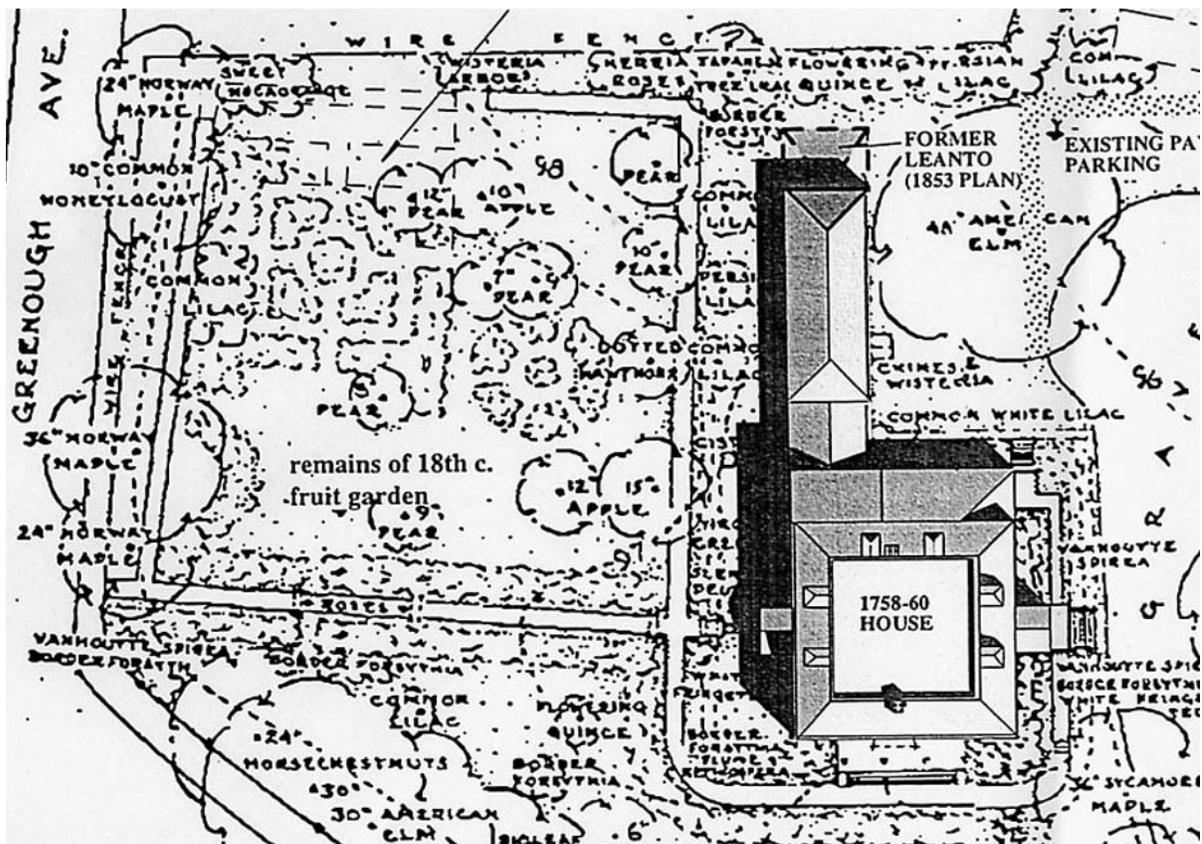


**ARCHAEOLOGICAL SITE EXAMINATION
NORTH YARD OF THE LORING-GREENOUGH HOUSE
JAMAICA PLAIN, MASSACHUSETTS**



CENTER FOR CULTURAL AND ENVIRONMENTAL HISTORY
UNIVERSITY OF MASSACHUSETTS BOSTON

CULTURAL RESOURCES MANAGEMENT STUDY No. 11

2004

Cover Illustration: The Loring-Greenough property as depicted by the Historic American Buildings Survey in 1937 (Courtesy Detwiller 1998)

**ARCHAEOLOGICAL SITE EXAMINATION
NORTH YARD OF THE LORING-GREENOUGH HOUSE
JAMAICA PLAIN, MASSACHUSETTS**

**Prepared for
The Jamaica Plain Tuesday Club Inc.**

**By
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Center for Cultural and Environmental History
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Cultural Resources Management Study No. 11

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CENTER FOR CULTURAL AND ENVIRONMENTAL HISTORY

Established in 1996, the Center for Cultural and Environmental History's mission includes research, public service, and educational initiatives. The Center maintains archaeology and conservation laboratories and supports research in landscape and environmental archaeology, historical archaeology, and environmental history.

Center projects often have an applied focus, seeking to promote and protect the cultural heritage and historic landscape of the Commonwealth of Massachusetts and the surrounding region. As a public service unit of the Department of Anthropology, the CCEH also serves an important educational role at the University of Massachusetts Boston, creating opportunities for students to participate in public service projects.

ABSTRACT

A phased program of stabilization and restoration for the Loring-Greenough House and property located in Jamaica Plain, a suburb of Boston, MA, called for reconstruction of porches, construction of an entrance walk and new foundations for the carriage house. This program also included landscaping and rehabilitation of garden plantings in the north yard. Archaeological testing was conducted to identify cultural resources that would be impacted by the proposed project and to search for evidence of early garden features that could be used to guide landscape restoration. The first phase of research focused on house porches, walkway installation and foundation work in the carriage house (Mohler and Kelley 2000). The second phase of work, reported herein, focused on the temporal assessment of existing planting beds and identification of historic planting features. A total of five 1 m x 1 m units and four 1 m x .5 m units were excavated in the north yard. Investigations revealed the presence of an intact buried A-horizon in the east and south portions of the north yard that contains eighteenth and early nineteenth century artifacts. Sand walkways were laid down in the early to mid nineteenth century and may have corresponded with other house improvements made around 1840. Such improvements may have included the creation of a formal garden with beds laid out in a geometric pattern. These garden features were covered over with landscaping fill sometime after 1937 when a plan of the property was made by the Historic American Buildings Survey. The present

parallel garden beds may have been created simultaneously with the geometric garden. The parallel beds have been maintained with slight twentieth-century modification up to the present. The irregular lilac beds at the north edge of the property appear to date to the late nineteenth or early twentieth centuries, while the herb bed was created in the late twentieth century. Evidence of seventeenth to eighteenth century garden features consisting of a series of small planting holes was identified below the south end of the parallel beds and associated walkway. The program of archaeological testing revealed the presence of a well-preserved buried A-horizon across much of the property that is associated with the eighteenth and early nineteenth century occupation of the property. In addition evidence of eighteenth century gardening activity lies at the base of the buried A-horizon. An early nineteenth century pathway was found on the surface of the buried A-horizon. Due to the presence of well-preserved archaeological deposits recommendations for proposed garden restoration focused on the need to limit the depth of new planting holes to prevent disturbance to the buried A-horizon. Because tree planting and erection of posts for arbors require greater depths, it was recommended that the new planting and post locations should be archaeologically excavated to mitigate potentially adverse impacts. The excavated holes will then be used for specific trees and posts. The third phase of archaeological investigation associated with the foundations of the carriage house north wall joists will be reported under separate cover.

MANAGEMENT SUMMARY

The Jamaica Plain Tuesday Club Inc. contracted with the Center for Cultural and Environmental History to conduct an archaeological site examination at the historic Loring-Greenough House in the Jamaica Plain neighborhood of Boston, MA. Subsurface testing conducted in 1999 under State Archaeologist permit no. 1826 tested areas to be disturbed by porch rehabilitation, walkway construction and foundation work in the carriage house. The second phase of investigation in April and May of 2002 under State Archaeologist permit no. 2145 focused on the temporal assessment of existing planting beds and identification of historic planting features in the north yard of the property. Testing of the north wall of the carriage house included under this permit will be reported on under separate cover.

The initial phase of testing revealed intact archaeological deposits including a buried A-horizon, sand bed walkway and two periods of porch footings on the west side of the house. In the area of the carriage house were foundations and associated builders

trenches, deep deposits of mixed fill, possible refuse pits and a brick walk that pre-dates the 1811 carriage house. The depth of deposits suggests significant landscape modification in the eastern portion of the property.

The second phase of testing in the north yard revealed the presence of a buried A-horizon associated with the eighteenth and early nineteenth century occupation as well as sand walkways that may have been laid down between the 1820s and 1860s when other changes were made to the house. Landscaping fill was spread across much of the property in the late nineteenth to early twentieth centuries, and this was followed by additional capping with fill in specific areas after 1937. The site examination finds represent an important contribution to the overall understanding of landscape use and alteration of the property. Limiting excavation depth to 16 inches was recommended for the proposed garden restoration. Due to the need to place trees and posts below this depth, the holes for these new fixtures were recommended to be archaeologically excavated to mitigate potential damage to subsurface resources.

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I. INTRODUCTION

The Jamaica Plain Tuesday Club Inc. owns and maintains the historic Loring-Greenough House located at 12 South Street in Jamaica Plain, Massachusetts (Fig. I-1). The house is a Massachusetts and National Register Historic Landmark because of its historical connections to the American Revolution and its exemplification of colonial architecture. The mansion with adjoining carriage house and gardens

is the only surviving example of a colonial country estate in Jamaica Plain (Fig. I-2).

A phased rehabilitation program for both the house and grounds that commenced in the spring of 1999 included repair of porches, installation of a handicapped access ramp, replacement of deteriorating posts in the carriage house and landscape restoration. This work was determined to have the potential to negatively impact subsurface cultural resources. As a result, an archaeo-

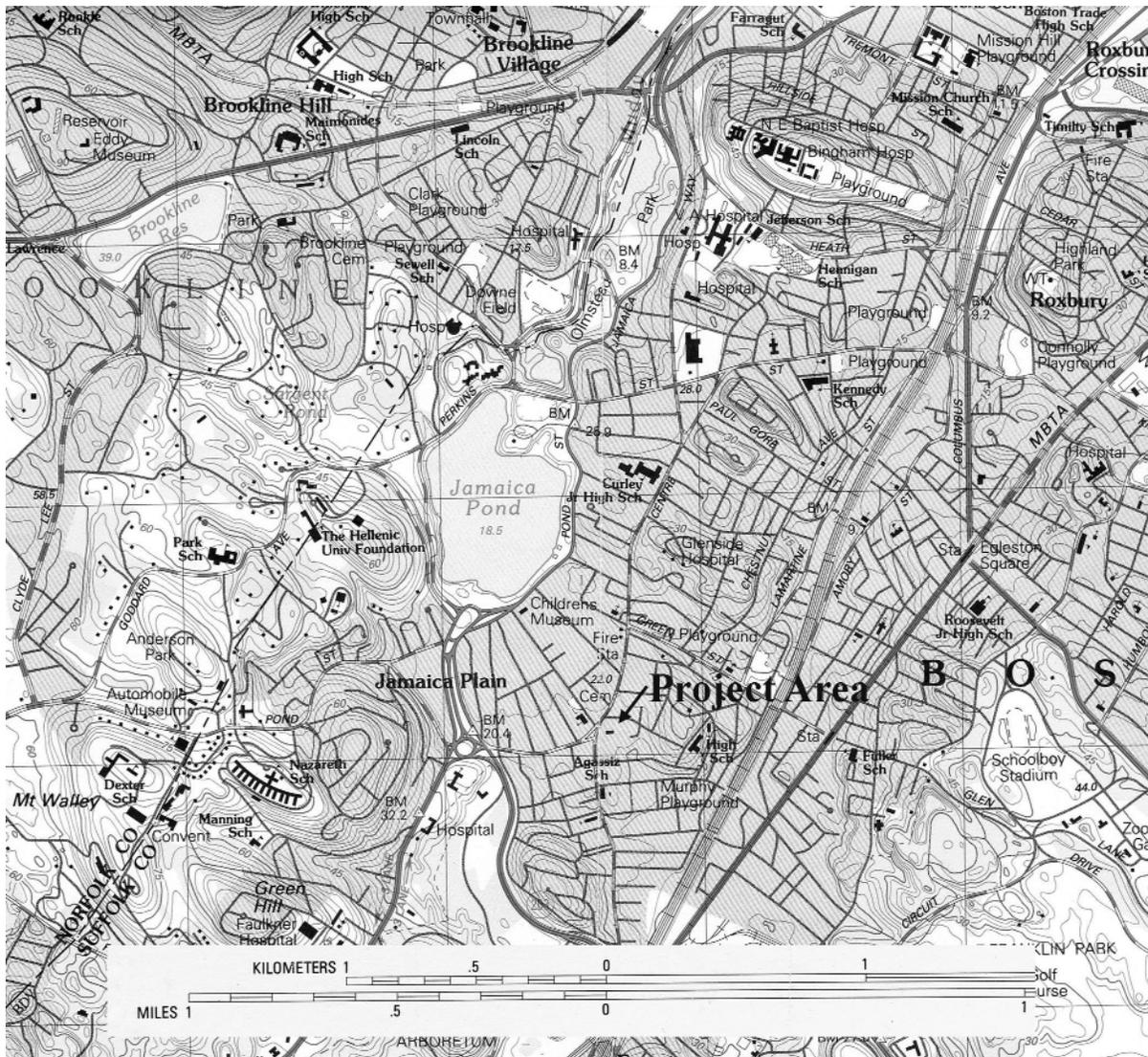


Figure I-1: Project area on USGS Boston South Quadrangle.

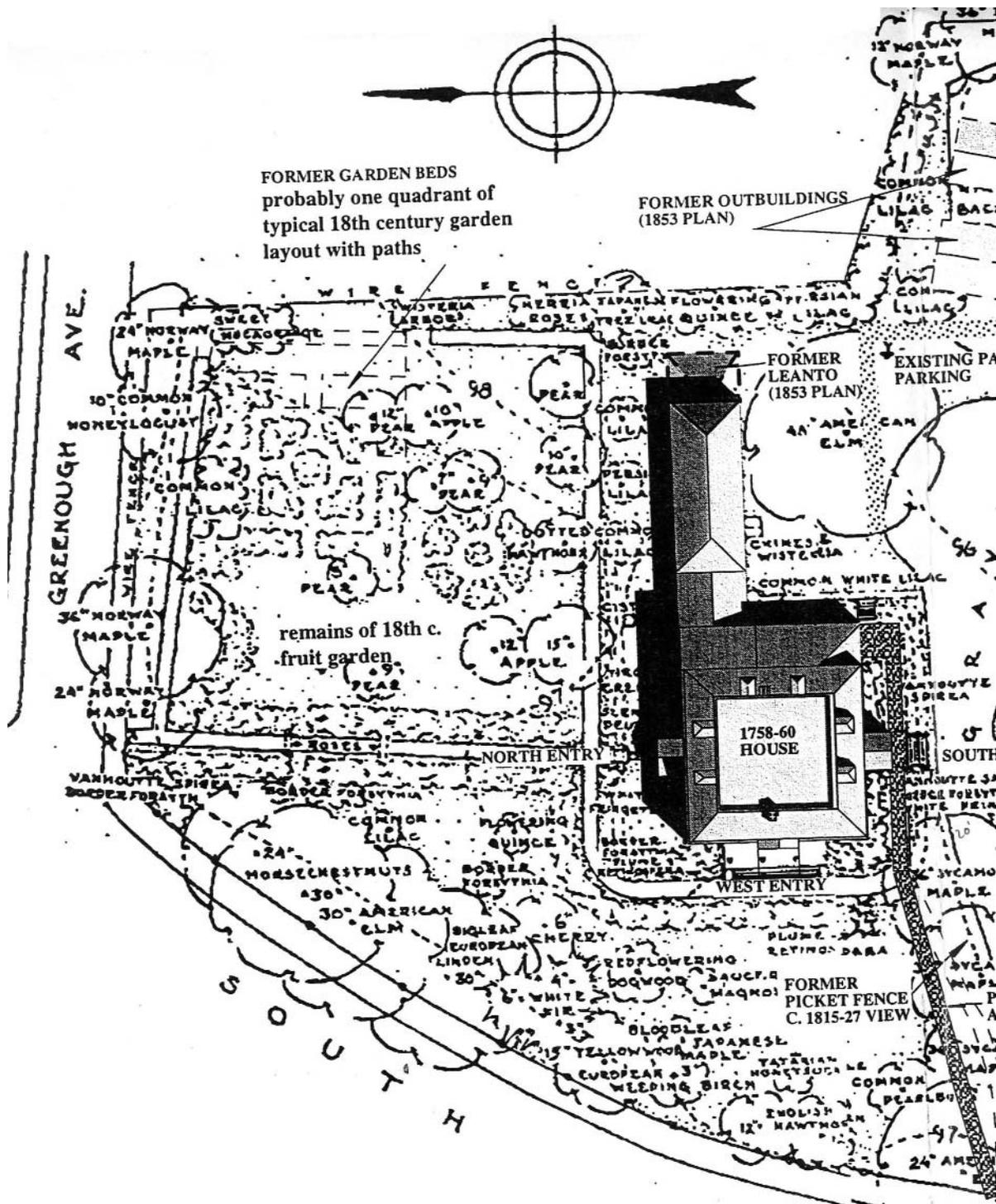


Figure I-2: Historic American Buildings Survey (1937) plan of the Loring-Greenough property with additional captions (courtesy Detwiler 1998).

logical site examination under State Archaeologist permit no. 1826 was carried out in the summer and fall of 1999 by the Center for Cultural and Environmental History (CCEH). This work focused on the exterior of the mansion house and carriage house and along the front (west) entrance walk (Mohler et al 2000). The Jamaica Plain Tuesday Club is now in the process of completing the structural rehabilitation of the carriage house and initiating the program of landscape restoration. Katherine Cipolla of the Jamaica Plain Tuesday Club contacted the CCEH in December 2001 to solicit archaeological services for the final phase of rehabilitation associated with carriage house post replacement and restora-

tion of plantings in the north yard. An archaeological site examination of the north yard was carried out under State Archaeologist Permit No. 2145 between April 19 and May 3, 2002. Final investigation of the carriage house is awaiting funding and will be reported on under separate cover. This work was performed in compliance with Section 106 of the National Historic Preservation Act of 1966 (36 CFR 800), Massachusetts General Laws Chapter 9, Sections 26-27C, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71). University of Massachusetts staff who worked on the project included Katherine Howlett and Leith Smith.

II. PROJECT LOCATION AND ENVIRONMENTAL CONTEXT

The Loring-Greenough property consists of nearly two acres in the Boston neighborhood of Jamaica Plain in Suffolk County. It is bordered by Greenough Avenue on the north, the intersection of South and Centre Streets to the west and by houseslots to the east and south. Well-known landmarks in the vicinity include Jamaica Pond to the north, Franklin Park to the southeast and the Arnold Arboretum to the south west.

The parcel is situated on an upland plain surrounded by gently rolling landscape that is punctuated by low hills. The closest water source is Muddy River, the headwaters of which are associated with Jamaica Pond that lies approximately 700 m to the northwest. The Muddy River flows generally northward to the Charles River nearly 5 km to the north. Water sources to the south consist of small ponds and streams that flow into the Neponset River 5 km to the southeast and into the upper Charles River just over 6 km to the west and southwest.

The plain on which the site is located is composed of nearly level and undulating Merrimac soil that is generally deep and excessively drained (USDA 1989). A typical soil profile consists of 23 cm of dark brown fine sandy loam overlying approximately 36 cm of yellow brown fine sandy loam that grades to a yellowish brown loamy sand. The C horizon consists of a light yellowish brown coarse sand and gravel. Much of the area is designated as Urban Land where the soil has been covered with impervious surfaces. A low hill immediately west of the property is characterized by Canton soils that are very deep and well drained and occur on the sides of hills and ridges on uplands. Soils located approximately 200 m south of the property have been designated as Urban Land due to the excessive amount of disturbance and covering by construction. The area bordering the south end of Jamaica Pond consists of Merrimac fine sandy loam with 3 to 8 percent slopes. This soil is deep and occurs on gentle slopes associated with major stream valleys.

III. BACKGROUND

A. Native American Cultural Context of Southern New England

The history of Native American occupation in the area of Jamaica Plain and the broader region as a whole derives in part from a study conducted for the Olmstead Parks System (Loparto 1986), a sewer project in Arnold Arboretum (Donta et al. 2002) and work conducted in the Neponset River valley (Ritchie 1994) that utilizes palynological data collected within the middle Neponset drainage in Canton and Milton.

1. *Paleo-Indian Period (ca. 12,000-10,000 B.P.)*

New England was first occupied by humans soon after the retreat of the Wisconsin ice sheet around 13,000 B.P. The environment at the time was rapidly changing as the glacial margins slowly moved northward. Forests came to be dominated by spruce, birch and alder. Fauna would have been characterized by cold adapted species including mastodon, mammoth, caribou, elk and a variety of birds and smaller mammals. While big game would have been an important source of food (Ritchie 1980, Snow 1980), smaller species probably made up the bulk of the diet along with a wide variety of plant foods (Curran 1987; Curran and Dincauze 1977; Dincauze 1990; Dincauze and Curran 1984; Donta et al 2002). Nothing is known of human social structure from this time, but it likely was characterized by small family groups that banded together to move frequently about the landscape in search of food. This mobile hunting and gathering lifeway led to living sites that were typically occupied for short periods of time. Artifact assemblages

from such sites are dominated by stone tools that include scraping tools, drills, graters fluted projectile points and large quantities of flakes from stone working, some of which are utilized. Many of the tools are manufactured of exotic, fine grained stone that was carried for long distances from their sources of origin. With the exception of isolated finds (Elia and Mahlstedt 1982) few archaeological sites of this period have been found in New England (Loparto 1986). Bull Brook in Ipswich, the Neponset site in Canton (Carty and Spiess 1992), and the Shattock Farm site in Andover (Spiess and Bradley 1996) are a few.

2. *Early Archaic Period (ca. 10,000-8,000 B.P.)*

Although little is actually known of this phase due to a scarcity of well-documented sites, a lifeway characterized by mobile hunting and gathering is believed to have continued during the Early Archaic with an emphasis on seasonal settlement patterning (Ritchie 1980). The environment remained cool, but through a slow warming trend forest species in the Boston area came to be dominated by pine, oak and birch (Ritchie 1994). The manufacture of stone tools out of locally available materials suggests a trend toward occupation of particular regions with a decrease in long distance mobility and trade. Differences in the lithic tool kit characterized by the manufacture of bifurcate-base projectile points have been interpreted by some researchers to suggest a discontinuity with the preceding Paleoindian Period (Donta et al 2002; Ritchie 1969; Snow 1980), while others suggest a general continuum of development (Custer 1984).

3. *Middle Archaic Period (ca. 8,000-6,000 B.P.)*

During the Middle Archaic the New England landscape began to resemble that of today with the establishment of a deciduous forest and increased diversity of plant and animal foods (Dincauze 1976; Dincauze and Mulholland 1977). The number of archaeological sites from this period increases dramatically in comparison with the past period, suggesting a significant rise in population. The Merrimack River Valley associated with northern Massachusetts and southern New Hampshire, in particular, contain the best known sites of the period. These include the Neville and Smyth sites in New Hampshire (Dincauze 1976; Kenyon 1983) and Shattuck Farm in Andover (Mahlstedt 1981; Leudtke 1985)

Settlement in and exploitation of a variety of environments is clearly indicated by both faunal remains and tool kits and this was increasingly associated with seasonal resource availability (Dincauze and Mulholland 1977; Barber 1979).

Andromous fishing at falls was clearly the primary attraction at a number of localities including the Neville site that revealed evidence of reoccupation over a period of time. The lithic tool kit during this period is characterized by three distinctive projectile point styles (Dincauze 1976). These include the Neville, Stark and Merrimack that are joined by atlatl weights, knives, perforators, axes, adzes, scrapers, abraders, ulus, gouges and harpoons (Donta et al 2002).

4. *Late Archaic Period (ca. 6,000-3,000 B.P.)*

The greatest number of Native American archaeological sites in New England is associated with the Late Archaic. Seasonal temperatures were slightly higher than

today and an oak-hickory forest came to dominate southern New England (Loparto 1986:7). The period is characterized by relatively high populations that occupied the entire range of available environments for the purpose of exploiting an equally wide range of plant and animal resources.

Seasonal settlement patterns continued, but toward the end of the period populations became more settled on the landscape as evidenced by shell middens and fish weirs. Coupled with this sedentism was limited cultivation of plant foods such as squash, gourds and sunflower.

Three different lithic traditions suggest the possible development of regional ethnic diversity (Dincauze 1974, 1975) or of differing tool kit functions. The Small-Stemmed point tradition is most widespread and is associated with indigenous populations that had long inhabited the region. The Laurentian tradition may represent a migration of peoples from the Great Lakes region where such tool kits are common. The Susquehanna tradition is generally associated with groups that derived from the Middle-Atlantic region. The mixture of these traditions in single sites suggests the coexistence of the three groups and exchange of technologies (Dincauze 1976; Ritchie 1969; Snow 1980; Custer 1984; Bourque 1995). Evidence of religious beliefs from burials becomes more common during this period due to the use of particular practices that includes red ocher and burial goods.

5. *Early Woodland Period (ca. 3,000-1,600 B.P.)*

The Early Woodland is generally associated with a period of population reduction and a clustering of sites in valleys along river courses, but this characterization may be a product of sampling error. An expansion of

spruce and slight decline in oak may have been associated with a cooling trend during the period (Ritchie 1994). Coastal resources, particularly fish and shellfish, take on greater importance, but the most significant development during this period is the transition from simple cultivation to horticulture, and the development of ceramic technology that coincided with an increasingly settled lifeway. The Small-Stemmed and Susquehanna projectile point traditions continue in this period and were joined by the more common Meadowood and Rossville projectile points. The latter is associated with indigenous development, while the former may derive from the western interior (Loparto 1986). The Early Woodland is also known for increasingly complex burial customs that incorporate artworks including gorgets, pottery pipes, copper beads as well as red ocher (Ritchie 1965; Ritchie and Funk 1973; Spence and Fox 1986). These goods imply a rich belief in the afterworld.

6. *Middle Woodland Period (ca. 1,600-1,000 B.P.)*

The general lifeway established during the Early Woodland continues in the Middle with a subsistence and settlement focus on marine and riverine environments. Living sites by this time were semi-permanent or year-round habitations, where surpluses of cultivated foods began to be preserved in storage pits (Donta et al 2002; Snow 1980). Ceramic use expanded and came to include the use of decoration, thought in some cases to signify ethnic identity. The major technological innovation of the period was that of the bow and arrow that ushered in a new repertoire of small projectile points.

7. *Late Woodland Period (ca. 1,000-450 B.P.)*

By the Late Woodland Period Native populations are living in settled communities, some of which were occupied throughout the year. Some seasonal movement continued to occur, particularly for the exploitation of migratory species. In addition, small groups may have traveled varying distances for the purpose of hunting as well as gathering of plant foods. While wild food resources remained a large component of the diet, cultivated species came to be produced in fields cleared specifically for that purpose. The development of regional home bases by this time also led to the formation of ethnic diversity reflected in the growth of linguistic and cultural traditions unique to individual groups. The Boston Harbor area came to be occupied by the Massachusetts-speakers, while southeastern Massachusetts was home to the Wampanoag (Simmons 1986; Goddard and Bragdon 1988). The Nipmuc and Pawtucket (or Pennacook) were present to the north and west of the Massachusetts, and to the west and south were the Narragansett and Pequot. Together these groups became known as the Eastern Algonquians.

8. *Contact Period*

The Contact Period commenced with the arrival of Europeans on the coast. Basque fishermen were among the first to arrive as early as the sixteenth century. These were followed by explorers such as Champlain in 1605 (Champlain 1907) and later by groups with the express purpose of settlement and exploitation of New World resources. Thus, the actual period of contact along the coast lasted for nearly a century. The period closes with the establishment of permanent settlements. For the Native American populations, this was a period of tremen-

dous change and transition. European-borne diseases for which the Natives had no immunity, may have killed as much as ninety percent of New England populations (Spiess and Spiess 1987; Carlson et al. 1992). This tremendous loss in population had particularly negative effects on the ability of remaining community members to carry on long established traditions (Johnson 1997). This effort was made more difficult by the prejudicial European attitudes of Native peoples as uncivilized, leading to restricted use of hunting grounds, enforced Christianization (Cogley 1999) and forced removal from traditionally occupied lands.

B. Native American Archaeological Sites Around the Project Area

Much of the landscape in the vicinity of the Loring-Greenough property has been severely impacted by urban development. Nevertheless, evidence of Native American occupation has been found at a number of localities in the area. Isolated finds and collection sites dominate the record here. The greatest concentration of finds is from the Arnold Arboretum, due south of the project area. Nine separate locations disturbed by garden cultivation have provided non-diagnostic and diagnostic projectile points including Neville-like, Archaic Notched, Small Stemmed, Orient Fishtail, Meadowwood, Atlantic, Foxcreek lanceolate, Susquehanna-like and small triangle. A small collection was made in Franklin Park to the east of the project area. To the north is a historically documented fish weir on what was once Stoney Brook in Jackson Square. Finds to the northwest include an isolated ground stone tool on the shore of Jamaica Pond and additional material found further north on the bank of Muddy River. Clear evidence of Native occupation in the

region, thus spans from the early Archaic through the contact period. No finds have been made in the immediate vicinity of the Loring-Greenough property.

C. Historic Development of Jamaica Plain

Jamaica Plain was originally part of West Roxbury, founded in 1851 from its parent town of Roxbury that was established in 1630. Fertile fields cleared by Native Americans for cultivation were found by the first settlers and this agricultural tradition characterized the area throughout the eighteenth century. Among the early farms were the Polley Farm that included the present project area and the Bussey Farm that later became the Arnold Arboretum. Other farms were located in the valley formed by Stoney Brook. Much of early Boston's fruit and produce was grown in this area (Pollan et. al. 1983). Close ties to Boston were maintained by the fact that the two major thoroughfares that extended west of Boston, Washington and Centre streets, passed through western Roxbury. A school was established at what was to become Eliot Square in 1689 and this was followed by the establishment of a second parish in the western portion of the town.

The rural character of the area encouraged the establishment of large estates by wealthy Bostonians in the mid and later eighteenth centuries. The Loring-Greenough house is the last remaining example of these (Fig. III-1). During the later eighteenth and early nineteenth centuries settlement expanded from Boston following the major thoroughfares of Washington and Centre Streets. It was not until the mid nineteenth century that cross streets began to be laid out to accommodate the growing population. The Jamaica Plain Aqueduct Company was formed in 1795 to

construct a water supply between Jamaica Pond and Fort Hill. This remained in operation until 1845 when pipes were extended to Lake Cochituate. Few large-scale industries operated in the area until the arrival of the railroad in 1834 that improved transportation into Boston and to points south and west. Major industrial growth that included tanneries and breweries followed in the area of Stoney Brook between Roxbury Crossing and Forest Hills. Accompanying the industry was an influx of predominantly Irish and German workers that stimulated a building boom on land created from the subdivision of former farms and estates.

The western portion of Roxbury split off to form the town of West Roxbury in 1851 and the area of Jamaica Plain was included in the new town. Eliot Square formed the center of the town and a town hall was con-

structed immediately south of the Loring-Greenough house in 1868. Many of the town's residents worked locally, but an increasing number commuted into Boston. This trend toward a commuter community was strengthened by the arrival of street cars in the 1870s. Annexation of West Roxbury to Boston in 1873 placed the area within a larger metropolitan context that became a center of population growth during the late nineteenth and early twentieth centuries. This growth was supported by significant industrial expansion that included carriage factories, rubber mills, and additional breweries.

Amid this growth and industry was a prevailing concern for green space by some of the more wealthy residents. An agricultural school and later the Arnold Arboretum was created in 1842 and this was followed by the extensive Forest Hills Cemetery in

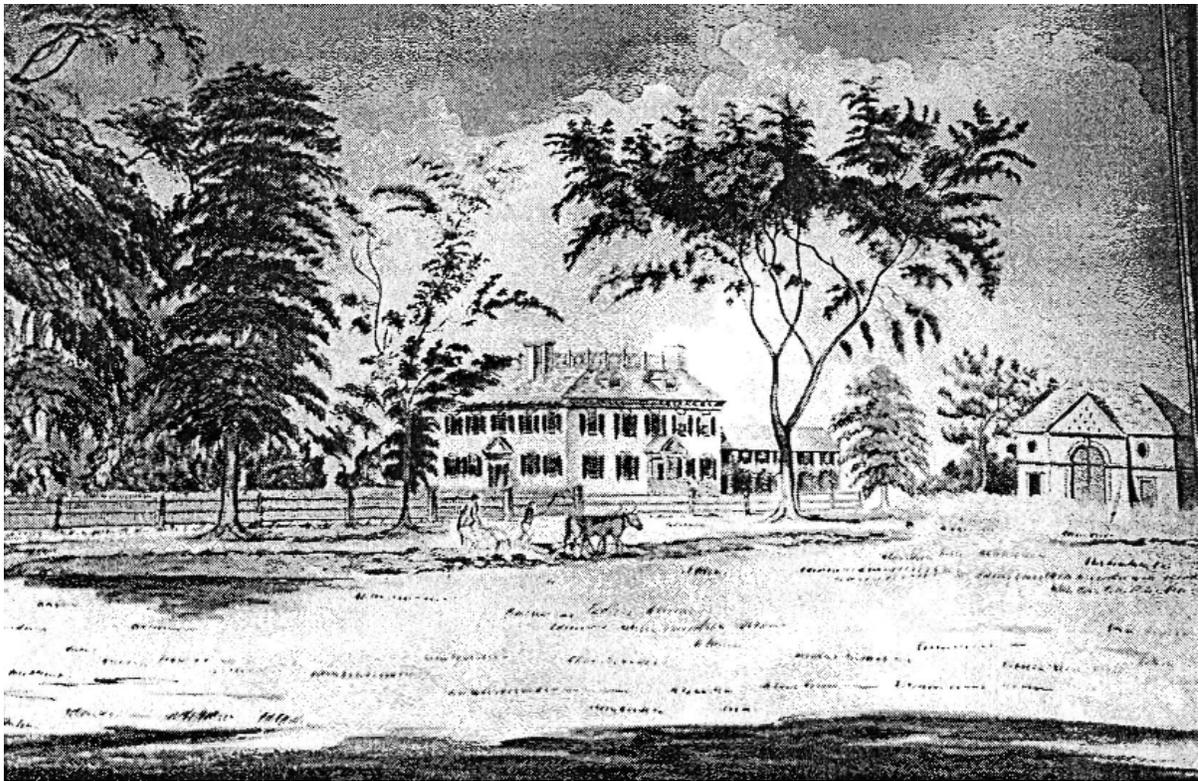


Figure III-1: Watercolor view of the Loring-Greenough House ca. 1815-1827 (Detwiller 1998).

1848. In 1876, land began to be set aside for one of the largest urban park systems designed by Frederick Law Olmstead. Scenic landscapes, drives and bodies of water were included in what was to become known as the Emerald Necklace that was completed in the 1890s. Over the course of the twentieth century much of the area's industry has been replaced by institutional establishments associated with schools and hospitals, while small businesses have grown to service what has become a large residential area.

D. Loring-Greenough House History

The present Loring Greenough property was originally part of a 288-acre tract of land in what was then Roxbury granted to Joshua Hewes in 1639. The parcel was recorded as lying along the Country Road to Dedham, today known as Centre and South Streets. John Polley purchased a 16-acre parcel from Hewes in 1654 that later became known as the Polley Farm. By 1663 South Street was described as "that highway leading out of Dedham by John Polley's home lot" (Drake 1905:438). The farm was enlarged from 16 to 60 acres during the tenure of Polley's heirs, John Walley and finally Joshua Cheever who purchased the property in 1745.

1. Loring Occupation 1752-1775

Joshua Loring, the son of Joshua and Hannah Loring of Roxbury, followed in his father's footsteps as a tanner, but took to the sea as the commander of a privateer against the French in 1744 (Detwiller 1998:4). In 1752, Loring, by then a Commodore, purchased the old Polley Farm of 60-acres in Jamaica Plain from the heirs of Joshua Cheever. That same year, Loring moved his wife and three children to

the 60-acre farm in the center of the Jamaica Plain community along Dedham Road. During the French and Indian Wars, Joshua Loring was an officer in the Royal Navy, eventually earning the title "Commodore of the Lakes" for his campaigns against the French on Lakes George, Champlain, and Ontario. In the British attempt to capture Quebec in 1759-1760, Loring was severely wounded, thus ending his naval career. Thereafter, he retired to his country estate in Jamaica Plain. In 1760, Loring sold the original Polley farmhouse to the First Church, which moved the structure to the west side of South Street. Loring then constructed the present mansion on the site of the old farmhouse.

Joshua lived the life of a country gentleman for the next fourteen years, living off his pension from the British government as well as private transactions. Loring also owned 23-acres of woodland in Roxbury, 5-acres of salt meadow near Boston Neck, and a small estate near Boston Common. Loring and his family were well respected within the community until he accepted an appointment to the Governor's Council by writ of mandamus from Governor Thomas Gage in 1774. Such appointments were traditionally filled by local election. The change in procedure and acceptance by Loring angered the local community, resulting in mobbing and mistreatment of him and his family. In August of 1774, Loring left his estate to seek refuge at either their small estate or their daughter's house in Boston. According to Mary Loring's deposition, they were "compelled to fly for refuge to Boston, and put [themselves] under the protection of the King's troops, from which time until the evacuation of the place [they] were confined to the town" (Boyd 1959). After a stay of nearly eighteen months, the family was evacuated to

England with General Howe on March 17, 1776. Joshua Loring died in England in 1781, and two years later his widow, Mary Curtis, made a claim of indemnity describing the estate as containing “a large well-built house, out houses, coach house, and stables with sixty acres of land.”

2. *Revolutionary Period 1775-1784*

On May 13, 1775, town selectmen were instructed to “take care of the estates of the gentlemen who have left them and gone to Boston” (Boyd 1959). Private Samuel Hawes of Wrentham wrote in his diary on May 30, “Captain Pond’s Company moved into Commo. Loring’s house.” The property was officially seized by Colonial troops in April 1775, and between June 3 and June 17, became the headquarters for General Nathaniel Greene’s three Rhode Island Regiments during the siege of Boston.

After the Battle of Bunker Hill (June 17, 1775), several rooms and outbuildings on the Loring property were commissioned as public stores for the Massachusetts Army stationed in Roxbury. In addition, alterations were made to the buildings in order to make it convenient to “bake all the flour into bread sufficient for the whole Massachusetts Army stationed at Roxbury” and to build ovens in the buildings for such a purpose (Boyd 1959).

On June 23, 1775, the Loring House was appointed “a hospital for the camp in Roxbury,” treating wounded soldiers from the Battle of Bunker Hill. The Provincial Congress of Watertown recorded that the house chosen to provide a hospital for the camp was that of Joshua Loring. Some of the unfortunate soldiers who died from the Battle of Bunker Hill were buried “just back of the house” where their graves were

discovered by construction activities in 1867 (Drake 1905:415). These may be the same graves reported to be those of small-pox victims located between Everett and Elm Streets. These remains were reinterred in the old Walter Street burial ground that is now part of the Arnold Arboretum in 1867 (Anderson et. al. 1956).

Following the Siege of Boston, the Loring house was leased by the town Selectmen to the Hon. William Phillips, who later became Governor Phillips. In 1779, “In accordance with the act of the General Court of April 30, 1779, to confiscate the estates of ‘notorious conspirators,’ Loring’s large mansion house, convenient out-houses, [and] gardens planted with fruit trees” were officially confiscated by the Provincial Legislature’s Committee on Absentee Estates. Ownership of the property reverted to the state, resulting in its sale at auction to Isaac Sears. In 1783, the property was transferred to Pascal Smith who, the next year, sold it to Anne Hough Doane, a wealthy widow.

3. *Greenough Occupation: 1784-1924*

David Stoddard Greenough A prominent Boston lawyer and Anne Doane were married the same year that she purchased the old Loring estate. In addition to his law practice, Greenough was one of the “Sons of Liberty” and served on the Committee of Safety under George Washington. Although Anne Doane died in 1802, the estate remained in the Greenough family for another four generations.

It was during the nineteenth century tenure of the Greenoughs that major changes were made to the property. The Carriage House ell was added to the main house in 1811, dated by an inscription on the timber fram-

ing for the roof that reads “B. 1811” (Detwiller 1998) Other changes focused on the porches. Noted Boston architect Charles Bulfinch is attributed with designing the west doorway porch, but more likely designed the Federal Period north entry portico and doorway with sidelights. The original north entry doorway and pediment was, at some time, relocated to the house’s west side.

The death of David Stoddard Greenough, Esquire, in 1826 may have led to additional improvements throughout the main house and possibly other modifications elsewhere by David S. Greenough, Jr. Examples of such changes include the six-over-six Federal Period window sashes and the design of the North portico and doorway. After the death of David S. Greenough, Jr. in 1830, subdivision of the property by David S. Greenough III and other heirs began in order to distribute the inheritance. In 1838, the heirs subdivided and developed a large part of the acreage into house lots, including the area known as Sumner Hill (Detwiller 1998).

Further improvements made to the old mansion may have been prompted by the marriage of David S. Greenough III to Anna Parkman in 1843. The west side porch with Ionic detailing that survived into the twentieth century was likely built between the 1840’s and 1860’s. During the late 1840’s, as the family grew with the birth of David Greenough IV, the estate was divided further by the extensions of Roanoke Avenue and Elm Street. In 1853, Sumner and Greenough Avenues further reduced the size of the property (Figs. III-2 and III-3). Additional changes occurred when the family of David S. Greenough IV, who had been living in another house on Greenough land nearby, moved into the Loring-

Greenough House in 1907. Changes at this time were primarily internal, consisting of installation of central heating and the addition of a bathroom. In 1924, the death of David Greenough IV led to the sale of the house and two acres by his son, David Greenough V to a group of local businessmen to be demolished for development (Detwiller 1998).

4. Jamaica Plain Tuesday Club Occupation: 1926-present

Although the Loring-Greenough property had been acquired for investment purposes, members of the Tuesday Club initiated plans for the purchase of the house in late June of 1924. Preservation of the house and grounds was a primary goal since the house was considered “a rare specimen of Colonial architecture” (Anderson et. al. 1956). The property was finally purchased in 1926 and has served as the headquarters for the Tuesday Club ever since. A stipulation of the purchase agreement required maintenance and restoration of the house. The need to raise funds for such repairs prompted the transformation of the second floor of the carriage house in May of 1925 into a tearoom that was open to the public. This space also served as an antique shop to provide additional income. In 1937 the house and grounds were formally documented by the Historic American Buildings Survey (HABS).

Improvements made to the property by the Tuesday Club include the reconstruction of the fence around the property, maintenance of plantings in garden beds and occasional replacement of trees. A program of structural and roofing repairs was initiated in the 1970’s and continued into the 1980’s under the guidance of the Society for the Preservation of New England Antiquities (SPNEA).

PART
of the
MANSION HOUSE ESTATE

JAMAICA PLAIN

belonging to

W. S. Greenough Esq.

ROXBURY Aug^r 16th 1853. Wm. A. Garbutt. Sur^r

SCALE 100 feet = 1 inch.

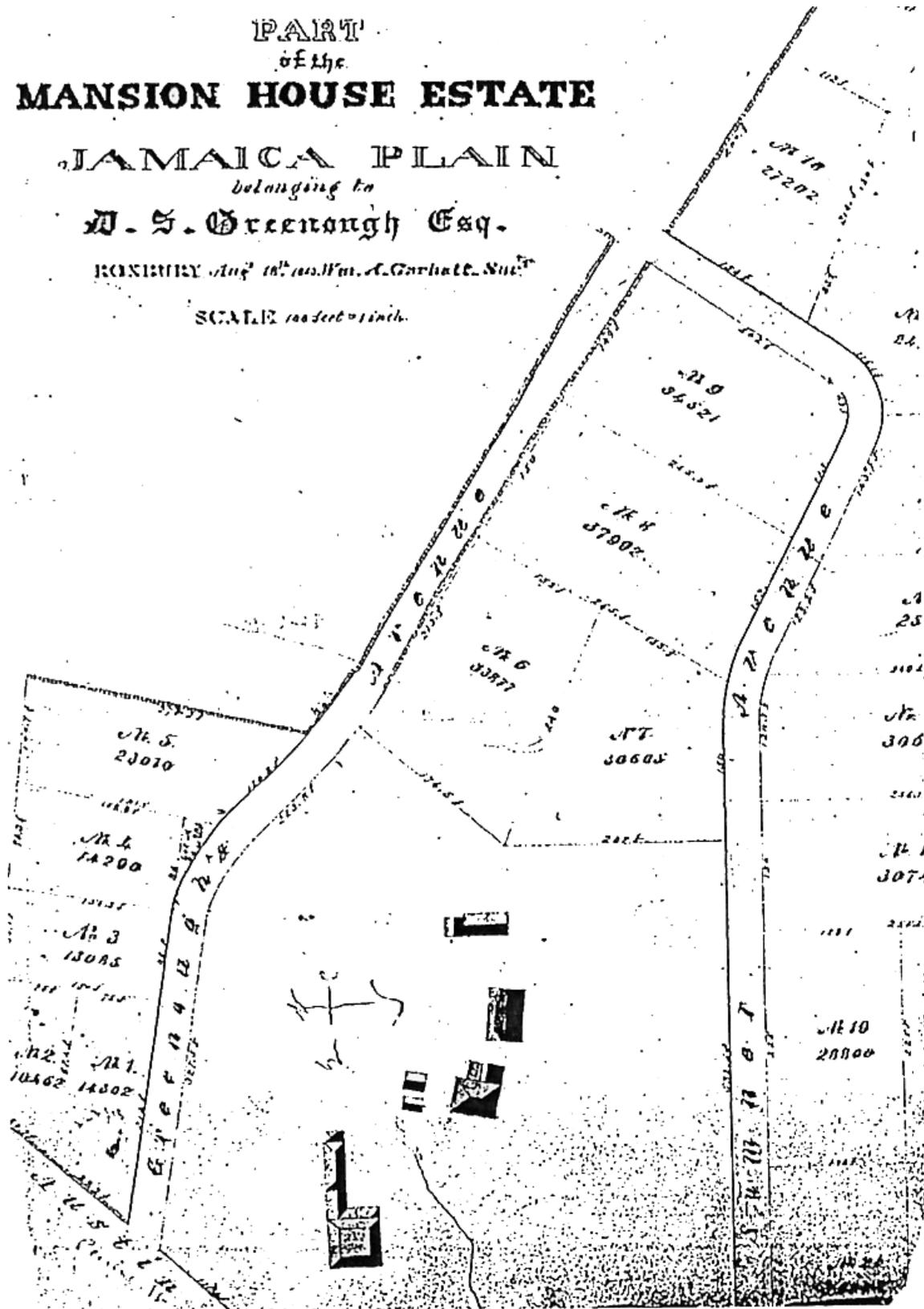


Figure III-2: Plan of Loring-Greenough property in 1853 (Norfolk Registry of Deeds) (Detwiler 1998).



Figure III-3: The Loring-Greenough property as depicted by Hopkins Insurance Co. in 1874 (Detwiler 1998).

E. Archaeological Potential of the Loring-Greenough House Property

The Loring-Greenough property is listed on the National and State registers of Historic Places and has been nominated for local landmark status. The property consists of nearly two acres in the historic center of Jamaica Plain, adjacent to two National Register Historic Neighborhoods and close to the Arnold Arboretum and Jamaica Pond, part of Boston's Emerald Necklace.

No evidence of Native American occupation of the property was found prior to the North Lawn investigation. The site's location on well-drained upland not far from streams and wetlands, however, suggested the potential for such presence. Nine Native sites spanning in time between 8000 and 400 B.P. have been identified in the Arnold Arboretum only 500 m southwest of the property. Additionally, extensive wetlands associated with Muddy River (area of Jamaica Pond) lie approximately 600 m to the northwest. Even partially disturbed

Native resources in this area may retain research significance.

The Loring-Greenough property clearly possesses high potential for historic archaeological resources. The yard surrounding the house is likely to contain remains that could increase our understanding of 1) a seventeenth to early eighteenth century farmstead (Polley Farm), 2) an eighteenth-century country estate (Loring family), 3) Revolutionary War hospitals, commissaries, bakeries, and arsenals, and 4) late eighteenth and nineteenth-century domestic life and farming practices (Greenough family). In addition to its extant structures, the parcel may retain evidence of the 1807 coach house, (on the site of the present tennis court), the 1807 mill house, the 1796 barn, and other early out buildings. Given the documented presence of eighteenth century gardens, the property may also retain data important to early gardening practices and design.

IV. PREVIOUS INVESTIGATIONS

Initial archaeological investigations were conducted on the property during the summer and fall of 1999 (Fig. IV-1). A long-term management plan developed by the JPTC called for several improvements that had the potential to negatively impact buried cultural resources. These included 1) installation of a walkway from the south entrance to the gate on the western edge of the property, 2) replacement of the west entrance porch and addition of porch stairs, 3) the replacement of timber joists in the south carriage house wall, 4) the replacement of the stone foundation supporting the east carriage house wall, and 5) the grading of the area along the north carriage house façade.

A. Proposed South Entrance Walkway

The area of the proposed walkway was tested with a series of ten shovel test pits and two excavation units to identify earlier walks that may have been in this area and original footings for the south porch. A deposit of A-horizon fill was found to overlie a 20 cm-thick walkway defined by yellow-brown silty sand oriented in an east-west direction. The walk lay directly on the surface of a buried A-horizon.

B. Proposed West Entrance Porch and Stairs

The west entrance was tested with two excavation units located where proposed footers were to be constructed for porch support. A single shovel test was also placed between these immediately below the porch. Revealed here were two sets of porch footings, one from the 1826 porch and another from the 1850 porch.

C. Carriage House South Wall Joists

Four excavation units were used to test this area. Two were situated around a stone joist foundation, while the other two were trenches that stretched from the exterior to interior of the structure in the middle of both entry ways. Both units around the joist stones revealed builders trenches for the stones and sand bedding, presumably associated with use of the structure. In the trenches were various layers of fill over a brick walk at 60 cmbs. The walk predated the 1811 carriage house. Below this was a trash deposit with eighteenth century artifacts.

D. Carriage House East Wall Foundation

The south portion of the east wall foundation was tested with three trenches. Two of these were adjacent to the interior and exterior foundation, while the third extended eastward from the outside wall. These units revealed various layers of disturbed fill, builders trenches associated with the carriage house construction and trash deposits dating to the eighteenth century and extending to a depth of 85 cmbs to 1 mbs. A layer of cobbles observed at 85 cmbs may represent an early walk or floor.

E. Carriage House North Wall

A series of three shovel tests were placed along the exterior of the north wall of the carriage house and kitchen. These revealed a deep buried A-horizon and little evidence of disturbance.

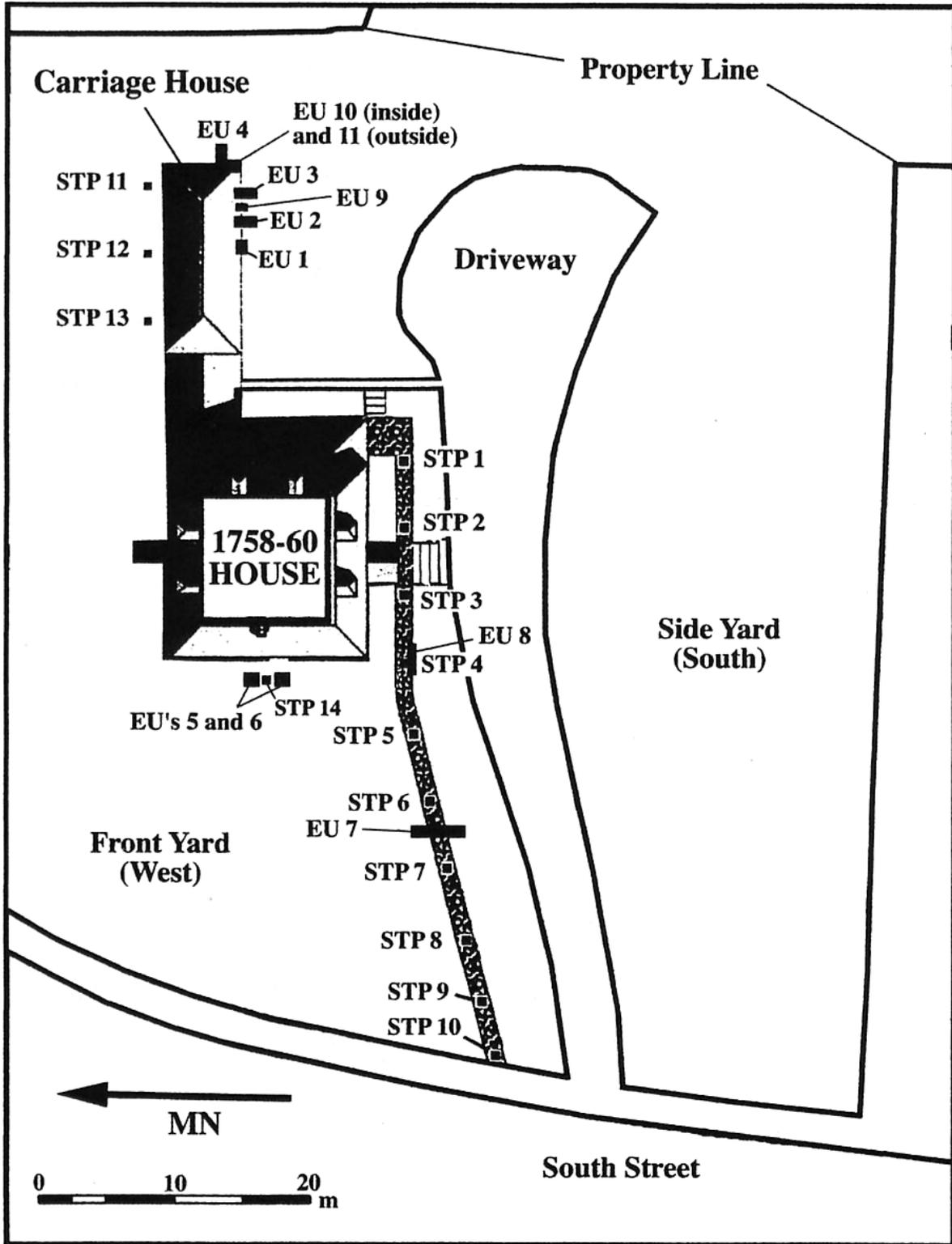


Figure IV-1: Archaeological testing locations from the 1999 site examination.

F. Summary

The previous investigations succeeded in identifying archaeological deposits consisting of buried yard surfaces and intact architectural and other features associated with the eighteenth- and nineteenth-century occupation of the property. In addition, a significant degree of landscape change is evidenced by as much as a meter of mixed fill at the east end of the carriage house, suggesting that the yard was originally much lower here (unless the disturbed deposits were in an unidentified cellar feature). Landscaping fill was found to have been placed over much of the ground surface on the west and south sides of the house.

V. ARCHAEOLOGICAL SITE EXAMINATION

A. Research Design

The Loring-Greenough House property, consisting of the eighteenth-century mansion, nineteenth century carriage house and gardens is the only surviving example of a colonial country estate in the Jamaica Plain neighborhood of Boston. The house is a Massachusetts Historic Landmark because of its historical connections to the American Revolution and its exemplification of Colonial architecture. This status implies that any subsurface cultural remains are considered significant due to their potential to contribute data to the prehistoric and historic interpretation of the property. The primary goal of the site examination was to determine whether extant garden features were historically significant and therefore worthy of inclusion in proposed garden restoration efforts.

By the 18th century, gardens had taken on a dual function that combined utilitarian needs with an increasingly popular colonial aesthetic that favored the creation of visually appealing landscapes. Over time the arrangement of plantings within the utilitarian vegetable garden were combined with fruit trees and shrubs to create spaces that were not only functional, but were also aesthetically pleasing. Thus, the concept of the garden was transformed from a place of work to a place of recreation and beauty. Because it was the wealthy who maintained the means of creating and maintaining such spaces, gardens became synonymous with the image of the colonial gentleman and came to serve, in addition to the estate house, as a symbol of one's wealth and status (Yentsch 1996). The 1779 description of Joshua Loring's property includes mention of gardens and fruit trees. Although Loring was an individual of high repute with a distinguished military career, it is not known if he conformed to popular upper class taste by maintaining a formal garden. The popularity of the garden with its

romantic associations and its connection to a purer perception of the past (Beaudry 1996:3) extended the appreciation of gardens through the nineteenth century, implying that the Greenough family, too, might have maintained a formal garden space on the property similar to that known to have been present at the Longfellow House in Cambridge (Pendery 2002, 2003). The continued popularity of decorative gardens in the twentieth century (Binzen and Kelley 2000, Binzen et. al. 2002) suggests that the geometrically arranged garden depicted on the 1937 HABS plan, in fact, may have been constructed more recently.

Archaeology has become a valuable tool in the identification and eventual restoration of early gardens (Kelso, 1990; Leone 1984, 1988; Yentsch 1994). A multidisciplinary approach to landscape design that combines non-destructive remote sensing techniques along with documentary research to generate both emic and etic perspectives, careful excavation and soil analysis and detailed mapping of extant vegetation is now considered standard for such projects (Metheny et. al. 1999; Yentsch 1994). The investigation of the Loring-Greenough House North Yard is limited in scope and, therefore, is reliant upon careful observation of stratigraphic sequences and features. The archaeological identification of garden related features is contingent upon the presence of specific indicators. These can include differences in soil type, texture and elevation across the site, borders that are indicated by soil differences, the presence of walkways or edging that may appear as linear arrangements of post holes, bricks or other border materials as well as indications of specific plant locations. Plant locations are generally defined by depressions or holes that have been backfilled with soil that can be differentiated from surrounding matrix due to obvious or subtle alterations in soil color, texture and composition. Occasionally artifacts are incorporated into the back fill of planting holes that also aid in identification and dating.

B. Scope of Work

A major component of the landscape restoration is the reconstruction of garden plantings that include trees, shrubs and prepared beds. The most comprehensive depiction of garden plantings was made in 1937 when the property was documented by the HABS (see Fig. 2). The north yard of the house was shown to contain a series of isolated garden plots that were geometrically arranged within four footpaths or walks that frame much of the yard area. Only a few of these features have been maintained to the present. Of particular interest for garden reconstruction efforts is the age of garden features depicted in the 1937 plan. Landscaping by the Tuesday Club is known to have occurred after 1926, but the extent of this work as depicted on the 1937 plan is unknown. In addition, it is unclear what, if any effort was made at that time to maintain garden features dating to the nineteenth or even eighteenth centuries. A program of limited archaeological testing was requested by the Tuesday Club to examine three separate garden beds in an attempt to discern their borders and approximate ages as well as internal characteristics that would benefit reconstruction efforts. Due to funding limitations, the present garden restoration plan does not call for a detailed recreation of an historic garden, but rather the establishment of beds and plantings that are historically appropriate and that do not require a high level of maintenance (Shari Page Berg, personal communication). Thus, the proposed archaeological investigation in the garden is limited in scope and a more accurate reconstruction in conjunction with detailed archaeological investigations is planned for the future.

C. Field Methodology

Three extant planting beds were the focus of archaeological investigations in the north yard. Each of these is discussed separately below.

1. *Parallel Planting Beds and Walk*

A pair of parallel planting beds lies on either side of a grass-covered walkway that extends from the main house northward to Greenough Street (Fig. V-1). The walkway is believed to be associated with the eighteenth century occupation of the property, leaving a question as to the age of the beds on its borders. Testing of these features was carried out by excavation of a series of four contiguous 1 m x 1 m units placed across the beds and walk (Fig. V-2). The units were located at the south end of the beds closest to the house to provide both plan and profile views that allowed assessment of the relationship between the walk and beds as well as temporal and spatial characteristics of the beds themselves. Assisting this analysis were observations of bed location, size and depth, as well as soil composition, texture and the nature of planting features. Since the original alignment of the walk and beds was also in question, a .5 m wide trench extending 4 m in length was placed across the northern-portion of the beds and walk. This allowed similarities between the north and south ends of the beds to be observed. This strategy also provided an opportunity to view potential differences in walk construction.

2. *Herb Garden*

A small, raised herb bed is located approximately 5 m north of the junction between



Figure V-1: Photograph of the north entrance walkway and parallel garden beds ca. 1900 (Detwiller 1998).

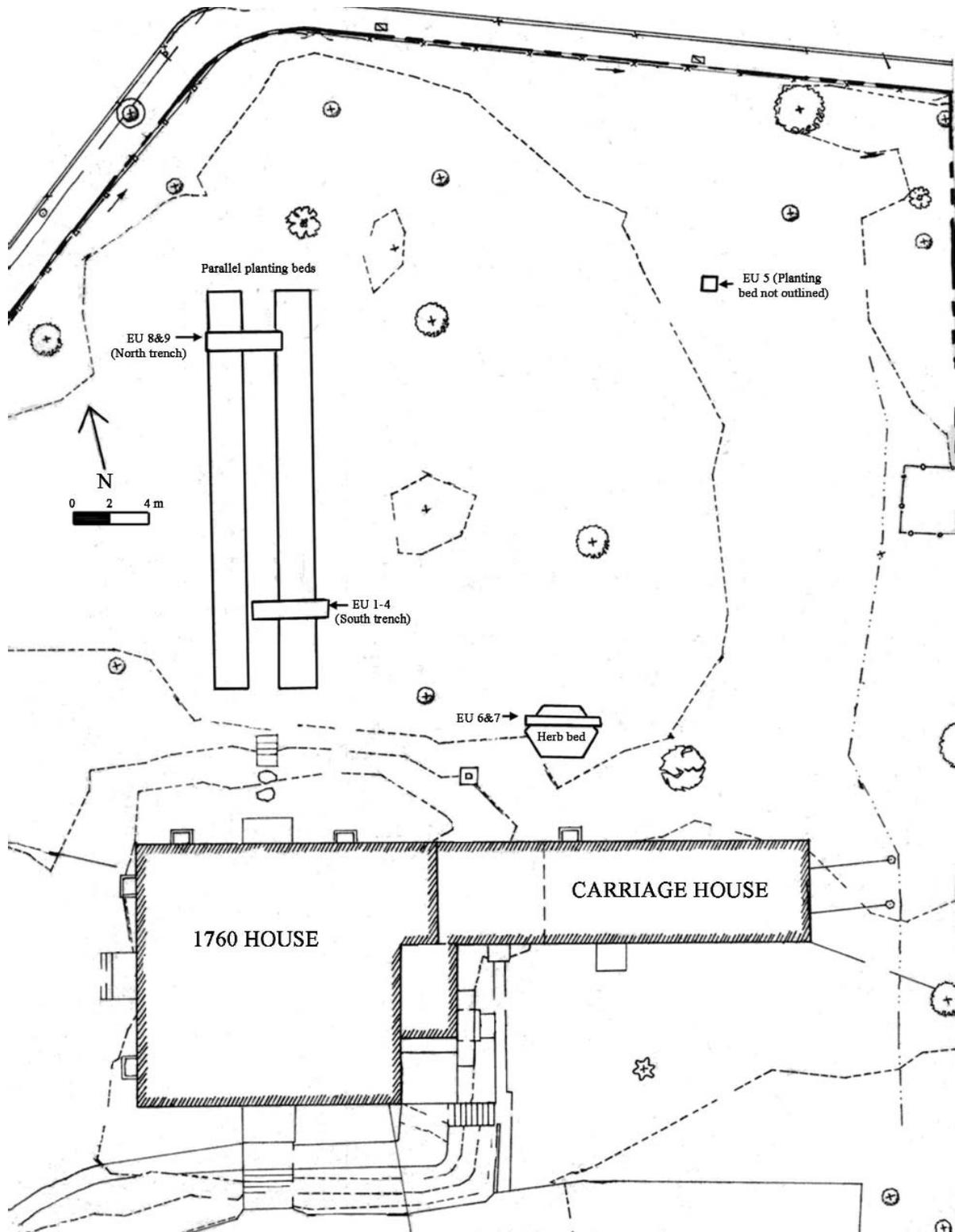


Figure V-2: North Yard site examination unit locations (adapted from Due North Land Surveying property map 2002).

the main house and east ell. This bed is not depicted on the 1937 HABS plan of the property (see Fig. V-2) and therefore may represent a more recent creation. Of particular interest in considering the possible reconstruction of this bed, is whether a similar garden was located in this area prior to the early twentieth century. A series of four 50 cm x 1 m contiguous excavation units were placed across the present herb bed to identify possible changes to the bed's boundaries and to search for evidence of earlier beds at this same location. Although it was stipulated that the 50 cm-wide units could be expanded into 1 m x 1 m units to provide a clearer plan view of planting holes or other features, this was not necessary as evidence of these was not found.

3. *Irregular Planting Bed Adjacent to Greenough Avenue*

An irregularly-shaped planting bed is presently located on the north edge of the property adjacent to the fence bordering Greenough Avenue (see Fig. V-2). This bed is not specifically identifiable on the 1937 HABS plan, and may have been an area planted with shrubs and trees. The present bed lies immediately north of a group of geometrically-shaped beds (no longer in existence) that are clearly depicted on the plan. The area of geometric beds maintains unique potential for a thorough archaeological study of planting bed history on the property and this area, therefore, was not included in the present investigation. Since there are no immediate plans to alter the configuration of the existing irregular bed, this area was tested with a single 1 m x 1 m excavation unit to assess changes to the bed's boundaries as well as its approximate age.

Archaeological excavation proceeded in 10 cm arbitrary levels within stratigraphic layers to natural, sterile subsoil and all soil was screened through 1/4 in mesh hardware

cloth. All cultural materials were collected and placed in labeled self-sealing plastic bags and processed following standard archaeological laboratory procedures. Work was conducted in compliance with Section 27C of Chapter 9 of Massachusetts General Laws and according to the regulations outlined in 950 CMR 70.00.

D. **Site Examination Results**

A total of five 1 m x 1 m units and eight 50 cm x 1 m units were completed during the site examination to investigate the Parallel Beds, Herb Garden and one of the Irregular Beds (Table I). The natural soil profile at the site consists of a dark medium brown medium sandy or clay loam A-horizon overlying an orangy-brown to yellow-brown clay loam with a trace of medium sand. The C-horizon consists of yellow-brown fine silty sand that grades to a coarse sand. No direct evidence of plowing in the form of plow scars or a well-defined plow zone was observed in any of the units.

1. *Parallel Planting Beds*

a. *South End*

Four contiguous 1 m x 1 m units were placed at the south end of the parallel garden beds and were located 12 m north of the house and 3.50 m north of the south end of the beds. These units stretched from beyond the east edge of the east bed (EU 1), westward across the bed (EU 2) and across most of the grass-covered walk between the beds (EU 3 and 4) (see Fig. V-2). All four units were excavated together to provide a plan view of garden bed and walkway borders as well as of potential features.

The A-horizon consisted of two episodes in the east and three in the west. An A₁-horizon was composed of a dark brown medium sandy loam that was little differentiated from the soil within the garden bed.

Table 1. Completed Excavation Units.

<i>Location</i>	<i>No. of Units</i>	<i>Unit Dimensions</i>
N. Yard-Parallel Beds	4 contiguous	1 m x 1 m
N. Yard-Parallel Beds	4 contiguous	50 cm. x 1 m
N. Yard-Herb Garden	4 contiguous	50 cm. x 1 m
N. Yard-Irregular Bed	1 isolated	1 m x 1 m

Artifacts were mixed and ranged from a modern plastic cellophane candy wrapper to nineteenth-century (whiteware, yellow ware, ironstone, redware) and eighteenth-century (porcelain, redware, tin glaze enamel, Nottingham stoneware (1700-1810)) ceramics, bottle glass and architectural refuse including nails and brick fragments (Appendix A).

This horizon overlaid several layers of coal ash and sand used for walkway bedding between the parallel beds (Fig. V-3). The topmost layer of the walkway consisted of 2 cm. of coal ash and clinker. Below this were 4 cm of hard-packed dark medium-brown coarse sandy loam. The next layer consisted of 6-8 cm of dark medium-brown coarse sand and gravel in a loam matrix. This overlay another layer of hard-packed dark medium-brown coarse sandy loam that, in turn, was on top of a thin lens of coarse sand and gravel in a dark medium-brown loam matrix. The only artifacts associated with these lenses were an assortment of burned nails (4 wrought, 11 cut, 6 wire) that derived from the uppermost layer of coal ash.

Below the walkway bedding and below the garden bed was a buried A₂-horizon extending to approximately 35 cm below surface (cmbs) that was slightly more compact than the A₁-horizon above. The surface of this layer was slightly disturbed by digging at the base of the modern planting bed and two well-defined planting holes extended 2-3 cm into the buried A-horizon. Artifacts from the A₂-horizon revealed less mixture and included bone fragments, oyster shell, bottle glass, a glass goblet bowl fragment with cut facets, nails and ceramics consisting of transfer printed whiteware, pearlware, creamware, porcelain, redware, Nottingham stoneware and Astbury ware (1725-1750). Below 4-5 cm of mottled transition that contained 4 secondary argel-lite flakes, was an orangy-brown clay loam B-horizon that extended below 65 cmbs. The surface of this layer revealed a number of small, round, oval and irregularly-shaped features filled with dark or medium brown loam (Fig. V-4). Excavation of the loamy soil from these revealed them to extend only 4-6 cm in depth. None contained artifacts with the exception of a small oxidized

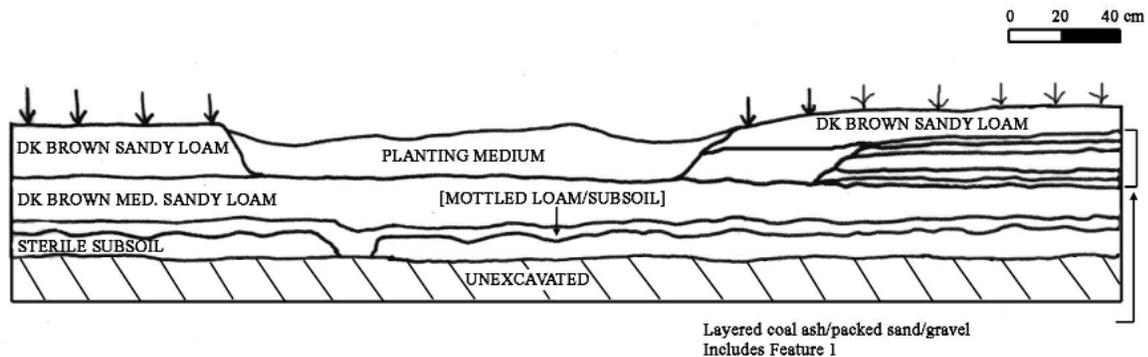


Figure V-3: South wall profile of Units 1-4 at the south end of the Parallel Beds .

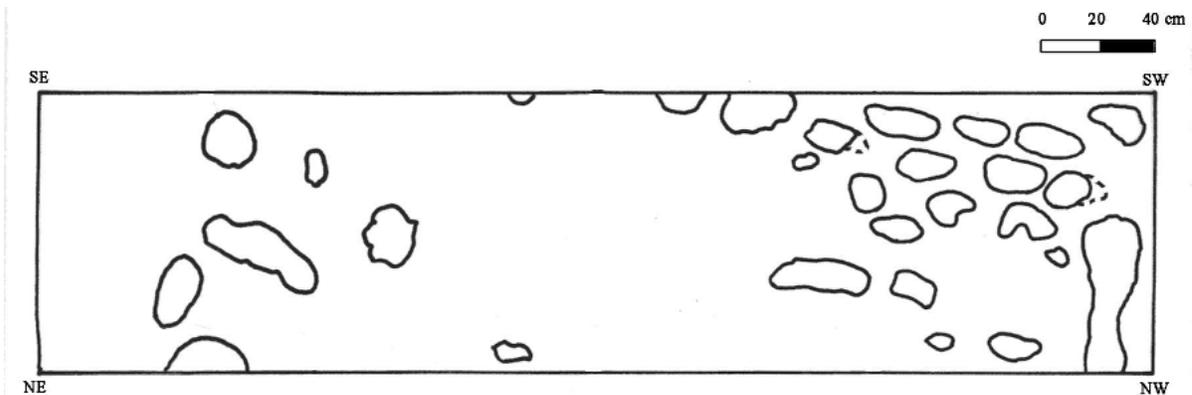


Figure V-4: Plan of units 1-4 at 46 cmbs showing planting holes in the B-horizon surface.

iron fragment. The quantity of cultural material in the B-horizon, in general, dropped off considerably with none found below 50 cmbs. Present in the upper B-horizon were fragments of window glass, redware, a nail and 1 argellite secondary flake.

b. North End

A 50 cm-wide, 4 m-long trench was placed toward the north end of the parallel beds (28 m north of the house). The trench was divided into an east (EU 8) and west (EU 9) half and spanned from the west edge of the east bed, across the center median and across the west bed. The soil profile here closely resembled that at the south end. Two dark brown, medium sandy loam A-horizon fill soils were present at the top, the lower of which contained some gravel. The upper A₁ contained a cuprous button and

fragmented window glass and ceramics that included transfer printed whiteware, redware, porcelain pearlware, recent bottle glass and brick and nail fragments. The lower A₂ contained only three fragments of a badly burned whiteware bowl. Five layers of walkway fill were present in this horizon and consisted of coal ash over a thin sandy loam that overlay a thick deposit of coarse sand and gravel. Below this was hard packed sandy loam over a medium-brown coarse sand and gravel that sat directly on the surface of the underlying buried A-horizon (Fig. V-5). The dark medium-brown clay loam that made up the buried A-horizon was encountered approximately 35 cmbs and contained the greatest quantity of eighteenth- and early nineteenth-century cultural material. Included here were fragments of German stoneware, Chinese export porcelain, tinglazed ware,

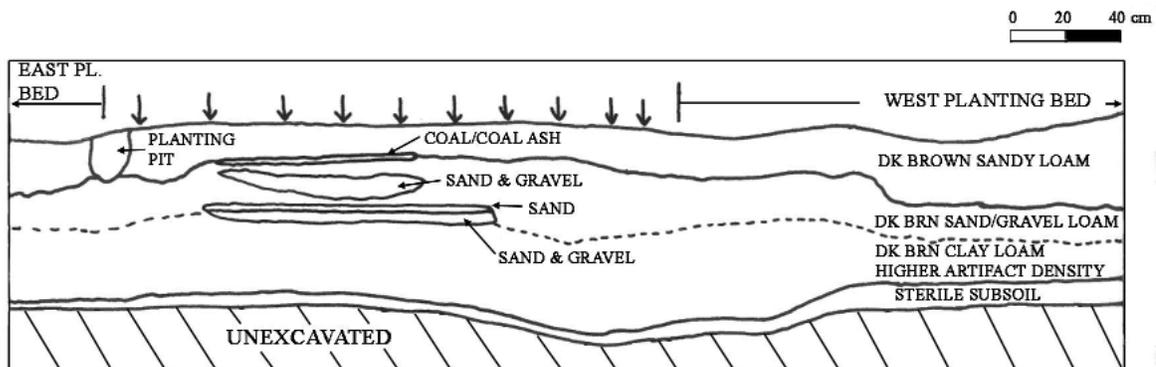


Figure V-5: South wall profile of Units 5 and 6 at the north end of the Parallel Beds .

creamware, pearlware, redware, transfer printed whiteware, wine bottle glass, window glass, brick and cut and wrought nails. The B-horizon consisted of a yellow brown silty clay loam and only the upper 3 to 4 cm contained cultural material, all of which is firmly associated with the eighteenth century. This included fragments of a white salt glazed stoneware plate (1740-1775), regular and deeper yellow creamware (1762-1780), a possible redware planting pot, window glass and nails. Three clay tobacco pipe stems and an oyster shell were also present.

2. Irregular Planting Bed adjacent to Greenough Avenue

The Irregular Planting Bed that lies adjacent to Greenough Avenue was tested with a single 1 m x 1 m unit (EU 5) that was located on the bed's south border (see Fig. V-2). The northwest half of the unit lay within the bed, while its southeast half extended beyond the bed boundary. The unit was oriented cardinally, 12 m south of the north property fence line and 17.30 m west of the east fence line. The uppermost A₁-horizon consisted of a dark brown fine sandy loam that was present both within and outside of the bed. This layer was 20 cm thick within the bed, and slightly thin-

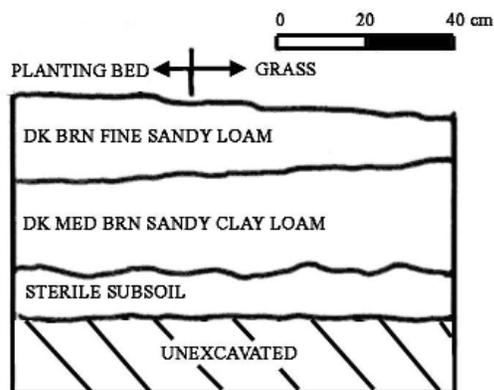


Figure V-6: East wall profile of Unit 5 in the Irregular Planting Bed.

ner in the yard (Fig. V-6). Cultural material from this layer included modern bottle glass and tarpaper as well as a few small fragments of wine bottle glass, redware, pearlware, whiteware ceramics and cut nails. A sudden increase in gravel marked the lower A₂-horizon that consisted of a dark medium-brown sandy clay loam. This layer extended to a depth of approximately 40 cmbs and contained a similar assortment of fragmented artifacts including coal slag and calcined bone fragments. The surface of the underlying B-horizon was poorly defined and consisted of a yellow-brown medium sandy clay loam with coarse sand and gravel. Artifacts here were similar to those above with bottle glass, brick and mortar fragments, calcined bone and ceramics that included whiteware, yellow ware and ironstone (1842-1930) fragments. A single small, rounded feature was identified in the southwest corner just below the surface of the B-horizon at 45 cmbs. This contained soil similar to the A₂-horizon with a few fragments of redware, calcined bone and a wrought nail. The feature extended to a depth of 70 cmbs.

3. Herb Bed

The herb bed was constructed of 2 in x 6 in planks laid on their sides that created an above-ground border for approximately 10 cm of planting loam. A 50 cm x 2 m trench placed across the north portion of the bed was oriented on an east-west axis 6.60 m north of the house wall. The extreme ends of the trench fell just outside the east and west ends of the bed (see Fig. V-2). The trench was divided into east (EU 6) and west (EU 7) halves. Removal of the herb bed fill revealed gardening-related disturbance of the underlying former ground surface. The present A₁-horizon representing that for the north lawn in general, consisted of a dark brown coarse sandy loam with a

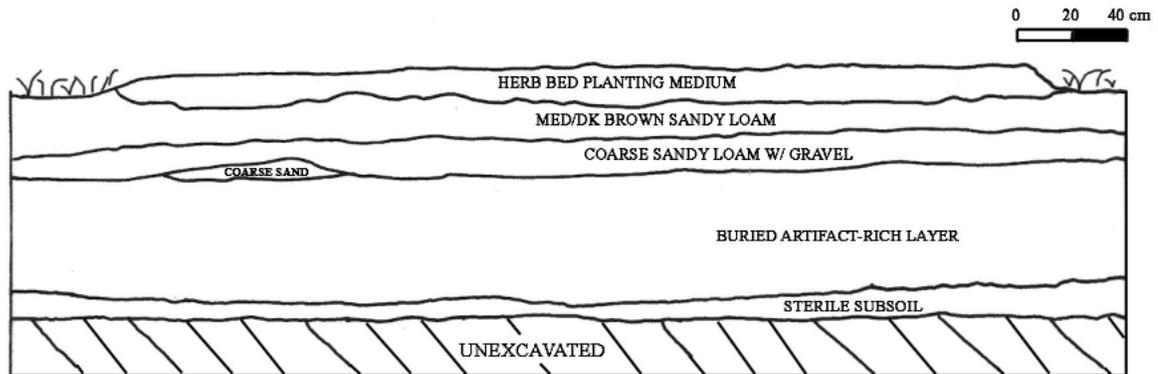


Figure V-7: South wall profile of Units 6 and 7 under the Herb Bed.

considerable amount of waterworn gravel (Fig. V-7). Cultural material from this included recent bottle glass, a plastic wrapper, cut nails, a complete pair of scissors, and a fragment of creamware and Canton porcelain (1800-1830). The A₂-horizon consisted of a 14 cm-thick deposit of medium brown coarse sand and gravel mixed with some dark medium brown loam. This fill layer was deposited directly on the surface of a buried A-horizon. The sand and gravel contained a low density of artifacts from the eighteenth through twentieth centuries some of which likely derived from the overlying fill and from the earlier surface below. The more recent objects include a foil wrapper, wire nail and bottle glass. Coal, cut nails and whiteware and redware are representative of the nineteenth century. Earlier material includes pearlware, creamware, redware and a tobacco pipe stem.

The underlying buried A-horizon was encountered at a depth of 30 cmbs and consisted of a dark brown to dark medium brown sandy loam with charcoal flecks and a high density of cultural material. Highly fragmented ceramics (n=2032) made up the majority of objects and included plain and slip decorated redware (bowls, pans, jars, jug), white salt glazed stoneware (plate and

saucer), German stoneware, Nottingham stoneware (tankard) tin glazed ware, Astbury ware (teapot) (1725-1750), Chinese export porcelain (tea bowls and saucers) including Batavian (tea bowl) (1740-1780), deeper yellow and lighter yellow creamware (plates, bowls), and shell edged pearlware (plates) and mocha decorated pearlware (bowls, pitcher). Pieces of wine bottles and other glassware (n=186), animal bone and shell (n=110), tobacco pipe fragments, architectural debris including brick, nails and window glass (n=162), as well as 1 primary and 3 secondary argelite flakes were also present. Eleven out of a total of nineteen tobacco pipe stems revealed a bore diameter of 5/64ths suggesting a manufacture range between 1710 and 1750 (Hume 1972). The buried A-horizon was 40 cm to 45 cm in thickness and overlay a yellow-brown silty clay loam B-horizon. The surface of the B-horizon was slightly undulating and only a single fragment of window glass derived from this layer.

VI. INTERPRETATIONS AND DISCUSSION

A. Garden Walk and Parallel Beds

The location of garden paths is one of the most common archaeological contributions to garden investigations. Not only the placement, but also changes in location and in construction materials often promote diachronic interpretations of garden development. Major alterations have been found to be closely linked to changes in household composition and familial events.

The walkway located between the parallel beds (Fig. VI-1) was clearly defined by a series of superimposed lenses of bedding. The original walk was demarcated by a medium- brown coarse sand and gravel that was laid down on the original yard surface (buried A-horizon). The presence of a fragment of transfer printed whiteware in the upper portion of the buried A-horizon and whiteware, yellow ware and ironstone in the overlying fill suggests the walk was

first created in the early nineteenth century. Natural erosion of the walk and trampling resulted in the formation of a hard-packed lens of sandy loam over the original sand layer. The walk was redefined by a new, thick layer of coarse sand and gravel, possibly between the 1840s and 1860s, and it may have been at this time that the planting bed borders were added. Fill associated with bed creation abutted the walk, and as before, slowly mixed with the surface of the walk to form a hard-packed sandy loam. The walk was redefined a final time by the spreading of a layer of coal ash down its length. The laying down of this ash layer very likely corresponded with a period of repair to the house since mixed in the coal ash were modern wire nails as well as cut and wrought examples. This assortment that included cut lath nails likely resulted from the burning of construction/demolition debris on site or from the accidental burning of an outbuilding. This latter interpretation is supported by three fragments of a badly burned whiteware bowl, the only

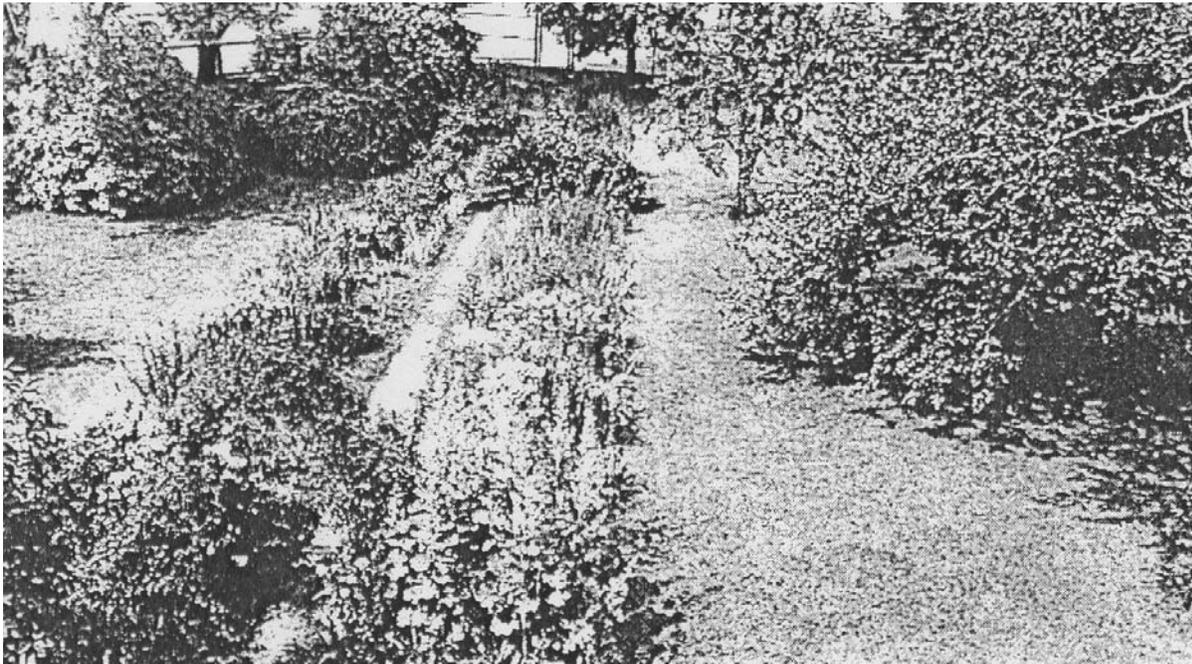


Figure V-1: North walkway as it appeared in 1937. View facing north from the house (HABS) (Detwiller 1998).

items found in association with the walk in the north units.

The laying down of the final ash layer in the very late nineteenth or more likely early twentieth century corresponds with the reestablishment of the parallel garden beds that actually cut into the outer edges of all layers of the walkway (see Fig. V-3). Sometime after 1937 a layer of loam was spread over the walk, possibly to discourage use since by this time the main entrance to the house was on its south side. This action widened the space that had contained the walk by covering over the inner edges of the parallel beds, and in turn narrowed the total width of the beds. The trench at the north end of the beds revealed the original walk width to be approximately one meter. Over time the walk narrowed to approximately 70 cm before its final loam capping (Fig. VI-2).

B. Planting Holes Below Walkway

The shallow depressions identified at the surface of the B-1 horizon at the south end of the parallel beds were clearly defined by their dark brown loamy fill. A distinct uni-

formity in size and shape as well as their stratigraphic location identified these as the bottom portions of small planting holes.

The only object of cultural material found from the fill was a small piece of oxidized iron, possibly a nail fragment. The depressions in the two western units generally follow a NW to SE orientation with a separate cluster in the two eastern units. The location of these well below the garden walkway and below the buried A-horizon suggests they are associated with the eighteenth or even seventeenth century occupation of the property.

C. Irregular Bed

The Irregular Bed revealed a slightly different stratigraphic profile than that observed in the other areas of the site. The A₁-horizon appears to be a twentieth century yard and garden fill that was deposited on top of the A₂-horizon. The A₂-horizon was gravelly and contained a mixture of artifacts. The underlying B-horizon was disturbed and contained a mixed range of artifacts atypical of that layer in other parts of the property. The absence of a well-developed buried A-horizon here and disturbed B-horizon

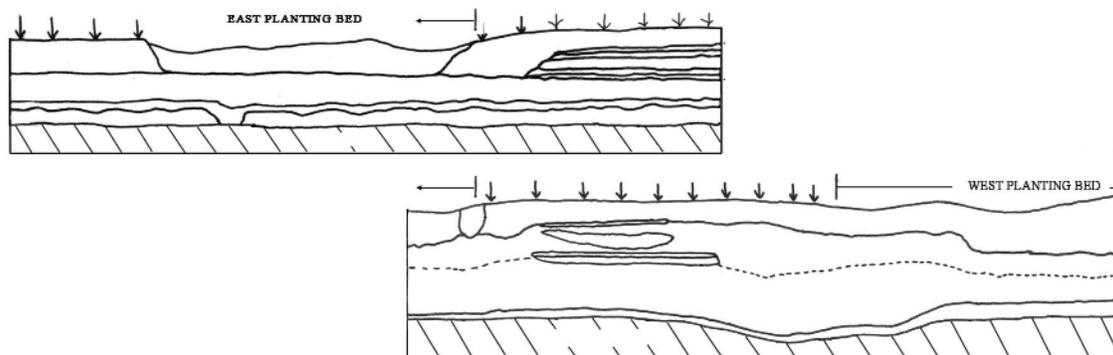


Figure VI-2: Comparison of the north walkway as it appeared in profile at its south end (upper) and north end (lower).

suggests several possible interpretations. This area may be heavily disturbed from intensive gardening activities including tree and shrub planting. Such is suggested by the mixed soils and the presence of burned bone fragments that may have derived from bonemeal used as fertilizer. This area may also have been a borrow pit or may have been the site for a structure that required ground leveling prior to construction. There is no evidence that this was a low-lying area such as for a pond since no organic accumulation is present.

D. Herb Bed

The Herb Bed is clearly of recent, twentieth-century origin given the fact that it was constructed of modern materials and was filled with dark brown planting loam. Correspondence with Katharine Cipolla revealed the bed was, in fact, constructed by Jean Sullivan between 1989 and 1994. Planting activities disturbed the layer of dark loam yard soil that lay below and caused some mixing of the two soils. No further evidence of gardening activities was found in this area, and although planting holes were identified in the surface of the B-horizon at the south end of the parallel beds, no such features were apparent in the B-horizon below the Herb Bed.

Observation of the soil stratigraphy at this locality, however, was extremely beneficial in contributing to the general interpretation of historic yard use. The 40 cm thickness of the Buried A-horizon and the high quantity of artifacts it contained point out that this was an activity area where a certain amount of refuse was allowed to accumulate, but this was also an area of heavy foot traffic revealed by the heavily fragmented condition of the ceramics and glassware. The thickness of the A-horizon here is not

surprising, due to the close proximity to the house and kitchen where refuse was discarded and where organic debris would have contributed to soil formation. It is worth noting that the large number of fragmented tea wares found in this area is indicative of the upper status of the Loring and Greenough families. Sometime in the early nineteenth century a sand and gravel walkway was laid down across this area and remained in use until as least 1937 when a path was formally recorded to be present in this area.

E. Native American Occupation

Excavation in the area of the Parallel Beds and Herb Bed revealed evidence of Native American occupation in the form of chipped stone debitage. Gray argillite secondary flakes were found in the disturbed A-horizon (N=1), the transition between the A- and B- horizons (N=4) and in the upper B-horizon (N=1). In the buried A-horizon under the Herb Bed were 1 primary flake and 3 secondary flakes. The presence of these flakes, whether used as tools themselves or representing the byproducts of stone tool manufacture provides conclusive evidence of Native American presence in the site area. The period of occupation is unknown due to the absence of diagnostic artifacts such as projectile points or dateable features.

Summary

The eighteenth and possibly the seventeenth century occupation of the property is associated with a deep layer of yard loam that lies between 30 cm and 35 cm below the present yard surface. Evidence of gardening for this period is represented by the series of small planting holes identified under the south end of the north walk.

Coarse sand and gravel walkways were laid down on top of the original yard surface to provide formal access to the north entrance (in the area of the Parallel Beds), the west and/or south entrance, and in the north yard parallel to the carriage house (under the Herb Bed). The similarity in sand and gravel composition, in underlying and associated artifacts, and in their stratigraphic location lying on the original yard surface suggests that these were laid down at the same time in the early nineteenth century. These were likely associated with construction of the carriage house in 1811 or with other changes made to the house after 1826. The location of these paths remains the same for approximately one hundred years based on the 1937 HABS plan. The placement of the Herb Bed walk parallel to the 1811 Carriage House suggests that this structure was in place at the time the walk was created, further supporting the early nineteenth century date.

The walks remained in use for a period of time as evidenced by repeated maintenance of the north walk. The fact that the walk under the Herb Bed consists of a single thick layer may indicate that this portion of the walk was little used and, therefore, required little maintenance, while the north walk was heavily used and required new bedding due to erosion by foot traffic and mixing with adjacent loamy soil. The laying down of the walks signaled the general cessation of refuse disposal in the north yard since very little material dating to the last three quarters of the nineteenth century was present in the excavations.

Sometime between the 1840s and 1860s much of the yard was relandscaped with a layer of loam fill. This is represented by the A₂-horizon at the north end of the north

walk and the A₁-horizon at its south end. This soil was not spread as far south as the Herb Bed area, but was placed in the area of the Irregular Beds represented by the A₂ horizon there. The addition of this soil may have levelled the yard and at the same time provided new bedding for the creation of the formal garden and parallel beds. This landscaping corresponded with improvements made to the house that included a possible shift of the formal entrance to the west side of the house, thus transforming the north yard into a more private space.

The garden and walks were maintained through the remainder of the nineteenth century. By the time of the HABS documentation, the geometrically-arranged garden may have been in disrepair as evidenced by the dotted garden outlines on the HABS plan. It is clear from photos taken during the documentation that the portion of the north yard associated with the north walk and the west yard were landscaped with a wide assortment of flowers, shrubs and trees. Maintenance of the gardens and walks may have been considered too great, however, for sometime after 1937, 15 cm to 20 cm of loam fill was spread across much of the yard and specifically over the walkways. The irregular beds along the north border of the property may have been created at this time and the borders of the parallel beds shifted slightly to accommodate the wider space that now covered the north entrance walk. The covering of the walks implies a shift in focus to the west and/or south sides of the house.

VII. RECOMMENDATIONS

The proposed rehabilitation of the North Yard calls for seven changes to the area (Figs. VII-1; VII-2). Each of these is listed below along with comments regarding the potential for subsurface disturbance that each presents.

1) Rehabilitate perennial (parallel) beds with rose arbors (Fig. VII-2:9). Garden beds were found to have been present at this location since the early to mid nineteenth century and were even maintained when the yard was landscaped in the early twentieth century. The planting of shallow-rooted rose bushes in these beds is not likely to have an impact on the well-preserved buried A-horizon that is present approximately 40 cm (16 in) below the present ground surface as long as precautions are taken to prevent planting below this depth. Construction of the rose arbor, however, will impact potentially important sediments since support posts need to extend below the frost line. Holes for the new posts should be archaeologically excavated in the form of shovel test pits to mitigate negative affects on potentially important archaeological deposits in this area.

2) Place a bench at the north end of the perennial beds (Fig. VII-2:10). No subsurface impacts are expected here.

3) Replace existing chain link fence with new chain link (Fig. VII-2:11).

No subsurface impacts are expected here, especially if existing posts or post locations are used.

4) Remove overgrown vegetation from irregular bed along Greenough Ave (Fig. VII-2:12).

This work requires the removal of root balls from lilacs and other shrubs. This area is particularly sensitive since some portions of the geometric garden bed may be located here. One of the early nineteenth century garden paths should pass through this area as well. Since significant disturbance may result from the removal of plantings, additional archaeological testing is recommended for this area to identify the location of the garden path and to search for evidence of the formal garden. Up to four 1m x 1m excavation units are recommended for this area.

5) Restore fruit tree plantings (Fig. VII-2:13).

The restoration plan calls for the removal of some existing trees and the planting of twelve or more apple trees inside the sand walks depicted on the 1937 HABS plan. These activities maintain the greatest potential to disturb archaeological deposits. It is therefore recommended to conduct test excavations at tree removal locations and to excavate the holes for the new trees. This solution will minimize the loss of potentially important archaeological data across the property.

6) Renovate existing lawn (Fig. VII-2:14).

This activity will not disturb archaeologically sensitive deposits as long as renovation does not extended deeper than 40 cm (16 in).

7) Replace existing wisteria arbor with a

new arbor (Fig. VII-2:15).

The new arbor must be moved from its present location since it now straddles the east property line. Similar to the proposed rose arbor, new support posts must extend below the frost line. It is therefore recommended to archaeologically excavate the new postholes with shovel test pits to mitigate disturbance in this area. In addition, these tests will provide information on the nature of the soils since no archaeological testing has been conducted in this part of the garden.

The primary threat from the proposed changes is disturbance to yard soils that lie below approximately 40 cm (16 in). Most garden plants and shrubs do not require excavation of planting holes below this depth. Some portions of the surface of the perennial (parallel) beds, however, lie below the level of the surrounding lawn. In such areas it is recommended that garden loam be added to the existing beds to raise the surface and thus minimize potential negative impacts to underlying soils.

Regarding the tree planting, it is recommended that existing trees be removed by cutting and grinding at ground level so that old roots can be left in place. Where this is not possible, excavations should be conducted within the root area prior to their removal to assure that archaeological resources are not affected by the root removal. This work will also provide a hole for the planting of new trees. New tree locations should be archaeologically excavated as well.

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APPENDIX A

ARTIFACT PHOTOGRAPHS



ARTIFACTS FROM THE PARALLEL BED EXCAVATION.

- 1) Blown 3-mold glass (early 19th century)
- 2) Window Glass
- 3) Goblet bowl with cut facets
- 4) Printie Block pattern whale oil lamp font (2nd quarter 19th century)
- 5) Wrought nails
- 6) Transfer printed whiteware plate (1820+)
- 7) Crumb decorated Astbury Ware (1725-1750)
- 8) Chinese export porcelain plate (18th century)
- 9) Lead glazed redware
- 10) White salt-glazed stoneware (1740-1775)
 Dot, Diaper and Basket rim (above)
 Barley pattern rim (below)
- 11) Porcelain handle and rim
- 12) Creamware Royal pattern plate (1775-1820)
- 13) Tobacco pipe stem
- 14) Nottingham stoneware tankard (1683-1810)



ARTIFACTS FROM THE HERB BED EXCAVATION.

- 1) Nottingham stoneware tankard (1683-1810)
 - 2) Chinese export porcelain 1660-1830)
 - 3) Food bones
 - 4) North Devon Gravel Temper Ware (1675-1760)
 - 5) Tobacco pipes
 - 6) Lead glaze redware
 - 7) Wine bottle neck and base
 - 8) White salt-glazed stoneware (1740-1775)
 - 9) Ferrous scissors
 - 10) Dipt pearlware (1782-1810)
- Thimble fragment (right of 10)



ARTIFACTS FROM THE IRREGULAR BED EXCAVATION.

- 1) Wine bottle neck
- 2) Burned bone fragments
- 3) Ironstone base (1842-1930)
- 4) Chinese export porcelain saucer (18th –19th century)
- 5) Ferrous hook or latch

APPENDIX B
ARTIFACT CATALOG

