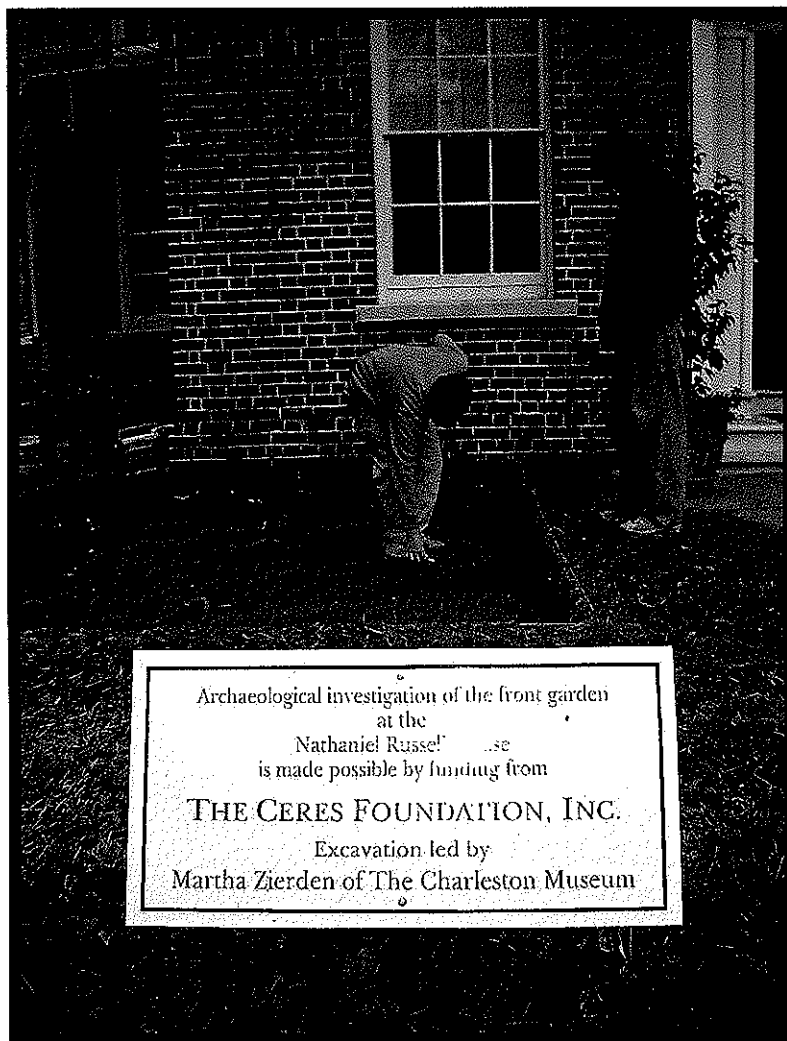


Excavations in the Front Lawn: Nathaniel Russell House 2003-2006



Archaeological Contributions 36
The Charleston Museum

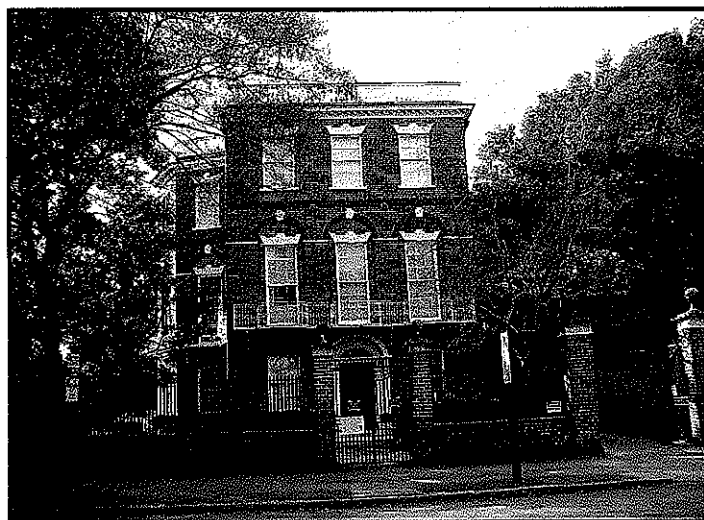
Prepared for
Historic Charleston Foundation
February 2006

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Excavations in the Front Lawn
Nathaniel Russell House
2003 – 2006

by
Martha A. Zierden
The Charleston Museum

February 2006



Prepared for
Historic Charleston Foundation

Funded by
The Ceres Foundation, Inc.

Archaeological Contributions 36

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The research and restoration was funded by a generous grant from the Ceres Foundation, Inc. to Historic Charleston Foundation. I would like to thank Mr. Stephen Gavel for his vision and support. Landscape architects Sheila Wertimer and Spencer Tunnell have been a pleasure to work with. I thank them for the opportunity to move from archaeological data to above-ground design. Thanks also to Bob Cox of Landscapes Limited and the volunteer staff of master gardeners for their patience, guidance, and for restoration of the grounds after excavation. Architect Glenn Keyes and restoration specialist Richard Marks directed the restorations of 2004 and provided valuable guidance throughout the project.

The excavations were conducted professionally, efficiently, and even cheerfully in bad weather by groups of talented technicians and volunteers. I thank everyone who worked on the various phases of fieldwork. The 2003 crew included Andrew Agha, Jimmy Lefebre, and Margaret Harris. Student interns and volunteers were Arianna Shackle, Ashley Zatarain, Eric Mischker, and Tina Rust. The 2004 crew were Andrew Agha, Katie Epps, Margaret Harris, and Damon Jackson. Student interns and volunteers included Luran Riser, Jason Grismore, Blair Toombs, Phillip Spencer, Merritt Sanders, and Tina Rust. The 2006 crew of students and volunteers included Margaret Harris, Rebekah Sease, Jessica Downs, Theresa Kennedy, and Rachel Vykakal. And of course, my colleague and friend Ron Anthony was there throughout.

Staff at The Charleston Museum provided support and guidance throughout the project. Director John Brumgardt, Assistant Director Carl Borick, and Administrative Services Officer Vickie Styles provided administrative support. Exhibits Designer Sean Money prepared digital graphics for the report. Museum volunteers Lee Stevens, Barbara Aldrich, Margaret Harris, Mary Hildebrand, and William Turner worked in the laboratory to process, analyze and conserve the materials. Artifacts from the Nathaniel Russell House were donated to The Charleston Museum by Historic Charleston Foundation and are part of the permanent archaeological collections.

Excavations in the Front Lawn Nathaniel Russell House 2003 - 2006

Introduction and Background

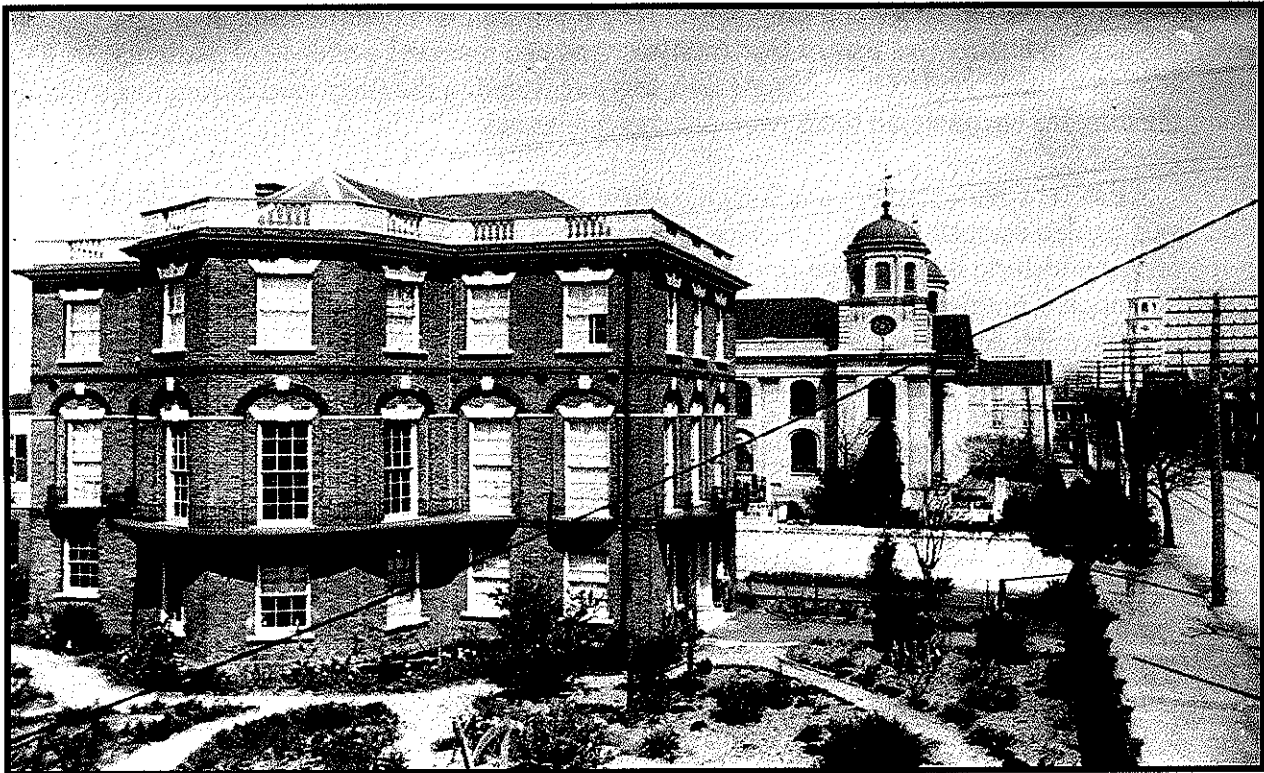
Fieldwork in the front of the Nathaniel Russell House (c.1808) was conducted by The Charleston Museum for Historic Charleston Foundation in three field seasons from 2003 to 2006. Historic Charleston Foundation proposed to install a "fancy garden" consistent with period practices in the front area. This proposal followed a decade of research, restoration, and reinterpretation of the house and property under a multi-phased Historic Structures Analysis. Archaeological testing was part of that Analysis, and had revealed evidence of gardening episodes in the side yard. Only a single unit was excavated in the front yard during these studies, and the remains encountered there were poorly understood.

Historic Charleston Foundation engaged the services of Wertimer and Associates to design a garden consistent with the space, the period of interpretation, and the logistics of operating an historic house museum. Archaeological excavation in advance of garden installation was multi-purpose. If the excavations revealed evidence of garden features in that location, then the design suggested by the archaeology could serve as a guide for garden design. If no garden evidence was encountered, then the excavations would serve to retrieve any data present prior to potential disturbance from garden installation. The archaeological work was funded by the Ceres Foundation.

Study of the yard and garden at the Nathaniel Russell House was part of the overall Historic Structures Analysis, but detailed research and restoration were not funded or scheduled under the terms of that project. It is clear from descriptions, anecdotes, and correspondence that Nathaniel Russell's urban seat included formal gardens. Early 19th century visitors' accounts describe strolls through the garden and descriptions of particular plants. A 1929 reminiscence notes that "the garden occupied half a block, and was filled with every imaginable plant and flower". Other twentieth century reminiscences describe formal and informal areas, and divisions between them. As late as the early 20th century, the garden was described as "divided into three sections with a formal, parterre garden in the front, a grassy section for children to play in the middle, and a work yard with a cow, pony, and chickens to the rear."

But the few plans of the property offer no details of the garden. The most revealing image are two photographs take about 1898. These show larger, curving paths in the front portion of the garden, and a variety of shrubs, flowers, and trellises within a large circular bed. At the time of the Historic Structures study (mid-1990s), the bold, curving pattern of the garden, which extends into the front lawn area, was interpreted as a mid-19th century design. (Barbara Sarudy, personal communication; Zierden 1996:166).

Subsequent to completion of the Historic Structures study, The Charleston Museum conducted extensive excavations of the formal garden at 14 Legare Street, a property contemporary with the Nathaniel Russell House. Built in 1800 and altered by the second owner in 1818, the lots and brick single houses are comparable in scale. Excavation of the lawn area beside the house revealed an 1818 garden in a bold curving design. Careful analysis of the materials retrieved from shell paths, garden beds, and overlying deposits suggests the design dates to the first quarter of the 19th century. These data, bolstered by new research on early Charleston garden design by C. Allan Brown, led to a reconsideration of the garden shown in the 1898 photos (Brown 2001; Zierden 2001). Scholars familiar with the two properties were ready to consider the possibility that the garden shown in the photo was a first-period installation.



The experience at 14 Legare Street and other Charleston properties prompted a change in archaeological methodology for the present project. Broad areas would be excavated in a series of contiguous units, to maximize visibility. Further, the ephemeral stains that characterize garden archaeology can be interpreted more readily under these conditions. The archaeological team was now better equipped to recognize archaeological evidence of gardening activities.

This document reports on the methods and results of the garden project, and provides detailed plans of the garden features encountered, as well as rationale for dating and sequencing the garden events. Details on archaeological methods and interpretations, as well as historical documentation on the house and gardens have been previously reported, and are available at Historic Charleston Foundation and The Charleston Museum. The reader is referred to the two monographs (Zierden 1995 and Zierden 1996) for further reference.

Field Methods

Planning for the 2003 front garden fieldwork required careful coordination among Historic Charleston Foundation staff, the archaeological team, and the garden maintenance staff. All phases of the project were scheduled for January, a period of low visitation, to minimize disruption of museum activities.

Nonetheless, considerable effort was required to continue access to the house around the excavations and through the front door. Efforts were made to minimize impact to the lawn and the garden plantings, and to avoid tracking dirt into the house. Filter fabric, plastic, and plywood provided protection to the walk and the sod, while frequent sweeping of the walks decreased dirt intrusion. Backfilling was planned in coordination with the landscape crew to restore the plantings and garden to the front as quickly as possible.



2003: Expanding the N200 block, facing north

These efforts took on added urgency during the 2004 season, as a number of restoration projects were concurrent with the fieldwork. Planning for the second phase of fieldwork required coordination among Historic Charleston Foundation staff, the garden maintenance staff, the landscape architectural firm, the restoration contractors and specialists, and the archaeological crew. The house was closed to visitation on January 5, but access through the front door was required by the contractors. Also, a carpentry crew would be decking the second-story balconies concurrent with the excavations below. The garden and front lawn needed



2004: Excavation of N195 block and screening beneath the magnolia tree

restoration prior to full visitor access. Unit location was planned in consultation with Jonathan Poston and Sheila Wertimer, and a map prepared. Sod and bushes in these areas were removed and stored by Bob Cox and his crew at Landscapes Limited. The irrigation system was de-activated for this area for the duration of the dig. Topsoil, both screened and unscreened, was stored in a separate location to be backfilled last. All roots cut during excavation (a considerable volume) were discarded elsewhere. Landscaping fabric was placed beneath all screens.

Screening was conducted beneath the magnolia tree for the southern block, and traffic across the lawn was minimized. Upon completion of the excavations, the block was backfilled by the archaeological crew, using the screened soils from zones 2 and 3, to a level 3" below present ground surface. . The excavated features were filled with sterile orange builders sand prior to backfilling. Re-sodding and bush planting was handled by the landscape staff.

The 2006 season involved excavation beneath the current bluestone walk. In order to minimize impact to visitation at the Russell House, and damage to the bluestone walk, locations for excavations were chosen by individual stone. Consulting landscape architect Spencer Tunnell and HCF property manager Fielding Freed developed a plan in which six stones were carefully removed and stored beside the drive by a professional crew; these were dispersed from the steps to the sidewalk, and provided continuous profile from north to south. The stones were carefully placed on tarps north of the walk. Plywood was placed on the bluestone, and soils were screened on top of this protective surface. Shell and other debris were separated from the loose (screened) soil. During backfilling, the coarse material was placed in the bottom of the units, with the finer sands reserved for the upper layers. Stones were removed Wednesday morning, and again Thursday morning, and replaced on Friday by Andreas Kuester, the Stonemeister.



2006: Excavation in the central walk

Winter weather was a factor in the process of the fieldwork. The weather was cold and wet during each season, and heavy rains hampered the 2004 project. The numerous overcast days, however, aided in visibility of the subtle soil stains encountered during the project; bright sunny days would have seriously reduced visibility in the unit floors. The units were covered carefully with black (4mil) plastic each day, and the soils were often damp. Likewise, the units were riddled with roots of all sizes, from the modern garden, which hampered visibility in some areas.

Horizontal control throughout the project was established in relation to known landmarks, and to the site grid established in 1994-1995. A single 5' unit was excavated in this vicinity in 1994. This was located adjacent to the southeast corner of the house, abutting the front foundation. The southwest corner of the unit was 2.0' south of the front house corner. In 1994 this unit was designated N200.4E297, and was located according the foundation position, rather than even grid increments. For the 2003 project, this unit was used to place the block excavations in the front. For convenience sake, the ".4" designation was dropped, and the old unit was assigned N200E297.

Nathaniel Russell House

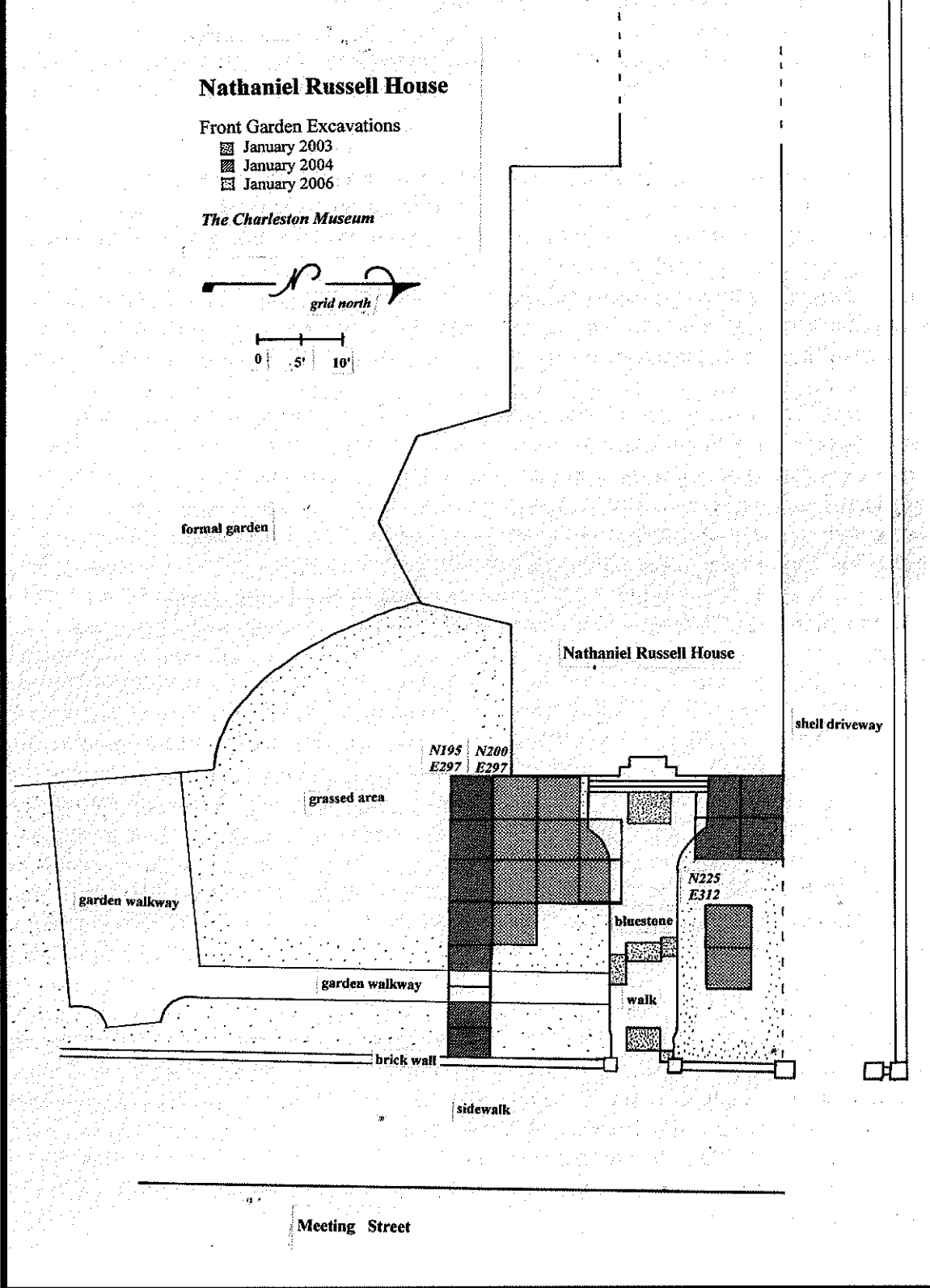
Front Garden Excavations

- January 2003
- January 2004
- January 2006

The Charleston Museum



0 5' 10'



To begin grid layout, this 1994 unit was relocated. A large block was then triangulated from the southwest corner of the unit and the front of the Russell house. Initially, a six-unit block was laid out, measuring 10' south to north and 15' west to east. Each unit was designated according to the grid. This grid method continued throughout the project. During the 2003 project, eleven units were eventually excavated, nine in the original block and two north of the walkway.

Field methods for the 2003 dig were replicated for the 2004 project. In anticipation of a return to the field, grid nails along the N200 line were left in place in 2003. These were re-discovered in 2004, and the new, adjoining units to the south were triangulated from these points. A line of 5' units was excavated along the southern boundary of the 2003 block. These extended from the front of the house to the front brick wall. Yew bushes were removed from the front wall, but the brick walkway was left in place. Seven 5' units were established along the N195' line; three of these were partial units, due to truncation by the brick walkway and the front wall.

For the 2006 season, unit locations and size were pre-determined by dimensions of the removed pavers. Grid coordinates for these units were determined by reestablishing the overall site grid used during previous excavations. This grid system was established in 1994, and reestablished and modified in 2003. Grid point N200 E297, located 2' south of the southeast (front) corner of the house, served as the starting point for the front lawn excavations. As in the previous two field seasons, this point was reestablished using tapes. From here, additional points along the N297 and the E200 line were replaced by triangulation. Unit locations were then measured and designated from these points.

Vertical control also continued the 1994 system. Reference Point 1 was re-established for the duration of the project. This was a mark placed on the sidewalk adjacent to the southeast corner of the northern gatepost leading to the front door. In 1994 this point was tied into the U.S.G.S. marker located in the doorway of the U.S. Post Office at the corner of Meeting and Broad streets. The absolute elevation of RP1 is 8.37'. All elevations during the current project were taken relative to this point.

Excavations during all three seasons were conducted by hand using shovels and trowels. Excavations followed natural zones, and deep zones were subdivided into arbitrary levels. All materials were dry-screened through 1/4 inch mesh. Soil samples were recovered from most natural proveniences.

Record keeping entailed narrative notes and completion of a variety of forms on a daily basis. Planview and profile maps were made for each unit, or block, as appropriate. Material from each designated provenience were bagged and tagged separately; a field specimen number (FS#) was assigned to each in ordinal fashion; numerical designation continued from the list established in 1994-1995; thus the first field specimen number assigned for this project was # 361. Likewise, feature designation resumed with the next available number from the 1995 season, and # 79 was the first assigned in 2003. This ordinal designation continued through the 2004 and 2006 seasons, as well.

Photographs were taken in black and white (T-max 100) and color slide (Kodachrome 200 professional film), and processed for archival stability. In addition, a series of digital photographs were taken, for instant analysis. The digital photographs are shown in this document, while the slides remain on file at The Charleston Museum.

Results of Fieldwork, 2003

The units in the 6-unit block were excavated simultaneously, including the backfill from N200E297 (referred to as the N200 block). Sod was removed and placed in the shade of the rear garden. Zone 1 was excavated and discarded; this soil was taken by wheelbarrow to a separate pile in the rear parking area of the house. Zone 1 was a dark topsoil, established for the current garden (10yr3/1). The zone contained relatively few artifacts and was densely laden with roots from the large magnolia. This soil was sampled and discarded.

Beneath the greatest concentration of tree roots, the soil was slightly browner, and the artifact concentration increased somewhat. This was designated zone 2 (10yr3/2). Zone 2 was excavated in two levels, with a greater concentration of cultural material in the lower level. The zone 2 soils were screened and all artifacts retained. Garden features were first noted at the base of zone 2. A series of small round pits of dark gray-brown soil (10yr3/2) with a light gray center (10yr4/1) were noted along the south wall of the block, in units N200E302 and N200E307. These were aligned with the south edge of the building facade, running east/west. They were designated features 80 through 83. The features were .6' in diameter and were .8' apart, center-to-center. A fifth possible feature, on the western edge of N200E302, was an area of soil disturbance caused by a large root. Though no feature could be defined here, the location of the root and the size of the disturbed area were consistent with the pattern presented by the four plant stains. Likewise, two similar features were noted in N200E207 in 1994. Features 7 and 8 were of similar stratigraphic position, size, and location, and contained similar fill. At this same level, two larger round stains were located in the N205 units. These were amorphous at this time, but received the designation feature 84 and feature 85. Feature 84 contained soil deposits identical to the smaller plant stains: dark soil (10yr3/2) filled with gray sand (10yr4/1). Feature 85 was slightly lighter brown/gray sand (10yr4/2). A different soil deposit was visible at the base of zone 2. This was



A. Agha exposing features 80-83

designated zone 3. Zone 3 was a lighter brown (10yr4/3) and more heavily flecked with shell fragments. As the goal was definition of the earliest garden, and a flat floor, the intrusive features were excavated first, but only to a depth even with the base of the first level of zone 4 (about 3/10'). The small plant features were excavated first. They were initially interpreted as possible posts and postholes, but upon excavation proved to be shallow pits in which the gray sand and dark soil were mixed together. As these features were only .3' deep, they were excavated completely at the base of zone 2. A comparable first level of features 84 and 85 was excavated to .3' below the top of the feature. A series of small dark features were also noted adjacent to the house, in N205E297. These were very small, and were excavated separately. Features 86 through 89 averaged .6' in diameter and .4' in depth. These may represent small, individual plantings.

Excavation of zone 3 throughout the block then commenced. This revealed a continuation of some of the zone 2 features, and a new series of features at the base of zone 3 level 1. These were uniformly brown soil (10yr4/2 or 10yr4/3) with an increased concentration of shell fragments. At this point, the block was expanded to the east and the north, and excavation continued in the same manner. A single 5' unit, N200E312, was excavated to the east. Two units to the north intersected the central bluestone walk, N210E302 and N210E307. Again, sod was removed and stored and zone 1 was excavated and discarded. Zone 2 was excavated in two levels, and the soils screened through 1/4" mesh. Unit N200E312 revealed a continuation of the row of small plant stains; to the east of feature 80 were three additional features, 100, 101, and 102. These were encountered at the base of zone 2 and excavated completely.

The northerly units adjacent to the walk were a bit more complex. The sod was removed and zone 1 was excavated and discarded. Excavation of zone 2 was interrupted when an area of crushed shell was encountered at the base of zone 2 level 1, one half foot below surface. This was in N210E302, adjacent to the curve in the present bluestone walk. This was designated feature 99, and was interpreted as a foundation for a previous paving event. This feature was recorded and excavated, and excavation of zone 2 level 2 continued. This revealed a large oval pit of dark soil mottled with red clay. This was designated feature 103. This was defined at the base of zone 3. The oval feature nearly encompassed the entire unit floor in N210E307. This proved to be relatively shallow, and was completely excavated at the base of zone 3 level 1.

The first level of zone 3 was then excavated for each of the 8 units in the block; this averaged .2 to .3 feet. This revealed a second series of features, beneath and distinct from those defined in the zone 2 matrix. Composite maps of new features, and the remaining portions of later features, were prepared, as were overall photographs, including several from the second story balcony. A variety of new features were defined at this level. Feature 94 was the designation given to the amorphous area of dark soil along the south wall of the block. This linear area was difficult to map, as it appeared as a gradual darkening of soil as one moved south. The original edge of this darker area was defined 3' north of the southern edge of the block, while the more distinct area initiated about .6 to 1.1' north of the block wall. Excavation of a cross-section of this feature revealed that the more southerly line was the true limit of a deep planting feature.

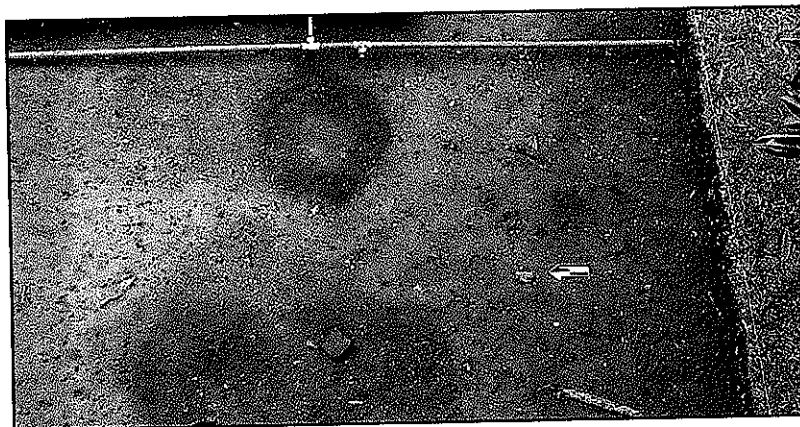
The most intriguing deposit was feature 95, a series of small oval plant stains of medium brown sand (10yr4/3) containing shell flecks. This line of small (.3-.4' in diameter) oval stains appears to transect the block on the diagonal, from the southeastern corner of the block in N200E312 to the northwest corner of N205E302. None of these small plant stains were excavated at this time, but they appear to represent a linear series of small plants.



View from balcony of N200 block (expanded), showing features from three planting episodes

Likely associated with feature 95, based on soil color and stratigraphic position, were a number of larger planting stains. Feature 97, in N205E302, appeared to be rectangular (3' by 4'), and aligned with the axis of feature 95. This feature was truncated by two round pits, each about 3' in diameter, feature 98 and feature 85, respectively. Feature 111 was a rounded stain located in N205E307, also truncated by two overlying features, feature 96 and feature 84. Unit N200E312 also contained some early features, underlying intrusive pits. Feature 115 was a rounded pit about 1.1' in diameter, underlying a rounded pit of similar dimensions, feature 104. These were located just north of feature 94, the aforementioned linear area of dark soil. Unit N205E297, adjacent to the house, also contained some smaller pits filled with the characteristic brown shell-flecked soil. Feature 109 was of moderate size, 2.4' in diameter, while features 110 and 112 were smaller stains. Features associated by soil type and artifact content are shown at the end of this document.

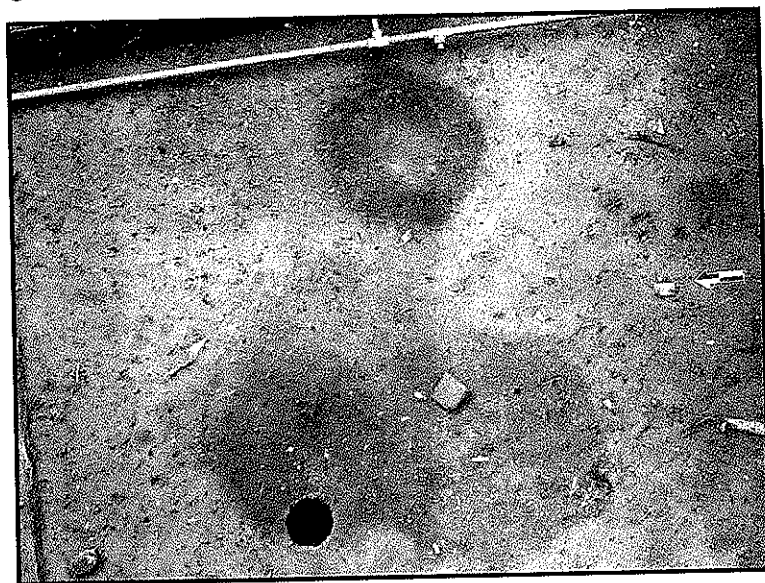
After consultation with HCF staff, some of these were selected for sampling, while the majority was left intact. Of particular significance were three clusters of superimposed pits. These include features 104, 94, and 115 in N200E312, features 84, 96, and 111 in N205E307, and features 85, 98, and 97 in N205E302. In each case, the clusters were bisected north/south, and the western half excavated, with each feature segregated. The profiles of each of these three groups were then drawn and photographed.



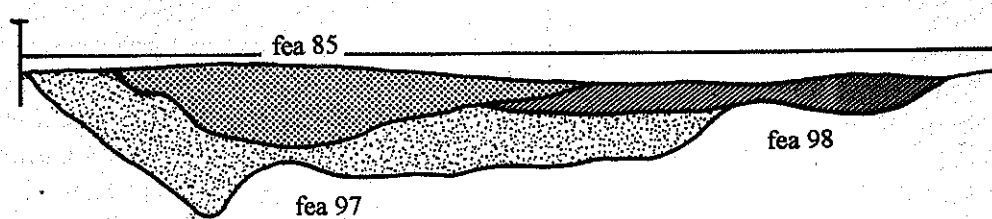
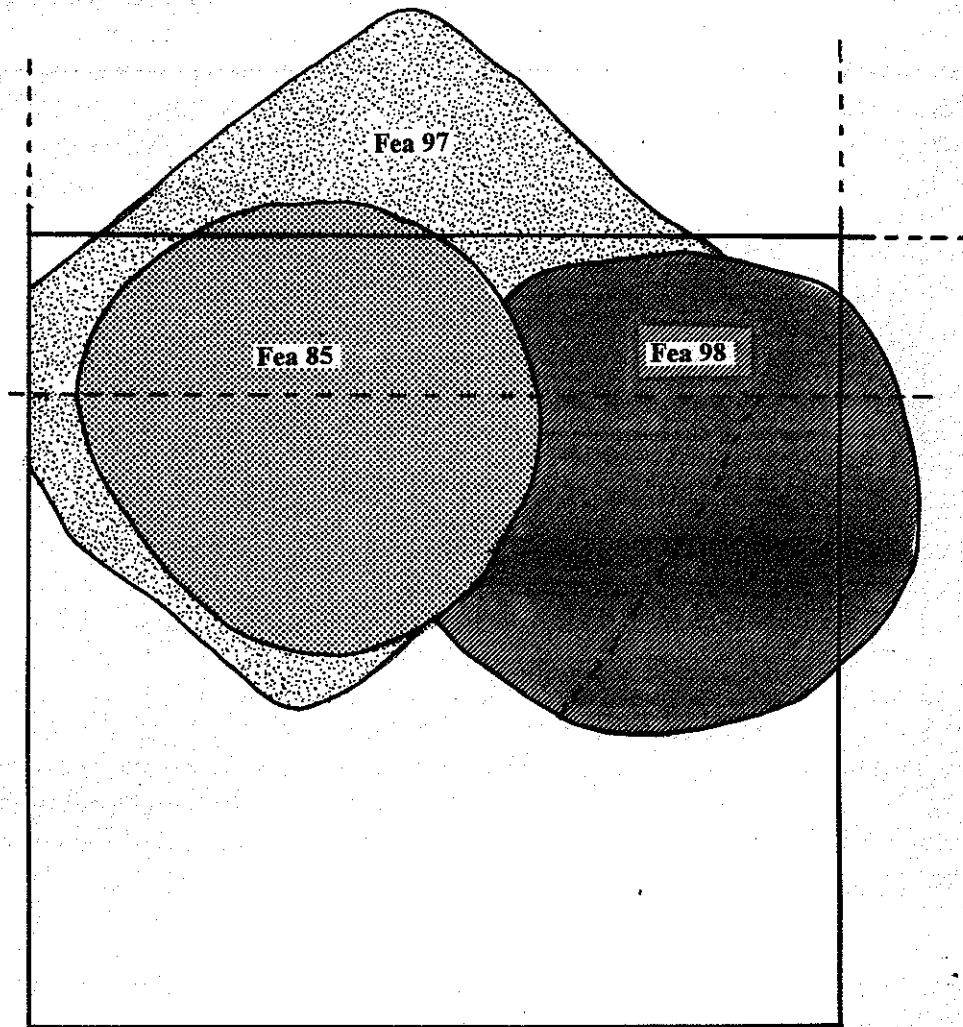
Close-up zone 3, showing feature 95, line of small plant stains

Features filled with brown sand characteristic of the early 19th century were also encountered in the N210 units. Of particular interest was a well-defined linear area of brown sand, 2.0' in diameter, designated feature 105. A series of small round stains was located immediately north of this; these were designated features 106 through 108. These were first interpreted as further garden evidence; a linear bed and associated individual plantings. Excavation of a sample of feature 105, however, revealed that this was a trench for two iron service pipes, of considerable age. The small features were not sampled and they may still reflect gardening activity.

In order to preserve as much of the early 19th century garden as possible, excavations were halted at this point. This left a level excavation surface throughout the block, at .9' below ground surface. This was not at sterile subsoil, however. A second level of zone 3, or an underlying zone 4 (as defined in 1994) was present at the ground surface; this presented as a mottled brown and orange sand, obviously containing cultural materials, particularly brick fragments and ceramics. These may be associated with construction of the Russell House, or the buildings that predate the mansion. Likewise, the backfill of N200E297 was excavated only to this point. The zone 4 deposits excavated in 1994 continued to a depth of 2.1' below surface.

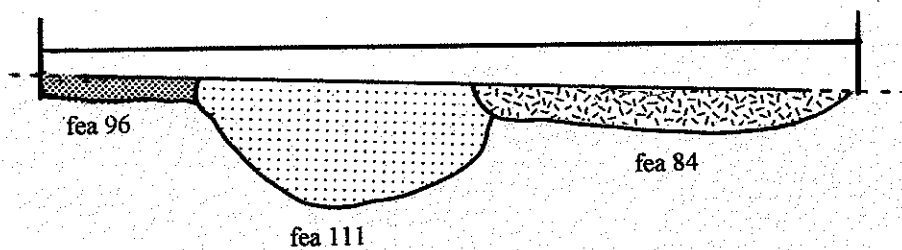
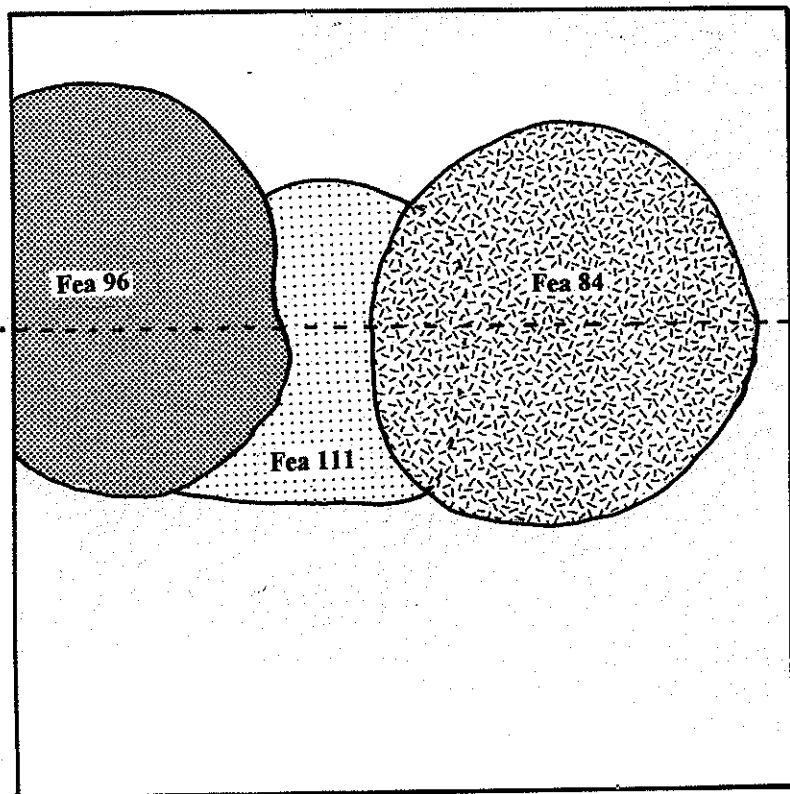


Series of superimposed features selected for excavation



N205E302, feature cross-section

Feature 85	10yr4/2	undecorated whiteware
Feature 98	10yr4/2	transfer printed whiteware
Feature 97	10yr4/3	transfer printed pearlware (1810)



N205E307, feature cross-section

Feature 84	10yr3/2	Canton porcelain
Feature 96	10yr5/3	creamware
Feature 111	10yr4/3	shell edged pearlware

Results of Fieldwork, 2004

Two blocks were excavated in 2004. A group of four 5' units was excavated on the northern side of the front walk. These were established by measuring along the front wall of the main house, beginning with the northeast corner of the foundation and measuring south. A ten-foot block was then triangulated to the east, based on this line. This alignment with the corner of the house served to give the units grid coordinates of N223.5E297/302 and N228.5E297/302 (referred to hereafter as the N223 block). Seven 5' units were established along the N195' line, south of the 2003 excavations. Three of these were partial units, due to truncation by the brick walkway and the front wall. Units excavated here were N195E297 through N195E327 (referred to hereafter as the N195 block).

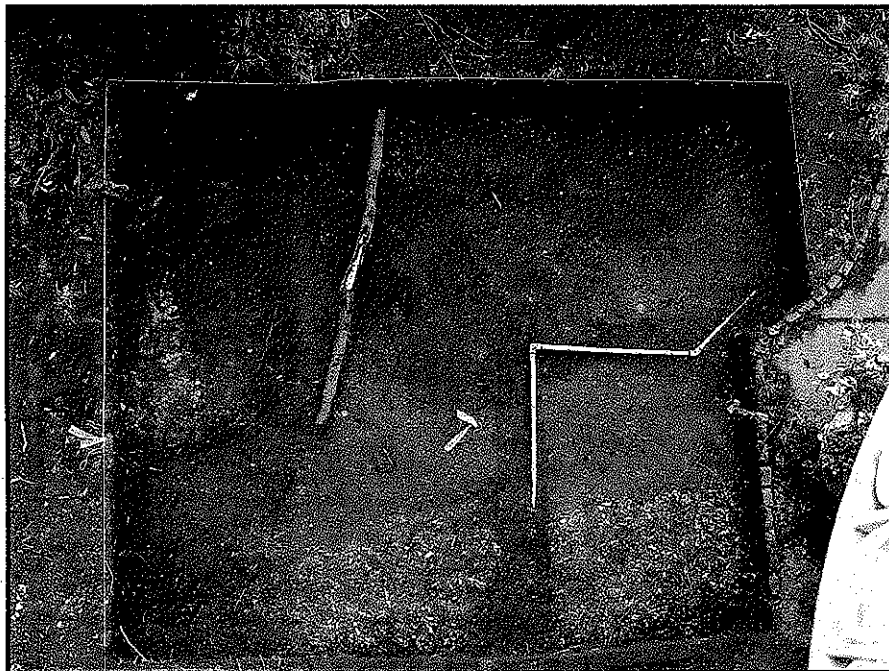
As was the case in 2003, the units in the two blocks were excavated simultaneously, zone by zone. Three zones were identified, and the blocks were troweled and photographed at the base of each zone. Zone 1 was a dark topsoil (10yr3/1), established during the 20th century for landscaping purposes. The zone contained relatively few artifacts and was densely laden with roots from the large magnolia. This soil was sampled (50%) and discarded. Artifact content was minimal. Two days were required to excavate all units to the base of zone 1.

Beneath the topsoil, the soil was somewhat browner (10yr3/2), and the artifact concentration increased somewhat. This was designated zone 2. Zone 2 was initially excavated in two levels, as was the case in 2003. In some units, however, remnant dark brown soil remained; this was excavated as a third level of zone 2. Features were first noted at the base of zone 2; these were photographed and mapped. The 2004 blocks contained fewer late 19th/early 20th century features than did the 2003 block, and so definition and excavation of feature fill at this point was minimal.

The distinct soil change noted at the base of zone 2 was again encountered in the two blocks. This was again designated zone 3, and was lighter and browner (10yr4/3) and more heavily flecked with shell fragments. Soil visibility also improved at this level. As the continuing goal of the project was to define the earliest garden, the upper levels of intrusive features were excavated first, and then a first level of zone 3 was excavated by unit across the block (about 3/10 foot). Careful troweling of the blocks at this level revealed a number of features, which were photographed and mapped. In some locations, the soil remained somewhat disturbed by the extensive root network and the irrigation system, and a second shallow level of zone 3 was excavated and the features re-mapped. Excavation of some of the features revealed that zone 4 was present about .2' below the zone 3 level 2 surface. As sampled in 1994 and encountered in 2003, the zone 4 soils were characterized by light brown sand (10yr5/4), filled with sporadic brick rubble and a few 18th century artifacts. Zone 4 was noted in the base of excavated features, but the lower levels of zone 3 and zone 4 was not excavated during the present project. Excavations for both blocks were terminated in the middle of zone 3, 1.0' below the present ground surface.

In the N223 block, several features were noted in the zone 2 context. First encountered were a line of brick headers, running north/south along the front of the house (1.5' from the front

of the house). These were large red bricks, and they enclosed a border bed along the front of the house. The bricks were breached in two places. A gap occurred at a terminal sprinkler line, and the bricks were removed by the planting of the yew bushes along the driveway. A second line of brick edging was visible on the driveway surface, 1.0' north of the edge of the block. These were mapped in relation to the block. They likely represent a border bed along the southern side of the drive, and appear to be associated with the front border bed. The soils inside the bed were not excavated at this point. Two large circular features were also encountered in N223.5E302. Feature 129 was completely circular, and measured 2.2'. Soil was dark brown (10yr3/2) mottled with red clay (non-local clay). The south half of this feature was sampled and yielded a wire nail, dating it to the second half of the 19th century. A larger feature (feature 130), 3.7' in diameter, was filled with dark soil mottled with yellow sand. This was not sampled.



N223 block, showing shell path (feature 119) and brick edging to mid-19th century border beds, and remnant zone 2 plant stains.

The most pertinent feature in the block was a linear path, running north/south in the E297 units, from the slate walkway to the driveway. The northern end of this feature was truncated by the backfilled holes of the yew hedge. The brick border bed formed the western edge of the feature. Feature 119 as initially defined exhibited a curved eastern edge, 3.7' on the southern side and 2.1' wide at the northern edge. Within the zone 2 levels, feature 19 exhibited a surface of coal ash. These upper deposits were excavated as level 1. A concentration of black marble fragments, matching the mantle in the back parlor (installed during the Allston period, 1857-1870), was recovered in this ash.

Beneath this was a packed surface of whole and crushed oyster shell, designated feature 119 level 2. This appeared to be a shell path surface. A builders trench for the small red bricks edging the slate walkway intruded into the shell. This was designated feature 134.

No new features were defined at the base of zone 3 level 1. A 1.5' wide sample of feature 119 level 2 was excavated. The upper level, about .15' thick, was well-prepared shell, a mixture of whole and crushed oyster. Beneath this, the feature was characterized by large brick fragments mixed with pockets of crushed shell. Excavations were terminated at what appeared to be the top of zone 4.

In order to investigate the possibility that the shell from feature 119 continued below the present slate walkway, three bricks were removed from the edging as a 1.0' wide sample. Here, the narrow construction trench, feature 134, was excavated, revealing a profile of the slate walk. Beneath the slate was a lens of dark soil about .3' deep. Beneath this, the shell paving clearly continued beneath the slate. Excavations were halted at this point.



N223.5E297, showing continuation of feature 119
Beneath brick edging of bluestone walk

As the excavations were five feet closer to the large magnolia tree that dominates the front garden, the N195 block was characterized by heavy root mass. Several large roots, including the major root that runs along the front of the house (encountered in the 1994 unit and in the 2003 block), were left in place. A host of smaller roots were trimmed and removed. The roots hampered visibility to the base of zone 2, and entailed excavation of two levels of zone 3 in some units.

Features were first mapped in this block at the base of zone 2. In N195E312-E317, a diagonal swath of brown soil with a concentration of oyster shell was interpreted as ephemeral evidence of a shell garden path. This was designated feature 120. Feature 120 never exhibited well-defined edges, and the shell concentration decreased as excavations continued into zone 3. The interface with other features in this area (also poorly defined) remained difficult to determine. Four small dark circular-to-oval stains (.5' in diameter) along the southern edge of feature 120 were interpreted as small plant stains and were collectively designated feature 127. An amorphous concentration of artifacts and slightly orange mottled soil was present along the southern profile, and was designated feature 126. Finally, the units revealed the southern portion of a linear feature of darker soil (10yr3/2) encountered in the 2003 block, designated feature 94. The stratigraphic sequencing of feature 94 and feature 120 was difficult to determine.

The westernmost units in the block were heavily impacted by large roots. But the top of zone 3 was higher in these units, and so feature visibility was actually better. A variety of small

garden features were revealed in N195E297, N195E302, and N195E307. Two clusters of small plant stains were recorded. Most distinct were the fourteen small oval stains of brown soil (10yr4/2) in N195E297. These trended southwest/northeast, and in places appeared to be three abreast. Soil on either side of this plant cluster appeared to be slightly darker than the zone 3 soil beneath feature 125; this may be the result of root disturbance, or it may be additional evidence of the overall footprint of the garden. A second cluster of small oval/circular stains was located in the center of N195E302. Eleven stains were initially defined, and were collectively designated feature 124. This feature was roughly circular, but there was a suggested linear trend, again northeast/southwest. Between these two features were small patches of finely crushed shell, again highly disturbed by roots. The two shell pockets mapped were designated feature 123.

A large feature of slightly darker soil did not match the plant stains, and may not be associated with garden activities. Feature 122 was an oval area of dark brown soil (10yr3/4) filled with large fragments of wall plaster. This feature was initially encountered at the base of zone 2 and a first level was excavated before zone 3 level 1 was removed. Excavation of a small sample revealed a heavy concentration of wall plaster in a rounded pit.

A single late planting feature, characterized by dark soil (10yr3/1), was present in the southern profile of N195E307. The dark soil contained areas of mottled gold and tan sand in the center of the feature. This feature intruded into an amorphous area of brown sand and crushed shell, designated feature 128. Neither of these features was excavated.



N195E297-E307, at base of zone 3 level 2, showing small plant stains

Many of these features were re-defined and re-mapped at the base of zone 3 level 1. The overall configuration of all of the features remained. Fewer individual stains remained for feature 124, while an additional cluster was noted for feature 127. The possible path area, feature 120, diminished in size, but was replaced by new small deposits of feature 127. Interestingly, the individual features of feature 127 trended with feature 120. The shell concentration designated feature 128 in N195E307 increased in size, but these features were difficult to isolate due to disturbance from the irrigation pipes in the northern portion of this unit.

A few of the encountered features were selected for sample excavation. The goal was to excavate enough features to date the various garden events, but to minimize disturbance of the pattern below the zone 3 level. A single stain of each of the clusters was excavated, as was one area of the crushed shell. The enigmatic feature 122 was sampled to determine the nature of the architectural debris and any possible association with the garden features. The single stain from feature 127 exhibited sloping sides and a rounded bottom, and was .5' deep. The sample stain from feature 125 was similar, but was only .25' deep. The small patch of crushed shell, feature 123, exhibited regular sides and was .4' deep. The shell contained a moderate amount of artifacts, as well as some brick fragments. All of these features intruded into zone 4, and so any brick rubble may have been re-deposited from zone 4. Feature 122 was more substantial, and the portion contained in N195E307 was sampled to the unit boundary. This revealed a feature of dark soil and moderate amounts of wall plaster, initially 2.5' in diameter, about .8' deep, followed



N195 block at zone 3 level 1, view from front balcony

by a narrower pit full of solid plaster, 1.0' in diameter. Also sampled was a 1.5' wide section of feature 94, against the north profile of N95E312. This is in roughly the same location as the feature taken from N200E312 the previous year. Feature 94 remained difficult to define on the sides, but had a clearly defined flat bottom on top of zone 4, about .3' deep. At this point there was a darker circular area, which received a separate designation (feature 135) and was excavated separately. It was only an additional .25' in depth.

Two partial units were excavated on the east side of the brick walkway. N195E327 was badly disturbed by the yew hedge, while N195E322 was less so. Excavation of zones 1 and 2 revealed the 19th century brick wall foundation below the present front wall (designated feature 22 in 1994), and a pier for that wall. As noted in the excavation of N130E328, these excavations confirm that the location of sectional piers in the present wall does not match those in the

previous wall. The present excavation provides additional data for future study. Amorphous, roughly circular areas of slightly darker dirt were noted in the northern profile of N195E322 and in the southeast corner of N195E327. The former was designated feature 133. The latter was badly truncated by the yew hedge, and so was not designated a feature. A layer of coal ash was present on the top of this area, but no other feature boundaries were revealed. Neither deposit was excavated.

Two units were excavated north of the central sidewalk, but these received less attention. Units N225E312 and N225E317 were placed in the center of the north lawn area. Sod and zone 1 were removed as before. Excavation of zone 1 in N225E317 revealed an entry pipe to an old fuel oil tank. The iron cap was removed, revealing the pipe to the tank and indicating that the tank still contained fuel. The cap was replaced and excavation of this unit abandoned. Excavation of N225E312 continued to the base of zone 3. Zone 2 was excavated in two levels and screened.

A number of features, most poorly defined, were encountered at the base of zone 2, and again at the base of zone 3 level 2. A well-defined linear area along the southern wall of the unit was likely the line from the fuel tank to the house. A large oval area occupying the eastern 2/3 of the unit contained brown soil (10yr4/3) mottled with orange clay (10yr7/8). This may be related to feature 103 encountered in N210E307. The western portion of the unit contained a series of small to medium pits of brown sand (10yr4/3 to 5/4). None of these received feature designations at this time. The units were photographed and backfilled, to await further excavation.

Results of Fieldwork, 2006

Removal of the pavers revealed an underlying foundation bed of coarse white sand beneath each of the stones. Areas of dark (10yr3/2; very dark grayish brown) sand were present in the builders sand, particularly around the edges of the stone where topsoil permeated the edges. Because this dark soil was designated as Zone 2 in the surrounding lawn, this designation

was given to the mixed dark soil and coarse construction sand in each unit. Zone 2 was present in all of the units, but varied in thickness from west to east. Very few cultural materials of any type were recovered from this deposit.



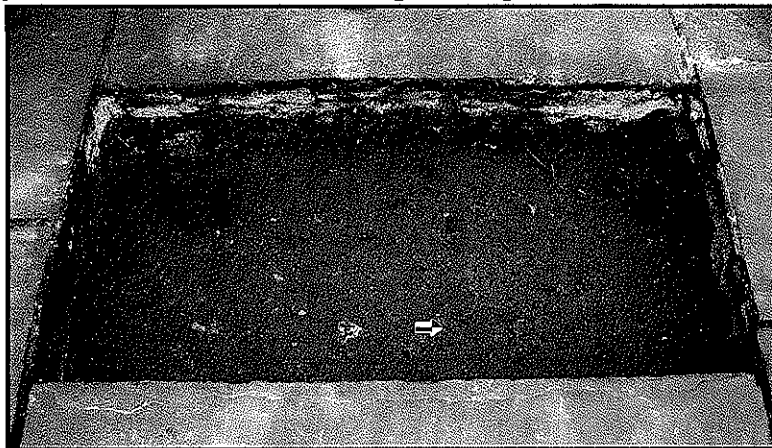
Feature 119 in N216E299

Excavation of zone 2 in N216E299 immediately revealed an expanse of shell paving, matching a similar deposit exposed in 2004 to the north and designated feature 119. Because exploratory

excavations in 2004 suggested that the shell continued beneath the current walk, the feature 119 designation was used for this material, as well. In order to provide adequate support for the front stair, the unit was bisected at this point, and the northern half of feature 119 was excavated. The shell deposit was .2' thick, composed of large and small fragments of oyster, and was well compacted. Excavation of feature 119 in this unit revealed a bed of brick. This was designated feature 137. Feature 137 was characterized by whole and half brick laid on side, with significant space between. No particular pattern was apparent in the small sample space. Several bricks exhibited traces of old mortar on the surfaces. The brick was photographed, and then a small sample was removed in the northeast corner. Removal of 8 bricks revealed that the crushed shell sifted between the individual bricks, and that they were dry-laid on end on top of yellow sand, apparently sterile subsoil. Based on position and lack of finish, the brick is interpreted as a foundation for a shell surface (feature 119).

Similar stratigraphy, with some horizontal variation, was noted in each of the excavated units. Excavation of N216E317 in the center of the walk revealed a slightly deeper bed of zone 2 sand (.3') and a significant bed of shell, .3' deep. Two intact bricks were present at the base of the shell, and a minor amount of brick rubble was recovered from the feature 119 fill, but otherwise the brick base of feature 137 was absent from this unit. The soils below were characterized as highly mottled sand, ranging from pale brown (10yr6/3) to brownish yellow (10yr6/8) to yellowish brown (10yr5/8). Cultural materials included brick and mortar fragments, as well as a range of domestic materials. Previously excavated samples of zone 4 suggest that it dates to the end of the 18th century and demolition of structures predating the Russell House.

Zone 4 was not excavated during the previous two phases of front lawn excavation, and was not sampled during the present project. Absent from this unit, and from all of the units in the center of the walk, was the dark grayish brown sand designated as zone 3 and associated with the first half of the 19th century (the Russell family occupation).



Top of zone 4 in N216E317

Excavation of two units along the edges of the bluestone walk revealed slightly different stratigraphy. Unit N214 E318.3 adjoined N216E317 and abutted the southern edge of the walkway and the brick path leading through the side garden. This unit contained a substantial deposit of zone 2 followed by a much more ephemeral layer of crushed shell (feature 119). Feature 119 exhibited the greatest concentration in the northwest corner of the unit (.15' thick), and was only a thin lense elsewhere in the unit (.1'). The mottled soils of zone 4 were present beneath the shell, but the soil was darker in the southern half of the unit. Artifacts were also more numerous in this portion of the unit. Unit N220E316.75 abutted the northern edge of the

walk and exhibited similar stratigraphy. Here, a substantial layer of zone 2 (.25') was followed by a concentration of shell (feature 119) in the southern 2/3 of the unit. Shell here was .15' thick. The northern third of the unit contained very little shell and instead contained a deposit of zone 3 soil (10yr4/3). This soil was also characterized by a greater concentration of cultural materials. The mottled soils of zone 4 were noted across the base of the unit.



Above: profile of N216E317, showing feature 119 directly beneath builders sand (zone 2) and above zone 4
Below: view of N220E316.75, showing interface of zone 3 and feature 119

Unit N216E327 was located in the center of the walk, adjacent to the front gate. Here, the builders sand and dark soil of zone 2 was relatively thick, but the underlying shell layer was thin and ephemeral, despite the location in the center of the walk. As with previous units, the deposits were excavated as zone 2 and feature 119, respectively. The light mottled soil of zone 4 was present directly beneath feature 119, with no evidence of brick foundation. The top of zone 4 was .2' higher in this unit than in the units further west.



The adjacent unit to the north, N220E330, revealed a different assemblage. Here, the dark soil and builder's sand of zone 2 was followed by a concentration of brick similar to feature 137 at the base of the steps. The bricks appeared to be the same vintage, and some of those exhibited old mortar on the surfaces. There was no evidence of shell paving between the zone 2 soils and the brick, and the brick appeared to be in a matrix of dark (zone 2) soil. Since the immediate goal of the project was to locate and measure the shell surface, no further excavation of the brick was conducted and it remains unknown if the dark soil matrix continued through the level of brick. Though visibility was limited in the small unit, it appears that the brick were somewhat disturbed and uneven, and did not present a flat surface as in N216E299. A possible explanation is that the bricks reflect construction of the gate post in the early 20th century and are remnants from that activity. Alternately, they may be part of the early 19th century paving, disturbed and redeposited in the early 20th century.

Dating the Deposits

All encountered archaeological deposits were dated on the basis of stratigraphic point of initiation and Terminus Post Quem. Terminus Post Quem, or TPQ, is the principal which states that no provenience can be deposited earlier than the invention date of the latest dating item in the provenience. A provenience can be deposited any time after that date; therefore, date of deposition is rarely the same as the TPQ date. The front lawn units at Russell contained a sparse artifact assemblage, but fortunately one large enough, and diverse enough, to aid in dating and sequencing the encountered deposits.

Stratigraphic point of initiation is based on the Law of Superimposition, the geological principal that soils gradually accumulate on sites of human occupation. Therefore, the deepest deposit is the earliest, with deposits occurring later as one approaches the top of the ground. Relative dates are therefore assigned according to the profile map and the level of the top (or point of initiation) of each deposit. Thus the date of deposition assigned to each archaeological provenience is based on both techniques and is determined by considering each provenience relative to those around it. The three clusters of features sampled in 2003 were therefore central to dating the deposits encountered in the excavations, and determining the overall evolution of the front lawn area.

On sites such as Russell, where dispersed test units are excavated, additional emphasis is placed on recognizing stratigraphy, in terms of dating, depth, artifact content, and physical characteristics, across broad areas of the site. The evidence recovered in the excavation of N200E297 in 1994 was unclear at that time; with a larger area exposed, however, the features encountered there could be placed in proper temporal and functional context. The excavations contain evidence of activity dating to the first half of the 19th century, to the mid to late 19th century, and to the late 20th century, respectively.

Table 1
Provenience Guide (by Levels), 2003-2006

	<u>FS#</u>	<u>Unit</u>	<u>Level</u>	<u>TPO</u>
(Zone 2 level 1)				
	363	N200E302	zone 2 lev 1	brown glass
	364	N205E307	zone 2 lev 1	pressed glass
	366	N205E302	zone 2 lev 1	jet button
	367	N200E307	zone 2 lev 1	cheese whiz jar
	368	N205E297	zone 2 lev 1	brown glass
	383	N225E312	zone 2 lev 1	brown glass/prosser button
	399	N210E307	zone 2 lev 1	flower pot
	400	N210E302	zone 2 lev 1	undec. whiteware
	385	N205E302,	zone 3 lev 1/fea 96	late flower pot
(Zone 2 level 1)	444	N195E297	zone 2 level 1	white porcelain
	445	N195E307	zone 2 level 1	manganese glass
	446	N223.5E297	zone 2 level 1	black marble
	447	N223.5E302	zone 2 level 1	chrome/white porcelain
	448	N228.5E302	zone 2 level 1	manganese glass
	449	N195E302	zone 2 level 1	manganese glass
	450	N195E307	zone 2 level 1	mang. glass, jet button
	452	N195E307	zone 2 level 1	non-wire nail
	453	N195E317	zone 2 level 1	--
	493	N195E322	zone 2 level 1	manganese glass
	513	N216E299	zone 2	cut nail/slate pencil
	517	N214E318.3	zone 2	colonoware
	524	N216E327	zone 2	window glass/creamware
	527	N220E330	zone 2	brick
	528	N220E330	zone 2 lev 2/feature 137	wood screw
(Zone 2 level 2)				
	369	N200E307	zone 2 lev 2	blue milk glass
	370	N205E297	zone 2 lev 2	rockingham/green tr.pr. ww
	372	N200 block	trowel base z.2	blue milk glass
	373	N205E297	zone 2 lev 3	minie ball
	383	N225E312	zone 2 lev 2	brown glass/prosser button
	395	N200E312	zone 2 lev 2	blue milk glass
	396	N210E307	zone 2 lev 2	tr.pr. whiteware
	397	N210E302	zone 2 lev 2	molded glass
	414	N210E302	pipe	white porcelain
	454	N195E297	zone 2 lev 2	wire nail

	455	N223.5E302	zone 2 lev 2	glass marble, 1976 coin
	456	N228.5E297	zone 2 lev 2	manganese glass
	457	N228.5E302	zone 2 lev 2	2-hole shell button
	458	N195E302	zone 2 lev 2	brown glass
	459	N195E307	zone 2 lev 2	manganese glass
	460	N223.5E297	zone 2 lev 2	manganese glass
	461	N195E312	zone 2 lev 2	manganese glass
	462	N195E317	zone 2 lev 2	glass marble
	501	N195E317	zone 2 lev 2	gilt white porcelain
	496	N195E322	zone 2 lev 2	rose-tinted glass
(Zone 2 level 3)	472	N195E307	zone 2 lev 3	white porcelain
	473	N195E302	zone 2 lev 3	white porcelain
	481	N223.5E302	zone 2 lev 3	screw/white porcelain
	484	N228.5E302	zone 2 lev 3	milk glass
	498	N195E322	zone 2 lev 3	manganese glass
(Zone 3 level 1)	379	N205E307	zone 3 lev 1	transfer print whiteware
	380	N200E307	zone 3 lev 1	purple tr. pr. whiteware
	381	N205E307	zone 3 lev 1	transfer print pearlware
	382	N200E307	zone 3 lev 1	chinese porcelain
	384	N205E302	e. 1/2, zone 3	undec. whiteware
	389	N205E203	trowel b. zone 3	undec pearlware
	390	N200E302	zone 3 lev 1	gaudy dutch/tr. pr. whiteware
	391	N225E312	zone 3 lev 1	milk glass
	392	N225E312	zone 3 lev 2	Canton porcelain/whiteware
	410	N200E312	zone 3 lev 1	wire nail/tr. pr. pearlware
	412	N205E297	zone 3 lev 1	tr. pr. ww/prosser button
	415	N210E307	zone 3 lev 1	flow blue whiteware
	416	N210E302	zone 3 lev 1	cut nail/white porcelain
	474	N195E302	zone 3 lev 1	undec. whiteware
	475	N195E307	zone 3 lev 1	blue tr.pr. whiteware
	476	N195E312	zone 3 lev 1	transfer print pearlware
	477	N195E297	zone 3 lev 1	whiteware - 1840s
	480	N195E317	zone 3 lev 1	Canton porcelain
	486	N223.5E302	zone 3 lev 1	hand painted pearlware
	487	N228.5E302	zone 3 lev 1	creamware (later)
	499	N195E322	zone 3 lev 1	w.w./ wire nail
	521	N220E316.75	zone 3	wrought nail
	523	N220E316.75	troweling zone 4	white porc.
(Zone 3 level 2)	490	N195E317	zone 3 lev 2	creamware/whiteware?

491	N195E312	zone 3 lev 2	white porcelain
492	N195E307	zone 3 lev 2	creamware/whiteware?
494	N195E302	zone 3 lev 2	whiteware

(Zone 2 features)

371	N205E297	feature 79	dispensary bottle
377	N200E307	feature 80	spig ware
378	N200E307	feature 81	creamware
387	N200E302	feature 82	creamware
388	N200E302	feature 83	brick
401	N200E312	feature 100	transfer print pearlware
402	N200E312	feature 101	green glass
403	N200E312	feature 102	brick rubble
404	N205E297	feature 86	window glass
406	N205E297	feature 87	tr. pr. whiteware
407	N205E297	feature 88	wire nail
408	N205E297	feature 89	pressed glass
409	N205E297	feature 90	clear bottle glass
411	N310E302	feature 99 lev 1	creamware
418	N210E302	feature 99 lev 2	yellow ware/whiteware
421	N205E307	feature 84	Canton porcelain/whiteware
422, 398, 384	N205E302	feature 85	whiteware/container glass
417	N210E307	feature 103	whiteware
426	N205E302	feature 98	tr. pr. whiteware
423	N200E312	feature 94	gaudy dutch
405	N200E312	feature 94 lev 1	white porcelain
478	N223.5E297	feature 119 lev 1	white porcelain
479	N228.5E297	feature 119 lev 1	wire nail
508	N223.5E302	feature 134	wire nail

(Zone 3 features)

431	N205E302	feature 97	tr. pr. pearlware (1810)
428	N205E307	feature 111	shell edge pearlware
424	N205E307	feature 96	creamware
429	N200E312	feature 115	tr. pr. pearlware
425	N200E312	feature 104	creamware
430	N210E307	feature 105	creamware
522	N216E299	feature 119/137	shell
489	N195E317	feature 94 lev 1	transfer print pearlware
497	N195E317	feature 94 lev 2	blue hand paint pw

510	N195E317	feature 94 sample	annular pearlware
495	N195E302	feature 122 level 1	whiteware
507	N195E302	feature 122 level 2	white porcelain
504	N195E317	feature 127	slipware
505	N195E297	feature 125	cut nail fragment
506	N195E302	feature 123b	creamware
509	N228.5E297	feature 131	red transfer print w.w.
511	N223.5E302	feature 129	later creamware
512	N195E312	feature 135	Oriental porcelain
(feature 119)			
502	N228.5E297	feature 119 lev 2	amber glass
514	N216E317	feature 119	late creamware
515	N216E299, N1/2	feature 119	iron tack
518	N214E318.3	feature 119	transfer print pearlware
520	N220E316.75	feature 119	tr. Print pearlware/ww
525	N216E327	feature 119	shell edge pearlware

(1994 excavations)

36	N200E297	zone 2 lev 2	brown bottle glass	1870
35	N200E297	feature 6	nail	1870
39	N200E297	feature 7	brown bottle glass	1870
40	N200E297	feature 8	table glass	
41	N200E297	resid. zone 2	milk glass	1870
42	N200E297	zone 3	yellow ware	1850
47	N200E297	feature 9	undec pw	1820
48	N200E297	feature 10	tr pr whiteware	1830
49	N200E297	zone 4	pearlware	1800
54	N200E297	zone 4 lev 2	green bottle glass	
58	N200E297	feature 13	iron	1810

Sequencing the Proveniences

The stratigraphic position of the features and zones encountered, plus the artifacts they contain, are sufficient to suggest three distinct planting episodes. The earliest is represented by the brown shell-flecked features encountered at the base of zone 3 level 1, and underlying the intrusive plant stains. This garden is represented by features 95, 96, 97, 104, 115, 111, and features 109-112. Those excavated contained transfer printed pearlware dated to c. 1810 as the latest artifact, as well as other refined earthenwares from the 1780s-1820s. Added to this in 2004 are features 122, 123, 125, 127, 129, 131, and 135. This is the earliest garden event, conceivably installed shortly after the house was complete. The overlying zone 3, likely a planting surface for these features and containing their true tops, contains artifacts invented through the first half of the 19th century. White porcelain, dating to 1851, and wire nails of the same era, suggest this zone received debris and cultural material throughout this half century. The shell walk, feature 119, is also associated with zone 3.

The second planting episode is represented by some of the darker features, including the linear bed represented by feature 94, the small features near the house (features 86-90), the larger round plant stains, feature 98 and possibly feature 85. The mottled deposit of dark soil and red clay, features 103 and 136, may also date to this era, as suggested by the red clay features encountered in front of the kitchen in 1995. These deposits may represent garden plantings by the Allstons, 1857-1870. The lower levels of zone 2, though somewhat disturbed by installation of the irrigation system, contain some materials from the second half of the 19th century, but the majority reflects wares popular during the middle of the 19th century.

Though the artifact content is not significantly later, stratigraphic position and similarity of soil matrix suggest that the row of small plantings (features 80-83, 100-102, and 6-7) plus the large round plant stain, feature 84, are a third event, one dating to the late 19th century and possibly some time in the first half of the 20th century.

The data retrieved in 2004 generally support the interpretations proposed a year earlier. Generally, the earliest group of garden features conforms to the pattern visible in the c. 1890s photo. The features encountered, particularly those from the present season are ephemeral, and marked by subtle shadings in the soil. Shell concentrations, presumed to reflect pathways, are present, but again they are reflected by a subtle increase in shell density rather than a feature with definite edges.

The definitive feature of this early garden episode is the clusters of small circular-to-oval stains of brown shell-flecked soil. A 5-foot-long section, two to three deep, was encountered in the 2003 block (feature 95). Three more clusters of these were encountered in the N195 block (features 124, 125, 127). Associated with these features, and aligned with them, were subtle soil differences, reflected on the maps as dashed lines. The combined maps, though, show an alignment of these features.

The archaeological footprint of this earliest garden event conforms to the pattern visible in the 1890s photo. While this is strongly supported by the feature position, an early 19th century date for this garden is less certain. The 2004 section presented the opportunity to sample

additional features. All contained artifacts from the late 18th century, redeposited from zone 4 below. Two features contained artifacts dating to 1810-1815. These artifacts suggest that the oval pattern could date to the 1810s to 1820s, and remain in use through the 19th century. Based on the principals of Terminus Post Quem and Stratigraphic Point of Initiation, however, it is still possible that the garden was installed some decades later. There has been no evidence to date, however, of any earlier garden event in this portion of the yard. The underlying zone 4, encountered across the front lawn proper, contains artifacts that predate the Russell house and seem to be associated with the demolition of earlier structures and construction of the Russell house.

Most enigmatic is the roughly linear (east/west) area of darker soil designated feature 94. This feature was marked by poorly-delineated concentration of darker soil and an increase in artifacts. A sample of the north half, excavated in 2003, recovered a sherd of gaudy dutch whiteware (c. 1830); the 2004 sample contained only pearlwares (c. 1795). This suggests that feature 94 may be associated with the early 19th century garden, rather than the mid-19th century as suggested last year. Regardless, the configuration of feature 94, as mapped, does not conform to the oval pattern formed by the other features. The shape of the feature is poorly-defined, though, and may reflect a concentration of midden or planting soils within a large bed. Maps of the early 19th century pattern have been prepared with and without feature 94.

Excavations were less extensive, but patterning for the earliest garden is more difficult to discern north of the central walk. The most concrete feature is the well-defined shell path from the central walk north to the driveway. Most likely, the interface of this walk and the drive was marked by a fence and/or gate, but the large yew bushes impacted this area. Removal of the brick edging to the slate walkway (in the south profile of the N223.5 block) revealed that the compacted shell continued beneath the present slate walk, reflecting an earlier paving event. A cluster of small plant stains filled with the earliest soil type were present in the western half of N225E312; the area exposed was too limited to discern any pattern.

Red clay seems to be the visual marker of gardening events by the Allstons during their tenure at the Russell House (1858-1870). A solid layer of red clay was encountered next to the kitchen in 1994, and was dated to the mid-19th century (Zierden 1995:37-38 1996:64-65). Red clay was also noted in a plant feature from N172E270, a unit located in the garden proper in 1995 (Zierden 1996: 78). This clay-filled feature was stratigraphically above large beds dating to the early 19th century. Three large plant stains exhibiting this signature were discovered in the front lawn. Feature 103 and feature 136 appear to bracket the central walkway, midway between the street and the front door. A third feature was noted in N223.5E302, in the curve between the main walk and the auxiliary walk.

The edging formed by the brick headers, noted in the N223.5 block, is also a mid-19th century event. The brick edge forms border beds along the front of the house and the south side of the driveway. These match a brick-edged border bed along the northern side of the driveway, explored in 1995 (Zierden 1996:54-57). Here the well-preserved, complex stratigraphy strongly supported an 1850s date of installation. The border beds encountered this year were not excavated.

The third garden event is marked by the sporadic placement of larger planting stains, likely representing bushes. One additional feature (feature 121) was encountered this year; this was located south of the line of small bushes noted last year. A second feature was present in N228.5E302. Most of the 20th century planting events are marked by a lack of artifacts, as is the associated zone 2 level 1.

Close inspection of the 1898 photo suggests that the central walk is, at this time, bluestone, and that the portion leading north from the central walk to the drive is also stone. The main garden paths to the south appear to be a lighter material, possibly shell. There is an irregular border between the two. Investigations of the area between the central walk and the drive in 2004 revealed an area of shell paving, and no evidence of bluestone paver (these were likely removed in the 20th century). The upper layer of shell contained fragments of black marble that matches the mantle in the back parlor installed by the Allstons. The layer above the shell consisted of coal ash characteristic of the second half of the 19th century. These data suggested that the drive and front door were originally connected by a path, first crushed shell and then bluestone. Exploration of the edge of the central walk in 2004 suggested the crushed shell surface was present beneath the current central walk.

The 2006 excavations confirmed this sequence. The current paving layer was laid on a bed of builders sand that was devoid of datable artifacts. A small amount of dark soil beneath the pavers associated the event with zone 2, dating to the late 19th to early 20th century. The crushed shell was present directly beneath zone 2, and was present, in varying degrees of preservation, throughout the footprint of the walk. Though the edges were not well defined, there was some physical evidence to suggest the shell path was narrower than the current bluestone walk.

The present walk consists of large central stones 4' wide, with narrower stones (2' wide) on either side. Excavations beneath the central stones revealed a solid layer of shell paving .3' deep. The shell present beneath the side stones (N214E318.3 and N220E316.75) was thinner and more ephemeral, except for ½ foot closest to the center. This suggests that the shell path could have been 5' wide, and that the thinner layer reflects scatter of the edges, either during use or at the time of abandonment. The outer edges of the units also contained ephemeral layers of zone 3 (the soil present in the early 19th century garden layers). The presence of these soils further indicates an edge to the shell walk. There was no evidence encountered for edging of the shell walk, in the form of brick, tile, etc.

Artifacts in the shell path were rare, while those in the associated zone 3 deposits were slightly more numerous. This is consistent with previous data, from both the Russell garden and other sites in Charleston. The prepared paths contain virtually no refuse, while the associated garden beds are more likely to receive refuse, particularly bone and ceramics. Though the artifacts retrieved in and around the shell are few, all of those recovered could support an early 19th century date of construction for the shell path.

The data from the 2004 and 2006 excavation support the interpretations proposed after the 2003 work, and expand the footprint available for interpretation. Three garden episodes are represented by the zone deposits and associated intrusive features. Features associated with each

of the three episodes are shown in the figures at the end of this document, while the artifacts critical for dating these proveniences are listed in Table 1.

Table 2
Elevations for Key Features
Front Walk*

	<u>Top Slate</u>	<u>Top Crushed Shell</u>	<u>Top Zone 4</u>
At Front Step (N216E299)	8.63'	8.39'	8.26' (brick)
Middle of Walk (N216E317)	8.44'	8.16'	7.88'
At Sidewalk (N216E327)	8.38'	8.23'	8.03'

	<u>South Edge</u>	<u>Middle</u>	<u>North Edge</u>
Top Slate @ middle walk	8.40'	8.44'	8.49'
Top Shell @ middle walk	7.99'	8.09'	8.09'

Front Lawn

	<u>Top Ground</u>	<u>Top Zone 2</u>	<u>Top Zone 3</u>
N200 E302	8.64'	8.39'	7.71'
N195 E307	8.34'	8.19'	7.77'
N225 E312	8.93'	8.71'	8.08'
N228.5 E302	9.0'	8.70'	8.27'

**elevations are absolute: feet above mean sea level*

Material Culture

The artifact assemblage from the front yard was relatively sparse, suggesting that refuse disposal in this portion of the yard was uncommon. Material items were common enough to date the stratigraphic sequence, but the assemblage is not the best source of data on daily affairs at the house. Still, some items of interest were retrieved, and differences are discernable among the three temporal assemblages. The entire assemblage is tabulated below, with temporal subdivision.

Table 3
Material Assemblages

	Early 19 th Century*	Late 19 th century**	20 th century***
Porcelain, blue on white	45	63	26
Porcelain, overglazed	2	8	2
Porcelain, Canton	6	4	-
Porcelain, White	14	36	25
Brown saltglazed stoneware	2	4	1
Gray saltglazed stoneware	4	3	4
White saltglazed stoneware	11	13	16
Nottingham	2	8	2
Elers ware	1	-	-
Misc. 19 th century stoneware	18	5	1
Ginger beer bottle	1	-	-
Whieldon ware	2	-	-
Creamware	137	150	65
Pearlware, undecorated	38	31	17
Shell edged	15	7	5
Hand painted	38	12	9
Transfer printed	17	42	18
Annular	3	13	10
Whiteware, undecorated	54	80	48
Shell edged	7		
Flow Blue	-	1	1
Transfer printed	16	24	11
Annular	4	6	2
Hand painted	4	4	3
Yellow ware	9	6	7
Rockingham	-	1	-
Jackfield	3	1	1
Astbury ware	2	1	-
Agate ware	-	2	1
North Devon ware	2	1	3
Delft	34	22	11
Slipware, combed and trailed	31	31	17
Slipware, American	3	-	-
Leadglazed earthenware, misc	6	10	9
Lead glazed earthenware, black	8	6	2
Slip coated ware/mottled ware	1	1	1
Spanish/Olive jar	1	-	-
Colonoware, Yaughan	5	4	5
Lesesne lustered	8	2	3

River burnished	2	1	-
Olive green glass	107	134	78
Clear container glass	182	239	220
Aqua container glass	99	113	94
Amber/brown glass	7	24	25
Milk glass	2	23	11
Blue glass	3	7	3
Manganese glass	8	37	38
Table glass	28	48	16
Cutlery	2	1	-
Unidentified nail	58	236	124
Wrought nail	119	119	71
Cut nail	54	84	35
Nail fragment	48	203	129
Aqua flat glass	343	817	620
Clear flat glass	184	557	289
Wire nail	9	21	4
Flint fragment	11	11	1
Lead shot	-	2	1
Flint grip	-	1	-
Bone button	2	6	-
Prosser button	2	7	3
Brass button	2	3	2
Bead	1	1	-
Buckle	1	1	1
Grommet	-	1	-
Furniture tack	2	1	1
Wood screw	-	-	1
Toothbrush	-	1	-
Slate pencil	-	5	7
Pocket knife	-	1	-
Coin	-	2	7
Jewelry	-	-	4
Pipe bowl	8	6	4
Pipe stem	27	18	12
Strap/misc metal	62	80	26
Misc lead/copper	1	2	3
Marble	-	1	-

Toy	-	1	1
Fish weight	-	1	-
Flower pot	9	10	18
Military	-	1	-

* early 19th century proveniences include zone 3 (all levels) plus the features initiating in zone 3 and/or filled with soil from zone 3

** mid-19th century proveniences include zone 2 level 2 plus the features filled with darker soil and/or initiating in zone 2

*** 20th century proveniences include zone 2 level 1

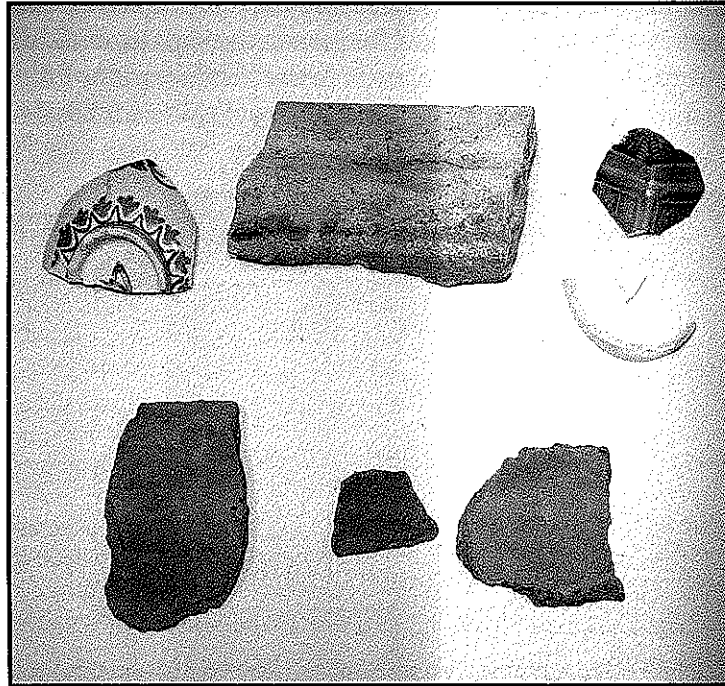
As the above table suggests, the materials were divided into functional categories for consideration relative to other Charleston assemblages. The relative proportions of these functional groups are shown in Table 4 below, and are consistent with analysis of all Charleston sites.

Artifacts recovered from datable proveniences numbered over 7,600, and most were highly fragmented. Somewhat larger items were recovered from the top of zone 4, indicating that the late 18th century deposits predating the Russell House contain an assemblage more likely from refuse disposal than that of the early 19th century front lawn. Maps and plats of the property suggest a series of smaller buildings fronted directly on Meeting Street in this location, and they were likely razed for construction of Russell's townhouse (Zierden 1996: 16-17).

Artifacts from the 19th century are relatively sparse, and relatively small, and the kitchen-related items that usually dominate townhouse assemblages are less common than elsewhere on site. Instead, architectural debris is more common, and these increase in frequency through the 19th century. Architectural items average 25-30% of domestic sites (South 1977). Architectural items are 40% of the early 19th century assemblage and nearly 60% of the late 19th century materials. Fragments of window pane glass dominate this assemblage, and become more numerous through time. This increase in architectural debris may reflect the renovations of the Allston family in the 1850s, but more likely reflects damage to the house during the Civil War and the repairs made by Mrs. Allston after recovery of the property. Too, the increased frequency in architectural materials may simply reflect the relatively small amount of kitchen materials.

Kitchen items include a range of ceramics and glass containers, with glass increasing in relative frequency through the 19th century as mass-produced bottles become more numerous. The ceramic assemblage includes a number of 18th century wares, as well as the refined earthenwares and porcelains that dominate 19th century assemblages. Wares associated with the early to mid 18th century were present in minor amounts, including North Devon Gravel-tempered ware, Combed and Trailed Slipware, and Delft. Minor amounts of the 18th century utilitarian stonewares – Westerwald and Brown saltglazed stoneware – and utilitarian lead-glazed earthenwares were present. Eighteenth century tablewares and tea wares included white saltglazed stoneware,

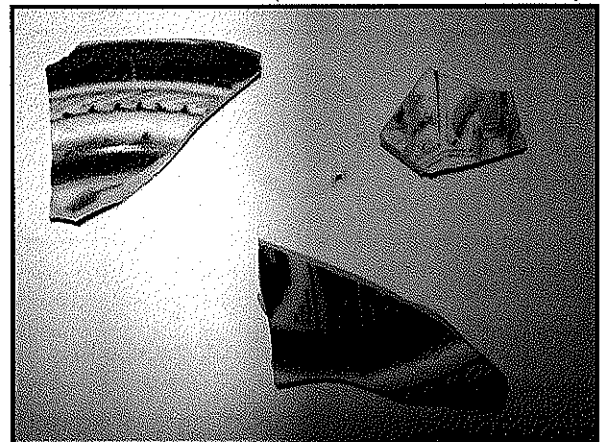
Nottingham stoneware, and Elers ware. Earthenwares from the mid-18th century included Manganese mottled ware and Slip-coated ware, as well as the more refined Jackfield ware, Astbury ware, and Agate ware. All of these were present in minor amounts, and decrease through time. While it is possible that many of these are from the previous occupation at the site, their consistent recovery elsewhere on the property, during the 1990s testing, suggests that at least some of these wares were part of the Russell household.



18th Century ceramics. Top row: delft, North Devon Gravel-tempered ware, Whieldon ware, White saltglazed stoneware. Bottom row: examples of colono ware.

This is likely the case for the Chinese porcelains from the late 18th century. A c. 1780s pattern was recovered beneath the kitchen of the Russell house beside fragments of 19th century Canton porcelain, in layers of refuse dating from the 1820s to 1850s (Zierden 1996: 185-187). The front lawn assemblage included underglazed blue-on-white fragments and a smaller number of enameled wares. Unlike the other 18th century ceramics, the porcelains increase in frequency through the 19th century.

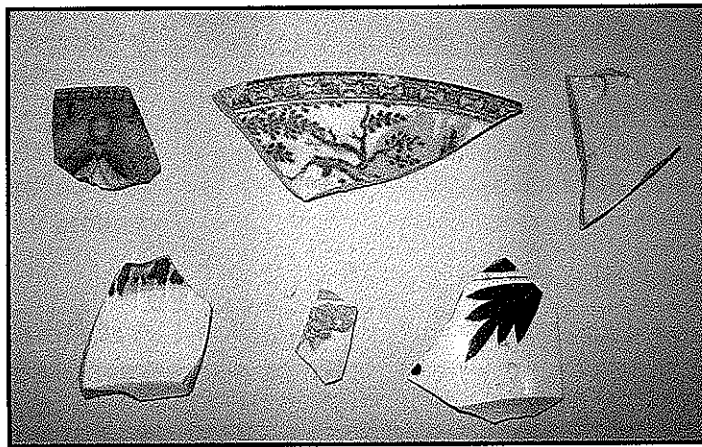
The Canton porcelain that is a hallmark of the 19th century was less common in the front lawn assemblages. The consistent recovery of this ware across the site suggests that the Russell family owned and used a set during their tenure. Like the other porcelain, though, the Canton ware increases in



19th century Canton; 18th century enameled porcelain

frequency through the 19th century. Slightly more common, and increasing through time, is the inexpensive plain white porcelain manufactured in America after 1851.

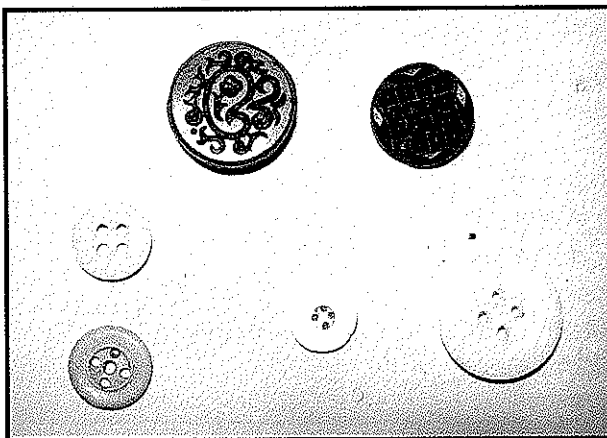
Refined earthenwares dominate the assemblage, and creamware (c.1770-1850) is particularly common. Creamware was an inexpensive ceramic by the early 19th century, and is most common in the late 19th century assemblage. The pearlwares, manufactured from 1780 to 1820, are present in a range of decorative styles and decline slightly in the later 19th century. Whitewares, developed by 1830, increase in frequency through time. This is particularly true for the undecorated whitewares, which are common in the third quarter of the 19th century. Utilitarian wares of the 19th century – stoneware crocks and jugs, yellow ware bowls – are present only in smaller amounts.



19th century refined earthenwares. Top row: transfer print pearlware, creamware. Bottom row: shell edged pearlware, sprigged ware, gaudy dutch whiteware

Colono ware, the unglazed low-fired earthenware of local manufacture ubiquitous in the Carolina lowcountry, was present only in small amounts. These wares are found on plantation sites as well as urban townhouses, and are mostly attributed to African American potters. Colono wares often comprise half of the ceramics recovered on 18th century plantation sites and they average 5% of Charleston ceramics. Further, colono wares are associated principally with the 18th century, and decline after the first quarter of the 19th century. Colono wares comprise 2.3% of the front lawn ceramic assemblage. The ceramic assemblage from the 1990s excavations produced a comparable proportion of colono wares for the second half of the 19th century, but slightly more for the Russell period. Colono wares were 5% of the Russell ceramics in the work yard and

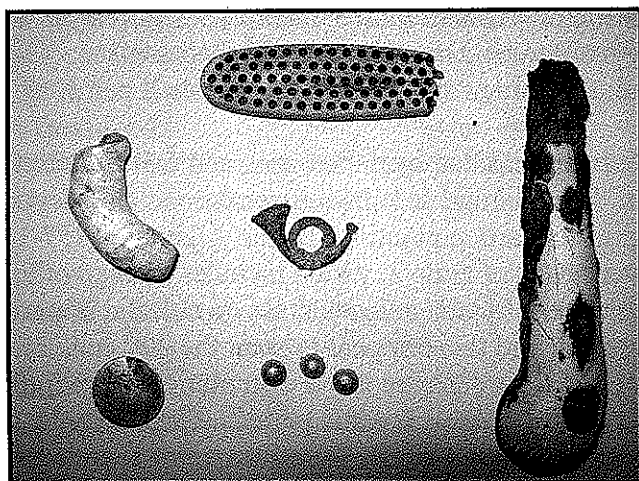
garden, but only 1.6% of those from the front lawn. This suggests that these wares were not used, and therefore not discarded, here.



19th century buttons, of jet, prosser, shell, and bone

Artifacts other than those from architectural debris and kitchen refuse were relatively sparse across the front lawn. Arms materials included a few lead shot and a small number of flint fragments. Furniture items included a screw and four upholstery tacks. Clothing items included buttons of brass and bone, and a larger number of the white prosser buttons that characterize the mid-19th century.

Jewelry items included pearls, clearly from a broken necklace, and a few glass beads. The personal group included artifacts that characterize 19th century assemblages, such as a pocket knife, a bone tooth brush, and several slate pencils. All of the pencils were recovered from late 19th century layers and are likely associated with the girls' school operated by Mrs. Allston and later the Sisters of Charity. A number of slate pencils were recovered elsewhere on the site. The most unusual item was a small stamped tin 'bugle', less than 2" in diameter. This is a stamped hat insignia for a Union soldier. The pattern matches an 1851 Infantry enlisted man's style (Miller 2001: 30-31). Several coins were recovered from the upper zones, most of them pennies from the 20th century. Children's activities were reflected in porcelain doll parts and marbles. Finally, gardening was reflected in the recovery of several terra cotta flowerpot fragments, particularly from the late 19th and early 20th century deposits.



Top row: bone toothbrush
Middle row: figurine arm,
Union army insignia, bone
fork handle
Bottom row: Spanish coin,
pearls

Table 4
Artifact Profiles

	Zone 3		Zone 3 fea5		Zone 2 lev 1		Zone 2 lev 2		Zone 2 fea5.	
	#	%	#	%	#	%	#	%	#	%
Kitchen	850	52.0	175	52.0	823	37.5	1115	37.5	197	36.6
Ceramics	446		111		319		497		109	
Glass	404		64		504		618		88	
Architecture	676	41.3	139	41.3	1277	58.2	1743	58.6	293	54.4
Arms	9	.5	2	.6	1	.04	13	.4	1	.2
Clothing	5	.3	3	.9	6	.3	18	.6	1	.2
Furniture	0	-	1	.3	18	.8	9	.3	1	.2
Personal	2	.1	0	-	2	.1	1	.03	0	-
Pipes	25	1.5	10	2.0	16	.7	19	.63	5	.9
Activities	66	4.0	6	1.7	49	2.2	56	1.8	40	7.4

Summary

Archaeological excavations were successful in isolating and revealing evidence of gardening activities in the front lawn of the Russell house. The relatively shallow deposits (averaging one foot) included three zone deposits and a number of associated features that suggest three garden events. Artifacts associated with each event suggest they were deposited in the first quarter of the 19th century, the second half of the 19th century, and the early 20th century, respectively. The earliest is characterized by brown shell-flecked soil, and contain artifacts that support an early 19th century date of deposition. It is likely the first such event at the Russell house and is comparable to the garden shown in the c.1898 photograph. The numerous features associated with this garden provide a footprint that can be replicated. The overlying zone 3 is likely a planting surface for these features, and the artifacts recovered suggest this zone received debris and cultural material through the first half of the 19th century. The central walk, and one connecting the walk to the drive, appears to be a roughly crushed shell surface. Though the evidence was much more ephemeral, the garden area likely featured shell paths, as well.

The second planting episode is represented by darker soil, and features containing this darker soil. The mottled deposits of dark soil and red clay mirror the red clay deposits discovered elsewhere on the site, and likely represent garden plantings by the Allstons, 1857-1870. These features are associated with the lower levels of zone 2, which includes a range of artifacts from the second half of the 19th century. A third set of plant stains contain no cultural materials and are associated with the upper level of zone 2, and these appear to span the 20th century. Unlike the zone 3 garden, features from the latter two gardens are too few in number to propose a formal pattern; however, several photographs are available for this period. These may be used in concert with the plant stains to reconstruct the appearance of the front lawn after abandonment of the more formal pattern reflected in zone 3. At some point, the central walk was covered in bluestone, laid directly on the previous shell path. Brick-edged beds in front of the house and along the drive may have been added at this time, likely by the Allstons. Sometime later, the connection from the front walk to the drive was abandoned.

Associated with these changes was a rise in grade, as reflected in the face of the marble steps. The addition of the bluestone walk added about 3/10' to the ground surface. The top of the early 19th century features is 6/10' below surface. While it is difficult to pinpoint historic grade in archaeological stratigraphy, it is likely that the ground surface during era of the Russell family is somewhere between these two points.

The data suggests that, during the Russell's tenure, the front lawn featured elements of a formal garden, one that continued to the large side yard. This block excavation, considered with the testing conducted in 1994 and 1995, suggests that archaeological evidence of these gardening episodes is intact beneath the present garden. Extensive excavations will be necessary to define these gardens.

The present project successfully demonstrated the role of archaeology in reconstruction of Charleston's historic gardens. The project also suggests that there is still much to learn about the location, style, and evolution of these gardens. Interpretations proposed a decade ago have been changed considerably as new data, both archival and archaeological, were collected. Continuing

study of the Nathaniel Russell House and grounds will likely further refine our understanding of Charleston's early 19th century landscape.

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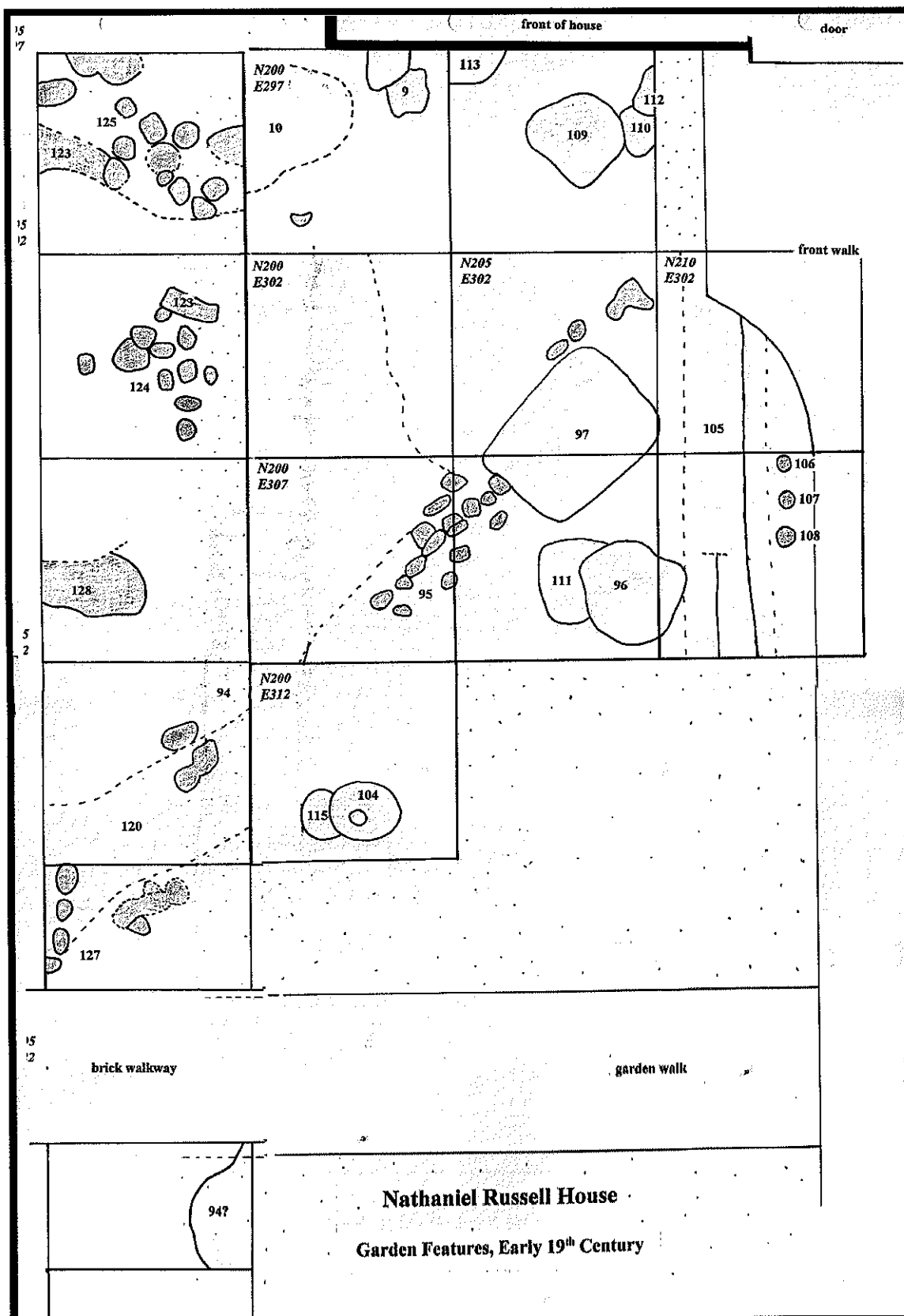
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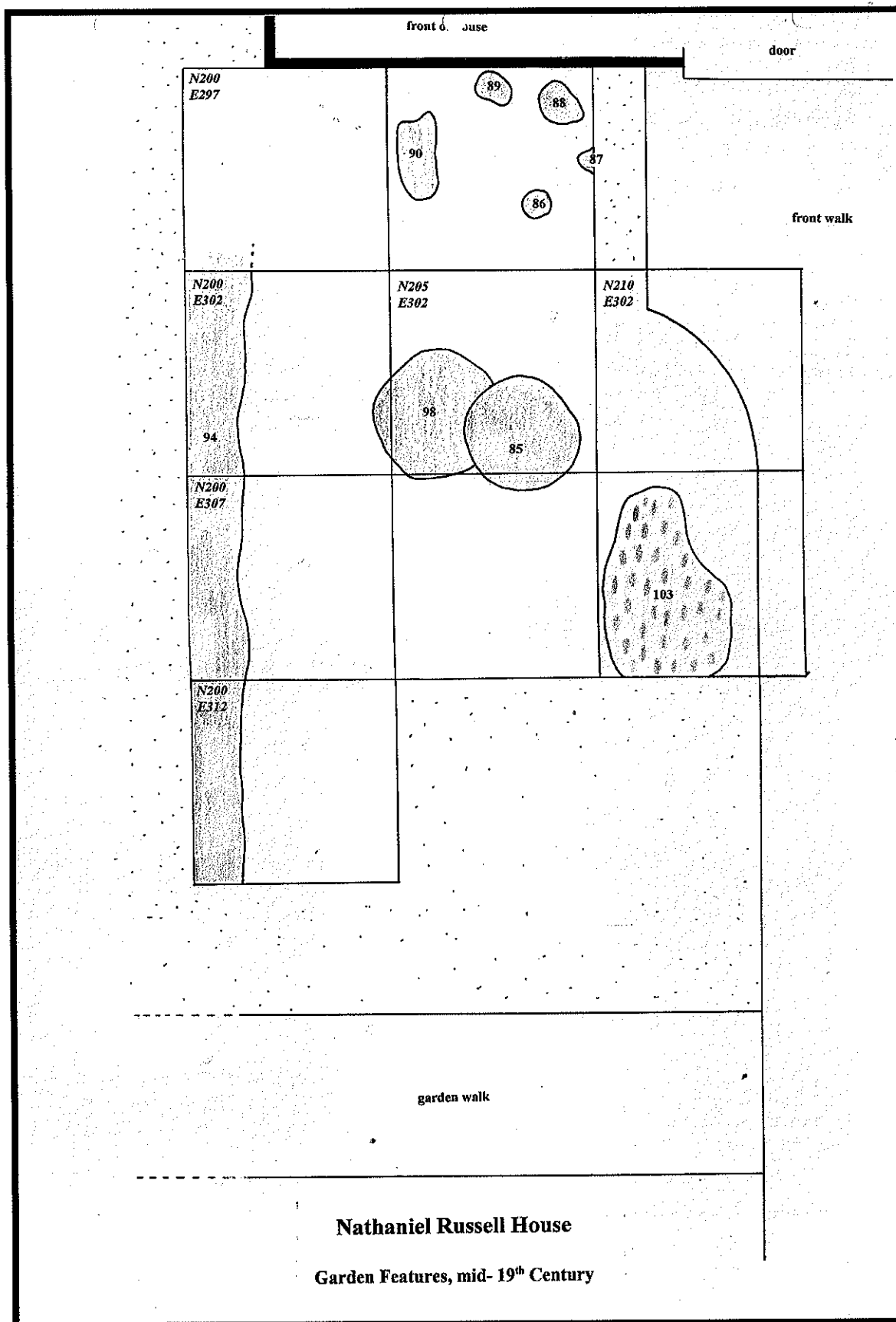
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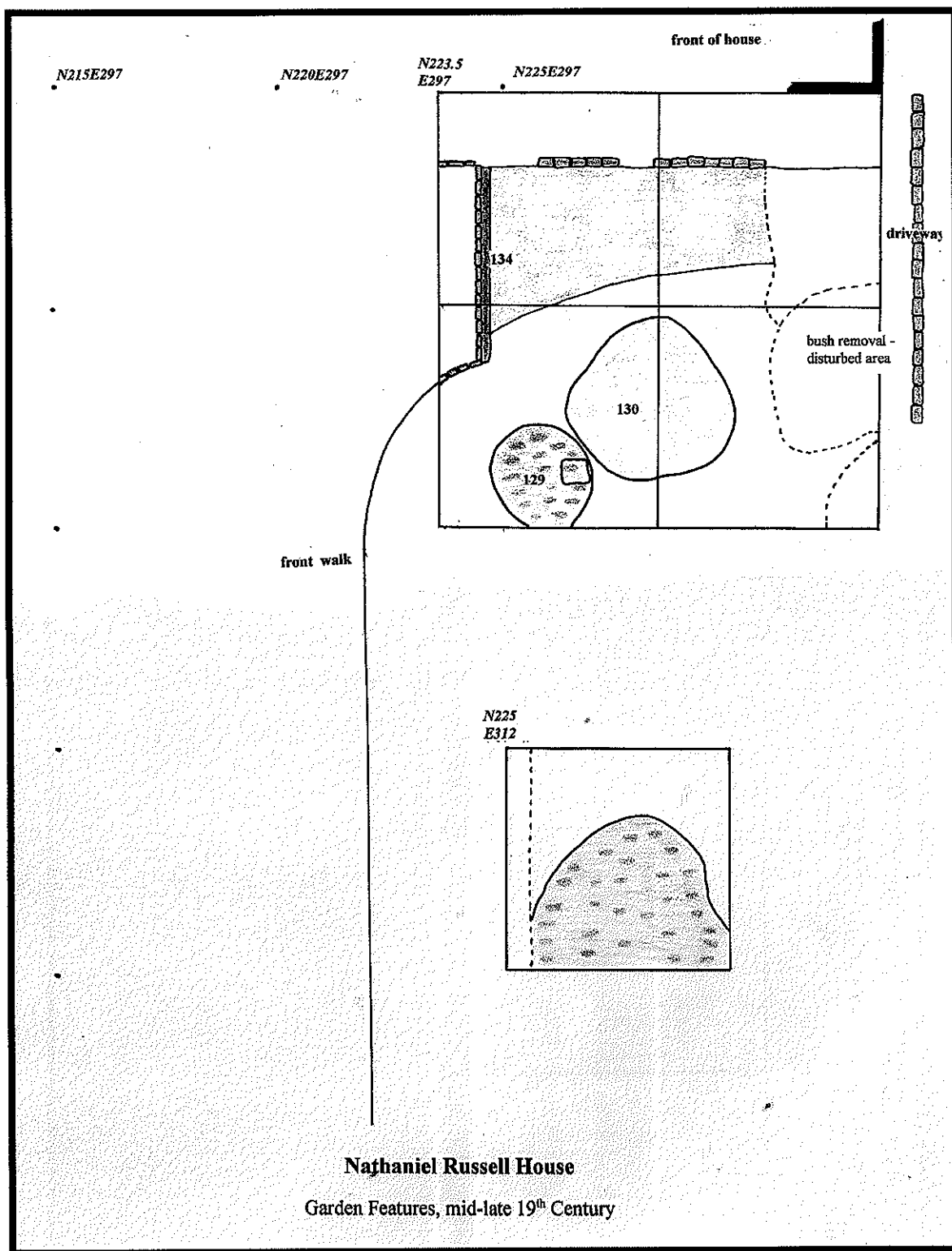
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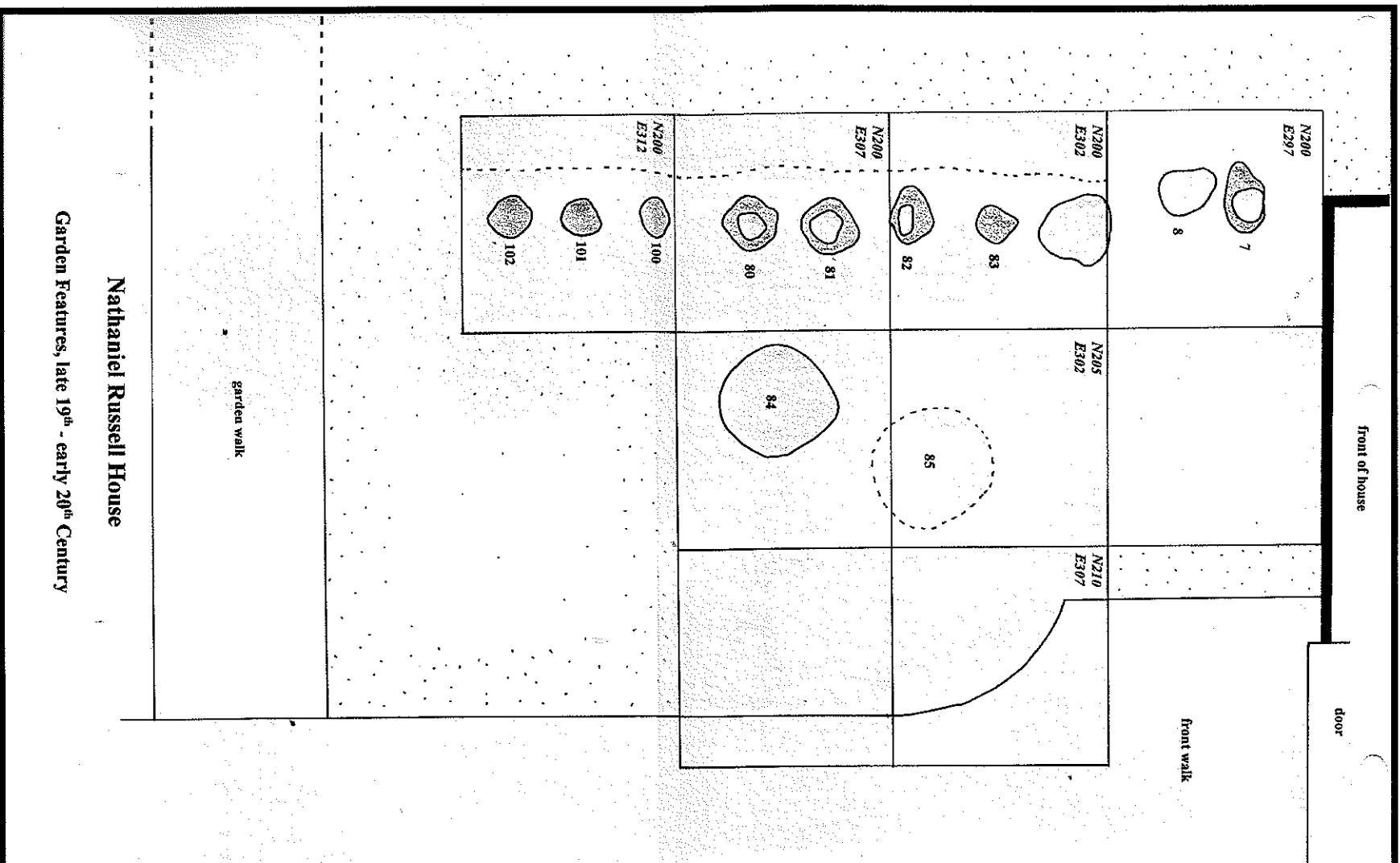
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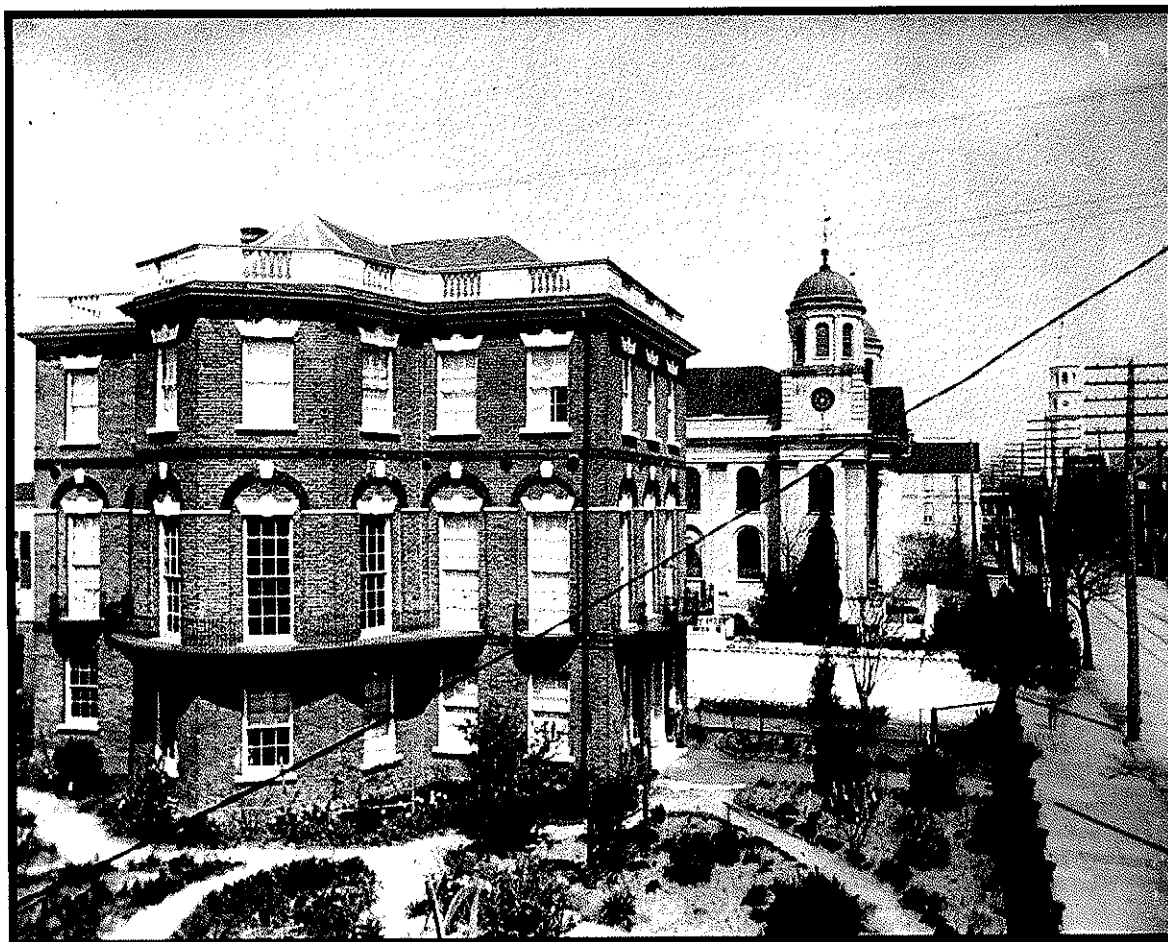
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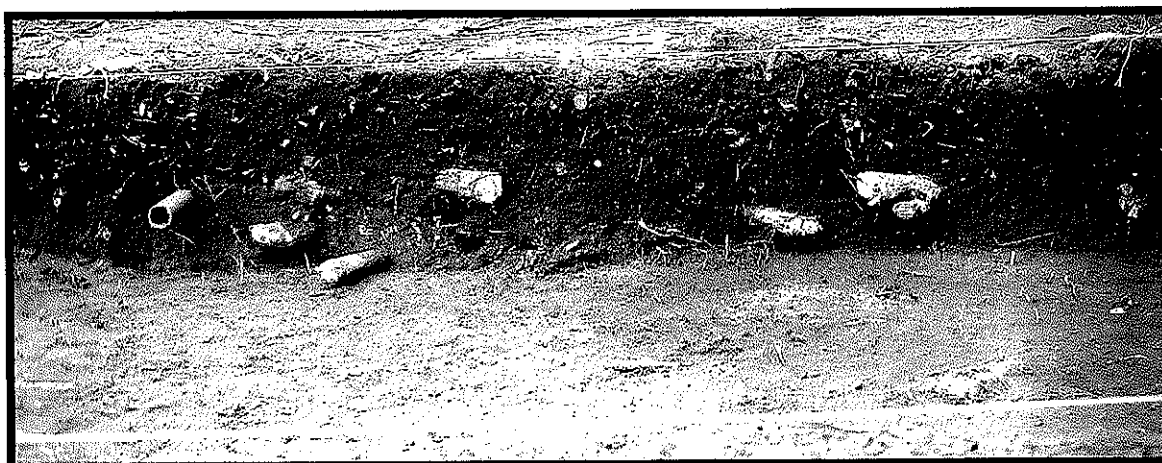






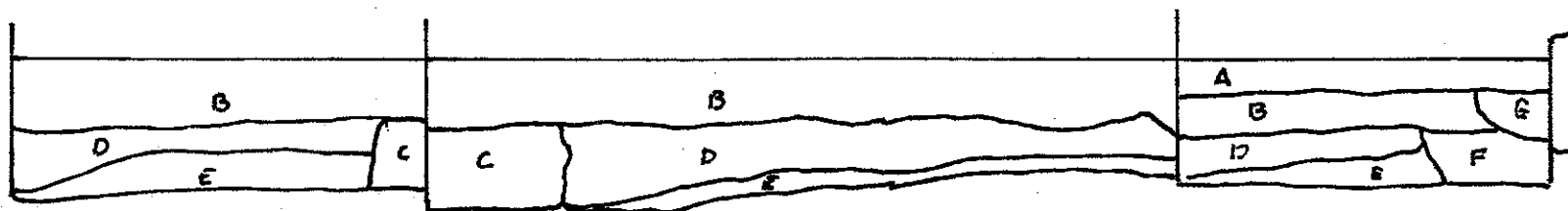


C. 1898 view of the front of the Nathaniel Russell House, facing north. Visible in the foreground is the formal garden with broad, curving paths. Plants appear to have been pruned recently. The front walk appears to be stone, while the garden paths are likely shell. Collections of The Charleston Museum.



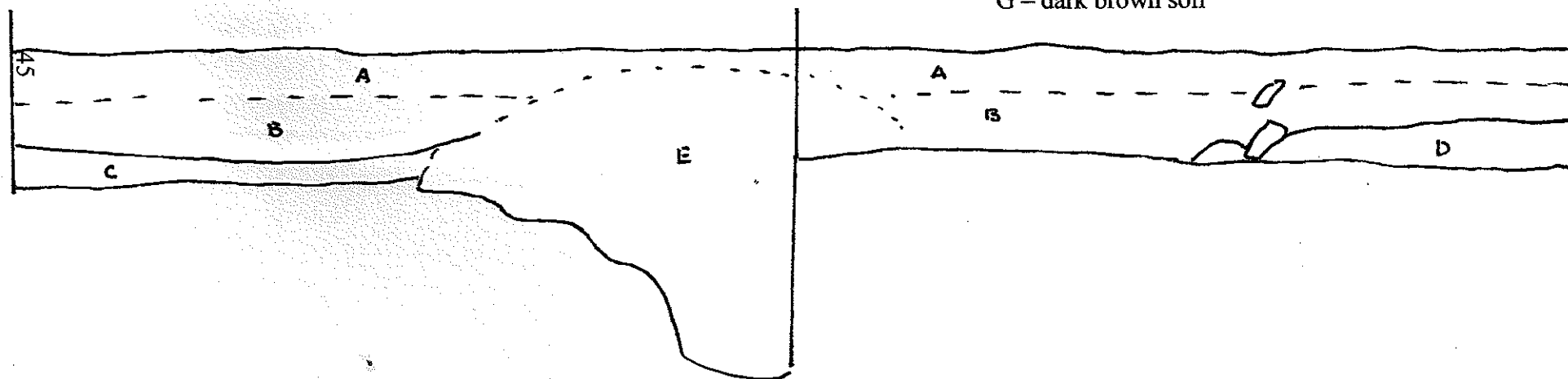
Top: Aerial view of N200 block with superimposed features, 2003

Bottom: South profile of N195 block



N 214 E318.3, N216E317, N220 E316.75; west profile

- A – bluestone paver
- B – zone 2; builders sand
- C – brick
- D – feature 119; shell in brown sand matrix
- E – zone 4; mottled gold and brown sand
- F – zone 3; medium gray-brown sand
- G – dark brown soil



N195 E297, N195E302, south profile

- A – zone 1
- B – zone 2
- C – zone 3
- D – concentration of crushed shell
- E – feature 122