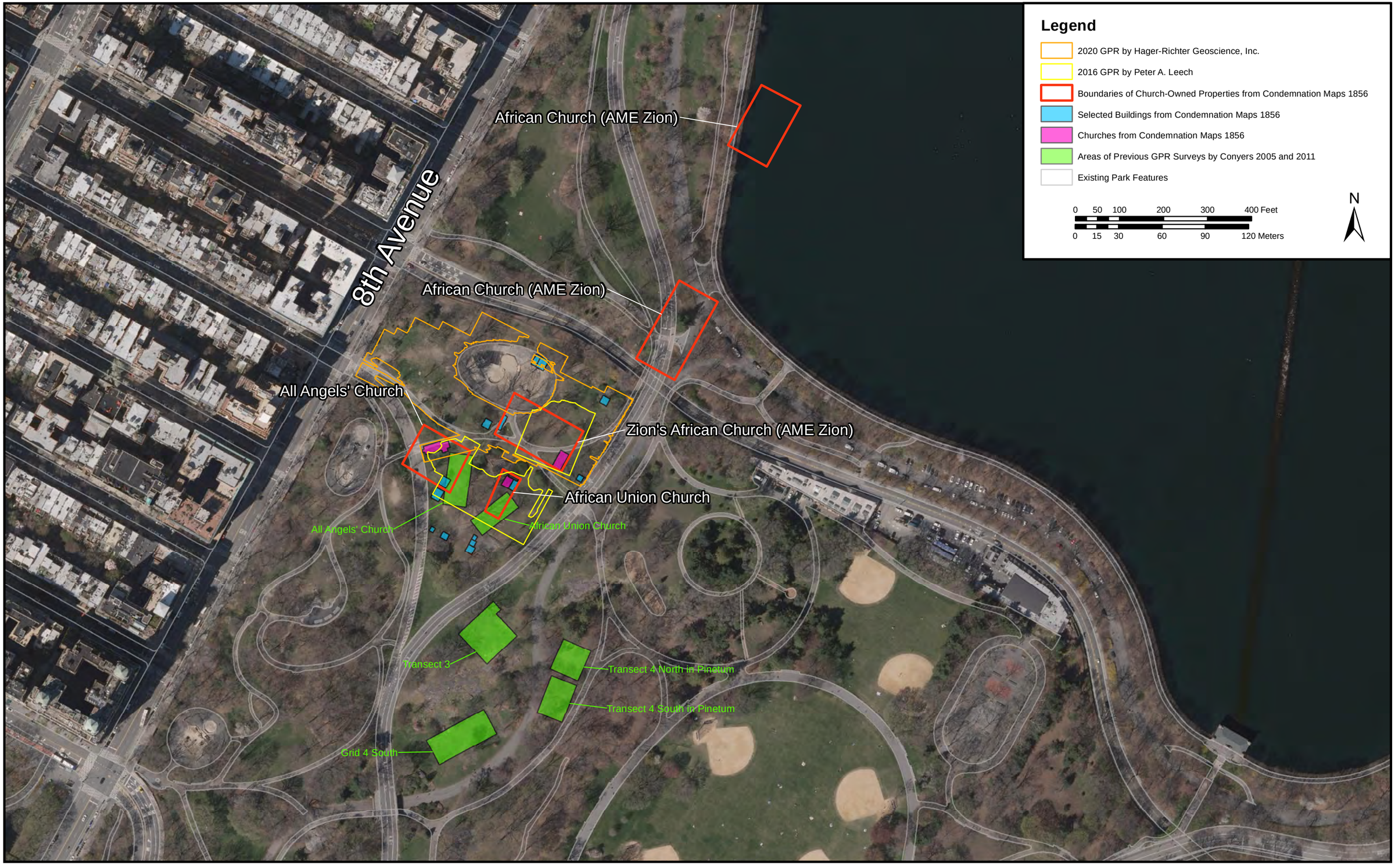

Figure 1.3. Aerial Site Plan Showing Ground-Penetrating Radar Survey Areas, 2005-2020. Source: Conyers 2005, 2011; Leach 2016; Hager-Richter Geoscience, Inc. 2020; GIS.NY.GOV 2020.

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able in guiding archaeological fieldwork and, in some instances, confirming the transposition of buildings from historic maps to modern-day topographic maps.

In 2005, Lawrence Conyers conducted a GPR survey of portions of Seneca Village, examining a series of eight blocks of ground of varying dimensions, only six of which were formally mapped. Conyers returned in May 2011 to undertake an additional two days of GPR survey at the same six mapped locations in an effort to clarify the interpretation of anomalies and more specifically address the potential for human burials. All six of the Conyers survey areas lie well to the south of the Spector Playground, although the most northerly one was focused on the All Angels' Church property and examined ground close to where the current project envisages pathway improvements. A buried anomaly was noted close to the site of a mid-1930s sand box in this latter area in 2005 and interpreted as a possible rubble-filled cellar, but re-examination in 2011 resulted in this anomaly being re-interpreted as a zone of bedrock (Conyers 2005, 2011).

In 2016, Peter A. Leach of the University of Connecticut conducted another GPR survey of selected areas of Seneca Village. These studies homed in on the three church properties within the village (All Angels', African Union and AME Zion) and were designed to investigate not only the sites of the church buildings but also the potential for human burials. Two of the Conyers survey blocks (All Angels' and African Union) partially overlapped with Leach's southern survey area.

Leach identified seven GPR anomalies as buried structural elements (BSE-01, 02, 03, 04a, 04b, 06 and 07), six of which can be correlated with buildings or features potentially dating from the Seneca Village era: BSE-01 – All Angels' Church; BSE-02 – William G. Wilson house site (3-story frame building); BES-03 – C. Wallace shanty site; BES-04a – African Union Church; BES-04b – African Union Schoolhouse; and BES-06 – a well (Figure 1.4). Leach also roughly delineated four locales where there is a reasonable suspicion that intact human burials may survive to depths between 1.00 and 1.25m below the present ground surface. It is not possible to determine from the GPR data without archaeological "ground-truthing" whether these anomalies are in fact human burials (or, for that matter, whether they might be burials in caskets or coffins, burials placed directly into open grave shafts, or empty grave shafts). Owing to the sensitivity of descendant communities to archaeological exhumation of human burials, and the relatively "safe" current status of these possible interments beneath well-maintained and carefully regulated parkland, there are no plans to "ground-truth" these anomalies (Leach 2016).

Most recently in 2020, shortly after the archaeological investigations reported on here were completed, another GPR survey was completed for the land surrounding Spector Playground between West 85th and West 86th Streets, the West Drive and Eighth Avenue. While providing a good representation of bedrock depth, the survey results are of limited value for archaeological interpretation. Anomalies classified as indicating "possible flat-topped structures" were noted in seven locations, including the sites of the Haff House, All Angels' Church and AME Zion Church. For the most part, the survey results confirmed the results of the survey conducted in 2016 by Peter Leach, although two additional "structures" were identified west of the playground, neither of which correlates with historic map data. The possible roadway identified by Leach was again recognized. No evidence for burials was observed (Hager-Richter Geoscience, Inc. 2020).

D. MAPPING/GEOREFERENCING METHODOLOGY

The current archaeological investigations have been underpinned by ongoing efforts at overlaying historic map data on to modern topographic maps of the park. Earlier, in 1995-96, the Common Council maps of 1853 had been used as the basis for map overlays (Common Council of the City of New York 1853). In the studies of 2015-16 and the current work, the Central Park Condemnation maps of 1856 (Sage 1856) were used in place of the Common Council maps. In actuality, the two sets of maps are very similar: they both provide almost identical information in terms of property lines, block and lot identifications, building locations and dimensions, etc. The key difference is that the Condemnation maps identify property owners and building occupants by name, whereas this information is absent from the Common Council maps.

In 1995-96, the map overlay exercise consisted of a common scaling of historic and modern maps to establish a "best fit" superimposition of historic over modern maps. The more recent studies have involved a more rigorous attempt at georeferencing the Condemnation maps. This is no simple matter as there are no existing points or features within the Seneca Village area of the park today that can be unequivocally and accurately identified on pre-park maps, either the Condemnation maps or any other historic cartographic sources. To circumvent this problem, the centerlines of the avenues and cross streets were extrapolated across the park from the surrounding street grid and these lines were used as the basis for georeferencing in ArcGIS 10.3. This enabled the streets, property lines and buildings on the Condemnation maps to be superimposed over modern topographic maps with reasonable accuracy. Greater confidence was placed in this newer map analysis and the archaeological investigations described in this report have largely relied on this revised cartography in the placement of excavation units and shovel tests.

Also in contrast to the recording system used in 1995-96, a different method of identifying and numbering historic buildings was adopted in the current investigations. In place of the customized sequential numbering used in 1995-96, buildings and other features are identified by the block and lot numbering system used in the Condemnation maps (which is also the same as that used in the Common Council maps). Thus, the shanty shown as being occupied by Pleasant Smith on Condemnation maps, which is located on Lot 59 within Block 785, is identified as 785/59. All Angels' Church, which is spread across several lots, is similarly identified as 785/53-56 (see below, Figure 3.2). This means of identification is viewed as the simplest way of distinguishing individual properties as research into Central Park's pre-park history continues into the future. The use of the block numbers in the Common Council maps and Condemnation maps is also broadly compatible with the resource numbering system previously adopted for pre-park historic resources in the northern section of the park, north of 97th Street, where the Common Council block numbering was employed as a framework for resource identification (cf. Hunter Research, Inc. 1990).

E. ARCHAEOLOGICAL TESTING METHODOLOGY

Excavation unit locations were based on a combination of historic map analysis and the results of the ground penetrating radar (GPR) survey carried out by Peter Leach in 2016. Two 2-by-1-meter excavation units were placed to establish the depth, extent and character of any potentially intact archaeological remains relating to All Angels' Church. A single 2-by-1-meter excavation unit was placed in the hope of identifying more of the foundation of the Haff House which had been encountered in 2015-16 just beyond the perimeter of the Spector Playground and also to assess the depth of any potential remains in relation to the depth of the planned playground improvements.

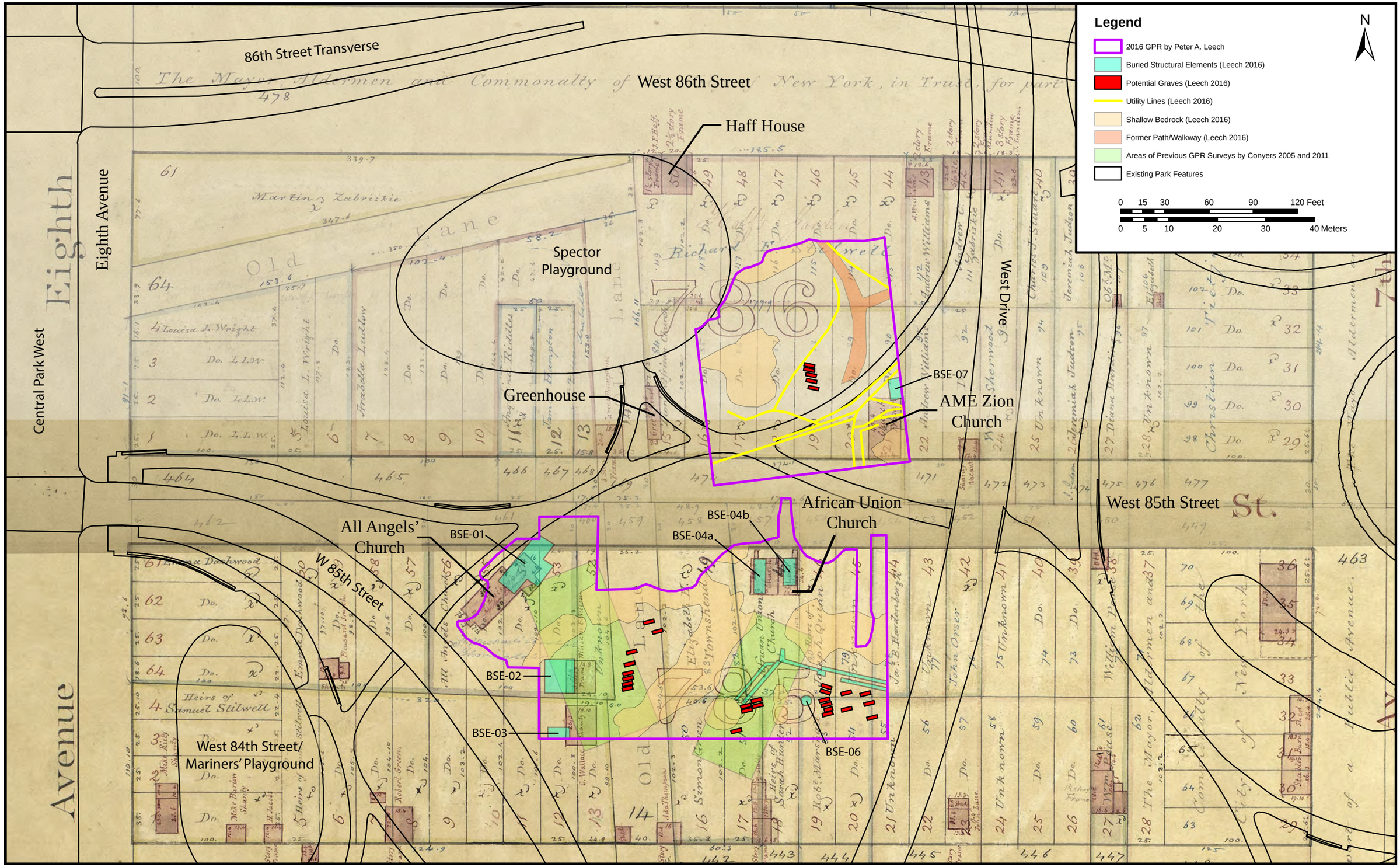

Figure 1.4. Leach, Peter. Ground-Penetrating Radar Survey Results Overlaid on Condemnation Maps of 1856 (scaled and adjusted for "best fit"). 2016. Source: Sage 1856; Hunter Research, Inc. 2016; Leach 2016.

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Finally, a 1-meter-square excavation unit was placed to investigate the possibility of structural remains surviving of the greenhouse formerly located on the AME Zion Church property just to the south of the playground.

The locations of excavations were laid out in the field using a sub-foot GPS unit pre-loaded with the proposed unit locations. The final, exact positioning of the excavations at the Spector Playground was constrained somewhat by the present-day landscaping elements and vegetation, most notably in the case of the greenhouse excavation unit. A summary of stratigraphic data recorded for each excavation unit is provided in Appendix A. Artifacts were recovered and recorded according to their stratigraphic provenience, with modern items (mid-/late 20th- or 21st century) being noted and discarded in the field. A catalog of recovered and retained artifacts is provided in Appendix B.

Excavation was conducted by hand using shovels, mattocks and trowels, as appropriate. A 4-inch-diameter soil auger was used to investigate deeper deposits. Live tree roots over a half-inch in diameter were not cut in order to protect nearby trees. Soils and stratigraphic information were recorded in standard archaeological fashion (depth, dimensions, soil composition, texture and Munsell color, etc.). The metric system was used where applicable to maintain consistency with previous archaeological investigations undertaken within Seneca Village. Profile and plan view drawings were prepared and photographs were taken for each excavation unit. Artifacts were retrieved and documented by stratigraphic context and taken to Hunter Research's laboratory in Trenton, NJ for analysis and cataloging. Final test locations were re-surveyed using a handheld, sub-foot GPS unit and mapped on current topographic plans of the park. Excavations were backfilled upon completion.

Chapter 2

HISTORICAL OVERVIEW OF SENECA VILLAGE

The history of Seneca Village is described to good effect in *The Park and the People: A History of Central Park* by Roy Rosenzweig and Elizabeth Blackmar (1992:65-73, 88-90) and somewhat more cursorily at the Central Park Conservancy and Institute for the Exploration of Seneca Village History websites (http://www.centralparknyc.org/things-to-see-and-do/attractions/seneca-village-site.html; http://www.mcah.columbia.edu/seneca_village/). The following brief summary is based on these sources and on research data kindly provided by Marie Warsh, Director of Historic Preservation, and Sara Cedar Miller, Historian. It focuses primarily on the village's land use history, its built environment and the churches and their burial grounds. More detailed historical information on the All Angels' and AME church properties and the Haff property is provided in Chapters 3A, 4A and 5A below.

The settlement of Seneca Village began to take shape in late 1825 as John and Elizabeth Whitehead started to subdivide and sell off parcels of arable land that they owned in the area roughly bounded by 83rd and 88th Street and Seventh and Eighth Avenues. By 1832, some 50 parcels had been sold, with approximately half of them being taken up by African-American families, many of whom were active members of the African Methodist Episcopal Zion (AME Zion) church. Instrumental in establishing the settlement were church members Andrew Williams and Epiphany Davis who bought three and 12 lots respectively from the Whiteheads in September 1825, while the church itself purchased a group of six lots later the same month for use as a burial ground (between West 86th and West 87th Streets). A major constraint to the expansion of the settlement emerged in the late 1830s in the form of the new Croton water system whose reservoir effectively prevented any residential expansion of the village east of Seventh Avenue. Around the same time, the African Union church bought land in the area, reinforcing the already predominantly African-American complexion of the village.

The settlement continued to grow through the 1840s and early 1850s, but took on a more mixed ethnic aspect. By 1855, there were at least 264 residents, of whom 30% were Irish-American. Both Black and white residents were viewed with some suspicion by other New Yorkers, but despite its relatively low socio-economic status, the community showed considerable stability as seen in land ownership and census records. The stability and cohesiveness of Seneca Village as a discrete community is perhaps best demonstrated by its ability to support no less than three churches. In the early 1850s, at its peak, the 60 or so households comprising Seneca Village occupied approximately four full city blocks within which were two African-American Methodist churches (AME Zion and African Union) and the racially mixed All Angels', an affiliate of St. Michael's Episcopal Church. When exactly these churches first established formal houses of worship is somewhat unclear. Although the AME Zion church owned property and apparently made use of a burial ground from the mid-1820s onwards, this congregation did not begin to erect a church building until August 1853. The earliest church to be built may have been that of the African Union AME congregation, which acquired land in 1837 and built a school in the late 1840s, by which time it most likely had already constructed a church building. All Angels' Church was built in 1849.

As the contiguous built-up zone in lower Manhattan spread inexorably north across the island, plans for what subsequently became Central Park began to be developed. The Central Park Act was passed on July

21, 1853 and in November of this year three commissioners were appointed to value both the publicly and privately held property within the proposed area of the park. Two years later a value of $5 million was placed on the land, although there was much grumbling from landowners about the level of this assessment. By the spring of 1856, the City was actively purchasing land in the Seneca Village area to secure the park. Despite sporadic protests by residents and the churches against the City's condemnation proceedings, the owners were compensated for their loss and virtually all of the structures had been razed or removed by the late fall of 1857.

The churches and their burial grounds have a complex history and appear to have presented a particular challenge to the creators of the park. In the course of the second quarter of the 19th century, space in and around Seneca Village was acquired for burial purposes by all three of the churches that had active congregations within the community. The AME Zion church commenced interments soon after 1825 on property it acquired for a cemetery between 86th and 87th Streets (this was spurred in large part by the City's ban on burials below Canal Street in 1823 and by the cessation of burials in 1825 at the Potter's Field, soon to be redeveloped as Washington Square [Stokes 1915-26:V:1466; Geismar 2005:20]); the African Union church may have been burying congregants as early as the late 1830s; and the church records of All Angels' document burials on its church property from January 1849 until February 1852. In the latter year the City passed a law prohibiting all burials south of 86th Street, which represents an important watershed for burial practices within the village. By the time land for the park was being acquired in the mid-1850s, it would appear that each of the three church properties containing church buildings (all below 85th Street) included a burying ground that was no longer in use, while north of 86th Street interments were continuing on land owned by the AME Zion church.

This picture of the distribution of burials in the village would appear to be borne out by at least one later historical source which notes that there was "one large burying ground and three or four smaller ones" (Peters 1907:92). The removal of burials from the Seneca Village area of the park clearly constituted a major undertaking and was the subject of a resolution by the Board of Commissioners in January of 1858 authorizing the Park Superintendent "to permit the removal of the dead buried within the limits of the park – first complying with the measures required by law in case of removal of the dead, provided such removal be made within three months of this date" (Minutes of Proceedings of the Board of Commissioners of the Central Park 1858:132). How many burials were removed and from where, what the removal process entailed and where the remains were re-interred are all questions that require further investigation. It would appear from later discoveries of human skeletal remains within the park (see below) that by no means all of the burials were removed and one suspects that many unmarked graves may have survived the landscaping operations of the park builders.

The overall extent of Seneca Village is vividly shown in a topographical map published by Central Park's first engineer, Egbert Viele, on June 17, 1856 (Figure 2.1). The settlement consisted of a roughly laid out series of properties stretching from 82nd Street to 88th Street between Eighth Avenue and the Reservoir (the western edge of which corresponded with Seventh Avenue). The map shows almost 60 individual buildings and ten irregular patches of cultivated land scattered over this area in the vicinity of (and avoiding) three large outcrops of bedrock.

The physical growth of the village is traceable in greater detail in the Manhattan Square Benefit maps of *circa* 1836, the Common Council maps of 1853 and the Central Park Condemnation maps of 1856. These maps, excerpts of which are included below in Chapters 3-5, show the subdivision of properties

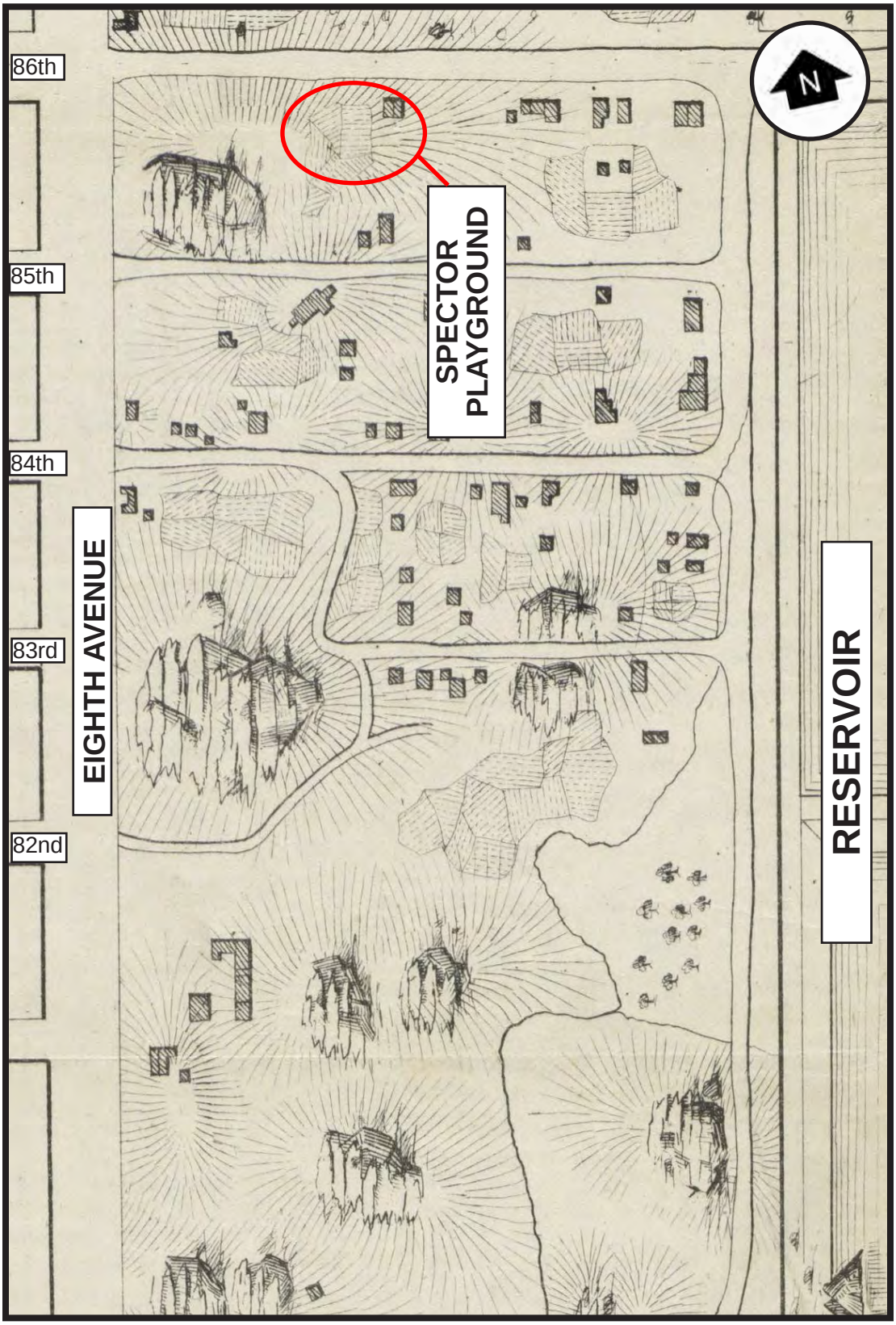


Figure 2.1. Viele, Egbert C., Portion of *Map of the Lands Included in The Central Park, from a Topographical Survey, June 17, 1856.* Scale 1 inch: 255 feet (approximately). Playground locations indicated.

within the village and the extent to which the various lots were developed and taken up by residents. A noticeable feature of the village's growth is that the initial development, prior to the mid-1830s, was concentrated on land lying east of Stilwell's Lane/Spring Street (shown as the "Old Lane" on the Common Council and Condemnation maps). It was only in the later stages of the village's growth in the 1840s and later 1850s that settlement spread west of this lane toward Eighth Avenue. The Common Council maps of 1853 and the Central Park Condemnation maps of 1856 are both exceptionally informative in that they give details of the types of buildings present within the village, noting dwellings, shanties, sheds, stables, shops and other types of structures, as well as recording the number of stories, footprint dimensions and, in many instances, whether they are of frame construction. The Condemnation maps have added value as they provide the names of property owners and building occupants.

Most dwellings were humble and would have fit well with the descriptions of one or other of two classes of domicile – "shanties" and "wooden tenements" – recognized in the Twenty-fifth Sanitary District by the Council of Hygiene and Public Health in the mid-1860s (this district bordered the west side of Central Park from 86th Street southward). Descriptions of these two dwelling types are excerpted below as they offer a vivid picture of how Seneca Village may have looked a decade earlier in the mid-1850s. These descriptions are also especially relevant from an archaeological standpoint as they offer useful clues concerning the type of below-ground expression that might be expected within the park today.

> "*Shanties.*—The shanty is the cheapest and simplest domicile in civilized communities. The typical shanty is built of rough boards, which form the floor, the sides, and the roof. It is built either on the ground, or but little raised above it. It is from six to ten feet high, and its ground area varies much in different cases; but is always of moderate extent. It contains no fireplace or chimney, but a stove, the pipe from which passes through a hole in the roof. It has from one to three or four windows, with single sash, each containing from four to six panes of small size. Some shanties have but one room; others an additional small apartment, used as a bedroom. The better shanties are lathed and plastered. It is evident that, to the occupants of the shanty, domiciliary and personal cleanliness is almost impossible. In one small room are found the family, chairs, usually dirty and broken, cooking utensils, stove, often a bed, a dog or cat, and sometimes more or less poultry. On the outside, by the door, in many cases are pigs and goats, and additional poultry. There is no sink of drainage, and the slops are thrown upon the ground. The water used is sometimes the Croton, which is brought to the shanties in pails, usually from one of the avenues [i.e., from hydrants in the municipal water supply system based on the Croton Reservoir within the park]. In other places, where the Croton hydrants are too far away, and the ground is marshy, the water is obtained from holes dug a little below the surface. This water often has a roiled appearance, and an unpleasant flavor. Shanties are usually built promiscuously over the ground, without the least regard to order. Families living in them are largely squatters, and such people of course select for residence localities of which no profitable use can be made by the proprietors. Therefore, shanties in this district are built mainly on rocky, elevated ground, or on lots sunken and too wet for tillage ….."
>
> "*Wooden Tenements*.—Next to shanties, in the classification of domiciles, come wooden tenements. In determining what buildings should be placed in this class, we have regarded more the

> appearance and general character of the houses, than the number of families which they accommodate. The separation of wooden tenements from shanties on the one side, and the better class of dwellings on the other, is in a measure arbitrary. Some wooden tenements are but little removed from shanties, as regards both size and mode of construction; while others might, without much impropriety, be placed in the group of good private residences. Ordinarily, however, there is little danger of error in their classification. The wooden tenement in the Twenty-fifth District has usually two stories, but some have only one, some three, and a few four. It is built without cellar, and but little raised above the ground. It has a mortised frame, clap-boarded sides, a chimney, and shingled roof. It has no sewer connection or other drainage, and no gas or Croton pipes. The privies are in the rear, or in front, and also without drainage. The water used by the occupants is, in some localities, the Croton; in others, spring or well water. The house is heated by a stove, and the fluel [sic] used is coal, frequently partially burnt, and sifted from ashes obtained from hotels and private residences in the city. This is also the fluel [sic] used in shanties, and the shanties and wooden tenements are lighted by kerosene oil.
>
> The ground area of the wooden tenement, like that of the shanty, is nearly square; sometime the width, sometimes the depth excelling. The width and depth vary generally from twelve to twenty-five feet.
>
> The number of families in the wooden tenement varies from one to as many as seven or eight, according to the size of the house ….." (Smith 1865:300-301).

By matching these descriptions with the detailed information on the Condemnation maps, it is clear that both shanties and wooden tenements were common dwelling types within Seneca Village.

Construction work for the park commenced soon after April 1858 when the Board of Commissioners of the Central Park selected the Greensward Plan of Calvert Vaux and Frederick Law Olmsted as the winner of the design competition. Landscaping in the area of Seneca Village was largely complete by 1863, although no written descriptions appear in the annual reports or minutes of what was accomplished. The primary use of the narrow strip of land between Eighth Avenue and the original reservoir was pedestrian and vehicular circulation and a carriage drive, bridle path and pedestrian paths all wound their way through this area. There was insufficient room for a large meadow or other scenic landscape features, and the local topography was dominated by Summit Rock, the highest spot in the park, which was approached by a road leading up the hill from the carriage drive. A major transverse road crossed the park at 86th Street, passing between the two reservoirs.

Prior to the creation of playgrounds in the area in the 1920s and 1930s, the former site of Seneca Village seems to have existed as a moderately landscaped and lightly used section of the park. There are several mentions of human burials being encountered in the vicinity of the village in the late 19th and early 20th centuries, although many of these references are obscure. The most credible account appeared in August of 1871, when it was reported that two burials were found near the West 85th Street entrance into the park from Eighth Avenue:

> "Yesterday afternoon, while laborers were engaged in uprooting trees at the new entrance to the Central Park, corner of Eighty-fifth street and Eighth avenue, they discovered, fourteen inches beneath the surface, a black rosewood coffin, richly mounted and in a state of good preservation. On the lid was a plate with the engraving, "Margaret McIntay, died February, 1852, aged sixteen years, three months and fourteen days." Within the coffin was the body

> of a woman, decayed almost to a skeleton. At a short distance from the spot another coffin was found, enclosing the body of a negro, decomposed beyond recognition. This land was dug up five years ago, when the trees were planted there, and no such coffins were there at that time" (*New York Herald*, August 11, 1871).

Further detail about Margaret McIntay has so far not been forthcoming. Her surname may be Irish (or Scottish) and one might assume her burial, based on its location, was undertaken under the authority of All Angels'. However, the McIntay name has not been found in the All Angels' church records or on the Manhattan Square Benefit or Central Park Condemnation maps. One wonders if the family resided west of Eighth Avenue beyond the area of the park. Further pursuit of the McIntays is called for.

Other reports of a more confusing nature concern burials found in "Gilhooley's Field" or "Gilhooley's Burial Plot." A 1922 article in the New York Times speaks of an Indian burial ground south of 86th Street and west of the West Drive on or close to land "once owned or occupied by a settler named Gilhooley," where workmen had frequently turned up relics during the course of park improvements (*New York Times*, June 25, 1922:92). Another article in the *New Yorker* a generation or so later appears to be speaking of the same burial area, which it refers to as "Gilhooley's Burial Plot." Gilhooley, in this instance, however, was supposedly a parks gardener, while the human remains were described as "a whole graveyard, filled with the bones of tramps and squatters who had lived in the park a hundred or so years ago" (*The New Yorker*, January 10, 1959).

Chapter 3

ALL ANGELS' CHURCH

A. SITE-SPECIFIC HISTORY

The site of All Angels' Church property was undeveloped in the early 19th century and is shown on the Randel "Farm Maps" of 1819-20 as being in the hands of Samuel Stillwell. This would appear at the time to have been one of the few remaining parcels still in Stillwell family hands left over from what was a 125-acre holding at the turn of the 19th century (Randel 1819-20; Hunter Research, Inc. 2016:3-1). By the late 1830s, as depicted on the Manhattan Square Benefit maps of *circa* 1836, the future church site was still undeveloped, although the land was now platted with a series of lots fronting on to the south side of West 85th Street (Figure 3.1). The property at this time is shown as being owned by the estate of Gulian Ludlow with Samuel Stillwell's tract adjoining to the south. Ludlow (1764-1826), a nephew and business partner of New York City banker Daniel Ludlow, was a prominent merchant and importer of goods from the East Indies. It is unclear whether he acquired a portion of Stillwell's land in the early 1820s for speculative purposes or whether Randel had perhaps misrepresented the limits of the Stillwell property in 1819-20. The future church site lay on the west side of the farm lane identified on the Manhattan Square Benefit maps as "Spring Street" which led from north to south terminating at the spring or springs known today as Tanner's Spring.

Unlike the other two Seneca Village churches (AME Zion and African Union), which were both outposts of African-American churches located in downtown Manhattan, All Angels' was created as a result of missionary efforts on the part of St. Michael's Episcopal Church which was located nearby on Bloomingdale Road between West 99th and West 100th Streets. An initiative to help the poor in the area of Seneca Village was begun by St. Michael's in 1833 as a Sunday School, which was held in a private home and targeted at both African-Americans and European immigrants. In 1846, Thomas McClure Peters took up the position of rector of St. Michael's in Seneca Village, ministering to a congregation of both African-American and white (chiefly German) residents. In 1849, under McClure's leadership, St. Michael's erected a church and established a burial ground to serve the local community. The frame church building, labeled as "Free Episcopal African Church" on the Condemnation maps of 1856 (Figure 3.2), straddled four contiguous lots on the west side of the "Old Lane" (former Spring Street) that ran north-south through the heart of the village. The main block of the building measured 39 feet by 22 feet with a 16-foot-square addition at its eastern end. The church is notable for being oriented at an angle to the street grid. This may have been a deliberate attempt to achieve an east-west orientation independent of the street grid or it may have been dictated by the bedrock outcrops that interfered with the laying of foundations. The precise location of the burial ground is uncertain but it presumably occupied the land immediately surrounding the church to the west, south and east.

The church edifice of All Angels' was evidently still standing in early 1858, by which time the great majority of buildings in Seneca Village had been razed to make way for the park. In February of that year the Board of Commissioners adopted a resolution concerning "whether the church edifice in 84th street can be advantageously used for the purposes of the park, and, if so, whether it could be removed to the Wagstaff House [East 79th Street vicinity], and the expense of its removal." Although the street

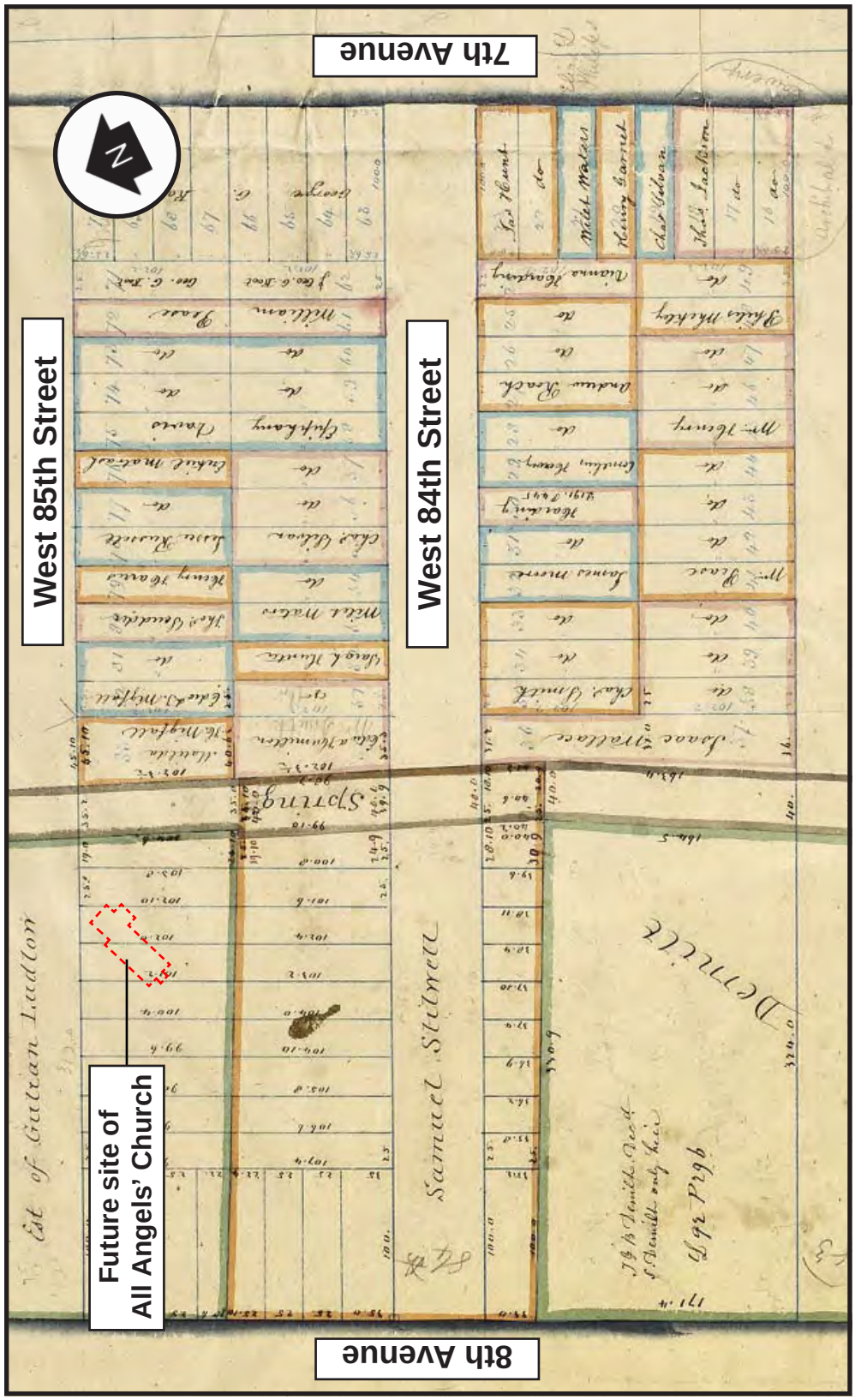


Figure 3.1. All Angels' Church. Portion of Manhattan Square Benefit Maps. *Circa* 1836. Scale 1 inch: 125 feet (approximately).

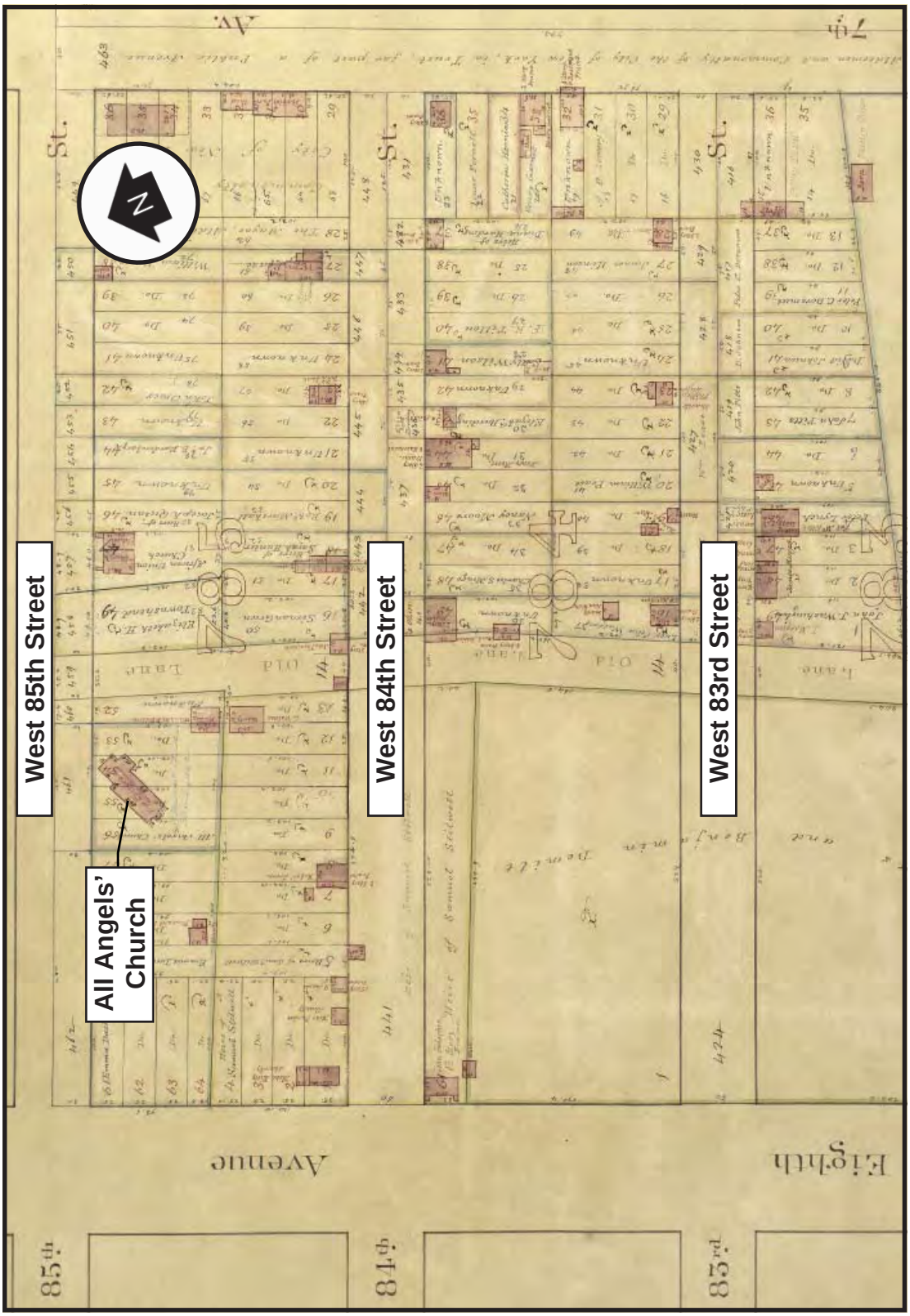


Figure 3.2. All Angels' Church. Sage, Gardner A. Portion of Central Park Condemnation Maps. 1856. Scale 1 inch: 130 feet (approximately).

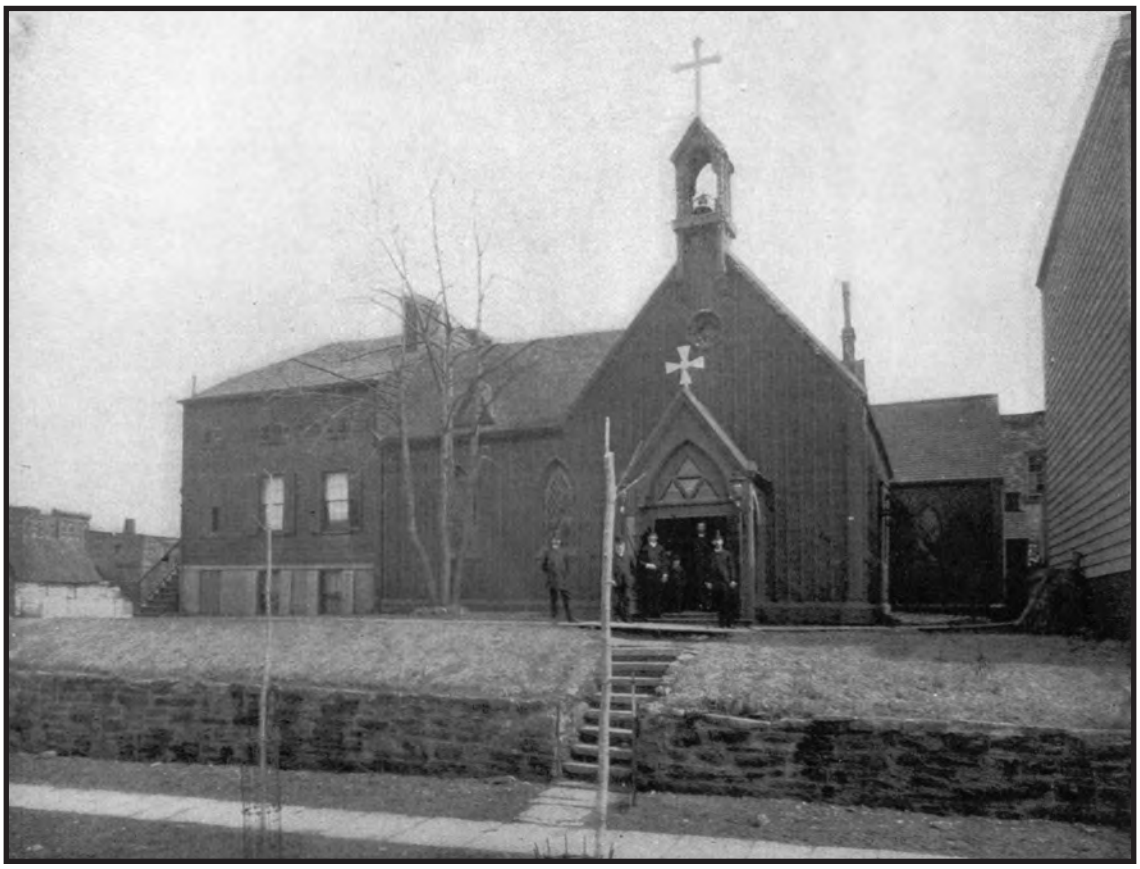
address is incorrect (All Angels' being on West 85th Street), this is definitely the church being referenced on account of its subsequent linkage with the Reverend Thomas McClure Peters. Two months later, the Board of Commissioners resolved to allow the "Rev. Mr. Peters to remove the church near Eighty-fifth street and Eighth avenue, purchased by him from the city" (Minutes of Proceedings of the Board of Commissioners of the Central Park 1858:147-148, 185). The church building was moved shortly thereafter since the church address was reported in the *Church Journal* in mid-April as being at "West Eighty-first st., corner Eleventh Avenue" (*Church Journal*, April 14, 1858:6).

A more revealing notice about the fate of All Angels' was published in the *Church Journal* the following year:

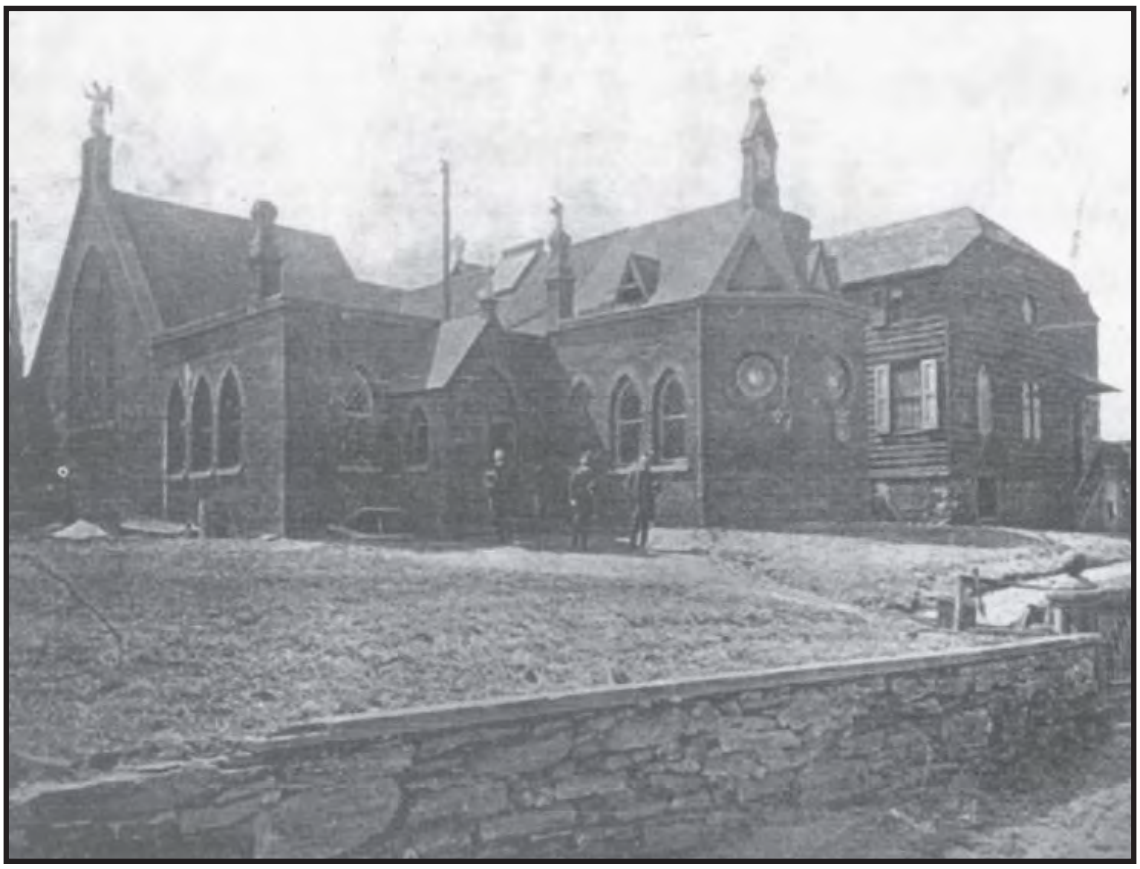
> All Angels church, in this city, was visited by the Provisional Bishop on the 19th ult., when *four* persons were confirmed.
>
> The building known by this name was erected about eleven years ago on 85th street, in what is now the Central Park, and was consecrated by the Bishop of New Hampshire. It was in the centre of a settlement of colored people, of whom its congregation was mainly composed. It was originated and carried on by the Rev. T.M. Peters, at that time assistant minister, and now Rector-elect of St. Michael's, Bloomingdale. For some years in quite a flourishing condition, the opening of the Central Park caused the dispersion of its congregation and its necessary removal. It was taken to pieces and reërected precisely as before, on the corner of 81st street and 11th Avenue. The first service in the new location was held on the last Sunday of June, 1858. An almost entirely new congregation of white persons has been formed with encouraging prospects. The male members met on the 29th of December, 1858, for the purpose of incorporating themselves, when the following officers were elected:-
>
> *Wardens*:-Peter Clark and Augustus F. Bayes.
>
> (*Church Journal*, January 12, 1859:2)

The church is evident, although not identified, near the southeast corner of the intersection of West 81st Street and Eleventh Avenue, fronting on to the latter thoroughfare, on both the Dripps *Plan of New York City*, published in 1867, and the Bromley *Atlas of the Entire New York City*, published in 1879. In 1887, a newspaper article noted that "All Angels' Episcopal Church is a picturesque little wooden edifice which has stood for forty years upon the spot where it stands today, on the corner of Eighty-first and West End [Eleventh] avenue" but the building's days were numbered. The very next year, Sunday, April 8, 1888 was reported to be the "last Sunday in this church. New building to be begun immediately on same site." By early May, the old church had been pulled down and excavations were under way for a new edifice estimated as costing $200,000 (Dripps 1867:Sheet 13; Bromley & Co. 1879:Sheet 17; *New York Herald*, September 19, 1887:6; *New-York Daily Tribune*, April 8, 1888:6; *New York Herald*, May 7, 1888:6).

A more extended recounting of the history of All Angels' on its second site appeared in the New York Herald in December, 1888, by which time the congregation was worshipping in a "provisional building" while the new church was under construction. The parish was noted as being organized 30 years' prior by the Reverend Charles E. Phelps with the congregants living locally and in Brooklyn. The church was "a frame building capable of accommodating about seventy-five worshippers." In 1872, the Reverend Dr. Charles F. Hoffman took charge of the congregation, retired a debt of $2,000 that had encumbered the church property and undertook an enlargement of the church building, part of which was opened as a paro-



Photograph 3.1. Historic photograph of All Angels' Church. *Circa* 1887. This view is looking east from Eleventh Avenue between West 80th and West 81st Streets. The original church that stood in Seneca Village is the portion of the building facing gable end to the street. The two-story frame wing at the left is the rectory. Source: All Angels' Church.



Photograph 3.2. Historic photograph of All Angels' Church. *Circa* 1887. This view is looking northwest from Broadway between West 80th and West 81st Streets. The original church that stood in Seneca Village is in the center of the view, barely visible beyond the masonry additions of the 1870s and 1880s. Source: All Angels' Church.

chial school. In 1882, a parish hall was built "with the intention that it should answer for the chancel and transepts of a new church, and subsequently a small chapel was added." The Reverend Hoffman went on to oversee and largely underwrite the cost of the new All Angels' Church, which was erected between 1888 and 1891. A substantial structure constructed in bluestone and Indiana limestone, this building opened directly on to the southeast corner of West 81st Street and Eleventh Avenue. It was demolished in 1979, being replaced by an apartment building, the congregation at this time moving its place of worship to the parish house at 251 West 80th Street (*New York Herald*, December 10, 1888:2; Bromley & Bromley 1891:Sheet 26).

Two historic photographs, both taken around 1887, show All Angels' Church in its second location shortly before its demolition. One of these views, taken looking east from Eleventh Avenue at the recently enlarged complex of buildings, shows the original, relocated Seneca Village church building facing gable end to the street with several additions, including the rectory at the northern end (Photograph 3.1). The second view is looking northwest from Broadway (the old Bloomingdale Road) at the rear of the church complex. The rectory is at the right side of the view, while the original Seneca Village church is largely out of sight obscured by the various later additions erected in the 1870s and 1880s (Photograph 3.2).

Following the disassembly and removal of All Angels' Church in the spring of 1858, it is thought that the church site was thoroughly graded and landscaped. The route of the path that passes alongside and over the site of the church was part of the original design of the park and appears on the map included with the Annual Report showing the progress of work up until January 1, 1864 (Board of Commissioners of the Central Park 1864:64). Few changes to the park landscape have occurred in this location since that time aside from periodic repaving of the pathway and installation of utilities and a 20th-century sand box noted below.

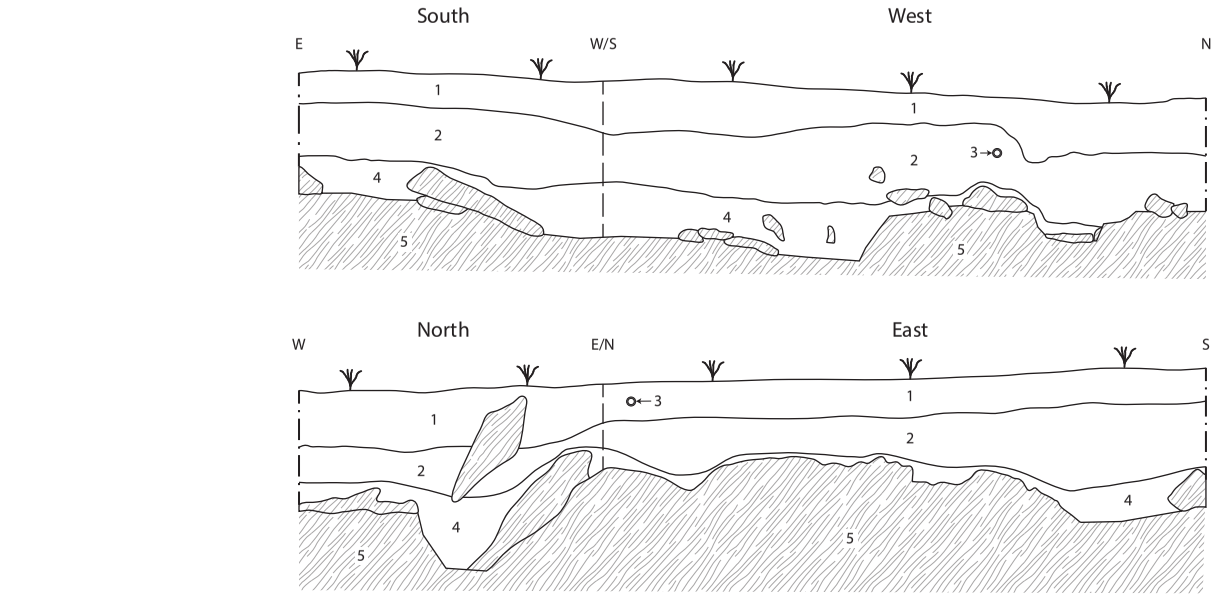
B. ARCHAEOLOGICAL TESTING

Excavation Units 100 and 101 consisted of two, 2-by-1-meter excavation units, which were positioned to locate and examine the integrity of any archaeological remains associated with All Angels' Church (see above, Figure 1.2; Photographs 3.3 and 3.4). The excavation units were specifically placed to examine GPR anomaly BSE-01 identified by Peter Leach in 2016 in an area immediately southeast of where an asphalt path passes through a bedrock outcrop (see above, Figure 1.4). Just to the northeast and adjacent to the path is the outline of a rectangular feature picked out in a linear arrangement of rough-dressed stone blocks set into the grass. Although often mistaken for the foundations of All Angels' Church, this feature is the remnant of a sand box installed in the 1930s (Warsh 2015-16).

Excavation Unit 100 was oriented north-south roughly 2.5 meters (7.5 feet) from the edge of the path (Figure 3.3; Photograph 3.5). Excavation commenced with the removal of a silty sand loam topsoil deposit that extended to a maximum depth of 25 cm below the ground surface [Context 1]. Context 1 yielded small amounts of historic ceramic vessel sherds, fragments of bottle and window glass, glass marbles and a spoon. This context overlay a mottled, coarse sandy loam [2] and an iron pipe [3], which ran northeast-southwest across the northern third of the excavation unit. Context 2 is interpreted as a mid-19th-century landscaping fill related to the park's construction and contained 19th-century artifacts, including small quantities of historic ceramic vessel sherds, glass and nails. An iron pipe [3] measuring 3 cm in diameter was identified embedded in Context 2 sloping downward to the southwest (no evidence for a pipe

Photograph 3.3. View facing northwest showing the location of Excavation Unit 100, positioned to examine the site of All Angels' Church. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:003].

Photograph 3.4. View facing north showing Excavation Units 100 and 101. Scale rods in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:065].



Context List

Context	*Description [Interpretation] (Munsell)*
1	Silty sand loam [modern topsoil] (10YR 3/4)
2	Mottled silty loam [mid-19th-century park fill] (10YR 3/6, 10YR 3/3)
3	Iron pipe (3 cm. diam.) [utility]
4	Coarse sand and gravel [regolith] (10YR 3/6)
5	Schist [bedrock]

Figure 3.3. All Angels' Church, Excavation Unit 100, Profiles.

Photograph 3.5. View facing west showing Excavation Unit 100. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:005].

trench was observed, suggesting that it may have been installed when the park was originally landscaped). The pipe was also propped up by a large slab of displaced bedrock. The surrounding sandy loam [2] contained several large boulder fragments, extended to a depth of 45 cm below the ground surface and overlay a deposit of fragmentary stone and regolith [4].

Context 4 was a mixed deposit composed of displaced and broken fragments of schist overlying solid, *in-situ* bedrock [5]. The fractured nature of the schist fragments in this deposit resembles thermally altered rock, which is typically fractured by overheating. Without any evidence of burning, this rock may represent the detritus from dynamited bedrock relating to the construction of Central Park's path and road system in 1858-59. Context 4 was devoid of cultural materials and extended to a maximum depth of 65 cm below the ground surface where it overlay Context 5, the intact schist bedrock. The bedrock surface undulated across the floor of the excavation unit and generally trended downward to the southwest. No evidence of any structural remains, such as rough-dressed foundation stone or iron anchor bolts were observed on top of or within the bedrock and no cultural material was recovered from the stone debris overlying the bedrock (Figure 3.3; Photograph 3.6).

Sixty-four artifacts were recovered from Excavation Unit 100, all being found within the modern topsoil [1] and the mid-/late19th-century park fill layers [2]. Vessel glass fragments were the most common artifact type with 32 pieces being recovered from the topsoil and three from the underlying fill. Twenty-seven fragments were derived from clear or uncolored glass bottles of late 19th-century or 20th-century date. Three window glass fragments, including a single small piece of stained glass, and two glass marbles were recovered from the topsoil. The underlying fill [2] yielded a much smaller number of glass fragments: just a single sherd of bottle glass and two window glass fragments.

Eighteen historic ceramic vessel sherds were recovered from Excavation Unit 100, with five being found in the topsoil and 13 in the underlying fill. This small assemblage included sherds of porcelain, pearlware, whiteware and redware, with pearlware and whiteware dominating (six sherds each). Such pottery is a common indicator of 19th-century occupation: pearlware is typically dated from 1780 to 1890 and whiteware from 1815 to the present day. Several transfer-printed and shell-edged pearlware sherds are present, traits that are usually dated between 1780 and 1860. Three sherds of redware, two sherds of hard-paste English porcelain and a single transitional pearlware/whiteware sherd complete the ceramic assemblage and reinforce the broad 19th-century dating of the cultural materials. Nine metal artifacts were found, comprising a brass spoon, six nails, a hook, and an indeterminate corroded item. Three of the nails were identifiable as machine cut, an indication that they post-date the first decade of the 19th century. Modern artifacts were mostly discarded in the field and included such items as a single coal fragment and an aluminum and plastic bottle cap, both recovered from the topsoil.

Excavation Unit 101 was a 2-by-1-meter excavation unit placed one meter to the south of Excavation Unit 100 (Figure 3.4; Photograph 3.6). Due to the absence of any archaeological remains related to All Angels' Church being found in Excavation Unit 100, Excavation Unit 101 was shifted southward in the hope of finding a clearer archaeological expression of GPR anomaly BSE-01 identified in 2016 by Peter Leach.

Excavation commenced with the removal of the upper silty sand topsoil deposit [1] that extended to a depth of 8 cm below the ground surface. The topsoil produced a small quantity of bottle glass, including several modern beer bottle fragments. The topsoil overlay a thick mottled silty loam fill layer [2], again interpreted as a mid-19th-century landscaping fill related to the park's construction and containing small

Photograph 3.6. View facing west showing Excavation Unit 101. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:017].

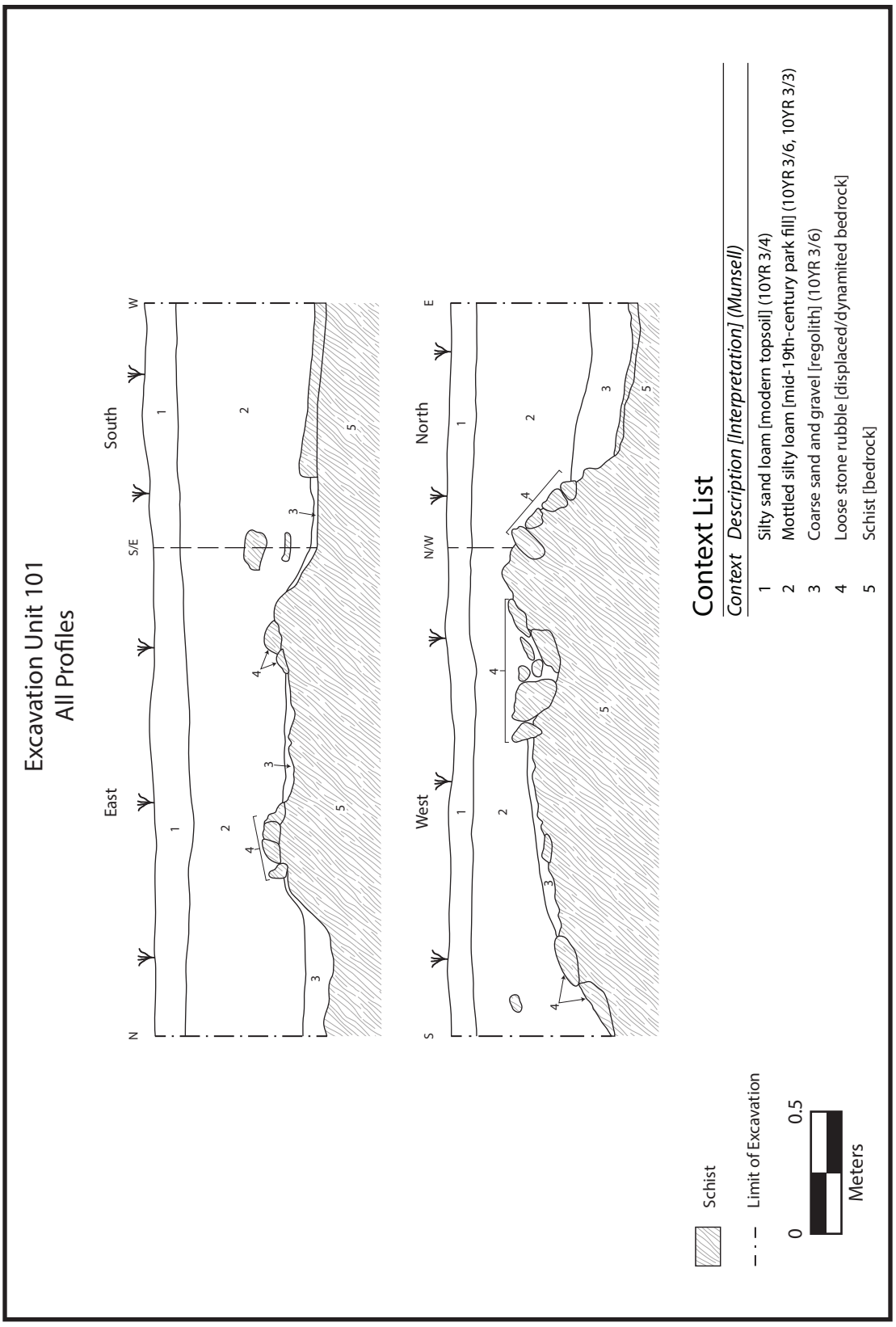


Figure 3.4. All Angels' Church, Excavation Unit 101, Profiles.

quantities of historic ceramic vessel sherds and glass fragments. The fill extended to a maximum depth of 58 cm below the ground surface in the north end of the excavation unit where it overlay a layer composed of coarse sand, gravel, and redeposited bedrock fragments [3]. This latter deposit was interpreted as another mid-19th-century landscaping fill and extended to the top of the schist bedrock [5] at a depth of 73 cm below the ground surface. In the center of the excavation unit, within Context 3, was a pile of loose redeposited bedrock rubble [4] regarded as a pile of displaced or dynamited bedrock, likely related to park construction and possible placed as a leveling deposit within an undulation in the bedrock. This rubble sat directly on top of the schist bedrock [5]. Within the pile of displaced bedrock were several large stone rubble fragments that showed evidence of having been shaped or roughly dressed; these fragments may be architectural debris, possibly part of the foundation of All Angels' Church. Although this rubble may represent demolished foundation material, it was not articulated and is unlikely to have been in its original location.

Fifty-three artifacts were recovered from Excavation Unit 101. Artifacts were recovered from both the modern topsoil [1] and the underlying mottled mid-/late 19th-century park fill [2]. Historic ceramic vessel sherds were the most numerous artifact type with 29 sherds being recovered, all from the park fill deposit. Pearlware, commonly dated from 1780-1890, predominated with 13 sherds being recovered, including several transfer-printed and shell-edged examples which are usually dated earlier in this time frame from 1780-1860. Whiteware, commonly dated from 1815 to 1940, and porcelain were the next most numerous ceramic type represented (five sherds of each), while three sherds of indeterminate white bodied refined earthenware completed the assemblage. Twenty-one glass fragments were recovered, with eleven pieces being found in the topsoil and ten in the underlying fill. Eighteen of these fragments were from bottles and the remaining five were pieces of window glass. The bottle glass was predominantly clear or light blue, typically manufactured in the latter part of the 19th-century. Three corroded nail fragments were also recovered from Excavation Unit 101 with a single fragment identified as a machine-cut nail, post-dating 1805.

C. ANALYSIS AND RECOMMENDATIONS

Based on historic map analysis and ground-penetrating radar survey results, Excavation Units 100 and 101 were placed over the eastern end of the projected footprint of All Angels' Church, but neither excavation was successful in locating *in-situ* evidence of the church foundations. The frame church likely stood on shallow footings of rough-dressed stone rubble and concentrations of schist found especially in Excavation Unit 101 may perhaps represent highly disturbed and perhaps dynamited remnants of these foundations mixed in with bedrock debris.

However, this is by no means certain and it may be that the church was located slightly further west (or east) of where the excavation units were dug, either immediately north or south of the bedrock outcrop that lies adjacent and south of the path leading up from West 85th Street to the signage kiosk by Spector Playground. The creation of the park in this area (notably, the cutting through of West 85th Street into the park) clearly resulted in extensive modification of the topography and it may well be that virtually no below-ground trace of the church survives. Further archaeological testing on either side of the pathway downslope of the bedrock outcrop may produce displaced – or, less likely, *in-situ* – evidence of the building, but the probability of success in this endeavor must be considered low. Likewise, further testing to the east of Excavation Units 100 and 101, tracking the ground-penetrating radar anomaly BSE-01 (see above, Figure 1.4), could also encounter church-relat-

ed remains, but again, the prospects of success seem low. On balance, the most credible explanation for the absence of obvious remains of the church is that the park landscaping of 1858-59 removed all trace of the building's foundations.

Considered together, the cultural materials recovered from Excavation Units 100 and 101 are meager in quantity. While one might not necessarily expect to find domestic items in abundance on a site such as that of All Angels' Church, the paucity of building materials and hardware and window glass is notable. Only a single fragment of stained glass was recovered. The limited number of church-related finds is probably a function of the church being disassembled and re-erected elsewhere.

With regard to the planned pathway and utilities improvements in the vicinity of the All Angels' Church site, no further archaeological testing is considered necessary. However, archaeological monitoring of contractor ground disturbance in this locale is still recommended for the proposed improvements in accordance with a pre-approved monitoring plan with provision made for documentation of any structural remains and associated cultural deposits, retrieval of artifacts, and follow-up analysis and reporting.

Chapter 4

HAFF HOUSE

A. SITE-SPECIFIC HISTORY

Property in the vicinity of the Haff House was largely undeveloped in the early 19th century, although the Randel "Farm Maps" of 1819-20 show a small structure owned by Robert L. Bowne, perhaps a farm outbuilding, a short distance to the northwest on a tract that stretched along the east side of Eighth Avenue north of West 86th Street. Other property in the vicinity was owned at this time by Gulian Ludlow and James Fairlie. These holdings were likely subdivided around the turn of the 19th century from the 125-acre farm of Samuel Stilwell. They may have existed as working farm properties (most likely pastureland) or been acquired for speculative reasons with future development potential in mind (Randel 1819-20; Hunter Research, Inc. 2016:3-1).

The key feature in the cultural landscape in this immediate area was a farm lane which extended east from Eighth Avenue between the Ludlow and Bowne properties and across a tract owned by James Fairlie to City-owned lands where the receiving reservoir for the Croton water system was eventually built in the late 1830s and early 1840s (Rosenzweig and Blackmar 1992:66). This lane was loosely connected to another lane or track that headed south along the west side of the Fairlie lands almost as far as West 82nd Street, terminating at the southern edge of a parcel owned by (Samuel) Demilt and the northern edge of a large sprawling tract owned by David Wagstaff (Randel 1819-20). Although unnamed on the Randel maps, the Manhattan Square Benefit maps produced *circa* 1836 refer to the east-west segment of this thoroughfare as "Stilwells Lane" and the north-south segment as "Spring Street" (Figure 4.1). The "Spring Street" appellation reflects the presence of a spring or springs ranged along the northern border of the Wagstaff lands between West 82nd and West 83rd Streets. Known as Tanner's Spring from the 1880s, this area has been partially filled in, but the spring is still evident in the present-day park landscape (Sara Cedar Miller 2016:personal communication).

The Manhattan Square Benefit maps of *circa* 1836 show that the development of Seneca Village up to that time had focused mostly on the area east of Spring Street between West 82nd and West 86th Streets. In fact, by this date, the section of Stilwell's Lane extending east from Spring Street to Seventh Avenue (shown only faintly on the Randel maps) ceased to exist and had been superseded by a series of subdivided lots, now under the control of ten different landowners. Stilwell's Lane instead made a sharp turn to the south, becoming Spring Street, the core of this former intersection lying within the present-day footprint of the Spector Playground. The future site of the Haff House lay immediately east of the road intersection on land belonging to Leven (or Levin) Smith (see below) who owned a block of seven contiguous lots on the south side of West 86th Street (Figure 4.1). It is unclear if any buildings stood on these lots in the mid-1830s, but this is thought unlikely bearing in mind their subsequent history and the state of development of the village as a whole.

By the early 1850s Seneca Village was beginning to spread into the area where the Spector Playground is now located. The overall subdivision plan for this area shown on the Common Council maps of 1853 and the Condemnation maps of 1856 did not change compared to that shown on the Manhattan Square Benefit maps (cf. Figures 4.1 and 4.2), but in the interim some lots had changed hands, a few new individual

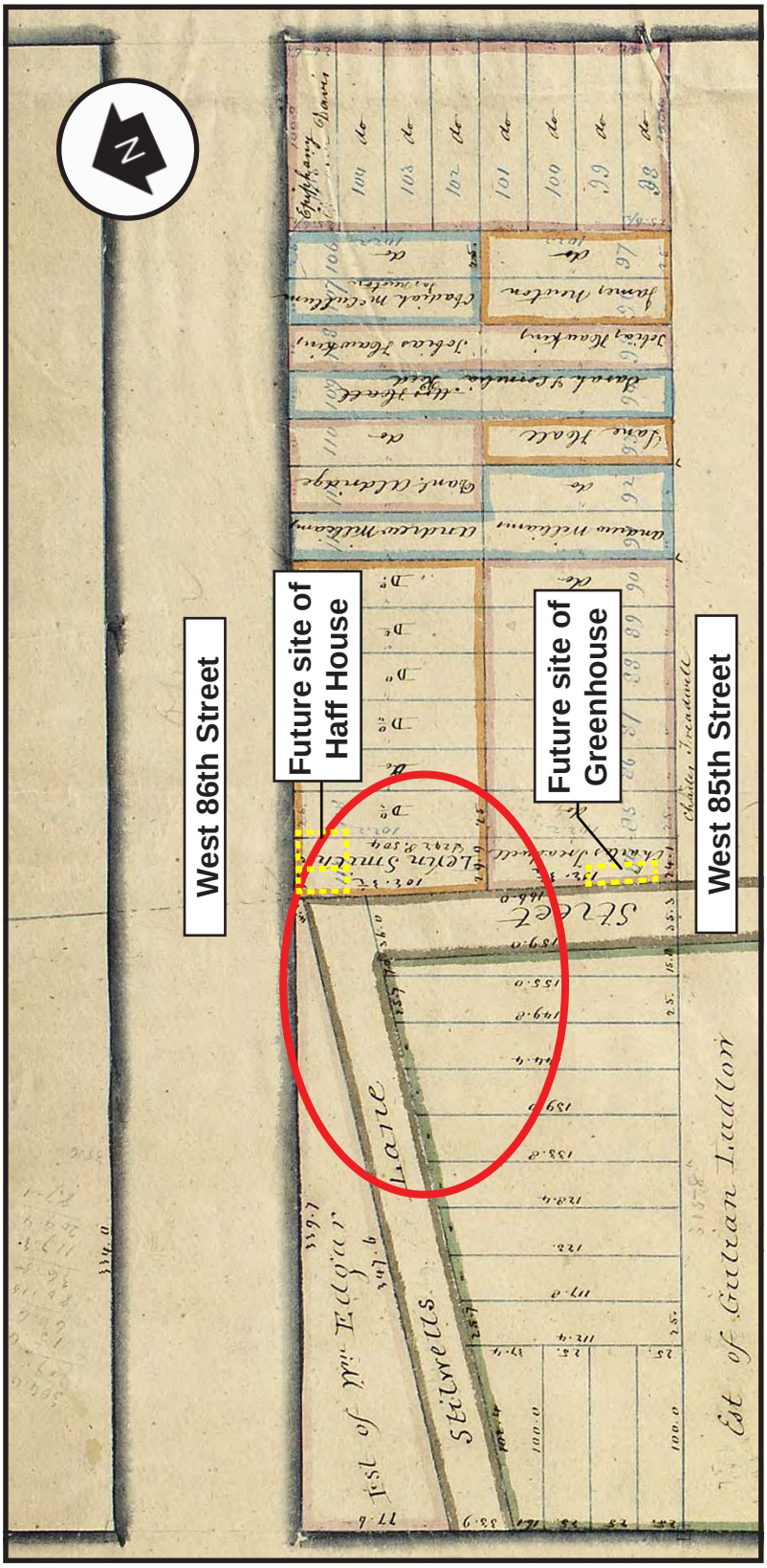


Figure 4.1. Haff House. Portion of Manhattan Square Benefit Maps. *Circa* 1836. Scale 1 inch: 115. West 86th Street/Spector Playground outlined as a red oval.

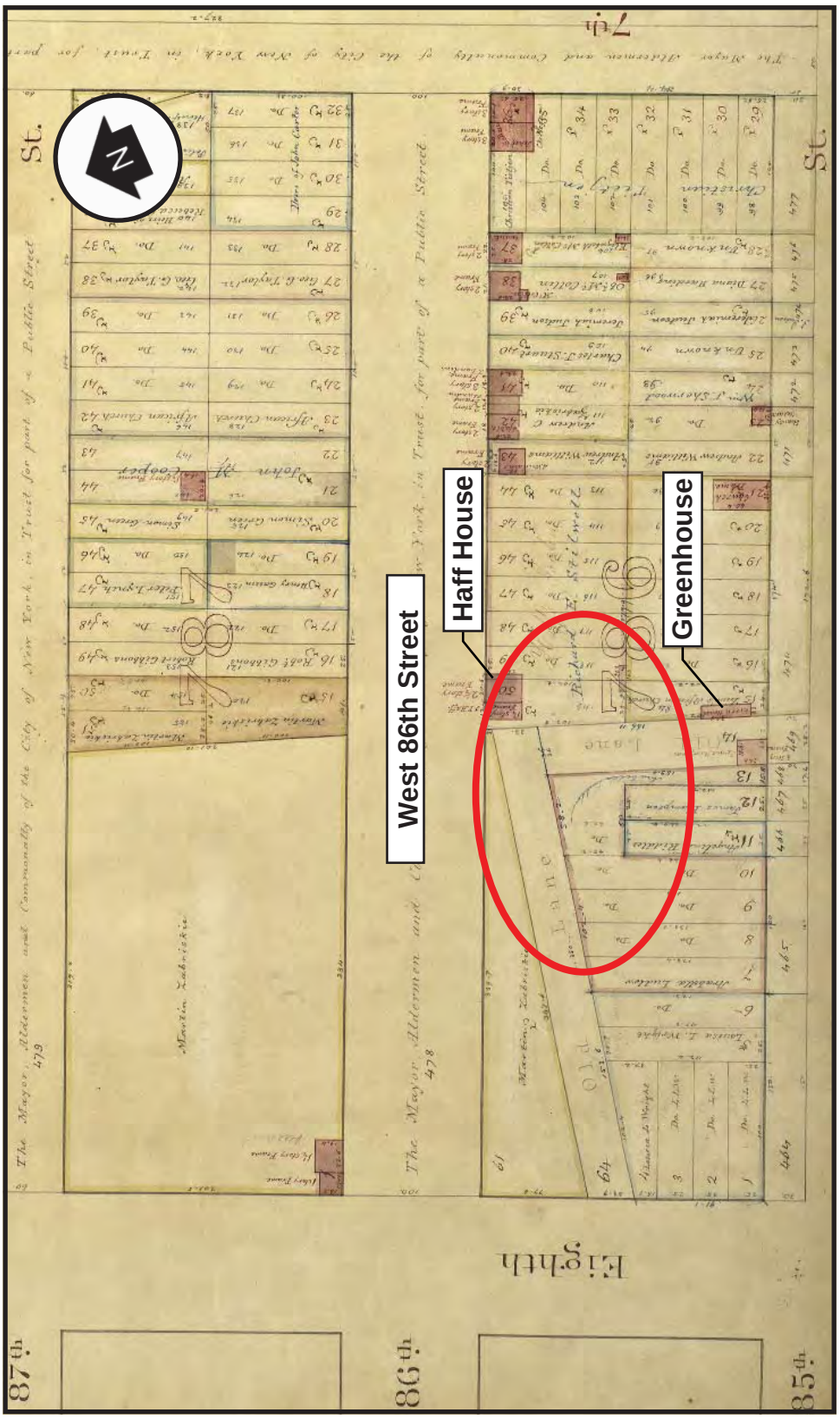


Figure 4.2. Haff House. Sage, Gardner A. Portion of Central Park Condemnation Maps. 1856. Scale 1 inch: 140 feet (approximately). West 86th Street/Spector Playground outlined as a red oval.

properties had been taken up and a handful of buildings had been erected. Land north of Stilwell's Lane, formerly under the control of the William Edgar estate had passed to Martin Zabriskie by 1856, but remained largely undeveloped save for a two-section frame building in the northeast angle of Eighth Avenue and West 86th Street.

Land in the southwest angle of Stilwell's Lane and Spring Street (the "Old Lane" on the Condemnation maps), which had been in the hands of the Gulian Ludlow estate in the mid-1830s, had been partially sold off by the mid-1850s and would have been in the process of being acquired by the City for inclusion within Central Park. Louisa L. Wright owned Block 786, Lots 1-6 along Eighth Avenue and at the western end of West 85th Street. None of these lots contained buildings. Arabella Ludlow, a descendant of Gulian, retained ownership of Lots 7-10 and 13, again undeveloped, in 1856, while two adjoining parcels, Lots 11 and 12, had been taken up by Angelina Riddles and James Hampton (apparently identified as Hamilton in the 1855 New York State census). These also were vacant, but Hampton owned a three-story frame dwelling on Lot 14, which actually comprised the right-of-way for the north-south section of the Old Lane within Block 786. The Hampton household in the 1850 federal census comprised James, age 50, his wife Maria, age 48, and their five-year-old son George (U.S. Census, Population Schedules 1850; New York State Census 1855).

On the east side of the Old Lane (Spring Street), the former Charles Treadwell property, Block 786, Lots 15-21, is shown on the Condemnation maps as being owned by "Zion's African Church" with a frame church building present by 1853 on Lot 21 at the eastern end of the tract (Figure 4.2). At the opposite, western end, a greenhouse is depicted on Lot 15, bordering the Old Lane (see below, Chapter 5A).

Adjoining the AME Zion property to the north, Lots 44-50 were purchased by Leven Smith from John Whitehead in 1838. "Leven J. Smith [Figure 4.3], the second pastor of AME Zion, was appointed by James Varick, superintendent. A humble man, Smith declined the post of Bishop after Varick's death in 1827, choosing instead to assume the responsibility of the office without the ordination. A tireless worker, Smith established churches throughout New England and was considered one of the great nineteenth-century pulpit orators on issues of civil rights and religious freedom. Leven Smith's property in Seneca Village (Lot [sic] 786) was on the same block as properties owned by Andrew Williams, Charles Treadwell, Tobias Hawkins, and Epiphany Davis," also members of the AME Zion congregation (New-York Historical Society *et al.* n.d.)

Figure 4.3. Portrait of Leven Smith. Source: Collection of Mother AME Zion Church (New-York Historical Society Education Department 2010:17).

By the time of the 1850 census, Smith and his family were living in the City's Fifth Ward and his Seneca Village property was owned by Richard Stillwell, whose ownership of Lots 44-50 is reflected on the Condemnation maps of 1856 (Figure 4.2). Richard was a grandnephew of prominent early 19th-century Seneca Village landowner Samuel Stilwell, but more significantly he was the brother-in-law of John P. Haff, who resided in the two-section frame dwelling shown on Lot 50. Inked lightly in red across Lots 45-49 is "Haff's Garden," which provides an important clue to Haff's livelihood and interests (see below). The Haff family was in residence in the dwelling in 1850 as shown by the federal census records of that year. John P. Haff, age 45 years old, was identified as the head of household with his occupation given as a customs inspector. Also living there was his wife, Ann (Stilwell), age 36, his sons, John, William and Charles, ages 18, 12 and 4 respectively, his daughter, Adelia, aged 10, and Ann Haff, possibly a niece, aged 16 (U.S. Census, Population Schedules 1850). In the 1855 New York State census, 50-year-old Haff, identified as a hotel keeper, along with his wife Ann, age 40, and five children (John P., Jr., Delia, Robert, Charles and Edward, aged 17, 15, 13, nine and three respectively), are listed as living in the 22nd Ward, which corresponds to the area of Seneca Village (New York State Census 1855).

John P. Haff was born in New York in 1805, the son of John P. Haff, Sr. (*circa* 1778-1831) and Abigail Colfax Haff. In the early 19th century, the elder Haff, of German extraction, was proprietor of Elm Park, an inn, beer garden and picnic grounds at Columbus Avenue and 91st Street. His son continued in this role following his father's death and by the early 1860s Elm Park was well known as "a pleasure resort of the Germans" (Lamb 1884:54). The younger Haff was a passionate and serious horticulturalist. In addition to his garden in Seneca Village, he had a large farm in Bull's Ferry, New Jersey and was awarded several prizes over the years in agricultural fairs and contests. In Fort Lee, New Jersey he won prizes for "numerous varieties of garden products" and in the 1843 Fair of the American Institute, he received an award for "his superior specimens of field grapes." He was very proud of his products and shared his expertise in several professional journals. In one entry Haff is noted as living in Yorkville, New York (i.e., in the Seneca Village area) and received acclaim for "a peck of superior flat white turnips" (*Annual Reports of the American Institute of the City of New York* 1843:50-51, 75-76; 1844:54).

By the late spring of 1856 all land within the area of the park had officially become City property and by the end of this year villagers resident in the vicinity of the future Spector Playground had for the most part relocated. Park construction was in progress by 1857, and the removal of the various dwellings, shanties and outbuildings in this area had certainly been completed by the winter of 1857-58 (Board of Commissioners of the Central Park 1858:Document #15; Rosenzweig and Blackmar 1992:85, 91).

The area where Spector Playground is located appears to have been only moderately landscaped during the course of the park's creation in 1858-63. No major park features were established here as part of the original design and one assumes that a moderate grading and filling of the pre-park topography occurred. Following the removal of Seneca Village the area existed as relatively flat terrain with some tree plantings.

In the 1920s Hermann Merkel, a landscape architect serving as the Superintendent of the Westchester County Park System, was retained by the City of New York Parks Department to assess the condition of the park and offer recommendations for its improvement. Merkel recommended the establishment of playgrounds around the perimeter of the park, in part as a means of managing the more active use of children, which was considered to be potentially damaging to

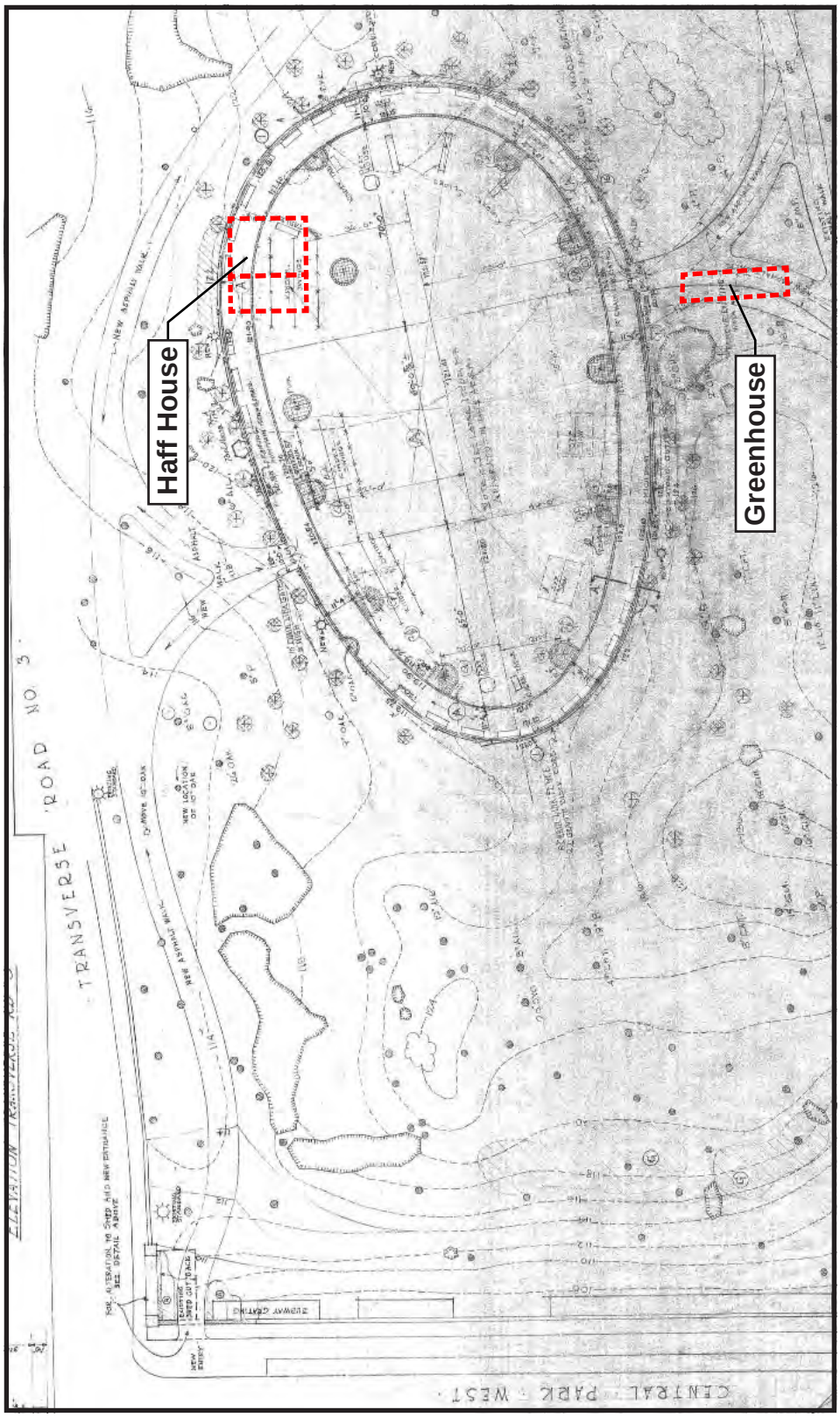


Figure 4.4. Haff House. City of New York, Department of Parks. Landscape Plan for Marginal Playground No. 16 (Spector Playground). 1936. Scale 1 inch: 60 feet (approximately).

the landscape. The site of the future Spector playground was one of the locations Merkel had in mind as a playground. He noted this spot as follows: "On the middle hilly section of this parcel [the area of Seneca Village], there is a somewhat depressed, fairly level area in which a small children's play lawn might well be placed without injury. The playfield could be approached from the south and west by short walks and should be surrounded by trees" (Merkel 1927:39; Warsh 2015-16).

An informal playground area based on the Merkel recommendations appears to have been established at the Spector location in the late 1920s and is shown on the 1934 survey of the park. It had a "cinder surface" and was surrounded by a low fence, but there was no play equipment. It was in essence ground set aside for children's play and seems to have been placed over the pre-existing topography without any substantial grading (City of New York, Department of Parks 1935:Sheet M-T-10-113).

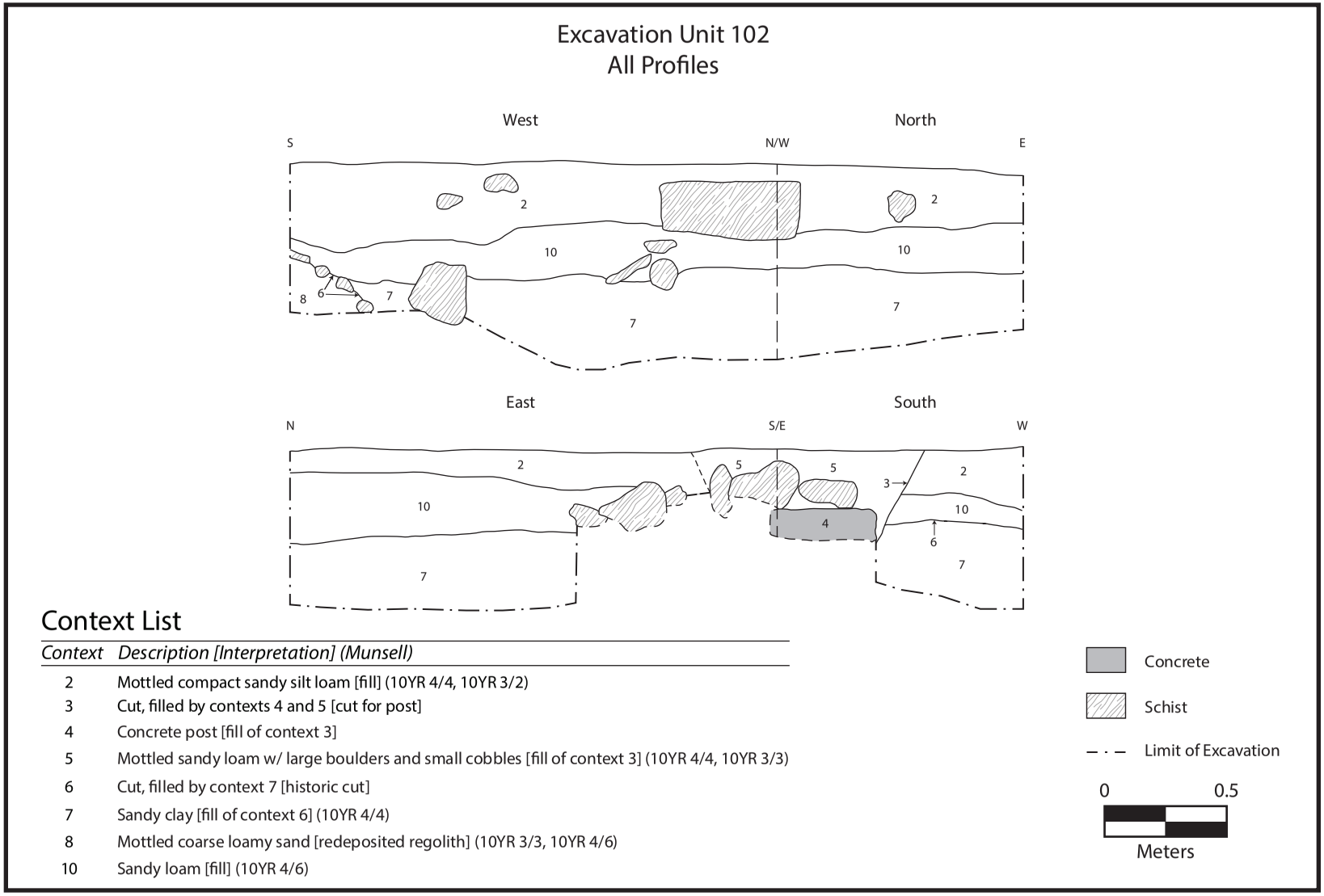
When Robert Moses' plans for establishing playgrounds within the park were implemented in the mid-1930s, the play area at the site of the future Spector Playground was converted into the more formal amenity designated as "Marginal Playground No. 16" (Figure 4.4). Somewhat larger than the other playgrounds of this era, and set at a greater distance from the park perimeter, this oval-shaped facility was accessed by asphalt walks from both the north and south, leading to ten-foot-wide, eight-foot-high chain link gates. The playground perimeter was defined by a granite block curb and eight-foot-high chain link fence. Arranged around a pathway that circled the playground immediately within the fence were three sets of "kinder swings," four sets of "kinder slides," two seesaws, two playhouses, two "kinder tables" and a sand table. Provision was also made for future installation of playground apparatus in the center of the oval. This playground was both larger and better equipped than the other nearby playground (the Mariners' Playground).

In 1975 the Moses-era playground was replaced by a new playground equipped with typical 1970s apparatus, including tree houses, climbers, tire swings and a pyramid. This upgrade was accomplished with funding assistance from the Spector family and the amenity was henceforth known as the Spector Playground. The earlier playground footprint and its wrought iron fence were retained and roughly a foot of sand was placed over the interior area. In 1991 another renovation episode occurred with deteriorated wood features in the western part of the playground being replaced by new metal and plastic climbing equipment (Warsh 2015-16).

B. ARCHAEOLOGICAL TESTING

Excavation 102 was a 1-by-2-meter excavation unit positioned within the existing Spector Playground sand pit (Figures 1.2 and 4.5; Photographs 4.1-4.3). The Spector Playground occupies a rise overlooking the 86th Street Traverse and the Jacqueline Kennedy Onassis Reservoir beyond. The playground is enclosed by a wrought iron fence and consists of a large wood-bordered sand pit containing playground equipment.

The excavation unit aimed to investigate potential cultural deposits and structural remains associated with the Haff House and establish the depth of any remains relative to the projected depth of impact of the planned improvements. The foundations of the Haff House had been previously identified in 2015 in Excavation Unit 5, located just outside and northeast of the playground fence. Excavation Unit 102 was placed approximately 10 meters south of Excavation Unit 5 in hopes of further defining and characterizing the remains of the Haff House.



Context List

Context	*Description [Interpretation] (Munsell)*
2	Mottled compact sandy silt loam [fill] (10YR 4/4, 10YR 3/2)
3	Cut, filled by contexts 4 and 5 [cut for post]
4	Concrete post [fill of context 3]
5	Mottled sandy loam w/ large boulders and small cobbles [fill of context 3] (10YR 4/4, 10YR 3/3)
6	Cut, filled by context 7 [historic cut]
7	Sandy clay [fill of context 6] (10YR 4/4)
8	Mottled coarse loamy sand [redeposited regolith] (10YR 3/3, 10YR 4/6)
10	Sandy loam [fill] (10YR 4/6)

Figure 4.5. Haff House, Excavation Unit 102, Profiles.

Photograph 4.1. View facing northeast showing the location of Excavation Unit 102, positioned within the sand pit of the Spector Playground close to the site of the Haff House. A substantial quantity of sand was removed before the excavation unit could be formally laid out. Scale rod in feet (Photographer: James Lee, December 2019) [HRI Neg.#19074/D1:071].

Photograph 4.2. View facing west showing Excavation Unit 102. At bottom left is the concrete slab that surrounded the base of a wood post. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:073].

Photograph 4.3. View facing northeast showing Excavation Unit 102. At right is the concrete slab that surrounded the base of a wood post. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:090].

Prior to establishing the limits of the excavation unit, a roughly 2.5-by-1.5-meter area of playground sand [1] was removed. Context 1 was 38 centimeters thick and was removed as a single deposit and not screened for artifacts. Context 1 overlay a very compact, mottled silty sand fill deposit [2]. Context 2 was devoid of artifacts and is interpreted as a construction fill deposit of the Spector Playground.

Context 2 extended for a depth of 69 cm below the surface of the sand pit and sloped downward toward the southwest. In the southeastern corner of the excavation unit this context was cut by a large posthole [3] which contained a mottled sandy loam fill with cobbles and boulders [5] and the concrete base for a modern signpost [4]. A hole in the center of this poured concrete slab contained the remains of the wooden base of a post. Modern artifacts including a beer can and beer bottle glass fragments were also recovered from the posthole fill. The beer bottle fragments were discarded in the field.

Underlying Context 2 in the northern end of the excavation unit was a large historic cut [6]. First observed in the west profile, this cut started at a depth of around 75 cm below the surface of the sand pit and continued beyond the base of the excavation unit. The uppermost fill of Context 6 was a thin red sandy loam deposit [10]. This sterile fill deposit extended to a depth of up to 83 cm below the surface of the sand pit at which point it overlay a clean sandy clay fill deposit [7]. Context 7, which extended beyond the maximum excavation depth of 120 cm below the surface of the sand pit, was also devoid of artifacts. Context 7 contained small to medium sized cobbles and large boulders, with these obstructions further preventing excavators from reaching the bottom of the cut identified as Context 6. As Contexts 6 and 7 sloped to the north beyond the limits of the excavation unit and were unable to be fully excavated, the source of this cut and fill episode is unknown.

In the southern end of the excavation unit the soil sequence was less straightforward. Underlying Contexts 3-5, the cut and fill deposits and concrete slab related to the earlier playground sign, was a coarse sand and regolith deposit [8] that extended from 70 cm below the surface of the sand pit to bedrock [9] at a depth of 160 cm (this was determined through the drilling of two auger tests in the base of the unit). This deposit contained no artifacts or features and directly overlay the schist bedrock. The bedrock slopes gently upward from a depth of 160 cm below datum in the south to a depth of 153 cm below the sand in the north.

A total of eight artifacts was recovered from Excavation Unit 102. These included a single brick fragment and seven pieces of metal which included can fragments, an aluminum can and a ring pull tab. These artifacts all date to the later 20th century and were likely introduced into the fill during the mid-1970s modification of the playground.

C. ANALYSIS AND RECOMMENDATIONS

Excavation 102 was positioned over or just south of the rear (south) wall of the Haff House. The Condemnation maps identify the house as a two-part frame structure with a two-and-a-half-story eastern main section measuring 20 feet 6 inches east-west by 26 feet 6 inches north-south in plan and a smaller one-and-a-half-story western wing measuring 12 feet east-west by 26 feet 6 inches north-south. The building is presumed to have had no basement and, based on the findings of Excavation Unit 5 in 2015, is thought to have been erected on a foundation of rough-dressed stone. The rear yard of the property may well have contained a privy and been used for gardening and limited disposal of refuse.

The excavation unit shows that southern portion of the site of the Haff House has been extensively disturbed by playground construction and modification, probably during both of the original building episodes in the mid-1920s and mid-1930s, and by the modifications of the 1970s. Prior to that, the creation of the park in the late 1850s may also have involved cutting and grading and the deposition of fill, which would also have impacted the house site. Only fill deposits and disturbed soils were observed and no trace was seen of *in-situ* foundations or intact cultural deposits from the mid-19th century. The full extent of the disturbance is unknown but since remnant foundations were documented *in-situ* roughly ten meters away in 2015 in Excavation Unit 5 immediately adjacent to the northeastern edge of the playground, one cannot entirely rule out the possibility of further survival of additional foundations and related cultural deposits in the area between Excavation Unit 102 and Excavation Unit 5.

Limited, targeted archaeological monitoring is recommended for the immediate area of the project footprint of the Haff House for ground disturbance in excess of two feet (60 cm) below the surface of the sand pit within the Spector Playground. Archaeological monitoring should be conducted in accordance with a pre-approved monitoring plan with provision made for documentation of any structural remains and associated cultural deposits, retrieval of artifacts, and follow-up analysis and reporting.

Chapter 5

GREENHOUSE ON AME ZION CHURCH PROPERTY

A. SITE-SPECIFIC HISTORY

A more detailed account of the history of the portion of the AME Zion Church property where the greenhouse was later located is provided in Chapter 4A above. This brief narrative is focused chiefly on the greenhouse itself and the AME Zion Church.

The Manhattan Square Benefit maps of *circa* 1836 show that the future site of the greenhouse was on land that formerly belonged to Charles Treadwell who at that time owned a block of seven contiguous undeveloped lots on the north side of West 85th Street (see above, Figure 4.1). Treadwell was a leading member of the AME Zion congregation and at some point prior to 1853 he ceded control of his West 85th Street properties to the AME Zion Church for construction of a church, completed in that year, and perhaps also for use as a burial ground. Although this was the last of the three church buildings to be constructed in Seneca Village, the AME Zion Church's affiliation with the community extended back into the mid-1820s. Along with several members of its congregation, including Charles Treadwell and Leven Smith, the church was among the earliest purchasers of land in the village, although its initial interest was in acquiring property for burial purposes.

The AME Zion mother church was New York City's first African-American church, founded as an independent congregation around 1796 by African-American members of the John Street Methodist Church. They met in a rented hall until 1800, when they established a church downtown at the corner of Church and Leonard Streets. This church existed at that location until 1866, when its congregation moved uptown, finally settling in the early 20th century in Harlem, where it still exists today (Rush 1843; Greenleaf 1846; New-York Historical Society *et al.* n.d.)

The overall subdivision plan for the greenhouse location as shown on the Common Council maps of 1853 and the Condemnation maps of 1856 did not change compared to that shown on the Manhattan Square Benefit maps of *circa* 1836 (see above, cf. Figures 4.1 and 4.2), but in the interim some lots had changed hands, a few new individual properties had been taken up and a handful of buildings had been erected. On the east side of the Old Lane (Spring Street), the former Treadwell property, Block 786, Lots 15-21, is shown on the Condemnation maps as being owned by "Zion's African Church" with a frame church building present by 1853 on Lot 21 at the eastern end of the tract, while the greenhouse was present at the opposite, western end on Lot 15 (see above, Figure 4.2).

Since the greenhouse is located on property identified as being owned by the AME Zion Church, it is a reasonable assumption that the church used this structure to propagate plants and store horticultural equipment used on the church-owned land extending along the north side of West 85th Street between the greenhouse and the church building. However, there is also a possibility that the greenhouse was being used by the nearby Haff family, as this structure was situated to the rear of their house and the lots adjoining the church land to the north along West 86th Street were informally identified on the Condemnation maps of 1856 as being "Haff's Garden" (see above, Figure 4.2). The greenhouse was likely pulled down sometime between the late spring of 1856, when the land on which it stood would have officially become City property, and the winter of 1857-58, by which time

the various buildings in Seneca Village are thought to have all been removed (Board of Commissioners of the Central Park 1858:Document #15).

This location was likely roughly landscaped at the time of the park's creation, but remained largely unaltered until the late 1920s when an informal playground with a "cinder surface" was established on the site of what later became the Spector Playground. This "playfield," as it was known, seems to have been placed over the pre-existing topography without any substantial grading and was approached from the south and west by "short walks" (Merkel 1927:39; City of New York, Department of Parks 1935:Sheet M-T-10-113; Warsh 2015-16).

When Robert Moses' plans for establishing playgrounds within the park were implemented in the mid-1930s, the play area at the site of the future Spector Playground was converted into the more formal amenity designated as "Marginal Playground No. 16" (see above, Figure 4.4). As a result of these modifications, the oval-shaped playground facility was accessed by asphalt walks from both the north and south, leading to ten-foot-wide, eight-foot-high chain link gates. The site of the greenhouse lay beneath the triangular arrangement of paths that formed the southern access to the playground. This pathway layout was retained in the upgrading of the playground that was implemented in the mid-1970s and has persisted to the present day (Warsh 2015-16).

B. ARCHAEOLOGICAL TESTING

Excavation Unit 103 was a 1-meter-square excavation unit placed to establish whether archaeological remains of the A.M.E Zion Church greenhouse or related cultural deposits survived just outside the southern entrance to Spector Playground (Figures 1.2 and 5.1; Photograph 5.1). This excavation unit was positioned within the triangular piece of grassy ground enclosed by asphalt pathways just north of the tri-sided kiosk that is at the hub of the Seneca Village historic interpretive signage system.

Excavation commenced with the removal of a silty sand loam upper deposit that extended to a maximum depth of 25 cm below the ground surface [Context 1] (Figure 5.1; Photograph 5.2). This deposit contained a mix of modern refuse (e.g., plastic) and historic artifacts such as pieces of window glass and bottle glass and sherds of pottery. It overlay a thin mottled sandy silt loam fill deposit that extended to 30 cm below the ground surface [2]. No artifacts were found or retained from Context 2, which is interpreted as grading or leveling fill related to the construction of the Spector Playground in the mid-1930s. Context 2 overlay a dark sandy silt deposit [3] that contained glass, nails and historic ceramic vessel sherds. The top of this deposit is considered to be the ground surface immediately prior to the mid-1930s playground improvements. Context 3 extended to a depth of 40 cm below the ground surface and overlay a thick sandy silt deposit [4] similar in character to the park fill deposit found in Excavation Units 100 and 101 (see above, Chapter 3). Interpreted as mid-19th-century landscaping fill related to the park's construction, this soil layer extended to a depth of 70 cm below ground surface and was devoid of artifacts. Context 4 overlay a thin, possibly truncated B horizon subsoil [7] that produced no cultural materials. This deposit overlay a regolith layer of eroded bedrock [5] beneath which was schist bedrock [6].

A total of 114 historic artifacts were recovered from Excavation Unit 103. Eighty-two artifacts were recovered from Context 1, the modern topsoil, and 32 were recovered from Context 3, the buried mid-20th-century ground surface. Eight modern artifacts were also recovered from Context 1 including bottle glass, plastic and an aluminum measuring spoon. The most numerous type of artifact recovered from Excavation Unit 103 was glass with 56 fragments from Context 1 and nine from Context 3. Forty-seven

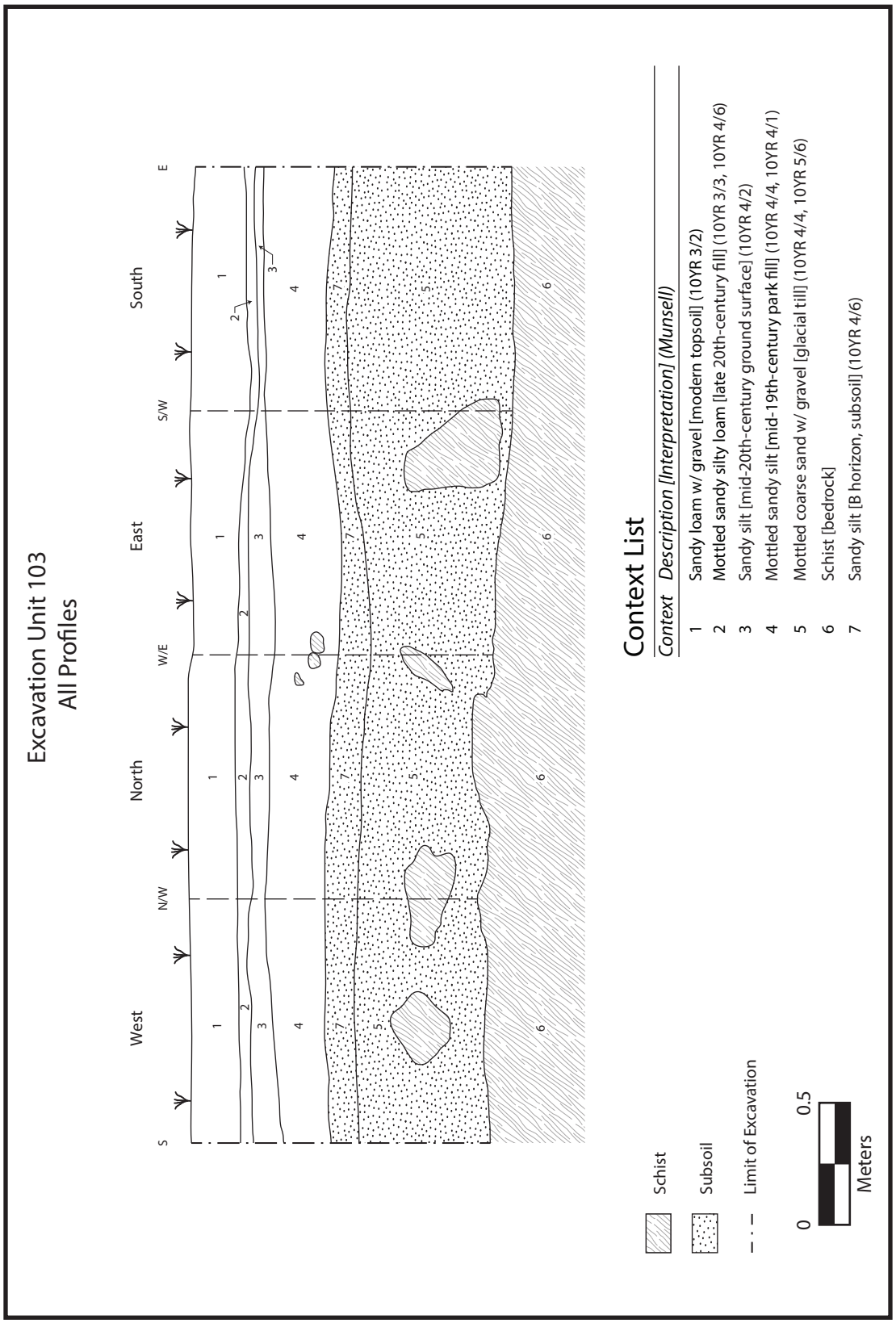


Figure 5.1. Greenhouse on AME Zion Church Property, Excavation Unit 103, Profiles.

Photograph 5.1. View facing east showing the location of Excavation Unit 103, which was positioned just north of and behind the Seneca Village signage kiosk (Photographer: Jim Lee, December 2019) [HRI Neg.#19074/D2:067].

Photograph 5.2. View facing north showing Excavation Unit 103 in plan and profile. Bedrock is exposed at the base of the excavation unit. Scale rod in feet (Photographer: Andrew Martin, December 2019) [HRI Neg.#19074/D1:126].

of these fragments were derived from bottles, drinking glasses and other forms of curved glass vessels, with the remaining nine fragments being pieces of window glass. Bottle and vessel glass fragments were primarily derived from clear glass vessels which is indicative of a late 19th-century or 20th-century date of manufacture. Several olive glass fragments were also recovered. Though olive glass is often thought of as an earlier (usually 17th or 18th-century) form of glass, the decoration on these fragments places their date of manufacture in the 19th and 20th-centuries.

Historic ceramic vessel sherds were the next most numerous artifact type with a total of 41 items being recovered from the excavation unit. Of these, 22 sherds were recovered from Context 1 and 19 from Context 3. Indeterminate white-bodied refined earthenwares and ironstone china, ceramic types commonly dated from 1840 to the present day, were the most numerous with nine sherds of each being present in the assemblage. Porcelain (six sherds) and redware (three sherds), two vessel forms with a broad date range were the next most numerous ceramic type. Whiteware, commonly dated from 1815 to the present (two sherds), and a single sherd of slip-glazed stoneware, usually dated to the later 19th-century, completed the historic ceramic assemblage. A molded tobacco smoking pipe dating from 1800-1900 was also recovered, as were six metal artifacts, including a brass alloy hook, a copper alloy plumbing valve and a single nail, again recovered from Contexts 1 and 3. The artifact distribution in Excavation Unit 103 reflects the deep disturbance seen in the soil stratigraphy, with both artifact deposits appearing higher and more recently in the soil sequence than the 19th-century park fill.

C. ANALYSIS AND RECOMMENDATIONS

Excavation 103 was positioned on or just east of the former site of the greenhouse at the western end of the AME Zion church property that bordered the north side of West 85th Street. The soil profile documented in this excavation unit showed a sequence of 19th and 20th-century deposits entirely post-dating the creation of the park. No intact cultural layers associated with the period of occupation of Seneca Village were observed and it is concluded that the creation of the park resulted in grading and removal of pre-park cultural deposits in this location. The greenhouse, a building measuring 35 feet 9 inches by 9 feet 3 inches in plan (see above, Figure 4.2), is likely to have been a frame structure on shallow, impermanent foundations and its removal *circa* 1856-57 probably left little if any trace below ground. No further archaeological consideration of the site of the greenhouse is considered necessary within the context of the proposed playground improvements.

Chapter 6

CONCLUSIONS

Archaeological testing was conducted within and around Spector Playground in advance of playground and pathway improvements in archaeologically sensitive locations where deep ground disturbance is anticipated. Archaeological tests were manually excavated on or close to the sites of All Angels' Church, the Haff House and a greenhouse on the AME Zion Church property. Test locations were determined on the basis of detailed historic map analysis (chiefly involving the georeferencing of the Condemnation Maps of 1856) and the results of a ground-penetrating radar survey carried out by Peter Leach in 2016.

In the case of the site of All Angels' Church on West 85th Street, a structure erected in 1849 and disassembled and removed in 1858, two excavation units (Excavation Units 100 and 101) found no intact remains of the church foundations and minimal evidence of the church's former existence. Concentrations of schist rubble found beneath *circa* 1860 park fill deposits on top of schist bedrock may represent displaced, and possibly dynamited, remnants of the church footings. A single small fragment of stained glass, presumed to be from the church, was recovered. No further pre-construction archaeological testing is considered necessary in connection with the proposed improvements; however, archaeological monitoring during construction is still recommended in the vicinity of All Angels'.

A single excavation unit (Excavation Unit 102) was dug within the sand play area of Spector Playground on or close to the site of the southeastern corner of the Haff House, a dwelling that is thought to have been erected in the late 1830s or 1840s and pulled down *circa* 1856-57. No trace of the Haff House was observed, although the full depth of the cultural stratigraphy was not penetrated. Abundant evidence of disturbance was noted both relating to the construction of the playground in the mid-1930s and its subsequent alteration in the 1970s. There is a slight chance that archaeological remains of the Haff House and associated cultural deposits may survive beneath the playground, most likely to the north and west of the excavation unit, while earlier testing encountered house foundation remnants just beyond the playground perimeter to the northeast. Archaeological monitoring is recommended during construction for ground disturbance in excess of two feet (60 cm) in the immediate vicinity of the Haff House.

A single excavation unit (Excavation Unit 103) was also located just east of the site of a greenhouse that formerly existed in the mid-1850s at the western end of the AME Zion Church property. This test found only disturbed soils dating from the time of the park's creation and its subsequent modification (chiefly in the 1930s and 1970s). These soils directly overlay culturally sterile subsoil and bedrock. No trace was observed of the building, which was likely set on shallow footings, nor of any associated greenhouse-related activities. No further archaeological assessment of the greenhouse site is considered necessary within the context of the proposed playground improvements. Most, if not all, trace of the greenhouse has likely been removed as a result of the park's construction and subsequent modification.

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Appendix A

SUMMARY OF SUBSURFACE TESTING

APPENDIX A

SUMMARY OF SUBSURFACE TESTING

Unit Type	No.	Context	Depth	Soil Description [Interpretation]	Munsell	Cultural Materials
Excavation Unit	100	1	14 - 25cm	silty sand loam [modern top soil]	10YR 3/4	Historic Fired Clay
				silty sand loam [modern top soil]	10YR 3/4	Historic Glass
				silty sand loam [modern top soil]	10YR 3/4	Historic Metal
				silty sand loam [modern top soil]	10YR 3/4	Modern Composite
		2	25 - 43cm	mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Fired Clay
				mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Glass
				mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Metal
				mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Mineral
		3	10 - 16cm	[iron pipe]	--	--
		4	43 - 61cm	coarse sand with gravel [rhegolith and decayed bedrock]	10YR 3/6	--
		5	61 - cm	bedrock [natural]	--	--
Excavation Unit	101	1	4 - 14cm	silty sand loam [modern top soil]	10YR 3/4	Historic Glass
				silty sand loam [modern top soil]	10YR 3/4	Historic Metal
		2	14 - 50cm	mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Fired Clay
				mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Glass
				mottled silty loam [fill]	10YR 3/6, 10YR 3/3	Historic Metal
		3	65 - 73cm	coarse sand with gravel [rhegolith and decayed bedrock]	10YR 3/6	--
		4	43 - 73cm	loose stone [rubble]	--	--
		5	73 - cm	bedrock [natural]	--	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Unit Type	No.	Context	Depth	Soil Description [Interpretation]	Munsell	Cultural Materials
Excavation Unit	102	1	0 - 8cm	sand [playground sand]	10YR 6/4, 10YR 5/4	--
		2	8 - 31cm	compact, mottled sandy silt loam [fill]	10YR 4/4, 10YR 3/2	--
		3	--	cut [post]	--	--
		4		concrete post base [sign post]	--	--
		5	10 - 43cm	mottled sand loam [fill for sign post]	10YR 4/4, 10YR 3/3	Historic Fired Clay
				mottled sand loam [fill for sign post]	10YR 4/4, 10YR 3/3	Historic Metal
		6	--	cut [historic cut]	--	--
		7		sandy clay [fill of context 6]	10YR 4/4	--
		8	33 - 70cm	coarse, mottled loamy sand [redeposited rhegolith]	10YR 3/3, 10YR 4/6	--
		9	122 - cm	bedrock [natural]	--	--
		10	30 - 52cm	sand loam [fill]	10YR 4/6	--

APPENDIX A (Cont.)

SUMMARY OF SUBSURFACE TESTING

Unit Type	No.	Context	Depth	Soil Description [Interpretation]	Munsell	Cultural Materials
Excavation Unit	103	1	8 - 31cm	sand loam with gravel [modern top soil]	10YR 3/2	Historic Fauna
				sand loam with gravel [modern top soil]	10YR 3/2	Historic Fired Clay
				sand loam with gravel [modern top soil]	10YR 3/2	Historic Flora
				sand loam with gravel [modern top soil]	10YR 3/2	Historic Glass
				sand loam with gravel [modern top soil]	10YR 3/2	Historic Metal
				sand loam with gravel [modern top soil]	10YR 3/2	Modern Glass
				sand loam with gravel [modern top soil]	10YR 3/2	Modern Metal
				sand loam with gravel [modern top soil]	10YR 3/2	Modern Synthetic
		2	31 - 34cm	mottled sandy silt loam [20th century fill]	10YR 3/3, 10YR 4/6	--
		3	34 - 45cm	sandy silt [20th century ground surface (pre-playground)]	10YR 4/2	--
				sandy silt [20th century ground surface (pre-playground)]	10YR 4/2	Historic Fired Clay
				sandy silt [20th century ground surface (pre-playground)]	10YR 4/2	Historic Glass
				sandy silt [20th century ground surface (pre-playground)]	10YR 4/2	Historic Metal
				sandy silt [20th century ground surface (pre-playground)]	10YR 4/2	Historic Stone
		4	45 - 74cm	mottled sandy silt [park fill]	10YR 4/4, 10YR 4/1	--
		5	81 - 137cm	mottled, coarse sand with gravel [glacial till]	10YR 4/4, 10YR 5/6	--
		6	--	bedrock [natural]	--	--
		7	74 - 81cm	sandy silt [B horizon]	10YR 4/6	--

*** Discarded**

Appendix B

ARTIFACT INVENTORY

APPENDIX B
ARTIFACT INVENTORY

Excavation Unit 100, Context 1 **Catalog # 1**

Modern

1	Composite, Aluminum and Plastic, cap whole	Row #	21

Historic

1	Fired Clay, Porcelain, Hard Paste, tile whole, small hexagonal tile	Row #	20
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type rim fragment, crazing, 1780 - 1890	Row #	19
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, crazing, 1780 - 1890	Row #	18
2	Fired Clay, Refined Earthenware, Whiteware, saucer body fragment, transfer printed boat scene, blue Transfer Printed, Blue, crazing, mends with 2.11, crazing only present on exterior, 1815 - 1859	Row #	17
5	Glass, Curved, bottle body fragment, clear/uncolored, mold seam	Row #	11
1	Glass, Curved, Pepsi Wave Bottle, bottle body fragment, embossed linear design exterior, clear/uncolored, embossed with "[…]EPSI[…]" (Lockhart 2010), 1940 - 1951	Row #	15
1	Glass, Curved, bottle body fragment, embossed dots exterior, clear/uncolored	Row #	14
3	Glass, Curved, bottle body fragment, embossed design exterior, clear/uncolored, design indeterminate	Row #	12
6	Glass, Curved, bottle body fragment, clear/uncolored	Row #	10
7	Glass, Curved, bottle body fragment, olive green	Row #	8
3	Glass, Curved, bottle body fragment, amber	Row #	7
1	Glass, Curved, bottle body fragment, embossed natural design exterior, clear/uncolored, central line of design may be a mold seam	Row #	13
1	Glass, Curved, marble whole, clear marble with blue and white veins swirled, blue, white	Row #	6
1	Glass, Curved, marble whole, clear marble with colored veins swirled together, green, white, blue	Row #	5
2	Glass, Flat, window fragment, clear/uncolored	Row #	9
1	Glass, Flat, window, stained glass fragment, stained blue in varying shades and white, blue, white	Row #	16
1	Metal, Brass, spoon whole, incised decoration on handle, "MONROE STEEL CO." embossed on back of spoon, date is an approximation based on known pattern styles, this particular style is unknown (Sterling Flatware Fashions 2019), 1900 - 1950	Row #	1
1	Metal, Ferrous metal, indeterminate type fragment, relatively flat object with a slight curve in the center	Row #	2
1	Metal, Ferrous metal, nail fragment, machine cut, corroded, encrusted, dated 1805 to present (Miller 2000)	Row #	4
2	Metal, Ferrous metal, nail whole, machine cut, corroded, encrusted, dated 1805 to present (Miller 2000)	Row #	3

Total Artifacts in Context 1: 43

Excavation Unit 100, Context 2 **Catalog # 2**

Historic

3	Fired Clay, Earthenware, Redware, indeterminate type body fragment, 1700 - 1900	Row #	7
1	Fired Clay, Porcelain, Hard Paste, hollow ware body fragment	Row #	16
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, flow blue transfer printed floral motif interior, blue Transfer Printed, Flow Blue, crazing, 1828 - 1929	Row #	10
2	Fired Clay, Refined Earthenware, Pearlware, plate rim fragment, blue hand painted shell edged rim, unscalloped rim with impressed lines, blue Hand Painted, Blue Shell Edged, crazing, (MAC Lab 2020), 1840 - 1870	Row #	8
1	Fired Clay, Refined Earthenware, Pearlware, small bowl base fragment, crazing, 1780 - 1890	Row #	9
1	Fired Clay, Refined Earthenware, Pearlware/Whiteware, indeterminate type body fragment, lead glazed interior and exterior with remnant of white slip band present, white Annular Ware, crazing, (MAC Lab 2020), 1780 - 1850	Row #	12
1	Fired Clay, Refined Earthenware, Whiteware, indeterminate type body fragment, transfer printed boat scene, blue Transfer Printed, Blue, exterior surface missing, mends with 1.17, 1815 - 1859	Row #	11
2	Fired Clay, Refined Earthenware, Whiteware, indeterminate type body fragment, crazing, one surface missing, 1815 - 1940	Row #	13
1	Fired Clay, Refined Earthenware, Whiteware, indeterminate type body fragment, crazing, 1815 - 1940	Row #	14
1	Glass, Curved, bottle body fragment, aqua	Row #	6
2	Glass, Flat, window fragment, clear/uncolored	Row #	5
1	Metal, Ferrous metal, hook fragment, corroded, encrusted	Row #	1

APPENDIX B (Cont.)
ARTIFACT INVENTORY

2	Metal, Ferrous metal, nail fragment, wrought, corroded, encrusted	Row #	3
1	Metal, Ferrous metal, nail whole, machine cut, corroded, encrusted, L 3.25in, dated 1805 to present (Miller 2000)	Row #	2
1	Mineral, Coal, waste material fragment	Row #	4

Total Artifacts in Context 2: 21

Total Artifacts in All Angels' Church Excavation Unit 100 : 64

Excavation Unit 101, Context 1 **Catalog # 3**

Historic

1	Glass, Curved, bottle body fragment, amber	Row #	2
1	Glass, Curved, bottle body fragment, embossed lettering exterior, green, embossed with "[…]MES BUCHANAN & […]", "SCO[…]", James Buchanan $ Co. Ltd., Glasgow Scotland bottle	Row #	4
1	Glass, Curved, marble whole, light blue, melted	Row #	5
5	Glass, Curved, marble body fragment, clear/uncolored	Row #	6
3	Glass, Flat, window fragment, clear/uncolored	Row #	3
1	Metal, Ferrous metal, nail whole, corroded, encrusted	Row #	1

Total Artifacts in Context 1: 12

Excavation Unit 101, Context 2 **Catalog # 4**

Historic

1	Fired Clay, Porcelain, Hard Paste, indeterminate type body fragment	Row #	15
1	Fired Clay, Porcelain, Hard Paste, indeterminate type body fragment, one surface missing	Row #	16
2	Fired Clay, Porcelain, Hard Paste, plate rim fragment	Row #	17
1	Fired Clay, Porcelain, Porcellaneous English Hard Paste, indeterminate type rim fragment	Row #	24
3	Fired Clay, Refined Earthenware, Indeterminate White Body, indeterminate type body fragment, transfer printed design on one side, blue Transfer Printed, Blue, crazing, one surface missing	Row #	11
1	Fired Clay, Refined Earthenware, Pearlware, hollow ware rim fragment, molded exterior, crazing, 1780 - 1890	Row #	20
2	Fired Clay, Refined Earthenware, Pearlware, indeterminate type base fragment, foot ring, crazing, 1780 - 1890	Row #	8
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, transfer printed fern design interior, blue Transfer Printed, Blue, crazing, 1780 - 1890	Row #	10
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type rim fragment, crazing, 1780 - 1890	Row #	12
2	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, crazing, one surface missing, 1780 - 1890	Row #	18
1	Fired Clay, Refined Earthenware, Pearlware, indeterminate type rim fragment, crazing, exterior surface missing, 1780 - 1890	Row #	22
3	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, crazing, 1780 - 1890	Row #	19
1	Fired Clay, Refined Earthenware, Pearlware, jar rim fragment, transfer printed floral and city scene exterior, dark blue Transfer Printed, Blue, crazing, 1802 - 1846	Row #	14
1	Fired Clay, Refined Earthenware, Pearlware, plate rim fragment, hand painted shell edged rim, impressed lines on rim, blue Hand Painted, Blue Shell Edged, crazing, date taken from MAC Lab, rim fragment too small to determine whether it is scalloped (MAC Lab 2020), 1780 - 1860	Row #	13
3	Fired Clay, Refined Earthenware, Whiteware, flatware body fragment, crazing, 1815 - 1940	Row #	21
1	Fired Clay, Refined Earthenware, Whiteware, hollow ware body fragment, transfer printed floral design exterior, blue Transfer Printed, Blue, crazing, 1815 - 1940	Row #	9
1	Fired Clay, Refined Earthenware, Whiteware, indeterminate type body fragment, crazing, burned, 1815 - 1940	Row #	23
3	Fired Clay, Structural, Earthenware, brick fragment, red	Row #	7
2	Glass, Curved, bottle body fragment, olive green	Row #	4
2	Glass, Curved, bottle body fragment, clear/uncolored	Row #	6
3	Glass, Curved, bottle base fragment, star design embossed exterior, clear/uncolored	Row #	2

APPENDIX B (Cont.)
ARTIFACT INVENTORY

1	Glass, Curved, bottle body fragment, medium cobalt blue	Row #	5
2	Glass, Flat, window fragment, clear/uncolored	Row #	3
2	Metal, Ferrous metal, nail fragment, machine cut, corroded, encrusted, dated 1805 to present (Miller 2000)	Row #	1

Total Artifacts in Context 2: 41

Total Artifacts in All Angels' Church Excavation Unit 101 : 53

Excavation Unit 102, Context 5 **Catalog # 5**

Historic

1	Fired Clay, Structural, Earthenware, brick whole, stamped, red, "BROCKWAY" stamped to exterior, date from sites (Bayley, 2012, Yasinac 2003), 1883 - 1990	Row #	4
1	Metal, Aluminum, can lid fragment, "PLEASE DO NOT LITTER" embossed on surface	Row #	2
1	Metal, Aluminum, ring tab fragment, dated 1965 to present (DePastino 2015)	Row #	1
5	Metal, Ferrous metal, can fragment, corroded, encrusted	Row #	3

Total Artifacts in Context 5: 8

Total Artifacts in Haff House Excavation Unit 102 : 8

Excavation Unit 103, Context 1 **Catalog # 6**

Modern

2	Glass, Curved, bottle body fragment, 7-up green	Row #	8
1	Metal, Aluminum, measuring spoon whole, "1 ML 1 TABLESPOON" and "CHINA" incised on handle	Row #	1
1	Synthetic, Plastic, cap whole, raised in the center, yellow	Row #	46
1	Synthetic, Plastic, indeterminate type fragment	Row #	42
1	Synthetic, Plastic, indeterminate type fragment, design with cursive lettering on exterior, teal, lettering illegible	Row #	43
1	Synthetic, Plastic, indeterminate type fragment, green	Row #	44
1	Synthetic, Plastic, indeterminate type fragment, red	Row #	45

Historic

1	Fauna, Shell, oyster fragment	Row #	41
1	Fired Clay, Earthenware, Redware, hollow ware body fragment, ribbed, 1700 - 1900	Row #	38
2	Fired Clay, Earthenware, Redware, indeterminate type body fragment, unglazed, interior surface missing, 1700 - 1900	Row #	39
1	Fired Clay, Porcelain, Chinese, hollow ware rim fragment, transfer printed natural and geometric design around rim, blue Transfer Printed, Blue, crazing, stained	Row #	27
1	Fired Clay, Porcelain, Hard Paste, indeterminate type rim fragment, overglaze enamel line around rim, brown Overglaze Enameled	Row #	28
1	Fired Clay, Porcelain, Hard Paste, indeterminate type base fragment, foot ring, stained	Row #	24
2	Fired Clay, Porcelain, Hard Paste, indeterminate type body fragment	Row #	29
1	Fired Clay, Porcelain, Indeterminate Paste, indeterminate type body fragment, dimpled	Row #	30
5	Fired Clay, Refined Earthenware, Indeterminate White Body, flatware body fragment, crazing, burned	Row #	34
1	Fired Clay, Refined Earthenware, Indeterminate White Body, hollow ware rim fragment, crazing, burned	Row #	35
2	Fired Clay, Refined Earthenware, Indeterminate White Body, indeterminate type base fragment, crazing, burned	Row #	36
1	Fired Clay, Refined Earthenware, Indeterminate White Body, indeterminate type rim fragment, burned	Row #	31
1	Fired Clay, Refined Earthenware, Ironstone, hollow ware body fragment, scratched, 1840 - 1950	Row #	26
1	Fired Clay, Refined Earthenware, Pearlware/Whiteware, indeterminate type body fragment, molded, 1780 - 1890	Row #	33
1	Fired Clay, Refined Earthenware, Whiteware, indeterminate type rim fragment, 1815 - 1940	Row #	32
1	Fired Clay, Stoneware, Slip Glazed Stoneware, hollow ware body fragment, tan body, ribbed	Row #	37
1	Flora, Charcoal, waste material fragment	Row #	40

APPENDIX B (Cont.)
ARTIFACT INVENTORY

3	Glass, Curved, bottle body fragment, amber	Row #	7
1	Glass, Curved, bottle base fragment, olive green, large mamelon base, (Jones and Sullivan 1985)	Row #	14
1	Glass, Curved, bottle body fragment, medium cobalt blue	Row #	9
2	Glass, Curved, bottle body fragment, embossed exterior, clear/uncolored, indeterminate embossing - may be lettering, may simply be decoration	Row #	20
3	Glass, Curved, bottle body fragment, aqua	Row #	6
1	Glass, Curved, bottle base fragment, embossed based, clear/uncolored, Owens-Illinois glass symbol (Glass Bottle Marks 2020), 1929 - 1966	Row #	15
1	Glass, Curved, bottle finish fragment, cap seat finish, clear/uncolored	Row #	16
1	Glass, Curved, bottle body fragment, square body, clear/uncolored	Row #	17
1	Glass, Curved, bottle body fragment, embossed lettering on exterior, clear/uncolored, embossed with "[…]C[…]", "[…]E", very faint	Row #	19
1	Glass, Curved, bottle body fragment, embossed exterior, clear/uncolored, embossed with "[…]RN[…]" and "[…]UP[…]"	Row #	21
3	Glass, Curved, bottle body fragment, clear/uncolored, mold seam	Row #	22
14	Glass, Curved, bottle body fragment, clear/uncolored	Row #	23
2	Glass, Curved, bottle body fragment, olive green	Row #	13
2	Glass, Curved, cup body fragment, clear/uncolored	Row #	18
2	Glass, Curved, hollow ware body fragment, opaque white	Row #	11
1	Glass, Curved, indeterminate type body fragment, ribbed, opaque white, stained	Row #	25
1	Glass, Curved, indeterminate type fragment, molded lines present on one surface, opaque white	Row #	12
2	Glass, Flat, indeterminate type fragment, opaque white	Row #	10
5	Glass, Flat, window fragment, clear/uncolored	Row #	5
1	Metal, Brass alloy, hook whole, hook on each side of the object, as though for hanging something from something else	Row #	3
1	Metal, Copper alloy, plumbing valve whole, corroded	Row #	4
1	Metal, Ferrous metal, nail whole, wire, corroded, encrusted	Row #	2

Total Artifacts in Context 1: 82

Excavation Unit 103, Context 3 **Catalog # 7**

Historic

1	Fired Clay, Personal, White Clay, smoking pipe bowl fragment, molded vertical lines, seam embellished, date estimated based on molding (Mann 1977), 1800 - 1900	Row #	18
1	Fired Clay, Porcelain, Hard Paste, indeterminate type body fragment	Row #	10
2	Fired Clay, Porcelain, Hard Paste, saucer base fragment, foot ring	Row #	9
1	Fired Clay, Refined Earthenware, Ironstone, hollow ware rim fragment, gold gilt band around exterior rim, gold, scratched, 1840 - 1950	Row #	17
5	Fired Clay, Refined Earthenware, Ironstone, hollow ware fragment, machine cut, corroded, encrusted, dated 1805 to present (Miller 2000)	Row #	3
2	Fired Clay, Refined Earthenware, Ironstone, indeterminate type body fragment, crazing, 1865 - 1890	Row #	12
1	Fired Clay, Refined Earthenware, Pearlware, hollow ware body fragment, brown slip trailed banding exterior, brown Slip Trailed, crazing, 1770 - 1920	Row #	16
2	Fired Clay, Refined Earthenware, Pearlware, indeterminate type body fragment, 1780 - 1890	Row #	11
2	Fired Clay, Refined Earthenware, Pearlware, plate base fragment, hand painted floral design interior, foot ring, blue Hand Painted, Blue, crazing, (MAC Lab 2019), 1815 - 1830	Row #	13
1	Fired Clay, Refined Earthenware, Pearlware, saucer base fragment, hand painted geometric design interior, foot ring, blue Hand Painted, Blue, crazing, 1815 - 1830	Row #	15
1	Fired Clay, Refined Earthenware, Whiteware, indeterminate type body fragment, hand painted floral design interior, blue Hand Painted, Blue, crazing, 1815 - 1830	Row #	14
1	Glass, Curved, bottle body fragment, embossed lettering on exterior, clear/uncolored, embossed lettering reads "[…]QUAL[…]"	Row #	8

APPENDIX B (Cont.)
ARTIFACT INVENTORY

2	Glass, Curved, bottle body fragment, clear/uncolored	Row #	5
3	Glass, Curved, bottle body fragment, light aqua	Row #	6
1	Glass, Curved, cup rim fragment, etched design on exterior, clear/uncolored	Row #	7
2	Glass, Flat, window fragment, light aqua	Row #	4
2	Metal, Ferrous metal, nail fragment, wire, corroded, encrusted, 1780 - 1890	Row #	1
1	Metal, Ferrous metal, nail whole, machine cut, corroded, encrusted, L 3in, dated 1805 to present (Miller 2000)	Row #	2
1	Stone, Structural, Sandstone, indeterminate type fragment, possible chinking stone	Row #	19

Total Artifacts in Context 3: 32

Total Artifacts in A.M.E. Zion Church Greenhouse Excavation Unit 103 : 114

Total Number of Artifacts: 239

*** Item Discarded in Laboratory**

Appendix C

RESUMES

Richard W. Hunter
PRESIDENT

Patrick Harshbarger
VICE PRESIDENT

James S. Lee
VICE PRESIDENT

RICHARD W. HUNTER
President/Principal Archaeologist, Ph.D., RPA

EDUCATION

Ph.D., Geography, Rutgers University, New Brunswick, New Jersey, 1999.
Dissertation Title: *Patterns of Mill Siting and Materials Processing: A Historical Geography of Water-Powered Industry in Central New Jersey*

M.A., Archaeological Science, University of Bradford, England, 1975

B.A., Archaeology and Geography, University of Birmingham, England, 1973

EXPERIENCE

1986-present President/Principal Archaeologist
Hunter Research, Inc., Trenton, NJ

Founder and principal stockholder of firm providing archaeological and historical research, survey, excavation, evaluation, report preparation, historic exhibit development and public outreach services in the Northeastern United States. Specific expertise in historical and industrial archaeology (mills, iron and steel manufacture, pottery manufacture), historical geography, historic landscape analysis, historic interpretive design and public outreach products. Participation in:

- Project management, budgeting and scheduling
- Proposal preparation and client negotiation
- Hiring and supervision of personnel
- Supervision of research, fieldwork, analysis and report preparation
- Historic exhibit development, popular and academic publications and public presentations

1999-2004 Faculty Member, Certificate in Historic Preservation
Office of Continuing Education, Drew University, Madison, NJ

Courses: The Role of Archaeology in Preservation
25 Years of Public Archaeology in New Jersey

1983-1986 Vice-President/Archaeologist
Heritage Studies, Inc., Princeton, NJ

Principal in charge of archaeological projects. Responsibilities included:

- Survey, excavation, analysis, and reports
- Client solicitation, negotiation, and liaison
- Project planning, budgeting, and scheduling
- Recruitment and supervision of personnel

1981-1983 Principal Archaeologist
Cultural Resource Group, Louis Berger & Associates, Inc., East Orange, NJ

Directed historical and industrial archaeological work on major cultural resource surveys and mitigation projects in the Mid-Atlantic region. Primary responsibility for report preparation and editing.

1979-1981 Archaeological Consultant, Hopewell, NJ

1978-1981 Adjunct Assistant Professor, Department of Classics and Archaeology, Douglass College, Rutgers University, NJ

1978-1979 Research Editor
Arete Publishing Company, Princeton, NJ

Prepared and edited archaeological, anthropological, and geographical encyclopedia entries (*Academic American Encyclopedia*, 1980).

1974-1977 Archaeological Field Officer
Northampton Development Corporation, Northampton, England

Supervised archaeological salvage projects executed prior to development of the medieval town of Northampton (pop. 230,000).

Experience included:

- Monitoring of construction activity
- Supervision of large scale urban excavations
- Processing of stratigraphic data and artifacts
- Preparation of publication materials

1969-1970 Research Assistant
Department of Planning and Transportation, Greater London Council

SPECIAL SKILLS AND INTERESTS

- water-powered mill sites
- canals and urban water powers
- iron and steel manufacture
- pottery manufacture
- historic cartography
- scientific methods in archaeology
- historic sites interpretation and public outreach

SELECTED PUBLICATIONS

"New York's Urban Archaeology. The Forts Landscape Reconstruction Project: Central Park's Revolutionary War Forts." *Archaeological Institute of America, New York Society News*, Winter 2015:6-8.

Sartori to Sacred Heart: Early Catholic Trenton. Sacred Heart Church [2014] (with Patrick Harshbarger).

"Historical Archaeology in Trenton: A Thirty-Year Retrospective." In *Historical Archaeology of the Delaware Valley, 1600-1850*, edited by Richard Veit and David Orr. University of Tennessee Press, Knoxville, Tennessee [2013] (with Ian Burrow).

"A Sugar Bowl of William Young & Sons or William Young's Sons." *Trenton Potteries* 13 (1):1-3 [2013].

"Internal Oxidation of Cast Iron Artifacts from an 18th-century Steel Cementation Furnace." *Journal of Archaeological Science* XXX, 1-8 [2012] (with Colin Thomas and Robert Gordon).

"Steel Away: the Trenton Steel Works and the Struggle for American Manufacturing Independence." In *Footprints of Industry: Papers from the 300th Anniversary Conference at Coalbrookdale, 3-7 June 2009*, edited by Paul Belford, Marilyn Palmer and Roger White. *BAR British Series* 523 [2010] (with Ian Burrow).

"Early Milling and Waterpower." In *Mapping New Jersey: An Evolving Landscape*, edited by Maxine N. Lurie and Peter O. Wacker, pp. 170-179. Rutgers University Press [2009].

"On the Eagle's Wings: Textiles, Trenton, Textiles, and a First Taste of the Industrial Revolution." *New Jersey History* 124, Number 1, 57-98 [2009] (with Nadine Sergejeff and Damon Tvaryanas).

"The Historical Geography and Archaeology of the Revolutionary War in New Jersey." In *New Jersey in the American Revolution*, edited by Barbara J. Mitnick, pp.165-193. Rutgers University Press [2005] (with Ian C.G. Burrow).

"Lenox Factory Buildings Demolished." *Trenton Potteries* 6 (2/3):1-9 [2005].

Fish and Ships: Lamberton, the Port of Trenton. New Jersey Department of Transportation and Federal Highway Administration [2005] (28-page booklet).

Power to the City: The Trenton Water Power. New Jersey Department of Transportation and Federal Highway Administration [2005] (24-page booklet).

Rolling Rails by the River: Iron and Steel Fabrication in South Trenton. New Jersey Department of Transportation and Federal Highway Administration [2005] (24-page booklet).

Quakers, Warriors, and Capitalists: Riverview Cemetery and Trenton's Dead. New Jersey Department of Transportation and Federal Highway Administration [2005] (24-page booklet) (with Charles H. Ashton).

"Keeping the Public in Public Archaeology." In: *Historic Preservation Bulletin*, pp. 6-9. New Jersey Department of Environmental Protection, Division of Parks and Forestry, Historic Preservation Office [2004].

"A Coxon Waster Dump of the Mid-1860s, Sampled in Trenton, New Jersey." In: *Ceramics in America*, edited by Robert Hunter, pp. 241-244. University Press of New England [2003] (with William B. Liebeknecht and Rebecca White).

"The Richards Face – Shades of an Eighteenth-Century American Bellarmine." In: *Ceramics in America*, edited by Robert Hunter, pp. 259-261. University Press of New England [2003] (with William B. Liebeknecht).

"The Pottery Decorating Shop of the Mayer Arsenal Pottery Company." *Trenton Potteries* 4(2):1-7 [2003].

"Minutes of the Potters Union (Part 2)." *Trenton Potteries* 4(1):1-5 [2003].

"Minutes of the Potters Union (Part I)." *Trenton Potteries* 3(4):1-5 [2002].

"Eighteenth-Century Stoneware Kiln of William Richards Found on the Lamberton Waterfront, Trenton, New Jersey." In: *Ceramics in America*, edited by Robert Hunter, pp. 239-243. University Press of New England [2001].

"William Richards' Stoneware Pottery Discovered!" *Trenton Potteries* 1(3):1-3 [2000]. Reprinted in *Bulletin of the Archaeological Society of New Jersey* 59:71-73 [2004].

"Trenton Re-Makes: Reviving the City by the Falls of the Delaware." *Preservation Perspective* XVIII (2): 1, 3-5 [1999]

"Mitigating Effects on an Industrial Pottery." *CRM* 21(9):25-26 [1998] (with Patricia Madrigal).

From Teacups to Toilets: A Century of Industrial Pottery in Trenton, Circa 1850 to 1940, Teachers Guide sponsored by the New Jersey Department of Transportation, 1997 (with Patricia Madrigal and Wilson Creative Marketing).

"Pretty Village to Urban Place: 18th Century Trenton and Its Archaeology." *New Jersey History*, Volume 114, Numbers 3-4, 32-52 [Fall/Winter 1996] (with Ian Burrow).

Hopewell: A Historical Geography. Township of Hopewell [1991] (with Richard L. Porter).

"Contracting Archaeology? Cultural Resource Management in New Jersey, U.S.A." *The Field Archaeologist* (Journal of the Institute of Field Archaeologists) 12, 194-200 [March 1990] (with Ian Burrow).

"American Steel in the Colonial Period: Trenton's Role in a 'Neglected' Industry." In *Canal History and Technology Proceedings* IX, 83-118 [1990] (with Richard L. Porter).

"The Demise of Traditional Pottery Manufacture on Sourland Mountain, New Jersey, during the Industrial Revolution." Ch. 13 in *Domestic Potters of the Northeastern United States, 1625-1850.* Studies in Historical Archaeology, Academic Press [1985].

PROFESSIONAL AFFILIATIONS

Register of Professional Archaeologists (RPA) [formerly Society of Professional Archeologists] (accredited 1979; certification in field research, collections research, theoretical or archival research)
Preservation New Jersey (Board Member, 1994 - 2003)
New Jersey State Historic Sites Review Board (Member, 1983 -1993)
Society for Historical Archaeology
Society for Industrial Archaeology
Society for Post-Medieval Archaeology
Historical Metallurgical Society
Council for Northeast Historical Archaeology
Professional Archaeologists of New York City
Archaeological Society of New Jersey (Life Member; Fellow, 2011)

OTHER AFFILIATIONS

Mercer County Cultural & Heritage Commission (Commissioner, 2011 – present)
Trenton Downtown Association (Board Member, 1998 – present; Board Chair, 2007 - 2008)
Trenton Museum Society, (Trustee, 2011 – present)
Hopewell Township Historic Preservation Commission (Member, 1998 - 2006; Chair 2003 - 2004)
Hopewell Valley Historical Society (Trustee, 2014 – present)

JAMES S. LEE, III, M.A., RPA
Vice President
Principal Investigator/Archaeologist

EDUCATION

M.A., Archaeology, University of Durham, Durham, United Kingdom, 1996

B.A., Anthropology and History, Rutgers University, New Brunswick, New Jersey, 1995

EXPERIENCE

2015-present — Vice President/Principal Investigator/Archaeologist
Hunter Research, Inc., Trenton, NJ

Vice President of firm providing archaeological and historical research, survey, excavation, evaluation, report preparation and public outreach services in the Northeastern United States. Responsible for:

- Project management, budgeting and scheduling
- Technical and synthetic writing
- Proposal preparation, contract negotiation and management
- Hiring and supervision of personnel
- Supervision of research, fieldwork, analysis and report preparation

2001-2015 — Principal Investigator
Hunter Research, Inc., Trenton, NJ

Technical and managerial responsibilities for survey, evaluation and mitigation of selected archaeological projects. Technical and managerial responsibility for report production. Participation in:

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- supervision of cartographic and GIS product, graphic design and report layout
- hiring and supervision of personnel

2001 — Crew Chief
Kittatinny Archaeological Research, Stroudsburg, Pennsylvania

- survey and excavation
- supervision of field personnel
- stratigraphic and artifact analysis

1997-2001 — Principal Investigator/Project Manager
Cultural Resource Consulting Group, Highland Park, New Jersey

- overall site direction and day-to-day management
- development and implementation of research, excavation and analysis strategies for prehistoric and historic archaeological sites
- report and proposal preparation
- hiring and supervision of personnel

1997-2000 Laboratory Supervisor
Cultural Resource Consulting Group, Highland Park, New Jersey

Technical and managerial responsibilities for laboratory components of archaeological projects. Participation in:

- management of laboratory operations
- supervision of laboratory personnel
- computerization of artifact data
- prehistoric and historic ceramic analysis
- preparation of artifact inventories and writing of artifact sections of reports

1996-1997 Field Technician
Cultural Resource Consulting Group, Highland Park, New Jersey

SPECIAL SKILLS AND INTERESTS

- canals and associated water control structures
- waterpowered mill sites
- iron manufacture
- prehistory of the northeastern United States
- prehistoric lithic technology
- historic sites interpretation and public outreach

CERTIFICATIONS

Secretary of the Interior's Professional Qualification Standards for Archaeologists (36 CFR Part 61)
Register of Professional Archaeologists
OSHA 40-hour Initial Training, 2002
OSHA 8-hour Refresher Course, 2012

PROFESSIONAL AFFILIATIONS

Society for Industrial Archaeology
Archaeological Society of New Jersey, Member at Large
Society for Pennsylvania Archaeology
New York State Archaeological Association
Canal Society of New Jersey
Warren County Morris Canal Committee
Eastern States Archaeological Federation
Middle Atlantic Archaeological Conference

SELECTED PRESENTATIONS

"The Fishkill Supply Depot: Archaeological Synthesis" Paper presented to the Friends of the Fishkill Supply Depot, October 25, 2015.

"Archaeological Investigations at the Tulpehacken Nature Center, Abbott Marshlands, Mercer County, New Jersey." Paper presented to the Archaeological Society of New Jersey, March 21, 2015.

"The Last 100 Years at Morris Canal Plane 9 West." Paper presented to the Canal Society of New Jersey, November 21, 2014 (with James Lee Jr.).

"Ephrata Tract Archaeological Assessment." Paper presented to the Moravian Historical Society, October 20, 2014.

"Archaeological Investigations in the Shadow of the Gap, I-80 Weigh Station Site (28Wa290)." Paper presented to the Society for Pennsylvania Archaeology, Forks of the Delaware Chapter 14. April 3, 2013.

"Exploring the Industrial Archaeological Resources of Waterloo Village." Paper presented to the Canal Society of New Jersey, March 15, 2013 (with Richard W. Hunter).

"Archaeological Investigations at Morris Canal Lock 2 East, Wharton, New Jersey." Paper presented to the Canal Society of New Jersey, March 16, 2012.

"Delaware and Raritan Canal Lock #1, Hamilton Township, Mercer County, New Jersey." Paper presented to the Canal Society of New Jersey, December 1, 2010 (with Richard W. Hunter).

"The Archaeological Potential of the Morris Canal." Paper presented to the Archaeological Society of New Jersey, March 19, 2007.

"Planes and Plans: The Morris Canal in Warren County." Paper presented to the New Jersey Historic Preservation Conference, April 23, 2004.