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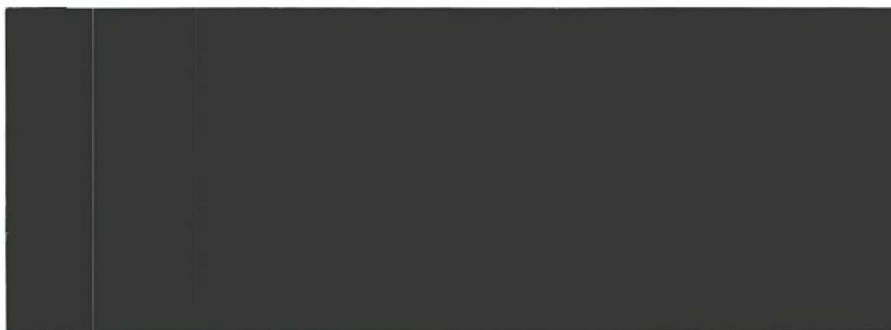
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TECHNICAL REPORT

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**PHASE IA SENSITIVITY ASSESSMENT/LITERATURE SEARCH
HAMILTON GRANGE NATIONAL MEMORIAL
AND ST. NICHOLAS PARK**

New York, New York

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ABSTRACT

PAL conducted a Phase IA sensitivity assessment and literature search for the Hamilton Grange National Memorial project area in the borough of Manhattan, New York, New York. Hamilton Grange (ca. 1802) was built as a country retreat for Alexander Hamilton, first Secretary of the United States Treasury. The property currently is under the stewardship of the National Park Service, which is proposing its relocation from a highly urban setting at 287 Convent Avenue to a more appropriate, non-congested setting in St. Nicholas Park on 141st Street and St. Nicholas Avenue. Background research conducted for both impact areas concluded that the project area contained low prehistoric archaeological sensitivity and moderate historic archaeological sensitivity. Possible historic period resources identified within the project area include a mill house associated with Hamilton's tenure at the house, an outbuilding depicted on an 1885 map of the Hamilton Heights district, and a pathway incorporated as part of the original landscape design for the park. Phase IB field investigation recommendations are provided for both impact areas.

TABLE OF CONTENTS

ABSTRACT	i
MANAGEMENT SUMMARY	ix
ACKNOWLEDGEMENTS	xiii
1 INTRODUCTION	1
Project Scope and Authority	1
Project Personnel	1
Disposition of Project Materials	1
2 METHODS AND PROCEDURES	4
Archaeological Significance and Historic Contexts	4
Background Research	6
State Site Files	7
Cultural Resource Management Reports	7
Histories and Maps	7
Environmental Studies	8
Walkover Survey	8
Archaeological Sensitivity Assessment	8
Native American Archaeological Sensitivity	8
Euro-American Archaeological Sensitivity	9
Archaeological Sensitivity Ranking	10
3 RESULTS	11
Environmental Context	11
Geology and Geomorphology	11
Soils	11
Hydrology	11
Prehistoric Context for Hamilton Grange	13
PaleoIndian Period (12,500–10,000 B.P.)	13
Archaic Period (10,000–1000 B.P.)	14
Woodland Period (3000–400 B.P.)	16
Contact Period	17
Historic Context for Hamilton Grange	19
The Dutch Occupation of Manhattan Island	19
The Succession of British Rule	21
Revolution	22

Table of Contents

Alexander Hamilton and the Re-Gentrification of Harlem Heights	23
A Series of Sales and Speculations	27
The Development of Hamilton Heights and the Creation of St. Nicholas Park	34
Hamilton Grange in the Twentieth Century	38
4 INTERPRETATIONS	43
Existing Project Area Conditions	43
Prehistoric Archaeological Sensitivity	44
Historic Archaeological Sensitivity	44
Convent Avenue Impact Area	44
St. Nicholas Park Impact Area	50
5 RECOMMENDATIONS	53
Subsurface Testing	53
Convent Avenue Impact Area	53
St. Nicholas Park Impact Area	53
Laboratory Processing and Analysis	54
End-of-Fieldwork Memo and Phase IB Report Preparation	54
REFERENCES	55
APPENDICES	
A DIGITAL DATA – REPORT AND GEO-REFERENCED HISTORIC MAPS	
(to be included in final report)	59

LIST OF FIGURES

Figure 1-1.	Locations of Hamilton Grange National Memorial and proposed relocation site, Hamilton Grange project area, Manhattan, New York, NY, Central Park USGS topographic quadrangle, 7.5 minute series	2
Figure 1-2.	Detail map showing the existing location and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	3
Figure 3-1.	Map of the physiographic regions of New York showing the location of the Hamilton Grange project area	12
Figure 3-2.	Map showing the Native American place names in New York City and the location of the Hamilton Grange project area	18
Figure 3-3.	1639 Manatus Map showing the location of the Hamilton Grange project area, Manhattan, New York, NY	21
Figure 3-4.	1782 British Headquarters Map showing the location of the Hamilton Grange project area, Manhattan, New York, NY	24
Figure 3-5.	Map of the Hamilton Heights District in Harlem, showing the current location and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	26
Figure 3-6.	Perspective drawing of the south and east sides of Hamilton Grange, date unknown	27
Figure 3-7.	1811 Commissioners Plan Map, showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	28
Figure 3-8.	1867 map of New York and Vicinity showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	30

List of Figures

Figure 3-9.	1879 map showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	31
Figure 3-10.	1885 map showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY.	32
Figure 3-11.	1890 map showing Hamilton Grange in its new location on Convent Avenue	33
Figure 3-12.	Photograph of Hamilton Grange during its relocation, view north, ca. 1889	34
Figure 3-13.	Photograph of Hamilton Grange at its current location on Convent Street, ca. 1890, view east	35
Figure 3-14.	1906 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	36
Figure 3-15.	1921 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	37
Figure 3-16.	Construction map of St. Nicholas Park, North, showing the location of water and sewer pipes and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	39
Figure 3-17.	1937 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	40
Figure 3-18.	1955 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	41
Figure 3-19.	1975 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	42
Figure 4-1.	Map showing the current and proposed sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	45

Figure 4-2.	Photograph of the front yard space at the current site of the Hamilton Grange National Memorial, view northwest, Hamilton Grange project area, Manhattan, New York, NY	47
Figure 4-3.	Photograph of the back yard space at the current site of the Hamilton Grange National Memorial, view east, Hamilton Grange project area, Manhattan, New York, NY	47
Figure 4-4.	Photograph of the back yard space at the current site of the Hamilton Grange National Memorial, view southeast, Hamilton Grange project area, Manhattan, New York, NY	48
Figure 4-5.	Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view west, Hamilton Grange project area, Manhattan, New York, NY	48
Figure 4-6.	Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view north, Hamilton Grange project area, Manhattan, New York, NY	49
Figure 4-7.	Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view northeast, Hamilton Grange project area, Manhattan, New York, NY	49
Figure 4-8.	1874 map showing the original watercourses and made land within Manhattan and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY	51

LIST OF TABLES

Table 2-1.	Archaeological Sensitivity Ranking	10
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MANAGEMENT SUMMARY

Hamilton Grange National Memorial is the former home of Alexander Hamilton, one the United States' founding fathers and its first Secretary of the Treasury. The Grange was established as a national memorial in 1962, and is currently located at 287 Convent Avenue in the Hamilton Heights Historic District in the borough of Manhattan, New York, New York. The house was moved roughly 350 feet southeast from its original location in 1889, and presently is located in a highly urban setting with an apartment building attached to its northeast side and a portico from St. Luke's Episcopal church partially blocking its western elevation. The current setting meets neither the visitors' expectations of viewing the house in a non-congested setting, nor Congress' intention of providing the Grange an appropriate setting in its present day community.

In order to better fulfill its stewardship responsibilities, the National Park Service (NPS) is proposing to move the Grange to a site in St. Nicholas Park adjacent to 141st Street. As an undertaking of the federal government, the project falls under the purview of Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). William A. Griswold of the Northeast Region's Archaeology Program in Lowell, Massachusetts, acting as the Contracting Officer's Technical Representative (COTR) for Manhattan Sites, a unit of the National Park Service, requested that a Phase IA literature search and sensitivity assessment and a Phase IB archaeological field investigation be conducted in advance of the proposed relocation. The investigations were conducted for both the current Grange site at 287 Convent Avenue and the proposed 0.91-acre relocation site in St. Nicholas Park.

The current location of the Grange is an approximately 25-x-50-ft grassy lot wedged tightly between St. Luke's Episcopal Church to the south and an apartment complex to the north; the apartment building actually makes contact with the Grange at its northwestern corner. The front of the house consists of a landscaped yard bisected by a brick walkway. The rear yard comprises a largely undisturbed expanse of grass bounded by a chainlink fence, retaining wall, and apartment building to the north, St. Luke's Church to the south, and a wrought iron fence to the east.

The proposed relocation site at the northern tip of St. Nicholas Park consists of a canopy of mature deciduous trees, large expanses of exposed bedrock, and minimal ground cover of burdock and violets. The entire parcel slopes generally to the east with more dramatic contours at the eastern and western corners of the project area; the proposed relocation site for the Grange lies on a relatively flat section of land between these two points

The goal of the Phase IA assessment was to gather information concerning the environmental, physical, and prehistoric and historic cultural contexts of the current Hamilton Grange site and the proposed St. Nicholas Park relocation site. The results of the research were then used to develop an archaeological sensitivity assessment and Phase IB subsurface testing strategy. To accomplish these objectives, two research strategies were used including: archival research, including a review of literature and maps, and local informant interviews; and, field investigations, consisting of a walkover survey of the project areas.

A review of the site files for Manhattan identified no prehistoric sites within a 1-mile radius of the project area. Based on the extant archaeological record for northern Manhattan, it appears that prehistoric occupation tended to cluster along the Harlem River on the fertile flatlands formerly known as Muscoota. The steep and rocky topography and relative distance from these major watercourses would have made the Hamilton Grange project area a comparatively undesirable settlement option.

The intensive and expansive urban development of the Harlem Heights district during the late nineteenth and twentieth centuries has seriously compromised the integrity of the soils in the project area. The relocation of Hamilton Grange to its current lot on Convent Avenue, ca. 1889, required site clearing, blasting, excavation and grading that would preclude the stratigraphic integrity of any prehistoric resources in that area. While the construction of St. Nicholas Park was generally sensitive to the topographic integrity of the original landscape, the bedrock outcrops, steep terrain, and minimal water resources mitigate against a prehistoric presence in that portion of the project area.

The Convent Avenue and St. Nicholas Park impact areas possess low archaeological sensitivity for prehistoric cultural resources.

The northern portion of Manhattan was sparsely occupied throughout the seventeenth and eighteenth centuries, in large part because of its isolation from the urban core to the south and the lethal threat of Indian attack. Those individuals that did venture to the area tended to congregate to the east of the Manhattan Hills along the shores of the Harlem River. During the mid- to late- eighteenth century, however, Harlem Heights saw increased use as a summer retreat for the wealthiest of New Yorkers and as a base of operations for Washington's army during the Revolutionary War. The nineteenth-century saw large-scale residential development of the area and the expansion of the gridiron into the newly created Hamilton Heights district.

A review of historic maps dating from 1639–1890 indicates no historic period resources within the proposed Convent Avenue impact area. Blasting, excavation, and grading within the lot during the construction of the house foundation, ca. 1889, compromised the stratigraphic integrity of the soils in that area and, by extension, any pre-1889 historic resources contained within those soils. Features post-dating the relocation of the house to Convent Avenue, ca. 1889, may exist within the impact area. These features may include refuse deposits and the remains of small outbuildings. The installation of indoor plumbing in the house in the mid-nineteenth century and the re-establishment of that system after its move preclude the presence of privy or well features.

The Convent Avenue impact area possesses low historic archaeological sensitivity for resources pre-dating 1889, and moderate to high archaeological sensitivity for resources post-dating the relocation of the Grange, ca. 1889.

Several historic period resources may survive within the proposed St. Nicholas impact area. While the construction of the park did include some degree of blasting and filling, the fact that it was designed in the generally "low-impact" Picturesque style suggests that some of these resources, or portions of these resources, may survive within this part of the project area.

The utilization of the Harlem Heights as a base of operations area during the Revolutionary War and, moreover, the engagement of the Battle of Harlem Heights between 130th and 155th streets, suggests the possibility of the presence of military cultural material and features within the relocation site. Resources

associated with this period may include portable personal effects such as buttons, buckles, pipes, and bottle glass; ammunition; and, hearth features related to temporary camps.

Another potential resource is the remains of Alexander Hamilton's mill house, ca. 1800–1802, as suggested by the 1874 Viele map of Manhattan. While the first cartographic evidence of the Grange on the 1811 Commissioners Plan provides an anticipatory view of the landscape after the construction of the gridiron, the Viele map depicts the original watercourses and made land on the island. Based on this map, Hamilton would have had access to several different small streams and rivers across his property, including a small stream in what is now the northwestern portion of St. Nicholas Park. Hamilton may have utilized this stream for his mill house, and portions of the mill including foundation remains, may survive in the proposed relocation site for the Grange.

A second possible resource includes the remains of portions of the Mott farm as depicted on the 1811 Commissioners Plan of Manhattan. The farm itself is depicted as lying outside of the relocation site boundaries, but it is possible that outbuildings and yard features (e.g., privies, trash heaps, stone walls, outbuildings, wells) may survive within those boundaries.

The 1885 Robinson map depicts an outbuilding at the northeastern corner of the park and within the boundaries of the proposed relocation site. This outbuilding appears to be associated with a residence situated west of the historic alignment of King's Bridge Road, what is now the corner of St. Nicholas Avenue and 141st Street. The building is gone by 1921, likely razed during the construction of the park, but elements of it may survive below the modern ground surface.

Other possible historic period resources within the relocation site may include subsurface evidence of Parsons' original layout of the park. The design plans for the park and subsequent land maps dating to 1975 depict a walkway cutting through the St. Nicholas portion of the project area. This path no longer exists as a formal design feature, but a well-trod footpath follows what was likely its original alignment. Portions of the original path may survive, including any formal landscaping elements associated with it.

In light of the number of potential resources identified within this portion of the project area and the degree of disturbance caused by park construction and improvements, the St. Nicholas Park impact area possesses moderate archaeological sensitivity for resources dating from the mid-eighteenth to early twentieth centuries.

Based on the results of Phase IA sensitivity assessment and literature search, **it is estimated that 44, 30–50-cm diameter test units will be necessary to provide adequate coverage across the Convent Street and St. Nicholas Park project impact areas.** The test pits will be divided between the two impact areas as follows:

Four 30–50-cm diameter test units will be excavated in the current location of the Hamilton Grange National Memorial at 287 Convent Avenue. One test pit will be placed in the front of the house north of the brick walkway to confirm expected subsurface disturbance in that area. The remaining three test pits will be excavated across the backyard using a judgmental test pit transect spaced at 2.5-m intervals to test for the presence of historic period resources post-dating the relocation of the Grange, ca. 1889.

Approximately 40, 30–50-cm diameter test units will be excavated at the proposed Hamilton Grange relocation site in St. Nicholas Park. The testing will be conducted using a coordinate grid spaced at 5-m intervals. Approximately 35 test units will be excavated across the impact area within the grid system, excluding those areas containing exposed bedrock or excessive slope. This approach will ensure an equal probability of identifying cultural resources across the entire project impact area.

The remaining 5 test units will be excavated on a discretionary basis in those areas identified as potential locations for specific historic period cultural resources. These areas include the north-central boundary of the park in the possible location the Alexander Hamilton mill house (ca. 1800), and at the northeastern corner in the possible location of an 1885 outbuilding.

ACKNOWLEDGEMENTS

The long history of Hamilton Grange, as set within the even longer history of New York, required the casting of a long research net both within and without Manhattan. PAL would like to thank William Griswold, the Contracting Officer's Technical Representative at the National Park Service's Cultural Resource Center in Lowell, Massachusetts, for his time and direction in providing resource links for the project. PAL also would like to thank Amanda Sutphin, R.P.A., Director of Archaeology for The City of New York Landmarks Preservation Commission, for providing copious documentary and archaeological information about Hamilton Grange and the Hamilton Heights Historic District. C. Stevens Laise, Park Ranger at the Manhattan Sites office, also graciously coordinated a tour of the Hamilton Grange National Memorial. Finally, PAL would like to thank the staff of the Map Division of the New York Public Library and the staff of the New York City Hall Municipal Archives for their invaluable research assistance.

CHAPTER ONE

INTRODUCTION

Hamilton Grange National Memorial is the former home of Alexander Hamilton, one the United States' founding fathers and its first Secretary of the Treasury. The Grange was established as a national memorial in 1962, and is currently located at 287 Convent Avenue in the Hamilton Heights Historic District in the borough of Manhattan, New York, New York (Figure 1-1). The house was moved roughly 350 feet southeast from its original location in 1889, and presently is located in a highly urban setting with an apartment building attached to its northeast side and a portico from St. Luke's Episcopal church partially blocking its western elevation. The current setting meets neither the visitors' expectations of viewing the house in a non-congested setting, nor Congress' intention of providing the Grange an appropriate setting in its present day community.

Project Scope and Authority

In order to better fulfill its stewardship responsibilities, the National Park Service (NPS) is proposing to move the Grange to a site in St. Nicholas Park adjacent to 141st Street (Figure 1-2). As an undertaking of the federal government, the project falls under the purview of Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). William A. Griswold of the Northeast Region's Archaeology Program in Lowell, Massachusetts, acting as the Contracting Officer's Technical Representative (COTR) for Manhattan Sites, a unit of the National Park Service, requested that a Phase IA literature search and sensitivity assessment and a Phase IB archaeological field investigation be conducted in advance of the proposed relocation. The investigations were conducted for both the current Grange site at 287 Convent Avenue and the proposed 0.91-acre relocation site in St. Nicholas Park.

Project Personnel

PAL conducted the Phase IA literature search and sensitivity assessment for the Hamilton Grange National Memorial in August 2003. PAL staff involved in the background research and walkover survey included Deborah Cox (project manager), Kristen Heitert (principal investigator and project archaeologist), and Jennifer MacPherson (project archaeologist).

Disposition of Project Materials

All project information (field recording forms, maps, photographs) will be temporarily curated at the PAL offices at 210 Lonsdale Avenue, Pawtucket, Rhode Island, according to Archaeological Collections Management (ACMP) guidelines. The Phase IA survey documentation will be returned to the NPS with the submission of the final report.

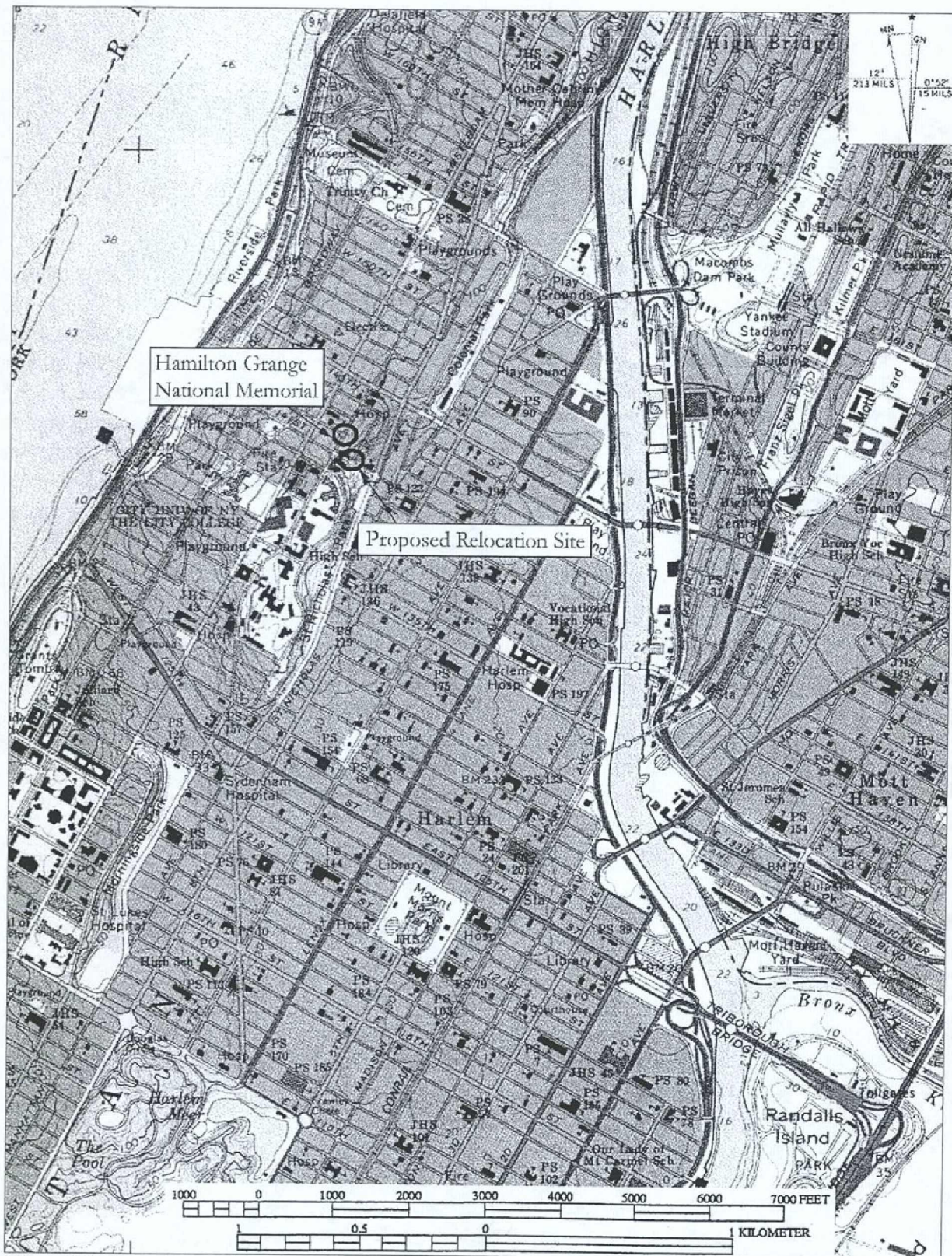


Figure 1-1. Locations of Hamilton Grange National Memorial and proposed relocation site, Hamilton Grange project area, Manhattan, New York, NY, Central Park USGS topographic quadrangle, 7.5 minute series.

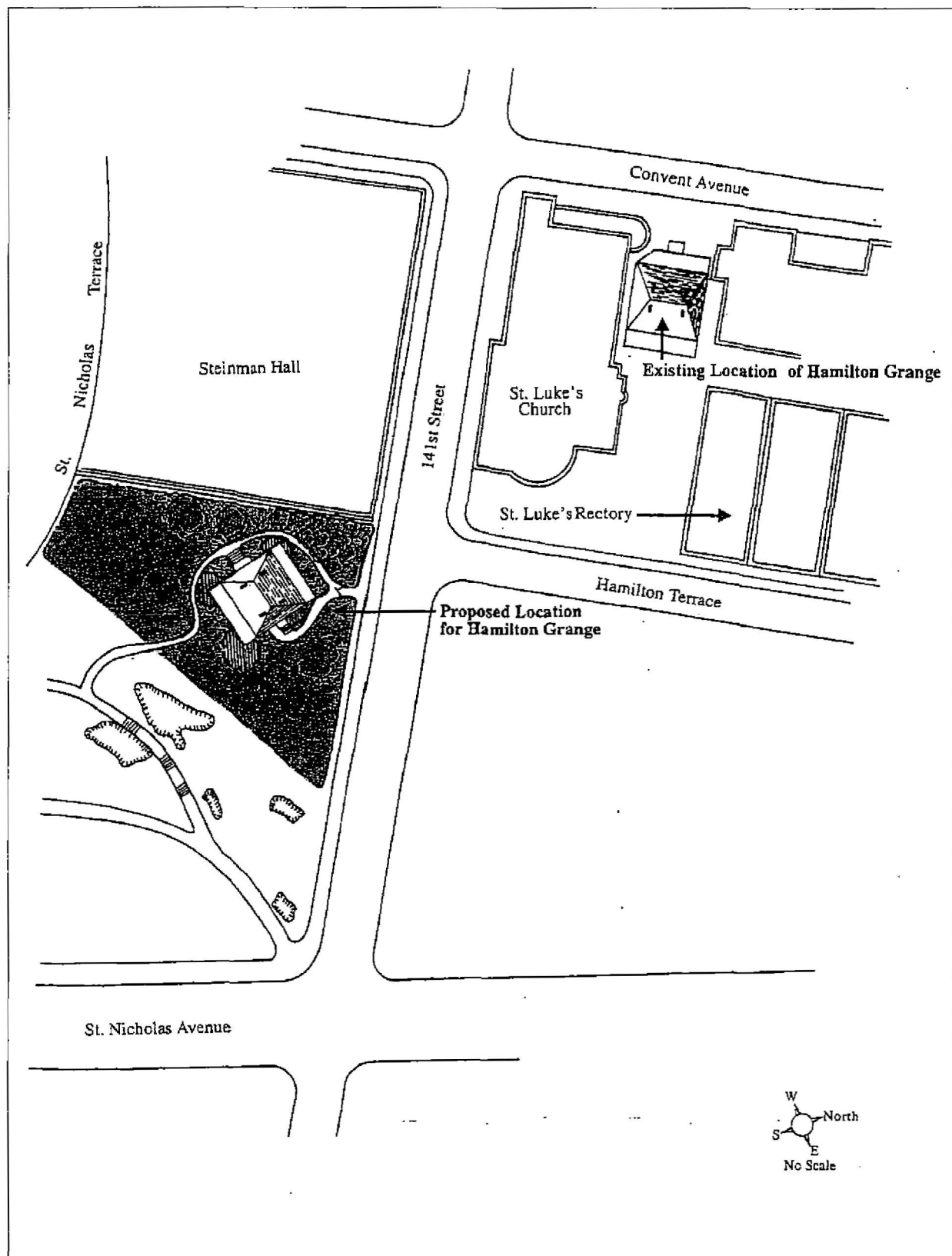


Figure 1-2. Detail map showing the existing location and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY.

CHAPTER TWO

METHODS AND PROCEDURES

The goal of the Phase IA assessment was to gather information concerning the environmental, physical, and prehistoric and historic cultural contexts of the current Hamilton Grange site and the proposed St. Nicholas Park relocation site. The results of the research were then used to develop an archaeological sensitivity assessment and Phase IB subsurface testing strategy. To accomplish these objectives, two research strategies were used:

- archival research, including a review of literature and maps, and local informant interviews;
- field investigations, consisting of a walkover survey of the project areas.

The archival research and walkover survey provided the information needed to stratify the project area into zones of expected archaeological sensitivity. Archaeological sensitivity is defined as the likelihood for prehistoric and historic period resources to be present and is based on various categories of information. These categories include:

- known locational, functional, and temporal characteristics of identified prehistoric and historic sites in the project area or vicinity; and
- project-specific, local and regional environmental data in conjunction with project-area conditions observed during the walkover.

This report section describes the methods used during each of the background research and field activities. The results of the research and field investigations are discussed and evaluated in Chapters 3 and 4.

Archaeological Significance and Historic Contexts

The different phases of archaeological investigation (reconnaissance, intensive survey, site examination, and data recovery) reflect preservation planning standards for the identification, evaluation, registration, and treatment of cultural resources (National Park Service [NPS] 1983). This planning structure pivots around the eligibility of cultural resources for inclusion in the National Register of Historic Places (NRHP). The National Register is the official federal list of properties studied and found worthy of preservation. The results of an intensive (locational) survey and site examination are used to make recommendations about the significance and eligibility of any resource.

The standards for determining the significance of cultural resources, a task required of federal agencies, are the guidelines provided by the NPS (36 CFR 60): the National Register Criteria for Evaluation. The

following four criteria are given for determining if the “quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association” (36 CFR 60):

- A. that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. that are associated with the lives of persons significant in our past; or
- C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. that have yielded, or may be likely to yield, information important to prehistory or history.

Most archaeological sites listed in the NRHP have been determined eligible under criterion A or D. For eligibility under these criteria, a number of issues must be addressed, including the kind of data contained in the site, the relative importance of research topics suggested by the data, whether these data are unique or redundant, and the current state of knowledge relating to the research topic(s) (McManamon 1990:14–15). A defensible argument must establish that a site “has important legitimate associations and/or information value based upon existing knowledge and interpretations that have been made, evaluated, and accepted” (McManamon 1990:15).

The criteria used to evaluate the significance of cultural resources are applied in relation to the historical contexts of the resources. A historical context is defined as follows:

At minimum, a historical context is a body of information about past events and historic processes organized by theme, place, and time. In a broader sense, an historic context is a unit of organized information about our prehistory and history according to the stages of development occurring at various times and places (NPS 1985).

Historical contexts provide an organizational format that groups information about related historical properties based on a theme, geographic limits, and chronological periods. A historical context may be developed for Native American, historic, and/or modern cultural resources. Each historical context is related to the developmental history of an area, region, or theme (e.g., agriculture, transportation, waterpower), and identifies the significant patterns that particular resource can represent.

Historical contexts are developed by:

- identifying the concept, time period, and geographic limits for the context;
- collecting and assessing existing information about these limits;
- identifying locational patterns and current conditions of the associated property types;

- synthesizing the information in a written narrative; and
- identifying information needs.

“Property types” are groupings of individual sites or properties based on common physical and associative characteristics. They serve to link the concepts presented in the historical contexts with properties illustrating those ideas (NPS 1983:44719).

A summary of an area’s history can be developed by a set of historical contexts. This formulation of contexts is a logical first step in the design of any archaeological survey. It is also crucial to the evaluation of individual properties in the absence of a comprehensive survey of a region (NPS 1983:9). The result is an approach that structures information collection and analyses. This approach further ties work tasks to the types and levels of information required to identify and evaluate potentially important cultural resources.

The following research contexts have been developed to organize the data relating to the Native American and Euro-American cultural resources identified within the proposed project area:

1. Native American land use and settlement in the Harlem River drainage, ca. 12,500 to 300 years before present (B.P.); and
2. historic land use and settlement patterns of the borough of Manhattan, New York, ca. A.D. 1650 to present.

Historical contexts, along with expected property types and locational patterns, are discussed in detail in Chapter 3. The potential research value of the known and expected prehistoric and historic archaeological resources identified within the Hamilton Grange project area is evaluated in terms of these historical contexts. This evaluation, along with Phase IB archaeological survey recommendations, is presented in Chapters 4 and 5.

Background Research

Finding the information necessary to develop a historical context and assess the potential for archaeological resources begins with the examination of primary and secondary documentary sources. These sources include written and cartographic documents relating both to past and present environmental conditions and to prehistoric and historic period resources in or close to the project area. This background information assists in the formulation of predictive models or statements about the project area, and is an integral part of a Phase IA survey. Variables within each category of background data are used to define the overall archaeological and historical context of the project area.

The following sources were reviewed as part of the background research for the proposed Hamilton Grange project area:

State Site Files

Archaeological site files maintained by the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) were reviewed for information regarding prehistoric or historic resources in or close to the project area. These inventories include cultural resources listed or eligible for listing in the NRHP.

Cultural Resource Management Reports

Cultural resource management (CRM) reports conducted in the project vicinity were reviewed to provide information about previously identified prehistoric and historic cultural resources in the immediate project area as well as general contextual information. Referenced reports include *Archaeological and Historical Sensitivity Evaluation of the Dance Theatre of Harlem Expansion Project, 474-476 West 152nd Street, Manhattan, New York, CEQR #90-140m* (Roberts 1991); *East Harlem Triangle Site, Block 1791, Part of Lot 1; Block 1792, Blocks 5, 9, 10. CEQR #89-106M* (Rubinson and Winter 1991); and, *Phase IV Upgrade of the High Voltage Electrical Service and Distribution System, United States Coast Guard Support Center, Governors Island, New York* (LBA 1995).

Histories and Maps

Secondary documentary histories of New York were consulted to provide a general context for the development of Manhattan. *Gotham: A History of New York City to 1898*, Burrows and Wallace's monumental history of New York City, provided a synthetic and thematic overview of the city as well as detailed information about the settlement, growth, and evolution of Harlem (Burrows and Wallace 1999). *Unearthing Gotham: The Archaeology of New York City* provided a current and comprehensive look at the prehistoric and historical archaeology of the island (Cantwell and diZerega Wall 2001). The National Register nomination for the Hamilton Heights Historic District was consulted for information concerning the architectural and narrative history of the Grange, as well as the development of the surrounding community. A historical summary of the Grange and a designation report for the Hamilton Heights Historic District Extension (Postal 2000) also were reviewed for additional information about the property.

Historical and contemporary cartographic data provided the most critical information for evaluating changes in land use over time, and assessing the potential for prehistoric and historic cultural resources within the project areas. *Manhattan in Maps* (Cohen and Augustyn 1997) provided a valuable narrative overview of the cartographic depiction of Manhattan, including information about the relative strengths and weaknesses of various maps over time. Primary source material specific to the Hamilton Grange project area, including Bromley, Hyde, Perris, and Randel maps, was obtained from the Map Library at the New York Public Library and the Municipal Archives at City Hall. Samuel Parsons' original plans for St. Nicholas Park also were reviewed on microfiche at the Municipal Archives to provide information about the original layout and design of the proposed relocation site.

Environmental Studies

Bedrock and surficial geological studies provide information about the region's physical structure and about geological resources near the project area. The 1902 USGS New York City Folio supplied information about the bedrock and surficial geology of the project area. Viele's topographical atlas of the original watercourses and made land of Manhattan also was reviewed (Viele 1874).

Walkover Survey

A walkover survey was conducted to collect environmental information and to examine the current physical condition of the project area. Environmental information noted the presence, types, and extent of fresh water; drainage characteristics; presence of bedrock outcrops and level terraces; and the steepness of slopes. The current physical condition of the project area is largely defined by the presence, absence, and degree of previous disturbance to the natural landscape.

The information collected during the walkover was recorded on project maps and was instrumental in formulating the Phase IB subsurface testing methodology.

Archaeological Sensitivity Assessment

Information collected during background research and the walkover survey was used to develop a predictive model to assess the potential for the presence of Native American and Euro-American resources, the types of sites that might be found, and their cultural and temporal affiliation. The development of predictive models for locating cultural resources has become an increasingly important aspect of CRM and planning.

The predictive sensitivity model used criteria to rank the potential for the project area to contain Native American or Euro-American sites. The criteria used to assess the Hamilton Grange project area were proximity of documented cultural resources, local land use patterns, environmental characteristics, and the area's physical condition.

Native American Archaeological Sensitivity

Sets of key environmental variables used to predict the location of Native American sites have been compiled from research conducted by professional archaeologists. These studies have demonstrated that certain environmental and topographical settings are strongly associated with the presence of Native American sites. The most productive studies have been of large areas with a variety of environmental settings that were field tested to determine the validity of the predictive model. For example, analysis of several hundred sites in southeastern New England (Thorbahn et al. 1980) found that the highest density and greatest clustering of prehistoric sites occurred within 300 meters (m) of low-ranking streams and large wetlands. The distribution of sites found along a 14-mile I-495 highway corridor in the same area confirmed this observation (Thorbahn 1982).

Other studies have found that site locations are strongly associated with modern wetland densities (Mulholland 1984). Wetlands provide both a home and breeding habitat for a diverse set of animals,

support foods, and other vegetation. Prehistoric Native Americans sought the most productive wetlands, including those with a wide variety of resources and those with consistent and reliable resource availability (Hasenstab 1991; Nicholas 1991; Thorbahn 1982; Thorbahn et al. 1980).

Geologic data provides information about lithic resources and about current and past environmental settings and climates. Bedrock geology helps to identify where raw materials for stone tools were obtained by prehistoric groups and gives indications of how far from their origin lithic materials may have been transported or traded. The variety and amount of available natural resources are dependent on soil composition and drainage, which also play a significant role in determining wildlife habitats, and forest and plant communities.

Geomorphology assists in reconstructing the paleoenvironment of an area and is particularly useful for early Holocene (PaleoIndian and Early Archaic period) sites in areas that are different physically from 10,000 years ago (Simon 1991). Recent landscape changes such as drainage impoundments for highways and railroads, the creation of artificial wetlands to replace wetlands impacted by construction, or wetlands drained for agricultural use, can make it difficult to assess an area's original configuration and current archaeological potential (Hasenstab 1991:57).

Beyond predicting where sites are located, archaeologists attempt to associate cultural and temporal groups with changes in the environmental settings of sites. Changes in the way prehistoric groups used the landscape can be investigated through formal multivariates such as site location, intensity of land use, and specificity of land use (Nicholas 1991:76). However, distinguishing the difference between repeated short-term, roughly contemporaneous occupations and long-term settlements is difficult and can make interpreting land use patterns and their evolution problematic (Nicholas 1991:86).

Euro-American Archaeological Sensitivity

The landscape of a project area is used to predict the types of Euro-American sites likely to be present. Major locational attributes differ according to site type. Domestic and agrarian sites (houses and farms) characteristically contain water sources and are located near arable lands and transportation networks. Industrial sites (e.g., mills, tanneries, forges, and blacksmith shops) predating the late nineteenth century are typically located close to waterpower sources and transportation networks. Commercial and public or institutional sites (e.g., stores, taverns, inns, schools, and churches) are usually situated near settlement concentrations with access to local and regional road systems (Ritchie et al. 1988).

Written and cartographic documents aid in determining Euro-American archaeological sensitivity. Historic maps are particularly useful for locating sites in a given area, determining a period of occupation, establishing the names of past owners, and providing indications of past use(s) of the property. Town histories provide information about important sites including previous functions, ownership, local socioeconomic conditions, and political development. These details assist in placing the Euro-American site within its historical context, facilitating assessments of the potential importance of a particular site.

Background research alone, however, is not sufficient to locate underdocumented historic period archaeological sites. A large-scale archaeological study by King (1988) showed that in rural areas only 63 percent of the sites discovered were identifiable through documentary research. This suggests that

approximately one-third of New England's rural Euro-American archaeological sites may not appear on historical maps or in town and regional histories. Walkover inspections and subsurface testing are required to locate and identify underdocumented historic sites.

Archaeological Sensitivity Ranking

The project area was ranked according to the potential for the presence of cultural resources based on information collected during the background research and walkover. Subsurface testing was planned for areas assigned high and moderate sensitivity rankings and where project impacts will occur. Table 2-1 is a summary of the different factors used to develop the archaeological rankings.

Table 2-1. Archaeological Sensitivity Ranking.

FACTORS								RANKING
PRESENCE OF SITES		PROXIMITY TO FAVORABLE CULTURAL/ ENVIRONMENTAL CHARACTERISTICS			DEGREE OF DISTURBANCE			
Known	Unknown	≤ 150 m	150-500 m	> 500 m	None/ Minimal	Moderate	Extensive	Sensitivity
.		.			.			High
.		.				.		High
.		.					.	Low
.			.		.			High
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.				.			.	Low
	.	.			.			High
	.	.				.		High
	.	.					.	Low
	.		.		.			High
	.		.			.		Moderate
	.		.				.	Low
	.			.	.			Moderate
	.			.		.		Low
	.			.			.	Low

CHAPTER THREE

RESULTS

The following chapter provides the results of the background research conducted for the Hamilton Grange project area. This section is divided into three components outlining the environmental, prehistoric, and historic contexts for the area.

Environmental Context

Geology and Geomorphology

Manhattan lies at the boundary of the Atlantic Coastal Lowland and the New England Upland physiographic provinces and is more properly grouped, from a geologic standpoint, with the latter than the former (Figure 3-1). The New England Upland is further split into three subdivisions, including Manhattan Hills, of which Manhattan Island and Westchester County are a part. This area is low in elevation and was formed on a complex of ancient rocks.

On a macro-scale, the underlying bedrock of Manhattan Island is composed of igneous and metamorphic rocks and resistant sandstone, a condition that allowed these formations to withstand glacial scouring following the retreat of the Wisconsin glaciation. The Hamilton Grange project area is underlain by Hudson schist (Silurian), a mica-schist consisting of biotite and quartz, with garnet, staurolite, fibrolite and cyanite (USGS 1902). The surviving glacial till is generally reddish and so thin as to constitute a discontinuous mantle that barely masks the surface of the underlying bedrock (USGS 1902). The project area has long been recognized as a particularly hilly region of the island with prominent bedrock outcrops. This topographic profile combined with its distance from the primary shipping ports to the south resulted in the gradual and relatively late incorporation of the area into the urban core of New York.

Soils

Manhattan generally comprises shallow and acidic soils on glacial till spread over steep terrain (Thompson 1977). No detailed soil survey maps currently are available for New York City or the Hamilton Grange project area. The New York City Soil and Water Conservation District is in the process of developing a study of urban soils, spanning a citywide reconnaissance soil map, a series of intensive soil surveys, and special research projects.

Hydrology

The Harlem River, separating Manhattan from the Bronx and connecting the Hudson and East rivers, lies immediately northeast of Hamilton Grange and serves as the primary drainage for the project area.

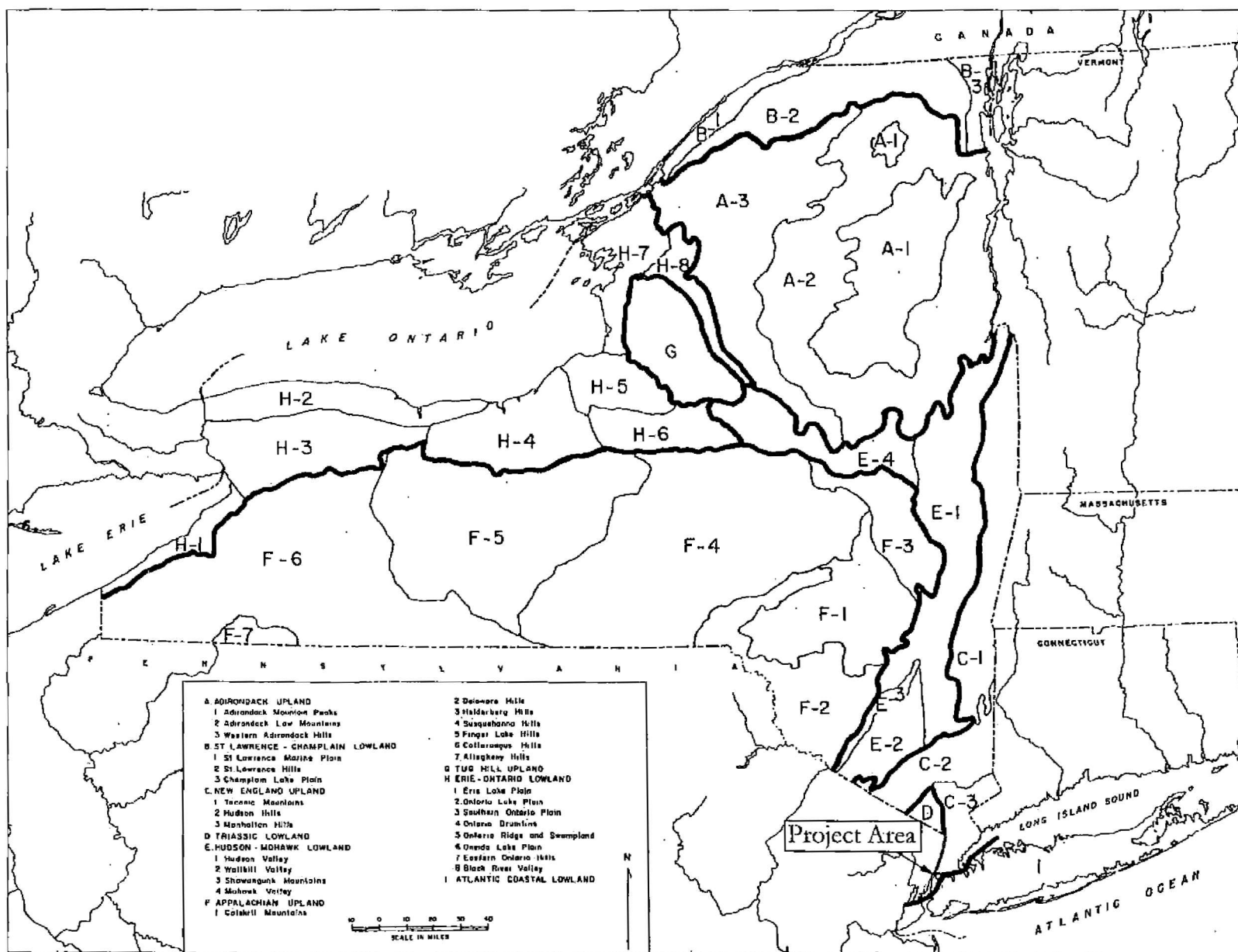


Figure 3-1. Map of the physiographic regions of New York showing the location of the Hamilton Grange project area (source: Thompson 1977).

The river is a navigable tidal channel, roughly 8 miles long, and has long served as a shipping shortcut between Long Island Sound and river ports north of New York City. Several railroad and many street bridges span the river.

Viele's 1874 map of the original topography of Manhattan depicts the Harlem River as substantially broader than its current configuration and channeled by a network of smaller streams and drainages along its western shoreline. The increasing urbanization of the northern portion of the island during the later nineteenth century and the need to "improve" the channel as part of larger shipping routes resulted in massive infilling that has narrowed and straightened the river.

Prehistoric Context for Hamilton Grange

PaleoIndian Period (12,500–10,000 B.P.)

The earliest archaeological evidence for human occupation in the region dates to the PaleoIndian Period, a time of dramatic environmental change in the Northeast. A major effect of the retreat of the ice sheet was glacio-isostatic rebound, a process in which landforms formerly compressed by the weight of the glacial overburden "rebound" to a state of equilibrium with the crustal surface. This phenomenon, in combination with the release of glacial meltwater, resulted in the inundation of previously dry land on what is now the continental shelf. This dynamic environment simultaneously created and eradicated major and minor watercourses, lakes, wetlands, and other landforms such as terraces, kettle holes, moraines, and outwash plains (Ritter et al. 1995).

Climatic shifts precipitated by the retreat of the massive Pleistocene ice sheets also can be correlated, through palynological evidence with shifts in the vegetative profile of the region. Changes in vegetation, in turn, may be associated with changes in the range and diversity of animal populations dependent on those plant resources and, by extension, the subsistence strategies of human populations dependent on both.

Following the retreat of the last Wisconsin glacier during the **Early PaleoIndian Period** (12,500–12,000 B.P.), the environment underwent a transition from a tundra to open spruce woodland, dominated by scrub birch and alder (Funk 1972). Small, highly mobile bands of hunter-gatherers moved into the Northeast at this time, roaming large territories and exploiting a wide range of food resources. These food resources included Pleistocene megafauna as well as smaller game, marine resources, and seasonally available wild plant food (Dragoo 1976).

The **Middle PaleoIndian Period** (12,000–11,000 B.P.) saw the return of colder conditions, a climatic shift known as the Younger Dryas, which created an Arctic-like landscape in eastern Maine and the Canadian Maritimes. Areas to the south, however, maintained more moderate conditions capable of supporting a mixed forest of spruce, pine, birch, and alder, as well as a sizable caribou population. These herds of caribou are believed to have been an important food resource for Middle PaleoIndian populations, who followed the animals movements from summer calving grounds in the north to wintering grounds in the south.

The **Late PaleoIndian Period** (11,000–10,000 B.P.) saw a return to warmer conditions and the development of an environmental and resource profile similar to that which exists today. Pine and oak dominated the woodlands that were able to support large deer populations as well as moose and black bear. Smaller species such as bobcat, wild turkey, grouse, and a diversity of fish, reptiles, and amphibians also were exploited while the moderate climate encouraged the growth and collection of a broad range of seasonal plant foods (Bradley 1998).

Regardless of the specific period, the PaleoIndian Period as a whole is distinguished by distinctive fluted projectile points and flaked stone tool assemblages containing scrapers, graters, and drills. The sparse vegetative profile of the Early and Middle PaleoIndian encouraged a subsistence strategy primarily focused on megafauna such as mastodon, caribou, and elk. This megafauna orientation likewise affected settlement choices. The earliest inhabitants in the lower Hudson River drainage appear to have strongly preferred elevated, well-drained ground adjacent to streams or woodlands offering vantage points for observing game. This settlement profile, however, may represent somewhat of a biased sample in that many PaleoIndian sites were likely situated on what are now the drowned shorelines across the Harbor Region of New York (Thieme 2000:3).

While no PaleoIndian sites have been identified to date in Manhattan, a small PaleoIndian site on nearby Staten Island, the Port Mobile site, indicates that the earliest groups to arrive in the Northeast utilized the harbor islands (Cantwell and diZerega Wall 2001; LBA 1990; Ritchie 1980; Robinson and Winter 1991). The site is situated on what once would have been a high terrace before the rise in sea levels during the early Holocene, and comprised a restricted tool variety, suggesting a short-term hunting camp (LBA 1995). Additional areas of PaleoIndian site sensitivity have been identified in the Collect Pond area in lower Manhattan and the Washington Heights area to the north (Robinson and Winter 1991).

Archaic Period (10,000–1000 B.P.)

The Archaic Period saw a rapidly warming environment in the Northeast with an attendant rise in the diversity of plant and animal species. This increased diversity and temperate climate encouraged widespread population migrations throughout the region and more broad-based subsistence strategies.

The lithic technology of the **Early Archaic** (10,000–8000 B.P.) reflects this shift from a primary reliance on big game hunting to a more diversified subsistence strategy, although the adaptation is not as pronounced or critical as it would become in the subsequent periods. Corner-notched (Palmer), stemmed, and bifurcate-based points serve as the diagnostic artifact class for the period but, in general, biface dominated assemblages are rare. A predominance of expedient tools and the nearly exclusive use of local lithic sources also is characteristic of assemblages dating to this time.

The small estimated population during the Early Archaic likely created much larger hunting and collecting territories that, in turn, created a “wandering” settlement pattern. Ritchie has outlined two variations on this theme including: restricted wandering,” defined as the seasonal movement of small residential groups from one well-defined resource locus to another; and, central-based wandering, interpreted as a large band of individuals, perhaps as many as several hundred, spending an extended period of time in a single location to which they may or may not return at a later date (Ritchie 1980). Wandering/settlement

preferences appear to mimic those of the Late PaleoIndian with the addition of newly exposed lowland areas, and lake and wetland margins. Coastal sites in New York also were sporadically occupied during the Early Archaic.

Several Early Archaic sites have been unearthed on Staten Island including Ward's Point, Richmond Hill, H.F. Hollowell, and Old Place. The deeply buried remains at Ward's Point provided the clearest picture of life on the Harbor Islands during the Early Archaic, yielding many cooking and tool preparation hearths, celts, grinding stones, and evidence for hide preparation in the form of a suite of scraping tools (Cantwell and diZerega Wall 2001:51–54).

No Early Archaic sites have been identified in the vicinity of the Hamilton Grange project area.

The **Middle Archaic** (8000–6000 B.P.) saw the emergence of an ever-moderating environment, although not one directly comparable to modern climatic conditions. Ecological and subsistence niches continued to expand during this period, an expansion that is reflected in a more diverse tool kit including ground-stone axes, milling stones and other plant-processing equipment, netsinkers, and various flake and bifacial tools (Ritchie and Funk 1973). Hypothesized settlement patterns also reflect the comparatively diversified environment. The current Middle Archaic database suggest two major site types: large base camps situated on major floodplains, river terraces, and marshy or estuarine locations; and, small task-specific camps settled in a both prime and marginal environments (LBA 1995). Diagnostic cultural material dating to this period includes bifurcate-base projectile points (LeCroy, St. Albans, Kanawh) and stemmed points (Stanly and Morrow).

Despite what appears to be a population increase during this period as documented in New England, there is little evidence of this time period in the New York City area (Rubinson and Winter 1991:3). One notable exception to this pattern were the highly visible shell heaps that once dotted the shores of the Hudson and Fresh Water, or Collect, Pond in lower Manhattan. While likely not exclusively associated with Middle Archaic settlement, the earliest (6900–4400 B.P.) and most intensively studied midden feature comes from Dogan Point, roughly 8 miles north of the city border (Cantwell and diZerega Wall 2001:55).

No Middle Archaic sites have been identified in the vicinity of the Hamilton Grange project area.

During the **Late and Transitional Archaic** periods (6000–1000 B.P.) environmental conditions were marked by a climatic shift to drier and slightly warmer conditions with a significant decrease in precipitation. During this period, oak, pine, and beech reached their full extent, while hemlock became much scarcer in response to the increasing dryness. Wetlands also became more abundant along river margins. Animal communities remained essentially the same as the preceding period, but it is likely that deer became even more plentiful with the full maturity of the mast forest, and that wetland/estuarine resources became an even greater subsistence resource. Sites are located in higher frequencies along littoral, or coastal, areas as well as along major inland waterways such as the Hudson River (Rubinson and Winter 1991).

Perhaps in response to an increasingly resource-rich natural environment, Late and Transitional Archaic populations underwent a substantial growth spurt relative to previous periods. With this expanding

population and stable environment, sites were occupied repeatedly and for extended periods of time, allowing for a stratigraphic and cultural differentiation of three traditions. The oldest of these traditions, the Laurentian, is identifiable on the basis of broad side-notched points with ground bases as well as ground slate blades, celts, gouges, plummets, and ulus (Ritchie 1980). The Narrow Point tradition is distinguished by the presence of relatively long and narrow bladed projectile points, with generally weak shoulders and straight, expanding and side- or corner-notched stems. These points tend to be made from locally available materials, often quartz.

The latest tradition of the Late Archaic, The Susquehanna, also is referred to as the "Broadspear" or "Transitional/Terminal" Archaic. Diagnostic projectile points include large, broad-bladed stemmed points (Atlantic, Snook Kill, Perkiomen, Genessee, and Susquehanna Broad) as well as smaller "fishtail" points with expanding stems (Orient Fishtail). Flat-bottomed, lug-handled soapstone vessels also appear during this period, often in association with Susquehanna Broad and Orient points, and evidence suggests that some of the earliest fired ceramics may date to this time as well. The Orient Phase of the Transitional Archaic represents a local focus on New York Harbor, and sites dating to this period have been found at many locations. Associated artifacts and features include Orient Fishtail projectile points, knives and drills, ground-stone tools and ornaments, soapstone vessels, ceremonial grave goods, and shell middens.

Two sites located immediately north of the project area in the Washington Heights section of the city provide some of the most detailed evidence for life during the Late Archaic, although isolated artifacts dating to that time are ubiquitous. The Tubby Hook and Inwood sites both lie on the shores of the Hudson and contained stratified shell middens, bannerstones, axes, and all manner of projectile points and debitage (Cantwell and diZerega 2001:57-58).

There is no evidence, however, for Late or Transitional Archaic occupation of the current project area.

Woodland Period (3000-400 B.P.)

The Woodland Period marks a major shift in subsistence and habitation strategies for Native peoples and is associated with the florescence of clay ceramic vessels and horticulture. On a general level, groups began to operate in more sedentary rounds, with large base camps forming the focal point. Coastal resources were fully exploited, and shellfish and marine species made up a large amount of the diet. Specific tool and ceramic types can be defined for local regions on the basis of style and decoration. It is on the basis of these regional cultural material variations that the Woodland is divided into three typological and cultural sub-periods.

The **Early Woodland** (3000-2400 B.P.) is characterized by settlement patterns roughly analogous to those of the Late/Transitional Archaic, but with a higher degree of sedentism. Two possible settlement models are posited for this period. The first emphasizes the establishment of large base camps near zones of maximum resource availability, with smaller camps calving off within the same major ecological zone. The second model suggests a constant splintering and re-formation of smaller bands at specialized procurement and processing sites. This process would occur on a seasonal basis and be designed to maximize labor during periods of resource abundance, such as at anadromous fish runs during the spring. The diagnostic Early Woodland cultural phase of the New York coastal region and along the

East River is the North Beach Focus of the Windsor Aspect, identifiable by a predominance of grit-tempered ceramics and a broad range of projectile points (Smith 1980).

The **Middle Woodland Period** (2400–1100 B.P.) in coastal New York is grouped within the Clear View Focus and is distinguished by the introduction of the Abbott Complex (Smith 1980). This complex exhibits pottery shapes and decorative styles similar to the North Beach Focus, with the addition of Fox Creek stemmed and lanceolate projectile points. Settlement patterns are generally similar to those of the preceding period with a subsistence emphasis on deer, shellfish, and tortoise (as extrapolated from the archaeological record).

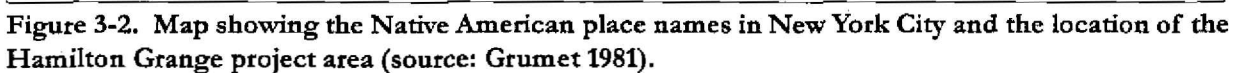
The adoption of horticulture is undoubtedly the most significant cultural adaptation during the **Late Woodland Period** (1100–400 B.P.), and had serious, identifiable repercussions for nearly every other aspect of Native American life during that time. Settlement patterns became markedly more sedentary in response to the labor intensive and surplus-generating practice of maize cultivation, and large continuously occupied village sites become common. While some argue that this shift in settlement systems was a response to European contact and the subsequent fur and wampum trade frenzy that ensued (Ceci 1982), sites throughout northern and southern New England suggest that this pattern was well established before the disrupting effect of European influences were widely felt (Bendremer et al. 1991; Heckenberger et al. 1992; Lavin 1988; Thomas 1980). Late Woodland sites tend to cluster on the margins of bays and tidal streams (Smith 1980), in proximity to a dependable spring, and sheltered from the prevailing winter winds (Bolton 1922). On Manhattan Island, this environmental preference would have resulted in a preponderance of sites on the eastern side of hills, or along a southern exposure; the early Dutch explorer Adriaen Block described seeing “large wigwams of the tribe of Castle Hill” in the Bronx. Diagnostic cultural material from this period tends to reflect its horticultural emphasis and includes triangular points, an elaboration of ceramic forms and decoration, and a variety of chipped and pecked ground-stone tools.

At least four Woodland villages and associated planting fields have been identified in northern Manhattan along the shores of the Hudson and Harlem rivers, all of which were reported by the archaeologist Arthur C. Parker during the 1920s, as well as several other unaffiliated prehistoric sites. NYSM# 4067, situated on the eastern shore of the Hudson River at Fort Washington Point, is the most extensive of these settlements, with a collection of shell middens, charcoal, and projectile points.

One of Parker’s Woodland villages, NYSM# 4065, lies within 1 mile of the current project area in the vicinity of 155th Street on the Harlem River, as well as a smaller, unaffiliated site, NYSM# 7249, also on the Harlem River at 145th Street. A Native American trail also is hypothesized to have run north to south along the island along the general alignment of what is now St. Nicholas Avenue (Bolton 1922) (Figure 3-2). This trail would have brought Indian populations through the current project area, although it is likely that the area now comprised by the Hamilton Heights district was used strictly as a pass through on the way to more fertile grounds to the northwest and southeast.

Contact Period

The **Contact Period** represents an era of cataclysmic socio-economic, political, and cultural change in the face of Native American and European interaction. The Harbor Islands were often a point of



communication and trade for local indigenous groups and European sailors exploring the coastline. There is some speculation that Governors Island was home for a short time to a Native/Dutch trading post (Stokes 1928). The 1610 Velasco map used the name Manahata to describe the native people occupying both banks of the lower Hudson River (Grumet 1981, 1995). In 1628, Isaak de Rasieres reported the presence of 200–300 “old Manhatasen” men and women in the northern portion of the island, a group later ethnically identified as subgroup of the Wiechquaesgeck (Bolton 1922; Grumet 1981).

Unlike the groups to the north, the Manhattan lacked the furs necessary to become valuable trading partners with the Dutch. The Dutch policy of supplying the Mahican and Mohawk with firearms while denying the same goods to the groups along the lower Hudson, however, made the Manhattan vulnerable to attack. In response to European aggression and increasing intratribal hostilities over trade privileges, palisaded villages began to emerge along the New York coast. A series of major and minor skirmishes among the various competing interests eventually led to the Manhattans and Wiechquaesgecks suing the Dutch for peace in 1644. Despite this accommodation, friction persisted between the Dutch and Manhattans culminating in two more major armed conflicts over the next 20 years.

The incessant violence coupled with “virgin soil” epidemics effectively decimated the Manhattan groups living in the New York City area. The fragmented populations were forced to merge in order to maintain viable communities, all of which had vacated the island for the mainland Wiechquaesgeck population centers by 1628 (Grumet 1995).

No Contact period sites have been identified within the project area. Planting fields in an area known as Schorrakin, however, have been identified in East Harlem in the vicinity of East 135th to East 150th Streets (see Figure 3-2).

Historic Context for Hamilton Grange

The Dutch Occupation of Manhattan Island

Beginning with Henry Hudson’s “discovery” of the island in 1609, Manhattan and the Harbor Islands attracted acute European interest and profound admiration. Described as a “terrestrial Canaan where the land floweth with milk and honey,” (Burrows and Wallace 1999:3), foreign travelers to Manhattan Island described a land of lush and vast meadows, enormous stands of hard- and softwoods, and abundant game. So inexhaustible did these resources initially appear that a Dutch trader was prompted to comment, “There are some persons who imagine that the animals of the country will be destroyed in time, but this is an unnecessary anxiety (Burrows and Wallace 1999:4)

This exuberant praise, however, was not as great an impetus to Dutch colonization of the island as it was hoped it would be by colonial financiers in Amsterdam. It wasn’t until 15 years after Hudson’s original voyage that settlement on the southern tip of the island began with the arrival of 30 Walloon families. This settlement strategy, part of a hastily organized land grab on the part of West India Company in response to French and English claims to the island, effectively marked the beginning of New Netherland (Rink 1986). Under the direction of Peter Minuit, Manhattan was famously “purchased” from the local Lenapes, and soon after boasted 30 log houses, a fort, and a solid stone countinghouse,

the last of which spoke volumes about the explicitly commercial orientation of the new colony (Rink 1986:87).

The fledgling community comprised a disparate mix of French-speaking Walloons, Dutch-speaking families from Amsterdam, and a loose confederation of young, single merchants concerned solely with profiting from the lucrative fur trade up and down the Hudson. This lack of cultural cohesion and common purpose threatened to undermine the stability of the colony. In response to the situation, the Amsterdam chamber proposed a settlement strategy of patroonships. This system called for the transfer of large portions of New Netherland to wealthy patroons, or patrons, in exchange for a promise on the part of the patron to fund the colonization efforts of at least 50 settlers. Despite best intentions, the patroon system led to rampant speculation and very little in the way of colonial settlement.

The colony continued to flounder until the firm hand of Petrus Stuyvesant took the administrative reins in 1647. Under Stuyvesant's direction, New Amsterdam underwent a civic and territorial reorganization, beginning with the appointment of three surveyors to establish reliable property lines and lay out a regular and orderly network of streets (Burrows and Wallace 1999). Building, hygienic, and livestock control measures followed soon after, until lower Manhattan began to take on the shape of the orderly, Old World Dutch townships after which it was modeled.

The first attempt to settle the northern portion of Manhattan began in 1637, a decade before Stuyvesant's tenure (Riker 1904). Henry and Isaac DeForest were the first to venture into the rich flats at Muscoota along the Great Kill, or Haarlem, River, followed by the LaMontagne, Van Curler, Van Tienhoven, and Kuyter families (Riker 1904:125–136). Captain Jochem Pietersen Kuyter, a Dane by origin, owned 400 acres in this frontier environment, stretching from what is now 122nd Street on the East River to 145th Street on the Hudson River, and incorporating the current project area (Postal 2000). Hostile Munsee Indians killed both Kuyter and his wife in the mid 1650s and claimed all of their land north of 130th Street to Spuyten Duyvel

The vast tracts of arable farmland along the Great Kill held out the promise of a bright future for these first settlers of northern Manhattan. High mortality rates, the lack of a suitable labor pool, erratic assistance from the colonial seat in New Amsterdam, and violent Indian attacks, however, combined to defeat the small enclave before it ever had the opportunity to expand over “Jochem Pietersen's Hills” to the west. The Manatus Map of 1639 shows only three farmsteads strung out along the northeastern shore of the island, and the current Hamilton Grange project area as an unoccupied spine of hills and forest (Figure 3-3).

Stuyvesant's nearly martial imposition of order on the island allowed for a second, more successful settlement of Nieuw Haarlem in 1658. The village comprised a series of house lots (*erven*) and garden lots (*tuyen*) linked to larger parcels of farmland (*bouwland*) along the river. Tobacco was the primary cash crop of the newly settled region, but eventually was supplanted by subsistence crops such as wheat, maize, rye, buckwheat, peas, and flax; cattle raising; and, salt hay harvests from the swampy margins around the Flats (Riker 1904:181).

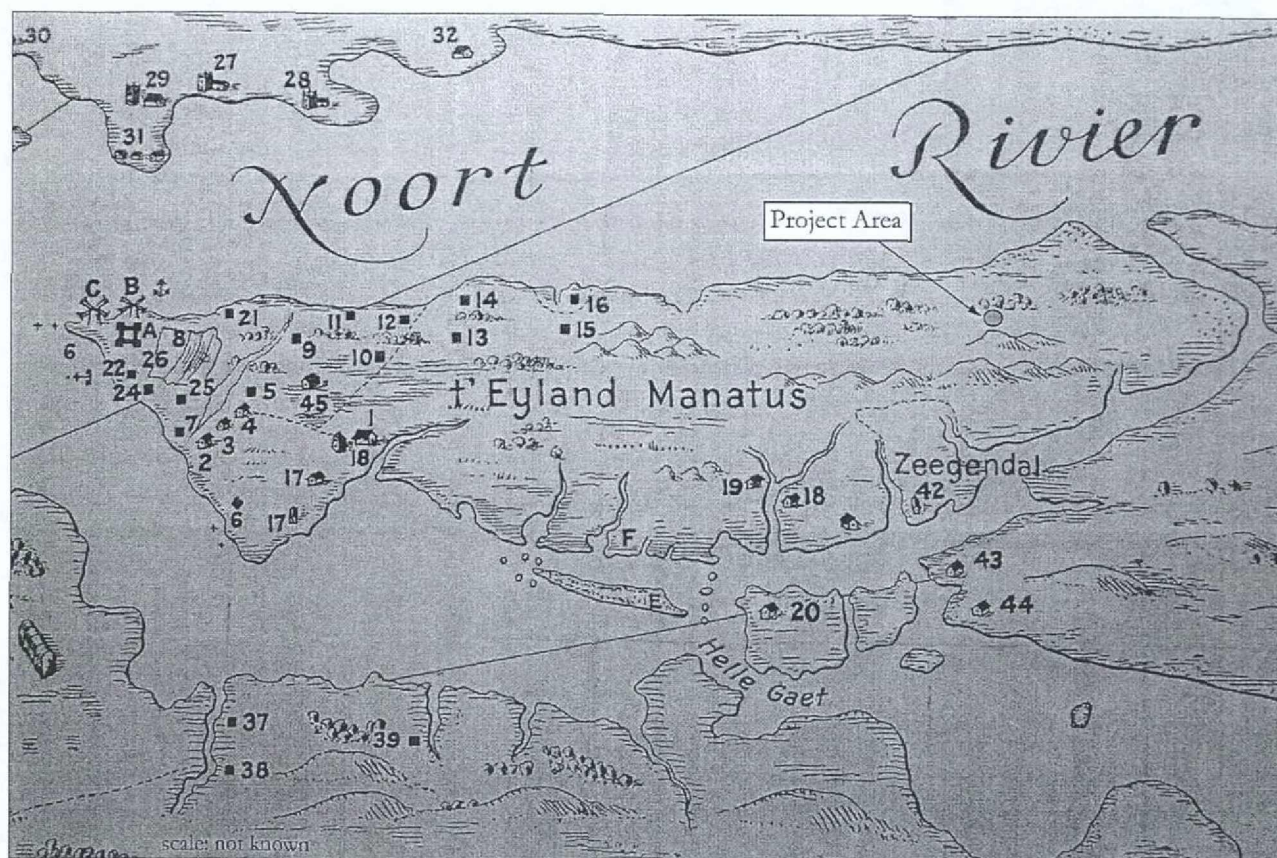


Figure 3-3. 1639 Manatus Map showing the location of the Hamilton Grange project area, Manhattan, New York, NY (source: Anon. 1665).

The Succession of British Rule

Dutch control of Manhattan had been tenuous from the beginning and, despite Stuyvesant's strong leadership, was made all the more precarious in the face of escalating British aggression. While England and Holland were at peace in 1664, the two countries were engaged in a political battle that extended throughout the Old World and the New. At stake was hegemony over the high seas, a prize that England saw within its grasp and believed was being threatened by Dutch commercial interests (Deak 2000). Monopolistic practices by the Dutch West India Company and its deadly competition with the Royal African Company over slaving rights in West Africa infuriated King Charles II (Rink 1986:262). In an attempt to thwart any further challenges, Charles declared the Dutch to be usurpers in the New World, and ordered four warships across the Atlantic to seize control of Manhattan Island in the summer of 1664 (Deak 2000:13).

The English gambit worked; New Amsterdam was seized without a shot being fired. The ease with which the English overpowered the Dutch colony is attributable to several different factors, not the least of which were poor defenses, a food shortage, and a policy of benign neglect on the part of the governing body in Amsterdam. Stuyvesant, watching his colony about to be unceremoniously wrenched from his grasp, attempted to hold out, proclaiming that "I had much rather be carried out dead!" (Deak 2000:14). The Dutch governor eventually bowed to the greater interests of a peaceful resolution and signed the articles of surrender on August 27, 1664.

Colonel Richard Nichols was installed as the first royal governor of the rechristened New York, followed by Colonel Richard Lovelace. Lovelace's absence from the island in the summer of 1673 allowed the Dutch to briefly reclaim their former colony, only to be restored to English rule nine months later under the control Sir Edmund Andros. By the 1690s, New York was home to approximately 3,000 families,

whereof almost one halfe are naturally Dutch a great part English and the rest French . . . few of them intelligent & sincere but the most part ignorant & conceited, fickle & regardless.
(Deak 2000:21)

English settlement of Manhattan proceeded at a much faster pace than had similar Dutch efforts, but was marked by rebellion, overcrowding, and the imposition of crippling trade restrictions by an English crown ever watchful of its mercantile interests. In spite of poor trade policy, it was during the early eighteenth century that New York emerged as a major seaport on par with Boston, Philadelphia, and Charleston. With the development of this seaport and the wealth attendant to that development, New York, like the 12 other colonies up and down the Atlantic seaboard, began to chafe at what it perceived as tyrannical English domination.

The succession of British rule in New York did little to spur development in the northern portion of Manhattan. A fixed boundary was established between Harlem and New York in 1666, extending from what is now East 74th Street on the East River to West 129th Street on the Hudson. The Munsee land claim to Kuyter's 400-acre parcel eventually was settled in 1713, when a special tax was raised by the freeholders of Harlem to purchase the land outright. The steep topography above Harlem's central plain led to the area being referred to as Harlem Heights, a name that would endure well into the eighteenth century. Concentrated settlement, however, continued to focus on the southern tip of the island, close to the bustling seaport.

By the mid-eighteenth century, Harlem Heights had become a favorite summer retreat for wealthy British families. Rich soil, cool breezes, and acres of undeveloped land provided a welcome respite from the always cramped and frequently plague-ridden urban center to the south. Roughly 2 miles north of the current Grange site, Roger Morris, a lieutenant colonel in the British Army, established a country retreat in 1765. The Georgian mansion, now known as the Morris-Jumel Mansion, once stood at the center of 130 acres of meadowland. No structures or features dating to this period, however, are documented within the current or proposed Hamilton Grange sites.

Revolution

The relationship between the British crown and its fractious colonies was in a long and irreversible decline by the mid eighteenth-century. In 1776, New York somewhat reluctantly agreed to join its colonial counterparts in what would become a prolonged battle for independence from the British crown. New York's seaport made the city a natural target for attack by the British and, therefore, a natural base of operations for American troops. By the summer of 1776, more than 10,000 American soldiers were stationed in the city, requisitioning town houses and country estates, ripping down trees and fences to construct barricades, and cramming every piece of open ground with tents, huts, shacks, wagons, and supplies (Burrows and Wallace 1999:229).

After a resounding defeat at the Battle of Brooklyn, Washington was forced to abandon and surrender all but the northern portion of Manhattan to General Howe's forces. The American general repositioned his headquarters in Harlem Heights at the Morris-Jumel Mansion on what is now 162nd Street (see above), and watched as the city fell back under British control. Just six days after the reassertion of British authority, a massive fire engulfed the already brutalized city. Believed to have been ignited in a bordello at Whitehall slip on the southern tip of the island, the fire spread rapidly northeast across the most densely populated portion of the city (Cohen and Augustyn 1997:82). Over a quarter of New York was destroyed during the conflagration.

British occupation of New York proved to be a difficult task as squatters camps, food shortages, epidemics, and rampant violence plagued loyalists and rebels alike (Burrows and Wallace 1999:245–261). While New York may have been firmly within royal control during this period, the war raged on throughout the colonies, much to the advantage of the Americans. With the capitulation of General Cornwallis to combined American and French troops in Yorktown in 1782, New York returned permanently to American control.

The Harlem Heights area of Manhattan housed several redoubts and breastworks during the Revolution, located north of the current Hamilton Grange project area. A line of redoubts flanked Amsterdam Avenue and Broadway between 145th and 149th Streets, and were linked by a network of breastworks stretching from the Hudson River to St. Nicholas Avenue, just north of 146th Street. As well as serving as the American headquarters following the Battle of Brooklyn, Harlem Heights was also the scene of a small but important military skirmish. The Battle of Harlem Heights, fought in 1776 between 130th and 155th Streets, saw the defeat of a column of redcoats by a small reconnaissance party of Connecticut rangers. While not important from a tactical perspective, this victory was the first time that Washington's troops had defeated the British in a head-on fight, and served to lift deflated American morale (Burrows and Wallace 1999:241; Postal 2000:6–7).

The British Headquarters Map of 1782 provides not only one of the clearest pictures of the military defenses that characterized the Harlem Heights area during the Revolution, but also provides an excellent illustration of the original topography of the island (Cohen and Augustyn 1997:84–87) (Figure 3-4). The map shows a dramatic landscape of broad plains, steep and rugged hills, and a vast network of rivers, streams, wetlands, and marshes, nearly all of which have been filled, graded, or blasted out of existence. The Hamilton Grange project area lies in the heart of the Manhattan Hills, adjacent to a series of roads leading north to the American military fortifications and Washington's headquarters at the Morris-Jumel Mansion. The landscape surrounding the project area is crisscrossed with a network of small rivers and wetlands feeding into the Hudson to the west and the Harlem River to the east. No structures, military or civilian, are depicted within the project area.

Alexander Hamilton and the Re-Gentrification of Harlem Heights

The cessation of hostilities and the return of New York to American hands did little to change the character of the Harlem Heights area of northern Manhattan. Military fortifications were dismantled and the land essentially returned to its quiet, rural, pre-Revolution status. It was still favored as a country retreat by wealthy New Yorkers, but rather than the return of British families, Harlem Heights saw the arrival of powerful and influential Americans.

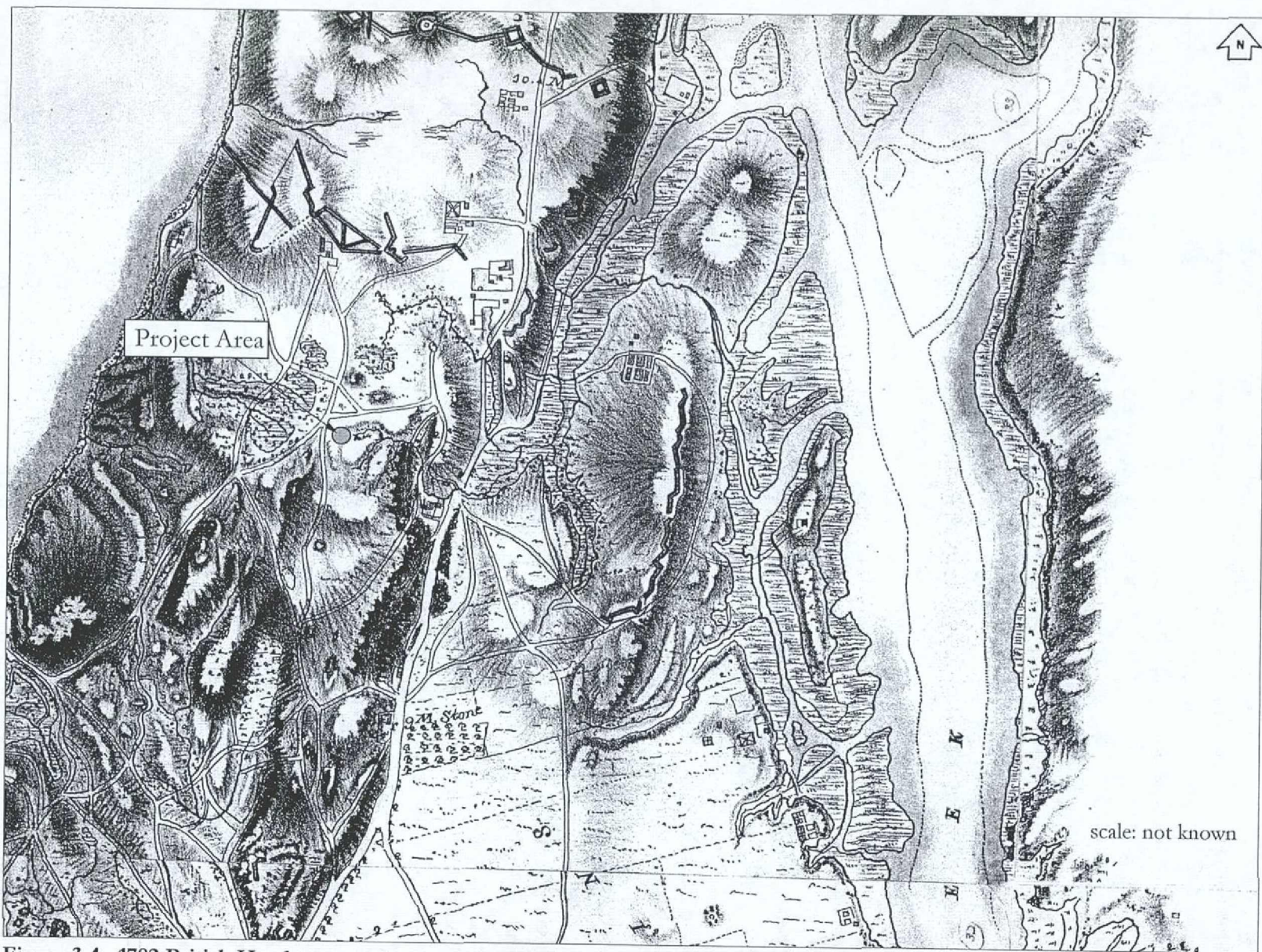


Figure 3-4. 1782 British Headquarters Map showing the location of the Hamilton Grange project area, Manhattan, New York, NY (source: Anon. 1782).

One of the most famous of these Americans was Alexander Hamilton, newly appointed Secretary of the Treasury. Born to a less than illustrious family in the British West Indies, Hamilton immigrated to America in 1773 to attend King's College (now Columbia University), but was waylaid in his studies by the outbreak of the Revolution. He rose to fame during the war as a captain, and then lieutenant colonel, serving as one of Washington's closest confidantes and aide-de-camp. Hamilton possessed a natural genius for economics and finance and, at the close of the war, founded the Bank of New York.

A vocal proponent of a strong federal constitution, he was a primary author of the *Federalist Papers* in which he advocated the primacy of the federal government over the interests of individual states. This ideological stance caused a great deal of tension between Hamilton and one of the other great thinkers of the period, Thomas Jefferson. The power struggle that ensued between the two men defined the shape of the Constitution and Hamilton's eventual role, from 1789–1795, as first Secretary of the United States Treasury. In that position, he was able to create and implement his vision of a centralized monetary policy that survives to this day.

After his retirement from the Treasury, Hamilton returned to his law practice and founded *The New York Evening Post*. To escape the congestion and occasional contagion of city life, Hamilton purchased 32 acres of land in the Harlem Heights area in northern Manhattan. The original configuration of the property extended from what is now Hamilton Place on the west, to Hamilton Terrace on the east, and from West 140th Street to West 147th Street. This configuration roughly matches the current boundaries of the Hamilton Heights Historic District and Hamilton Heights Historic District Extension (Postal 2000:7) (Figure 3-5).

Hamilton commissioned John McComb, Jr., one of New York's most prominent architects, to design his new home in an elegant but understated style. The resulting structure, built between 1800 and 1803, was a 12-room Federal-style mansion situated in the vicinity of what is now 143rd Street (Figure 3-6). Hamilton named his home the Grange after his grandfather's estate in Ayrshire, Scotland. Describing the place as "a sweet asylum from care and pain" (Postal 2000:8), Hamilton oversaw the estate groundskeeping and had a large barn, mill house, hen house, root house, and ice house on the property.

Hamilton's happy stay at the Grange was short-lived. A vicious political battle with Aaron Burr, gubernatorial candidate for the State of New York, resulted in an arcane duel in which Hamilton lost his life. The Grange, as well as a mountain of debt, was left to Hamilton's wife, Elizabeth. With assistance from many prominent families throughout the city, including the Astors and Pierponts, Elizabeth was able to save the house, although it was put up for sale.

The 1811 Commissioner's Plan, drafted by noted cartographer John Randel, depicts the original location of Hamilton Grange (Figure 3-7). This plan is interesting in that it depicts the proposed extension of the gridiron into the northern reaches of Manhattan at a time when the area was still almost entirely rural (Cohen and Augustyn 1997:100–105). Randel took no note of the prevailing topography when laying out the rectilinear street system, a strategy criticized by many. Clement Clark Moore complained of Randels' plan that "The natural inequities of the ground are destroyed, and the existing watercourses disregarded. . . . These are men . . . who would have cut down the seven hills of Rome." (Cohen and Augustyn 1997:103).

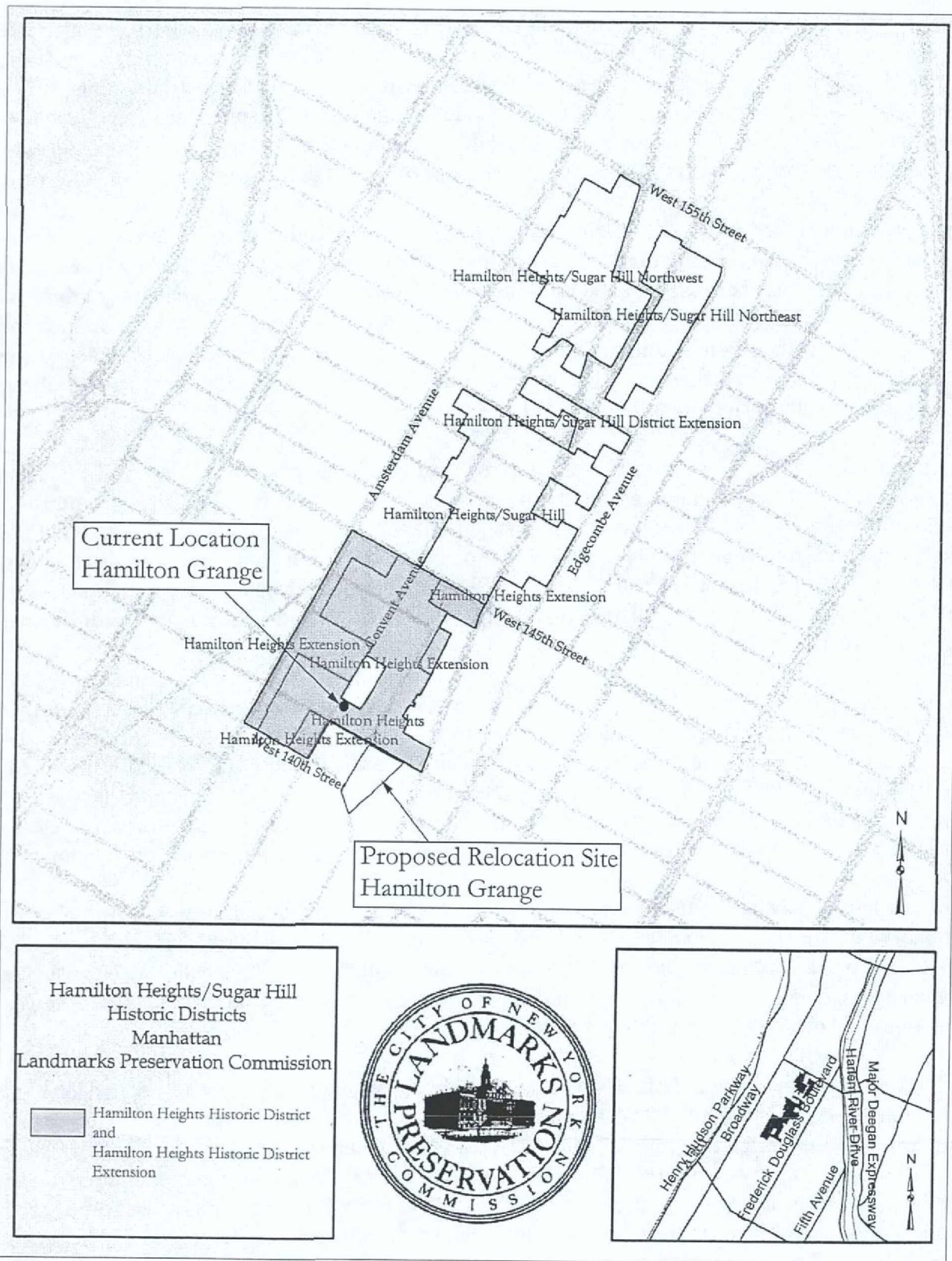


Figure 3-5. Map of the Hamilton Heights District in Harlem, showing the current location and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY.

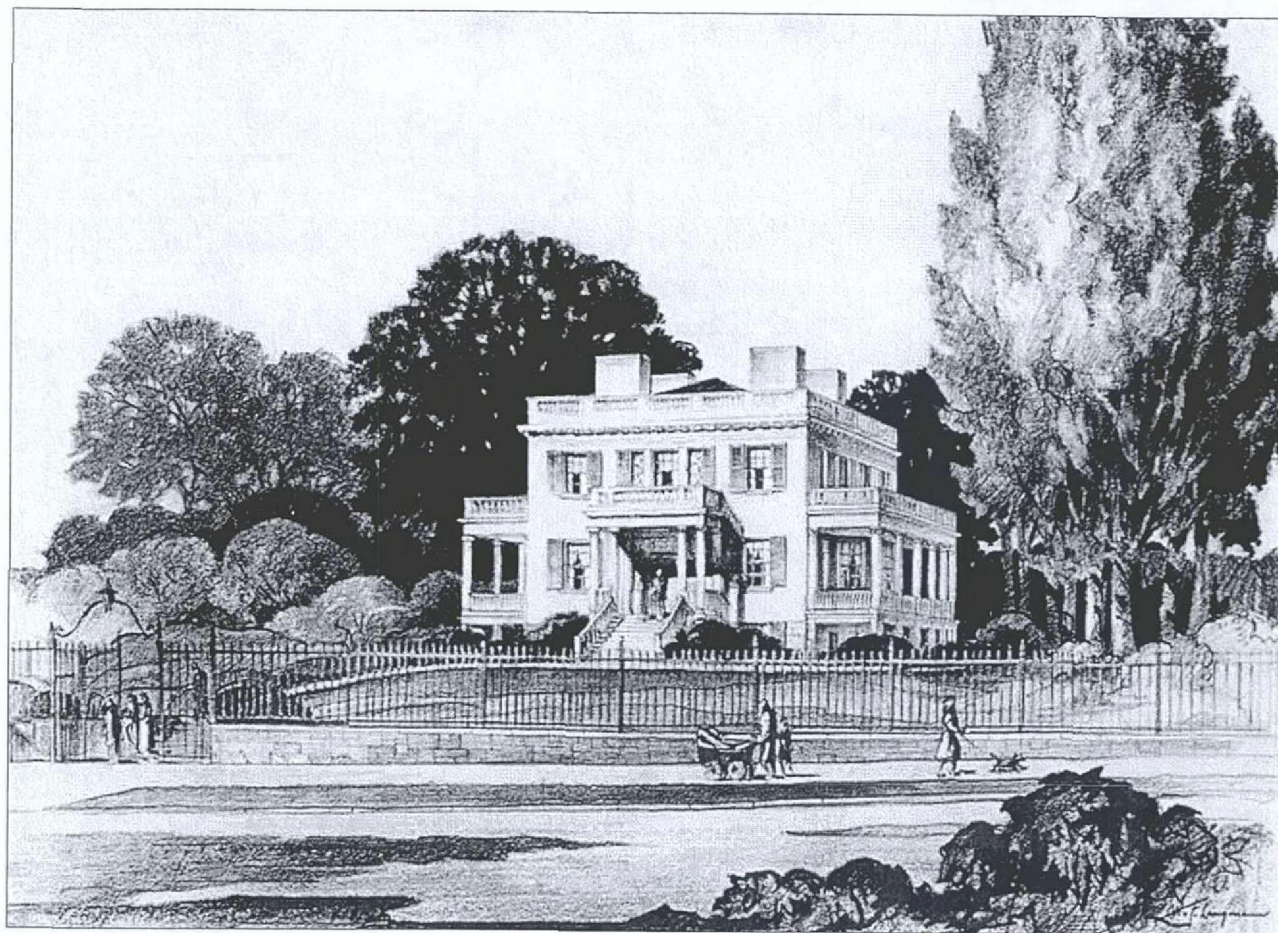


Figure 3-6. Perspective drawing of the south and east sides of Hamilton Grange, date unknown (source: LOC 2003a).

Despite the fact that the landscape appears to be devoid of any of the natural features depicted on the 1782 British Headquarters Map, it is assumed that the original configuration of rivers, wetlands, and hills that defined the area survived into the early nineteenth century. Hamilton's construction of a mill house on the property, a structure that would have required a reliable source of water, provides corroboration for this idea. The current site of the Grange as depicted on the map does not appear to contain any structures, but the area is shown as lying atop a bedrock ridge (see Figure 3-7). The 1811 map also depicts the Mott family farm complex and associated farm road immediately north of the proposed Grange relocation site in St. Nicholas Park.

A Series of Sales and Speculations

Hamilton Grange was purchased in 1833 for \$25,000 by a pair of speculators by the names of Theodore Davis and Isaac Pearson. In 1845, a New York financier by the name of William G. Ward purchased the estate as a summer retreat. Ward is believed to have installed the first indoor plumbing in the house, a nod to his considerable wealth and status. The Panic of 1873, however, devastated many of the wealthiest families in New York, including Ward, who lost the house through foreclosure to the Emigrant Savings Bank. Emigrant Savings in turn sold the house in 1879 to Anthony Mowbray for \$312,000. Mowbray

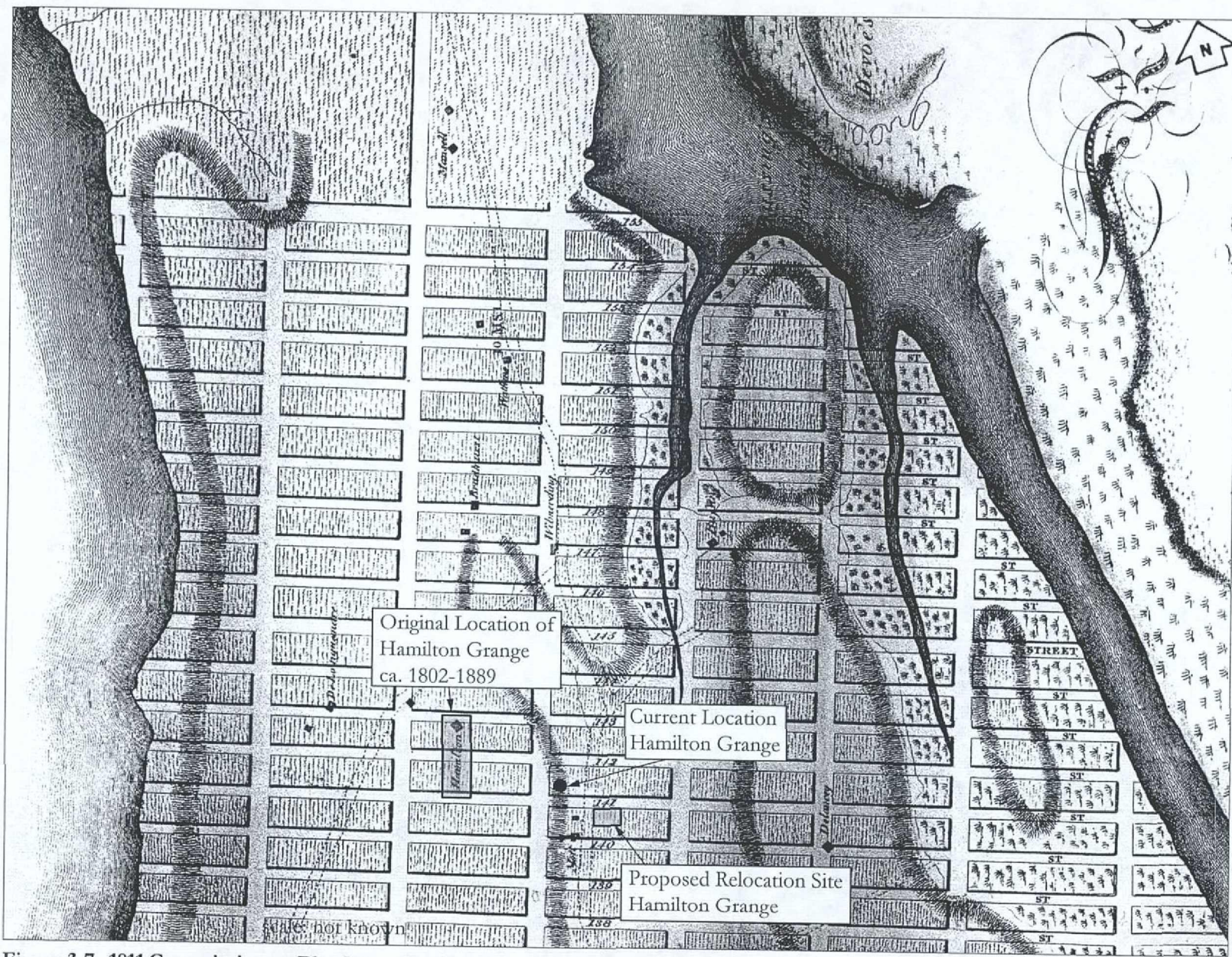


Figure 3-7. 1811 Commissioners Plan Map, showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Randel 1811).

owned the property for less than a month before selling it to William H. DeForest, a silk importer and the last private individual to occupy the house.

The 1867 Dripps Map of New York depicts Hamilton Grange in its original location as owned by William Ward, and overlaid by the proposed gridiron (Figure 3-8). The current location of St. Nicholas Park appears to lie directly within its path because 9th Avenue never was constructed as far as 141st Street. Neither the current nor proposed sites for Hamilton Grange are depicted as containing any structural remains or features.

The 1880s saw the rapid expansion of elevated railroads throughout the city. A cable car railway was installed on 10th (now Amsterdam) Avenue by the end of the decade, and provided a transportation link between Harlem Heights and the downtown commercial districts (Postal 2000:9). Improved transportation and increasing population pressures on the East Side led to the subdivision and sale of many of the large estates in Harlem Heights, including the Morris-Jumel Mansion. Farmland gave way to tracts of single-family townhouses and French-flats buildings. By this period, the area north of 138th Street was commonly referred to as Washington Heights, with the blocks within the lower portion of that area comprising the former Hamilton estate assuming the moniker Hamilton Grange.

William DeForest saw the financial opportunity before him and subdivided the 32-acre Grange parcel into 300 individual building lots sometime between his purchase of the house in 1879 and his sale of the property in 1889. Maps dating to 1879 and 1885 show this division, although once again much of the depicted gridiron is speculative, as demonstrated by the fact that 143rd Street was not constructed until after 1889 (Postal 2000:9) (Figure 3-9, 3-10). Block numbers, however, have been assigned on both maps, with the current Grange location lying in Block 1068 and the proposed relocation site in Block 1067. The 1879 Bromley map shows no obvious structural or landscape features in either the current or proposed Grange site, but the 1885 Robinson map shows an outbuilding within the footprint of the proposed relocation site (see Figure 3-10).

DeForest scheduled a public real estate auction in late 1887 in the hopes of selling off the lots. Evidently, DeForest's idea of what constituted a reasonable profit margin was not shared by the buyers, who balked at the exorbitant prices. Sales were disappointing, and DeForest was forced to auction off many of the parcels at a loss.

Two years later, DeForest sold the Grange and its now much reduced lot to Amos Cotting, a shrewd and wealthy New York banker. Population growth had expanded dramatically in the area, necessitating the imposition of the gridiron over the entire Hamilton Grange district. The rectangular grid pattern, however, often could not accommodate private land ownership boundaries, including the diagonal orientation of the Grange. Threatened with destruction in the face of aggressive residential development, the Grange was rescued by its relocation 350 feet southeast to its current site on Convent Street (Figure 3-11). Cotting brokered this deal with St. Luke's Episcopal Church with the understanding that the church would use the building as an interim chapel until a new edifice was constructed.

The relocation of the Grange to its current site on Convent Avenue was a massive undertaking, and had deleterious effects on the architectural integrity of the house (Figure 3-12). Despite the fact the new site comprised undeveloped land, the lots were too small to accommodate the original orientation of

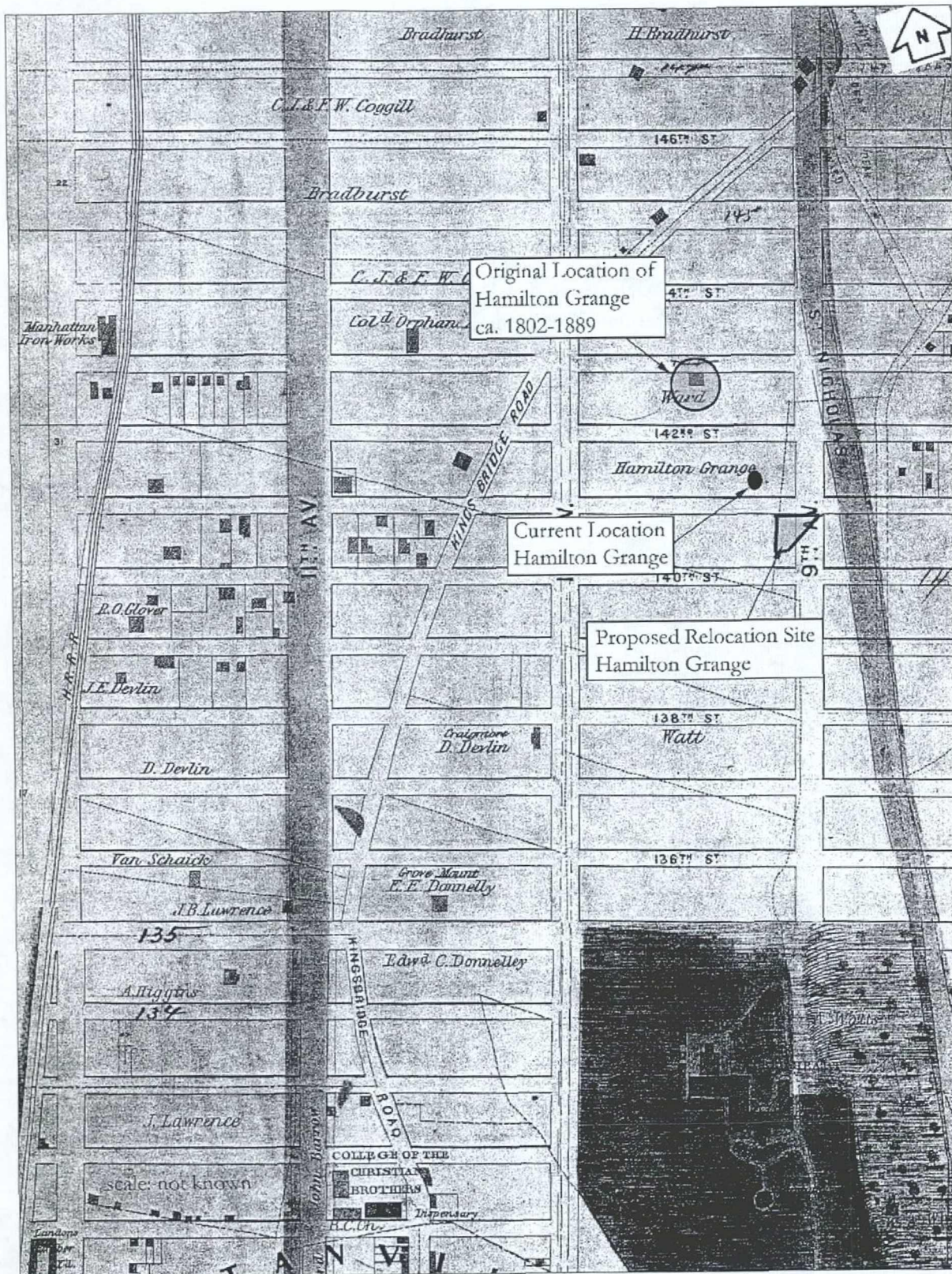


Figure 3-8. 1867 map of New York and Vicinity showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Dripps 1867).

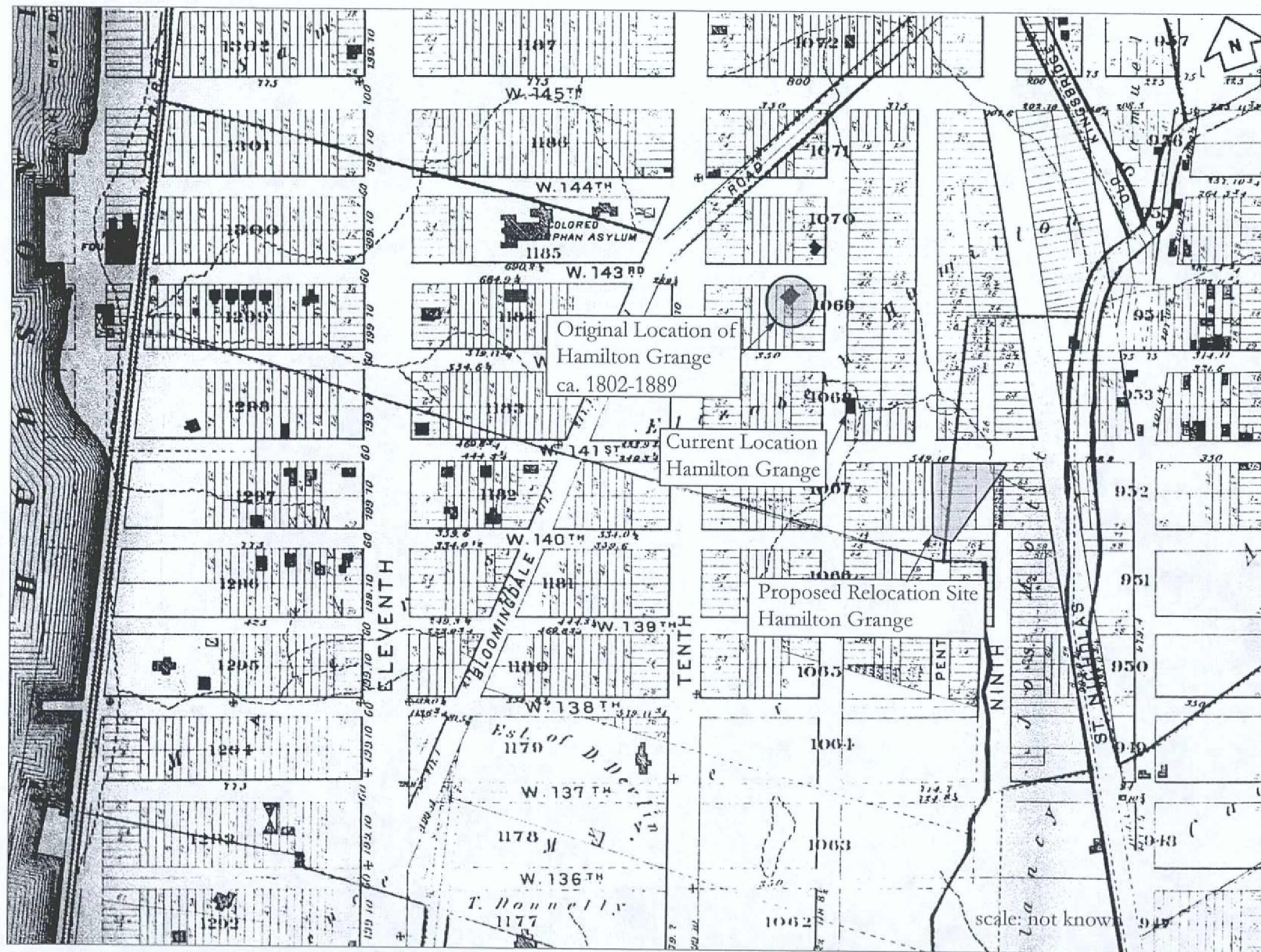


Figure 3-9. 1879 map showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Bromley and Bromley 1879).

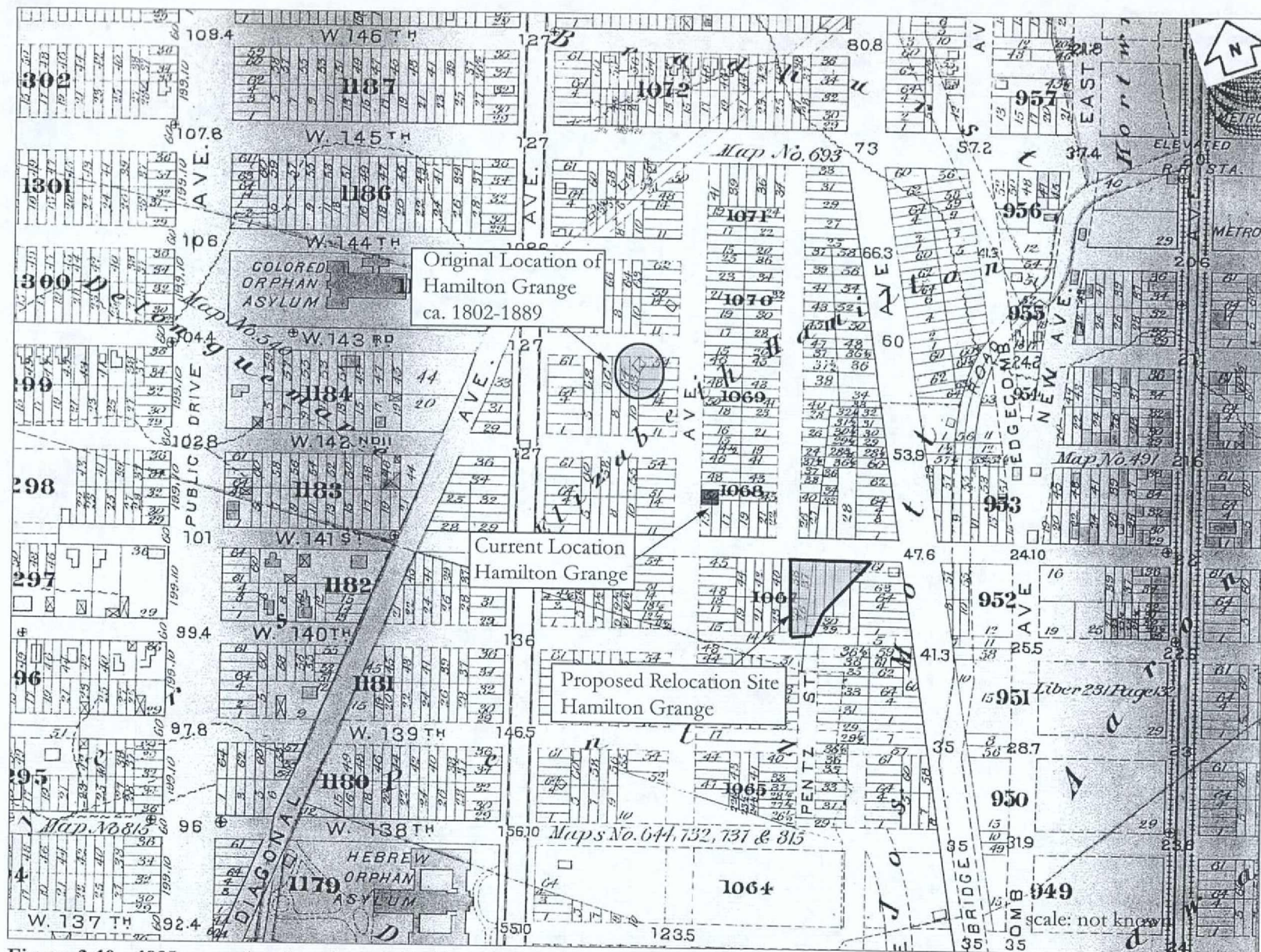


Figure 3-10. 1885 map showing the original location of Hamilton Grange, and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY. Note the possible location of an outbuilding within the footprint of the proposed relocation site (source: Robinson 1885).

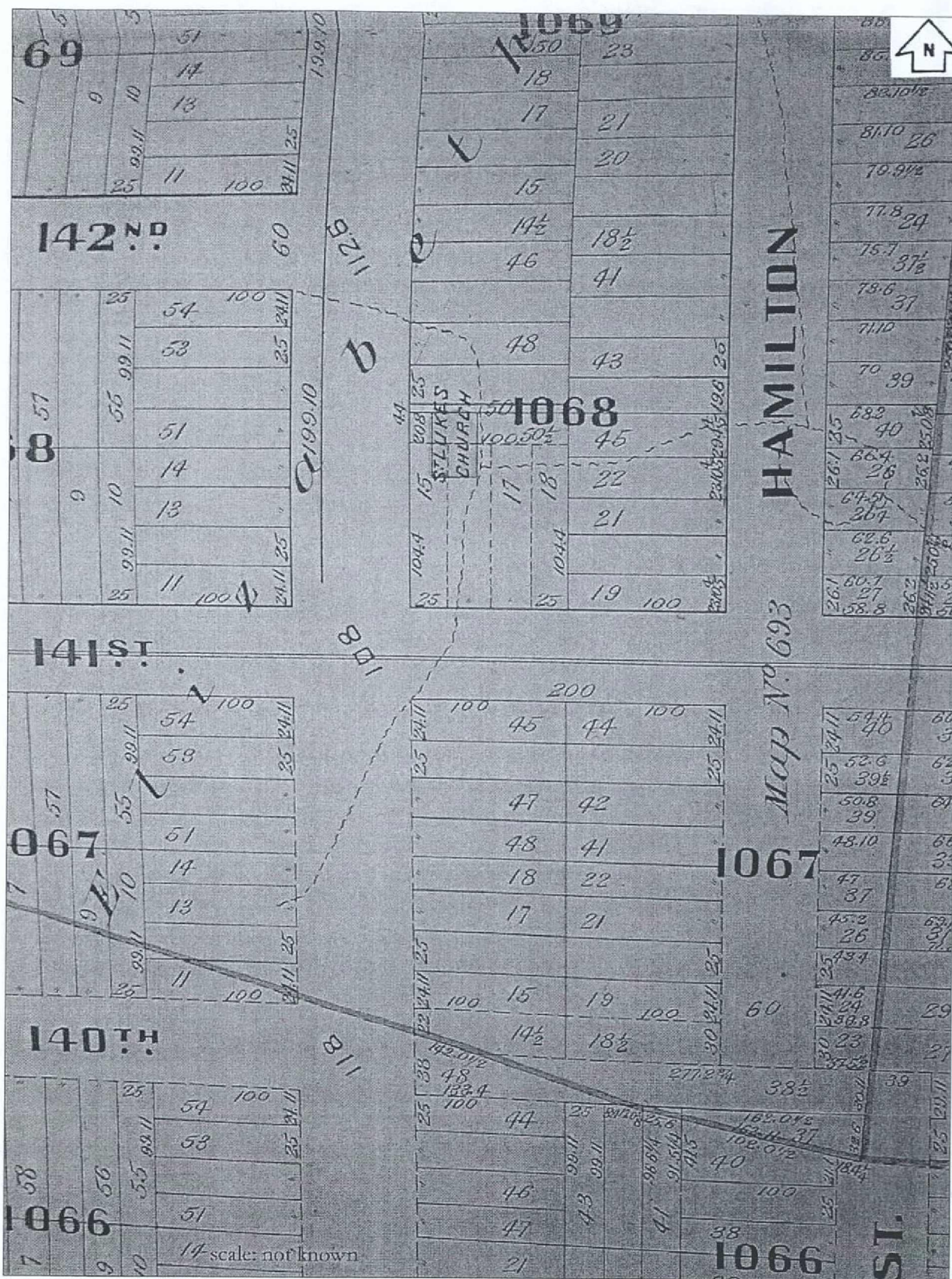


Figure 3-11. 1890 map showing Hamilton Grange in its new location on Convent Avenue (source: Robinson and Pidgeon 1890).



Figure 3-12. Photograph of Hamilton Grange during its relocation, view north, ca. 1889 (source: LOC 2003b).

the house. This situation required that the building be rotated 90 degrees so that the original front door faced south, and that the flanking porches be removed. The original front door was then relocated to the southwest corner of the house, facing Convent Street (Figure 3-13). A basement and partial sub-basement also were constructed to provide more support and storage. By 1892, construction on St. Luke's Church was complete, and the use of the Grange shifted from that of interim chapel to a rectory and school.

The Development of Hamilton Heights and the Creation of St. Nicholas Park

The 20-year period of 1886–1906 saw the rapid, but controlled development of a residential neighborhood in what would come to be called the Hamilton Heights district of northern Manhattan. DeForest's subdivision and sale of the original Grange estate included the conditions that all future construction be limited to "brick or stone dwelling houses at least two stories in height" (Postal 2000:10), a stipulation that would shape the genteel and elegant appearance of the neighborhood.

During this period, the modern gridiron took shape, a process that required massive landscape manipulations in the form of blasting, grading, and filling the natural contours of the landscape. 10th Avenue was renamed Amsterdam Avenue, and a series of multiple-unit dwellings, including one dubbed Hamilton Grange, were constructed along its eastern boundary. The City College of New York also decided, in 1897, to relocate from Gramercy Park to West 140th Street, and establish a 35-acre campus



Figure 3-13. Photograph of Hamilton Grange at its current location on Convent Street, ca. 1890, view east (source: LOC 2003c).

in the area. This move effectively insulated the Hamilton Heights from unrestricted development to the south and provided a steady stream of tenants (Postal 2000:11). This first incarnation of the neighborhood attracted a mix of middle- to upper-class white professionals, largely from Protestant stock, with a smaller infusion of Irish, Italian, and German immigrants.

The 1906 and 1921 maps of Hamilton Heights depict this earliest configuration of the neighborhood (Figures 3-14, 3-15). Both maps show Hamilton Grange in its current location adjacent to St. Luke's Church, and in use as a school. Amsterdam and St. Nicholas avenues, Convent Street, and Hamilton Terrace are in place, and the retaining wall that defines St. Nicholas Terrace has been constructed to support the main building of the City College of New York.

St. Nicholas Park makes its first appearance on the 1906 map of Hamilton Heights (see Figure 3-14). Designed by Samuel Parsons, Jr. in 1903, the park lies on the same topographical ridge as Central Park and Morningside and Jackie Robinson Parks. This bony, steep spine that defines the western side of the island hampered the development of many parcels into residential or commercial properties. As part of a larger landscape program during the first decade of the twentieth century, the vacant lots that compose St. Nicholas Park were converted into recreational space.

The park was designed in the Picturesque style, a style that stressed the preservation of natural topographic features and the enhancement, rather than subjugation, of the aesthetic environment using naturalistic and complementary planting schemes. Parsons respected the bedrock outcrops that defined the parcel,

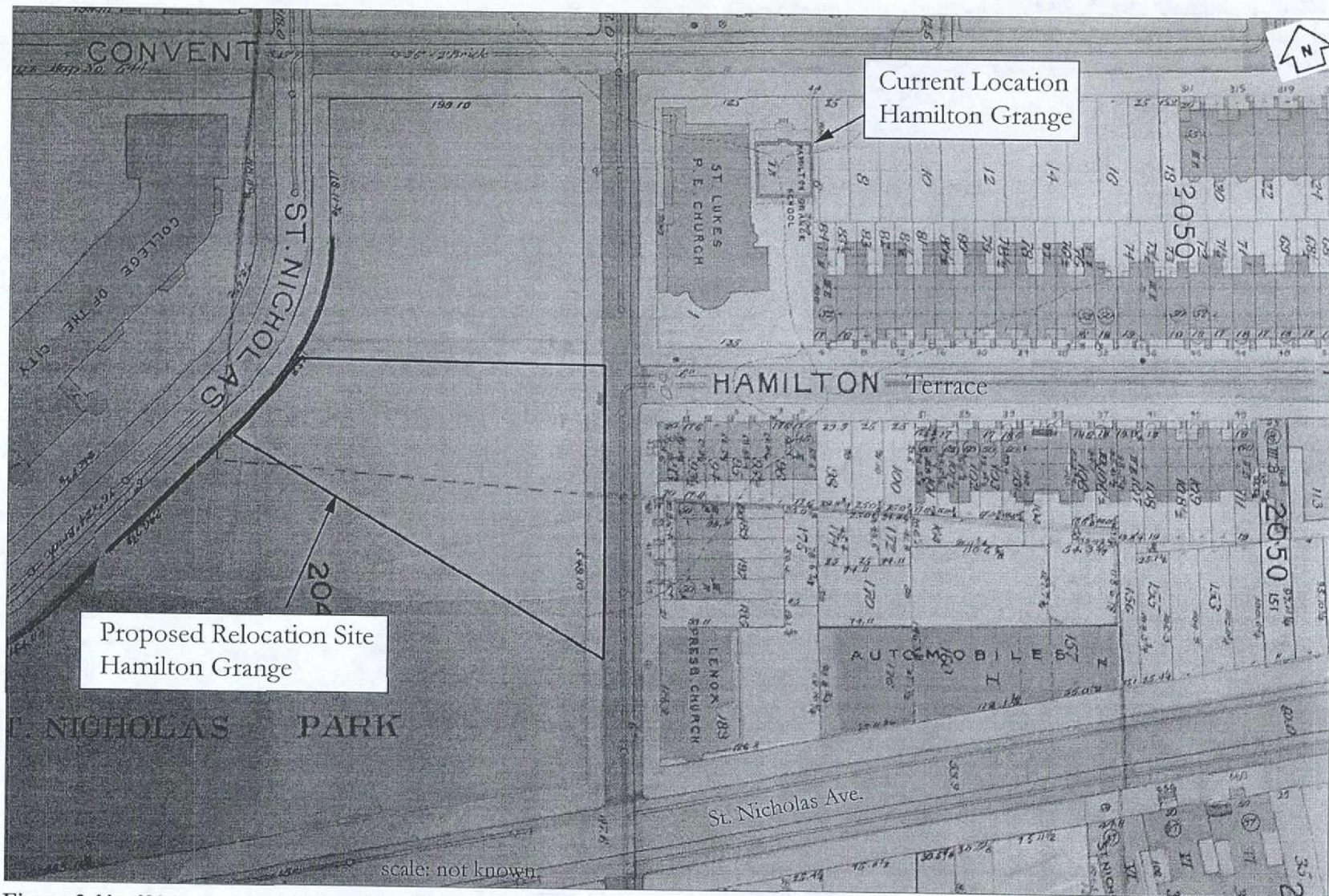


Figure 3-14. 1906 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Hyde 1906).

but did blast out and fill some areas to create level areas for lawns and paths. Water and sewer lines also were laid in during construction, several of which run through the proposed Grange relocation site (Figure 3-16).

Over time, several elements not included in the original Parsons design were incorporated into the park including playgrounds, wading pools, and ball courts. The City College of New York library appears at the northwest corner of the park (adjacent to the relocation site) beginning in 1937 (Figure 3-17), to be joined by an R.O.T.C. Armory in 1955 (Figure 3-18). In the 1960s, the College replaced the Armory and library with the nine-story Steinman Hall, which continues to occupy that location (Figure 3-19).

Hamilton Grange in the Twentieth Century

1907 marked a demographic shift in Harlem, from the predominantly white population toward a predominantly African American community. This shift was precipitated by the financial panic of 1907 that left many newly constructed residences vacant and available to the residents of San Juan Hill in the West 50s. The Hamilton Heights district of Harlem began to experience a similar shift in the early 1930s as affluent black families began to move into the neighborhood, and by the 1950s the area was solidly African American.

The condition of the Grange was in sharp decline by the first decade of the twentieth century. Reverend Isaac Henry Tuttle of St. Luke's had mustered enough funds to make some repairs to the building in the late 1890s, after which the house was used as a day school until 1909 (see Figure 3-14).

Development in Hamilton Heights continued to impinge on the landscape integrity of the Grange, most notably the construction of an apartment building in 1921 that actually touched the northern side of the house. Sensing that the historical continuity and integrity of the property had been seriously compromised, several different organizations and individuals proposed the preservation of the building as a memorial to Alexander Hamilton. These proposals, however, never expanded beyond a conceptual phase and were often thwarted by larger concerns, such as the onset of World War I.

In 1924, the house finally was deeded to the American Scenic and Historic Preservation Society (ASHPS). The society presented the first solid set of relocation strategies for the Grange in 1954, none of which were implemented. One small victory for ASHPS was the erection of the commemorative statue of Hamilton in the front yard of the house in 1936. In 1962, Hamilton Grange became part of the national park system under the jurisdiction of the NPS. The NPS currently maintains the property as a National Historic Landmark under the direction of the Manhattan Sites office in New York.

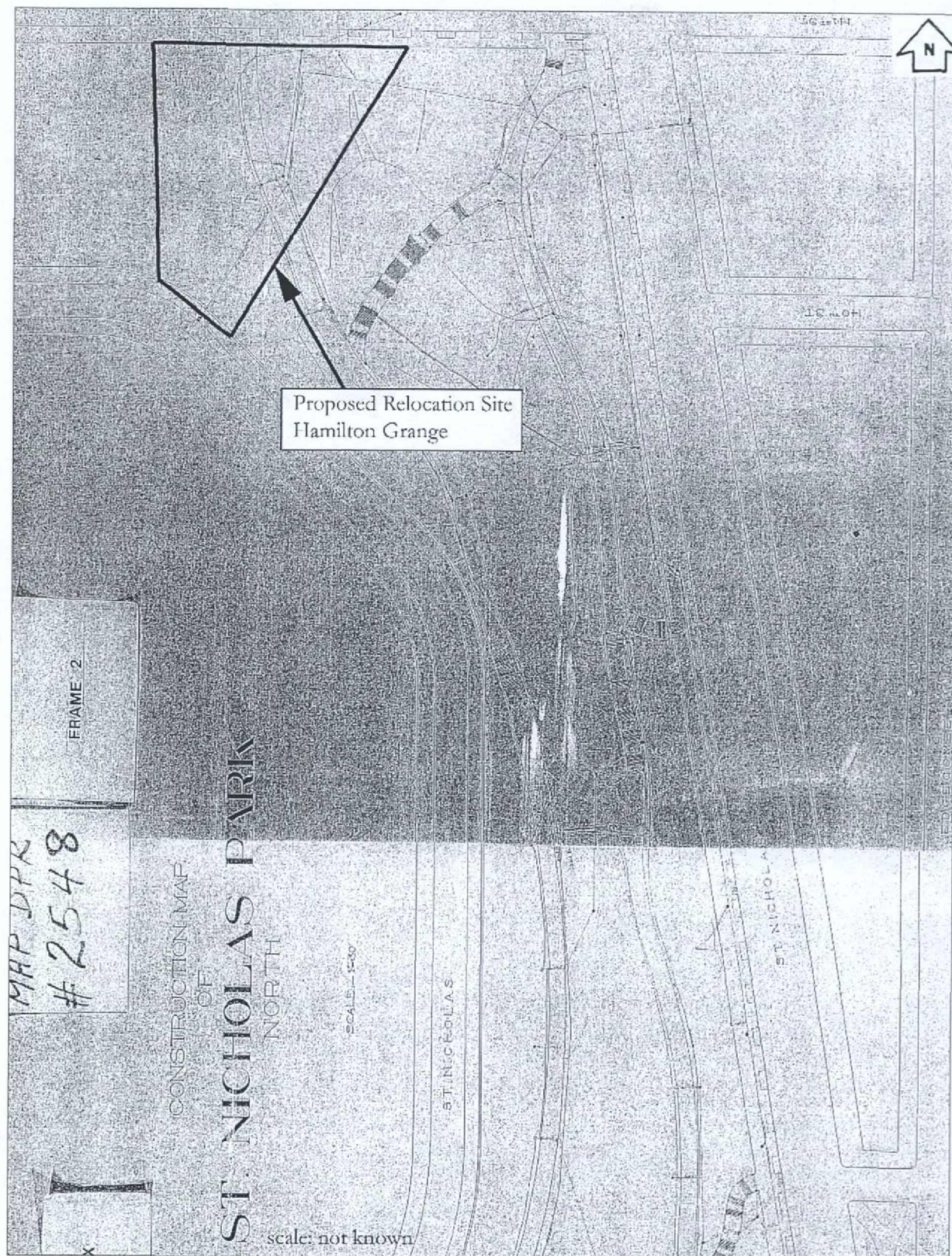


Figure 3-16. Construction map of St. Nicholas Park, North, showing the location of water and sewer pipes and the proposed relocation site of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Gregory 1903).

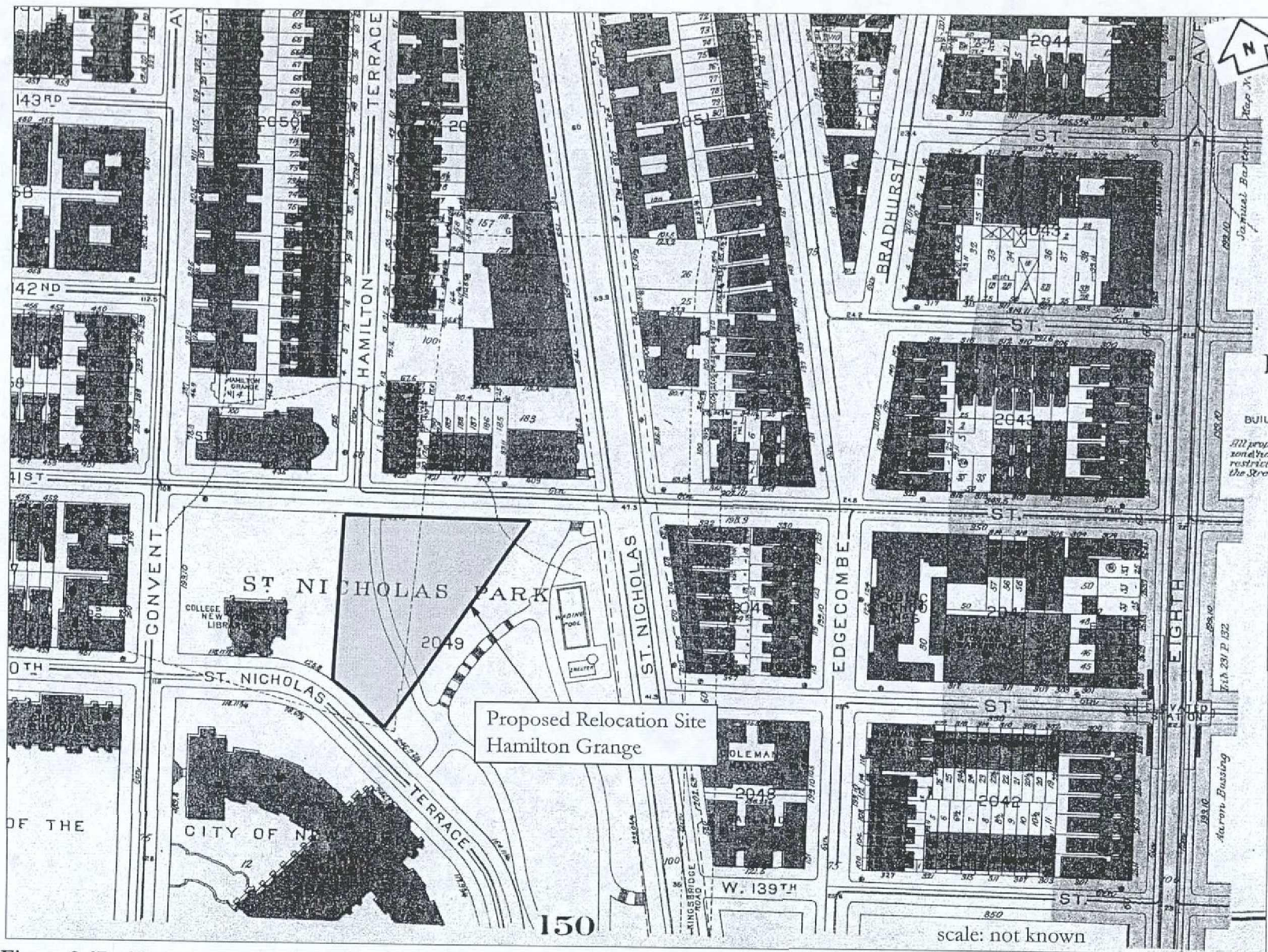


Figure 3-17. 1937 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Bromley 1937).

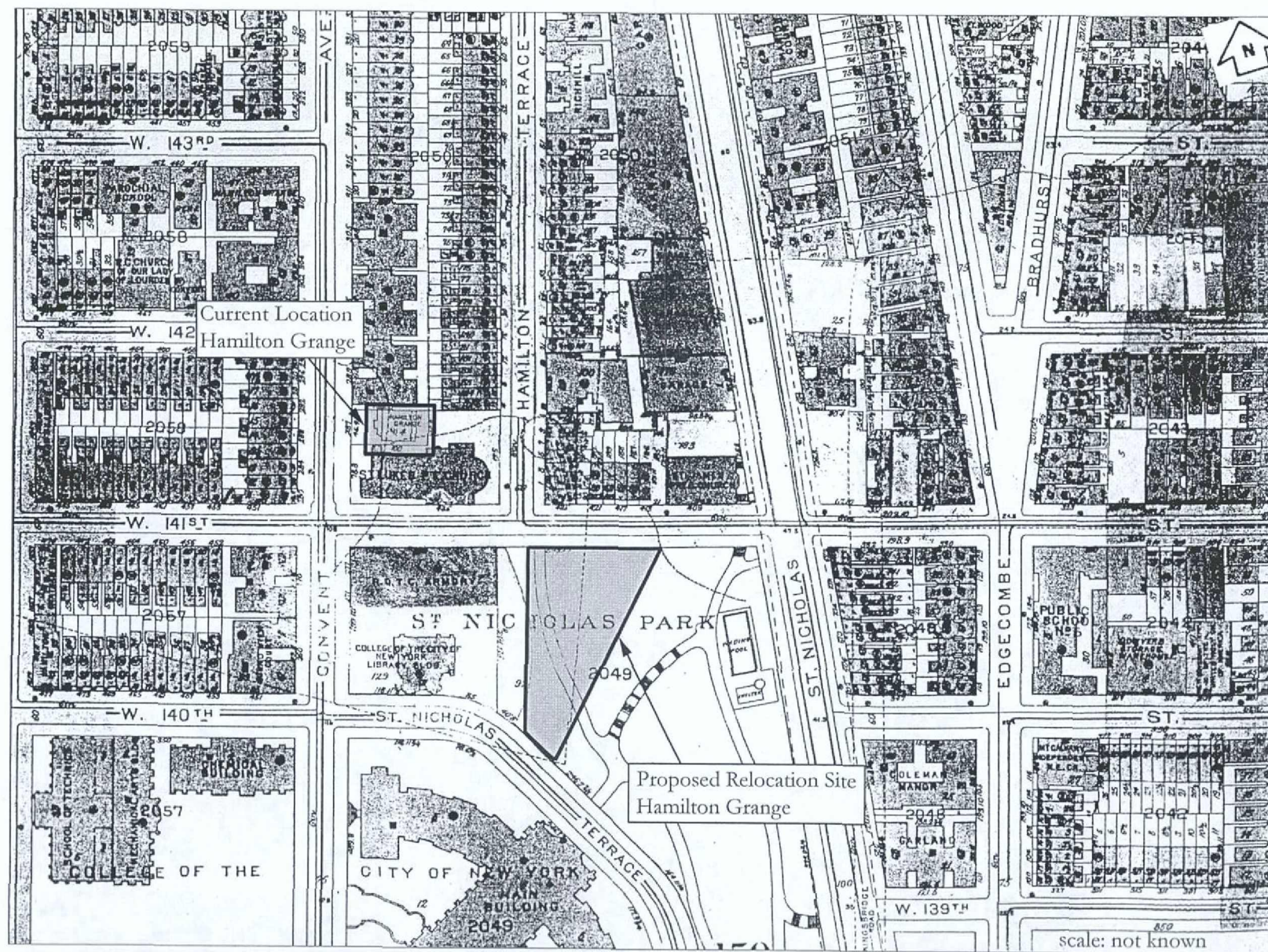


Figure 3-18. 1955 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Bromley 1955).

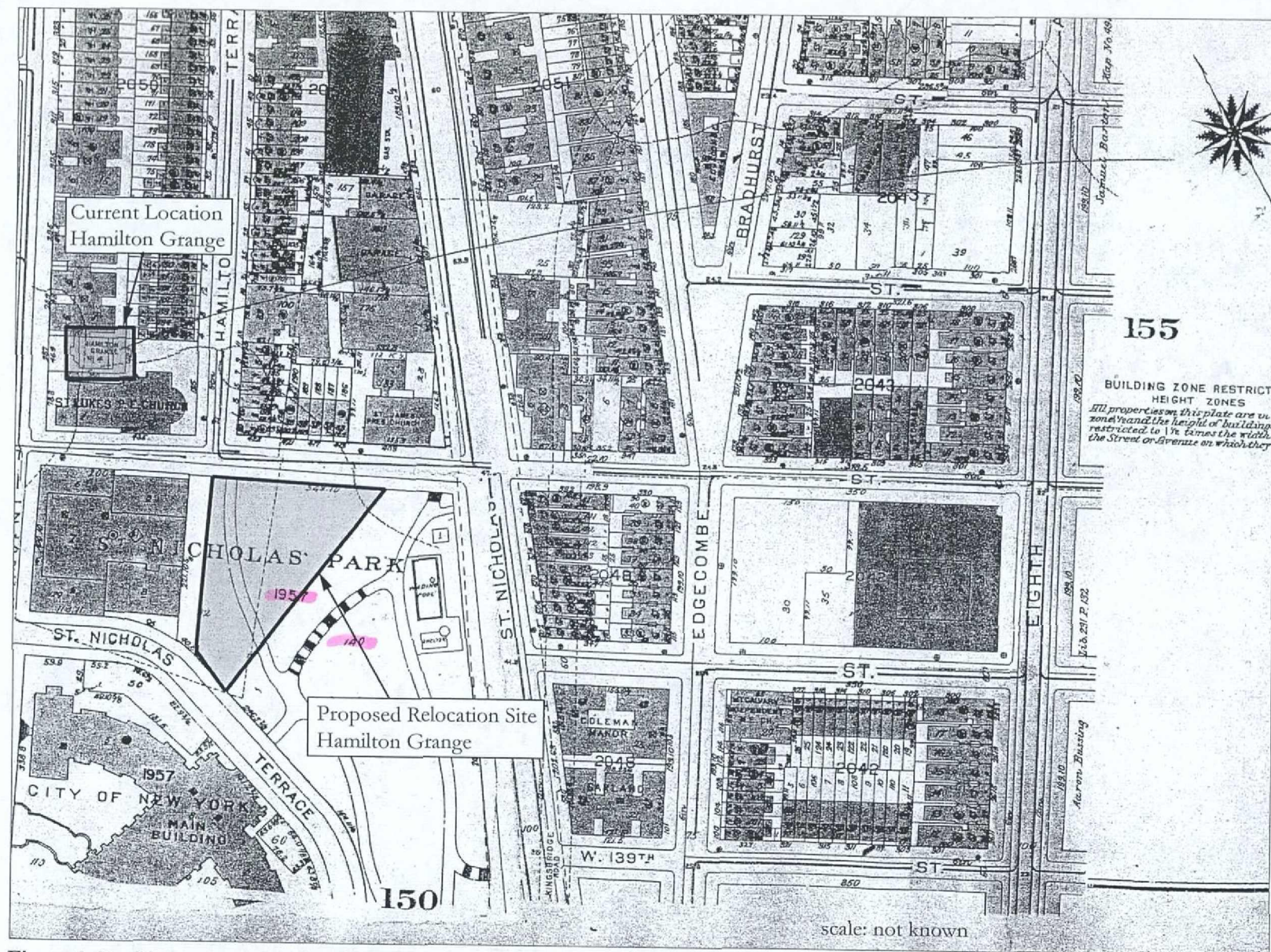


Figure 3-19. 1975 map of the Hamilton Heights neighborhood, showing the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY (source: Bromley 1975).

CHAPTER FOUR

INTERPRETATIONS

The background research collected during the Phase IA assessment was used to construct environmental, historic, and prehistoric contexts for the Hamilton Grange project area (see Chapter 3). The interpretation of these contexts, combined with a walkover survey of the current and proposed Grange sites, were then used to formulate predictive statements about the archaeological potential of the project area. This chapter provides a summary of the current project area conditions as observed during the walkover survey, followed by a sensitivity assessment for the both the Convent Avenue (current Grange location) and St. Nicholas Park (proposed Grange location) impact areas.

Existing Project Area Conditions

The Hamilton Grange project area consists of two separate parcels: the current site of the Grange at 287 Convent Avenue; and, the proposed relocation site for the Grange, situated in St. Nicholas Park, directly across 141st Street from Hamilton Terrace and abutting Steinman Hall to the south (Figure 4-1). The intensive development around the building has left very little open, undisturbed space.

The current location of the Grange is an approximately 25-x-50-ft grassy lot wedged tightly between St. Luke's Episcopal Church to the south and an apartment complex to the north; the apartment building actually makes contact with the Grange at its northwestern corner (see Figure 4-1). The front of the house consists of a landscaped yard bisected by a brick walkway. The portion of the yard south of the walkway is occupied nearly completely by a bronze memorial statue of Hamilton, as well as by part of the portico of the neighboring church. The yard north of the walkway consists of a manicured lawn and flowerbeds, a flagpole, and a National Park Service property sign (Figure 4-2). A wrought iron fence separates the front yard from the sidewalk and Convent Avenue.

The rear yard comprises a largely undisturbed expanse of grass bounded by a chain-link fence, retaining wall, and apartment building to the north, St. Luke's Church to the south, and a wrought iron fence to the east (Figure 4-3, 4-4). Hibiscus and maple line the edges of the yard and a shallow erosional channel created by the church drainage pipe cuts down and across the southern boundary.

The proposed relocation site at the northern tip of St. Nicholas Park consists of a canopy of mature deciduous trees, large expanses of exposed bedrock, and minimal ground cover of burdock and violets. A series of electrified light posts along the edge of the proposed relocation area closest to St. Nicholas Terrace suggests minimal subsurface disturbance in that location; as does the presence of concrete flagpole footing (Figure 4-5). The entire parcel slopes generally to the east with more dramatic contours at the eastern and western corners of the project area; the proposed relocation site for the Grange lies on a relatively flat section of land between these two points (Figure 4-6, 4-7). With the exception of

scattered modern refuse and several informal footpaths, the St. Nicholas site appears fairly undisturbed, although the presence of so much exposed bedrock suggests minimal soil development.

Prehistoric Archaeological Sensitivity

A review of the site files for Manhattan identified no prehistoric sites within a 1-mile radius of the project area. Based on the extant archaeological record for northern Manhattan, it appears that prehistoric occupation tended to cluster along the Harlem River on the fertile flatlands formerly known as Muscoota (HPI 2002). The steep and rocky topography and relative distance from these major watercourses would have made the Hamilton Grange project area a comparatively undesirable settlement option.

The intensive and expansive urban development of the Harlem Heights district during the late nineteenth and twentieth centuries has seriously compromised the integrity of the soils in the project area. The relocation of Hamilton Grange to its current lot on Convent Avenue, ca. 1889, required site clearing, blasting, excavation and grading that would preclude the stratigraphic integrity of any prehistoric resources in that area. While the construction of St. Nicholas Park was generally sensitive to the topographic integrity of the original landscape, the bedrock outcrops, steep terrain, and minimal water resources mitigate against a prehistoric presence in that portion of the project area.

The Convent Avenue and St. Nicholas Park impact areas possess low archaeological sensitivity for prehistoric cultural resources.

Historic Archaeological Sensitivity

As discussed in Chapter 3, the northern portion of Manhattan was sparsely occupied throughout the seventeenth and eighteenth centuries, in large part because of its isolation from the urban core to the south and the lethal threat of Indian attack. Those individuals that did venture to the area tended to congregate to the east of the Manhattan Hills along the shores of the Harlem River. During the mid- to late-eighteenth century, however, Harlem Heights saw increased use as a summer retreat for the wealthiest of New Yorkers and as a base of operations for Washington's army during the Revolutionary War (see Figure 3-4). The nineteenth-century saw large-scale residential development of the area and the expansion of the gridiron into the newly created Hamilton Heights district.

The following section provides a historic archaeological sensitivity assessment for the Hamilton Grange project area based on its potential to contain historic period cultural resources as determined by the background research and walkover survey. For ease of review, the project area has been broken down into two sections: the Convent Avenue impact area, the current location of the Grange; and the St. Nicholas Park impact area, the proposed relocation site for the Grange.

Convent Avenue Impact Area

A review of historic maps dating from 1639–1890 indicates no historic period resources within the proposed Convent Avenue impact area (see Figures 3-3, 3-4, 3-7, 3-8, 3-9, 3-10). Blasting, excavation, and grading within the lot during the construction of the house foundation, ca. 1889, compromised the

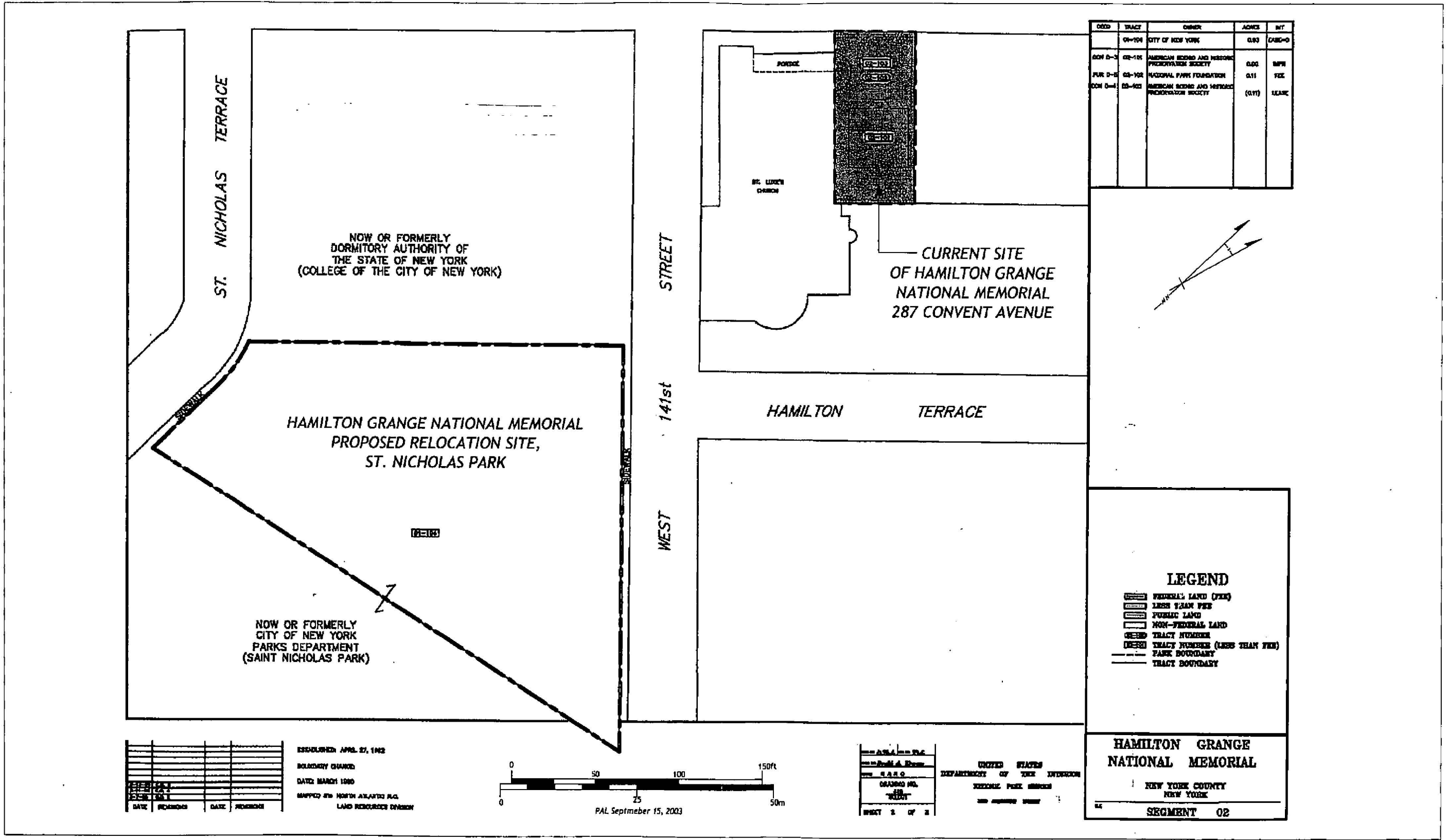


Figure 4-1. Map showing the current and proposed sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY.

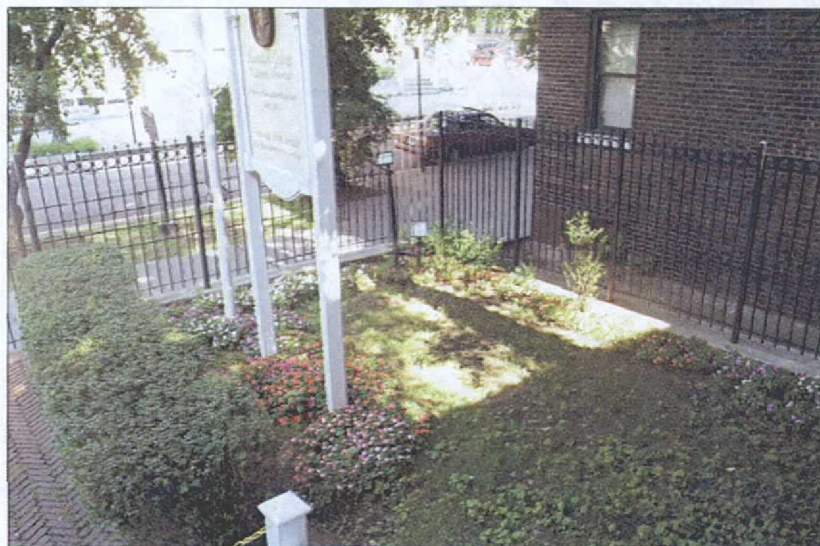


Figure 4-2. Photograph of the front yard space at the current site of the Hamilton Grange National Memorial, view northwest, Hamilton Grange project area, Manhattan, New York, NY.



Figure 4-3. Photograph of the back yard space at the current site of the Hamilton Grange National Memorial, view east, Hamilton Grange project area, Manhattan, New York, NY.



Figure 4-4. Photograph of the back yard space at the current site of the Hamilton Grange National Memorial, view southeast, Hamilton Grange project area, Manhattan, New York, NY.

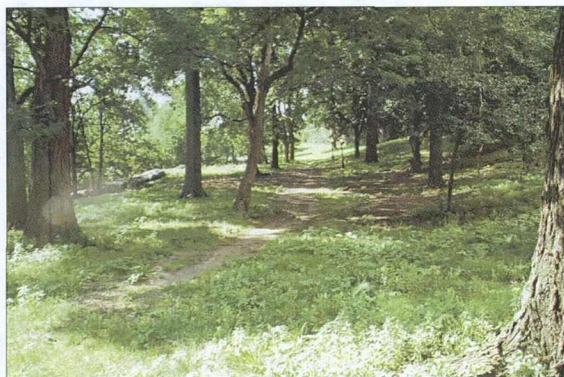


Figure 4-5. Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view west, Hamilton Grange project area, Manhattan, New York, NY. Note electrified lampposts in the background.



Figure 4-6. Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view north, Hamilton Grange project area, Manhattan, New York, NY. Note large bedrock outcrop in foreground.



Figure 4-7. Photograph of the proposed relocation site for the Hamilton Grange National Memorial, view northeast, Hamilton Grange project area, Manhattan, New York, NY.

stratigraphic integrity of the soils in that area and, by extension, any pre-1889 historic resources contained within those soils.

Features post-dating the relocation of the house to Convent Avenue, ca. 1889, may exist within the impact area. These features may include refuse deposits and the remains of small outbuildings. The installation of indoor plumbing in the house in the mid-nineteenth century and the re-establishment of that system after its move preclude the presence of privy or well features.

The Convent Avenue impact area possesses low historic archaeological sensitivity for resources pre-dating 1889, and moderate to high archaeological sensitivity for resources post-dating the relocation of the Grange, ca. 1889.

St. Nicholas Park Impact Area

Several historic period resources may survive within the proposed St. Nicholas impact area. While the construction of the park did include some degree of blasting and filling, the fact that it was designed in the generally "low-impact" Picturesque style (see Chapter 3) suggests that some of these resources, or portions of these resources, may survive within this part of the project area.

The utilization of the Harlem Heights as a base of operations area during the Revolutionary War and, moreover, the engagement of the Battle of Harlem Heights between 130th and 155th Streets, suggests the possibility of the presence of military cultural material and features within the relocation site. Resources associated with this period may include portable personal effects such as buttons, buckles, pipes, and bottle glass; ammunition; and, hearth features related to temporary camps.

Another potential resource is the remains of Alexander Hamilton's mill house, ca. 1800–1802, as suggested by the 1874 Viele map of Manhattan (Figure 4-8; see Chapter 3). While the first cartographic evidence of the Grange on the 1811 Commissioners Plan provides an anticipatory view of the landscape after the construction of the gridiron, the Viele map depicts the original watercourses and made land on the island. Based on this map, Hamilton would have had access to several different small streams and rivers across his property, including a small stream in what is now the northwestern portion of St. Nicholas Park. Hamilton may have utilized this stream for his mill house, and portions of the mill including foundation remains, may survive in the proposed relocation site for the Grange.

A second possible resource includes the remains of portions of the Mott farm as depicted on the 1811 Commissioners Plan of Manhattan (see Figure 3-7). The farm itself is depicted as lying outside of the relocation site boundaries, but it is possible that outbuildings and yard features (e.g., privies, trash heaps, stone walls, outbuildings, wells) may survive within those boundaries.

The 1885 Robinson map depicts an outbuilding at the northeastern corner of the park and within the boundaries of the proposed relocation site (see Figure 3-10). This outbuilding appears to be associated with a residence situated west of the historic alignment of King's Bridge Road, what is now the corner of St. Nicholas Avenue and 141st Street. The building is gone by 1921, likely razed during the construction of the park, but elements of it may survive below the modern ground surface.

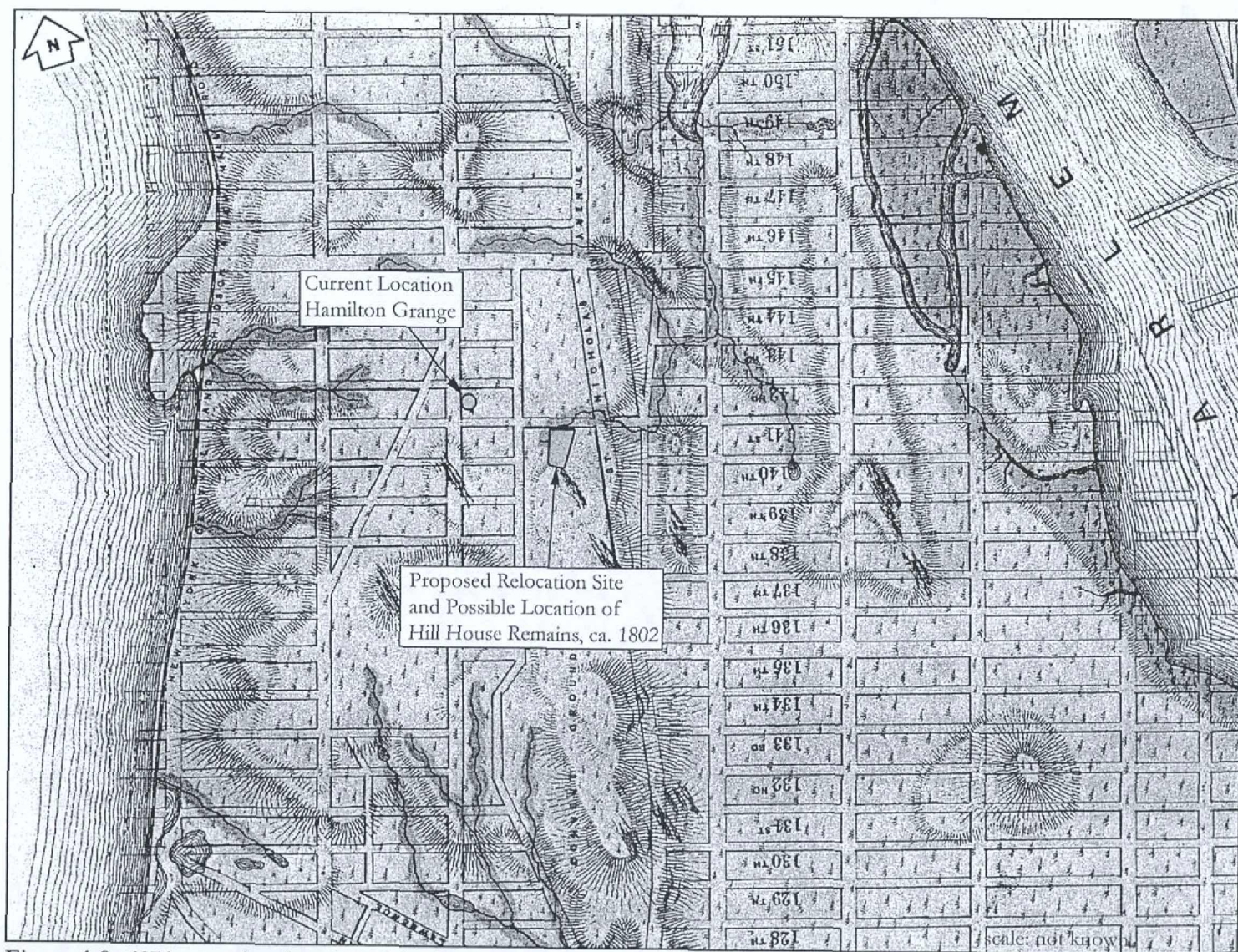


Figure 4-8. 1874 map showing the original watercourses and made land within Manhattan and the current and proposed relocation sites of the Hamilton Grange National Memorial, Hamilton Grange project area, Manhattan, New York, NY. Note the identification of the location of a possible mill feature, ca. 1800 (source: Viele 1874).

Other possible historic period resources within the relocation site may include subsurface evidence of Parsons' original layout of the park. The design plans for the park and subsequent land maps dating to 1975 depict a walkway cutting through the St. Nicholas portion of the project area (see Figures 3-16, 3-17, 3-18, 3-19). This path no longer exists as a formal design feature, but a well-trod footpath follows what was likely its original alignment. Portions of the original path may survive, including any formal landscaping elements associated with it.

In light of the number of potential resources identified within this portion of the project area and the degree of disturbance caused by park construction and improvements, the St. Nicholas Park impact area possesses moderate archaeological sensitivity for resources dating from the mid-eighteenth to early twentieth centuries.

CHAPTER FIVE

RECOMMENDATIONS

The following recommendations and methodology for Phase IB archaeological survey at the Hamilton Grange project area follows NPS guidelines for fieldwork and the *Standards for Cultural Resource Investigations and the Curation of Archaeological Collections in New York State* (NYAC 1994). The goal of the subsurface testing program will be to assess the accuracy of resource mapping, determine presence/absence of intact subsurface resources, and make recommendations for the potential research value and significance of identified resources within the project impact areas.

Subsurface Testing

Based on the results of Phase IA sensitivity assessment/literature search, it is estimated that 44, 30–50-cm diameter test units will be necessary to provide adequate coverage across the Convent Street and St. Nicholas Park project impact areas (see Figure 4-8). The test pits will be divided between the two impact areas as follows:

Convent Avenue Impact Area

Four 30–50-cm diameter test units will be excavated in the current location of the Hamilton Grange National Memorial. One test pit will be placed in the front of the house north of the brick walkway to confirm expected subsurface disturbance in that area. The remaining three test pits will be excavated across the backyard using a judgmental test pit transect spaced at 2.5-m intervals to test for the presence of historic period resources post-dating the relocation of the Grange, ca. 1889.

St. Nicholas Park Impact Area

Approximately 40, 30–50-cm diameter test units will be excavated at the proposed Hamilton Grange relocation site in St. Nicholas Park. The testing will be conducted using a coordinate grid spaced at 5-m intervals. Approximately 35 test units will be excavated across the impact area within the grid system, excluding those areas containing exposed bedrock or excessive slope. This approach will ensure an equal probability of identifying cultural resources across the entire project impact area.

The remaining 5 test units will be excavated on a discretionary basis in those areas identified as potential locations for specific historic period cultural resources. These areas include the north-central boundary of the park in the possible location the Alexander Hamilton mill house (ca. 1800), and at the northeastern corner in the possible location of an 1885 outbuilding.

All test units will be excavated in stratigraphic layers. For strata over 10 centimeters in thickness, arbitrary levels will be used to further subdivide the soil stratum. Excavation will continue to cultural features or approximately 10 centimeters into the sterile subsoil. All excavated soil will be screened through ¼-inch hardware cloth and remaining cultural material will be collected. Soil horizons will be recorded for each test pit. Cultural material and samples will be bagged and labeled with provenience information. All measurements will be done using the metric standard. Plan and profile drawings of all identified archeological features will be completed. Color slides and black-and-white prints will be taken of the general project area, all test units, and any identified features. The Contracting Officer's Technical Representative (COTR) will be notified immediately in the case of any significant discovery.

Laboratory Processing and Analysis

All artifacts recovered from the site areas during the Phase IB field investigations will be returned to the PAL facility for laboratory processing and analyses. These activities will include cleaning, identification, and computer cataloging in ANCS+ (Rediscovery) and will be entered according to the standards and terminology used by the Archeological Collections Management Project (ACMP). Preliminary analyses of spatial distributions of artifacts along with map and graphics production will also be completed.

Cataloged artifacts and associated project documentation from the excavations will be temporarily stored according to ACMP guidelines. The cataloged artifacts will be returned to NPS with the submission of the final report.

End-of-Fieldwork Memo and Phase IB Report Preparation

Upon completion of Phase IB fieldwork, PAL will prepare a brief end-of-fieldwork memo that summarizes the findings and makes preliminary recommendations for further investigations. Should Phase II excavations be warranted, the end-of-fieldwork memo will detail a research and cost proposal for the additional work. Following the laboratory processing activities and analyses, PAL will prepare a narrative report that presents the survey methods and procedures, results of the archaeological investigations, interpretations, recommendations, references, appendices, and site forms, if necessary. The report will follow the guidelines established by the National Park Service in the *Recovery of Scientific, Prehistoric, Historic, and Archaeological Data* (36 CFR Part 66, Appendix A).

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Appendix A

DIGITAL DATA – REPORT AND GEO-REFERENCED HISTORIC MAPS
(TO BE INCLUDED IN FINAL REPORT)





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