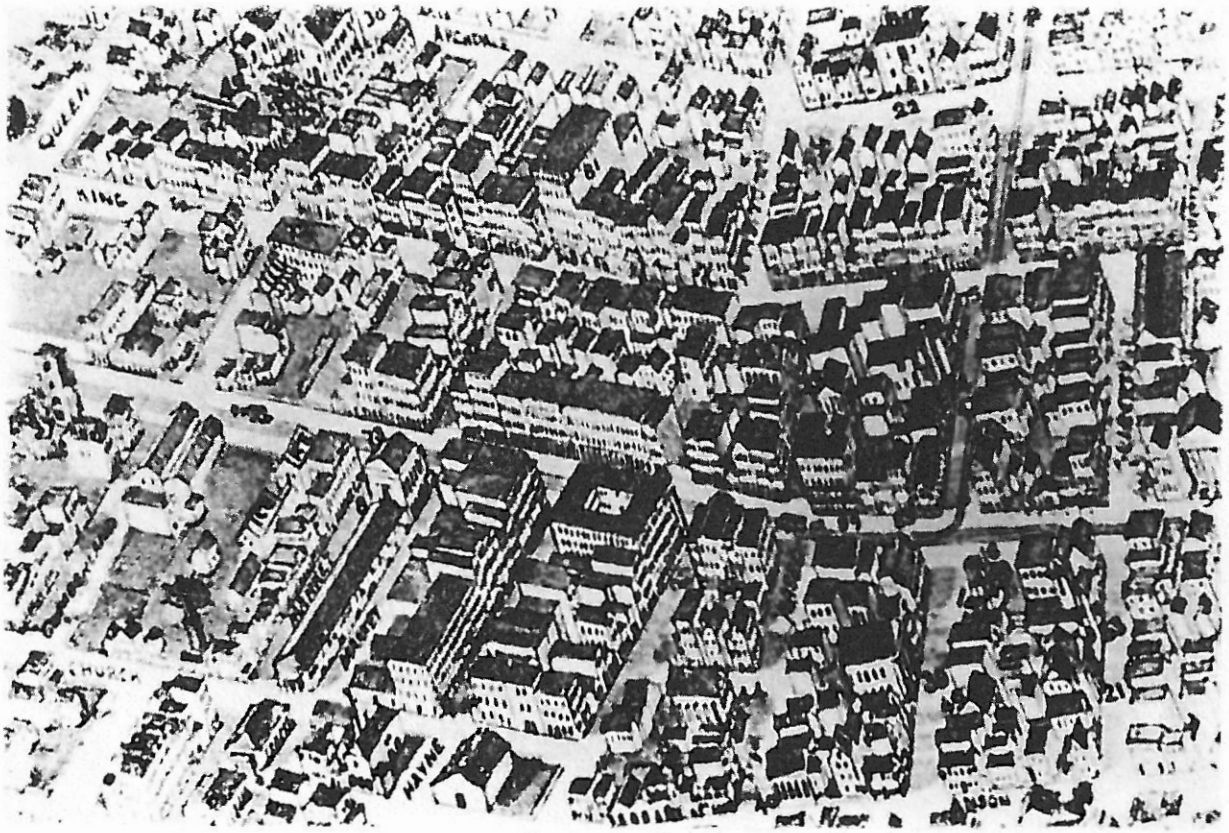
CHARLESTON PLACE:

Archaeological Investigations of the Commercial Landscape



by

Martha Zierden and Debi Hacker

The Charleston Museum

Archaeological Contributions 16

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CHAPTER I

INTRODUCTION AND METHODOLOGY

Introduction

The Charleston Place project is both the largest federally funded development project in the city, and the largest archaeological excavation project in Charleston's recent history. The hotel complex, in the planning stages since the 1970s and under construction since 1984, was completed in the fall of 1986. This imposing structure is the focal point of the City's broad goals for revitalization of the downtown area, as defined by the Central Business District Commercial Revitalization Plan.

In order to facilitate construction of the multi-million dollar complex in the downtown area, the City of Charleston obtained an Urban Development Action Grant, specifically to construct an adjoining parking garage and to restore the facades of the Meeting Street structures.
Since these funds represent direct federal involvement in activities that impacted the archaeological remains of the city, it was necessary to identify, evaluate, and mitigate these resources prior to construction.

Historic preservation legislation that applies to the Charleston Place site includes the National Historic Preservation Act of 1966 and Executive Order 11593, as implemented according to 36CFR800 (Procedures for the Protection of Historic and Cultural Properties), and the Archaeological and Historic Preservation act of 1974. In accordance with the guidelines set out by these acts and regulations, a Memorandum of Agreement (MOA) was drawn up between the City of Charleston, the Holywell Corporation, later Cordish, Embry and Associates and the Taubman Company, the South Carolina State Historic Preservation Officer, and the Advisory Council on Historic Preservation. The MOA stipulated that a program of intensive archaeological testing was to be carried out prior to construction in the project area, for the purposes of identifying and evaluating the presence of archaeological resources. The Jeffrey L. Brown Institute of Archaeology, Chattanooga, Tennessee, under the direction of Dr. Nicholas Honerkamp, was awarded the contract to conduct this work. Dr. Elaine Herold of The Charleston Museum received the contract to conduct historical research on the property.

The MOA also stipulated that, subsequent to testing and data recovery, demolition and construction activities that resulted in ground disturbing activities be monitored by professional archaeologists, and that the archaeological remains that were encountered be recovered. Plans called for the demolition of all structures fronting Meeting Street. In order to drive piles for the new facilities, it was necessary to remove all brick foundations, subsurface features, and other below ground obstructions. This involved complete grading of the property to a depth of four feet. Grading of the area fronting Market and King Streets, the site of the hotel, was conducted in 1981. Elaine Herold of The Charleston Museum served as Principal Investigator for the investigations.

A series of financial and legal complications forced a lengthy delay in the construction process, and work did not resume until 1984. At

that time, the rear portion of the structures fronting Meeting Street were demolished, and that area was graded in preparation for parking garage construction. This work was monitored by Charleston Museum staff under the direction of Martha Zierden. Although only "spot grading" was planned, the number of foundations present and the effort required to remove these resulted in complete grading (as it affects the archaeological record) of the area.

Monitoring of these grading episodes and excavation of features encountered resulted in the discovery of 63 features and the recovery of 252 cubic feet of materials, making the Charleston Place collection the largest recovered to date.

Site Setting and Description

The Charleston Place site consists of an entire city block bounded by Meeting, Market, King and Hasell Streets. At the time that work commenced on the property, the southern half of the block was cleared and was being used as a parking lot. The only standing structure in this portion of the block was the building at 199 Meeting Street, in use as a liquor store.

The majority of the northern half of the block was covered by standing structures. These characteristically long, narrow buildings fronted Meeting and King Streets, and to a much lesser degree, Hasell Street, and continued into the interior of the block almost to the center line. All of these structures were scheduled for demolition, with the exception of the St. Mary's Catholic Church properties, 233-235 Meeting Street, restored as Marianne's restaurant, and the front 40 feet of the structures fronting Meeting Street, 209-231 Meeting. The King Street structures were demolished in 1981, while the backs of the Meeting Street structures were demolished in 1985. This ongoing demolition resulted in a site of uneven terrain, littered with piles of rubble, that was dusty and noisy (Figure 1).

Previous Research

As a result of federal involvement, a number of projects have been conducted on the property prior to monitoring. In January 1978, the firm of Cosans and Henry conducted a preliminary assessment of the archaeological resources of the block. The report (Cosans and Henry 1978) included basic geological and topographic data on the area, a brief but cogent summary of prehistoric and historic settlement, and discussions of specific topics, such as privies, water supply, utilities, tidal drains, and street numbers (Cosans and Henry 1978 in Honerkamp et al. 1982:22). The report was basically a reconnaissance document with on-site inspection and interpretation. No subsurface work was conducted.

At the same time, an architectural survey was conducted by Grigg, Wood and Browne, Architects. Their report rated the architectural merit and integrity of the standing structures in the area. They noted that there were no individual structures of merit within the property area, but that "the value of the existing structures is embodied in the facade groupings created by the individual expressions" (Grigg, Wood and Browne 1978:17).

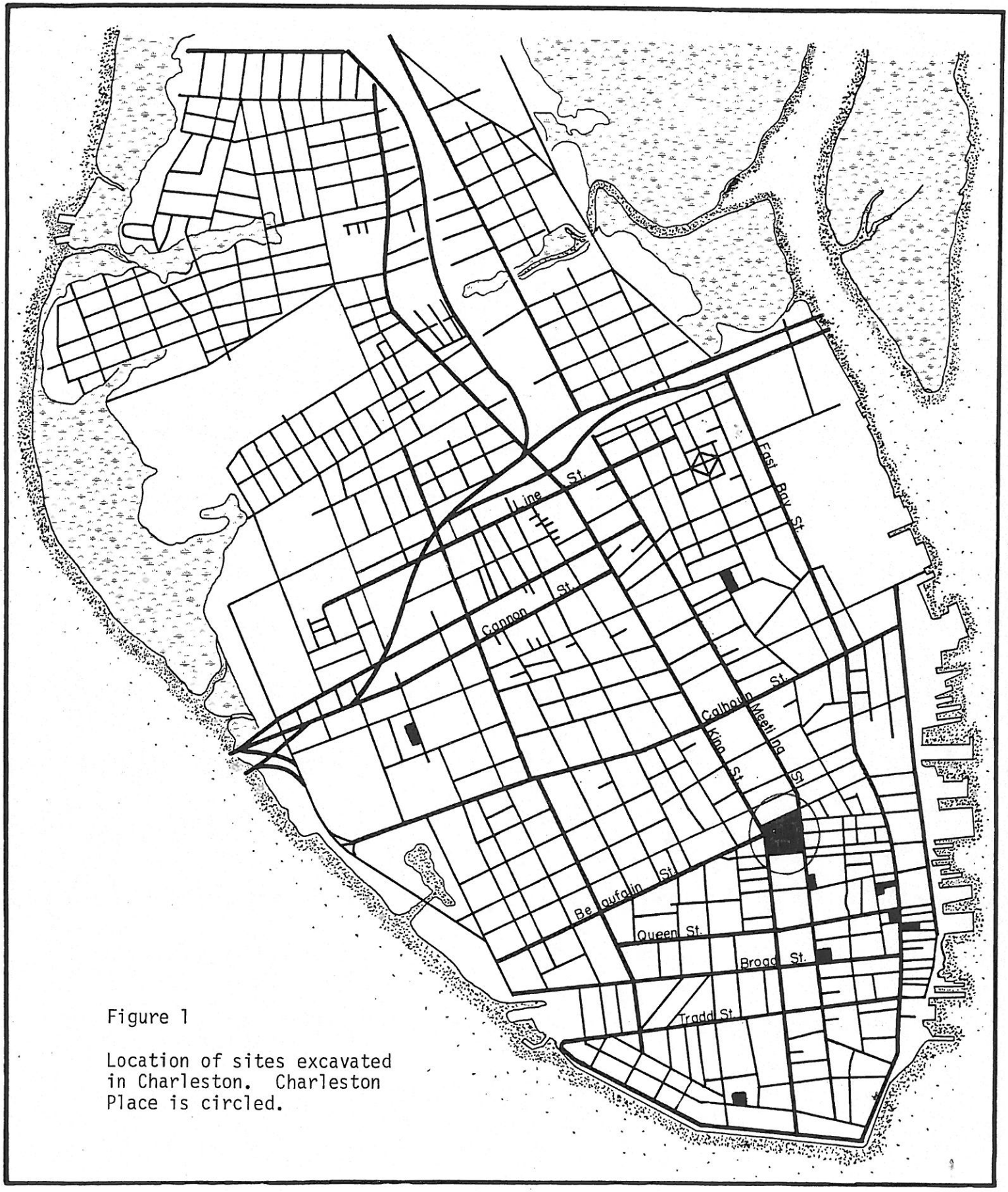


Figure 1

Location of sites excavated in Charleston. Charleston Place is circled.

Detailed historical research was conducted by Elaine Herold and Elizabeth Thomas of The Charleston Museum. This report presented a brief history of Charleston, focused on the projeet area, and presented a number of historic maps and plats. The bulk of the report was designed to provide site-specific information, and included a lot-by-lot reconstruction of the chains of title, as complete as possible within the constraints of time and money. In addition to nominal data and chronologies of ownership, the research revealed property utilization, locations of physical remains on the property, and to a certain extent, occupations of the inhabitants. Information on ethnicity and socio-economic status of site inhabitants, as well as the place of the site and its inhabitants in the general growth and development of the city, was not included in the report (Herold and Thomas 1981).

By far the most comprehensive work on the site was conducted by the University of Tennessee-Chattanooga, under the direction of Dr. Nicholas Honerkamp. This large scale archaeological project, conducted in 1981, included both testing and a limited amount of data recovery. A total of 250.5 square meters of surface area was excavated in fifteen units, labeled suboperations. Location of excavated units was limited by the areas of open space available for exploration. Therefore, units were concentrated in the Belk Tract, the southern half of the block, but two units were excavated in the open area of 213 Meeting Street and a single unit was placed in the alley adjacent to St. Mary's Church (Honerkamp et al. 1982). This research revealed the presence of intact, interpretable features and deposits, representing the mid eighteenth to the twentieth century. The construction of later nineteenth century structures sealed, rather than obliterated, earlier deposits; likewise, while the demolition and clearing of the belk tract truncated many deposits, it did not obliterate them. Honerkamp et al. suggested that the greatest density of deposits were to be found at mid lot and rear lot areas of individual properties. Excavations during the project were conducted with meticulous care and were thoroughly documented. The project resulted in the recovery of 8858 artifacts plus 18,746.5 grams of bone amenable to archaeological analysis. Because of the highly controlled nature of the excavations and the realtively large sample site, these materials provided a comprehensive data base for subsequent archaeological and zooarchaeological investigations in Charleston. For the purposes of this report, these data provide a control against which to measure the volumes of material recovered from proveniences with varying degress of control during the monitoring phases.

Field Methodology

By its very nature, monitoring represents a less than satisfactory approach to archaeological research. Sound archaeological study is rooted in carefully controlled excavation, or the ability to take the site apart exactly opposite of how it was put together. Even under the best of circumstances, this degree of control is not possible in a monitoring situation. When a features is encountered after a bulldozer has exposed it, then the relative stratigraphic situation of the top of the feature is lost, because accompanying and overlying strata have been disturbed or removed. As indicated elsewhere, stratigraphic point of initiation is often as important as Terminus Post Quem in determining the date of deposition. Even if a feature is uncovered in its entirety and then excavated in a carefully controlled manner, a certain amount of information has been lost.

On the other hand, monitoring certainly represents a better than nothing situation. When UTC completed the testing and limited data recovery program, it was clear that the site still contained extensive undisturbed archaeological deposits. It was also clear that the proposed construction activities would destroy almost all of these deposits. It was not feasable financially or otherwise to completely excavate the entire site. Monitoring is a reasonable compromise, in that proveniences can be recovered with some degree of control, rather than lost completely. The above discussion is provided to illustrate that while the massive data base recovered from the Charleston Place site can make a major contribution to urban archaeological research, utilization of these data is hampered by a number of situations where control was less than optimal.

The Charleston Place monitoring project is divided into three phases. The first phase consists of excavation of a number of targetted features located near the corner of King and Hasell Streets. These excavations were conducted under the direction of Elaine Herold and are discussed in a separate section. Basically, six large features (three privies and three wells) were located with a backhoe, and excavation was conducted by hand. Excavations were conducted with trowels and the artifacts were collected by hand. Materials were washed and analyzed by high school students.

The Belk tract and King Street areas were graded in 1981, and monitoring was conducted by Jeffrey Parker and Martha Zierden, under the direction of Elaine Herold. As they were encountered, features were described and were assigned feature numbers. These included features that were too amorphous to define or destroyed in the process of grading, those definable as to form and function, but containing no excavatable materal (such as brick walls, drains, sterile cisterns), and those features with definite form and function, containing artifact assemblages within a soil matrix (such as privies, trash pits, etc.). Feature desingation began with the arbitrary number of 100.

For this work, no grid was established; instead, features were located by measuring with tapes distances from known points to a designated corner of the feature, or to the center of the feature. No vertical location was established for the feature, but internal horizontal and vertical measurements were made. Features were examined by hand using trowels, and artifacts were gathered by hand. No materials were screened. Faunal materials were also collected by hand, and in organically rich proveniences a small soil sample was retained. An effort was made to expose the entire feature prior to excavation, but this was not always possible. Due to the nature of the grading, features were often breached from the side, while the undisturbed portion was relatively inaccessible. Likewise, in one case the top portion of a privy feature was removed by the bulldozer and "dumped" beside it. Where possible, planview and profile drawings of the features were made. With rare exceptions, the features were not photographed (Figure 2).

The lack of screening during these operations seriously affects the comparability of the data. All of the materials from the 1985 excavations, from the UTC excavations, and from the eight other excavation projects conducted in Charleston from 1982 to 1986 were screened through ¼ inch

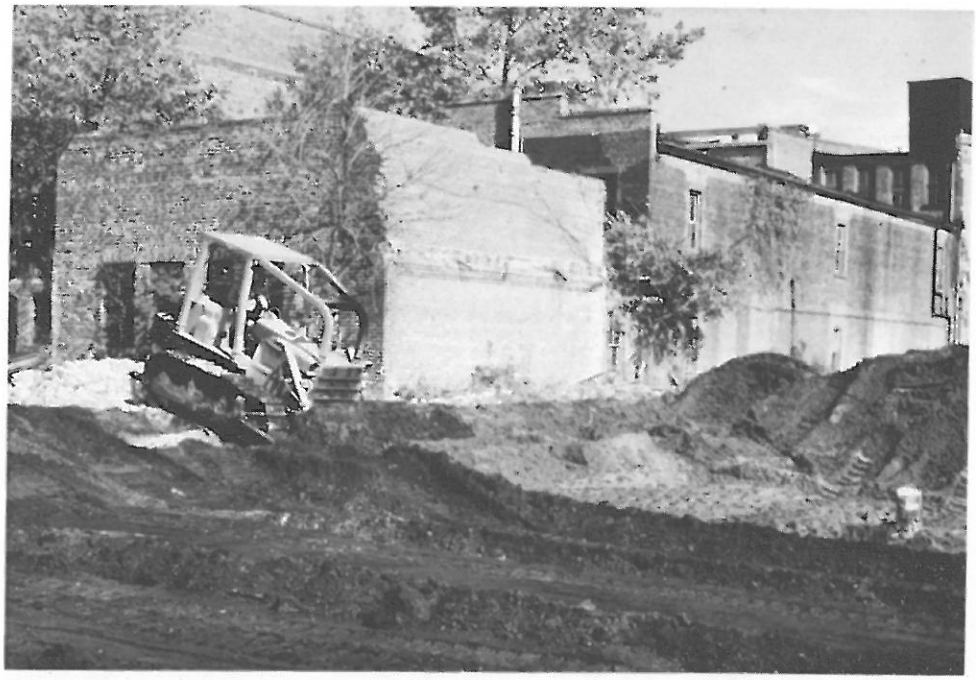


Figure 2

a) grading the Charleston Place site in 1981

b) excavation of Features 130, 129, and 126

mesh. Despite careful excavation, a lack of screening biases an assemblage against small artifacts, such as buttons and straight pins, and against "uninteresting" items such as rusted nails.

A greater degree of control was exercised during the 1985 excavations, contained within the area of the rear portion of the Meeting Street structures. When encountered by the bulldozer, features were exposed in their entirety prior to excavation. Where it was not possible to excavate the entire feature, a measured sample was obtained. Features were excavated in natural zones or, where these were lacking, arbitrary levels. Elevations were taken at the top and base of each feature with a transit and stadia rod, and were tied into a known elevation point. Planviews were made of each excavated feature, and each was photographed before, during, and after excavation. All excavated materials were screened through ¼ inch mesh. In addition, flotation samples for ethnobotanical analysis were collected from each feature. As in the 1981 excavations, feature numbers were assigned to three classes of proveniences; those already destroyed by bulldozing or too amorphous to clearly define, those exhibiting formal and functional attributes, but containing no excavatable matrix, and clearly definable features containing cultural and biological materials within a clearly bounded soil matrix. While the 1985 excavations were conducted in a controlled manner, making the data comparable to those from other sites, the nature of the site grading made stratigraphic positioning and relations impossible to determine (Figure 3).

Laboratory Methods

After excavation, the materials were removed to The Charleston Museum. Artifacts from the 1981 excavations were washed by high school students and were sorted and analyzed by Elizabeth Paysinger. Materials from the 1985 excavations were washed, sorted, and analyzed by Debi Hacker, with assistance from a number of volunteers. The first step in the analysis of the materials was the identification of the artifacts. The Museum's type collection, Noel Hume (1969) and Stone (1974) were the primary sources used, although a number of other references were consulted for specific artifacts. In particular, the privies excavated in 1981 yielded a number of ceramics with maker's marks. Godden (1964 and 1971) and Kovel and Kovel (1986) provided extensive information on these ceramics. Lorraine (1968), Huggins (1971), Kechum (1975) and Switzer (1974) were used to identify bottle glass.

Following identification, the materials were grouped according to functional categories, based on South's (1977) and Garrow's (1982) model for the Carolina Artifact Pattern. Under this method, artifacts are organized into different types, groups, and classes, based on their function. South's technique has been widely adopted by historical archaeologists, allowing for direct intersite comparison; all of the data from Charleston have been organized in this manner. South's categorization is an extremely useful heuristic device in that it allows complete quantification of the assemblage.

Conservation procedures included reconstruction of ceramic and glass vessels, and stabilization of metal artifacts. Ceramic and glass vessels were restored with DAP china and glass mender, a non-yellowing glue soluble

Figure 3

a) demolition activities behind Meeting Street, 1985

b) exposing the edges of Feature 149

in acetone. Ferrous materials were stabilized by soaking them in successive baths of distilled water to remove chlorides, then air dried. Selected items were placed in electrolysis in a weak sodium carbonate solution with a current of 6 amperes. Upon completion of electrolysis, they were placed in successive baths of distilled water to remove chlorides, then coated with a solution of tannic acid and phosphoric acid to protect the surfaces.

Non-ferrous copper based artifacts were also placed in electrolytic reduction, in a more concentrated solution, with a current of 12 amperes. They were placed in the distilled water baths to remove surface chlorides before being coated with Incralac to protect the surfaces. Non-ferrous metallic artifacts not requiring electrolysis were cleaned with a soft, dry brush and bagged.

All materials are curated in The Charleston Museum storage facility according to standard museum policy. Artifacts were packed by provenience in standard low acid boxes, labeled, and stored in a controlled environment. Field records and photographs are curated in The Charleston Museum Library in the high security area. Copies on 100% rag paper are available in the general research section of the library.

Organization of the Data

Large archaeological projects with accompanying volumes of data often present problems when it comes time to organize the information. There are always choices to be made when defining analytical units; these divisions may be made on the basis of temporal, functional, or spatial criteria, for example. Recovery of data from an entire city block, where horizontal and vertical association of the proveniences is unclear, where property lines changed numerous times during the 250 years of occupation, and where dating of the proveniences is sometimes ambiguous, necessitates a broad level of research. In this case, research moves from a household-specific level to a neighborhood level of investigation.

Because of the disparity in excavation methodology, the often large volumes of material recovered from a single provenience, and the temporal and functional disparity between proveniences, each feature will be discussed separately. These discussions will include information on the form and function of the feature, particular field methods employed, particular site history where relevant, and a description of the artifact assemblage. To avoid repetition, the artifact discussions are very general, with details provided only on unusual or more complete materials. Artifact assemblages are instead summarized in table format in Appendix V. Small or amorphous features are not discussed in narrative format, but are instead summarized in Appendix V. These discussions will be divided into two sections; the 1981 excavations (Chapter III) and the 1985 project (Chapter IV).

The entire data base is then combined to address a number of ongoing research issues in Chapter V. As discussed above, these approach the data base on a neighborhood level, and utilize comparative data from other

Charleston projects. The contributions, as well as limitations, of these investigations are discussed in each section. Included in appendicies are analysis of materials excavated by Elaine Herold at the corner of King and Hasell streets, analysis of the floral remains, analysis of faunal remains from the 1981 excavations, and analysis of faunal remains from the 1985 excavations.

CHAPTER II

HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The Documentary Data Base

The major difference between prehistoric and historical archaeology is that the populations being studied produced written records. Although the field techniques are basically the same, the availability of documents results in a findamentally different approach to the formulation and testing of hypotheses in historical archaeological research. These records, which are themselves artifacts of the culture that produced them, provide an emic view of past lifestyles which can be tested through archaeological research; archaeology thus provides the etic view of past society.

In an urban setting, which is defined as a relatively dense concentration of humans and human activity (Staski 1982), the level of energy expended must be organized for increased efficiency; this requires expanded record keeping. Therefore, the documentary data base for cities is more extensive, but also more disorganized (Honerkamp et al. 1982; Staski 1982). Historical research, then, is a major aspect of the urban archaeological program in Charleston. Extensive archival research was conducted to outline general patterns of growth and development in the city, and to outline broad research goals (Calhoun et al. 1982; Calhoun and Zierden 1984; Zierden and Calhoun 1984).

Historical research is also a critical aspect of individual excavation projects. As part of an excavation project, site specific information is collected on spatial patterning, range of site activities, and the income, occupation, and ethnic affiliation of site occupants. In many instances, specific data on these topics were not available. In such cases, incomplete site histories are combined with general data on the growth and development of the city to formulate a neighborhood level research model.

Extensive historical research has been conducted on the Charleston Place site but, due to the size and complexity of the property, significant gaps remain in our knowledge of the history of the block. This study provided extensive data on spatial patterning, physical remains located on the property, various commercial activities conducted on the block, and the occupations of property owners. Largely lacking from the study was a consideration of home rental, and thus in many cases actual occupants of the site. Research on other Charleston sites has demonstrated the prevalence of site occupation by individuals other than the property owner. Such conditions were prevalent in the commercial core, including the Charleston Place block (Calhoun et al. 1982). Thus, race, ethnicity, and socioeconomic status of the occupants was clearly beyond the scope of the study (Herold and Thomas 1981).

The goal of the Herold and Thomas study was to present baseline data that could be used to correlate a one-to-one association between particular site occupants and individual archaeological proveniences. While disparity between ownership and occupancy precluded such efforts, there are a number of additional complicating factors which made such correlations difficult, if not impossible. Property lines at the Charleston Place block changed innumerable times and lots were increasingly subdivided, and buildings gradually encroached on the interior of the lots. Maps of the periods vary in their degree of

accuracy, and many critical subdivisions do not have accompanying plats. Other researchers (Beidleman et al. 1986; Cultural Resource Group 1985) have minimized this problem by carefully excavating walls, fences, and other physical evidence of property boundaries. The grading and salvage procedures precluded such efforts at Charleston Place. This, combined with an incomplete knowledge of site formation processes - where was the trash coming from and where did it ultimately end up - and the fact that many of these structures were rental property, makes one-to-one correlations impossible. Some researchers have suggested that the myriad of occupants and activities at such sites result in an archaeological record that is and average of human behavior (Honerkamp et al. 1983); such is certainly the case with the Charleston Place site. Rather than as a number of separate entities, the Charleston Place site will be treated as a single site, a neighborhood. Recently, urban archaeologists have begun to move from the individual household to the neighborhood as a logical unit of study in an ruban situation. Such an approach has already been used, with mixed results, in Charleston (Zierden and Calhoun 1987).

Regardless of whether an individual or neighborhood approach is used, a sound historical data base is necessary to check interpretations. Contained below is a general description of the development of the Charleston Place block as it relates to and reflects the history of the city and the region. Logically following from this background are a series of research questions to be addressed by examination of the archaeological data.

Historical Background

The founding of Charleston in 1670 as the initial settlement of the Carolina colony reflects the European competition for the new world colonies and power that characterized the seventeenth century. The English government was searching not so much for land but for the fruits of the land; products that were desired, but could not be raised, in England. These included, among others, silk, wine, hemp, naval stores, and citrus fruits.

Although attempts to transplant an urban lifestyle to the New World had failed in Virginia, the Proprietors were eager to establish a port city in Carolina (Brownell and Goldfield 1977; Goldfield 1982). The original Carolina settlers bypassed Port Royal to the south, the scene of Spanish colonization a century earlier, and settled on Albemarle Point on the Ashley River. The location was swampy and difficult to defend and the settlers soon set a covetous eye upon Oyster Point, the peninsula formed by the confluence of the Ashley and Cooper Rivers (Andrews 1937). In 1680 the settlement was moved to the peninsula and a planned town was established (Reps 1965). The 300 acres set aside for the Grand Model encompassed the southern portion of the peninsula up to Beaufain Street, including the Charleston Place block; the area immediately settled, however, was the portion of the city bounded by East Bay, Cumberland, King, and Water Streets. The late seventeenth century city exhibited such medieval characteristics as low, crowded buildings and a high brick wall which completely surrounded the city (Coclanis 1984). By 1704, however, a number of small farmsteads were located outside of the wall (Crisp 1884), and by 1717 all but the eastern wall of the fortification was destroyed or removed, as the city moved west, south, and north across the peninsula.

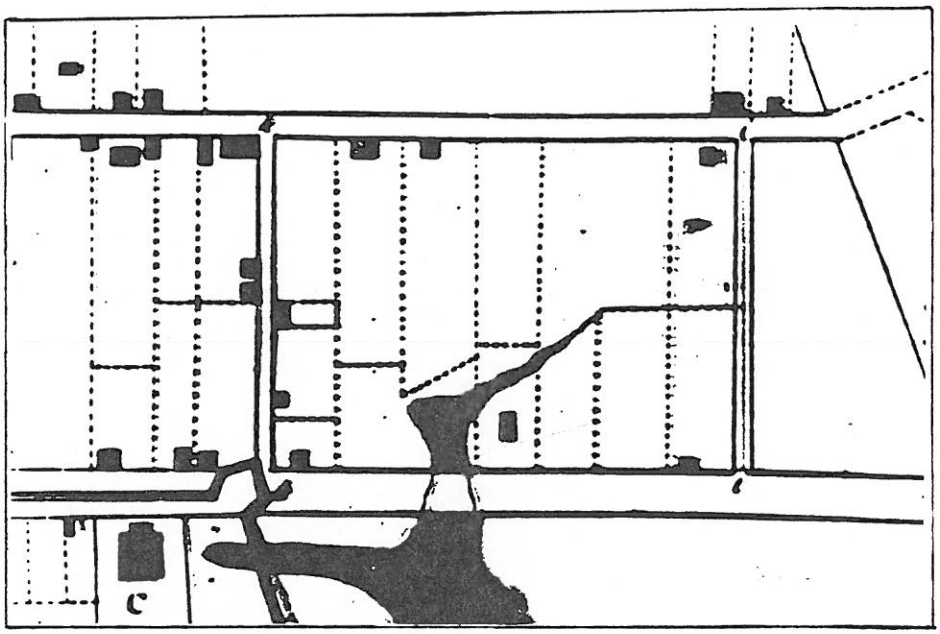
The settlers lost no time in searching for a profitable export. They experimented with a number of products, but the Indian trade in skins emerged as the major export and laid the foundation for Charleston's development as a major port and commercial center. With the development of rice as a profitable staple in the early eighteenth century, the transformation from a small frontier settlement to a viable commercial center was complete.

Several factors jelled in the 1730s to produce this transformation; the inefficient proprietary government was replaced in 1720 by royal rule, integrating the colony more closely with the rapidly expanding and increasingly centralized politic-economic system of Great Britain (Lewis 1976:19). The reduction of aboriginal threat through disease and warfare and the removal of the Spanish threat, partially through colonization of Georgia in 1733, opened the backcountry for settlement and trade. This expansion of the colony inland was given official sanction with the Township Plan of 1730, which projected a series of frontier communities to be settled by small farmers. With the development of rice as a profitable staple, the plantation economy expanded, bringing with it a financial stability and enough capital to entice merchants and factors to remain in Charleston and reinvest their earnings, rather than returning to England (see Rogers 1980, chapter 3). Charleston's location at a good port meant that it served as a collecting point for colonial export commodities and a distribution center for imported goods (Lewis 1976; Sellers 1934:5). In addition, Charleston was the terminus of the British Indian trade in the southeast (Crane 1956:108). The growth and prosperity that began in the early eighteenth century continued throughout the Federal period.

The location of the original city on the Cooper River between Cumberland and Water Streets was no accident. The latter two streets were formerly large creeks, which formed natural boundaries and impeded development. This particular stretch of the Cooper River, however, with its high bluffs, deep water channel, and relatively narrow area of marsh, was ideally situated for shipping, and it was in this location that Charleston began to build a port.

The commercial expansion of Charleston was matched by physical growth. The 1739 map of Charleston indicates that the city had expanded well beyond the original walls and that the growth was primarily to the west. The city had spread west to the Ashley River, encompassing the Mazyck lands, south to the tip of the peninsula, and north to Beaufain Street. Although streets had been extended and blocks had been subdivided into long, narrow lots, occupation in the peripheral areas of the city was sparse. The Charleston Place block was subdivided and occupied by this time, but only three structures were present on the block (Figure 4).

An examination of two city maps from the late eighteenth century (Petrie 1788; Bonner 1802) suggest that subsequent growth to the north proceeded slowly during the eighteenth century. Although growth had reached Beaufain Street by 1740, it had only advanced four more blocks by 1788. Instead, the areas already occupied in the early eighteenth century were subject to more intensive utilization; lots were subdivided, and buildings expanded vertically and into the center of the blocks. The 1788 map indicates that the marsh in the southeast portion of the Charleston Place block had been filled and that all four streets were lined with



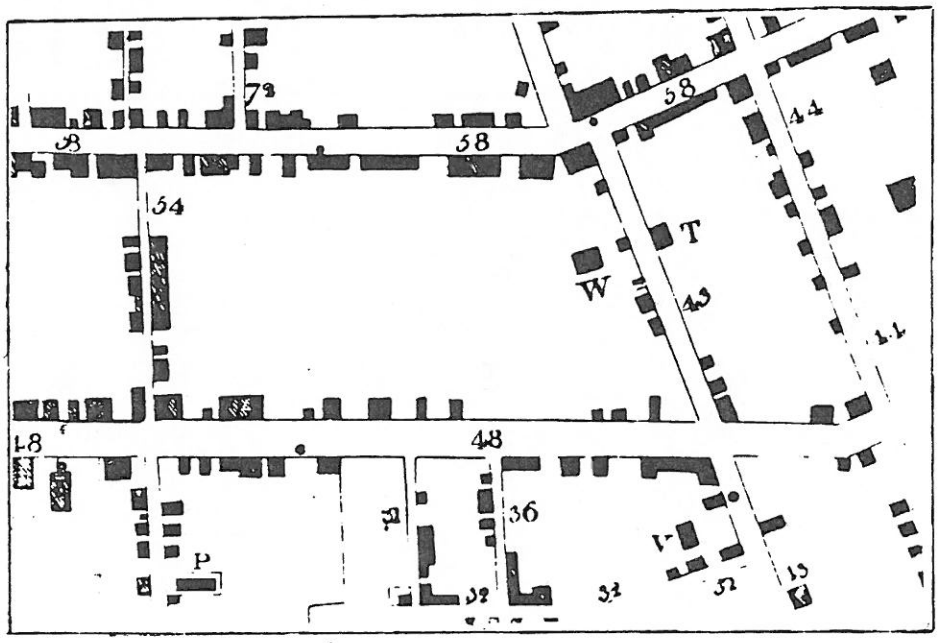


Figure 4

Portion of the 1739 Roberts and Toms map. The lots are spacious, but long and narrow. The creek is still extant, and the block is sparsely occupied.

Figure 5

Portion of the 1788 Petrie map. The block is more intensely occupied; Market Street is not yet present.

structures (Figure 5). By this time the block was on the edge of the commercial core of the city, and this is reflected in the presence of combination business/residences which characterized the commercial core of Charleston throughout the colonial and antebellum periods.

During the colonial period, commercial activity centered on the Cooper Riverfront; in addition to developing in a westerly direction, Charleston was actually oriented on an east/west axis. Commercial ventures were concentrated on three streets that carried traffic west across the peninsula from East Bay; Broad, Tradd, and Elliott Streets. North/south streets, Church, State, Meeting, and King were less intensively utilized for commercial purposes, but did have a number of merchants and craftsmen living and operating there (Calhoun et al. 1982). These colonial entrepreneurs often located their businesses on the first floor of the structure, and housed their family on the floors above.

By the early years of the antebellum period, Charleston's population expansion was matched by physical expansion. The plantation lands north of Beaufain were gradually subdivided and sold. The city limit was moved from Beaufain to Calhoun Street in 1783. Many different groups sought the relatively spacious lots of the Neck, that portion of the peninsula between Calhoun and Line streets. While merchants still chose to live downtown in the hub of commercial activity, planters, not needing commercially prime real estate, chose the more spacious and healthy lots on the Neck for their opulent townhouses. Both enslaved and free blacks flocked to the Neck where they were less subject to the scrutiny of the authorities and the white population. Finally, high real estate values and ordinances prohibiting construction of wooden buildings drove many low and middle class residents to the Charleston suburbs.

As the city residents moved north, the retail businesses followed their customers. The transportation orientation of the city changed to a north/south axis, as road travel increased in importance over water travel, and King and Meeting Streets became the major commercial thoroughfares. Wholesale activity still centered on East Bay Street (Calhoun and Zierden 1984). This shift in activity location meant that the Charleston Place block was no longer peripheral, but was instead central to, the commercial activity of the city. The city market was built on the filled creekbed one block east in 1804, replacing markets on Queen, Broad, and Tradd Streets (Calhoun et al. 1984), and Market Street, the present southern boundary of the Charleston Place block, was added. Linear subdivision of the already narrow lots continued throughout the nineteenth century. The 1852 map (Bridgens and Allen 1852) shows the intensive use of the Meeting and King Street frontages (Figure 6). By the close of the nineteenth century the lots averaged 30 feet in width, and over 200 feet in depth. The entire lot was covered with buildings, until over 80% of the block surface was covered. The streetfront buildings were substantial brick, while the second and third tiers on the interior of the block ranged from substantial brick to wooden warehouses and sheds. The Sanborn maps of 1884, 1888, and 1902 demonstrate the overwhelmingly commercial nature of the block by this time (Figure 7 and 8).

While increasing utilization of the block was a unilinear trend, the development of the block was not without setbacks. Ordinances against wooden

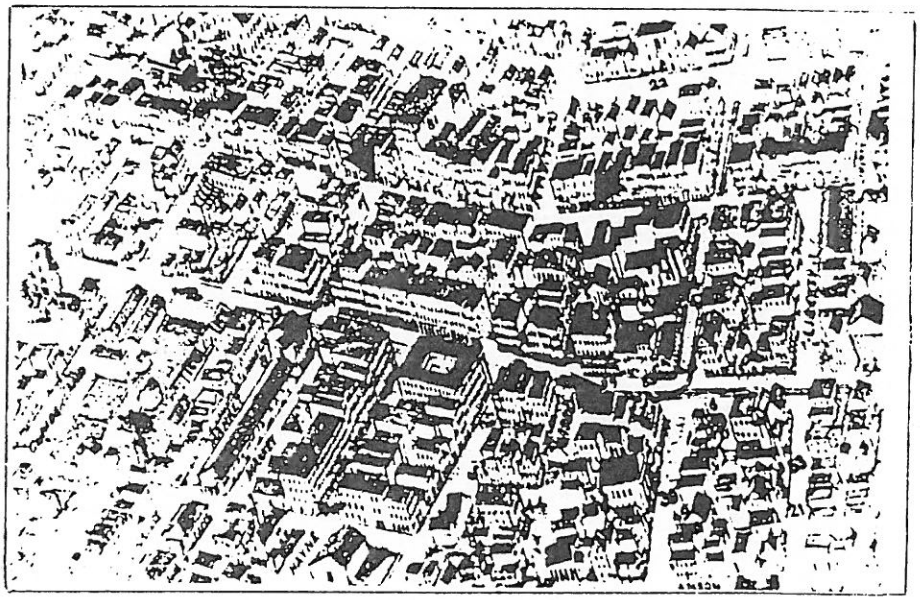


Figure 6

Charleston Place in 1852 (Bridgens and Allen 1852). The block is intensively occupied; lots are long and narrow. Almost all of the street frontage is covered in structures.

Figure 7

Portion of the 1872 Drie map. Note the substantial street facades and the second "tier" of structures on the interior of the block. No. 90 is the Waverly Hotel.

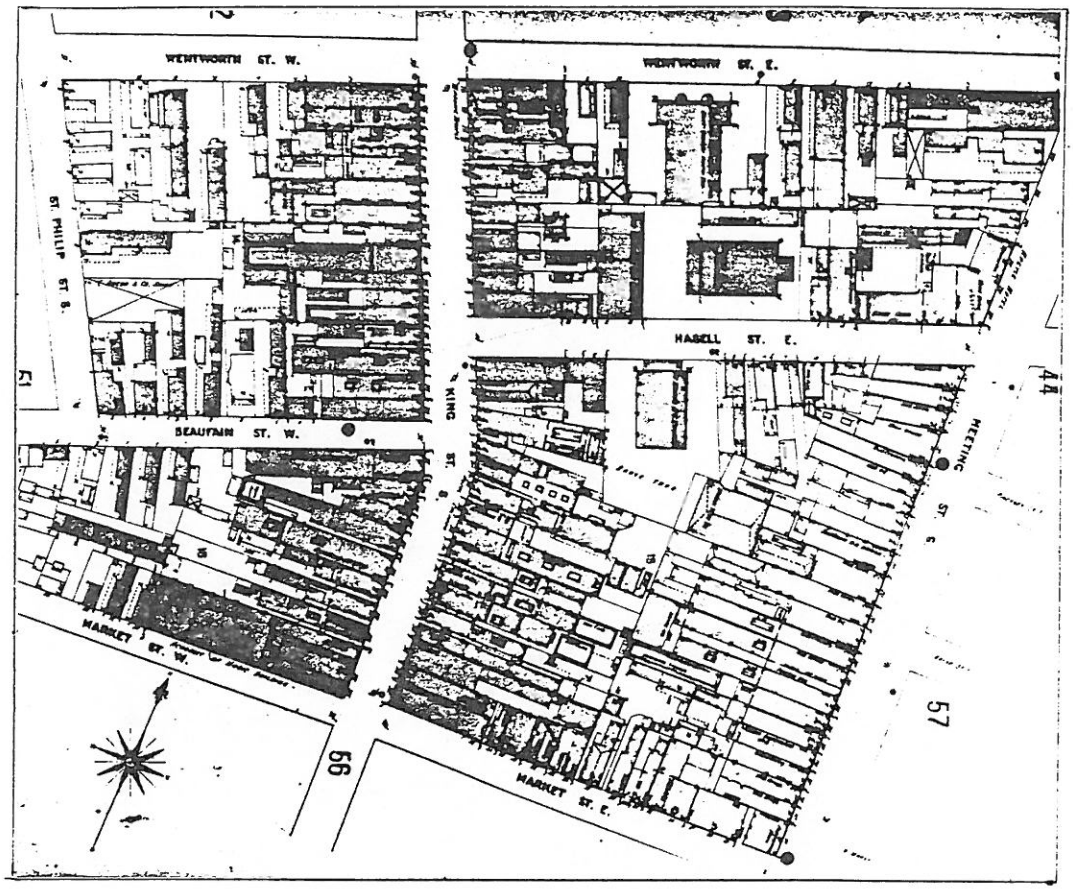


Figure 8

The Charleston Place block in 1902. From the Sanborn Insurance Map of Charleston.

buildings were a direct response to the ever present danger of fire (Pease and Pease 1978). Fires destroyed major portions of the block in 1835 and 1838.

While Charleston entered the nineteenth century economically viable due to the development of cotton as an export, the city began to experience commercial stagnation by the middle of the antebellum period. Municipal improvements, development of public services, development of industry and transportation, and economic diversification were crucial to the growth of antebellum cities, but Charleston made only mediocre progress in these areas (Greb 1978; Jaher 1982; Pease and Pease 1984). The failure to attract industry left Charleston as a trade city vulnerable to the effects of market fluctuations; the failure to secure a major rail line meant that the burgeoning transportation network bypassed the city. The Civil War dealt only the final economic blow to the city, and Charleston remained economically stagnant until after World War II, with only minor episodes of growth in the 1880s and again in the 1900s. King Street remained a regional emporium throughout the nineteenth century (Stockton 1985).

Despite the economic stagnation, the city experienced several minicipal improvements in the nineteenth century. Before 1800 only East Bay and adjacent streets were paved. During 1880, Mayor William Courtenay began to pave the streets, giving "earliest consideration to the major thoroughfares". King and other major streets were paved with Belgian blocks, quarried in piedmont South Carolina (Pogue 1964). Electrification was another improvement initiated in 1881, and electric street lights were installed shortly thereafter.

Central to the daily life of Charlestonians was the development of minicipal water and sewerage systems; however, a shift from private to municipal systems was not complete until the last years of the nineteenth century. The first sewerage system was completed south of Broad Street in 1896 (Cosans and Henry 1978:59; Honerkamp et al. 1982:29). Privies remained in use up until this time. Similarly, there were no plans for a municipal water supply until the very late nineteenth century (Cosans and Henry 1978:60). Prior to that time, private wells and cisterns supplied water to Charleston residents. The encroachment of buildings into the interior of the block and the resulting concentration of prople meant that the closer proximity of shallow water wells and privies resulted in contamination of the water supply. To offset this, Charlestonians, including residents of the Charleston Place block, began to construct cisterns which collected rainwater from the roofs of buildings, augmenting their well water. Public wells were constructed as early as the eighteenth century, but these were primarily for fires. Attempts to tap deep aquifers began early in the nineteenth century, but these artesian wells were not supplying water to the city until the late nineteenth century. All of these issues have major archaeological ramifications, which will be discussed later.

By the post-World War II era, Charleston began to experience economic revitalization that continues to the present day. The stagnation of the previous period resulted indirectly in the preservation of many historic buildings, in that new construction was minimal. With the growth of tourism as a major industry, the city recognized the value of the historic architecture,

and was the first minicipality to enact protective legislation. The preservation movement has been active since 1931. Revitalization of the downtown area has been a major concern of the city for the past fifteen years, and the success of these endeavors is reflected in the number of Urban Development Action Grants awarded to the city, and thus the number of archaeological projects conducted in the past few years. The construction of Charleston Place is the cornerstone of these endeavors (Figure 9).

Archaeological Research Potential

Archaeological research in Charleston has been united by a series of broad research goals. These were first proposed as part of an archaeological preservation plan, whose development was funded by the City (Zierden and Calhoun 1984). The proposed research questions approached the archaeological data base on a variety of levels. Urban archaeology is a relatively new field of study, and many of the processes responsible for the formation of the urban archaeological record are poorly understood. For this reason, some of the research issues are formative, addressing such factors as site function, site formation processes, artifact patterning, and lot element patterning. Data from this research, in turn, contributes to ongoing research on the processual issues of human behavior. These questions, classified as adaptive, include investigation of social and ethnic variability, subsistence strategies, minicipal responses to human needs, rural/urban contrasts, spatial patterning, and the role of Charleston in the regional economic and social milieu. Results from these studies have most recently been utilized in an ongoing examination of urban adaptive strategies.

A recent trend in urban archaeology has been to expand the level of investigation from the individual site, or household, to the neighborhood level. Although most researchers propose to examine the city as the unit of study (Cressey and Stevens 1984), actual excavation often focuses on the problems of reconstructing the behavior of individual households (Beidleman et al. 1986; Brown 1987; Cultural Resource Group 1985). The problem with this approach is that much of the urban archaeological record cannot be so correlated, and as a result is often academically, if not physically, discarded (Honerkamp and Fairbanks 1984). Researchers have thus suggested that much of the urban archaeological record represents an "averaging" of human behavior (Honerkamp and Council 1984), and they propose a neighborhood level of research (Brown 1987; Cressey and Stevens 1984; Dickens and Bowen 1980; Honerkamp 1987; Rothschild 1987).

Archaeological research in Charleston has approached the data on a number of levels. On two sites, situated in the antebellum suburbs, a household-specific research design was employed successsfully (Zierden et al. 1986a, 1986b). In three projects, it was impossible to conduct household level research; instead, general demographic data derived from city-wide archival research were used to examine neighborhood level behavior (Zierden et al. 1982; 1983a; 1983b). Two additional sites were appropriate only for research on a city wide level (Calhoun et al. 1984; Zierden and Calhoun n.d.). The underlying strength of these studies is that, while they were appropriate data bases for different research topics, they were organized in a manner that made the results comparable, and thus cumulative.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The Charleston Place data are appropriate for neighborhood level research. As mentioned above, the conditions of excavation, plus the variety of complicating factors affecting the formation of the archaeological record, makes household level research impractical in all but a few cases. In addition, the Charleston Place block represents a socially and economically cohesive population, suitable for investigating neighborhood behavior.

Spatial Patterning

The spatial patterning of Charleston, on the individual site, neighborhood, and city levels, reflects the particular demands of the urban environment. During the eighteenth and nineteenth centuries, most of the structures found dispersed across the rural plantation site were also crammed onto the constricted urban lot (Castille et al. 1982:5; Wade 1964:61; Zierden and Calhoun 1986). Urban compounds, particularly those located within the commercial core, were organized to make the most efficient use of available land.

Lots were deep and narrow, to maximize available street frontage. Houses fronted directly on the street, with the narrow end facing the road. The southern side was open and complete with piazzas, while the northern side was devoid of large openings. This allowed residents to take full advantage of prevailing breezes while maintaining maximal privacy.

Behind the main structure, auxiliary buildings were arranged within a fenced compound, often including slave quarters, kitchen, stables, well at mid-lot, and privy in the rear corner. Gardens, both ornamental and functional, might be planted and livestock might be kept. The back yard was the scene of many commercial as well as domestic activities (Honerkamp et al. 1982; Zierden and Calhoun 1986).

As discussed earlier, the spatial pattern of the city also reflects adaptation to the local environment. The Charleston peninsula, with its stretches of waterfront, broad areas of lowlying marsh, and numerous creeks which transected the peninsula, presented certain limitations as well as possibilities. The creeks initially impeded growth to the north, while the filling of marshes gradually resulted in additional real estate. Commercial areas of the city were subject to increasing density of occupation and construction. The already narrow lots were continually subdivided, and buildings expanded both vertically and into the center of the block.

The Charleston Place block, which evolved from a peripheral residential area in the colonial period to a block centrally located in the nineteenth century business district, provides an excellent opportunity to examine changes in urban spatial patterning. Cartographic and historical sources, as well as archaeological data, will be used in this study.

Artifact Patterning and Site Function

When archaeologists moved their research baggage into the cities, they soon encountered sites that housed both residential and commercial activities. Such sites, with businesses on the first floor and residences above, were the dominant component of Charleston's commercial core, and were common in other cities as well.

A major emphasis of urban archaeological research has been an examination of site function as it is reflected in artifact patterning. Such research in South Carolina has led archaeologists to suggest that certain commercial activities may not be reflected in the archaeological record. Both Lewis (1977:177) and Honerkamp et al. (1982:17) have suggested that commercial enterprises that transfer, rather than produce, goods (such as retail shops) are likely to produce little in the way of byproducts which would be recovered archaeologically. By contrast, sites characterized by craft-oriented, or combined craft-domestic occupations would be expected to generate at least some discarded byproducts indicative of site function (Honerkamp 1980; Lewis 1977, 1984).

Subsequent investigations, though, suggest that commercially related artifacts may be present as the result of abandonment, as opposed to discard or loss (see Schiffer 1977:19-24; Zierden et al. 1983a:63-67). These abandonment behaviors include such activities as the major cleanup associated with the transfer of property from one family to another (Lewis and Haskell 1981), or fillowing disasterous events such as fires or storms. These postulated cleanup activities involved large scale deposition of rubble and refuse, often in large subsurface features such as privies (Bryant 1984). To date, the most dramatic evidence of abandoment of commercial activity has been from craft related deposits. This includes assemblages associated with a possible burned in site jewelry smithing operation at 38 State Street (Zierden et al. 1983a) and extensive evidence of coopering activity behind the Exchange building (Herold 1981). Evidence for these craft activities, however, was also recovered from secondary refuse deposits at these sites.

The dual function of the Charleston Place sites, plus the large number of proveniences, particularly privies, excavated at the site, makes the site an ideal data base for investigation of site function.

Socioeconomic Status

A major concern of historical archaeology has been an examination of the material manifestations of socioeconomic status. Since John Otto's pioneering plantation study in 1975, status studies have focused on ceramic and glass containers (Otto 1975, 1977), including relative proportions of types and forms, and the relative costs of these. This information, in turn, should reflect dietary differences indicative of status. An important development in this research endeavor was George Miller's formulation of a relative price scale for early nineteenth century ceramics (Miller 1980). A related development in urban studies has been the examination of the relative wealth of products available to urban residents and the underlying reasoning behind their consumer choices (Cultural Resource Group 1985; Wise 1984).

Researchers examining this issue have utilized the Miller scale and other methods to rank ceramic and glass vessels, and have applied these to contexts which can be directly correlated with households of known social, economic, and ethnic affiliation. Although these researchers have eliminated from their analyses any contexts which could not be absolutely correlated to a specific occupant, results of these studies have been inconclusive, in that no clear pattern of status-related consumption has emerged (Beidleman et al. 1986; Cultural Resource Group 1985).

Although such analyses have only been conducted on household-specific data, the present data base provides an excellent opportunity to initiate such research on a neighborhood level. Although specific household information is lacking, the block represents a relatively cohesive neighborhood whose status can be inferred from the available documents. Reconstructed vessels, rare on other Charleston sites, are abundant. The Charleston Place sites presents an excellent opportunity to begin such research.

A number of different approaches to the examination of status have been utilized in Charleston, and they will be explored here as well. An alternate model is the one presented by Lynn Lewis (1985), in which the relative proportions of a number of artifact types and groups are believed to reflect status. Status may also be reflected in the urban diet, and this has been an area of ongoing research in Charleston (Reitz 1986a; 1986b; 1987). These models will be examined with the Charleston Place data as well.

Subsistence Strategies

Increasing attention is being focused on the study of subsistence strategies in historic populations, using faunal and floral remains recovered from historic sites (Reitz and Scarry 1985). Faunal and floral remains have been used to address a variety of questions concerning historic subsistence strategies; these include studies of cultural conservatism, adaptation to local environments, ethnicity, and social variability. Recent urban investigations suggest a rural-urban dichotomy on historic sites in the southeast, based on the ratio of wild to domestic fauna (Reitz 1986a). Although these differences seem to crosscul temporal and social parameters, the diet of the wealthy, whether urban or rural, seems to have been more varied. The Charleston Place data will be used to examine these issues.

CHAPTER III

THE 1981 EXCAVATIONS

Feature 130

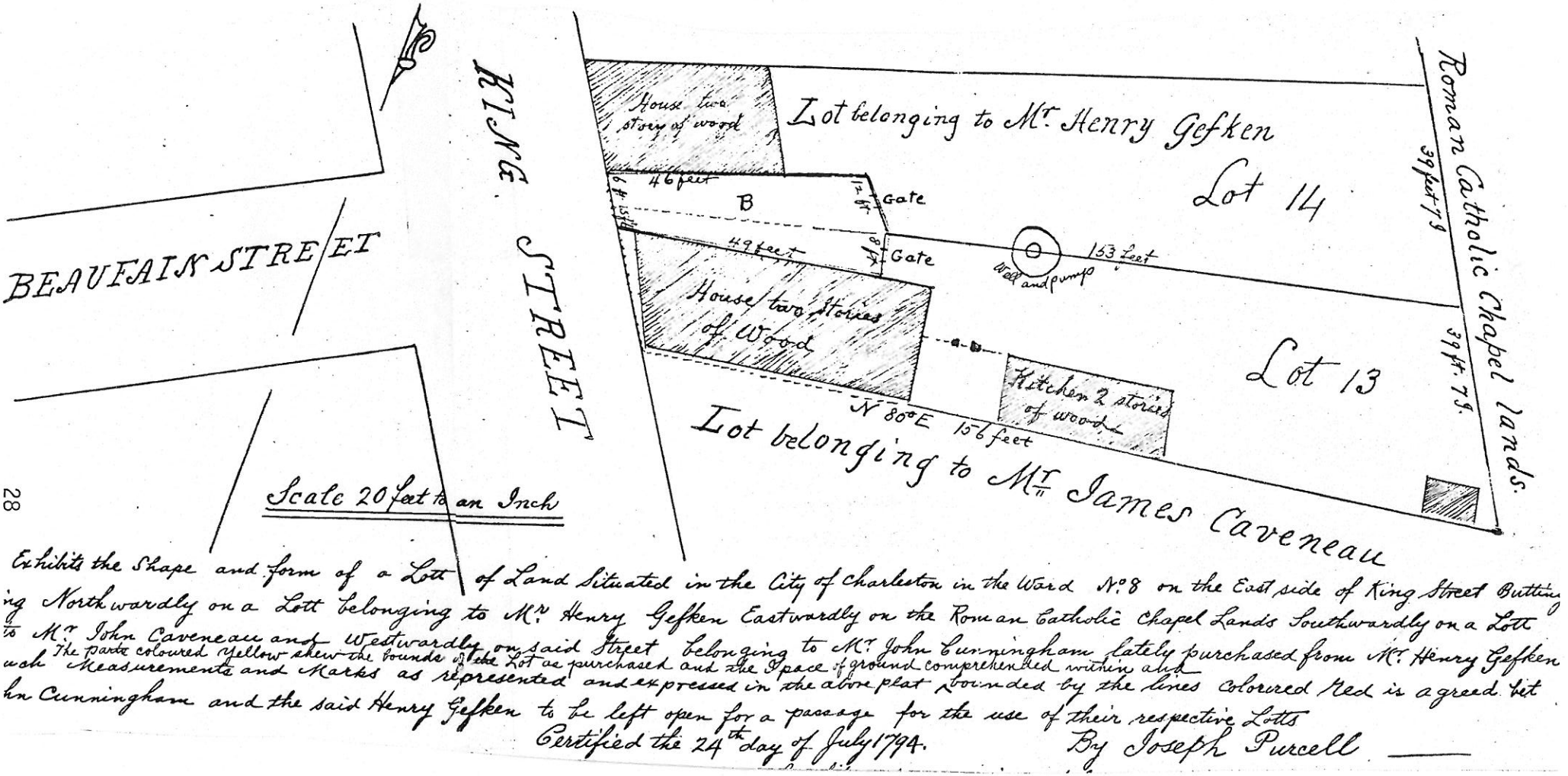
Feature 130 was one of the most interesting and productive features encountered at the site. The feature consisted of a rectangular stain, measuring 5 feet by 8 feet, and was 2.5 feet deep. The fill consisted of mottled grey, tan and yellow sand, and was excavated in three arbitrary levels. Level 3 contained a tremendous quantity of material, and included in the ceramics were a number of restorable vessels. The feature was excavated with trowels and all materials were hand collected. No soil was screened (Figure 11).

Feature 130 was a wood lined privy pit which was abandoned and filled in the 1820s. 3831 artifacts were recovered from the feature, and restored vessels counted as one. When Henry Geffkin divided the property in 1794, he sold the southern part to John Cunningham. At that time there was a two story wooden house on each lot. John's heir, Richard Cunningham sold to John Hunter in 1816. In 1824, Hunter sold it to Duncan Leitch. Leitch died in 1828, and his wife Jane inherited his estate. In 1838, she lived in the second and third floors of the wooden building, while the first floor was used by Duffus and Taylor as a dry goods store. Based on the artifacts, the privy may have been filled when Hunter sold to Leitch in 1824. Features 131, 132 and 133 were on the same property, and may have been filled by these occupants (Herold and Thomas 1981:59)(Figure 10).

Kitchen materials comprised the overwhelming majority of the artifacts, accounting for almost 90% of the materials. Ceramics comprised 74% of the kitchen group. Refined earthenwares dominated the category; creamware comprised 25% of the ceramics; pearlware, 57%, and whiteware, 7%. While whiteware provides a TPQ of 1820 for the feature, the relative proportions of earlier wares suggest that feature deposition occurred shortly after this date.

Feature 130 contained the greatest quantity of vessels recovered from the site. As is often the case with privies, the most numerous were chamber wares; 32 chamber pots and 4 wash bowls were identified. Other non-kitchen vessels include two stoneware ink bottles. The remainder of the vessels were related to food service and consumption. Most whimsical were three children's cups. A small creamware cup was decorated in an overglazed red transfer printed design depicting two boys on bicycles next to a tree. A dead cat is hung from one of the branches and a dog is barking at it. The cup reads "A Present for William". A second cup is of annular pearlware. It is inscribed "A Trifle for Robert" under the glaze. The third vessel is presumed to be a child's cup on the basis of size and shape; it is a transfer printed pearlware cup.

A complete distribution of vessel type and form is shown in table 2. Small, deep bowls were the most common. These were most often in transfer printed pearlware (29 vessels), followed by hand painted, annular, and creamware vessels. Shallow bowls or saucers were the next most common; once again, transfer printing was the predominant motif, followed by shell edged, hand painted, and undecorated. Two unusual handpainted saucers were



Exhibits the Shape and form of a Lott of Land Situated in the City of Charleston in the Ward No 8 on the East side of King Street Butting North wardly on a Lott belonging to Mr Henry Gefken Eastwardly on the Roman Catholic Chapel Lands Southwardly on a Lott to Mr John Caveneau and Westwardly on said Street belonging to Mr John Cunningham lately purchased from Mr Henry Gefken The parts coloured yellow shew the bounds of the Lot as purchased and the Space of ground comprehended within and such Measurements and Marks as represented and expressed in the above plat bounded by the lines coloured Red is agreed bet hn Cunningham and the said Henry Gefken to be left open for a passage for the use of their respective Lotts

Certified the 24th day of July 1794. By Joseph Purcell

Figure 10

Plat of two lots of Henry Geffkin and John Cunningham on King Street in 1794
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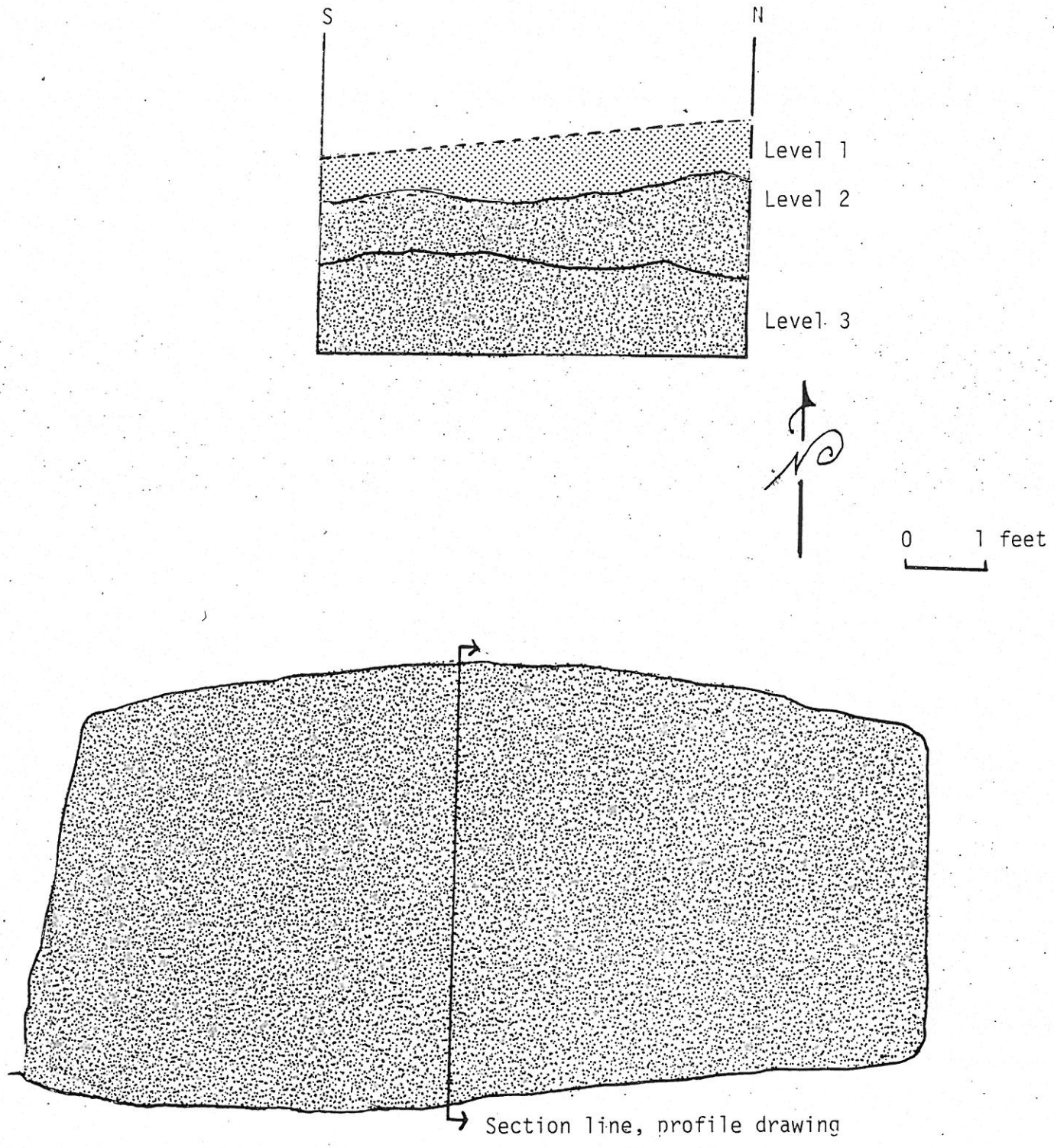


Figure 11
Planview and profile, Feature 130

recovered. The first was an overglaze hand painted pearlware saucer. The handpainted decoration in yellow and orange may represent stylized flowers, but mostly look like one-celled organisms. The small porcelain saucer is decorated with an overglazed design proclaiming "A Present for My Dear". Teacups followed saucers, and once again transfer printed vessels were the most common, followed by hand painted. Three porcelain cups were also recovered. A number of mugs were also recofered, in transfer printed and annular designs.

A number of service pieces were recovered, including 13 pitchers, 5 platters, three lids to covered bowls, and a sauce boat. One of the most interesting was a small circular jam pot with lug handles. In addition to these vessels, four transfer printed teaposts were recovered. Flatware pieces were the least common. Of these, 8 dinner plats, 4 luncheon plates, and 2 soup bowls were recovered.

Although refined earthenwares dominated the ceramics (90%), a number of other ceramics were recovered, including four restorable vessels. A lead glazed red stoneware teapot was recovered. This engine-turned vessel featured a rouletted design, straight sides, and a straight spout in a style typical of the Federal period. The most unusual was several fragments of a small pitcher representing a variation of Portobello ware (Lindsay 1962). The pitcher exhibits the fine red paste, white slipped interior, and clear lead glaze of other such vessels. Instead of the typical underglazed yellow transfer printed design, however, this vessel exhibits a large overglaze floral design in pink and yellow. The thirteen fragments of this ware recovered from the feature represent at least four vessels. A small bowl of black basalte stoneware was also recovered. Other tablewares include a small amount of Chinese export porcelain, white saltglazed stoneware, luster ware, jackfield, and delft. Utilitarian wares include lead glazed earthenware, stonewares, and yellow ware. 23 fragments of Colono and River Burnished wares were recovered, including a small globular jar with red and black paint on the exterior (Ferguson 1980, 1985; Wheaton et al. 1983).

Glass artifacts comprised 20% of the kitchen group. Container glass, including dark green and clear bottle glass, was the most common; aqua glass was also present. Nine portions of molded lettered bottles were also present, supporting the early nineteenth century date of deposition. A complete snuff bottle of blown green glass was also recovered. The bottle exhibited a rectangular shape with sloping shoulders, no neck and an everted rim. In addition, portions of 7 pharmaceutical bottles were recovered. Table glass comprised 2.2% of the kitchen group and included a decanter neck, a cup fragment, and a glass handle, as well as numerous fragments of tumblers and goblets. The final kitchen items were 5 bone handles from cutlery and a perforated brass lid.

Architectural material comprised 8.3% of the assemblage and included window glass, slate, a delft tile, and a sandstone tile. Arms comprised .05% of the assemblage and included 2 gunflints. Clothing items included a bone button and a straight pin. The personal group was larger and more varied and included, in addition to the chamber ceramics and snuff bottle, an eyeglass lense, 4 slate pencils, 2 bone brushes, and a bone tooth brush. A single coin, dating to 1732, was recovered. Other interesting items included a figurine of overglazed pearlware, a bone lid, and a game

piece. The game piece was a circular piece of slate with hatched marks on both sides. The lid of bone was a small domed piece and was threaded on the exterior to screw into some sort of container. The figurine was of undecorated pearlware and was in the form of a flower bedecked cherub. The flowers were decorated with overglaze hand painting. The final personal items were two fragments of perfume bottle glass. Personal items comprised .3% of the assemblage. Kaolin pipe fragments comprised .73% of the assemblage and activities items comprised .54%. This group included 15 marbles and a dish from a toy tea set.

Table 1

Summary: Feature 130

	#	%
Kitchen	3441	89.81
Architecture	321	8.30
Arms	2	.05
Clothing	2	.05
Personal	15	.39
Furniture	1	.03
Pipes	28	.73
Activities	21	.54

TPQ = 1830 (whiteware)

Table 2
Feature 130: Vessel Distribution

	washbowl	chamber pot	saucer	service piece	soup bowl	lunch plate	dinner plate	teapot	pitcher	mug	bowl	teacup
Transfer pr. ww	5	22	4	4				2		4	10	
Transfer pr. pw		3	22	4			3	2	10	4	19	13
plain ww		1										
creamware		6		2			1		1		2	
shell edge pw			5	5	1	1	2					
hand paint pw			3			1	2				8	10
plain pw			2	2		2						5
annular pw									1	3	4	
mocha pw										1	1	
porcelain			1							1		3
luster ware												1
Elers ware								1				

Feature 132

Feature 132 was a small trash filled pit, basin shaped and filled with medium brown sand. The presence of a transfer printed creamware mug provided a TPQ of 1804 for the feature, and suggested a date of deposition of ca. 1810. The feature was 3 feet in diameter and 1.5 feet deep. The feature was excavated as a single unit. All materials were hand collected no materials were screened (Figure 12).

Kitchen materials dominated the assemblage, comprising 91% of the group and the majority of the kitchen materials were ceramics. Refined earthenware, particularly creamware, dominated the assemblage. Creamware vessels included 3 mugs, 2 soup bowls, and 13 plates. Also included in this group is a black transfer printed bowl with overglazed coloring. The transfer printed bowl was a commemorative piece with a nautical scene. The bowl featured medallions with printed verses, but these were too fragmentary to read. A black transfer printed creamware mug was also present. This was also too fragmentary to decipher, but a portion of the verse contained the date 1804. A potpourri or teapot strainer of creamware with overglazed decoration was also present. Pearlware vessels were also present; these included 3 mocha mugs. These were tall, thin vessels exhibiting careful execution. All of the blue transfer printed wares were serving vessels, and included portions of 3 teapots, a pitcher, and a bowl. A hand painted pearlware teapot lid and three bowls were also present. Overglazed hand painted porcelain vessels included 5 shallow bowls/saucers and a teacup.

A number of interesting utilitarian earthenware and stonewares vessels were also present. The first was a small brown stoneware crock. The most unusual vessel was a complete earthenware urn. The urn exhibited sloping sides, round shoulders, and a straight neck with an everted rim. Two strap handles were present on opposite sides. The vessel was of buff colored coarse earthenware and was unglazed on the exterior. Incised and rouletted designs were present around the shoulder. The interior was glazed with a thin cream colored tin enamel. and the exterior portion of the neck had been dipped in a translucent yellow lead glaze. The vessel was very large, measuring almost 3 feet in height. The vessel was unidentified, but has a decidedly Mediterranean appearance. Other ceramics included fragments of stoneware and coarse earthenware, including 2 fragments of buckley ware and a single sherd of Colono ware.

Very few glass sherds were recovered, and they comprised 8.5% of the kitchen group. These included only olive green and clear bottle glass fragments. Architecture materials were rare, comprising only .61% of the assemblage. No arms materials were recovered. The single clothing item was a bone button, and a single slate pencil comprised the personal group. The remainder of the assemblage, 8.14%, consisted of kaolin pipe fragments.

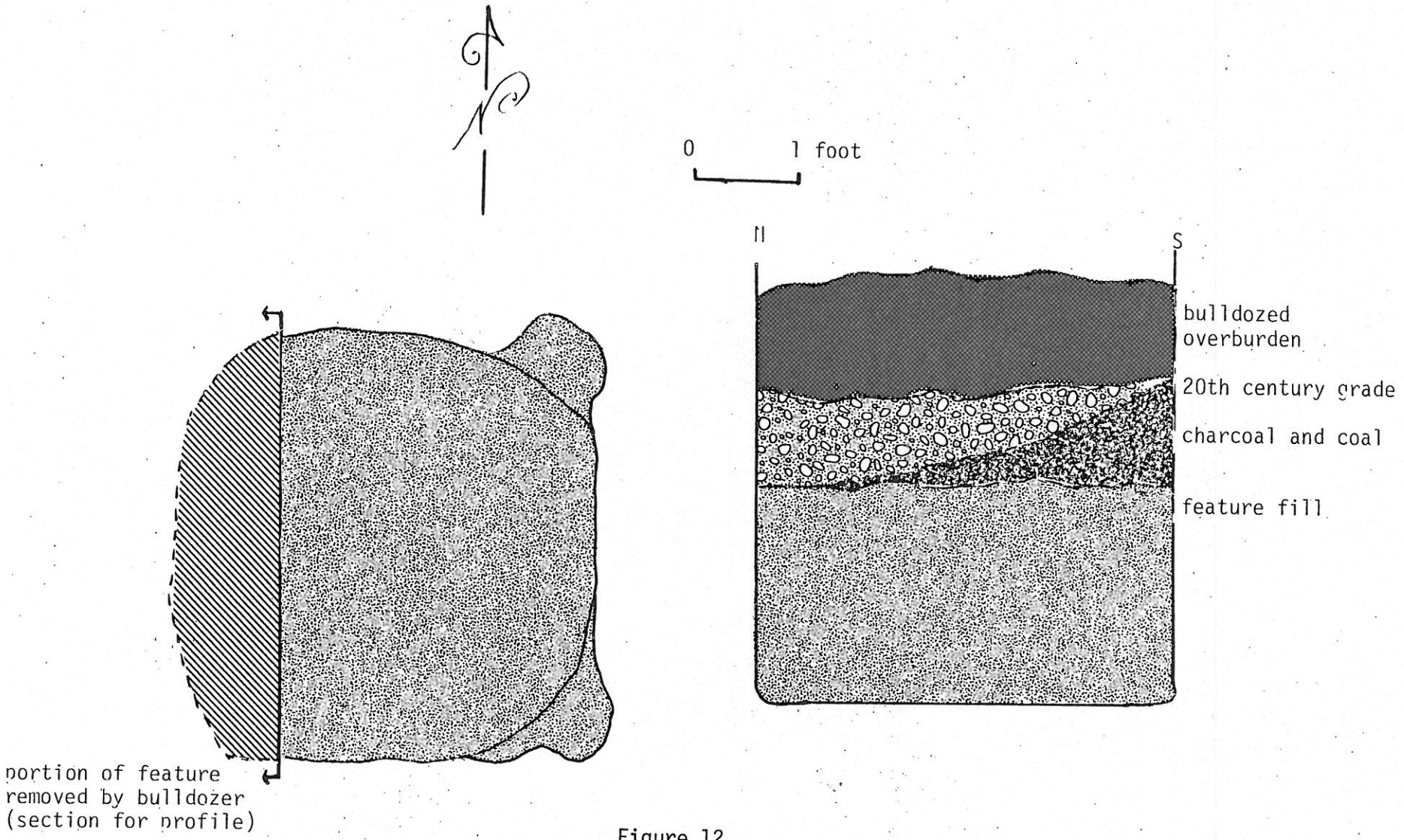


Figure 12

Planview and profile, Feature 132

Table 3
Summary: Feature 132

	#	%
Kitchen	737	90.98
Architecture	5	.61
Arms		0.0
Clothing	1	.12
Personal	1	.12
Furniture		0.0
Pipes	66	8.14
Activities		0.0

TPQ = 1804 (transfer printed creamware mug)

Table 4
Feature 132: Vessel Distribution

	pitcher	mug	teapot	bowl	plate	soup bowl	serving vessel	teacup	strainer	saucer
creamware		3			13	2	2	1	1	
creamware, tp		1		1						
transfer pr. pw 1			3	1						
mocha pw		3								
annular pw		1								
undecorated pw		4								
hand painted pw			1	3						
shell edged pw							2			
porcelain		1					1			3

Feature 133

Feature 133 was a large trash pit measuring 5.2 feet north/south and 4.1 feet east/west. The feature was .6 feet deep and was basically basin shaped. The feature contained a variety of artifacts and animal bone, with quantities of oyster shell. The matrix was medium brown sand and the feature was excavated as a single episode.

Transfer printed pearlware provided a TPQ of 1795 for the feature. Kitchen artifacts comprised 84% of the assemblage, and 85% of this group

were ceramics. Refined earthenware, creamware and pearlware dominated the assemblage. Pearlwares was present in shell edged, transfer printed, hand painted, and annular designs. A number of reconstructed vessels were recovered, including teacups, plates, mugs, bowls, saucers, and serving pieces. The most interesting piece was a creamware salt dish on three legs. The legs each exhibited a molded face. Other interesting vessels included a creamware teapot lid and a transfer printed pearlware lid. Other ceramics present in minor amounts include Buckley, Nottingham stoneware, slipware, lead glazed earthenware, and utilitarian stonewares. Glass artifacts comprised 15% of the kitchen group, and included 2 wine goblets, as well as dark green, aqua, and clear bottle glass. The final kitchen artifact was a bone knife handle.

Architectural items comprised 12% of the assemblage and included window glass and a delft tile. The only other artifacts recovered were kaolin pipes, comprising 3.4% of the assemblage.

Table 5
Feature 133: Summary

	#	%
Kitchen	268	84.27
Architecture	39	12.26
Arms		
Clothing		
Personal		
Furniture		
Pipes	11	3.45
Activities		

TPQ = 1795 (transfer printed pearlware)

Table 6
Feature 133: Vessel Distribution

	serving vessel	mug	bowl	plate	teacup	saucer	teapot
creamware	2	1		1			
undecorated pw	1						
porcelain					2		
transfer print pw			1		1	1	1
hand painted pw	2	1			1	2	

Feature 124

Feature 124 was one of the largest and most interesting features on the site. The feature was a brick lined privy pit. The feature was located when a heavy concentration of artifacts was encountered by the bulldozer; the top portion of the feature was removed in a single pass of the machine. This material was hand collected and kept separate from the in situ deposits. The feature was excavated by hand with trowels; no materials were screened.

The feature consisted of a rectangular privy pit. The interior measured 8.5 feet by 9.2 feet, and the wall was two bricks thick. The feature exhibited three distinct zones. Zone 1 was a shallow (.2 feet) layer of modern yellow sand fill. The next .6 feet consisted of grey sand, followed by zone 3, a layer of sticky dark grey organic material, .7 feet deep. A maker's mark on the base of several ceramic vessels provided a TPQ of 1850, and the artifact content suggests that the feature was filled in the 1850s. Historical research suggests that the feature is associated with the Waverly Hotel. The earliest record of a hotel in this area is 1838; a hotel continues in this location until 1903 (Herold and Thomas 1981:51).

Feature 124 contained one of the largest artifact assemblages (N=2858). Once again, kitchen materials comprised the majority of the artifacts, being 93% of the assemblage. Ceramics comprised the majority of the kitchen group at 77%. Once again, the predominant ceramic types were refined earthenwares, representing food service and consumption wares. As is typical of mid-nineteenth century assemblages, undecorated whiteware dominated the assemblage. Among the 1646 fragments of undecorated whiteware were a number of reconstructible vessels. Serving vessels included 3 platters and 3 pitchers. These were all in the heavy, octagonal style typical of the period. Other undecorated vessels include 2 ointment jars, 2 saucers, 2 mugs, 5 cups, 5 bowls, and 7 plates. A large amount of transfer printed whiteware was also present, including a pitcher, a cup, a bowl, 6 plates, and 2 serving vessels. Other ceramic types include stenciled whiteware, shell edged whiteware, annular whiteware, and flow blue ware. Whitewares comprised 94% of the refined earthenware, pearlware, 5.1%, and creamware, .3%. A small amount of semiporcelain and bone china was also recovered. Porcelain was also a common component of the ceramic group, including 8 cups, 1 bowl, 5 plates, 7 saucers, and 8 apothecary items.

A number of the whiteware sherds exhibited maker's marks. The most common was James Edwards and Sons, dated 1851-1882, and T.J & J. Mayer, dated 1843-1855 (Godden 1974). A third pottery mark was American Pottery, New Jersey, dated 1833-1840 (Kovel and Kovel 1966). Utilitarian wares comprised 5.3% of the ceramics, and included yellow ware, red earthenware, and nineteenth century slipware.

Glass comprised 23% of the assemblage. The most common artifact was dark green, or black, glass, with a much smaller number of clear glass bottle fragments. Twelve pharmaceutical bottle fragments were recovered. Table glass comprised 2.1% of the kitchen group, and included a number of goblets, tumblers, and decanters. All of these were the "hotel style"; heavy, molded octagonal vessels.

Architectural items comprised 2.3% of the assemblage and included window glass and a door hook. The pipe group comprised .41% of the assemblage and a single piece of lamp furniture comprised .03% of the assemblage for the furniture group. The activities group comprised 1.15% of the assemblage, and included a toy tea dish, four marbles, a slate weight, and 33 flower pot fragments. The personal group was unusually large and varied, and may reflect the commercial activities of the hotel. Included in this group, which comprised 2.99% of the assemblage, were 20 chamber pots and 5 wash basins. Other items included 4 fan slats, a bone razor strop, and a slate pencil. Most unusual was the presence of 12 inkwells and 29 bone toothbrushes. These may reflect personal activities of the hotel patrons, and may be items supplied by the hotel.

Table 7
Feature 124: Summary

	#	%
Kitchen	2661	93.10
Architecture	66	2.30
Arms	0	0.0
Clothing	0	0.0
Personal	85	2.99
Furniture	1	.03
Pipes	12	.41
Activites	33	1.15

TPQ = 1850 (James Edwards and Sons china)

Table 8
Feature 124: Vessel Distribution

	pin tray	chamber pot	wash bowl	pitcher	mug	teacup	bowl	plate	saucer	serving vessel	apothecary
undec. pw		9			1	7					
transfer print pw					1	2	1	5	3		
undec ww				2	2	5	5	7	2	6	2
transfer print ww			1	1	1	1	2	7		2	
annular ww							2				
flow blue			1								
yellow ware			1	1							
semi porcelain	3										
porcelain						8	1	4	7		8
bone china										1	
sprigged ware				1							

Feature 117

Feature 117 was a small trash filled pit. The feature was shallow, a basically oval area measuring 6 by 5 feet. The fill was medium brown sand and the feature intruded into sterile subsoil. The feature was excavated as a single provenience.

A moderate amount of material (N=562) was recovered from the feature, and the assemblage was overwhelmingly domestic. Surprisingly, a number of reconstructable vessels were recovered. The presence of pearlware and whiteware in relatively equal amounts suggests that the feature was deposited in the 1820s. The property was sold by Lucas Florian to John Anthony Woodill in 1801. Woodill left it to his wife and son. The property was sold by his executor to Samuel Seyle in 1812. In 1822, Seyle's property included his dwelling, his saddlery, and a long room and masonic hall. The wood dwelling burned in 1838. At this time, Seyle lived upstairs, and Mr. Pein ran a dry goods store in the bottom floor. Mr. Seyle built a brick structure in 1838 (Herold and Thomas 1981:49).

The kitchen group predominated the assemblage, comprising 95% of the materials; ceramics comprised 82% of the kitchen group. Tablewares, particularly refined earthenwares, dominated the kitchen group, and included creamware (3.6%), pearlware (40%), and whiteware (39%). A number of reconstructable vessels were present, dominated by handpainted pearlware. Reconstructed vessels of this type include 6 saucers or shallow bowls, 2 teacups, a bowl, a cream and sugar set, and a demitasse cup. Other refined earthenware vessels include a creamware teapot, 3 creamware chamber pots, an annular ware mug and bowl, a transfer print pearlware cup, and a plain whiteware salad plate. Although only a small amount of porcelain (3.6% of the ceramics) was present, 3 vessels were reconstructed, including 2 saucers and a bowl.

Utilitarian wares comprised 14% of the ceramics and included a number of lead glazed coarse earthenware sherds, as well 7 sherds of Colono ware. Glass artifacts comprised 18% of the kitchen group and consisted entirely of container glass, predominantly dark olive green glass.

Architectural materials, consisting entirely of window glass, comprised 1.6% of the assemblage. Arms materials consisted of a single gunflint, comprising .16% of the assemblage, while a single personal item, a bone comb, was also recovered. Kaolin pipe fragments comprised 3.02% of the assemblage.

Table 9
Summary: Feature 117

	#	%
Kitchen	534	95.01
Architecture	9	1.60
Arms	1	.17
Clothing	0	0.0
Personal	1	.17
Furniture	0	0.0
Pipes	17	3.02
Activities	0	0.0

TPQ = 1820 (whiteware)

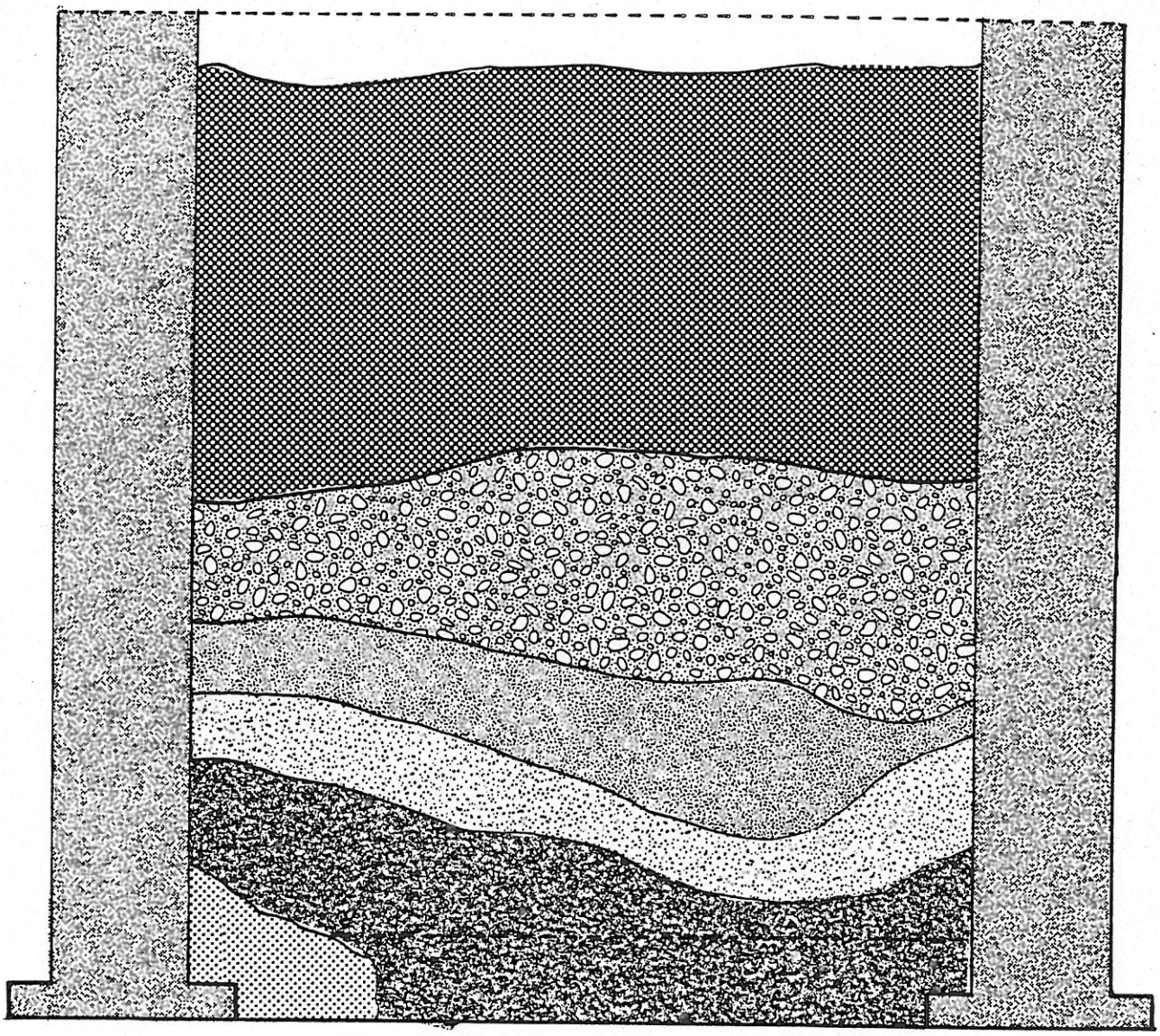
Table 10
Feature 117: Vessel Distribution

	saucer	teacup	bowl	teapot	chamber pot	mug	salad plate	serving vessel	small cup
undecorated ww							1	1	
hand painted ww	1								
hand painted pw	6	2	1	2					1
annular pw			1			1			
transfer print pw		1							
creamware				1	3				
porcelain	2		1						

Feature 115

Feature 115 was a large brick lined privy pit. The interior of the pit measured 8.3 feet north/south by 5.5 feet east/west, and the cultural deposits were 5.8 feet deep. Five zones were defined. The top 2.3 feet consisted of modern demolition rubble that was not sampled. The top excavated zone, labeled 115a, consisted of oyster shell, glass, and brick rubble. Zone 115b was a layer of dark brown loam with oyster shell. 115c was a light brown sandy loam. 115d consisted of dark grey sticky organic material. Located along the east wall of the privy at the base of the zone was a lense of coarse ash and sand, containing quantities of tobacco pipes.

Each of the zones was excavated separately, and 115d was divided into two arbitrary levels, labelled 115d and 115e. Materials from each of the zones were kept separate. All materials were hand excavated, and no materials were screened. The northern portion of the feature was excavated, leaving a soil profile along the southern brick wall. This was recorded, and then excavated as a separate provenience (Figure 13).



backfilled demolition rubble

115a - rubble, shell, glass

115b - dark brown loam, oyster

115c - light brown sandy loam

115d & 115e - dark grey-brown loam

lense of coarse sand and ash

0 1 feet

Figure 13

FEATURE 115, SOUTH PROFILE

Figure 14

Feature 115, artifacts in situ, level E

The separate strata indicate a number of different fill episodes. The presence of South Carolina Dispensary bottles (Huggins 1971) in zones 115a and 115b provide a TPQ of 1900 for these layers, while flow blue whiteware and molded panel bottles provide a TPQ of 1860 for the filling of 115d (Lorraine 1968). The lowest ash layer, with its assemblage of masonic tobacco pipes, is believed to be refuse from Mr. Seyle's Masonic Hall, located two doors down. It is believed that this material was deposited prior to, or just after, the 1838 fire (Figure 14).

The exterior of the brick feature was examined for evidence of a builder's trench in order to date construction of the feature. None were located; however it is assumed that the feature was constructed during the antebellum period, and that it was cleaned periodically before being abandoned. This property was sold by John Brownlee to Moses Davis in 1823. In 1838 there was a 2½ story brick tavern on the lot, owned by Mrs. H. Davis and occupied by a Mr. Antonio. In 1839 it was sold to John Simons, and he built a 3 story brick structure; he also operated a paint store at that address until 1857. He then sold to Daniel Silcox, who owned the property for twenty years (Herold and Thomas 1981:46).

Based on the various TPQs, the feature 115 assemblage was divided into two subassemblages for analytical purposes. The materials from zones 115c through 115e were deposited between 1830 and 1870, and are considered here. A total of 1254 items were recovered from these deposits. Unlike many of the other privy deposits, numerous non-kitchen materials were recovered from the feature. Kitchen materials comprised 67% of the assemblage; ceramics comprised 45% of the kitchen group. These wares were dominated by whiteware (79% of ceramics), primarily undecorated wares. Other prominent decorative types were blue transfer printed ware, shell edged ware, and flow blue ware, manufactured after 1840. A minor amount of pearlware, manufactured before 1820 (3.4%) was present. Maker's marks include "James Edwards and Sons", "Tuscan Stoneware", and "J. Clementonson". All date to the 1840 to 1860 period (Godden 1971; Kovel and Kovel 1966).

A large number of reconstructable vessels were recovered from the feature, including a number of serving vessels. Transfer printed serving pieces included 2 platters and 5 pitchers. Ten dinner plates were also recovered. Undecorated vessels included 4 serving vessels, 2 bowls, 3 saucers, 8 plates, 4 mugs, and 2 cream jars. Twenty hygiene vessels were present, including 16 chamber pots and 4 wash bowls. Porcelain vessels included 3 teacups and 2 saucers. Other vessels are summarized in table 12. Utilitarian wares were a minor component of the ceramic assemblage (11% of ceramics) and included yellow ware, stonewares, and redwares.

Glass artifacts comprised 54% of the kitchen group. Green and clear glass bottles for beverages comprised the majority of the glass. Other elements include pharmaceutical and other non-beverage containers, including patent medicine bottles and sperm oil testing bottles (12% of the kitchen group). The final element was table glass, consisting of tumblers and goblets, which comprised 2.8% of the kitchen group.

Architecture items comprised 14% of the assemblage and consisted entirely of window glass. Clothing items comprised .87% of the assemblage

and included porcelain buttons. Personal items comprised .95% of the assemblage and included bone toothbrushes and combs, and a glass ink bottle. Furniture items, .79% of the assemblage, consisted of lamp glass. Activities items comprised 1.11% of the assemblage; this group included 3 marbles, 3 toy dishes, and 3 fragments of clay flower pots. Two interesting activities items were a portion of a graduated cylinder and a glass egg, which was placed in hen's nests to make them lay. A large number of kaolin tobacco pipes were recovered (19.05%); many of these exhibited a masonic symbol on the sides. The majority of the pipes were recovered from the pocket of ash located at the bottom corner of the privy. This deposit may date to the 1830s, when Antonio's tavern was in this location.

Table 11
Summary: Feature 115

	#	%
Kitchen	848	67.62
Architecture	120	14.15
Arms	0	0.0
Clothing	11	.87
Personal	12	.95
Furniture	10	.79
Pipes	239	19.05
Activities	14	1.11

TPQ = 1867 (panel bottle), zones 115c-115e
1900 (dispensary bottle), zones 115a-115b

Table 12
Feature 115: Vessel Distribution

	serving vessel	bowl	saucer	plate	small plate	teacup	chamber pot	wash bowl	apothecary	mug
undecorated ww	4	2	3	6	2	4	11	1	2	
transfer printed ww	7		2	12				2		
flow blue						1				
sprigged ww	1									
hand painted pw		1								
undecorated pw	3	1	3	1		2				
transfer printed pw	1	1			1		1	1		
yellow ware							4			1
redware	1									
porcelain			2			3				

Feature 104

Feature 104 was a brick lined privy pit measuring 8.1 feet north/south and 6.35 feet east/west. The feature exhibited two zones. The uppermost was a cap of lime and window glass, .8 feet deep. This layer contained a quantity of dispensary bottles, prividing a TPQ of 1900 for filling of the feature (Huggins 1971). The zone beneath this cap consisted of dark grey organic loam and contained a quantity of artifacts. This lower zone was .8 feet deep, and sterile subsoil was encountered beneath this level. The two zones were excavated separately, but little difference was noted in the dates of the materials. A total of 1782 items were recovered from the feature (Figure 15).

Kitchen items comprised 81% of the assemblage, and ceramics comprised 69% of the kitchen group. This group was dominated by white porcelain and undecorated whiteware, as is typical of the period (Bartovics 1974). Whitewares comprised 41% of the ceramics, pearlware, 7.8%, and creamware, .4%. White porcelain comprised an additional 38% of the ceramics. Whiteware decorative motifs included transfer printed, annular, hand painted, stenciled, and sprigged.

A number of reconstructed vessels were recovered, and are summarized in table 14. Teacups, particularly in porcelain, were the most common, followed by mugs, plates, saucers, and pitchers. Special service pieces included casseroles, gravy boats, and a candy dish. Chamber ware included 27 chamber pots and 3 washbowls.

Glass artifacts comprised an additional 31% of the kitchen group, and was dominated by beverage container glass in dark green, clear, aqua, amber, and blue. This group included soda water bottles, manufactured in the second half of the nineteenth century, and South Carolina dispensary bottles, manufactured in the 1890s. Other glass artifacts included pharmaceutical and panel bottles, 1.7% of the kitchen group, and table glass, 4.6% of the kitchen assemblage. The majority of the table glass was molded octagonal tumblers.

Architectural items comprised 14.4% of the assemblage, and included 2 doorknobs and a slab of decorative marble, as well as window glass. Clothing items, .39% of the assemblage, included a bone button and 6 fragments of shoe leather. Personal items comprised 1.22% of the assemblage and included 2 slate pencils, 4 inkwells, a fan slat, 8 bone toothbrushes, 3 eyeglass lenses, a bone comb, a glass syringe, and a bisque porcelain figurine. Furniture items comprised .44% of the assemblage and included fragments of lamp glass. Kaolin pipe fragments comprised 1.01% of the group. Activities items, .95% of the assemblage, included 3 marbles, a doll's head, and 13 flower pot fragments.

backfilled demolition rubble

brown sandy loam

lime, window glass

dark grey-brown loam

0 1 feet

Figure 15

FEATURE 104, WEST PROFILE

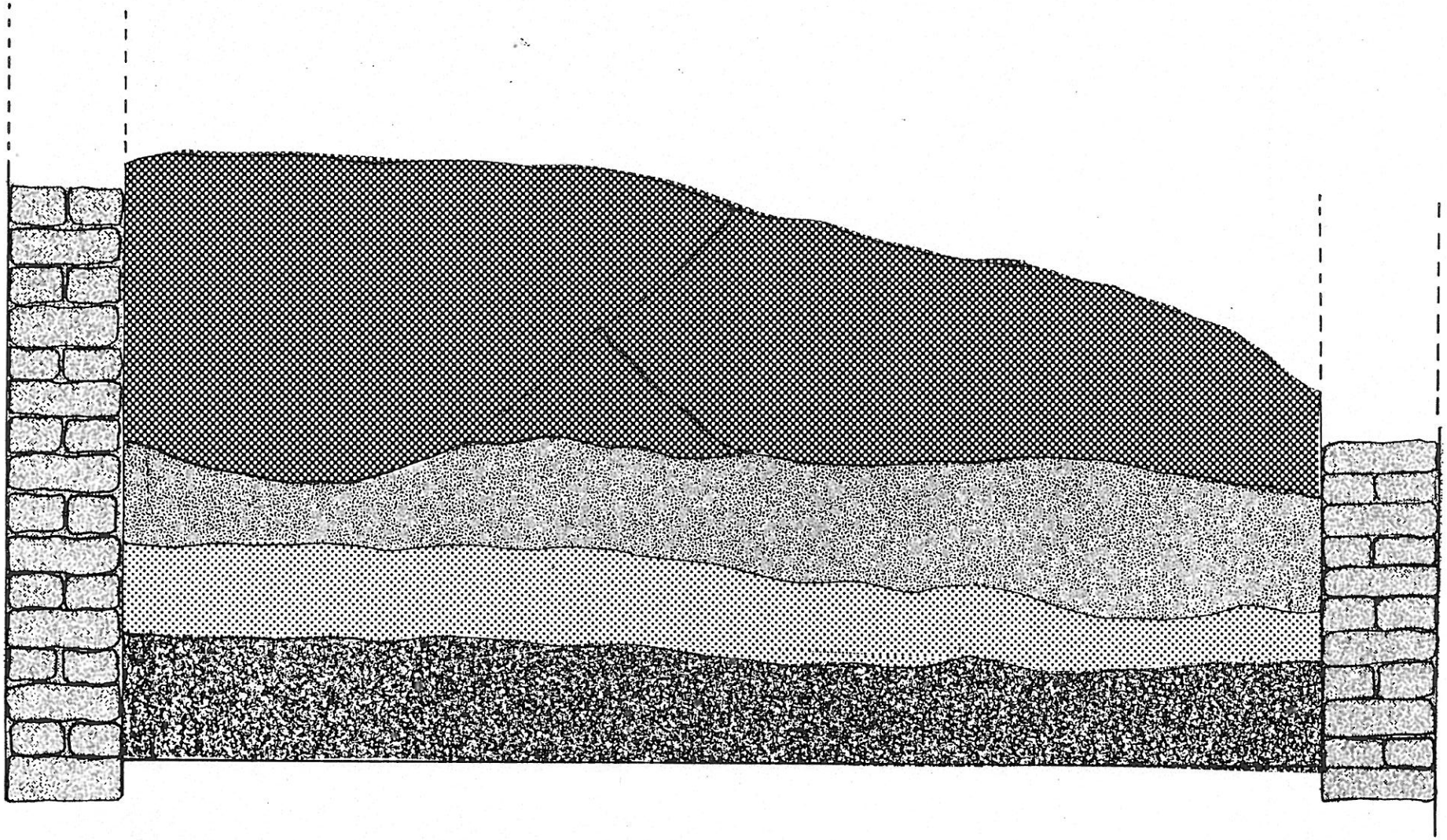


Table 13
Summary: Feature 104

	#	%
Kitchen	1452	81.48
Architecture	258	14.47
Arms	0	0.0
Clothing	7	.39
Personal	22	1.29
Furniture	8	.44
Pipes	18	1.01
Activities	17	.95

TPQ = 1893 (South Carolina Dispensary bottle)

Table 14
Feature 104: Vessel Distribution

	small plate	bowl	pitcher	teacup	saucer	plate	mug	service vessel	chamber pot	wash bowl	apothecary
undecorated ww			1	5	4	4	1	1	19	1	3
transfer printed ww		1	5		3	4	4	3	2	1	
hand painted ww			3	1							
sprigged ww				3							
stenciled ww				1						1	
undecorated pw				3	2				1		3
transfer printed pw annular pw		6	1				1		1		
hand painted pw				2							
shell edged pw						2		2			
creamware		1							1		
yellow ware							2		3		
porcelain	1	1	2	8	3		5	1			

Feature 100

Feature 100 was the latest dating feature excavated from the site, and it was filled after 1900, possibly as late as 1920. The feature consisted of a brick lined pit, measuring 12.8 north/south and 13.5 east/west. The feature may represent a brick-lined privy pit, but it is much larger than any of the other privy pits encountered on the site. It may represent some type of basement or cellar, but such features are extremely rare in lowlying Charleston. The dimensions are more in line with the cisterns encountered on the site, and the late date of filling lends credence to this interpretation. This site was the location of the County dispensary in 1900 (Herold and Thomas 1981).

The fill of the brick lined feature consisted of medium brown sand which was 1.6 feet deep. The contents of the feature was also unusual, and the assemblage was dominated by stoneware jugs, redware jars, and whiteware chamber pot lids. Kitchen items comprised 70% of the assemblage. Ceramics, comprising 33% of the kitchen group, consisted of stoneware bottles, followed by whiteware fragments. Other ceramics included hand painted whiteware, Rockingham earthenware, and ginger beer bottle. Glassware comprised the remaining 66% of the kitchen group, and included clear and dark green beverage glass, as well as brown, amber, milk, and dispensary glass. Only 2 fragments of table glass were recovered.

Architectural materials comprised 11.8% of the assemblage and included nails, a door lock, and window glass. A number of buttons of brass and porcelain comprised 1.22% of the assemblage. Personal items, .37% of the assemblage, consisted of a hard rubber comb, four pencils, a brass ruler, and a brass weight. Furniture items, .42% of the assemblage, consisted of lamp glass and a bed caster. Kaolin pipe parts comprised .96% of the assemblage. The activities group was quite large and varied, and included a number of lead pipe parts and ceramic insulators, as well as metal machine parts. The redware jars (29 vessels) were also placed in this category because of their suspected specialized function. A number of these vessels are already in The Charleston Museum history collections. These were donated in 1939 and 1984, respectively; all were from this approximate location on the Charleston Place block. Those donated in 1939 were found in the basement of 195 Meeting Street (Catalog card HC 614); their function and association remains unknown.

Table 15
Summary: Feature 100

	#	%
Kitchen	1313	70.13
Architecture	221	11.80
Arms	0	0.0
Clothing	23	1.22
Personal	7	.37
Furniture	8	.42
Pipes	18	.96
Activities	282	15.06

TPQ = 1909 (ceramic insulator)

Table 16
Feature 100: Vessel Distribution

	jar	bottle	chamber pot lid	cup
redware	29			
stoneware		4		
ginger beer		6		
whiteware			6	1

Feature 139

Feature 139 was a brick lined privy pit which was breached from the side by the bulldozer. The brick privy pit measured 6.2 feet by 4.3 feet, and a sample from the north end of the feature was retrieved as a single unit. A total of 1171 artifacts were recovered from this sample. Soil deposits in the feature were 1.2 feet deep. The relative proportions of decorative ceramics suggest a date of deposition of the 1840s.

This feature may have been filled after the 1838 fire. This land was part of the Amory estate. James Caveneau acquired it before 1798. In 1799, his executor sold the property with a wooden house and outbuildings to James Moles. At this time the property was occupied by Messrs. Patton and McComb. This was then sold to Mr. Koger, who sold to Thomas Napier in 1811. Napier then sold to John Hunter. The house was burned in the 1838 fire. At this time it was occupied as a shoe store. The property was inherited by Hunter's heirs (Herold and Thomas 1981:54)

Kitchen items dominated the assemblage, comprising 92% of the total. Ceramics comprised 74% of the kitchen group. Undecorated whiteware was the most common ceramic type; the whiteware group, comprising 66% of the ceramics, also included transfer printed and hand painted decoration. The pearlware group, comprising 21% of the ceramics, was more varied and included transfer printed, annular, shell edged, and hand painted. White porcelain comprised 8% of the ceramics. A variety of reconstructable vessels were recovered, and these are summarized in table 18. Compared to the other privies excavated on site, an unusually small number of hygiene ware was recovered; only 1 chamber pot and 2 wash bowls were represented. Other vessel types included bowls, mugs, teacups, saucers, and soup bowls. Only 2 plates were reconstructed. Other ceramics included yellow ware, black lead glazed earthenware, and stoneware.

Glass vessels comprised 26% of the kitchen group. Dark green and clear glass beverage containers were the most numerous. Pharmaceutical glass comprised .7% of the group, while table glass comprised 1.3% of the kitchen group.

Architectural items comprised 6% of the assemblage and consisted of window glass. Clothing, personal, and furniture items comprised .08% each, and consisted of a bone button, a bone toothbrush, and a fragment of lamp hardware.

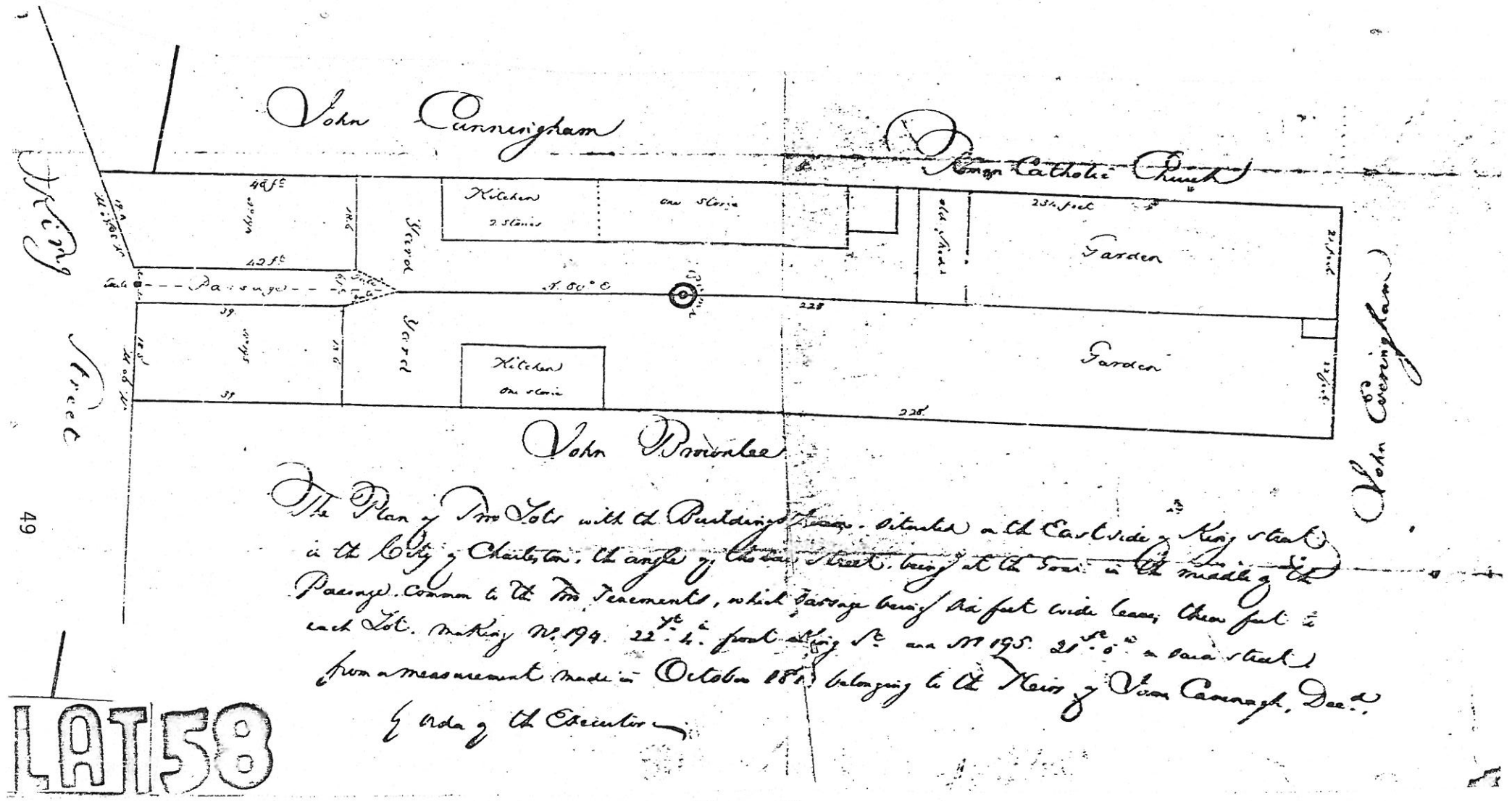


Figure 16

Plat showing the land of James Cavineau on King Street in 1813.
CCRMCO McCrady Plat no. 58

Kaolin pipes comprised .42% of the assemblage. Activities items comprised 1.79% of the assemblage and consisted of flower pot fragments and 2 marbles.

Table 17
Summary: Feature 139

	#	%
Kitchen	1077	91.97
Architecture	70	5.97
Arms	0	0.0
Clothing	1	.08
Personal	1	.08
Furniture	1	.08
Pipes	5	.42
Activities	21	1.79

TPQ = 1803 (Transfer printed whiteware)

Table 18
Feature 139: Vessel Distribution

	bowl	mug	pitcher	teacup	saucer	ladle	soup bowl	wash bowl	chamber pot	serving vessel	plate
undecorated ww					2						
transfer printed ww						1	1			1	
annular pearlware	7	2	2								
transfer printed pw	2	2									
hand painted pw								1			
undecorated pw									1		
creamware											1
porcelain		3		5	5						1

Feature 129

Feature 129 was a brick lined well. The well was 7 feet deep below the top course of bricks. The top courses of bricks were mortared, while the lower levels were laid dry, with no mortar. The feature had been breached by the bulldozer. The interior diameter of the well was 3.6 feet. The top 3.6 feet of fill consisted of motor oil-stained sand. This was followed by a layer of sand and debris 1.0 feet deep. Very black soil was encountered below this level, with a concentration of brick rubble at 6.0 feet. The water table was encountered 6.1 feet below surface.

This well was on the same lot as feature 139, and may be associated. The base of the well was enclosed by a hexagonal cribbing, consisting of boards placed on end in the subsoil. This feature appears to represent a "coffer dam" used to retain groundwater during well construction. A similar feature was recorded by Honerkamp et al. in 1981.

Artifacts in the well were very sparse; only 144 items were recovered. Kitchen items comprised 77% of the assemblage; ceramics comprised 48% and included pearlware, porcelain, whiteware, yellow ware, earthenware, and stoneware. The ceramics suggest that the well was filled ca. 1860 (see appendix V). Glass materials included green, clear, and aqua beverage containers. Table glass comprised 5.4% of the kitchen group. The final kitchen item was a bone knife handle and 2 metal sieves.

Architectural items comprised 12.5% of the assemblage and included window glass and roof tiles, as well as a door knob. Clothing items included 8 shoe heels (5.5% of the assemblage). Furniture items comprised .69% of the assemblage and consisted of a lamp part. A single pipe stem was recovered. Activity items, 3.4% of the assemblage, consisted of flower pot fragments.

Feature 126

Feature 126 was a brick lined well which had been converted to a cistern. This feature was also on the same property as features 139 and 129, according to early nineteenth century plats (Herold and Thomas 1981:54). The top of the well shaft had been bricked in to form a dome with a narrow hole in the top center. The feature was bell shaped, 2.0 feet in diameter at the base and 4.5 feet in diameter at the top. The feature was 6.0 feet deep, and in the lowest 2 feet the bricks were laid dry, with no mortar. The well was constructed on a solid wooden plank which was hexagonal on the exterior.

The artifact content of the feature was sparse. Transfer printed whiteware provided a TPQ of 1830. Kitchen artifacts comprised 97% of the assemblage; ceramics included porcelain, creamware, pearlware, and whiteware. The pearlware included a child's molded A-B-C plate. Utilitarian ceramics included coarse earthenware, jackfield, and stoneware. Glass wares, predominated by green container glass, comprised 46% of the kitchen group. A bone knife handle completed the kitchen group. Other artifacts included a delft tile, a marble, and 3 pipestems.

Miscellaneous features

In addition to the major features described above, a number of smaller features were encountered and designated. These features were either amorphous, were defined but not excavated, or contained extremely small artifact assemblages. These features are not described separately, but are summarized in table 19. Artifact counts for these features, as well as the large features, are summarized in Appendix V . Although they are not discussed separately, they are utilized for interpretive purposes in Chapter V where appropriate.

Table 19
Provenience Guide: 1981 Excavations

Fea #	Date of deposition	function	comments
100	1909	brick cistern or privy	
101	early 20th c.	cistern	sampled
102	?	privy pit	looted before work began
103	1890s	trash pit	
104	1900	privy	
105	1830s	trash pit	disturbed
106	?	amorphous	
107	?	amorphous	
108		posthole	
109	?	amorphous	
110	?	amorphous	
111	early 20th c.	cistern	not excavated
112	early 20th c.	cistern	not excavated
113		trash pit	sampled
114	?	builder's trench for fea 111	sampled
115	1860s	brick privy pit	
116	?	amorphous	sampled
117	1820s	trash pit	
118	1830s	well	destroyed by crew
119	?	privy pit	looted before work began
120		shallow pit	sampled
121		builder's trench	
122	?	amorphous	
123	?	drain	

Table 19, cont.

124	1850s	brick privy pit	
125	?	amorphous	
126	1830s	brick lined well	
127	20th cent.	brick cistern	
128	?	privy	looted prior to work
129	1860s	brick lined well	
130	1820s	wood lined privy pit	
131	1840s	trash pit	
132	1800s	trash pit	
133	1800s	trash pit	
134	?	amorphous	
135	?	amorphous	
136	?	amorphous	
137	?	well	previously excavated
138	1820s	trash pit?	
139	1840s	brick lined privy pit	
140	1835	burned linear area	

CHAPTER IV

THE 1985 EXCAVATIONS

Feature 145

Feature 145 was one of the more unusual features encountered at the site in many respects, including temporal affiliation, form, function, and artifact content. The feature was a rectangular pit intruding into sterile subsoil. The feature measured 6 by 8 feet, and exhibited rounded corners and a flat bottom. The pit was unlined, and was filled with a tan sand matrix. The rectangular feature was not oriented parallel with the street or with standing structures. The feature initiated at 7.93 feet MSL and continued to a depth of 7.16 feet MSL (Figure 17).

After discovery, the top of the feature was cleared with shovels to expose the edges. Excavation commenced with shovels in arbitrary levels, and the feature was excavated in 3 levels. No natural divisions or discrete deposition episodes were visible, and the feature was evidently filled in a single episode. All materials were screened through ¼ inch mesh. Flotation samples plus small soil samples were collected from each level. Several stains were noted in the base of the feature, resembling square post holes in configuration. Excavation of the best defined post suggested that these features have no depth (.09 feet). Therefore, their interpretation as post-molds remains tenuous (Figure 18).

The feature contained a moderate number of cultural materials; the latest dating item in the provenience was creamware, providing a TPQ of 1750. This mid-eighteenth century date of deposition makes feature 145 one of the earliest proveniences encountered at the site. Although only a moderate amount of cultural materials were encountered, the feature contained large amounts of faunal material, including an almost complete (but disarticulated) horse skeleton. While horses were a common component of everyday life in Charleston, horse remains are not commonly encountered in the urban archaeological record. The quantity of faunal remains, including the horse, suggests that the feature was used to dispose of this noxious refuse. The feature may have been dug deliberately to get rid of the refuse, or the feature was designed for other purposes, and used secondarily for refuse disposal. The configuration of the feature suggests a root cellar, although such features have not been encountered previously in the area. The land was part of the property owned by Sarah and James Hasell, and later by Parker Quince and his wife Suzanne Hasell Quince. The couple sold the land in 1773 (Herold and Thomas 1981:55)

Feature 145 contained a moderate amount of material culture (N=639), and the relative percentages of the functional groups were in close agreement with both the Carolina Artifact Pattern and the Charleston Mean. Kitchen materials comprised 58.2% of the assemblage. Of these, ceramics comprised 54% of the group, while glass comprised the remaining 46%. Tablewares comprised 70% of the ceramics, and consisted primarily of creamware (18%), white saltglazed stoneware (11%), and delft (18%). Utilitarian wares consisted of a variety of saltglazed stonewares, slipwares, and lead glazed and unglazed earthenwares. Colono ware and River Burnished wares (Ferguson 1980, 1985) comprised 5% of the ceramics. Glass artifacts comprised the remaining 46% of the kitchen group and consisted primarily of clear and green bottle glass. Two goblet stems completed the group.

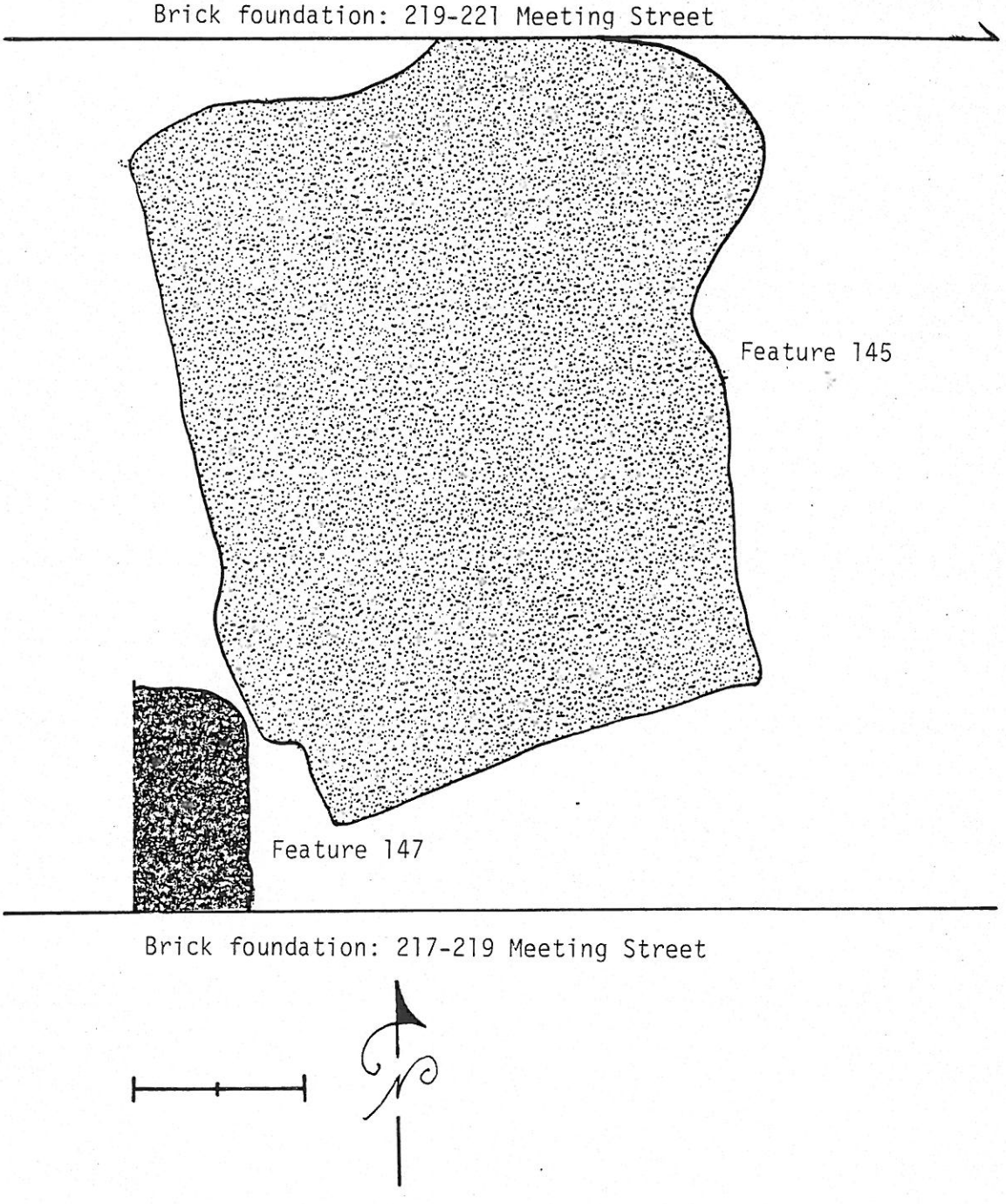


Figure 17

PLANVIEW, FEATURES 145 & 147

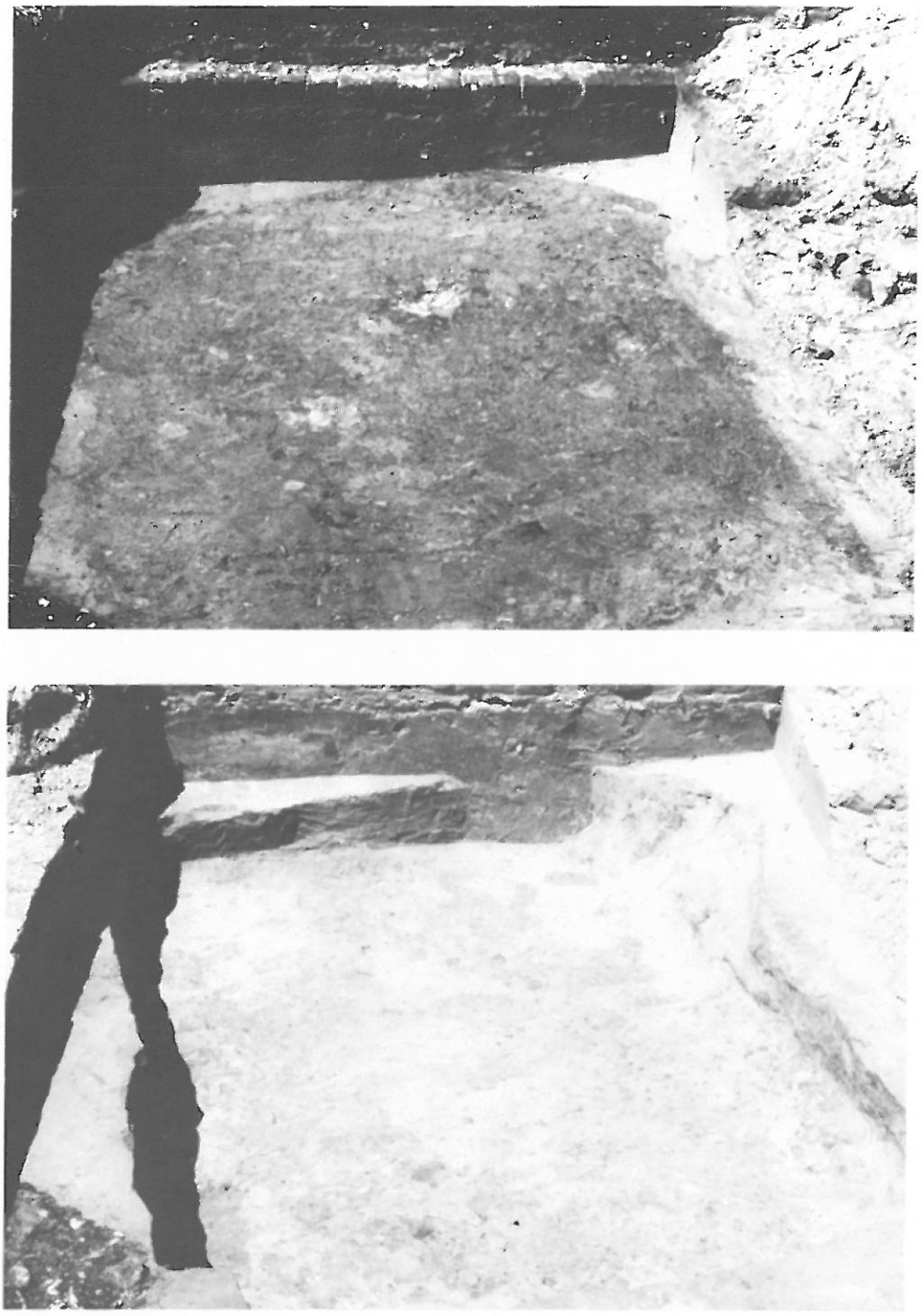


Figure 18

Feature 145 before and after excavation,
facing north.

Architectural materials comprised 30% of the assemblage, and consisted primarily of nails and window glass. Other architectural items included two shutter pintels and a large spike. Arms materials comprised .46% of the assemblage and included a lead shot and two gunflints. Clothing comprised .78% and consisted of a brass button, three portions of brass buckles, and a bone button. Personal and furniture items comprised .15% each, and consisted of an eroded coin and a brass upholstery tack, respectively. Pipes comprised 3.75% and consisted of kaolin pipe fragments. The activities group comprised 6.4% and consisted of a number of fragments of iron barrel straps.

Table 20
Summary: Feature 145

	#	%
Kitchen	372	58.21
Architecture	192	30.04
Arms	3	.46
Clothing	5	.78
Personal	1	.15
Furniture	1	.15
Pipes	24	3.75
Activities	41	6.41

TPQ = 1750 (creamware)

Feature 153

Feature 153 was the most productive feature encountered during the 1985 excavations, but unfortunately was the most badly disturbed by grading. Feature 153 consisted of a brick lined privy pit. The feature was discovered when the bulldozer cut into it during deep grading. Roughly one half of the feature was disturbed by this grading. The upper portions of the feature were thus removed by the bulldozer, and artifacts from this soil were hand collected and kept separate. This disturbed overburden was then removed. The lowest portion of the north half of the feature remained intact, and this was hand excavated and screened through ¼ inch mesh. This remaining portion was .6 feet deep and consisted of greasy grey loam. Artifacts were extremely numerous. This material was excavated to a hard packed sterile yellow sand bottom. This north half was excavated to the profile produced by the deep bulldozer cut; this wall was 5.5 feet high. Since this cut also ran along a property

Figure 19

Excavation of exposed portion of Feature 153.

line, it was impossible to fully remove the overburden to expose the southern half of the feature. The profile was cleaned and photographed. The top of the ground was 11.58 feet MSL; the top of the feature was encountered at 8.24 feet MSL and continued to a depth of 6.33 feet MSL. The profile revealed that a zone of lensed brown sand lay immediately above the greasy grey loam; this zone also contained a quantity of artifacts. The southern half was then excavated by removing the feature deposits from the profile. These excavations revealed that the interior of the brick lined pit measured 3.2 feet by 6.0 feet; the southern half was excavated to a width of 5.6 feet. All excavated materials were screened through ¼ inch mesh, and the two halves of the feature were kept separate during analysis. Soil samples and flotation samples were retained (Figure 19).

The feature contained a quantity of materials (N=2544) which consisted overwhelmingly of kitchen materials. The presence of transfer printed pearlware provides a TPQ of 1795, while the lack of whiteware and the presence of quantities of hand blown bottle glass suggests that the feature was deposited ca. 1800 to 1810. The privy was filled about the time that Hugh Swinton, a planter, sold the property to John White. He divided the property into two lots, each 34 feet wide (Herold and Thomas 1981:95).

Kitchen materials comprised 90% of the materials recovered from the feature. Ceramics comprised 33% of the group, while glass comprised the majority of the kitchen materials at 68%. The majority of the ceramics were the refined earthenwares that were manufactured between 1760 and 1820. These include creamware (32%), undecorated pearlware (19%), shell edged pearlware (18%), and transfer printed pearlware (17%). No whitewares, manufactured after 1820, were recovered. A number of these sherds represented reconstructible vessels. Creamware vessels include two pitchers, two chamber pots, an oval serving dish and five small bowls. Seven recognizable shell edged pearlware vessels include four plates, two soup bowls, and an oval platter. Transfer printed pearlware vessels include two chamber pots, five small bowls, two cups, and a pitcher.

Two unusual ceramic types were recovered from the feature. The first is an almost complete chamber pot of pearlware decorated with a scratch blue motif. The decoration is fairly crude, consisting of two wide bands of incised lines, filled with blue glaze. The blue glaze does not always follow the lines, and in several areas has bled beyond the limits if the incising. This sloppy execution is in contrast to the work exhibited on two other examples in the Museum collections, recovered from the Liberty National Bank building site, one block to the south (Herold 1981). These vessels, both chamber pots, exhibited fine incised bands carefully glazed in blue. The central portion of the vessel was decorated in an incised vine, with blue glaze, and a raised "GR" crest. Scratch blue pearlware has only been recovered in Charleston, Savannah, and Darien, Georgia (Cupstid 1987) and is extremely rare. The recovery of this vessel from feature 153 represents the first time such ceramics have been recovered from a tightly dated context.

The other unusual ceramic type represents a small pitcher. This vessel exhibits a fine red paste with a white slipped interior, covered with a clear

lead glaze. The resulting dark red exterior of the vessel was decorated with a yellow transfer printed design. This ware is called Portobello ware and was manufactured by the Scott brothers of Scotland. The ware was manufactured between 1796 and 1825, and was often produced in small mugs and pitchers (Lindsay 1962). This is no doubt the same type of ware as the small redware pitcher decorated with overglazed flowers from feature 130.

Canton porcelain comprises the remainder of the tablewares recovered from feature 153. Utilitarian wares include a small amount of slipware, lead glazed coarse earthenwares, and stonewares. Bottle glass comprised the bulk of the feature assemblage; this group consisted primarily of fragments from dark green hand blown bottles for wine and ale. Two complete bottles were recovered from this feature. Clear bottle glass was also a major component of the assemblage. Table glass comprised 3.4% of the kitchen group, and included a number of fragments from tumblers. One unusual item was a decorative bottle of purple glass.

The architecture group comprised 8.7% of the assenblage, consisting of two nails and the remainder window glass. Items other than kitchen and architecture materials comprised a very small percentage of the assemblage. No arms materials were recovered. Clothing comprised .15% of the assemblage, and included one bone button and two straight pins. Personal items comprised .39% and consisted of fragments of perfume bottles. Furniture items included a brass drawer pull and a brass bedpost medallion, comprising .07% of the assemblage. Only two fragments of kaolin pipes were recovered, once again comprising .07% of the deposit. The activities group comprised .51% of the assemblage and consisted of twelve fragments of barrel straps and a brass nail.

Table 21
Summary: Feature 153

	#	%
Kitchen	2290	90.01
Architecture	223	8.76
Arms	0	0.0
Clothing	4	.15
Personal	10	.39
Furniture	2	.07
Pipes	2	.07
Activities	13	.51

TPQ = 1795 (Transfer print pearlware)

Table 22
Feature 153: Vessel Distribution

	plate	soup bowl	bowl	cup	pitcher	serving dish	chamber pot
portobello ware					1		
scratch blue p.w.							1
creamware			5		2	1	2
shell edged p.w.	4	2				1	
hand painted p.w.							1
transfer print p.w.			5	2	1		2

Feature 149

Feature 149 was unusual in size and configuration. Feature 149 consisted a very shallow basin with amorphous edges. The feature was initially difficult to define. It became evident that a brick foundation, designated feature 154, formed the north and east edges of the feature. The basin was also deepest against these walls. The feature then gradually sloped up to the south and west, forming a roughly semicircular configuration (Figure 20). The feature contained four distinct zones. Zone 1 consisted of burned mortar and slate, evidently representing the roof of a collapsed, burning building. Zone 2 was a relatively thin layer of dark brown soil, containing quantities of bone, charcoal, and mortar. Zone 3 was similar to zone 2, but contained less charcoal. Zone 4 was a mottled yellow and tan sand. Located in the base of the feature was a distinct builders trench to feature 154 (Figure 21).

Each of the zones was excavated and screened separately. It appears that zones 1 and 2 were deposited ca. 1840, while zones 3 and 4 were somewhat earlier, possibly deposited as early as 1810 to 1820. Based on its configuration, it appears that the feature originally represented a "low spot" adjacent to the brick wall, which formed a refuse trap. This area, then, experienced a number of different filling episodes. This area represents the northern portion of the lot owned by the Baker brothers in 1818 (see discussion for feature 150). Elias Baker, owner of the northern lot, conveyed to Henry Geffkin in 1823. Geffkin sold in 1834 to Lawrence Benson. In 1838, a three story dwelling occupied by Mr. Benson burned in the fire which swept the block.

For the purposes of the artifact discussion, all four zones were tabulated together, for a total of 1561 items. Kitchen materials comprised 71% of the feature assemblage; ceramics comprised 81% of the kitchen group. As is typical of early nineteenth century assemblages, refined earthenwares dominated

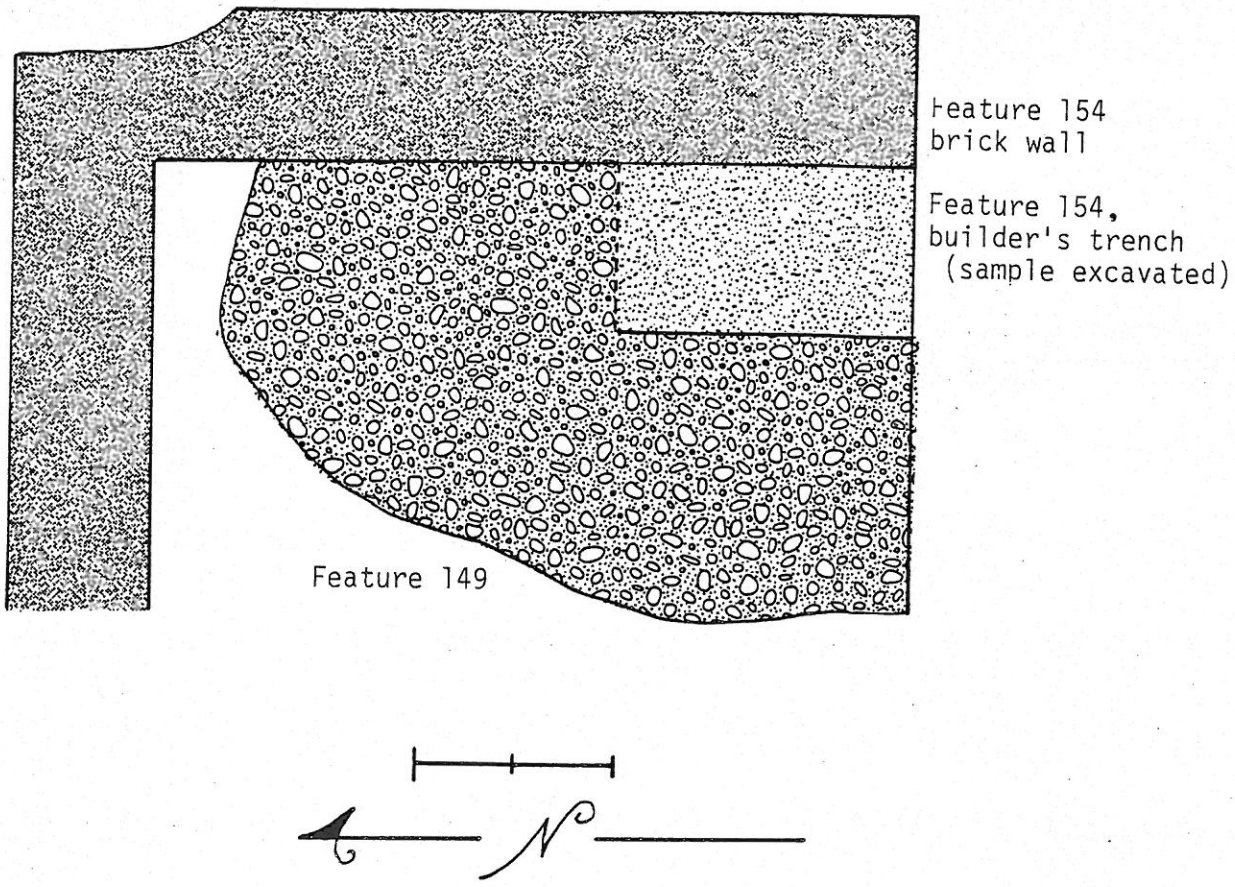


Figure 20

Planview, Features 149 and 154

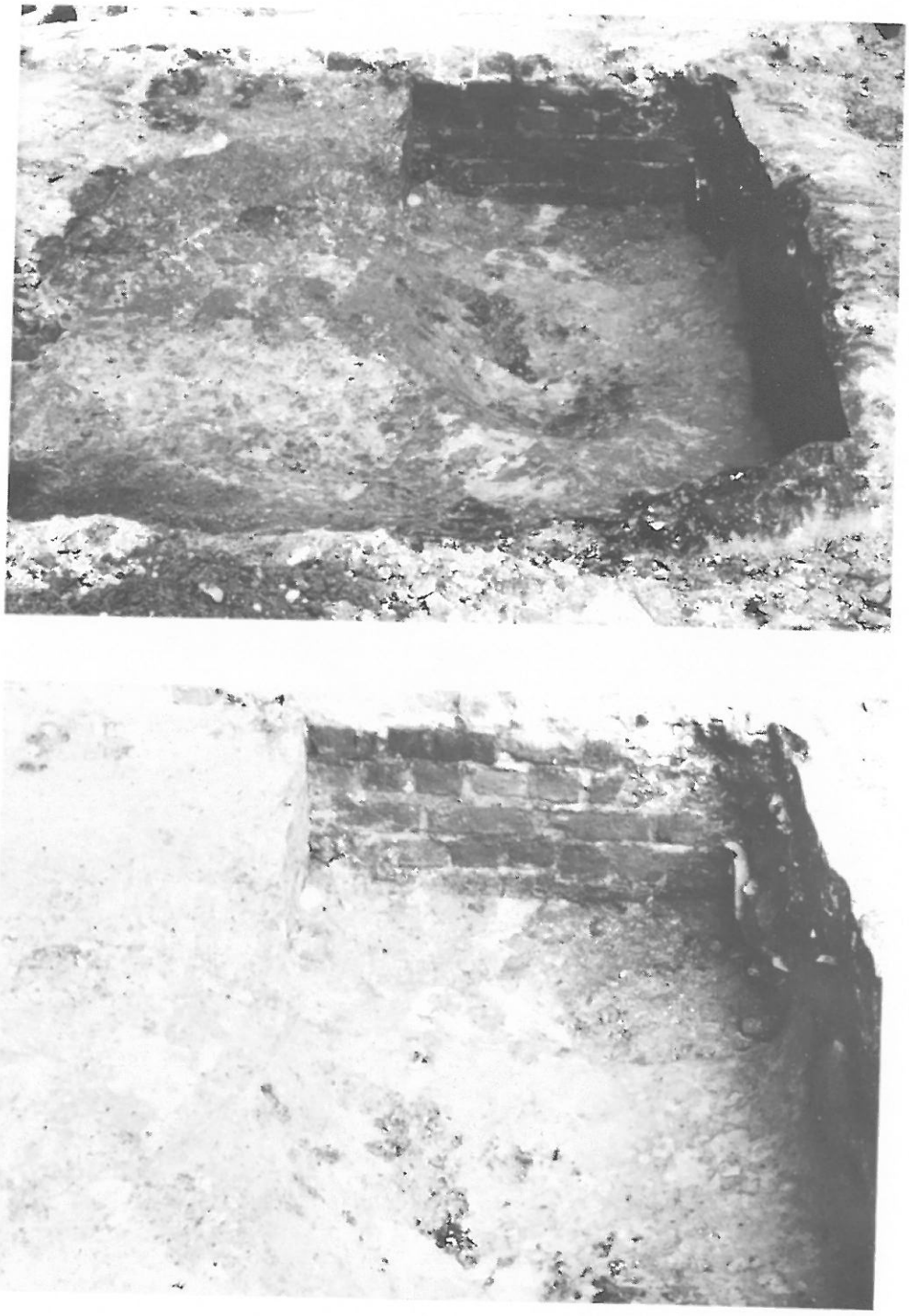


Figure 21

a) Feature 149 after excavation, facing east.

b) closeup of Feature 149.

the ceramic assemblage, comprising 94% of the group. These are represented by creamware (17%), pearlwares (66%), and whitewares (10%). The predominance of pearlwares supports the early nineteenth century date of deposition. Other ceramics in the assemblage include Canton porcelain, luster ware, yellow ware, and a variety of utilitarian stonewares and earthenwares. A few examples of eighteenth century wares were also present, including delft, Jackfield, faience, and Nottingham stoneware.

The glass group, comprising 20% of the kitchen group, was once again dominated by dark green and clear bottle glass. Table glass, comprising 1.2% of the kitchen group, consisted of four fragments of goblets, four tumbler bases, and six body fragments. Two iron kettle fragments completed the group.

Architectural items comprised 20% of the assemblage; these consisted of a large number of iron nails, plus a moderate amount of window glass. Also included were fragments of roofing tiles. A single arms artifact, a gunflint, was recovered, comprising .06% of the assemblage. Compared to other Charleston Place features, the clothing group was unusually large and varied, comprising .83% of the assemblage. This group included a brass buckle, a tinkling cone, a bone lace bobbin, a mother of pearl button, three brass buttons, and six straight pins. The personal group was also quite large, comprising 2.81% of the assemblage. The dominant artifact were fragments of perfume bottle glass. Other artifacts included four bone toothbrushes and a bone comb. Furniture items comprised .25% and consisted of two brass tacks, a drawer pull, and a medallion. The pipe group was also quite large, comprising 3.26% of the group. The activities group comprised .64% and consisted of 7 barrel strap fragments, a toy marble, a piece of brass wire, and a fragment of clay flower pot.

Table 23
Summary: Feature 149

	#	%
Kitchen	1116	71.49
Architecture	322	20.62
Arms	1	.06
Clothing	13	.83
Personal	44	2.81
Furniture	4	.25
Pipes	51	3.26
Activities	10	.64

TPQ, zones 1 and 2 = 1830 (transfer printed whiteware)
TPQ, zones 3 and 4 = 1795 (transfer printed pearlware)

Feature 148

Feature 148 was discovered when the bulldozer encountered a large, amorphous concentration of china and glass. The top portion of the feature was pushed away, and deposited ca. 30 feet to the north before the bulldozer could be stopped. The materials contained in this misplaced portion of the feature were hand collected. The feature itself was very large and, due to the disturbed nature of the terrain it was impossible to determine the exact dimensions of the feature. It appears that the feature was originally a broadcast scatter, or pile of material, rather than fill in a prescribed subsurface container.

Because of the large volume of material contained in the feature and the lack of definite dimensions, the feature was sampled by placing a 5 foot square within the area of greatest concentration. The west edge of the feature and the 5 foot square abutted a brick wall foundation, designated feature 152. Excavation of the unit revealed three zone deposits. Zone 1 was a dark grey-brown sandy soil containing quantities of artifacts, primarily china and glass. Zone 2 was of the same matrix, but the artifact content was much less dense. The base of this zone represented the true base of the feature. At the top of zone 2, a second brick foundation was encountered along the eastern wall of the 5 foot unit; this was designated feature 151. The wall ran north/south, and ended abruptly at the northern end. The southern limits of the wall were not encountered. Zone 3 of feature 148 was defined as mottled grey and yellow sand. This proved to be the interface between feature 148 and feature 150, which initiated below it. This feature will be discussed separately.

The materials excavated in the 5 foot square were screened through ¼ inch mesh. Materials that were hand collected from both the feature area and the displaced area were bagged and tagged separately. The feature was photographed and mapped at the top and base of the excavation (Figure 23).

The feature consisted almost entirely of broken ceramic and glass fragments, dating to the last quarter of the nineteenth century. No decaled ceramics, dating to the first years of the twentieth century, were recovered. Sanborn fire insurance maps dating to 1884 and 1902 indicate that the feature is located in the rear of a wholesale crockery and glass facility. No doubt feature 148 represents damaged and discarded materials from this mercantile enterprise. It is also possible, due to the presence of nails, that this feature represents cleanup after destruction and/or damage to the building. This commercial deposit has provided information on some of the wares that were available to Charleston residents during this period. Most of the artifacts were extremely fragmentary, due to compaction by the bulldozer, but some of the vessls could be restored (Figure 28).

As discussed above, the assemblage consisted almost entirely of ceramics and glass; the kitchen group comprised 94% of the feature assemblage. Whiteware dominated the ceramic group. These whitewares were present in undecorated, molded, transfer printed, annular, hand painted, and stamped decorations. The annular ware types included bright blue stripes and vessels featuring

both horizontal and vertical stripes, which created a checkerboard pattern. These were present in royal blue and dark green. Transfer printed vessels were primarily blue or brown. The most numerous sherds, besides undecorated, were those decorated with a hand painted or stamped design, or both. The hand painting usually consisted of stripes painted around the rim and/or marley of the vessel. These were in mulberry, blue, green, brown, and occasionally gold. These stripes were often combined with stamped designs in a starburst or floral design in bright colors. Plain white porcelain and semiporcelain were minor components of the ceramic assemblage.

Glassware comprised nearly 50% of the kitchen group. The numerous fragments can be divided into two groups; container glass and table glass. Clear bottle glass dominated the assemblage, but bottle glass was also present in green, borwn, dark green, aqua, amber, and blue. The table glass was dominated by pressed glass in a number of design motifs. These appear to have been covered candy or compote dishes and small, shallow bowls. Commercial grade tumblers and goblets were also present. A quantity of milk glass was also present, and although this has been placed in the table glass category, precise form and function are unclear.

Architectural material comprised only 2% of the assemblage and consisted of nails, plus a small amount of window glass. Other categories were extremely small as well; no arms materials were recovered. Clothing items included a bead, a snap, a bone button, and three porcelain buttons (.1%). Personal items included two bone combs and a bone tooth brush (.06%). Only two pipe fragments were recovered (.06%), and activity items included five machine parts and two clay flower pot fragments (.12%). The furniture group, in constrast, was rather large (3.10%), due to the presence of a large amount of lamp chimney glass. No doubt these were also stocked by the wholesale facility.

Table 24
Feature 148: Summary

	#	%
Kitchen	5510	94.50
Architecture	121	2.07
Arms	0	0.0
Clothing	6	.10
Personal	2	.03
Furniture	181	3.10
Pipes	2	.03
Activities	7	.12

TPQ = 1880 (pressed glass design)

Feature 150

Feature 150 was encountered during excavation of feature 148, when it became apparent that the materials encountered in zone 3 were from a different provenience. They were of a different type, and were much earlier than those in the upper zones of feature 148. When the 5 foot square excavated in feature 148 was completely excavated and cleaned, the outline of another feature was present. This feature continued beneath the brick foundation, feature 151, and thus predates it. The area around the stain was shoveled and cleaned to reveal a rectangular stain measuring 6.2 by 10.5 feet. The feature was bisected east/west, along its long axis, and the north half of the feature was excavated. The matrix consisted of mottled tan, yellow, and grey sand. The feature initiated at 8.66 feet MSL and continued to a depth of 7.05 feet MSL. This portion of the feature was excavated in three arbitrary levels. The southern half of the feature was not excavated. Based on the size and configuration, it appears that that feature 150 represents a wood-lined privy pit. The feature was filled ca. 1830. This feature is shown on an 1838 plat showing the privy and other structures (Figure 22). The 1822 City Directory lists the owner, Noah and Elias Baker, as dyers. The southernmost tract was owned by Noah Baker and occupied by M.E. Nopie. The heirs of Noah Baker sold the lot to William Nopie in 1839. The Brown Crockery Company was located on this lot in 1895 (Herold and Thomas 1981:67)(Figs. 23, 24).

Feature 150, like feature 145, was one of the few features to conform to the Carolina pattern, suggesting that it was filled with domestic refuse (N=1733). Kitchen materials comprised 55.8% of the assemblage. Ceramics comprised 54% of the kitchen group. Pearlwares dominated the ceramic group, followed by creamware. Undecorated and transfer printed pearlware were the most common decorative types. A small amount of transfer printed whitewares in colors other than blue were recovered, providing the TPQ of 1830. Tablewares dominated the ceramic group at 87%. Other tablewares included a few fragments of Canton porcelain and a single sherd each of Elers ware and Black Basalte stoneware. Utilitarian wares included a single sherd of yellowware, a variety of stonewares, black lead glazed coarse earthenware, and slipwares. Colono wares comprised 1.7% of the ceramics.

Glass items comprised 45% of the kitchen group. As is typical of the early antebellum period, dark green bottle glass dominated the group, followed by clear bottle glass. Minor amounts of blue and aqua glass were also present. Table glass comprised 2.8% of the kitchen group and included fragments of tumblers and goblets. Four pieces of cutlery and a kettle fragment completed the group.

Architectural materials comprised 29.6% of the assemblage. This included a number of nails as well as window glass, plus four spikes and two locks. No arms materials were recovered. Clothing comprised .4% of the assemblage, and included 1 lacing tip, two bone buttons, one brass hook, and three brass buttons. The personal group was unusually large, 11.8%, due to a large amount of perfume bottle glass. Other personal items include two toothbrush handles, and a bone comb. Furniture comprised .17% of the assemblage and included three brass tacks and a drawer pull. The pipe group was also quite small,

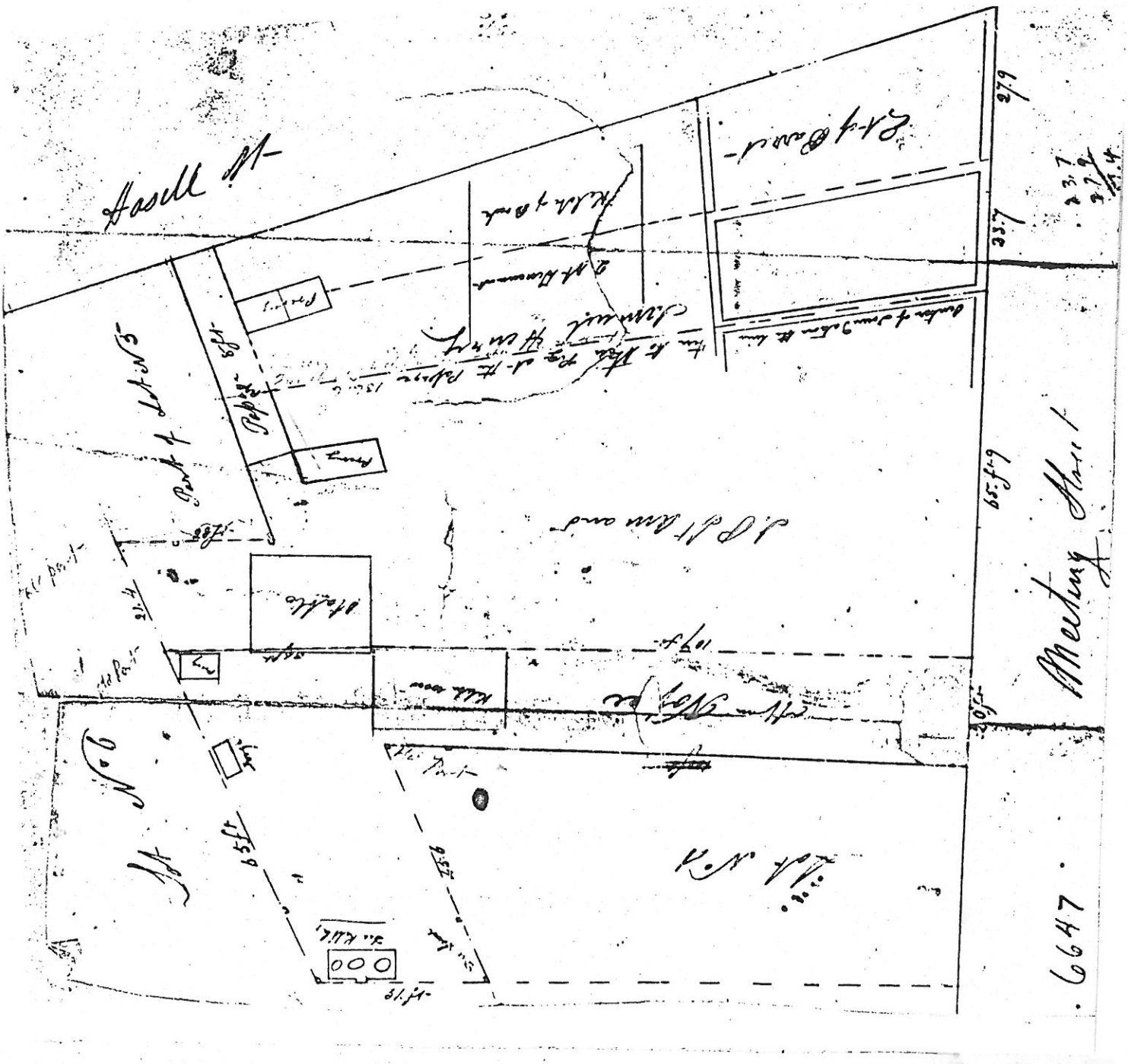


Figure 22

Plat of several lots of land on the corner of Meeting and Hasell streets, 1838-1843
CCRMCO McCrady Plat no. 6647.

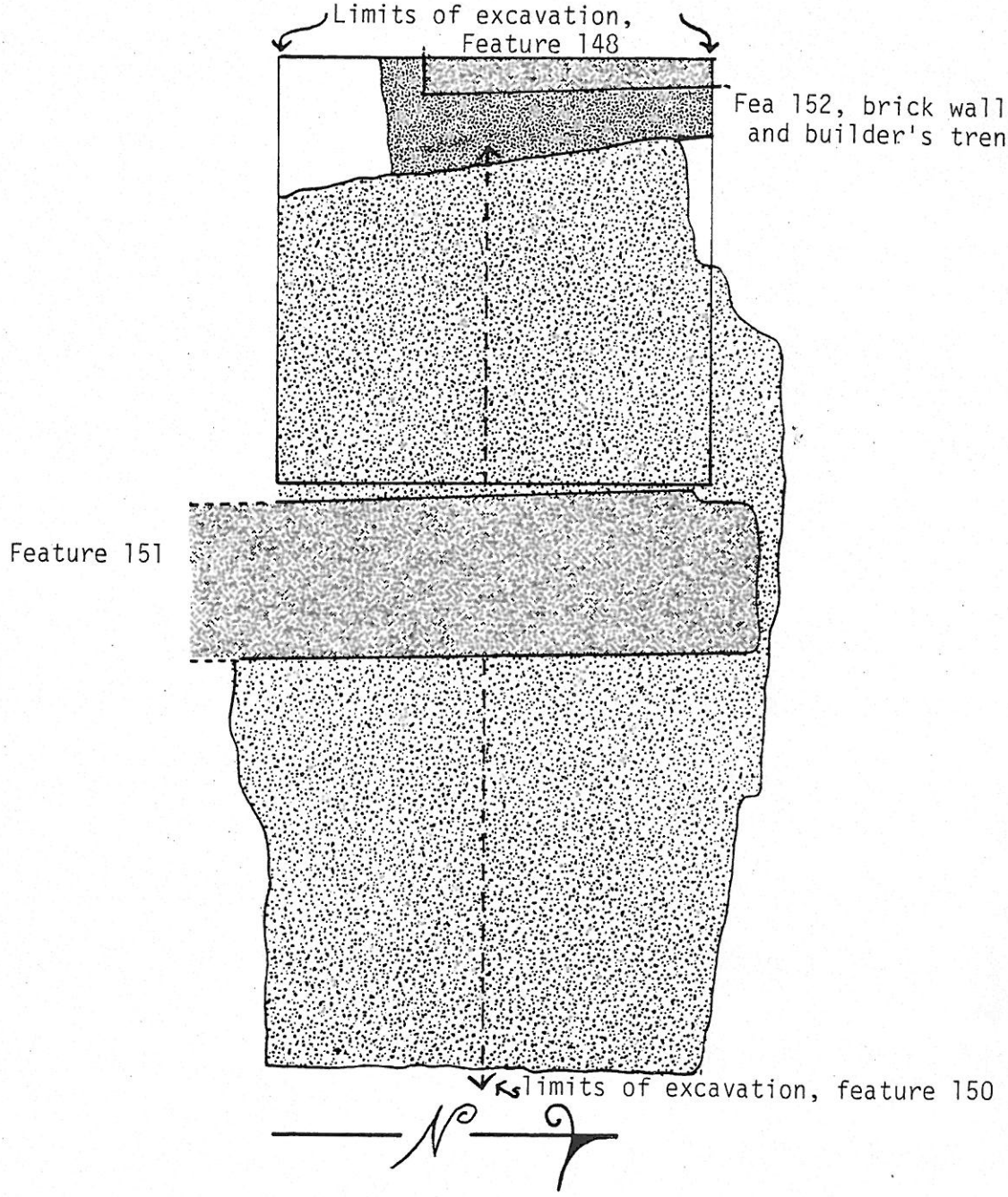


Figure 23

PLANVIEW, FEATURES 148, 150, 151, 152

Figure 24 Feature 150 after excavation.

Figure 25 Profile of Feature 147.

comprising .63% of the assemblage. The activities group comprised 1.44% of the assemblage, and included sixteen fragments of barrel straps, a clay marble, 2 flower pot fragments, and six pieces of brass wire.

Table 25
Summary: Feature 150

	#	%
Kitchen	968	55.85
Architecture	513	29.60
Arms	0	0.0
Clothing	7	.40
Personal	206	11.88
Furniture	3	.17
Pipes	11	.63
Activities	25	1.44

TPQ = 1830 (transfer printed whiteware)

Features 147, 155 and 156

These small features merit special discussion because of their unusual configuration, and their similarity to each other. These three features were linear areas of very dark black soil. Due to the linear nature of the features and the nature of the grading process, it was not possible to absolutely determine the dimensions of any of these. Feature 147 was 1.4 feet wide and at least 8.0 feet long. Only a portion of feature 155 was visible; it was at least 2.0 feet wide and 2.8 feet long. The feature was 1.8 feet deep and contained large pieces of charcoal. Feature 156 was the most clearly defined and measured 2.4 feet by 16.9 feet. The subsurface limits of these features were quite distinct.

The sample retrieved from each feature was rather small (160 to 200 artifacts), but the samples suggest that the artifacts within the features are quite dense. Luster ware provides the TPQ for feature 147, while transfer printed whiteware provided a TPQ of 1830 for features 155 and 156. This suggests that all three features are roughly contemporaneous and were deposited in the 1830s. One interesting aspect of these three features is that, unlike the majority of the features recovered from the block, all of these contain a large amount of architectural material. Architectural materials comprised 65%, 41%, and 77% of the assemblages, respectively. These data suggest that the features represent spaces between early nineteenth century structures. Given the already congested nature of the block by this time, it is likely that these spaces served as natural traps. The block experienced two major fires in 1835 and 1838; this may account for the black color of the soil, the quantity of charcoal, and the large amount

of architectural items. Alternately, the linear features may represent burned foundations to these buildings. In any case, it appears that these linear features are tangible evidence of the major fires which impacted the block in the 1830s.

Table 26
Summary: Features 147, 155 and 156

Kitchen	49	30.43	116	56.58	38	21.34
Architecture	105	65.21	84	40.97	137	76.96
Arms	0	0.0	1	.48	0	0.0
Clothing	0	0.0	0	0.0	1	.56
Personal	0	0.0	1	.48	2	1.12
Furniture	2	1.24	0	0.0	0	0.0
Pipes	0	0.0	1	.48	0	0.0
Activities	5	3.10	2	.97	0	0.0

TPQ, feature 147 = 1811 (luster ware)(Bartovics 1978)
TPQ, feature 155 and 156 = 1830 (transfer printed whiteware)

Table 27
Provenience Guide: 1985 Excavations

Fea #	date of deposition	function	top	base	comments
141	1840s	brick lined privy	--	--	looted by workers before monitoring began
142	post-1900	cistern	--	--	virtually sterile
143	19th cent?	brick lined drain	--	--	
144	?	burned area	--	--	thin lense; not defined
145	1750s	trash pit	7.93	7.16	contained horse
146	19th cent	laid brick floor	--	--	within later building; not fully exposed
147	1830s	burned linear area	8.17	7.60	results of fire?
148	1890s	trash pile	9.20	8.51	from wholesale crockery
149	1820s, 1840s	trash pit	--	--	
150	183os	wood lined privy	8.66	6.73	
151	between 1830 & 1880	brick wall	9.14	8.60	stratigraphically between feas 148 and 150
152	before 1880	brick wall	9.69	--	same
153	1800-1810	brick lined privy	8.24	6.33	
154	pre 1820	brick fndn. & builders trench	--	--	adjacent to fea 149
155	1830s	linear burned area	--	--	
156	1830s	linear burned area	--	--	
157	late 19th	cistern?	--	--	destroyed by bulldozing; concentration of artifacts

Figure 26

Late Eighteenth/Early Nineteenth Century Wares

a) Lead glazed red stoneware teapot
ARL 30013
ht. 5"
Fea 130, level 3

b) Willow ware gravy boat
ARL 32629
ht. 3 1/8"
Fea 130 level 3

c) Transfer print pearlware mug
ARL 32632
ht. 3 3/4"
Fea 130 level 3

d) Blue hand painted pearlware plate
ARL 32793
dia. 8 1/2"
Fea 130 level 3

e) Transfer printed pearlware coffee cup
ARL 32624
ht. 3 3/4"
Fea 130 level 3

f) Transfer printed pearlware teacup
ARL 32664
ht. 2 1/2"
Fea 130 level 3

g) Hand painted pearlware bowl
ARL 32789
ht. 2 1/2"
Fea 130 level 2

h) overglazed handpainted saucer
ARL 30036
dia. 4"
Fea 130 level 2

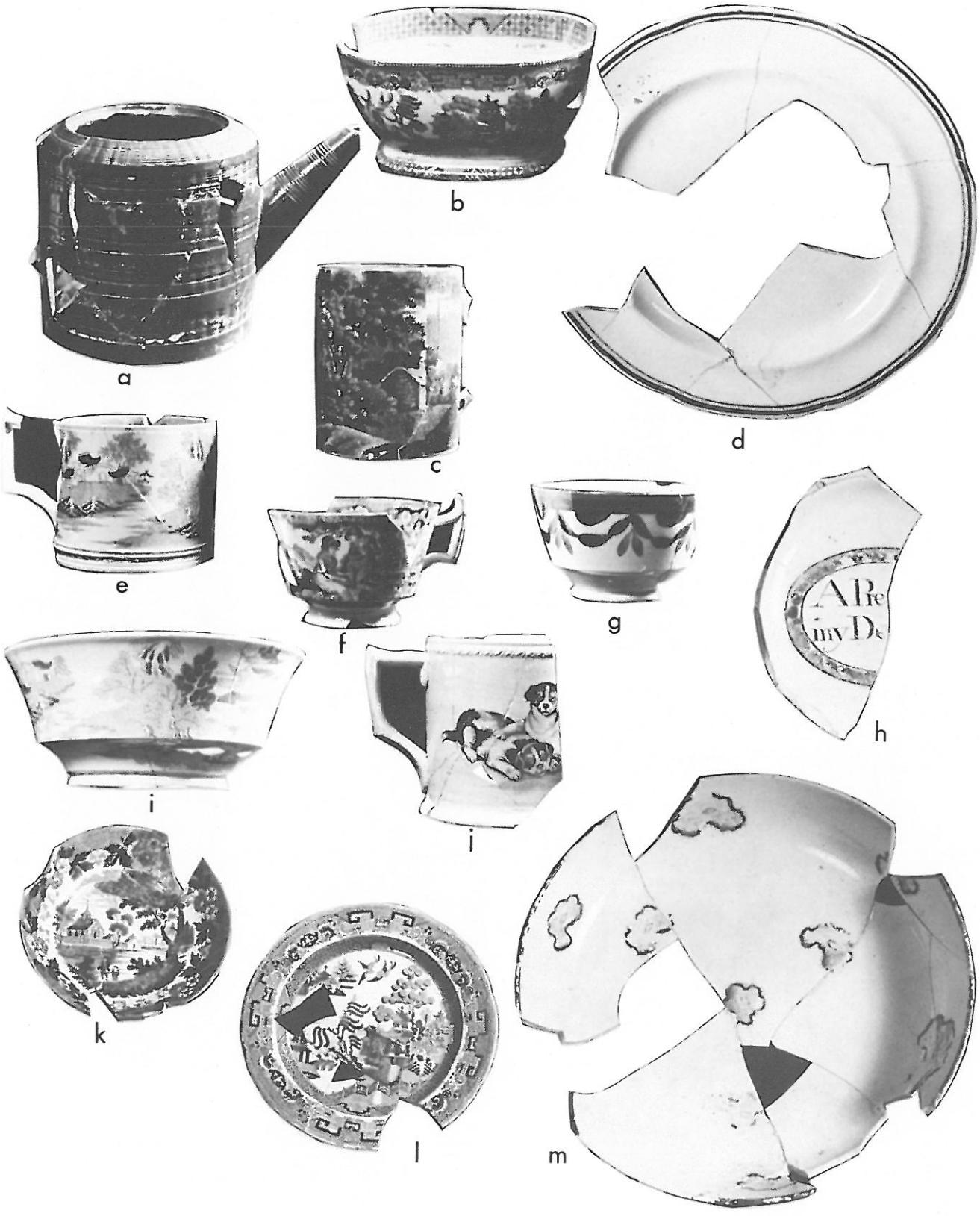
i) Transfer print whiteware bowl
ARL 32635
ht. 3"
Fea 130 level 3

j) "puppy" mug, whiteware
ARL 17828
ht. 3 3/4"
Fea 97

k) Transfer print pearlware saucer
ARL 33759
dia. 5 1/2"
Fea 136

l) Willow ware plate
ARL 32622
dia. 6 1.4"
Fea 130 level 3

m) overglazed pearlware saucer
ARL 30017
dia. 6 1/8"
Fea 130 level 2


a
b
c
d
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m

Figure 27

Early Nineteenth Century Ceramics

a) annular ware cup
ARL 17787
ht. 2 5/8"
Fea 97

b) hand painted pearlware creamer
ARL 33182
ht. 2 7/8"
Fea 117

c) annular ware cup
ARL 33454
ht. 3 1/8"
Fea 136

d) annular ware mug
ARL 30025
ht. 3 1/4"
Fea 130 level 3

e) hand painted saucer
ARL 33174
dia. 5 1/4"
Fea 117

f) Hand painted cup
ARL 33179
ht. 2 1/4"
Fea 117

g) hand painted saucer
ARL 33176
dia. 5 1/4"
Fea 117

h) Mocha ware mug
ARL 30024
ht. 4 3/4"
Fea 132

i) "America" cup
ARL 30039
ht. 2 3/8"
Fea 104

j) Cable cup
ARL 17932
ht. 2 5/8"
Fea 97

k) Transfer print pearlware bowl
ARL 17830
ht. 3 3/4"
Fea 97

l) creamware salt dish
ARL 33367
ht. 1 3/4"
Fea 132

m) transfer print creamware bowl
ARL 33139
ht. 3 7/8"
Fea 132

n) Cable bowl
ARL 17731
ht. 3"
Fea 97

o) Cable mug
ARL 17788
ht. 4 1/2"
Fea 97

p) Cable bowl, creamware
ARL 17897
ht. 3 1/4"
Fea 97

q) Portobello pitcher, overglazed
ht. 3 3/4"
Fea 130

r-s) Portobello ware
dia. 3 1/4"
Fea 153


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Figure 28

Refined Earthenwares

a) Transfer print pitcher
ARL 36482
ht. 7"
Fea 153

b) hand painted chamber pot
ARL 36483
ht. 5 3/4"
Fea 153

c) Scratch blue pearlware chamber pot
ARL 36483
ht. 5 1/2"
Fea 153

d) late 19th cent. annular ware
ARL 36477
ht. 3 1/4"
Fea 148

e) late 19th cent annular ware
ARL 36477
ht. 3 1/4"
Fea 148

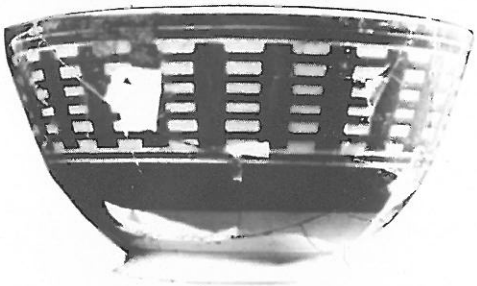
f-i) stamped whiteware, late 19th cent.
ARL 36477
dia. 6" (plate), 6 1/2" (bowl)

j) shell edged tureen lid
ARL 32805
dia. 8 1/4"
Fea 130 level 3

a

b

c



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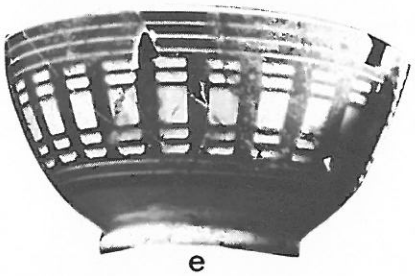

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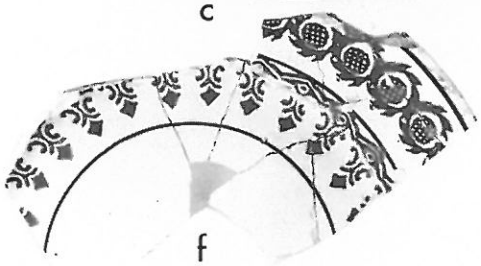

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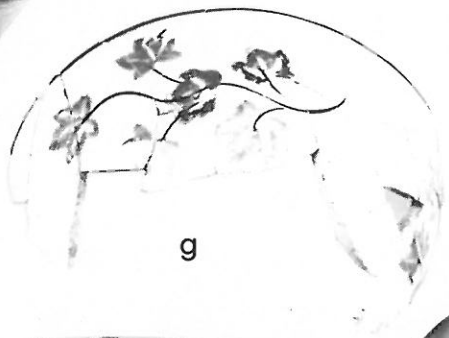

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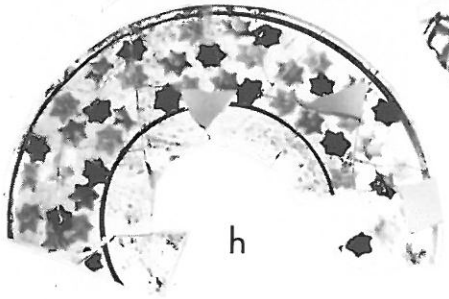

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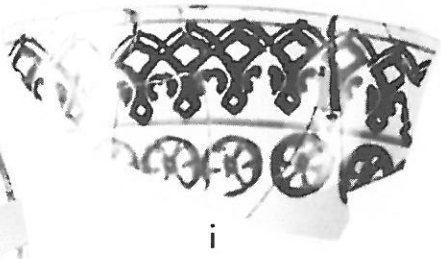

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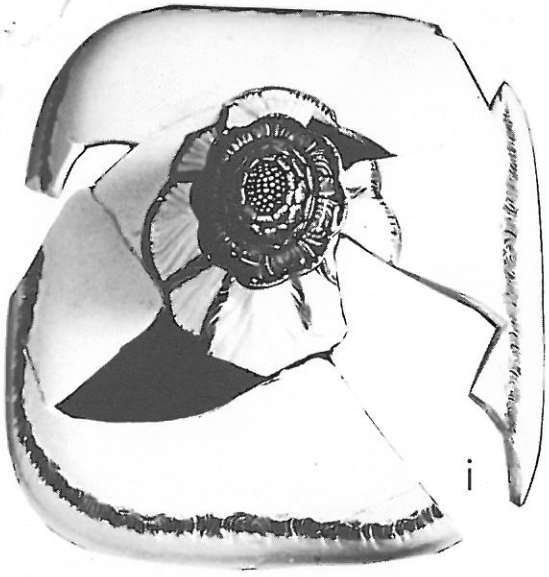

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Figure 29

Mid-Nineteenth Century Wares

a) Transfer print whiteware platter
ARL 30060
dia. 21"
Fea 115E

b) Sprigged whiteware mug
ARL 30009
ht. 3 1/2"
Fea 115C

c) molded whiteware cup
ARL 31459
ht. 3 1/2"
Fea 115C

d) Flow blue whiteware cup
ARL 30073
ht. 2 3/4"
Fea 115E

e) Canton porcelain cup
ARL 33869
ht. 2 3/8"
Fea 138

f) Canton porcelain plate
ARL 33867
dia. 9"
Fea 138

g) White porcelain saucer
ARL 32429
dia. 4 3/8"
Fea 104

h) white porcelain bowl
ARL 33269
dia. 4 1/2"
Fea 129

i) white porcelain cup
ARL 33473
ht. 2 1/2"

j) semiporcelain sprigged pitcher
ARL 30008
ht. 6 1/4"
Fea 115C

k) Rockingham pitcher
ARL 30125
ht. 7"
Fea 103


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k

Figure 30

Glass Artifacts

a) oil lamp part
ARL 31966
ht. 6 1/2"
Fea 103

b) oil lamp globe
ARL 31841
ht. 5"
Fea 115E

c) lamp part
ARL 31477
ht. 2 1/4"
Fea 115C

d-e) glass ink bottles
ARL 30303, 30304
ht. 2 3/8"
Fea 124

f) glass inkwell
ARL 31467
ht. 1 1/2"
Fea 104

g-h) stoneware ink bottles
ARL 30305, 30306
ht. 2 1/8"
Fea 124

i) "shoe" ink bottle
ARL 30161
ht. 3 3/4"
Fea 124

j) glass egg cup
ARL 17459
ht. 3 1/4"
Fea 96 level 2

k) goblet
ARL 32274
ht. 4"
Fea 104

l) decanter neck
ARL 17723
ht. 3 1/8"
Fea 97

m) glass cup
ARL 33634
ht. 1 3/4"
Fea 135

n) glass parfait
ARL 17457
ht. 1 7/8"
Fea 96 level 2

o-p) glass nursing bottle
ARL 31594
ht. 3 1/2"
Fea 115D

q) "hotel" tumbler
ARL 33309
ht. 3 1/2"
Fea 124

r) "hotel" goblet
ARL 30313
ht. 6 1/4"
Fea 124

s) sperm oil testing bottle
ARL 30309
ht. 9 1/4"
Fea 115D


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Figure 31

Miscellaneous Artifacts

a) handpainted perforated creamware lid
ARL 33873
ht. 2 1/4"
Fea 138

b) soft paste porcelain inkwell
ARL 17952
dia. 3"
Fea 97

c) whitware ointment jar
ARL 30041
ht. 1 1/2"
Fea 108

d) double perforated lid, creamware
ARL 33117
ht. 2"
Fea 132

e) glass egg
ARL 31658
ht. 2 3/4"
Fea 115D

f) slate marker
ARL 32868
ht. 1 5/8"
Fea 130 level 3

g) kaolin pipe
ARL 31962
ht. 4 1/4"
Fea 115

h) porcelain pipe
ARL 30118
ht. 4 1/4"
Fea 124

i-j) glazed stub pipes
ARL 31834, 31835
ht. 1 3/8"
Fea 115E

k-l) masonic pipes
ARL 30122, 30308
ht. 2 1/8"
Fea 115D

m) kaolin pipe
ARL 30310
ht. 6"
Fea 115D

n) whiteware cream jar
ARL 34033
ht. 1 3/8"
Fea 104

o) bone lid
ARL 32867
dia. 1 3/8"
Fea 130 level 3

p) eyeglass lens
ARL 32437
dia. 1 1/4"
Fea 104

q) ud. bone
ARL 31954
ht. 1 3/8"
Fea 115

r) bone knife handle
ARL 31497
ht. 2"
Fea 124

s-t) bone brushes
ARL 31497, 30155
ht. 3 7/8", 2 7/8"
Fea 124

u) carved bone fan part
ARL 31043
ht. 3 1/4"
Fea 124

v) bone razor strob
ARL 30139
ht. 3 1/8"
Fea 124

w-y) bone tooth brushes
ARL 33575, 30129, 30130
ht. 5 7/8", 6 1/4"
Fea 124

z) sprigged stoneware urn
ARL 30119
ht. 7 1/2"
Fea 124

a') slipware plate, mid 19th c.
ARL 30038
dia. 9 1/4"
Fea 104

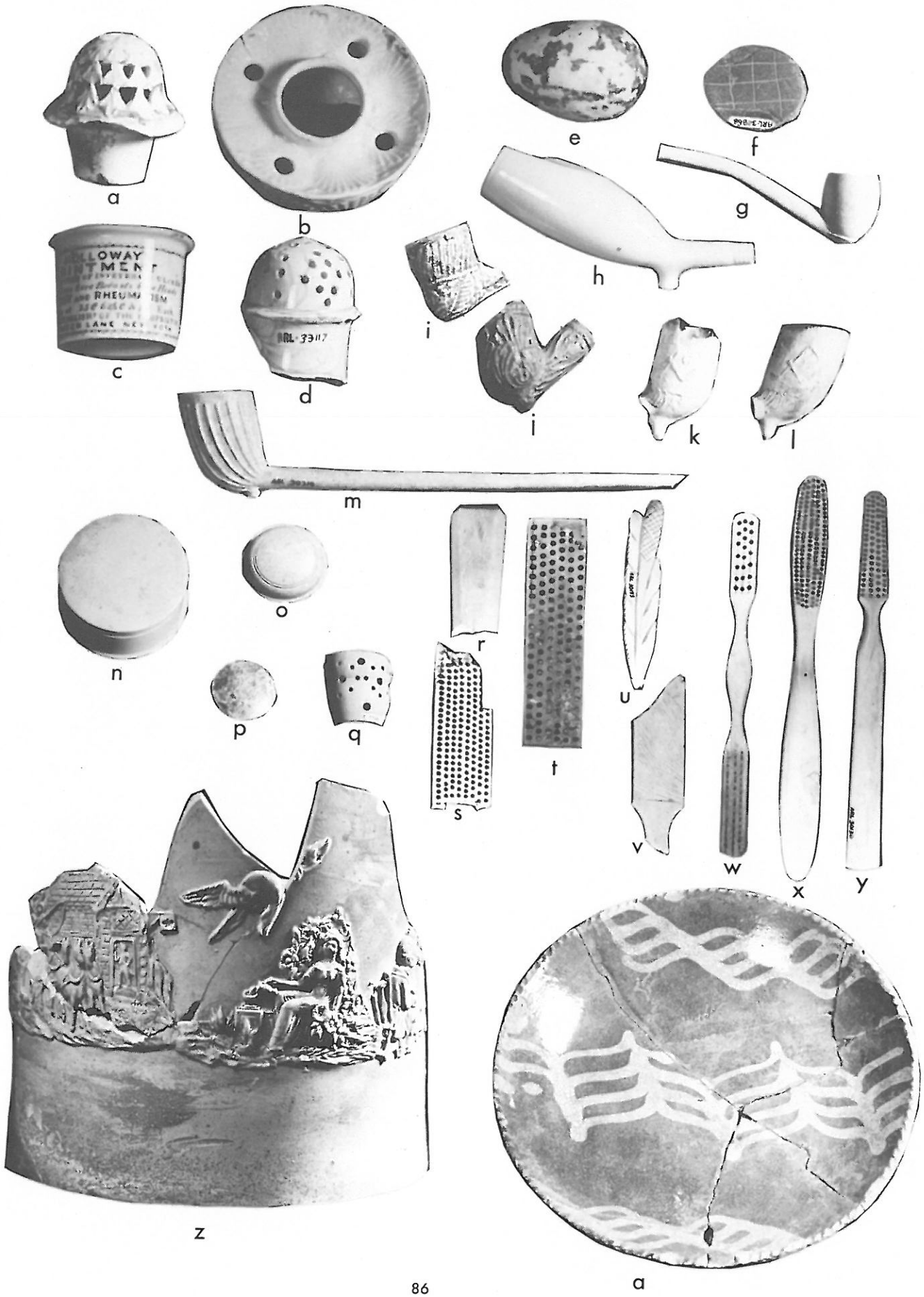
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Figure 32

Earthenwares

a-g) flower pot rims
ht. (a) 4 1/4"
Fea 98

h-i) lead glazed redware urns
ht. 9"
Fea 100

j-l) colono ware (River burnished ware)
dia (j) 4 1/2"
Fea 130

m-o) River burnished ware with red and black painting on rim
ht. (o) 3 1/4"
Fea 97


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CHAPTER V

ANALYSES AND INTERPRETATIONS

Artifact Patterning and Site Function

A basic analytical tool used in Charleston projects has been the organization of artifacts into functional categories, based on South's (1977) model for the Carolina Artifact Pattern. The Carolina pattern is a quantified artifact distribution which basically monitors domestic activities at British colonial sites (see Honerkamp 1980). Significant deviation from the pattern should indicate that activities other than the normal range of domestic affairs were being conducted at the site.

Comparison of the previously excavated Charleston sites is shown in Tables 28 and 30. This group includes Honerkamp et al.'s excavations at Charleston Place. Although some of the combined domestic-craft sites exhibit relatively high percentages of activities materials, most of the sites fit the Carolina pattern. This is especially true for the groups which comprise the majority of the materials, kitchen and architecture. It should be noted that these sites include data from a variety of proveniences, including zones, as well as large and small features.

The Charleston Place features, both separately and combined, revealed a radically different pattern. For the 1981 excavations, such a pattern is partilly the result of the lack of screening, and a resulting human bias in the retention of artifacts. However, the 1985 features, from which all materials were screened and saved, exhibit a similar pattern. The outstanding feature of the two assemblages is the overwhelming percentage of kitchen materials compared to other groups, particularly architecture. Kitchen materials comprised 85% of the 1981 assemblage and 80% of the 1985 materials. These high percentages are evident in spite of the fact that many of the large features contained reconstructable vessels; all of these received a count of one, rather than a count of the number of fragments comprising the vessel. Also, vessel completeness allowed a more positive functional identification, with the result that several vessels, such as chamber pots and perfume bottles, were placed in other categories. Still, the assemblages were overwhelmingly kitchen.

Other pattern variations exhibited by the Charleston Place assemblages include a low percentage of architecture, arms, clothing, and activities items, with a slightly higher percentage of personal and furniture items. As already mentioned, the higher percentage of personal items is due to the identification of whole ceramic and glass vessels which functioned as personal items. The furniture percentage is a function of the temporal affiliation of many of the features; quantities of lamp parts, particularly kerosene chimney glass, were recovered from nineteenth century features.

These differences aside, the outstanding feature of the Charleston Place assemblages is the overwhelming quantities of kitchen refuse. This is a function of the sampling strategy (a concentration on large features), but the fact that it is makes an important statement about the formation of the urban archaeological record. The assemblages from previously excavated sites used to formulate the Charleston Mean are from a combination of zone

deposits, small features of varying function, and a few large features. The assemblages Stanley South used to formulate the Carolina pattern are from similar proveniences. The Charleston Place assemblage, in contrast, is almost exclusively from large features containing quantities of materials. These variations suggest major differences in site formation processes. It appears that large subsurface features were deliberately used for household refuse on a daily basis. The general yard area, in contrast, collected a variety of lost items, trampled discarded refuse, and architectural debris resulting from the gradual decay or razing/renovation of site structures. It is interesting to note that Honerkamp's excavations at the same site, in which zones, small, and large features were sampled, resulted in an assemblage which closely agreed with the Carolina pattern and the Charleston Mean, but contrasted with the present assemblage.

It has been suggested by a number of researchers that privy deposits are the result of unique site formation processes. Based on the examination of a number of privies in New Orleans, Bryant (1984) has argued that the rich artifact assemblage did not result from normal domestic dumping behavior; that they instead reflect a number of post-abandonment activities not necessarily associated with the occupant of the associated household. Bryant then suggests that, while the contents are not appropriate for study of those particular households, the feature contents could be very useful for studying broader neighborhood patterns.

Another suggestion is that privy fill is the result of abandonment, rather than discard, activity. Examples of such abandonment include the wholesale cleanup of a site following a natural disaster, or a change of either owners or tenants; at such times, unusable, damaged, or unwanted items and refuse were quickly deposited into any available container (Lewis and Haskell 1981; Zierden et al. 1983a). An examination of the Charleston Place features certainly supports the suggestion that privy fill represents a different human behavior. While all of the features excavated during 1981 and 1985 were large, well defined deposits with dense artifact assemblages, not all of them were privies. Table 29 divides the privies from the other features. While the miscellaneous features were characterized by a more evenly dispersed artifact assemblage, the privies uniformly contained over 80% kitchen artifacts. The difference in artifact distribution is especially apparent in the 1985 excavations. Clearly, privies were filled in a different manner than were miscellaneous pits and open areas.

With these depositional biases in mind, the Charleston Place assemblage was examined for clues to site function. The history of the block suggests that the structures served a dual function as businesses and residences Further, the commercial function of the block increased in importance through time. Commercial activity should be reflected archaeologically in an elevated percentage of activity items. The Charleston Mean, derived from dual function sites, supports this suggestion; the activities group comprises 4.1% of the total, compared to 1.7% for the Carolina pattern. However, this is true only on a very broad level, and there is tremendous variation from site to site. The Charleston Place assemblage, and Honerkamp's assemblage, do not support this trend. This result led Honerkamp et al. to suggest that certain commercial activities may not be reflected archaeologically. Both Lewis (1977:177) and

Table 28

Summary of Artifact Patterning at the Charleston Place site

	1981		1985		UTC excavations	Charleston mean	Carolina pattern
	#	%	#	%	%	%	%
Kitchen	12330	85.78	10459	80.72	68.9	63.1	63.0
Architecture	1109	7.67	1697	13.09	24.9	25.03	25.5
Arms	3	.02	5	.03	.1	.2	.5
Clothing	45	.31	36	.27	1.7	1.18	3.0
Personal	144	.99	372	2.87	.1	.14	.2
Furniture	29	.20	193	1.48	.1	.08	.2
Pipes	409	2.82	91	.70	2.7	5.97	5.8
Activities	388	2.68	103	.79	1.5	4.14	1.7
	14457		12956				

Table 29
Comparison of Privies to Other Features

	1981				1985			
	Privies		Other		Privies		Other	
	#	%	#	%	#	%	#	%
Kitchen	10792	84.52	1926	91.97	3258	76.17	1691	61.46
Architecture	1056	8.27	67	3.19	736	17.20	840	30.53
Arms	2	.01	1	.04	0	0.0	5	.18
Clothing	44	.34	1	.04	11	.25	26	.94
Personal	142	1.11	4	.19	216	5.05	48	1.74
Furniture	29	.22	1	.04	5	.11	7	.25
Pipes	315	2.46	94	4.48	13	.30	76	2.76
Activities	388	3.03	0	0.0	38	.88	58	2.10
TOTAL	12768		2094		4277		2751	

Honerkamp et al. (1982:17) have suggested that commercial enterprises that tranfer, rather than produce, goods (such as retail shops) are likely to produce little in the way of byproducts which would be recovered. By contrast, sites characterized by craft oriented, or combined craft-domestic occupations would be expected to generate at least some byproducts indicative of site function (Honerkamp 1980; Lewis 1977). Generally, this seems to be the case in Charleston. The relatively high percentage of activities items in the Charleston Mean is due to the presence of a number of craft enterprises, such as the leather works at First Trident and a jewelry smithing operation at 38 State Street (Zierden et al. 1983a; 1983b). Retail domestic sites, such as the antebellum First Trident and Lodge Alley (Zierden et al. 1983b; 1983a) did not contain a large number of activities items. Another type of commercial activity not reflected archaeologically is one that produces services instead of goods. Examples of these include proveniences from the Beef Market site associated with City Hall (which at that time served as a bank), and McCrady's Tavern and Longroom, which provided domestic type services (Calhoun et al. 1984; Zierden et al. 1982). These deposits support another suggestion; that the "commercial" artifacts recycled into the archaeological record from retail enterprises, such as a dry goods store, are likely to be domestic materials, such as ceramics and bone, that cannot be functionally isolated.

The Charleston Place data are overwhelmingly domestic, and in general do not reflect the commercial activities which occurred at the site. There are a few specific proveniences which are an exception to this. Feature 98, the pit , contained an overwhelming majority of activity items, particularly flower pots. This feature is associated with Wilson's seed store, which burned in the 1838 fire (Herold, this volume). Feature 124 was associated with the Waverly Hotel; the service function is reflected in a large number of personal items. Specifically, these included inkwells and toothbrushes, which presumably were provided by the hotel to their patrons. Other materials reflecting this hotel function include heavy ironstone service pieces and the heavy, molded goblets and tumblers traditionally labeled "hotel ware". The distribution of hygiene vessels and other personal artifacts has been noted for a contemporaneous deposit at Harvard University, which represents a student dormitory assemblage. Such an artifact pattern may by typical of housing arrangements in which a large number of unrelated individuals occupied a series of rooms for a short duration (Graffam 1982).

Feature 148 also reflects commercial activity at the site. The feature was composed almost entirely of whiteware ceramics, glass tableware, and lamp glass, with an overwhelmingly large percentage of kitchen artifacts. Historical research suggests that during this period the structure on this lot served as a wholesale crockery and glass distributor; thus these materials most likely represent damaged and discarded merchandise, suggesting that this is a completely commercial deposit. Finally, Feature 115 contained an unusually large number of tobacco pipes, comprising 19% of the assemblage (compared to McCrady's tavern at 10%). Such a large number suggests a facility for social gatherings, such as a tavern. Mr. Antonio had a tavern on this property in the antebellum period, while Mr. Samuel Seyle operated a Longroom and Masonic Lodge two doors down (Herold and Thomas 1981). In

addition to McCrady's Longroom, unusually large numbers of pipes (10%) were recovered from the beef market, which was surrounded by taverns and served as a social meeting place (see Rothschild 1985:166).

These examples underscore the earlier suggestions that, in addition to being ephemeral, commercial activity in Charleston is often reflected in artifact types and groups other than those in the activities category; only in feature 98 was the commercial activity reflected in this category. Careful use of the documentary record is necessary to discern archaeological evidence of retail commercial activity.

The Charleston Place assemblage contains very little, if any, evidence of craft activity; craft enterprises, with associated byproducts, are more likely to be reflected in the activities category, such as at the First Trident, 38 State, and Exchange sites (Herold 1981; Zierden et al. 1983a; 1983b). It appears that few craft enterprises were located on the block, particularly during the nineteenth century, the period of heaviest commercial utilization. This is supported by the documentary record, which suggests a preponderance of retail and service enterprises. Less information is available on the activities of the eighteenth century, and few proveniences were recovered from this period; however, they did not contain evidence of craft activity.

This diachronic pattern of site activity fits the general model of commercial demographics for Charleston. In the eighteenth century, retail activities clustered in the center of the commercial area, nearer to customers. Craft enterprises, on the other hand, were often noisome, and relegated to the city's periphery by law. In addition, many such activities required the more spacious lots found only on the edge of the city (Calhoun et al. 1982). By the nineteenth century, the Charleston Place block was centrally located in the core of the commercial center, and open space, suitable for craft activity, was at a premium, if not unavailable. Also, by this time, small scale "cottage" industries were being replaced by larger industrial enterprises, once again located on the periphery of the city.

These data also reflect another aspect of urban sites; that the majority of the urban archaeological record appears to be an averaging of all human behavior (Honerkamp and Fairbanks 1984; Zierden and Calhoun 1986:38). This is, of course, directly related to the urban site formation processes, namely massive redeposition and reorganization. Materials from commercial activities may be mixed with those from domestic occupation, either at the same site or removed to another area. This would probably be reflected in a conformance to the Carolina pattern, with only slight variation.

Overriding the examples of commercial activities at Charleston Place is the preponderance of domestic activity at the site. Simply stated, the archaeological record at Charleston Place reflects the daily domestic affairs of this nineteenth century neighborhood. While such proveniences as those discussed above may be the best source of particularistic data on non-domestic urban activities, their relative importance in the urban archaeological record should be kept in perspective. Aspects of this domestic behavior will be discussed in the two sections concerning status and subsistence strategies.

Table 30

Summary of Artifact Patterns for Charleston Sites

	First 19th c.	Trident colonial	Lodge Alley	38 State St. A	38 State St. B	McCrady's Tavern	Beef Market	Atlantic Wharf	Gibbes House	Aiken-Rhett
Kitchen	59.56	47.47	76.20	63.00	29.78	63.00	67.35	68.28	51.40	64.26
Architecture	30.24	23.65	17.79	27.80	19.99	25.80	18.06	27.37	41.28	32.49
Arms	.38	.10	.43	0.0	0.0	.20	.23	.27	0.0	.30
Clothing	3.26	.90	.60	.21	.006	.41	.42	.56	.53	.96
Personal	.27	.05	.21	.13	.01	.06	.07	.05	.16	.32
Furniture	.27	0.0	.07	0.0	.006	.06	.15	.07	.28	.17
Pipes	3.87	10.55	4.23	4.49	.10	9.98	10.68	2.05	4.71	.72
Activities	2.14	16.0	.77	4.19	50.07	.25	2.99	1.37	1.61	.76

38 State A = general site assemblage

38 State B = craft deposit only

Spatial Patterning

Spatial patterning is defined as the manner in which humans distribute themselves over the landscape. Spatial patterning in Charleston has been examined on a lot-specific and city-wide level. In addition to these categories, the Charleston Place block provides an ideal vehicle for the examination of spatial patterning on a neighborhood level. On every level, the spatial patterning reflects both the opportunities and the restrictions of the urban environment, both cultural and natural.

The changes in spatial patterning in the Charleston Place block reflect the changing demography of the city. The original city was located south of the block, and the area was peripheral to the city core. By 1739, the block had been divided into lots (which were already long and narrow), but only a few of them were improved. The Charleston peninsula, with its stretches of waterfront, broad areas of lowlying marsh, and numerous creeks which transected the peninsula, presented certain limitations as well as possibilities. The creeks initially impeded growth to the north; instead, the city was oriented on an east/west axis, and the city grew west toward the Ashley River (Calhoun et al. 1982). Hasell and Beaufain Streets served as the city limits, making Charleston Place on the northern edge of the city. The commercial core of the colonial city focused on the waterfront and three east/west streets, Broad, Tradd, and Elliott. The filling of marshes and creeks gradually reduced this impediment, and resulted in additional real estate. Instead of physical expansion, though, the commercial core was subject to increasingly dense occupation and construction. The already narrow lots were further subdivided, and buildings expanded vertically.

This pattern of expansion was repeated in the nineteenth century in the area of the Charleston Place block. The city bagan to expand vertically to the north, and the area north of Calhoun Street, known as the Neck, became a series of primarily residential neighborhoods, housing everyone from wealthy white planters to poor free and enslaved blacks. The retail commercial business followed this movement, and was centered on Meeting and King Streets, on a north/south axis (Calhoun and Zierden 1984). The 1778 (Petrie 1778) map shows a number of structures fronting all of the streets of the Charleston Place block, while the series of nineteenth century plats show a variety of outbuildings and activity areas to the rear of the lots. These were gradually replaced by large structures which covered the entire front of the block. Technological and adaptive advances, such as the replacement of mid-lot wells with cisterns at various points, including under buildings, occurred in the mid nineteenth century. Privies were gradually replaced by water closets located in the structure, and sewerage hookups. This further freed the interior of the block for expansion.

The gradual decay and evacuation of the block in the mid twentieth century reflects the population move to the suburbs made possible by bridges and automobiles, with a resulting depopulation of the downtown area. The razing of the southern half of the block and its subsequent use as a parking lot reflects the pressures of increased automotive traffic on a nineteenth century settlement pattern. Finally, the construction of the Charleston Place reflects the recent trends in downtown revitalization; the construction of large buildings which house administrative and service enterprises.

Spatial patterning on an individual site level reflects the relatively constricted nature of the urban environment. The same structures and activities necessary to sustain life on the rural plantation site were also required in an urban setting; therefore, most of the structures found dispersed across the rural plantation site were also crammed onto the urban lot (Castille et al. 1982:5; Wade 1964:61; Zierden and Calhoun 1986). Urban compounds, particularly those located within the commercial core, were organized to make the most efficient use of available land.

Lots were deep and narrow, to maximize available street frontage. Buildings fronted directly on the street, with the narrow end facing the road. The southern side of residential structures was open and complete with piazzas, while the northern side was devoid of large openings; this allowed residents to take full advantage of prevailing breezes while maintaining maximal privacy.

Behind the main structure, auxiliary buildings were arranged within a fenced compound, often including slave quarters, kitchen, stables, well at mid lot, and privy in the rear corner. Gardens, both ornamental and functional, might be planted and livestock might be kept. The backyard was the scene of many commercial as well as domestic activities (South 1977; Zierden et al. 1983a; 1986a).

Examination of plats from the late eighteenth/early nineteenth centuries suggest that, for this period, the Charleston Place block fits this model. By the turn of the nineteenth century, the block was fully occupied, but many of the lots exhibited passageways between the streetfront structures, detached kitchens, wells, yard and garden areas (Figure 16). By the mid nineteenth century, the pressures of commercial expansion, coupled with the need to rebuild after several major fires, resulted in a different spatial patterning. The already narrow lots were increasingly subdivided, until the individual lots fronting Meeting and King Streets were only 30 feet wide. On most of these lots, buildings were constructed that fronted directly on the street, with no piazza, and the covered the entire width of the lot. These structures gradually encroached on the interior of the lot, until by the end of the nineteenth century over 80% of the ground surface was covered. These structures were also multi-storied. Passageways into the interior of the block were reduced in number, but those present were well maintained, for a number of individual businesses were gradually located in this area.

The changes in spatial patterning seen on maps and plats is also reflected in the distribution of features at the site. As suggested in the model, privies were often located in the rear corner of the lot, while wells were at mid lot. This is supported by the location of features 130, 136, 126 and 129, and by the location of feature 150. These features correspond to such structures on the early nineteenth century plats. These features are located in the northern portion of the block, where the presence of St. Mary's Church and cemetary in the middle of Hasell Street resulted in ultimately shorter lots. This pattern of privy location is not supported by features located in the southern half of the block. Although the block center line remained constant throughout the eighteenth and nineteenth centuries, features did not cluster along this line, as predicted. Although a number of trash pits (features 102, 103, 105, and 106) and privies (features 104 and 141) are in

this location, an equal number of trash pits (features 117, 118 and 120) and privies (features 153, 100, 124, and 115) are not. This suggests that privies were probably located at a convenient distance, or in an available open space, rather than necessarily in the back corner. This is further supported by the locations of privies at the Gibbes and Manigault houses, two upper class town houses with spacious lots (Zierden et al. 1986b; Zierden and Hacker 1986). Both of these sites featured the privy at mid lot, along one side.

The archaeological data also provides information on the distribution of trash pits, a feature not shown on plats. Trash pit location is fairly random, but they appear to cluster at mid lot and rear lot. This suggestion is somewhat tenuous, however. Trash pits are often smaller and more ephemeral than features such as privies and wells. It is unlikely that all of the trash pits deposited on site were encountered and identified during monitoring. Still, this partial picture provides new insights on the spatial distribution of trash pits in the city. The limited nature of excavations at Charleston sites prior to this time precluded such interpretation.

The spatial distribution of the features also supports the trend of gradual and continued encroachment into the interior of the block. The only feature deposited in the early colonial period, feature 145, is located 75 feet in from Meeting Street. Early nineteenth century features are located 125 to 150 feet from the street, while mid to late nineteenth century features are over 150 feet from the nearest street frontage.

The neighborhood community aspect of the Charleston Place block is reflected in a sharing of features; alleys, passageways, and wells were all shared by block residents. This trend continued into the early twentieth century, when a number of separate business entities were located on the interior of the block. As the block was increasingly subdivided and structures stretched the entire width of the lot, these adjustments became necessary. Increased population pressure is also reflected in the decline in wells and the increase in cisterns in the mid to late nineteenth century. Like wells, these features were quite often located at mid lot, but by now were under structures. Another feature type conspicuous in its absence is pipes, reflecting the shift from privies and wells to indoor plumbing. Due to the already congested nature of the block, these hookups may have been placed above ground.

Because of the large scale of the archaeological and historical investigations, the Charleston Place project has provided new data on spatial distribution in Charleston. The site reflects the changes in spatial distribution that result from increasing population density, as well as from changing site function. These data can be used as a model for future, more limited studies.

Socioeconomic Status

One of the major emphases of historical archaeology has been the attempt to discern social stratification in archaeological patterning. Archaeologists have utilized a variety of techniques in conducting such studies. Some of the pioneering studies relied on the archaeological data, correlating these patterns with the documented socioeconomic status of the site occupant.

Outstanding examples of such studies include John Otto's investigation of a coastal Georgia plantation (Otto 1975) and Kathleen Deagan's investigation of eighteenth century St. Augustine, Florida (Deagan 1983). In his study of planter and slave sites, Otto found a preponderance of the more expensive transfer printed china, in a variety of service and flatware forms, on the planter sites, while the less expensive annular wares, primarily bowls, were recovered from the slave sites. In her study of several St. Augustine sites, Deagan noted that the upper class peninsulare and criollo households utilized more of the hard to obtain hispanic ceramics, while the lower class mestizo households relied more heavily on the locally available aboriginal pottery.

Other studies have concentrated on the relative percentages of, and variety within, certain artifact classes and groups. The most thorough study of this type is Lynn Lewis' examination of the upper status, eighteenth century Drayton Hall plantation in Charleston County. From her examination of almost 240,000 artifacts, Lewis suggested that high status is reflected in a large percentage of oriental porcelain, a large percentage and variety of table glass, clothing, and personal items. Lewis' methodology has been used extensively in Charleston (Lewis 1985).

When archaeologists began to examine cities, they logically continued to address the issue of social variability. With its definite, often rigid, class structure, the city is an ideal data base for such studies. It was at this same time that status studies began to shift from the archaeological to the documentary data base as a reference point. The pioneering study of this type is George Miller's (1980) ceramic index. Miller examined price lists for English ceramics for the first half of the nineteenth century. From these price lists, he was able to provide a value for the price of the ceramic types, relative to the least expensive ware. Calculating the relative index for site assemblages should reveal the relative socioeconomic status of the site inhabitants. Urban researchers have also focused their attention on choices available to, and made by, consumers. Since they served as marketing and transportation centers, a larger variety of goods were available to urban residents. Research by Miller and Henry (1983), Cheek (1984), Wise (1985), and Henry et al. (1983) has demonstrated that several factors influence the measurable economic scaling of ceramics in a household, and ultimately in the archaeological record. These include changes in ceramic market prices, level of access to transportation networks, the developmental cycle of a household, and the reuse of second hand ceramics.

In their examination of the Christina Gateway site in Wilmington, Delaware, the Cultural Resource Group (1985) utilized the Miller index to rank a number of different household assemblages. These were then compared to data from the Wilmington Boulevard site (Klein and Garrown 1984), the Washington DC Civic Center site (Garrow 1982), and three properties from Alexandria, Virginia (Shephard 1985); all of these assemblages were from households where the relative socioeconomic status of the occupants was known. The results of these studies showed no clear correlation between the relative ceramic ranking and the relative status of the occupant. These results, coupled with the complicating variables listed above, suggest that there may be no direct correlation between a resulting Miller index and the economic level of a household, although the latter is certainly a contributing factor.

To further examine the issue of ceramic scaling analysis, a relative ceramic ranking scheme has been used by researchers in Alexandria, Virginia (Beidleman et al. 1983), Bridgeboro, New Jersey (Thompson 1984), New Orleans (Exnicios and Pearson 1985), and Wilmington, Delaware (Cultural Resource Group 1985). This relative ranking of ceramic assemblages allows utilization of deposits with ceramic samples too small for application of the Miller index (although the Cultural Resource Group suggests a minimal sample of 20 vessels). This method also allows utilization of a number of vessel forms other than the plates, bowls, and cups and saucers utilized in Miller's formula.

While not entirely consistent, the relative ranking of the same Wilmington samples exhibited a much greater consistency and correlation with the known status of the occupants. The Miller index shows much more diversity among the same sample. The authors suggest that, while more samples are needed, the relative ranking index shows promise.

Both the Miller scale and the relative ranking scale were used to examine the Charleston Place assemblage. Only those features with over 20 vessels and those dating from 1795 to 1860 were utilized in the present study. These include features 115, 117, 124, 130, 139, and 153. While some data are available on the individual households associated with these features, this information is sparse. Instead, it has been assumed from site research and general demographic data that the Charleston Place occupants represent primarily middle class small scale entrepreneurs.

The Miller index and relative ranking index calculations for these six features are shown in table 32. The index date closest to the determined date of deposition was used for each Miller scale. If no date was available for that year for a particular ceramic type, then the next earliest available number was utilized.

The Miller index results showed considerable variation among the features. The highest index, 3.29, is over twice as much as the lowest, 1.54. This index would suggest that the Charleston Place population was not nearly as homogenous as previously suggested. When compared to the Wilmington results, however, the Miller indicies fall within the scale limits exhibited by sites from other cities. While these assemblages include those of low status laborers as well as middle status artisans and property owners, none of the samples reflect extremes of wealth or property. The conformance of the Wilmington and Charleston samples does tend to support the proposed middle class status of the Charleston Place inhabitants, while at the same time reflecting variation in income and occupation among site residents.

The relative ranking scale was applied to the same Charleston Place features, with more consistent results (Table 31). The ranks are: undecorated and minimally decorated = 1, hand painted = 2, transfer printed and ironstone = 3, and porcelain = 4. The vessels in each deposit are placed in these categories and the percentage of vessels in each category is multiplied by the rank value. The sum of these products is then divided by 4 to yield the index. This index ranges from 25 to 100, with greater values reflecting the most costly ceramic assemblage.

Table 31

Relative Ranking Indicies
for Charleston Place Features

	1	2	3	4	Total #	Index
Feature 153	14		8		22	43.1
Feature 117	8	12	1	3	25	49.0
Feature 115	45	1	28	8	82	49.67
Feature 139	20	1	7	15	43	59.88
Feature 130	21	24	115	5	165	65.75
Feature 124	25	14	30	32	101	67.0

1 = undecorated, minimally decorated

2 = hand painted

3 = transfer printed, ironstone

4 = porcelain

Table 32

Miller Index Calculations
for Charleston Place Features

	Plate	Bowl	Cup	Saucer	Average
Feature 153	1.33	1.9	3.0		1.89
Feature 139	2.9	1.6	4.0	3.7	2.2
Feature 115	1.63	1.86	4.65	4.36	2.92
Feature 117	1.29	1.44	1.44	1.96	1.54
Feature 124	1.63	1.82	5.10	3.4	3.29
Feature 130	1.94	2.13	2.14	2.58	2.23

Ceramic ranks for the Charleston Place assemblage ranged from a low of 43 to a high of 67; in this case the highest was only 1½ times as great as the lowest. The range from 43 to 67 does indicate, once again, a certain degree of variation in income among the Charleston Place residents. The range also supports the proposed middle class status of the occupants. The results are also comparable to those from the Wilmington sites (Cultural Resource Group 1985:211). These sites, whose occupation ranged from laborers to small scale entrepreneurs, ranged in value from 42 to 75. The authors of this study suggested that this analysis, as opposed to the Miller formula, seemed to support a linkage between household economic level and the value cost of a ceramic assemblage (Cultural Resource Group 1985:210).

In order to further anchor the present study, the relative ranking scale was applied to the ceramics from the Aiken-Rhett site. The Aiken-Rhett site is a domestic only townhouse site located in the antebellum suburbs. The house, first built in 1817, was occupied by William Aiken, one of the wealthiest men in Charleston, from 1833 to 1882. Thus the Aiken-Rhett assemblage should represent the upper end of the scale for Charleston. One variable that may obscure this status reflection, however, is that a number of slaves lived within the Aiken compound. Therefore, the refuse recovered from the rear yard of the site may be a mixture of master and slave refuse. Analysis of the faunal remains, and of the cultural remains using Lewis' (1985) methodology strongly supported the upper status association of the site occupants (Zierden et al. 1986a). The index calculated for the Aiken-Rhett site is 65 - on the upper end of the scale, but not extremely so. While the difference between Aiken-Rhett and Charleston Place is not as great as expected, the fact that the index is among the highest supports the validity of the scale. The Aiken-Rhett assemblage was too small to employ the Miller index.

The results of this study, plus those from Wilmington, suggest that the Miller index and the relative ranking index are promising tools for investigating socioeconomic status for the nineteenth century. However, the indicies are not without problems. As pointed out by the Wilmington researchers, a number of factors other than the economic status of the consumers appears to affect the purchase, use, and ultimately discard of ceramics. Also, due to the present small sample size, there is no clear indication of what an individual rank means. More samples are needed from sites with clear cut status affiliations before it can be understood if, for example, a rank of 65 is low or high. Recovering such samples from urban contexts may be extremely difficult. As demonstrated by the present study, it is often extremely difficult, if not impossible, to associate refuse with a single individual or household. It was only through excavations at the suburban residential compounds, Gibbes and Aiken-Rhett, that status differences became clearly visible in Charleston (Zierden et al. 1986a; 1986b). Data from these two sites (which exhibited such reduced variables as: residential only, all original structures still standing, original lot lines within a fenced compound) were then used to reassess those from the more complex, dual function sites in the commercial core (Zierden and Calhoun 1987). Samples from such controlled sites could be useful in anchoring, and thus refining, the Miller index and the relative ranking index.

The examination of socioeconomic status for the Charleston Place neighborhood was not totally successful. It was initially assumed that the block contained a relatively homogenous population, associated with the middle class. While this generalization seems to hold, the study indicates that the block housed individuals with a range of incomes and occupations. This is consistent with the general demographic profile of the city for this period, which featured a highly integrated settlement pattern; the wealthy clustered in spacious lots on major thoroughfares, while lower class residents were often located around the corner on narrower streets and back alleys. It may therefore be inappropriate to investigate status on a neighborhood level, unless that neighborhood is very carefully researched and narrowly defined. Still, the mixed results from the present study have helped to define these problems, while the large sample size allowed investigation of new, innovative analyses.

Subsistence Strategies

An important avenue of research in Charleston has been an investigation of subsistence strategies through the analysis of floral and faunal remains. These data sets have been examined for each site investigated in the city to date, providing a broad comparative data base. Analysis of the faunal and floral remains from the Charleston Place site are discussed at length in the appendicies, so they will be examined only briefly here.

Within the discipline of historical archaeology, faunal and floral remains have been used to address a variety of questions concerning historic subsistence strategies. These include studies of cultural conservatism, adaptation to local environments, ethnicity, and social variability. Cultural conservatism was one of the first issues investigated by zooarcheologists. Utilizing data from British and Spanish colonial sites on the southern coastal plain, these researchers suggested that New World inhabitants consumed a diet significantly different from the traditional British diet, termed the "British Barnyard Complex" (Anderson 1971). This pattern exhibited a predominance of sheep, goats, and pig, as well as a variety of domestic birds and fish, particularly offshore species.

Instead of mirroring this pattern, the British colonial faunal assemblage from Frederica, Georgia exhibited a dominance of cattle, and to a lesser extent, hogs, and a virtual absence of caprines (sheep and goats). Heavy reliance on wild terrestrial species and estuarine fishes was also found, to the virtual exclusion of deep sea species. The diet from Frederica indicates that the majority of wild species were obtainable from local estuarine environments (Reitz 1979; Reitz and Honerkamp 1981; 1983).

Investigations at a number of plantation sites in coastal plain settings of Georgia and South Carolina support the proposed regionalization of dietary patterns, with significant differences noted between estuarine and more inland riverfront sites (Reitz et al. 1985). This pattern is characterized by heavy dependence on beef, and utilization of wild species indigenous to the local environment. In contrast, the use of domestic pigs and caprines is quite limited. This archaeological model is in contrast to the documentary evidence, which suggests a heavy dependence on pork (Genovese 1974; Hilliard 1972; Gray 1933).

Table 33

Comparison of the Charleston Place Faunal Sample to the Rural/Urban Model

	Charleston Place		Urban		Rural	
	MNI	%	MNI	%	MNI	%
Domestic Mammals	85	29.4	167	28.9	172	17.2
Domestic Birds	59	20.4	114	19.7	41	4.1
Wild Mammals	23	8.0	47	8.1	192	19.2
Wild Birds	28	9.7	44	7.6	30	3.0
Aquatic Reptiles	14	4.8	31	5.4	137	13.7
Fishes	40	13.8	114	19.7	383	38.4
Commensal Taxa	40	13.8	61	10.6	43	4.3
Total	289		578		998	

(from Reitz 1986a:53)

Honerkamp's excavations at the Charleston Place site provided the first opportunity to test this model in an urban setting, situated on the southern coastal plain. This work supported the proposed model, particularly the predominance of beef (Reitz and Honerkamp 1984). Subsequent excavations in Charleston and Savannah further supported this model (Reitz 1987).

The expansion of the urban data base in the past four years (nine samples from Charleston and two from Savannah), plus the continued examination of data from rural plantation sites have allowed researchers to discern differences between urban and rural diets within the same environmental setting (Reitz 1986). Basically, urban citizens utilized more domestic mammal individuals and a greater variety of domestic species. They also utilized more domestic birds and more wild bird individuals. In contrast, they used less wild bird species, fewer reptiles (but more sea turtles), and far fewer fish individuals and species. A greater percentage of commensal species are present in the urban setting. These generalizations appear to crosscut temporal and socioeconomic affiliations; however, the diet of the wealthy, whether urban or rural, appears to be more diverse (Reitz 1986a).

Because of the large sample size, the Charleston Place data presents an excellent opportunity to examine these models. Faunal data from the 1985 excavations were analyzed separately from the 1981 excavations. For certain analyses, however, tabulations from the 1985 excavations were combined with those from the UTC excavations. This is valid because of the similarity of the excavation methods, particularly the use of ¼ inch screen. This produced a sample of 289 individuals, well above the 200 individuals needed for adequate sample size. When compared to the proposed urban pattern, the degree of conformity is remarkable, strongly supporting the proposed model. Implications of this model include existance and reliance upon commercial distribution of food sources, mainly the market. Subsistence decisions are ultimately linked not only with availability, but with ease of access to resources. The development of market systems specializing in domestic species in Charleston provided ready access to foodstuffs, and probably discouraged individual production. Wild species may have also been provided from plantations via the market. The dominance of domestic species undoubtedly reflects the reliance on the market system (Calhoun et al. 1984; Carder, this volume).

As a final note, it is interesting that the UTC sample, from a variety of zones and small features, was so similar to the 1985 sample, solely from large features. This contrasts markedly with the artifactual data. This suggests that urban site formation processes affect the cultural and faunal records differently (see Reitz 1986b; Zierden and Calhoun 1987).

The large sample size from Charleston Place also provided an excellent opportunity to more thoroughly examine the floral remains. Despite careful recovery methods imposed on all sites in Charleston, the ethnobotanical record has been extremely sparse. This is probably due to a variety of factors, including urban site formation processes (more likely to damage fragile remains) and historic food preparation methods. These include

use of the entire plant, boiling, and frying instead of roasting in an open fire (Zierden and Trinkley 1984). The recovery of plant remains has been further hampered by the sampling strategy employed at Charleston sites. The majority of the deposits encountered have been zones or small features, resulting from secondary refuse disposal. The Charleston Place site represents an excellent opportunity to examine data from large refuse filled features.

Analysis of the specimens recovered from the Charleston Place features revealed a significant difference between the ethnobotanical materials recovered from privies and those recovered from other feature types. The samples from trash pits and other types of features revealed small samples containing a majority of wood charcoal, with few plant foods. The privy deposits, on the other hand, contained large numbers of plant food remains, specifically fruits. Trinkley suggests that these remains may represent refuse from food preparation or they may represent plant foods that were ingested and passed through the body.

The dominance of fruits in the sample may be a result of the processes described above. This is supported by the fact that the majority of the fruits represented contain small seeds that are easily swallowed. The documentary record does, however, attest to the popularity of fruits in the nineteenth century, including those recovered archaeologically. Trinkley suggests that the dominance of local fruits and the absence of exotic, imported fruits may reflect the assumed middle status of the site inhabitants. While this conclusion appears sound, good comparative samples from low and high status sites are needed. Trinkley also tentatively suggests that the dominance of wood over coal for fuel further supports the proposed middle status .

The recovery of quantities of plant food remains from the Charleston Place features has greatly enhanced our study of subsistence strategy in Charleston. The study has further illustrated the effect of site formation process and archaeological sampling strategy on the recovery of ethnobotanical remains. Within the urban setting, privy fill and waterlogged deposits produce the largest samples of ethnobotanical remains. The Charleston Place study indicates that the integration of ethnobotanical studies into the research design of urban projects and the careful recovery of samples from these deposits can greatly enhance the study of subsistence strategy in the urban setting.

The Charleston Place data have provided new insights into the urban lifestyles of Charleston citizens. When combined with comparative data from other sites in Charleston, the data have strengthened some models, and provided new interpretations in other areas.

One issue implicit in Chapter 5, but not discussed in great length, is site formation processes. The cultural and natural processes that result in the urban archaeological record can greatly affect the contents of that record (Honerkamp and Fairbanks 1984; Reitz 1986b; Zierden and Calhoun 1984; 1986; Zierden and Trinkley 1984). Discard, loss, and abandonment are three basic cultural processes that result in archaeological deposits (Schiffer 1977; 1983). Researchers have previously suggested that privy deposits are the result of different formation processes than are zones and small features (Bryant 1984; Lewis and Haskell 1981); this was strongly supported at Charleston Place. The privy deposits produced radically different artifact patterns than either the other Charleston sites (Zierden and Calhoun 1986) or the deposits excavated by Honerkamp from the same site (Honerkamp et al. 1982). This suggests that privy fill resulted from different activities, possibly abandonment. Surprisingly, the faunal record did not reflect these differences, suggesting that site formation processes affect the biological record in a different manner. These results should serve as a caveat to urban researchers; a variety of archaeological deposits should be used to interpret urban behavior. An overreliance on privy deposits could produce a skewed version of the past.

In contrast to these aspects, the data recovered from monitoring was remarkably similar to the excavated data, in that the archaeological record reflected very little of the commercial activity at the block. The record was, instead, overwhelmingly domestic, reflecting only that aspect of the site occupation. This supports earlier suggestions that retail activity is poorly represented archaeologically (Honerkamp et al. 1982; Lewis 1977).

The Charleston Place block was examined as a neighborhood, a cohesive community, rather than as an aggregate of individual sites. Several aspects of the historical and archaeological record suggest that, at least for commercial blocks in the nineteenth century, this approach may be valid. Block residents shared many features; wells, passageways, trash receptacles. Distinct artifact types, associated with a particular business, were often found in more than one feature, located on different properties. The block residents also shared buildings; in several cases a home owner rented the first floor of his dwelling for a business or vice versa. The cohesive nature of the inhabitants in terms of ethnicity and socioeconomic status (as far as we can determine) further supports the use of the term "neighborhood" in this case.

The spatially extensive excavations also revealed several adaptive strategies employed by urban citizens. As the Charleston Place block shifted from

peripheral to central, several changes occurred, which are reflected in the spatial patterning of the block. Lowlying areas were filled to create new real estate. Initially, lots and houses fronted only on the major thoroughfares, Meeting and King Streets. Later, these lots were carved up to create frontage along Hasell, and later, the new Market Street. Other lots along Meeting and King were further subdivided longitudinally, creating extremely long narrow lots, and in some cases irregularly shaped parcels.

Increasing population pressure also resulted in a gradual encroachment into the interior of the block. The main structure always fronted directly on the street, but miscellaneous small outbuildings and features were dispersed across the rear yard. These main houses, often of wood, and small outbuildings were gradually replaced with larger, more substantial structures; this transition was more complete due to the extensive fires which destroyed major portions of the block. Finally, over 80% of the land area was covered. The final result of this process, concurrent with the increasingly commercial nature of the block, was a second "tier" of businesses on the interior of the block, accessible by alleys. This encroachment is also reflected in the location of archaeological features from different temporal periods.

Because of the increasing population pressure, residents of the block were forced to develop innovative responses to everyday needs. The congested nature of the block, combined with a predominance of wooden structures, resulted in major portions of the block being destroyed by fire on several occasions. Such disasters prompted legislators to forbid wooden construction in the city, an ordinance that was repeatedly ignored (McCord 1848).

Charleston Place residents were also plagued by a poor water supply. The gradual encroachment of structures on the interior of the block, plus increasing population pressure, meant that an increasing number of privies and wells were in close proximity to one another. To counteract this, residents constructed cisterns designed to trap rainwater. Often elaborate drain systems filtered water from the roof to these containers, often located under buildings. Also, older brick wells were often later converted into cisterns (Honerkamp et al. 1982). The cisterns were evidently kept relatively clean; the majority of those encountered contained virtually sterile fill.

The wells, cisterns, and privies were eventually replaced with municipal water and sewerage systems. This shift from individual, site specific, to municipal, centrally controlled responses to these needs has been cited as a major urban adaptive strategy (Honerkamp and Council 1984). It is interesting that, aside from privies abandoned in the late nineteenth century, no archaeological manifestations of this shift were noted. Such features have been found in abundance on other urban sites (Honerkamp et al. 1983; Zierden and Hacker 1986). It is possible that, by the time such features were installed, the block was already too congested to allow below ground hookups. These pipes may have instead been placed above ground.

Finally, adaptation to the urban environment is reflected in refuse disposal practices. Refuse was deposited in any available space (Zierden and Calhoun 1986). The marshy area in the southern portion of the block

was a likely candidate. Refuse was also recycled into large subsurface features after they had ceased to be used for their original purpose. It also appears that any abandoned privy, not just an individuals's own, might be used for refuse. Refuse also appears to have accumulated in narrow middens between buildings, as suggested by features 140, 147, 155 and 156. It is also likely that a large amount of refuse was deposited off site. Clearly, urban citizens were forced to adapt to a number of circumstances not shared by their rural counterparts. The excavations at Charleston Place have provided new data on the adaptive strategies of urban citizens.

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APPENDIX I

ANALYSIS OF THE VERTEBRATE FAUNA FROM CHARLESTON PLACE (1985)

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In recent years the question of site location has risen as a potentially informative approach to historic subsistence behavior. Urban sites have traditionally posed a dilemma for archaeologists investigating subsistence practices. Questions of socioeconomic status and ethnicity have been addressed from analyses of rural sites (Otto 1975); however, research into these questions using urban faunal materials has been less profitable (Reitz 1987). Many urban sites occupied between the mid-eighteenth century and the mid-nineteenth century were composed of both residential and commercial structures, often one in the same, where domestic and commercial activity occurred. Separating commercial from domestic deposits has generally not been possible (Reitz 1986) and may, in actuality, represent an unnatural distinction. Additionally, the identities of urban site occupants are difficult to ascertain, making questions of ethnicity and socioeconomic status difficult to approach.

Archaeologists confronted with these dilemmas have focused their attention upon the unique nature of the urban deposits themselves (Reitz 1986). Through the aggregation of faunal materials recovered from sites in Charleston and Savannah occupied from the mid-eighteenth to the mid-nineteenth centuries by middle class to blue collar residents and the comparison of these data to those from rural plantations of the same time period and region, Reitz was able to identify differences between urban and rural samples. Site location (urban vs. rural) was suggested as a possible factor responsible for the apparent differences.

Subsistence behavior of urban residents may be differentiated from their rural counterparts in a number of ways (table 1). Analyses of vertebrate faunal materials indicate differences in reliance upon domestic mammals between urban and rural households. Typically, urban residents not only utilized a greater number of domestic mammals but also a greater variety of species than did rural households. However, in both urban and rural deposits, cattle were more abundant than hogs, while both species were far more frequent than goats and sheep. The dominance of cattle over pigs in the archaeological assemblage has been a puzzle for archaeologists since it runs counter to documentary evidence (Hilliard 1972). It has been suggested that this pattern may actually reflect techniques of marketing and processing hogs rather than dietary choice or availability (Honerkamp et al. 1982). Nevertheless, cattle remain the dominant domestic species archaeologically.

An additional characteristic of urban subsistence behavior is the frequent utilization of domestic birds, primarily chickens (Reitz 1986). While wild birds are identified in the urban deposits in comparison to rural sites a less diverse range of wild species were utilized. Urban sites contain primarily Canada geese and turkeys.

Faunal samples from urban sites typically include fewer wild mammals than rural ones, both in actual number of individuals and in the number of different species utilized. Deer are emphasized over other wild mammals in both urban and rural sites. Opossum, rabbit, squirrel, and racoon are additional wild species frequently encountered in fauna recovered from urban sites.

Aquatic reptiles (turtles and alligators) apparently were utilized less frequently by urban residents than their rural counterparts. Alligators had not been identified in urban collections when Table 1 was constructed, although they had been found in samples from rural sites (Reitz 1986). Utilization of fish by coastal urban populations is surprisingly low as the proximity of Charleston and Savannah to the ocean would seem to encourage consumption of fish. Fish appear to have been more extensively exploited by rural households as reflected in the greater contribution of fish in both number of individuals and number of species in the rural diet. While techniques of preparation and marketing practices for fish, like hogs, may be responsible for an underrepresentation of fish bones in the archaeological assemblage, the fact remains that fish are less common in urban deposits than in rural ones.

Commensal species (rats, mice, cats, dogs, horses, and frog/toads) are more common in the fauna recovered from urban sites. While many of the commensal species identified may have been included in the diet, the question of whether or not some of the commensal species were eaten remains a puzzle.

One of the reasons there are so many unresolved questions about urban subsistence is that many of the samples studied have been small. The opportunity to increase the size of one of these samples was, therefore, welcome. In 1981, Nicholas Honerkamp excavated several eighteenth and nineteenth century deposits from a one block area in Charleston (Honerkamp et al. 1982). The site Honerkamp excavated has been referred to as the Charleston Convention Center site, since the block was to be the site of such a center. This excavation produced the largest samples from the city. In 1985, Martha Zierden had an opportunity to return to this same site, which had been renamed Charleston Place. The materials from Charleston Place form the basis of this report, and are referred to as Charleston Place '85. For some purposes, data from Charleston Place '85 were aggregated with those recovered in 1981 from Charleston Center. The aggregated faunal materials are referred to simply as Charleston Place. Tempral affiliation, spatial contiguity, and urban setting, as well as similar recovery and analysis methodologies support the combination of the two samples for a larger, more representative urban sample. The materials were studied for information concerning urban subsistence behavior. Specifically, vertebrate fauna from Charleston Place '85 were analyzed and compared to the urban subsistence pattern as described above.

Methods and Materials

Field work at Charleston Place'85 was initiated in 1985 by Martha Zierden of The Charleston Museum under contract with the City of Charleston, South Carolina. Seven units were excavated with materials dating from the mid-eighteenth century to the late nineteenth century. Faunal materials were recovered using ¼ inch mesh hardware cloth. Most of the activities at the site were associated with a district of retail shops and primarily white residences. A list of the samples examined for this study are included in Appendix A.

The vertebrate materials recovered were examined using standard zooarchaeological methods. All identifications were made by Nanny Carder and Barbara Ruff using the comparative skeletal collection of the Zooarchaeological Laboratory, Department of Anthropology, University of Georgia. Bones of all taxa were counted and weighed to determine the relative abundance of the species identified. A record was made of identified elements. Age, sex, and bone modifications were noted when observed. Butchering marks, such as cutting, slicing, or hacking, were recorded on diagrams for future reference. Where preservation allowed, measurements were taken of all elements following the guidelines established by Angela von den Driesch (1976).

Minimum Number of Individuals (MNI) were determined based on paired elements and age. In calculating MNI, faunal materials recovered from each feature excavated were considered discrete analytical units, but levels and zones within each feature were lumped. These units consisted of mid-eighteenth century and early nineteenth century refuse pits, late eighteenth/early nineteenth century brick and wood lined privies, and several linear areas of burnt midden and refuse dated to the late eighteenth to the late nineteenth centuries.

While MNI is a standard zooarchaeological quantification medium, the measure has several inherent problems. MNI is a measure which emphasizes small species over large ones. This is easily demonstrated by a hypothetical sample which consists of twenty individual frogs and only one deer. While twenty frogs represent a larger number of individuals, one deer will supply a substantially larger meat yield than the twenty frogs. A further problem with MNI is the inherent assumption that the entire individual was utilized at the site. From ethnographic evidence we know that this is not necessarily the case, particularly in regard to larger individuals and for animals utilized for special purposes (White 1953; Thomas 1971). This is an especially relevant issue when dealing with historic samples where marketing of processed meat products was substantial, but the exact extent unknown. Additionally, MNI is influenced by the manner in which the data from the archaeological proveniences are aggregated during analysis. The aggregation of separate samples into one analytical whole, or the "minimum distinction" method (Grayson 1973), allows for a conservative estimate of MNI. On the other hand, the "maximum distinction" method applied when analysis discerns discrete sample units results in a much larger MNI. Furthermore, some elements are simply more readily identified than others and the taxa represented by these elements appear more significant in the species list than they were in the diet.

Biomass determinations attempt to compensate for problems encountered with MNI. Biomass provides information on the quantity of meat supplied by the animal. In some cases, the original live weight or size of the animal can also be estimated. The predictions are based on the allometric principal that the proportions of body mass, skeletal mass, and skeletal dimensions change with increasing body size. This scale effect results from a need to compensate for weakness in the basic structural materials, in this case, bone. The relationship between body weight and skeletal weight is described by the allometric equation:

$$Y = aX^b$$

(Simpson, Roe, and Lewontin 1960:397). Many biological phenomena show allometry described by this formula (Gould 1966; 1971). In this equation, X is the skeletal weight or a linear dimension of the bone, Y is the quantity of meat or the total live weight, b is the constant of allometry (the slope of the line), and a is the Y-intercept for a log-log plot using the method of least squares regression and the best fit line (Casteel 1978; Reitz and Cordier 1983; Reitz et al. 1986; Wing and Brown 1979). A given quantity of bone or a specific skeletal dimension represents a predictable amount of tissue due to the effects of allometric growth. Values for a and b are obtained from calculations based on data at the Florida State Museum, University of Florida. The allometric formulae used here are presented in Table 2.

Allometry is used to predict two distinct values. One of these is kilograms of meat represented by kilograms of bone where X is the archaeological bone weight. This is a conservative estimate of biomass determined from the faunal materials actually recovered from the site (The term "biomass" is used to refer to the results of this calculation). Biomass reflects the probability that only certain portions of the animal were used at the site. This would be the case where preserved meats or redistributed meat were consumed. On the other hand, when X is a linear measurement of a skeletal dimension such as defined by Driesch (1976) for mammals and birds, scaling predicts the total live weight or total length of the animal. The total live weight estimate is used to assess the size of livestock and fish. It does not imply that the entire animal was consumed. Unfortunately total live weight could not be estimated for any of the animals identified from Charleston Place '85.

Biomass and MNI are subject to sample size bias. Casteel (1978), Grayson (1979), and Wing and Brown (1979) suggest a sample size of at least 200 individuals or 1400 bones for a reliable interpretation. Small samples frequently will generate a short species list with undue emphasis on one species in relation to others. It is not possible to determine the nature or the extent of the bias, or correct for it, until the sample is made larger through additional work.

Relative ages of the species identified were noted based on observations of the degree of epiphyseal fusion for diagnostic elements. When animals are young their bones are not fully formed. Along the area of growth the shaft and the end of the bone, the epiphyses, are not fused. When growth is complete the shaft and epiphyses fuse. While environmental factors influence the actual age at which fusion is complete (Watson 1978), elements fuse in a regular temporal sequence (Silver 1963; Schmid 1972; Gilbert 1980). During analysis, bones identified were recorded as either fused or unfused; the bones were then placed into one of four general categories based on the age in which fusion normally occurs. This is most successful for unfused bones which fuse in the first year or so of life, and for fused bones which complete growth at three to four years of age. Intermediate bones are more difficult to interpret. An element which fuses before or at eighteen months of age and is found fused archaeologically could be from an animal which died

immediately after fusion was complete or many years later. The ambiguity inherent in age grouping is somewhat reduced by recording each element under the oldest category possible. Attempts to age animals are particularly relevant to an historic site. Indications of an animal's age may provide data concerning animal husbandry practices such as the utilization of younger animals for food and older animals for non-food byproducts.

The presence or absence of certain elements in an archaeological sample may provide additional data on butchering and animal husbandry practices. The elements recorded from Charleston Place '85 were summarized into categories by body parts. Head category includes all material from bones associated with the cranium, mandible, and teeth as well as the atlas and axis. The presence of head elements at a site may indicate either the consumption of head meat or the discard of unused refuse. The forequarter category includes the scapula, humerus, ulna, and radius. These are major meat bearing elements. Forefeet include carpals and metacarpals. These elements do not contain much meat and may be evidence of slaughtering refuse or use of the feet for stew broth, gelatin, or glue. The hindfeet include the tarsals and metatarsals. The hindquarter category includes the innominate, sacrum, femur, and tibia. These elements have historically been considered favored cuts of meat as they, like the forequarters, are major meat bearing elements. The feet contain bones identified only as metapodials and phalanges. These elements could not be assigned to other categories.

In order to summarize the data, the species list for Charleston Place '85 have been placed into faunal categories based on vertebrate class and husbandry practices. Domestic mammals include pigs (Sus scrofa), cows (Bos taurus), and caprines (Ovis/Capra sp.). Caprines include both sheep and goat and are identified as such due to difficulty of distinguishing their bones from one another. Domestic birds include muscovy ducks (Cairina moschata), chickens (Gallus gallus), and rock doves (Columba livia). Wild birds include ducks (Anas spp., Aythya affinis), Canada geese (Branta canadensis), pheasants (Phasianus colchicus), and turkeys (Meleagris gallopavo). Canada geese and turkeys may actually belong in the category of domestic birds. According to the American Poultry Association(1974) standards of excellence for these two species had been established by the mid-nineteenth century. Wild mammals include opposums (Didelphis virginiana), squirrels (Scirius niger), and deer (Odocoileus virginianus). Aquatic reptiles include alligators (Alligator mississippiensis) and turtles. Commensal taxa include rats (Rattus sp.), dogs (Canis familiaris), horses (Equus caballus), snakes (Colubridae), and frog/toads (Rana/Bufo sp.). It should be noted that only biomass for those taxa for which MNI had been determined is included in the summary table. For example, biomass for UID Fish is not included, while biomass for Anas spp. is.

Results

The faunal sample recovered from Charleston Place '85 is relatively small, containing 106 individuals identified from 7,067 bone fragments weighing 12.61 kgs. Overall, bone preservation was good to excellent. Features 145 and 149, both refuse pits, provided the largest samples in terms of bone count. Feature 153, a brick lined privy, closely followed. Features 150, 147, 155 and 156 (a wood lined privy pit and several linear areas of burnt midden, respectively) provided the smallest samples. Combined,

the faunal material recovered from Charleston Place '85 provide an adequate sample size. The location of the features within a single city block, their temporal affiliation as well as their urban/domestic setting supports the aggregation of the features for analysis.

Based on the identification of the Charleston Place '85 fauna, domestic mammals formed a substantial part of the urban Charlestonian diet (Tables 3 and 4). In terms of individuals, domestic mammals contributed 80% of the sample biomass and included 20% of the individuals. Cattle (Bos taurus), the dominant domestic taxon, contributed 9 individuals, supplied 70% of the domestic mammal biomass, and contributed 24% of the total sample biomass. Pigs (Sus scrofa) followed closely. They contributed 7 individuals, 18% of the domestic mammal biomass, and 6% of the sample biomass. Surprisingly, caprines (Ovis/Capra spp.), generally a minor element in the urban diet (Reitz 1986), were relatively well represented, contributing 6% of the individuals. Caprines supplied 12% of the domestic mammal biomass and 4% of the total sample biomass.

Domestic birds were a common component of the sample, particularly chickens. While chickens (Gallus gallus) contributed 16 individuals, they supplied only 1% to the total biomass. Rock doves (Columba livia) and muscovy ducks (Cairina moschata) were minor components of the identified domestic bird fauna.

Although wild mammals were present in the faunal materials recovered, they do not appear to have been a major component of the diet. Of particular interest was the paucity of deer (Odocoileus virginianus) remains. Deer were represented by 2 individuals and contributed less than 1% of the sample biomass. Although deer contributed 50% of the wild mammal individuals, an opossum (Didelphis virginiana) and a fox squirrel (Scirius niger) were also identified. These may actually represent commensal species rather than part of the diet.

Wild birds made a significant contribution to the Charleston Place '85 faunal collection, contributing 20% of the individuals identified from the site. Turkeys (Meleagris gallopavo) and Canada geese (Branta canadensis) were common, together contributing 15 individuals. Several other ducks were identified including mallard (Anas platyrhynchos) and scaup (Aythya affinis). Both of these species frequently inhabit the southern coastal wetlands and reed marshes during the winter months. One ring-necked pheasant (Phaseanus colchicus) was identified. The number of both domestic and wild bird individuals and the diversity of species identified from Charleston Place '85 may be largely the result of preservation factors. Not only were bird bones generally well preserved, but an abundance of diagnostic elements facilitated identification.

Of the aquatic reptiles, turtles were represented by only four individuals, all species which are found in brackish water. Sea turtles (Cheloniidae) and diamondback terrapins (Malaclemys terrapin) were absent. Both species are found in southern coastal environments and commonly occur in coastal historic sites (Carr 1952; Reitz 1986). An alligator (Alligator mississippiensis) was identified from Feature 153, a new addition to the urban scene.

Fishes were identified from each of the seven Charleston Place '85 features. Thirteen different species of fish were identified representing both freshwater and marine habitats. While a total of twenty individuals were identified, fish contributed only 1% of the biomass for taxa for which MNI had been estimated. Two of the species identified commonly inhabit freshwater, although some members may be found in estuaries. These were gar (Lepisosteus spp.) and catfish (Ictalurus spp.). The remaining individuals are typically estuarine species commonly identified from historic sites on the Southern Atlantic Seaboard.

Commensal taxa identified from Charleston Place '85 included rats (Rattus spp., Rattus norvegicus), a dog (Canis familiaris), five horses (Equus caballus), a snake (Colubridae), and a frog/toad (Rana/Bufo spp). Although historically many commensal species were consumed by human populations (Wing and Brown 1979:11), they are frequently found associated with domestic and commercial structures and may have been introduced into the archaeological assemblage by accident.

The elements identified from Charleston Place '85 are tabulated in Table 5. The distribution of elements for cows, pigs, and caprines indicate the presence of entire individuals at the site. Head elements identified from all three taxa included cranial fragments and upper teeth suggesting on site butchering was taking place. Deer, on the other hand, were represented by elements from the hindquarter and feet only. While this uneven distribution of elements may indicate that deer were slaughtered outside the urban area and brought to market dressed, it may also simply reflect the low number of deer elements identified. The horse remains deserve further comment. Sixty-two elements from horses were identified, from which were estimated five individuals. Four of these individuals were included in Feature 145; a single tooth fragment from Feature 153 accounted for the fifth individual. Of the horse elements identified, the species was overwhelmingly represented by teeth (38 of the elements). Sixteen canines were reported from Feature 145 which resulted in the estimate of four individuals.

Modifications to the bone included cutting, burning, hacking, slicing, sawing, and gnawing (Table 6). The dominant modifications were cut marks, 33% of the modifications observed. Cut marks, probably representing incisions left by a knife while defleshing the meat from the bone, may be inflicted either as a result of preparation techniques or during consumption. Burning occurred in 29% of the total sample with 96% of the burned bone belonging to mammals. Fragments of two turtle bones and three fish bones also displayed evidence of burning. While not quantified, much of the highly fragmented UID bone had also been burned. Burning of bone could result not only from preparation for consumption, particularly roasting, but additionally as a post-depositional phenomenon. Sliced bones were ones which had smooth, clean surfaces such as would be found on bones which had been sawed, but lacked the striations typical of sawed bones. Sliced bones comprised 6% of the modified bones. Sawed bones, representing 13% of the modified bones, were limited to mammalian elements. Twenty two bones representing over 5% of the sample displayed evidence of hacking. Hack marks closely resemble cut marks in their shape and irregularity but are deeper and wider inflictions. They may indicate the use of a cleaver in butchering (Gust 1983). A small portion of the modified bones were gnawed or chewed by dogs. Dogs were responsible

for the gnawing found on the horse metapodials identified from Feature 145, suggesting these bones were left exposed for some time before being completely covered.

The only butchering patterns noted from the modified elements were for cows. Four of the metapodial fragments identified had been hacked on the distal end of the shaft above the articulation. Three of the cow femurs identified were sawed midshaft sections, each approximately three inches in length. Two of these sections were taken from just below the middle of the shaft and the third was sawed from the femur directly midshaft. Sawed sections may represent cuts of meat such as roasts, round steaks, or stew meat.

Age of death, determined by epiphyseal fusion, has been calculated for pigs, cows, deer and caprines and is tabulated in Table 7. Relatively few of the animals identified from Charleston Place '85 can be assigned a definitive age. It does appear, however, that a significant number of individuals did not reach fully mature adulthood. One of the pig individuals was less than 18 months of age at death, four were subadults, one was an adult, and one was indeterminate and probably an adult. One of the deer was a juvenile and the other was indeterminate. Two of the cows were juveniles at death, four were probably subadults at death, one was an adult, and two were indeterminate, probably adults. One of the caprines was a juvenile at death, two were subadults, one was an adult, and two were of indeterminate age. At least some of the horses were adults. The opossum was a subadult, as was the dog.

Little evidence for the sex of the animals included in the sample was observed. Medullary bone was noted on two chicken bones indicating the consumption of laying hens (Rick 1975). One rooster was recorded from the presence of a spur fragment. Horse canines may additionally be used as an indication of sex. Erupted canines are found in male horses; female horse canines are either unerupted or do not occur (Getty 1975). The sixteen canines were identified from Feature 145 indicating the presence of four male individuals.

Bone measurements from Charleston Place '85 are presented in Table 8. Bone measurements allow for a reasonable estimation of the size of the animals utilized at the site. Due to the recent application of this method to North American faunal collections, Charleston Place '85 measurements are included to ensure a growing comparative data base for future analysis. Comparison of Charleston Place '85 measurements with other urban collections from the mid-eighteenth to mid-nineteenth centuries was not undertaken due to weaknesses in the present data base.

Discussion

To a large extent, the fauna recovered from Charleston Place '85 conform to expectations of a typical middle eighteenth to late nineteenth century urban diet (Tables 1 and 4). Fauna from Charleston Place '85 are similar to those summarized from other contemporaneous urban sites from the South Atlantic Seaboard, particularly in regard to domestic birds,

aquatic reptiles, and fishes. Domestic mammals are somewhat less abundant in the Charleston Place '85 samples than expected and commensal taxa are somewhat higher. The slightly higher percentage of commensal animals in the Charleston Place '85 collections reflects the identification of five horses in this sample. The minimal amount of the wild mammals in the Charleston Place '85 fauna is perplexing. Less than half the expected numbers of individuals were identified. Deer, in particular, were far less abundant than predicted.

Wild birds, on the other hand, are twice the expected percentage. The variety of wild bird species identified in the Charleston Place '85 collection is similar to that from other urban sites, with the exception of the scaup, but there are more wild bird individuals in the Charleston Place '85 collection, thus accounting for the higher percentage of this category in the Charleston Place '85 summary. As noted earlier, this may be a reflection of preservation factors as an abundance of well preserved diagnostic elements facilitated identification of birds.

Two interesting members of the Charleston Place '85 species list should be noted: gar and alligator. One gar individual was identified from Feature 153 from scales. Gar is relatively scarce in urban sites although a gar was reported from First Trident (Zierden et al. 1983:113). Alligator is an unexpected addition to the Charleston Place '85 materials as only one had been identified previously. This was identified from Aiken-Rhett, a mid-nineteenth century high status residential site (Ruff 1986).

The identificationof four male horses from Feature 145 was an additional surprise. The recovered distribution of elements and the modifications to the bones are somewhat a puzzle. Only when the data base is enlarged with elements displaying diagnostic butchering modifications (particularly those elements other than the feet or head) may the question of whether or not the horses were being consumed be addressed with any degree of certainty. The disproportionate number of horse canines recovered is an additional puzzle. This, along with the additional teeth identified from Feature 145, may indicate a specialized activity. Butchering for consumption, gelatin extraction, or glue processing are all possible explanations for the modifications and elements observed.

Since Charleston Place '85 was a relatively small sample consisting of only 106 identified individuals discrepancies in the subsistence pattern suggested by the sample and the predicted urban pattern are to be expected. In order to compensate for the small sample size, the data from Charleston Place '85 were combined with those from Charleston Center (1981) for a larger, more representative sample of the urban block. Charleston Center (1981), excavated by N. Honerkamp, consisted of several late eighteenth century to middle nineteenth century deposits located within the same city block as Charleston Place '85 (Honerkamp et al. 1982). The combined assemblage, known as Charleston Place, consists of a sample total of 289 individuals from a bone count of 11,015 fragments weighing 239 kg (Table 9).

When compared to the expected urban pattern (Table 1), the degree of conformity between Charleston Place and the urban pattern is remarkable. Domestic and wild species other than fish differ in MNI by 2% or less from

the urban pattern. Fishes and commensal taxa both deviate from the urban pattern by less than 6%. The degree of similarity between Charleston Place and the expected urban pattern in both the species lists and the faunal class summaries suggest mid-eighteenth to mid-nineteenth century Charlestonians relied upon a variety of domestic animals in their diet. Cattle were the most abundant of the domestic mammals. Domestic birds included muscovy ducks and rock doves, but were primarily chickens, as at other Charleston sites.

Perhaps due to the emphasis on domestic species, wild animals were less commonly exploited. Wild birds were primarily Canada geese and turkeys, but they were more common in the Charleston Place sample than in other urban samples. If these birds were domesticated, the dominance of domestic species in the Charleston diet is further strengthened. Aquatic reptiles were somewhat less common in the Charleston Place sample than expected. The numerical similarity masks the fact that diamondback terrapins and other turtles were not as abundant in the Charleston Place sample as in other urban collections, and tha one of only two alligators identified from Charleston was found in this collection. Fish continue to be minimal components in the species lists, although they were apparently somewhat less commonly used by residents of the Charleston Place block than elsewhere in Charleston. The higher level of commensal taxa at Charleston Place probably is a reflection of the high incidence of horse remains here. This block is the only Charleston site from which horses have been identified and probably indicates a special commercial activity.

The combined Charleston Place faunal samples provides an adequate sample for a middle class mixed residential/commercial sector of Charleston. This sample will undoubtedly serve as a good comparative base from which to examine rural plantation data as well as urban high and low status deposits once the sample size problems with those sites are resolved.

Implications of the conformity of Charleston Place with the urban subsistence pattern suggested by Reitz include the existence and reliance upon commercial specialization of domestic food sources in mid-eighteenth to mid-nineteenth century Charleston. Subsistence decisions are ultimately linked not only with availability, but ease of access to resources. The urban Charleston economy was largely developed and maintained by a plantation system which may have discouraged urban households from growing their own foodstuffs. The development and commercialization of market systems specializing in domestic species in Charleston enabled residents ready access to a variety of foodstuffs. The dominance of domestic species in the Charleston diet is undoubtedly a reflection of the existence and success of a commercialized urban market system.

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Table 1. Urban Compared to Rural Faunal Categories[a].

	URBAN		RURAL	
	MNI	%	MNI	%
Domestic Mammals	167	28.9	172	17.2
Domestic Birds	114	19.7	41	4.1
Wild Mammals	47	8.1	192	19.2
Wild Birds	44	7.6	30	3.0
Turtles/Alligators	31	5.4	137	13.7
Fishes	114	19.7	383	38.4
Commensal Taxa	61	10.6	43	4.3
TOTAL	578		998	

[a](Reitz 1986).

Table 2. Allometric Values Used in This Study.[a]

Faunal Category	N	log a	b	r^2
Biomass, kg, from Bone Weight, kg				
Mammal	97	1.12	0.90	0.94
Bird	307	1.04	0.91	0.97
Alligator	3	0.91	0.89	0.89
Turtle	26	0.51	0.67	0.55
Snake	26	1.17	1.01	0.97
Osteichthyes	393	0.90	0.81	0.80
Siluriformes	36	1.15	0.95	0.87
Perciformes	274	0.93	0.83	0.76
Serranidae	18	1.51	1.08	0.85
Carangidae	17	1.23	0.88	0.86
Sparidae	22	0.96	0.92	0.98
Sciaenidae	99	0.81	0.74	0.73

[a]The allometric formula is $Y=aX^b$, where Y is biomass, X is bone weight, a and b are scaled constants, N is the number of observations used in the regression, and r^2 is the proportion of total variance explained by the regression model (Reitz and Cordier 1983; Reitz et al. 1986).

Table 3. Charleston Place '85: Species List.

	CT	MNI		WT,GM	BIOMASS	
		#	%		KG	%
UID Mammal	4137			3905.07	51.0532	29.5
UID Lg Mammal	351			2738.86	37.8198	21.9
UID Sm Mammal	3			0.28	0.0093	0.01
Didelphis virginiana	2	1	0.9	2.00	0.0491	0.03
Opossum						
UID Rodent	1			0.12	0.0039	tr
Sciurus niger	1	1	0.9	0.03	0.0011	tr
Fox squirrel						
Rattus spp.	2	1	0.9	0.20	0.0062	tr
Old World rat						
Rattus norvegicus	16	6	5.7	4.50	0.1166	0.07
Norway rat						
Canis familiaris	3	1	0.9	2.65	0.0632	0.04
Dog						
Equus caballus	62	5	4.7	448.30	6.7431	3.9
Horse						
UID Artiodactyl	97			240.38	4.1964	2.4
Sus scrofa	83	7	6.6	680.34	10.8142	6.3
Pig						
Odocoileus virginianus	7	2	1.9	1304.89	0.8702	0.5
Deer						

Table 3. Continued.

	CT	MNI		WT,GM	BIOMASS	
		#	%		KG	%
Bos taurus	135	9	8.5	1942.69	41.7491	24.1
Cow						
Caprine	51	6	5.7	297.12	7.0669	4.1
Sheep/Goat						
UID Bird	558			281.04	3.9208	2.3
Anas spp.	3	2	1.9	2.89	0.0562	0.03
Duck						
Anas platyrhynchos	2	1	0.9	2.30	0.0054	
Mallard						
Aythya spp.	3	1	0.9	2.11	0.0403	0.02
Scaup						
Aythya affinis	2	1	0.9	0.68	0.0144	0.01
Lesser scaup						
Branta canadensis	19	6	5.7	38.49	0.6335	0.4
Canada goose						
Cairina moschata	1	1	0.9	4.60	0.0819	0.05
Muscovy duck						
Gallus gallus	103	16	15.1	123.00	1.8484	1.1
Chicken						

Table 3. Continued.

	CT	MNI		WT,GM	BIOMASS	
		#	%		KG	%
Phasianus colchicus	1	1	0.9	0.81	0.0169	0.01
Ring-necked pheasant						
Meleagris gallopavo	24	9	8.5	70.92	1.0869	0.6
Turkey						
Columba livia	4	2	1.9	1.07	0.0229	0.01
Rock dove						
Alligator mississipiensis	7	1	0.9	95.64	1.0064	0.6
Alligator						
UID Turtle	28			13.03	0.2070	0.1
Chelydra serpentina	1	1	0.9	6.11	0.1063	0.06
Snapping turtle						
Emydidae	5	1	0.9	3.25	0.0697	0.04
Pond turtle						
Deirochelys reticularis	69	2	1.9	161.64	1.0583	0.6
Chicken turtle						
Colubridae	1	1	0.9	0.15	0.0020	tr
Snake						
Rana/Bufo spp.	1	1	0.9	0.02		
Frog/Toad						
UID Fish	394			106.87	1.5786	0.9

Table 3. Continued.

	CT	MNI		WT,GM	BIOMASS	
		#	%		KG	%
Lepisosteus spp.	33	1	0.9	5.17	0.1117	0.06
Gar						
Opisthonema oglinum	1	1	0.9	0.02	0.0156	0.01
Thread herring						
Ictalurus spp.	1	1	0.9	0.77	0.0012	tr
Bullhead catfish						
Ariidae	1			0.20	0.0043	tr
Sea catfish						
Ariopsis felis	3	2	1.9	1.14	0.0234	0.01
Hardhead catfish						
Bagre marinus	5	1	0.9	5.32	0.0976	0.06
Gafftopsail catfish						
Centropristis spp.	1	1	0.9	0.49	0.0152	0.01
Sea bass						
Centropristis philadelphica	2	1	0.9	3.80	0.0834	0.05
Rock sea bass						
Centropristis striata	1	1	0.9	0.06	0.0027	tr
Black sea bass						

Table 3. Continued.

	CT	MNI		WT,GM	BIOMASS	
		#	%		KG	%
Mycteroperca microlepis	3	3	2.8	7.41	0.1535	0.09
Gag						
Pomatomus saltatrix	2	1	0.9	0.67	0.0198	0.01
Bluefish						
Sparidae	1	1	0.9	0.24	0.0043	tr
Porgies						
Archosargus probatocephalus	1	1	0.9	0.70	0.0114	0.01
Sheepshead						
Cynoscion spp.	10	1	0.9	4.58	0.1200	0.07
Seatrout						
Micropogonias undulatus	1	1	0.9	0.66	0.0286	0.02
Croaker						
Sciaenops ocellatus	3	3	2.8	1.18	0.0530	0.03
Red drum						
UID Bone	821	---		93.49	--------	
TOTALS	7067	106		12607.95	173.0639	

Table 4. Charleston Place '85: Summary of Species List.

Summary Group	MNI		Biomass	
	#	%	KG	%
Domestic Mammals	22	20.8	59.6302	80.3
Domestic Birds	19	17.9	1.9532	2.6
Wild Mammals	4	3.8	0.9204	1.2
Wild Birds	21	19.8	1.8536	2.5
Aquatic Reptiles	5	4.7	2.2407	3.0
Fish	20	18.9	0.7414	1.0
Commensal Taxa	15	14.2	6.9311	9.3
TOTALS	106		74.2706	

Table 7. Charleston Place '85: Number of Elements Identified for Selected Age Categories.

PIG	
Less than 2 years of age	2
At least 2 years of age	2
Less than 3 years of age	13
3 years of age or older	4
TOTAL	21
COW	
Less than 1.5 years of age	1
At least 1.5 years of age	7
Less than 3 years of age	13
3.5 years of age or older	--
TOTAL	21
CAPRINE	
Less than 1.5 years of age	1
At least 1.5 years of age	
Less than 3 years of age	10
3.5 years of age or older	1
TOTAL	12

Table 5. Charleston Place '85: Elements Identitifed.

Element Groups	Horse	Pig	Deer	Cow	Caprine
Head	42	42		56	6
Forequarters	5	10		21	10
Forefeet				1	1
Feet	12	11	3	27	9
Hindquarters	1	12	4	10	10
Hindfeet		1		1	
Vertebra	1	7		9	5
Ribs	1	--	-	10	10
TOTALS	62	83	7	135	51

Table 6. Charleston Place '85: Modifications Observed.

Taxon	Cut	Burned	Hacked	Sliced	Sawed	Rodent Gnawed	Dog Gnawed
UID Mammal	41	86			3	18	3
UID Lg Mammal	52	31	10	21	30	7	4
Horse	3		3				2
Artiodactyl	2	13		2	7	1	1
Pig	4				5	4	
Deer	1						
Cow	8	1	7	2	14	4	
Caprine	8		1	2	4	1	
UID Bird	1						
Scaup	1						
Canada goose	3					3	
Chicken	18			2		19	
Turkey	12						
UID Turtle	4	2	1				
UID Fish	---	3	--	--	--	--	---
TOTALS	158	136	22	29	63	57	10

Table 9. Charleston Place Summary.

Summary Group	MNI		Biomass	
	#	%	KG	%
Domestic Mammals	85	29.4	202.5002	84.7
Domestic Bird	59	20.4	6.1552	2.6
Wild Mammals	23	8.0	9.2784	3.9
Wild Birds	28	9.7	2.8236	1.2
Aquatic Reptiles	14	4.8	7.7007	3.2
Fishes	40	13.8	1.0962	0.5
Commensal Taxa	40	13.8	9.4311	4.0
TOTALS	289		238.9854	

Table 8: Charleston Place '85: Measurements.

Taxon	Element	Dimension	Measurement, mm
Eguus caballus	Radius	BFd	62.3
		Bd	77.4
	1st Phalanx	Bp	50.15
		SD	32.25
		Bd	42.5
		GL	81.8
		BFp	46.9
		Dp	34.7
	2nd Phalanx	Bp	49.6
		Dp	30.9
		BFp	43.75
		GL	44.0
		SD	42.5
		Bp	47.65
Sus scrofa	Humerus	BT	26.9,30.3
		Bd	38.5,40.8
	Radius	BFp	25.25
	Tibia	Bp	29.4
		Dd	25.5
		Bd	26.3

Table 8: Continued.

Taxon	Element	Dimension	Measurement, mm
Sus scrofa	2nd Phalanx	Bp	9.4
		SD	8.5
		Bd	8.3
Bos taurus	Humerus	Bd	890.0
	Metacarpal	Bp	47.9,52.2
		Bd	52.2
		SD	32.5
		GL	176.0
	Patella	GL	76.0
	1st Phalanx	Bp	28.0
		Bd	26.1
	2nd Phalanx	Dp	34.0,32.6
		GL	45.6,42.8
		SD	26.7
		Bp	34.0,29.2
		Bd	29.0,24.8
	3rd Phalanx	Ld	63.0,62.0,61.3
		MBS	24.9,28.7
		DLS	80.1,77.0,78.3

Table 8: Continued.

Taxon	Element	Dimension	Measurement, mm
Caprine	Humerus	BT	32.9,31.2
		Bd	34.3,33.2
	Radius	BFp	30.85
		BP	33.7
	Femur	head width	24.0
	1st Phalanx	Bp	15.5,10.6
		Bd	14.3,8.5
		GL	38.7,23.0
Anas spp.	Ulna	GL	49.0
		Bp	6.8
		Dip	9.1
		Did	5.9
Anas platyranchus	Coracoid	BF	20.2,21.6
		Bb	23.4,22.4
Aythya spp.	Coracoid	BF	21.3
		Lm	54.3
		GL	59.2
		Bp	25.0
Aythya affinis	Ulna	Did	9.6
	Carpometacarpus	GL	34.0
		Did	4.9

Table 8: Continued.

Taxon	Element	Dimension	Measurement, mm
Branta canadensis	Humerus	Bp	22.7
	Ulna	Did	8.0
	Tarsometarsus	Bd	11.2
Phasianus colchicus	Coracoid	BF	10.6
Gallus gallus	Scapula	Dic	11.3
	Coracoid	BF	10.6,10.3,10.9,10.8
			11.5
		Lm	51.2,50.2,50.5,50.7
			51.2
		GL	52.8,53.9,53.5,53.8
		Bb	14.3
	Humerus	Bd	14.3,13.5,16.7,14.1,
			15.2,15.4
		Bp	14.4,17.4,20.5,24.5
		GL	65.1,72.6
		SC	6.5,6.8,8.7
	Ulna	Bp	8.45
		Dip	10.4
		GL	54.2
		Did	7.2,8.5

Table 8: Continued.

Taxon	Element	Dimension	Measurement, mm
Gallus gallus	Carpometacarpus	Bp	11.4,12.0,11.5,11.2,
			12.1,10.7
		GL	36.7,37.9,37.4,37.5
			36.9
		Did	6.9,7.5,7.2,10.5
	Femur	Bp	14.4,15.1
		Dp	10.4,9.4
		Bd	15.2
		Dd	12.4
		LM	60.1
		GL	65.8
	Tibiotarsus	Bd	10.3,10.1
		Dd	11.7,9.95
	Tarsometatarsus	Bd	13.3,12.9
		Bp	12.2,12.8,12.9,13.3
Meleagris gallopavo	Coracoid	GL	75.3,96.5
		Lm	69.0,90.5
		BF	17.5
	Carpometacarpus	Did	12.6,12.6

Table 8: Continued.

Taxon	Element	Dimension	Measurement, mm
Meleagris gallopavo	Femur	Bd	18.2
		Dd	14.4
	Tibiotarsus	Bd	18.5
		Dd	18.9
Columba livia	Coracoid	Lm	31.5
		GL	33.5
		BF	9.7
		Bb	13.8
Sciaenops ocellatus	Atlas	width	4.2

Appendix A. Charleston Place '85: Provinience List.

FS	LEVEL	FS	LEVEL
FEATURE 145		FEATURE 150	
6		23	1
7	1	24	2
9	2	25	3
10	3	26	troweling
11	4	27	profile
12	5	FEATURE 153	
13	6	34	N 1/2
14	profile	35	S 1/2 profile
FEATURE 147		FEATURE 155	
5		37	
FEATURE 149		FEATURE 156	
15	Zone 1	38	
16	Zones 1/2		
17	Zone 2		
18	Zone 3		
19	Zone 4		
21	troweling		

APPENDIX II

ETHNOBOTANICAL ANALYSIS OF SAMPLES FROM THE CHARLESTON PLACE SITE, CITY OF CHARLESTON, SOUTH CAROLINA

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Introduction

The Charleston Place site, situated on the city block bounded by Hasell Street to the north, Meeting Street to the east, Market Street to the south, and King Street to the west in downtown Charleston, has been subjected to a series of archaeological studies beginning in 1978 as a result of federal historic preservation compliance procedures. An initial reconnaissance survey was conducted by Cosans and Henry (1978) and a documentary study was prepared by The Charleston Museum (Herold and Thomas 1981). The first extensive archaeology was conducted in 1981 by Honerkamp et al. (1982) at which time 2690 square feet of the site area were investigated (a 1.4% sample). Both Cosans and Henry (1978) and Honerkamp et al. (1982) emphasized the importance of privy features to providing sealed, datable archaeological contexts. Additional work was conducted at the site by The Charleston Museum, under the direction of Herold and later, in 1985, under the direction of Zierden. This work examined an additional 1000 square feet of the site (or 0.5% of the site area). This present study examines ethnobotanical materials collected by The Charleston Museum during its two seasons of investigations.

As a result of this previous work, the Charleston Place block is clearly the most thoroughly studied archaeological site in the city of Charleston, although the employed techniques have not been completely consistent and several problems have plagued the historical documentary studies (see Zierden et al. 1986 for a more complete discussion). The most significant limiting factors, as far at this ethnobotanical study is concerned, are (1) the failure of Honerkamp et al. (1982) to collect ethnobotanical samples from their original work, (2) the failure of The Charleston Museum excavations by Herold to routinely collect ethnobotanical samples (several features were sampled by Zierden, but no consistent program or collection procedures were used by Herold), (3) the failure to identify features having a high probability of yielding well preserved ethnobotanical remains during the 1985 studies, and (4) the inability to correlate the archaeological remains with identifiable households or families. These factors have worked to reduce the materials available for study and severely limit the conclusions which may be drawn from the available data.

Some historical archaeologists suggest that when faced with the inability to correlate archaeological reamins with identifiable households or families it is appropriate to "salvage" the data by considering it to represent the "average" of human behavior which took place at the site or in the neighborhood. This approach does have the attractive feature of allowing the study and use of thoroughly mixed proveniences, which would otherwise be difficult or impossible to interpret, although the conception of what this average represents is likely to be rather vague or ambiguous. While it is likely that the "average" most often represents the archaeological "mean" rather than the "median", this can be affected by the preservation of archaeological remains,

archaeological sampling techniques, and the social, cultural, and economic homogeneity of the neighborhood both temporally and spatially. While the archaeological "averaging" of complex sites and their data may be used to order the complexity of reality, it may present vastly different views of that reality, depending on how the technique is used. Consequently, the "averaging" concept is reduced in usefulness if we are uncertain what is being averaged and how the average is being derived.

The Charleston Museum research at the Charleston Place site examined four topics: spatial patterning of the remains, artifact patterning and site function, socioeconomic status of the block's residents, and evidence of subsistence strategies. A well designed and carefully implemented ethnobotanical study could possibly contribute to each of these research themes, albeit with varying intensity and accuracy. For example, examination of the spatial arrangement of ethnobotanical remains (including structural wood, fuel wood, and food remains) could contribute to a better understanding of the changes which took place in the block's structural and functional composition over time. Charcoal, as an artifact of human activities, may be expected to reveal information on site function through time and space. Ethnobotanical remains, such as plant folds and possibly even fuels, may be socioeconomically sensitive. Clearly, ethnobotanical remains may contribute to a more complete understanding of the historic diet (Reitz and Scarry 1985; Smith 1985; Zierden and Trinkley 1984). Unfortunately, prior to the 1985 season, the collection of ethnobotanical data and its integration into the research design were not pursued. While soil samples were collected in 1985 specifically for flotation, few features capable of making major contributions to ethnobotanical research were encountered. As a result, this study is able to offer only tentative suggestions regarding subsistence, site function, and evidence of status.

In addition to the problems specific to the Charleston Place site which have limited research, there are certain limitations inherent in the ethnobotanical record. First, it is primarily the durable, inedible portions of plant foods (the plant food remains) which are available for study. Second, the availability of plant food remains for study will depend on food preparation techniques, disposal patterns, site preservation, and the efficacity of the archaeological collection techniques. Third, the quantity of plant food remains and the types present bear no clear relationship to their dietary contribution. Succinctly stated, not all plant foods will be represented in the archaeological record and those present will not necessarily reflect their actual popularity in the diet. For example, foods such as potatoes or onions, because they have no durable remains and because of their normal preparation, are rarely found at archaeological sites. Further, the frequency of durable seeds must be cautiously interpreted, both in terms of popularity (a peach has a single seed, while a grape may have from two to six seeds and a raspberry may have 100 seeds) and dietary contribution.

Previous work in Charleston has resulted in the examination of ethnobotanical remains from six sites which span the eighteenth and nineteenth centuries: McCrady's Tavern (Trinkley 1982), First Trident (Trinkley 1983a), Lodge Alley/38 State Street (Trinkley 1983b), the Beef Market (Trinkley in Calhoun et al. 1984), the Aiken-Rhett house (Trinkley 1986a), and the Gibbes House (Trinkley

1986b). This work has examined 39 flotation samples from a variety of archaeological strata and features, but none from privy contexts. Wood charcoal from these sites ranged from 55.6 to 100% of the float samples. Evidence of subsistence activities has been difficult to identify in these previous studies and plant food remains have been limited to corn (Zea mays), grape (Vitis sp.), peach (Prunus persica), hickory nut (Carya Sp.), walnut (Juglans sp), and possibly acorn (Quercus sp.). Some evidence of site environs has been provided by "weed" seeds from the Brassicaceae, Poaceae, and Fabaceae families, as well as vetch (Vicia sp.), wildbean (Strophostyles helvola), and Paspalum (Paspalum sp.).

Identification of wood charcoal has revealed that while pine (Pinus spp.) was the most common fuel wood during both the eighteenth and nineteenth centuries, other woods being burned included oak (Quercus spp.), hickory (Carya spp.), maple (Acer sp.), elm (Ulmus sp.), cedar (Juniperus virginiana), and ash (Fraxinus sp.). Very small amounts of tupelo (Nyssa sp.), river birch (Betula nigra), gum (Liquidambar sp.), persimmon (Diospyros virginiana), walnut (Juglans sp), and willow (Salix sp.) have also been found in Charleston samples. It is not surprising that wood species diversity in the archaeological record decreases from the eighteenth into the nineteenth century; Weir remarks that:

> hauled in from a distance, fuel was becoming increasingly expensive in Charles Town by the end of the Colonial period. Some residents therefore burned imported coal, and many complained about the price of wood (Weir 1983:44).

Very small quantities of coal have been found in Charleston deposits dating to the 1720s, although it does not become common until the late eighteenth or early nineteenth century. Reese, in the mid-nineteenth century, remarked that:

> wood consumes quickly, and requres often renewing; on this account it is expensive, and the labor necessary to prepare it is also very considerable. . . . Coal's superiority over every other combustible, for domestic as well as many other purposes, is now generally acknowledged (Reese 1847:116-119).

In fact, in Britain by the mid-nineteenth century only the poorer classes continued to use wood and the archaeological samples from Charleston clearly reveal the popularity of coal among wealthy Charlestonians. Coal functioned not only for heating (Reese 1847:93-98), but also for cooking when used with a stove (Reese 1847:808-820). Coal, however, required the use of wood kindling, so that even if both heating and cooking were primarily through the use of coal, wood remained essential (Reese 1847:120). By the mid-nineteenth century there were at least three Charleston coal yards, including H.F. Baker at 173 East Bay, J.S. Ryan at the corner of East Bay and Fitzsimon's Wharf, and P.W. Knapp at Cumberland near Church Street. Prices ranged from $6 to $7 per ton and both caking or bituminous and anthracite coals were available.

Procedures and Results

During the 1985 excavations at the Charleston Place site personnel of The Charleston Museum handpicked charcoal from the excavation units and the 1/4 inch dry screening. A series of 23 such samples were collected and submitted for analysis. These samples represent primarily fuel or structural woods, both carbonized and noncarbonized, many pieces of which were large enough to allow identification. These handpicked samples were examined under low magnification (7 to 30x) with the larger fragments of wood charcoal, where possible, identified to the genus level, using Chicora Foundation comparative collections, Panshin and de Zeeuw (1970), and Koehler (1917). Wood charcoal samples were broken in half to expose a fresh transverse surface. The results of this analysis are shown in Table 1, which is organized by provenience.

Wood species diversity is quite low, as was expected from the largely nineteenth century collection (only Feature 145 represents a pre-nineteenth century deposit). Pine, present in all 23 samples, is dominant in 86.9% (N=20). Other wood species include only oak, maple, and hickory, in order of declining abundance. Coal is found in 14 of the 23 samples (60.9%) and has probably been selected against in the collection process. A single provenience (Feature 153), an early nineteenth century privy, produced a single noncarbonized grape seed in the trowelings. Two samples, from Features 147 and 155, have yielded large quantities of both carbonized and noncarbonized pine wood. Zierden and Haćker (this volume) have interpreted these to represent either "natural traps) which collected refuse or architectural remains or foundations, although in either case they apparently provide "tangible evidence of the major fires which impacted the block in the 1830s".

This conclusion is supported by the ethnobotanical data as both samples clearly represent burned structural remains. In spite of the periodic fires that ravaged Charleston and colonial ordinances which required fireproof construction, many structures, particularly smaller buildings, continued to be built of wood, even into the early nineteenth century. Colonial residents frequently complained of the costs associated with brick construction (Hollings 1978:38-39). Pine was the primary wood used in this construction because of its abundance, strength, and ease of working.

In addition to the handpicked samples, a series of 19 flotation samples were submitted. These samples, collected from features excavated by Herold and Zierden, were floated by Charleston Museum personnel using a simple system where the dried feature soil is gradually added to a large tub of water. The water is stirred and a scoop is used to collect material floating to the surface. The recovery rate of this system has not been tested, although it has been consistently used in the discussed City of Charleston research. Smith notes that this technique results "in the mechanical breakage of some of the charcoal" (Smith 1985:108).

Of the 19 float samples submitted, which represents 12 features, time and budgetary constraints allowed the investigation of 10 samples from eight features, selected by Zierden on the basis of associated artifacts and archaeological context. All of the collections date to the nineteenth century and, for the first time, eight privy features were available for investigation.

		Pinus sp.	Quercus sp.	Acer sp.	Carya sp.	UID wood	Coal	Seeds
Feature 145,	lv 1	p	t	t			+	
	lv 2	+	t			t	t	
	lv 3	+	t				t	
	lv 4	+	t			t	t	
	lv 5	+	t				t	
	lv 6	+	t			t		
	profile	+					t	
Feature 147		+						
Feature 148,	zn 1	+						
	zn 2	+						
	zn 3	+					t	
Feature 149,	zn 1	+	t	t			t	
	zn 2	+		t				
	zn 1/2	+	t				t	
	zn 3	p	+		t	t		
	zn 4	+	t	t	t			
Feature 150,	lv 1	+	p				t	
	lv 2	+	t				t	
	trow	p					p	
Feature 153,	N½	+		t		t	t	1 Vitis
	S½	+		t				
Feature 155		+						
Feature 156		+			t		t	

+ = abundant; p = present; t = trace

Table 1. Analysis of handpicked charcoal samples

The remaining two flotation samples, Feature 132 and Feature 149, represent a shallow refuse filled pit of indeterminate function and a natural "refuse trap" adjacent to a brick foundation, respectively. These samples are contexturally and functionally similar to previously investigated Charleston collections which have yielded few subsistence remains.

The flotation samples were prepared in a manner similar to that described by Yarnell (1974:113-114) and were examined under low magnification (7 to 30x) to identify plant foods and plant food remains. Remains were identified on the basis of gross morphological features and seed identification relied on Martin and Barkley (1961), Montgomery (1977), and Schopmeyer (1974). The results are provided in Table 2.

It may be observed that the privy features yield larger quantities of seeds than the natural depressions or pits. This observation may explain why previous ethnobotanicas studies in Charleston have produced so few results. Privies apparently served as convenient recepticles for the disposal of large quantities of floral remains. It has been observed that seeds from the processing of fruit preserves and jellies were discarded in privies (The Cultural Resource Group 1985:240) and smaller quantities were probably disposed of as normal kitchen refuse. In addition, a number of seeds with hard, impermeable seedcoats may pass through the digestive system relatively intact and will be found in privy contexts as a result of defecation. These seeds, while noncarbonized, are preserved because of the moist, sealed context; the addition of lime to the privy may actually assist in seed preservation by dissuading insect and fungal attack.

Recovered seeds include fleshy fruits, vegetable, and "weedy" plants. The former two categories probably represent the byproducts of subsistence activities, while the latter category provides some evidence of the "micro-environmental setting surrounding the outhouse" (The Cultural Resource Group 1985:244). Fruits evidenced by the Charleston Place samples include raspberry (Rubus sp.), strawberry (Fragaria sp.), elderberry (Sambucus sp.), blueberry (Viccinium sp.), cherry (Prunus sp.), pear (Pyrus communis), and grape. The single vegetable is the bean (Phaseolus vulgaris). Weedy plants are evidenced by seeds of bedstraw (Galium sp.), chenopod (Chenopodium sp.), maypops (Passiflora incarnata), violet (Viola sp.), knotweed (Polgonum sp.), and an unidentified grass (Gramineae)(Table 3).

Discussion

The woods discovered in the Charleston Place collection are similar to those previously identified from Charleston sites. Species diversity is low, probably reflecting the depletion of forest resources in the vicinity of the town. The most common wood from these collections is pine, which may indicate a preference for this species, or more likely, that there were large areas of second growth pine in the Charleston area by the nineteenth century. Two other recovered woods, oak and hickory, may be found on either dry or moist soils, depending on the species, but the maple is most likely red maple (Acer rubrum) which is found in low, rich woods. Since red maple, because

Provenience	Amount Floated	Wood Charcoal wt	Wood Charcoal %	Uncarb Organic wt	Uncarb Organic %	Other wt	Other %	Small Bone wt	Small Bone %	Seeds wt	Seeds %	Total Weight
Privies												
Fea 100, in pot	2 gal.	11.83	94.0	0.68	5.4	0.05	0.4[a]			0.02	0.2	12.58
Fea 115, Lv E	4 gal.	6.31	51.4	0.13	1.1			5.56	45.6	0.27	2.2	12.27
Fea 124	2 gal.	7.07	92.7	0.25	3.3			0.27	3.5	0.04	0.5	7.63
Fea 130, Lv 2	6 gal.	8.58	85.6	1.00	10.0	0.12	1.2[b]	0.24	2.4	0.08	0.8	10.02
Lv 3	?	1.29	87.8	0.07	4.7					0.11	7.5	1.47
Fea 139	2 gal.	9.22	87.8	0.71	6.8			0.30	2.8	0.27	2.6	10.50
Fea 153, S½	15 gal.	20.06	97.1	0.51	2.5			0.05	0.2	0.03	0.1	20.65
N½	25 gal.	16.41	94.6	0.34	2.0			0.58	3.3	0.02	0.1	17.35
Pits												
Fea 132	2 gal.	6.58	98.4	0.07	1.0			0.04	0.6			6.69
Fea 149, Zn 2	15 gal.	15.93	99.3	0.09	0.5			0.03	0.2	t	t	16.05

[a]shell [b]glass, carbonized twine

t = trace (less than 0.01 g)

Table 2. Flotation sample components, weight in grams.

	Raspberry	Strawberry	Elderberry	Blueberry	Cherry	Pear	Grape	Bean	Bedstraw	Chenopod	Maypops	Violet	Gramineae	Polygonum	UID	Total Weight (in grams)
Fea 100, in pot	1	41							24						2	0.02
Fea 115, Lv E	145	20			~	1	15				1				3	0.27
Fea 124	7	19									1				1	0.04
Fea 130, Lv 2	9	58	4		1								1		2	0.08
Lv 3	5	91					2								3	0.11
Fea 139	4	6		1				3							6	0.27
Fea 153, S½	1	10							7	1		1			3	0.03
N½	2	5	3							1				1	1	0.02
Fea 149, Zn 2															2	trace

Table 3. Seeds recovered from flotation samples.

of its poor heat yield, is unlikely to have been intentionally sought as a fuel wood (Graves 1919:29), its use in the early nineteenth century may provide evidence of the clearing of lowlying land for the planting of sea island cotton on plantations near Charleston.

All of the fruits recovered from the Charleston Place site could have been grown locally; the absence of exotic, or imported, fruits may provide an indication of the middling status of the Charleston Place block in the nineteenth century, or it may simply be a result of the small sample size.

While it is not possible, based on the ethnobotanical record, to suggest the use of most of the fruit specimens in these samples, historically fruits were used to produce wines and cordials; jams, marmalades, and jellies; and vinegar. Fruit was preserved by boiling or being candied and considerable quantities were eaten fresh (Reese 1847: 629-646, 668-669, 792, 776-780). Reese states that:

> no class of substances employed as food varies more in their dietetic qualities than fruit, which, though extremely salubrious when used judiciously, are frequently injurious, particularly to the invlaid. It is essential, in order to have a just view of this subject, to discriminate accurately between different species, the state of ripeness, the time and circumstances under which the fruit is eaten, as well as the constitution of the consumer. There are three modes in which fruits may be used as food: in a crude state, dried, or prepared by the art of cooking (Reese 1847:497).

Culpepper in the early nineteenth century also discusses the medicinal properties of fruits such as pears, strawberries, cherries, and blueberries, assigning to them certain curative powers (Culpepper 1981).

Raspberries, if locally grown, were a popular fresh fruit. They were also:

> much used in tarts, and jams, ices, &c., delicious wine, . . . raspberry brandy and raspberry vinegar (Reese 1847:514).

Strawberries were considered "nutritious, and very wholesome, and (might be) safely eaten by gouty and rheumatic patients who have been forbidden the use of other fruit" (Reese 1847:514). Elderberry was used extensively for the production of wine (Reese 1847:515), while the blueberry was seldom cultivated, but was used in tarts or made into jellies (Reese 1847:515). Reese comments that "next to the pineapple, grapes . . . have always been considered the most delicious fruit for dessert" (Reese 1847:506) and the grap was considered especially nutritious. Reese (1847:507) recommended grapes be eaten with bread as a working class breakfast. Cherries were a favorite fruit, being used for pies and tarts, and to produce brand and wine (called Kirschevasser)(Reese 1847:502). By the mid-nineteenth century there were over 150 varieties of pears and they were considered a good "table fruit"(Reese 1847:499).

The only vegetable specimens identified in the Charleston Place collections are three examples of kidney beans, all of which are carbonized. Beans were considered to be very nutritious and were almost exclusively boiled as a separate dish by nineteenth century cooks (Reese 1847:478,895). While French beans (i.e., green beans) were preserved by pickling, kidney beans were usually preserved by drying, usually by being "spread upon the floor of an oven or kiln" (Reese 1847:792). It is possible that during this drying process the recovered beans were carbonized.

The last category, that of "weedy" plants, includes species which are not likely to have been subsistence related, but which probably represent accidental inclusions in the feature fill. They are likely to be indicative of the micro-environment of the yards around the block's structures. Bedstraw, which fruits from April through August, may be found in wet areas, in clearings. and in waste-places (Radford et al. 1968:984). Maypop, a herbaceous climbing and trailing vine, is common to open fields and produces a fleshy fruit from July to October (Radford et al. 1968:734). Both knotweed and chenopod, annual or perennial herbs found in disturbed habitats and on rich soils, fruit from June until the first frost (Radford et al. 1968:407-409,418). The violet is a perennial or annual herb which may fruit from March through June. A variety of species are found wild and pansies were a common nineteenth century bedding plant (Favretti and Favretti 1978:164). The plants are found in disturbed habitats on moist soils.

The Cultural Resource Group (1985:244) has suggested that the low recovery of species such as polygonum in urban privy contexts is evidence that "human intervention" has removed these nuisance plants from the yard. Given the low occurrence of fruit seeds in the privy samples, in spite of the abundance of fruit in the nineteenth century diets, it seems unreasonable to equate the rarity of weed seeds from a closed or sheltered privy context with the presence of human intervention. While it may be reasonable to assume that some attempt was made to periodically cut down weeds in order to reduce the rodent and reptile populations, the presence of _any_ "weed" seeds in ethnobotanical collections from privies suggests that the rear yards were frequently overgrown and unkempt, not unlike many of the commercial areas of the city today.

Summary

The Charleston Place ethnobotanical collection provided samples from privy contexts, as well as open feature samples similar to those previously studied from Charleston. The privy samples have yielded subsistence information lacking from previous investigations. Fleshy fruits are abundant, with seven genera being represented. Previous Charleston investigations have documented the use on an eighth species (the peach). The Charleston Place flotation samples have yielded only one vegetable -- beans -- although previous work has identified evidence of corn and wheat (_Triticum aestivum_). Unpublished research from the waterlogged proveniences at the Atlantic Wharf site in Charleston has also documented the use of the watermelon (_Citrullus vulgaris_), squash (_Cucurbita_ spp.), and peanuts (_Arachis hypogaea_). Finally, a variety of nuts, including hickory, walnut, and acorn, have been found in various

features, although none suggest extensive use in the nineteenth century. The work conducted to date reveals that privy and waterlogged features are more likely to yield significant subsistence data than are open features, such as pits or zone proveniences.

The ethnobotanical remains from the Charleston Place site have failed to yield specialized remains such as found at the craft-related commercial 38 State Street site. The Charleston Place collection appears relatively domestic, although the privy samples do not reveal evidence of the large scale food processing activities which might be expected at "intensive" domestic sites. This observation, however, must be offered with caution, based on the small samples available for study.

These investigations have revealed evidence of exclusively structural remains in several features, assisting feature interpretation. The work has also provided some information on the use of coal and wood, supporting previously gathered evidence that not only does species diversity decline in the nineteenth century, but also that wood as a fuel is gradually replaced by coal in the first half of the century.

Status in the ethnobotanical record may be indicated by the presence or absence of certain high status foods such as the cantaloupe (The Cultural Resource Group 1985:240) and possibly wheat (Trinkley 1986b). While the types of fuel woods being burned seem to be related more clearly to availability than status, it is likely that the use of coal in the late eighteenth and early nineteenth centuries was largely confined to the wealthy. The absence of exotic foods in the Charleston Place collection, while quite possibly related to sample size, may be indicative of the middle class neighborhood. Likewise, coal (while almost certainly underrepresented) does not appear as common in the middle status commercial-residential Charleston Place neighborhood as at sites such as the high status Gibbes residence in the more wealthy residential section of Charleston.

The Charleston Place site underscores the necessity for ethnobotanical studies to be integrated into the research designs of historic sites. Features offer better sources of plant foods than midden and non-midden proveniences, but privies and waterlogged deposits seem to offer the best opportunities for the recovery of subsistence data. The extremely variable quantities of charcoal per volume of soil (3.07 grams of charcoal per gallon of soil in Feature 115 compared to 0.69 gram of charcoal per gallon of soil in Feature 153) also suggest that rather than collecting standardized soil sample volumes for subsequent flotation, all samples should be processed in the field to ensure adequate ethnobotanical recovery rates.

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APPENDIX III

FAUNAL REMAINS FROM THE CHARLESTON CENTER PROJECT

by

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A total of 6236 faunal elements, comprising approximately 310 individual animals, were recovered from eight historic privies excavated during the Charleston Center project. The privies date in time from around the late 1790s to the 1890s, and are associated with domestic facilities (features 130 and 132), a hotel (feature 124), a possible tavern (feature 115), a liquor store (feature 100) plus a few indeterminate locations (features 104, 129, 139). Techniques used to recover the faunal remains included trowel sorting and dry screening through ¼ inch mesh and window screen sized mesh. All remains were classified to the lowest possible taxonomic level by means of comparison to modern specimens from the zooarchaeological collections located at the Anthropology Department of The University of Tennessee, Knoxville.

The diversity in ages and associations of the Charleston Center features enables that only a broad comparison can be made between the recovered faunal remains. In this report, the periods in time when the remains were deposited will be ignored. Furthermore, each feature will be considered isolated from the rest, implying (possibly unrealistically) that no mixing of remains from the different locations occurred. With such an approach, it is believed that at least a relative idea of the differences between faunal remains recovered from "domestic" features to those recovered from "public" features can be presented.

In general, the recovered faunal remains are predominantly from cow, pigs, sheep, goats, domestic chickens, turkeys, and ducks (see Table 1). More specifically, approximately 76% of the mammal remains identified were from cows or pigs while chickens comprised close to 83% of the total recovered bird remains. Other remains identified were from guinea fowl, geese, dogs, cats, mice, rats, turtles as well as several species of marine fish and shellfish. Some elements from native species such as white-tailed deer, squirrel and opossum were also recovered.

As implied above, most features contained elements from large domestic mammals and birds. Upon comparison of the faunal remains recovered from features linked with domestic facilities to those recovered from features associated with public facilities, several distinctions can be made. For example, deer remains were recovered from features 132 and 130, and both are associated with domestic facilities. Deer remains were also recovered from features 124 and 115, both possibly associated with public facilities. This suggests that deer were used or at least deposited somewhat equally between feature locations.

Turning to small game animals, only 1 squirrel element, a left tibia, was recovered from feature 132. The remaining squirrel elements, some large enough to be fox squirrel, were recovered from feature 115. Similarly, the only remains identified as opossum were recovered from feature 115. In all, close to 66% of the wild animal remains were recovered from this feature. Possibly more wild animals, particularly small species, were used at public places than at domestic ones. On the other hand, feature 115 taken as a whole contained approximately 58% of all animal remains recovered from the features. Species that have a low frequency of occurrence in small samples of animal

remains would tend to be proportionately represented by greater numbers in a larger sample of remains. Therefore, it is quite possible that the amount of wild animal remains from feature 115 may be the product of a large sample size and not necessarily a result of the differential use of endemic animal species.

Another contrast between animal remains from the features can be seen in the distribution of dog, cat, mice and rat remains. Dog and cat elements were recovered from both features associated with domestic facilities. Although several elements of dog were recovered from feature 104 (association unknown), only a single right mandible from an immature dog was recovered from a feature associated with a public area (feature 124). Cat remains, though infrequent in number, were recovered from feature 115 in close to the same proportions as cat remains recovered from the "domestic" features.

Some elements of rats were recovered from feature 130, however, approximately 83% of the total recovered rat remains were from features associated with public areas or from those with unknown associations. Surprisingly, no mice remains were recovered from features associated with domestic facilities. Since vermin rodent speices typically invest food supplies, it is possible that the greater number of remains from privies associated with public places resulted from a larger rat and mice population which might have occurred at locations where large amounts of food were stored such as at taverns and hotels. It is also possible that the greater number of people that occurred at public places than at domestic areas could have resulted in more rodent pests being killed and disposed of into the nearest privy. Vermin rodent remains from features associated with public facilities usually lacking in stored food supports such an explanation. Interestingly, feature 100 which is associated with a liquor store, contained at least 3 individual rats, the most recovered from a feature.

The frequency of domestic animal remains from both classes of features clearly reveals the common use of cows and pigs. Sheep and goat remains were also frequently recovered but based on the minimum number of individuals, were outnumbered close to 4 to 1 by cows and pigs. Examining the amount of large animal remains indicates that "domestic" features collectively contained more individual cows than "public" features but only if remains from feature 115 were mixed. If, on the other hand, remains from these levels are indeed isolated, feature 115 would contain the greatest amount of cows. The frequency of occurrence for recovered pig remains is similarly proportioned. In contrast, although not surprising, is feature 100. This feature contained few remains from large domestic animals or any other species of domestic animal, most likely because it is associated with a liquor store at which few animal species would be used. Interestingly, a larger minimum number of individual cows were recovered from feature 132 than from feature 130. However, more individual pigs were recovered from feature 130 than from 132. Possibly, this difference resulted from changes in the domestic use and importance of these animals.

Although no definitive butchering pattern was identified from pig and cow remains recovered, saw cut and marked bones reveal a number of interesting contrasts. For example, the greatest number of cow mandibles were recovered from feature 132. Unlike most cow mandibles from other features, these

exhibited cut marks (saw?/knife?) mostly on the medial side of the gonial angle and on the mandibular condyles. Such a butchering pattern suggests that attempts were made to remove the tongue. Another feature contrasted as revealed through butchering marks, was the distribution of large animal elements saw cut in sections approximately ¼ inch to 3 inches wide. These bones most likely represent the remains of roasts, round steak cuts, or soup meals. Surprisingly, only features 115, 124, and 104 contained such remains. Although it may be possible that large cuts of meat and bone were not served near domestic locations, it is more probable that other factors such as the presence of dogs, prevented these remains from entering the archaeological record. The elements from cows and pigs generally noted to have saw cuts or marks are scapulas, innominates, vertebrae, and long bones, particularly the humerus and the femur. Proportions of saw cut bone range from approximately 10% in feature 100 to 43% in feature 104. No remains from feature 132, the earliest dated feature, were found to have saw cut marks. Only cut marks, apparently made by knives, were noted from this feature.

Finally, age determination for cows was complicated due to the fragmentary nature of maxillas and mandibles plus the frequent occurrence of isolated teeth. Generally few immature cow remains, based on the porous nature of the bones, were noted. Most remains were from adult/subadult individuals as based on the lack of unfused longbone epiphyses and the amount of wear on the teeth.

Similar aging complications were noted for pigs. However, based on the eruption state of the third mandibular molar, several individuals were between 17 and 22 months old. Also, a higher percentage of immature remains suggest that pigs were butchered at a younger age than cows.

As with cow and pig remains, chicken remains were also recovered from most of the features. Based on the frequency of recovered elements and the minimum number of individuals, feature 115 contained the greatest amount of chicken while feature 124 was second. Turkey remains likewise were recovered from most features. Their frequency of occurrence is strongly outnumbered by chicken at an approximate 8 to 1 ratio. Guinea fowl, in contrast, were recovered only from feature 115. Although the minimum number of individuals of this species is four, the number may be lower if mixing between levles D and E occurred. Bird remains identified to the order of Galliformes, for the most part, were from immature or juvenile individuals. The porous nature of these bones plus the lack of recognizable characteristics prevented their further identification. However, most of these remains are believed to be from chicken.

Elements from Galliformes, even if identified to a particular species, were commonly leg elements, in particular the tibiotarsus and the tarsometatarsus. Possibly, this reflects a pattern of butchering of chickens in which the lower leg bones were disarticulated and disposed of differently than the rest of the chicken carcasses.

The recovered remains of ducks and geese are generally from domestic species; however, elements from a mallard, a bufflehead, and, possibly, a snow goose were also present. Although duck remains are low in numbers,

they were recovered throughout most features. Remains of geese, in contrast, were recovered only from features 115 and 104. Such a pattern of geese remains is difficult to interpret since the association of feature 104 is unknown and feature 115 is questionably associated with a tavern. Nonetheless, the amounts of geese from feature 115 could possibly be a result of the larger sample of remains from this feature. It may, on the other hand, indicate that the geese were served at public places in greater numbers than at domestic places. Finally, the low amount of elements from perching birds and morning doves probably resulted from the natural deposition of these species into the feature.

Turning to aquatic resources, approximately 32% of all recovered remains were either from species of fish, reptiles, or invertebrates. This percentage is somewhat misleading due to the large amounts of bone contained in one fish. Nonetheless, there are a number of interesting contrasts between classes of features regarding aquatic animals. For example, only a few turtle elements, most likely from box or pond species, were recovered from feature 115 and 130. The scarcity of these remains suggests that little effort was directed to obtain turtles, if indeed they were culturally deposited. The fish elements recovered appear to be exclusively marine species of which the Common Sea Bass was the most frequently identified. A more exact species identification could not be obtained for some fish because of the limited amount of marine specimens in the zooarchaeological collection used. All features contained at least some elements of fish except feature 132. As with most classes of animals, feature 115 also contained the greatest amount of fish remains. Overall, public associated features contained proportionately more fish than domestic related features. Such a pattern suggests that fish were commonly served at public areas, such as a hotel or tavern in greater numbers than at domestic areas.

Finally, both molluscs and crustacea remains were recovered from several of the Charleston Center features. Feature 132 and 124 contained quahogs, oysters, and ark shell valves while one small indeterminate bivalve fragment was recovered from feature 100. It is interesting that no other remains from aquatic resources were recovered from feature 132 except the 1 quahog and 5 oyster shells identified. This pattern may be related to, for example, the early age of the feature, its general location to a body of water, or some other unforseen variable. Remains of marine crabs, one tentatively identified as a blue crab, were found in features 115 and 139. Although it could be possible that these crab remains are naturally deposited, it is believed that they represent, as do the mollusca shells, only minor supplements to the diet.

In conclusion, the faunal remains recovered from the Charleston Center project are diverse in the number of representative species. Domestic animals, mainly cows, pigs, and chicken comprised approximately 80% of all identifiable mammals and birds. Wild animal species were used, but only as a minor supplement to the diet. Aquatic resources, comprising mostly of marine fish, were also used most likely as a minor food supplement. Feature 100 contained few animal remains. This probably was due to its association with a liquor store. Only public associated features, mainly feature 115, were noted to have saw cut bone sections and a greater frequency of fish than domestic associated features. Reasons for this are most likely tied

to differences in the deposition of remains and the meals served at public locations compared to those served at domestic locations.

Table 1. Distribution of faunal remains from the Charleston Center Project.

Feature	*Bos taurus*, Cow	*Sus scrofa*, Pig	*Ovis aries*, Sheep	*Capra hirca*, Goat	*Ovis* sp./*Capra* sp., Sheep?/ Goat?	*Odocoileus virginianus*, Deer	Artiodactyla, Pig, Sheep, Goat, Deer	*Canis familiaris*, Dog	*Felis domesticus*, Cat	*Rattus* sp., Old World Rat	*Mus musculus*, House Mouse	*Sciurus* sp., Squirrel	*Sciurus* cf. *niger*, Fox Squirrel	*Didelphis marsupialis*, Opossum	Large Mammal, cf. Cow
139 (w.s.)	1(1)	-	-	-	-	-	-	-	-	-	5(1)	-	-	-	1
132	183(7)	16(3)	-	-	3(2)	2(1)	13	-	2(1)	-	-	1(1)	-	-	101
130, levels 2 & 3	158(2)	54(9)	8(2)	6(2)	10	4(2)	20	10(1)	1(1)	12(2)	-	-	-	-	42
129 (w.s.)	-	-	-	-	-	-	-	-	-	-	1(1)	-	-	-	1
124, excavated	34(3)	6(2)	-	-	4(1)	2(1)	3	-	-	8(2)	2(1)	-	-	-	7
124, collected	51(4)	4(1)	-	-	3(1)	-	4	1(1)	-	-	-	-	-	-	-
115, level A	8(1)	1(1)	-	-	-	8(2)	-	-	-	-	-	-	-	-	-
115, level B	36(2)	5(2)	-	-	3(1)	-	-	-	-	-	-	-	-	-	5
115, level C	94(3)	46(5)	-	3(2)	-	-	82	-	-	1(1)	-	1(1)	-	5(2)	95
115, level D	54(1)	18(2)	-	-	6(1)	-	42	-	-	17(1)	-	-	2(1)	2(1)	-
115, level E	49(2)	36(1)	-	-	26(2)	-	73	-	1(1)	42(2)	18(3)	-	3(1)	4(1)	27
115, unstrat.	16(1)	3(2)	1(1)	-	5(1)	-	15	-	1(1)	-	-	-	-	6(1)	7
104	88(3)	23(2)	5(1)	-	4	-	-	10(1)	-	1(1)	-	-	-	-	-
100	5(1)	5(1)	-	-	-	-	-	-	-	10(3)	-	-	-	-	51
Total	777(31)	217(31)	14(4)	9(4)	64(9)	16(6)	252	21(3)	5(4)	91(12)	26(6)	2(2)	5(2)	17(5)	337

Figures in parentheses represent minimum number of individuals.

Table 1. (continued).

Feature	Indet. Mammal, cf. Pig, Sheep, Goat, Deer	Indet. Large Mammal	Indet. Small Mammal, cf. Rodent	Indet. Mammal	Total Mammal	*Gallus gallus*, Chicken	*Meleagris gallopavo*, Turkey	*Numida meleagris*, Guinea Fowl	Galliformes, Chicken, Turkey, Guinea Fowl, Pheasent	Anserinae, Goose	cf. *Chen* sp., Snow Goose	Anatinae, Wild?/Domestic Duck	*Anas* sp., Duck	*Anas platyrhynchos*, Mallard	*Bucephala albeola*, Bufflehead
139 (w.s.)	-	-	-	-	7(2)	8(2)	-	-	82(3)	-	-	-	-	-	-
132	-	494	-	-	815(15)	4(3)	11(2)	-	-	-	-	-	1(1)	-	-
130, levels 2 & 3	-	160	8	-	493(21)	62(7)	3(1)	-	4	-	-	-	1(1)	-	-
129 (w.s.)	-	-	-	-	2(1)	1(1)	-	-	-	-	-	-	-	-	-
124, excavated	41	-	-	-	107(10)	88(14)	7(1)	-	-	-	-	-	1(1)	-	-
124, collected	-	7	-	-	70(7)	35(7)	3(1)	-	19(6)	-	-	-	4(1)	-	-
115, level A	-	-	-	-	17(4)	-	-	-	-	-	-	-	-	-	-
115, level B	11	-	-	50	110(5)	6(2)	3(1)	-	7(1)	-	-	-	-	-	-
115, level C	6	-	4	-	337(14)	71(6)	2(2)	-	33(3)	-	-	-	2(2)	1(1)	-
115, level D	-	83	-	11	235(7)	59(10)	2(1)	3(2)	53(3)	5(1)	-	1(1)	-	-	-
115, level E	-	119	31	15	444(13)	23(4)	12(2)	3(2)	212(13)	10(2)	-	-	-	-	-
115, unstrat.	-	-	-	3	57(7)	36(5)	3(2)	-	39	1(1)	1(1)	-	3(1)	-	-
104	-	34	-	28	193(8)	16(3)	4(1)	-	6(2)	1(1)	-	-	1(1)	-	1(1)
100	-	-	-	-	71(5)	4(2)	-	-	-	-	-	-	-	-	-
Total	58	897	43	107	2958(119)	413(66)	50(14)	6(4)	455(31)	17(5)	1(1)	1(1)	13(8)	1(1)	1(1)

Table 1. (continued).

Feature	Passeriformes, Perching Birds	Zenaidura macroura, Mourning Dove	Indet. Large Bird, cf. Chicken, Turkey	Indet. Small Bird	Indet. Bird	Total Birds	Chrysemys cf. picta, Painted Turtle	Indet. Turtle, cf. Box or Water Turtle	Total Turtle	Bagre marinus, Gafftopsail Catfish	Argentinidae, argentines	Pomatomus saltatrix, Bluefish	cf. Centropristis sp., Sea Bass	Centropristis striata, Common Sea Bass
139 (w.s.)	-	-	-	-	11	101(5)	-	-	-	-	-	-	-	-
132	-	-	-	-	3	19(6)	-	-	-	-	-	-	-	-
130, levels 2 & 3	1(1)	-	-	-	15	86(10)	-	1(1)	1(1)	-	-	-	-	-
129 (w.s.)	-	-	-	-	-	1(1)	-	-	-	-	-	-	-	-
124, excavated	2(1)	-	7(2)	-	-	105(19)	-	-	-	1(1)	-	-	1(1)	-
124, collected	-	-	-	-	1	62(15)	-	-	-	-	-	-	-	-
115, level A	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115, level B	-	-	-	-	-	16(4)	-	-	-	-	-	-	-	-
115, level C	-	-	3	-	-	112(14)	-	-	-	-	-	-	8(2)	-
115, level D	-	-	-	-	8	131(18)	-	-	-	-	1(1)	1(1)	4(1)	2(1)
115, level E	4(1)	2(1)	-	17	-	283(25)	1(1)	-	1(1)	-	-	-	38(7)	-
115, unstrat.	-	-	-	-	31	114(10)	-	-	-	-	-	-	5(1)	-
104	-	-	-	-	-	29(9)	-	-	-	-	-	-	-	-
100	-	-	-	-	-	4(2)	-	-	-	-	-	-	-	-
Total	7(3)	2(1)	10(2)	17	69	1063(138)	1(1)	1(1)	2(2)	1(1)	1(1)	1(1)	56(12)	2(1)

Table 1. (continued).

Feature	cf. Lutjanus sp., Snapper	Pagrus sedecim, Red Porgy	Sparidae, Porgies	cf. Sciaenops ocellata, Red Drum	Leiostomus xanthurus, Spot	Micropogon undulatus, Croaker	cf. Sciaenidae, Drums	Indet. Fish, cf. Marine	Total Fish	Indet. Bone	cf. Callinectes sapidus, Blue Crab	Crustacea, cf. Marine Crab	Crustacea, Crab? Crayfish?	Mercenaria mercenaria, Quahog	Crassostrea virginica, Common Oyster	cf. Anadara sp., Ark Shell
139 (w.s.)	-	-	-	-	-	-	-	138(1)	138(1)	15	1(1)	-	-	-	-	-
132	-	-	-	-	-	-	-	-	-	2	-	-	-	3(1)	11(5)	-
130, levels 2 & 3	-	3(1)	-	-	-	-	-	24	27(1)	51	-	-	-	-	-	-
129 (w.s.)	-	-	-	-	-	-	-	19(1)	19(1)	1	-	-	-	-	-	-
124, excavated	-	-	-	1(1)	-	-	-	136	139(3)	32	-	-	-	-	-	-
124, collected	-	-	-	1(1)	-	-	-	2	3(1)	-	-	-	-	1(1)	1(1)	1(1)
115, level A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115, level B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
115, level C	-	-	1(1)	-	-	-	-	7	16(3)	-	-	-	-	-	-	-
115, level D	-	-	1(1)	-	3(1)	2(1)	1(1)	240	255(8)	11	-	-	-	-	-	-
115, level E	1(1)	5(2)	-	-	6(2)	7(3)	-	1006	1063(15)	115	-	-	1(1)	-	-	-
115, unstrat.	-	-	5(1)	1(1)	-	3(1)	-	244	258(4)	46	-	1(1)	-	-	-	-
104	-	-	-	-	-	-	-	1(1)	1(1)	-	-	-	-	-	-	-
100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1(1)	8(3)	7(3)	3(3)	9(3)	12(5)	1(1)	1817(3)	1919(38)	273	1(1)	1(1)	1(1)	4(2)	12(6)	1(1)

Table 1. (continued).

Feature	Indet. Bivalves	Total Invertebrates	Total Remains
139 (w.s.)	-	1(1)	262(9)
132	-	14(6)	850(27)
130, levels 2 & 3	-	-	658(33)
129 (w.s.)	-	-	23(3)
124, excavated	-	-	383(32)
124, collected	-	3(3)	138(26)
115, level A	-	-	17(4)
115, level B	-	-	126(9)
115, level C	-	-	465(31)
115, level D	-	-	632(33)
115, level E	-	1(1)	1907(55)
115, unstrat.	-	1(1)	476(22)
104	-	-	223(18)
100	1(1)	1(1)	76(8)
Total	1(1)	21(13)	6236(310)

Table 2. Faunal remains from feature 130 level 2 (cat. # ARL-30040) and level 3 (cat. # ARL-30120).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	2	right mandible	158	91.1	8.9	-	33.5	-	4.4	6.3	-	-
Sus scrofa, Pig	9	right femur	54	85.2	14.8	3.7	3.7	3.7	-	22.2	-	3.7*
cf. Ovis aries, Sheep	2	right ischium	8	100.0	-	-	-	12.5	-	12.5	-	-
Capra hirca, Goat	2	right tibia	6	100.0	-	-	-	16.7	-	-	-	-
Ovis sp./Capra sp., Sheep?/Goat?	-	-	10	100.0	-	-	100.0	-	100.0	-	-	-
Odocoileus virginianus, Deer	2	left tibia	4	100.0	-	-	-	-	-	25.0	-	-
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	20	80.0	20.0	-	-	15.0	-	20.0	-	-
Canis familiaris, Dog	1	right scapula	10	50.0	50.0	50.0	-	-	10.0	-	-	-
Felis domesticus, Cat	1	left mandible	1	100.0	-	-	-	-	-	-	-	-
Rattus sp., Old World Rat	2	tibia	12	91.7	8.3	-	-	-	-	-	-	-

*Miscellaneous figures represent copper stained bone unless stated otherwise.

Table 2. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Large Mammal, cf. Cow	-	-	42	97.6	2.4	-	4.8	-	-	4.8	-	-
Indet. Large Mammal	-	-	160	98.8	1.2	-	1.9	0.6	-	2.5	-	-
Indet. Small Mammal, cf. Rodent	-	-	8	75.0	25.0	-	-	-	-	-	-	-
Total Mammal	21	-	493	92.5	7.5	0.4	14.2	1.6	3.9	6.9	-	0.4
Gallus gallus, Chicken (3 male, 3 female)	7	right & left tibiotarsus	62	93.5	6.5	-	-	-	-	1.6	-	-
Meleagris gallopavo, Turkey	1	left humerus	3	100.0	-	-	-	-	-	-	33.3	-
Galliformes, Chicken, Turkey, Guinea Fowl	-	-	4	100.0	-	-	-	-	-	-	-	-
Anas sp., Duck	1	right carpometacarpus	1	100.0	-	-	-	-	-	-	-	-
Passeriformes, Perching Birds	1	right humerus	1	100.0	-	-	-	-	-	-	-	-
Indet. Birds	-	-	15	100.0	-	-	-	-	-	-	-	-
Total Birds	10	-	86	100.0	-	-	-	-	-	1.2	1.2	-

Table 2. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Indet. Turtle, cf. Box or Water Turtle	1	carapace	1	100.0	-	-	-	-	-	-	-	-
Total Turtle	1	-	1	100.0	-	-	-	-	-	-	-	-
cf. Pargrus sedecim, Red Porgy	1	left premaxilla	3	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	-	-	24	100.0	-	-	-	-	-	-	-	-
Total Fish	1	-	27	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	51	100.0	-	-	-	-	-	-	-	-
Total Bone	33	-	658	93.8	6.2	0.3	10.6	1.2	2.9	5.3	0.2	0.3

Table 3. Faunal remains from feature 132 (cat. # ARL-30034).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	7	left maxilla	183	100.0	-	-	-	12.0	0.5	1.6	0.5	-
Sus scrofa, Pig	3	left tibia	16	81.2	18.8	-	-	12.5	-	-	-	-
Ovis sp./Capra sp., Sheep?/Goat?	2	left scapula	3	100.0	-	-	-	33.3	-	-	33.3	-
Odocoileus virginianus, Deer	1	left scapula	2	100.0	-	-	-	50.0	-	-	-	50.0
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	13	92.3	7.7	-	-	7.7	-	-	-	-
Felis domesticus, Cat	1	right femur	2	100.0	-	-	-	-	-	-	-	-
Sciurus sp., Squirrel	1	left tibia	1	100.0	-	-	-	-	-	-	-	-
Large Mammal, cf. Cow	-	-	101	100.0	-	-	-	-	-	-	-	-
Indet. Mammal, cf. Large Mammal	-	-	494	100.0	-	-	-	0.2	-	-	-	-
Total Mammal	15	-	815	99.5	0.5	-	-	6.7	0.2	0.7	0.4	0.2

Table 3. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Gallus gallus, Chicken	3	left tarsometatarsus	4	100.0	-	-	-	-	-	-	-	-
Meleagris gallopavo, Turkey	2	right tibiotarsus	11	100.0	-	-	-	-	-	-	9.0	-
Anas sp., Duck	1	right carpometacarpus	1	100.0	-	-	-	-	-	-	-	-
Indet. Birds	-	tibiotarsus	3	100.0	-	-	-	-	-	-	-	-
Total Birds	6	-	19	100.0	-	-	-	-	-	-	5.2	-
Indet. Bone, cf. Mammal	-	-	2	100.0	-	-	-	-	-	-	-	-
Total Bone	21	-	836	99.5	0.5	-	-	3.3	0.1	0.4	0.4	0.1
Mercenaria mercenaria, Quahog	1	left valve	3	100.0	-	-	-	-	-	-	-	-
Crassostrea virginica, Common Oyster	5	right & left valves	11	100.0	-	-	-	-	-	-	-	-
Total Shellfish	6	-	14	100.0	-	-	-	-	-	-	-	-

Table 4. Faunal remains from feature 124 excavated (cat. # ARL-30199).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	3	left tibia	34	100.0	-	-	53.0	-	5.9	-	-	14.8
Sus scrofa, Pig	2	left femurs	6	100.0	-	-	16.7	-	-	-	-	-
Ovis sp./*Capra* sp., Sheep?/Goat?	1	right scapula	4	100.0	-	-	-	-	-	-	-	-
Odocoileus virginianus, Deer	1	humerus	2	100.0	-	-	-	-	-	-	-	50.0
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	3	100.0	-	-	-	-	-	-	-	-
Rattus sp., Old World Rat	2	atlas	8	87.5	12.5	-	-	-	-	-	-	-
Mus musculus, House Mouse	1	right mandible	2	100.0	-	-	-	-	-	-	-	-
Large Mammal, cf. Cow	-	-	7	100.0	-	-	28.5	-	-	-	-	-
Large Mammal, cf. Pig, Sheep, Goat, Deer	-	-	41	100.0	-	-	17.0	-	-	-	-	-
Total Mammal	10	-	107	99.0	1.0	-	26.2	-	1.9	-	-	6.5

Table 4. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Gallus gallus, Chicken (2 males, 4 females)	14	right tarsometatarsus	88	85.2	14.8	1.1	-	-	-	-	-	7.9
Meleagris gallopavo, Turkey	1	sternum	7	100.0	-	-	-	-	-	-	-	-
Anas sp., Duck	1	tarsometatarsus	1	100.0	-	-	-	-	-	-	-	-
Indet. Birds cf. Chicken	2	tibiotarsus	7	100.0	-	-	-	-	-	-	-	-
Passeriformes, Perching Birds	1	carpometacarpus	2	100.0	-	-	-	-	-	-	-	-
Total Birds	19	-	105	87.6	12.4	0.9	-	-	-	-	-	7.6
cf. *Sciaenops ocellata*, Red Drum	1	right premaxilla	1	100.0	-	-	-	-	-	-	-	-
cf. *Centropristis* sp., Sea Bass	1	right pharangeal bone	1	100.0	-	-	-	-	-	-	-	-
Bagre marinus, Gafftopsail Catfish	1	left dentary	1	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	-	-	136	100.0	-	-	-	-	-	-	-	-

Table 4. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Total Fish	3	-	139	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	32	100.0	-	-	-	-	-	-	-	-
Total Bone	32	-	383	96.3	3.7	0.2	7.9	-	0.5	-	-	7.8

Table 5. Faunal remains from feature 115, level D (cat. # ARL-30193).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	1	scapula	54	100.0	-	-	-	-	-	-	-	-
Sus scrofa, Pig	2	left mandibles	18	88.9	11.1	-	16.7	16.7	-	5.5	-	11.1
Ovis sp./Capra sp., Sheep?/Goat?	1	right scapula	6	100.0	-	-	16.6	33.3	-	-	-	-
Artiodactyla, Pig, Sheep, Goat, Deer	-	left ischium	42	92.9	7.1	2.4	14.3	-	4.8	-	-	-
Rattus sp., Old World Rat	1	left femur	17	100.0	-	-	-	-	-	-	-	-
Sciurus cf. niger Fox Squirrel	1	left femur	2	100.0	-	50.0	-	-	-	-	-	-
Didelphis marsupialis, Opossum	1	right scapula	2	100.0	-	-	-	-	-	-	-	-
Indet. Large Mammal	-	-	83	100.0	-	1.2	30.0	-	-	-	-	-
Indet. Mammal, cf. Dog/Cat size	-	-	11	100.0	-	18.2	-	-	-	-	-	-
Total Mammals	7	-	235	97.9	2.1	2.5	26.0	6.0	0.8	0.4	-	0.8

Table 5. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Gallus gallus, Chicken (1 male)	10	coracoid, femur	59	83.0	17.0	-	-	8.5	1.7	-	-	3.4
Numida meleagris, Guinea Fowl	2	left carpometacarpus	3	66.7	33.3	-	-	-	-	-	-	-
Galliformes, Chicken, Guinea Fowl, Pheasent	3	sternum	53	64.2	35.8	-	-	-	-	-	-	5.7
Meleagris gallopavo, Turkey	1	right coracoid	2	100.0	-	-	-	-	-	-	-	-
Anatinae, Wild?/ Domestic? Duck	1	furculum	1	100.0	-	-	-	-	-	-	-	-
Anserinae, Goose	1	sternum	5	100.0	-	-	-	-	-	-	-	-
Indet. Birds	-	-	8	75.0	25.0	-	-	-	-	-	-	-
Total Birds	18	-	131	75.6	24.0	-	-	3.9	0.8	0.8	-	3.9
Centropristis striata, Common Sea Bass	1	skull	2	100.0	-	-	-	-	-	-	-	-
Centropristis sp., Sea Bass	1	left hyomandibular	4	100.0	-	-	-	-	-	-	-	-
cf. *Pargus* sp., Porgy	1	left dentary	1	100.0	-	-	-	-	-	-	-	-

Table 5. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Leiostomus xanthurus, Spot	1	left maxilla	3	100.0	-	-	-	-	-	-	-	-
Micropogon undulatus, Croaker	1	right dentary	2	100.0	-	-	-	-	-	-	-	-
cf. Sciaenidae Croakers	1	left premaxilla	1	100.0	-	-	-	-	-	-	-	-
cf. Argentinidae, Argentine	1	palate bone	1	100.0	-	-	-	-	-	-	-	-
Pomatomus saltatrix, Bluefish	1	left maxilla	1	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	-	-	240	100.0	-	-	-	-	-	-	-	-
Total Fish	8	-	255	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	11	100.0	-	-	-	-	-	-	-	-
Total Bone	33	-	632	94.0	6.0	0.9	9.9	3.0	0.5	0.3	-	1.1

Table 6. Faunal remains from feature 115, level E (cat. # ARL-30035).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	2	right femur	49	100.0	-	2.0	34.7	-	-	2.0	-	-
Sus scrofa, Pig	1	left mandible	36	94.0	6.0	2.8	2.8	2.8	2.8	-	-	-
Ovis sp./*Capra* sp., Sheep?/Goat?	2	left femur	26	100.0	-	-	3.8	3.8	-	3.8	-	3.8
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	73	98.6	1.4	1.4	12.3	-	-	-	-	6.9
Sciurus cf. *niger* Fox Squirrel	1	axis	3	100.0	-	-	-	-	-	-	-	-
cf. *Felis domesticus*, Cat	1	right mandibular premolar	1	-	100.0	-	-	-	-	-	-	-
Rattus sp., Old World Rat	2	left tibia	42	98.0	2.0	-	-	-	-	-	-	-
cf. *Mus musculus*, House Mouse	3	left femur	18	100.0	-	-	-	-	-	-	-	16.6
Indet. Rodent	-	-	31	94.0	6.0	-	-	-	-	-	-	9.7
Didelphis marsupialis, Opossum	1	frontal bone	4	100.0	-	-	-	-	-	-	-	-

Table 6. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Large Mammal, cf. Cow	-	-	27	100.0	-	-	44.4	-	-	-	-	-
Indet. Large Mammal	-	-	119	100.0	-	9.2	5.9	-	-	-	-	0.8
Indet. Mammal, cf. Dog/Cat size	-	-	15	93.3	6.7	-	-	6.7	-	-	-	-
Total Mammal	13	-	444	98.2	1.8	3.2	10.6	0.7	0.2	0.5	-	2.9
Gallus gallus, Chicken (1 male, 2 female)	4	right humerus	23	95.7	4.3	4.3	-	4.3	-	-	4.3	4.3 metal stained
Galliformes, Chicken, Pheasent, Guinea Fowl	13	left tibiotarsus	212	91.5	8.5	2.3	-	-	-	-	0.5	1.9
cf. Numida meleagris, Guinea Fowl	2	right humerus	3	100.0	-	-	-	-	-	-	-	-
Meleagris gallopavo, Turkey	2	right femur	12	100.0	-	-	-	-	-	-	-	-
Anserine, Goose	2	left coracoid	10	100.0	-	-	-	-	-	-	-	-
Zenaidura macroura, Mourning Dove	1	left coracoid	2	100.0	-	-	-	-	-	-	-	-

Table 6. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Passeriformes, Perching Birds	1	left coracoid	4	75.0	25.0	-	-	-	-	-	-	-
Indet. Small Birds	-	-	17	100.0	-	-	-	-	-	-	-	-
Total Birds	25	-	283	93.0	7.0	2.5	-	0.4	-	-	0.7	1.8
Chrysemys cf. *picta*, Painted Turtle	1	left coracoid	1	100.0	-	-	-	-	-	-	-	-
Total Turtle	1	-	1	100.0	-	-	-	-	-	-	-	-
cf. *Centropristis* sp., Sea Bass	7	right dentary	38	100.0	-	-	-	-	-	-	-	-
Leiostomus xanthurus, Spot	2	right articular	6	100.0	-	-	-	-	-	-	-	-
cf. *Pargrus sedecim*, Red Porgy	2	left dentary	5	100.0	-	-	-	-	-	-	-	-
Micropogon undulatus, Croaker	3	left premaxilla	7	100.0	-	-	-	-	-	-	-	-
cf. *Lutjanus* sp., Snapper	1	left premaxilla	1	100.0	-	-	-	-	-	-	-	-

Table 6. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Indet. Fish, cf. Marine	-	-	1006	100.0	-	3.6	-	-	-	-	-	-
Total Fish	15	-	1063	100.0	-	3.4	-	-	-	-	-	-
Indet. Bone	-	-	115	100.0	-	16.5(?)	-	-	-	-	-	-
Total Bone	54	-	1906	98.5	1.5	4.6	2.5	0.2	0.05	0.1	0.1	0.9
Crustacea, Crab?/Crayfish?	1	Pincer Claw	1	100.0	-	-	-	-	-	-	-	-
Total Crustacea	1	-	1	100.0	-	-	-	-	-	-	-	-

Table 7. Faunal remains from feature 115, unstratified (cat. # ARL-30315).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	1	right tibia	16	100.0	-	-	43.8	-	6.2	-	-	-
Sus scrofa, Pig	2	right scapula	3	66.7	33.3	-	33.3	33.3	33.3	-	-	-
Ovis aries, Sheep	1	right femur	1	100.0	-	-	-	-	-	-	-	-
Ovis sp./Capra sp., Sheep?/Goat?	1	right femur	5	100.0	-	-	-	-	-	40.0	-	40.0
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	15	100.0	-	-	13.3	-	-	-	-	6.7
cf. Felis domesticus, Cat	1	left mandible	1	-	100.0	-	-	-	-	-	-	-
Didelphis marsupialis, Opossum	1	left scapula	6	100.0	-	-	-	-	-	-	-	66.7
Indet. Large Mammal, cf. Cow	-	-	7	85.7	14.3	-	-	-	-	-	-	-
Indet. Mammal	-	-	3	100.0	-	-	-	-	-	-	-	33.3
Total Mammal	7	-	57	96.5	3.5	-	17.5	1.8	3.5	3.5	-	14.0

Table 7. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Gallus gallus, Chicken	5	ulna	36	97.2	2.8	-	-	-	-	-	-	13.9
Galliformes, Chicken, Guinea Fowl, Pheasent	-	-	39	71.8	28.2	-	-	-	-	-	-	-
Meleagris gallopavo, Turkey	2	left coracoid	3	100.0	-	-	-	-	-	-	-	-
Anas sp. Duck	1	left coracoid	3	100.0	-	-	-	-	-	-	-	-
Anserinae, Goose	1	right tibiotarsus	1	100.0	-	-	-	-	-	-	-	-
cf. Chen sp., Snow Goose	1	left coracoid	1	100.0	-	-	-	-	-	-	-	-
Indet. Birds	-	-	31	96.8	3.2	-	-	-	-	-	-	-
Total Birds	10	-	114	88.6	11.4	-	-	-	-	-	-	4.4
cf. Centropristes sp., Sea Bass	1	left dentary	5	100.0	-	-	-	-	-	-	-	-
Micropogon undulatus, Croaker	1	right dentary	3	100.0	-	-	-	-	-	-	-	-

Table 7. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
cf. Sciaenops ocellata, Red Drum	1	skull	1	100.0	-	-	-	-	-	-	-	-
Sparidae, Porgy	1	skull	5	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	-	-	244	100.0	-	-	-	-	-	-	-	-
Total Fish	4	-	258	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	46	100.0	-	-	-	-	-	-	-	-
Total Bone	21	-	475	96.8	3.2	-	2.1	0.2	0.4	0.4	-	2.7
Crustacea, cf. Marine Crab	1	pincer claw	1	100.0	-	-	-	-	-	-	-	-
Total Crustacea	1	-	1	100.0	-	-	-	-	-	-	-	-

Table 8. Faunal remains from feature 124 collected (cat. # ARL-30345).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	4	frontal bone, right ulna	51	93.7	6.3	50.0	50.0	6.3	-	-	2.1	-
Sus scrofa, Pig	1	left femur, right tibia	4	75.0	25.0	-	-	-	-	-	-	25.0
Ovis sp./Capra sp., Sheep?/Goat?	1	left femur	3	100.0	-	-	-	-	-	-	-	-
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	4	50.0	50.0	-	25.0	-	-	-	-	-
Canis familiaris, Dog	1	right mandible	1	-	100.0	-	-	-	-	-	-	-
Indet. Large Mammal	-	-	7	100.0	-	-	28.6	-	-	-	-	-
Total Mammal	7	-	70	91.4	8.6	-	38.6	4.2	-	-	1.4	1.4
Gallus gallus, Chicken (1 male, 6 female)	7	left tarsometatarsus	35	97.1	2.9	-	-	-	-	-	2.9?	-
Galliformes, Chicken, Guinea Fowl, Pheasent	6	left tarsometatarsus	19	15.8	84.2	-	-	-	-	-	-	-
Meleagris gallopavo, Turkey	1	right tarsometatarsus	3	100.0	-	-	-	-	-	-	-	-

Table 8. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Anas sp., Duck	1	right coracoid	4	100.0	-	-	-	-	-	-	-	50.0
Indet. Birds	-	-	1	100.0	-	-	-	-	-	-	-	-
Total Birds	15	-	62	72.6	27.4	-	-	-	-	-	1.6?	3.2
cf. *Sciaenops ocellata*, Red Drum	1	skull	1	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	-	-	2	100.0	-	-	-	-	-	-	-	-
Total Fish	1	-	3	100.0	-	-	-	-	-	-	-	-
Total Bone	23	-	135	83.0	17.0	-	20.0	2.2	-	-	2.2	3.7
Mercenaria mercenaria, Quahog	1	left valve	1	100.0	-	-	-	-	-	-	-	-
Crassostrea virginica, Common Oyster	1	right valve	1	100.0	-	-	-	-	-	-	-	-
cf. *Anadara* sp., Ark Shell	1	left valve	1	100.0	-	-	-	-	-	-	-	-
Total Shellfish	3	-	3	100.0	-	-	-	-	-	-	-	-

Table 9. Faunal remains from feature 104 (cat. # ARL-32243).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	3	left 4th maxillary premolar	88	100.0	-	-	44.3	-	-	-	-	-
Sus scrofa, Pig	2	right maxilla	23	87.0	13.0	30.4	17.4	8.7	-	-	-	-
cf. Ovis aries, Sheep	1	left radius	5	100.0	-	40.0	-	-	-	-	-	20.0
Ovis sp./Capra sp., Sheep?/Goat?	-	-	4	100.0	-	-	-	-	-	25.0	-	-
Canis familiaris, Dog	1	right scapula	10	-	100.0	-	-	-	-	-	-	-
Rattus sp., Old World Rat	1	left tibia	1	100.0	-	-	-	-	-	-	-	-
Indet. Large Mammal	-	-	34	100.0	-	-	67.6	-	-	-	-	-
Indet. Mammal	-	-	28	100.0	-	-	-	-	-	-	-	-
Total Mammal	8	-	193	93.3	6.7	4.7	43.2	1.0	-	0.5	-	0.5
Gallus gallus, Chicken	3	left humerus	16	100.0	-	-	-	-	-	6.3	-	12.5

Table 9. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Meleagris gallopavo, Turkey	1	mandible	4	100.0	-	-	-	-	-	-	-	-
Galliformes, Chicken, Guinea Fowl	2	tarsometa-tarsus	6	50.0	50.0	-	-	-	-	-	-	-
Bucephala albeola, Bufflehead	1	sternum	1	100.0	-	-	-	-	-	-	-	-
Anserinae, Goose	1	left tibiotarsus	1	100.0	-	-	100.0	-	-	-	-	-
Anas sp., Duck	1	left tibiotarsus	1	100.0	-	-	-	-	-	100.0	-	-
Total Birds	9	-	29	89.7	10.3	-	3.4	-	-	6.9	-	6.9
Indet. Fish	1	vertebra	1	100.0	-	-	-	-	-	-	-	-
Total Fish	1	-	1	100.0	-	-	-	-	-	-	-	-
Total Bone	18	-	223	92.8	7.2	4.0	30.0	0.1	-	1.3	-	1.3

Table 10. Faunal remains from feature 115, level A (cat. # ARL-30938).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	1	thorasic vertebra	8	100.0	-	-	62.5	-	-	-	-	-
Sus scrofa, Pig	1	right tibia	1	100.0	-	-	-	-	-	-	-	-
Odocoileus virginianus, Deer	2	right tibia	8	100.0	-	-	-	-	-	-	-	-
Total Mammal	4	-	17	100.0	-	-	29.5	-	-	-	-	-
Total Bone	4	-	17	100.0	-	-	29.5	-	-	-	-	-

Table 11. Faunal remains from feature 115, level B (cat. # ARL-30117).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	2	right humerus	36	97.2	2.8	-	50.0	2.8	-	-	-	2.8
Sus scrofa, Pig	2	left humerus, femur	5	80.0	20.0	-	20.0	20.0	-	-	-	20.0
Ovis sp./Capra sp., Sheep?/Goat?	1	left humerus	3	100.0	-	-	-	-	-	33.3	-	-
Large Mammal, cf. Cow	-	-	5	100.0	-	-	60.0	-	20.0	-	-	-
Large Mammal, cf Pig, Sheep, Goat. Deer	-	-	11	90.9	9.1	-	45.5	-	36.4	-	-	27.3
Indet. Mammal	-	-	50	100.0	-	-	-	-	-	-	-	-
Total Mammal	5	-	110	97.3	2.7	-	24.5	1.8	4.5	0.9	-	4.5
Gallus gallus, Chicken	2	right tibiotarsus	6	100.0	-	-	-	-	-	-	-	16.7
Meleagris gallopavo, Turkey	1	sternum	3	100.0	-	-	-	-	-	-	-	-
Galliformes, Chicken, Guinea Fowl	1	furculum	7	71.4	28.6	-	-	-	-	-	-	-
Total Birds	4	-	16	87.5	12.5	-	-	-	-	-	-	6.3
Total Bone	9	-	126	96.0	4.0	-	21.4	1.6	4.0	0.8	-	4.8

Table 12. Faunal remains from feature 115, level C (cat. # ARL-30033).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	3	atlas	94	96.8	3.2	-	29.8	1.2	-	1.2	-	1.2
Sus scrofa, Pig	5	right tibia	46	67.4	32.6	-	8.7	6.5	-	2.2	-	19.6
Capra hirca, Goat	2	right femur	3	100.0	-	-	-	-	-	-	-	33.3
Artiodactyla, Pig, Sheep, Goat, Deer	-	-	82	98.8	1.2	1.2	8.5	3.7	-	-	-	14.6
Sciurus sp., Squirrel	1	left tibia	1	100.0	-	-	-	-	-	-	-	-
Rattus sp., Old World Rat	1	right femur	1	100.0	-	-	-	-	-	-	-	-
Didelphis marsupialis, Opossum	2	right scapula	5	60.0	40.0	-	-	-	-	-	-	60.0
Large Mammal, cf. Cow	-	-	95	100.0	-	-	22.1	2.1	-	-	-	-
Indet. Mammal, cf. Pig, Sheep, Goat	-	-	6	100.0	-	-	100.0	-	-	-	-	16.7
Indet. Small Mammal	-	-	4	100.0	-	-	-	-	-	-	-	-
Total Mammal	14	-	337	92.6	7.4	0.3	19.6	2.7	-	0.6	-	8.0

Table 12. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Gallus gallus, Chicken (5 females)	6	left femur	71	100.0	-	-	-	-	-	-	1.4	12.7
Galliformes, cf. Chicken	3	left femur, humerus	33	57.6	42.4	-	-	-	-	-	-	9.0
Meleagris gallopavo, Turkey	2	sternum	2	100.0	-	-	-	-	-	-	-	-
cf. Anas platyrhynchos, Mallard	1	right ulna	1	100.0	-	-	-	-	-	-	-	-
Anas sp., Duck	2	left tarsometa-tarsus	2	100.0	-	-	-	-	-	-	-	-
Indet. Large Bird, cf. Turkey, Chicken	-	-	3	100.0	-	-	-	-	-	-	-	-
Total Birds	14	-	112	87.5	12.5	-	-	-	-	-	0.9	10.7
Centropristis sp., Sea Bass	2	left maxilla	8	100.0	-	-	-	-	-	-	-	-
cf. Sparidae, Porgy	1	skull	1	100.0	-	-	-	-	-	-	-	-

Table 12. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Indet. Fish, cf. Marine	-	-	7	100.0	-	-	-	-	-	-	-	-
Total Fish	3	-	16	100.0	-	-	-	-	-	-	-	-
Total Bone	31	-	465	92.0	8.0	0.2	14.2	1.9	-	0.4	1.9	8.4

Table 13. Faunal remains from feature 100 (cat. # ARL-30106).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	1	right tibia	5	100.0	-	-	80.0	-	-	-	-	-
Sus scrofa, Pig	1	canine	5	100.0	-	-	-	-	-	-	-	-
Rattus sp., Old World Rat	3	right femur	10	100.0	-	-	-	-	-	-	-	-
Large Mammal, cf. Cow	-	-	51	100.0	-	-	5.9	2.0	-	-	-	-
Total Mammal	5	-	71	100.0	-	-	9.8	1.4	-	-	-	-
Gallus gallus, Chicken	2	left tibiotarsus	4	75.0	25.0	-	-	-	-	-	-	25.0
Total Birds	2	-	4	75.0	25.0	-	-	-	-	-	-	25.0
Total Bone	7	-	75	98.7	1.3	-	9.3	1.3	-	-	-	1.3
Indet. Bivalve cf. Marine	1	-	1	100.0	-	-	-	-	-	-	-	-
Total Shellfish	1	-	1	100.0	-	-	-	-	-	-	-	-

Table 14. Faunal remains from feature 129 (window screened) (cat. # ARL-30525).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
cf. Mus musculus, House Mouse	1	left humerus	1	-	100.0	-	-	-	-	-	-	-
Large Mammal. cf. Cow	-	-	1	100.0	-	-	-	-	-	-	-	-
Total Mammal	1	-	2	50.0	50.0	-	-	-	-	-	-	-
Galliformes, cf. Chicken	1	sesamoid	1	100.0	-	-	-	-	-	-	-	-
Total Birds	1	-	1	100.0	-	-	-	-	-	-	-	-
Indet. Fish, cf. Marine	1	vertebra	19	100.0	-	-	-	-	-	-	-	-
Total Fish	1	-	19	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	1	100.0	-	-	-	-	-	-	-	-
Total Bone	3	-	23	95.7	4.3	-	-	-	-	-	-	-

Table 15. Faunal remains from feature 139 (window screened) (cat. # ARL-30535).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Bos taurus, Cow	1	left mandible	1	100.0	-	-	-	-	-	-	-	-
Mus musculus, House Mouse	1	skull	5	60.0	40.0	-	-	-	-	-	-	-
Large Mammal, cf. Cow	-	-	1	100.0	-	-	-	-	-	-	-	-
Total Mammal	2	-	7	71.4	28.6	-	-	-	-	-	-	-
Gallus gallus, Chicken	2	left tibiotarsus	8	100.0	-	-	-	-	-	-	-	-
Galliformes, Chicken, Guinea Fowl, Pheasent	3	left tibiotarsus	82	86.6	13.4	1.2	-	-	-	-	-	-
Indet. Birds	-	-	11	100.0	-	-	-	-	-	-	-	-
Total Birds	5	-	101	89.1	10.9	0.9	-	-	-	-	-	-
Indet. Fish, cf. Marine	1	left dentary	138	100.0	-	-	-	-	-	-	-	-
Total Fish	1	-	138	100.0	-	-	-	-	-	-	-	-
Indet. Bone	-	-	15	100.0	-	-	-	-	-	-	-	-

Table 15. (continued).

Species	Min. No. of Ind.	Id. Element	No. of Elements	% Adult/ Subadult	% Immat.	% Burnt	% Saw Cut	% Knife Cut	% Weathered	% Rodent Gnawed	% Dog Chewed	% Misc.
Total Bone	8	-	261	95.0	5.0	0.4	-	-	-	-	-	-
cf. *Callinectes sapidus*, Blue Crab	1	pincer claw	1	100.0	-	-	-	-	-	-	-	-
Total Crustacea	1	-	1	100.0	-	-	-	-	-	-	-	-

Table 16. Artifacts identified from features.

Material	Feature	Cat. #	No. of Pieces	Description
Bone	115, level C	ARL-30033	1	bone?/antler? handle (approx. 8 cm. long)
	124 (w. s.)	ARL-30534	1	bone needle frag. (needle eye and shaft portion, approx. 1.5 cm. long)
Total			2	
Non-bone	115, unstrat.	ARL-30315	1	lead disc (approx. 1.5 cm. diameter)
	124 (w. s.)	ARL-30534)	1	class frag.
	"	"	1	clay pipe bowl frag.
	"	"	1	copper eyelet
Total			4	

APPENDIX IV

EXCAVATION AND ANALYSIS OF FEATURES 94 - 99

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The excavation of the five features at the corner of King and Hasell Streets was the first archaeological recovery project after the testing and data recovery by the University of Tennessee-Chattanooga (Honerkamp et al. 1982) and coincided with the beginning of the preparation of the property for the construction of Charleston Place. At the time of the preliminary testing excavations by Honerkamp there were buildings standing on the property, which were to be removed to clear the land for a temporary parking area. It was agreed that we would monitor the leveling of the property and attempt to locate features which had been identified on historic maps and excavate them before the parking area was constructed. A bulldozer and operator were made available to us to clear the building debris and topsoil in an effort to locate the features.

Once the features were located, they were shovel-scraped to ascertain their limits and then the fill was removed by trowel. Artifacts recovered were collected and removed to the museum for cleaning and laboratory analysis. Excavations were conducted with the aid of a crew from the Museum and occasional assistance of volunteers.

History of the Area

The history of the area was summarized by Herold and Thomas (1981:55-59, 123-126) and a brief summary of the King and Hasell location is presented here. This land, situated on the southeast corner of King and Hasell Streets was part of lot 123 of the Grand Model of the City of Charlestown (Smith 1908). Lot 123 along with 121 and 122 were granted to Jonathan Amory in 1695 (CCRMCO 00:279-281). When Amory died in 1697 he left the land to his wife, Martha. Martha Amory died in 1699 leaving the estate to her children and a son-in-law.

Sarah Rhett was the executor of the Amory estate. She sold the land in 1708 to Bentley Cook. Sarah Rhett and her husband, William, purchased it from him in 1711. The property was part of what was known as Rhettsbury and remained in the possession of the Rhett heirs for three generations. In 1775 Parker Quince, whose wife was the great granddaughter of Sarah Rhett, sold a piece of the land extending from King Street to Meeting Street along the south side of Hasell Street to Alexander Gillon for £ 10,000 current money (CCRMCO W4:219). Gillon divided the property into smaller lots shown in Figure 1; land at the corner of King and Hasell was designated lots 14 and 15.

In 1784 Gillon held the mortgage on the land for Elias Hauser, an innkeeper. The land was sold at a court ordered sheriff's sale. At that time the property measured 53 feet 9 inches on King Street and 156 feet on Hasell. It was purchased by John Eberly, a baker, for £ 634.16.16 sterling. Eberly died before January 1800, and the land was sold to Andrew Blum, a butcher, for 1067 guineas. The Blum family owned the property until 1834, when Mary Blum (widow of Andrew) sold it to Andrew Moffett and William

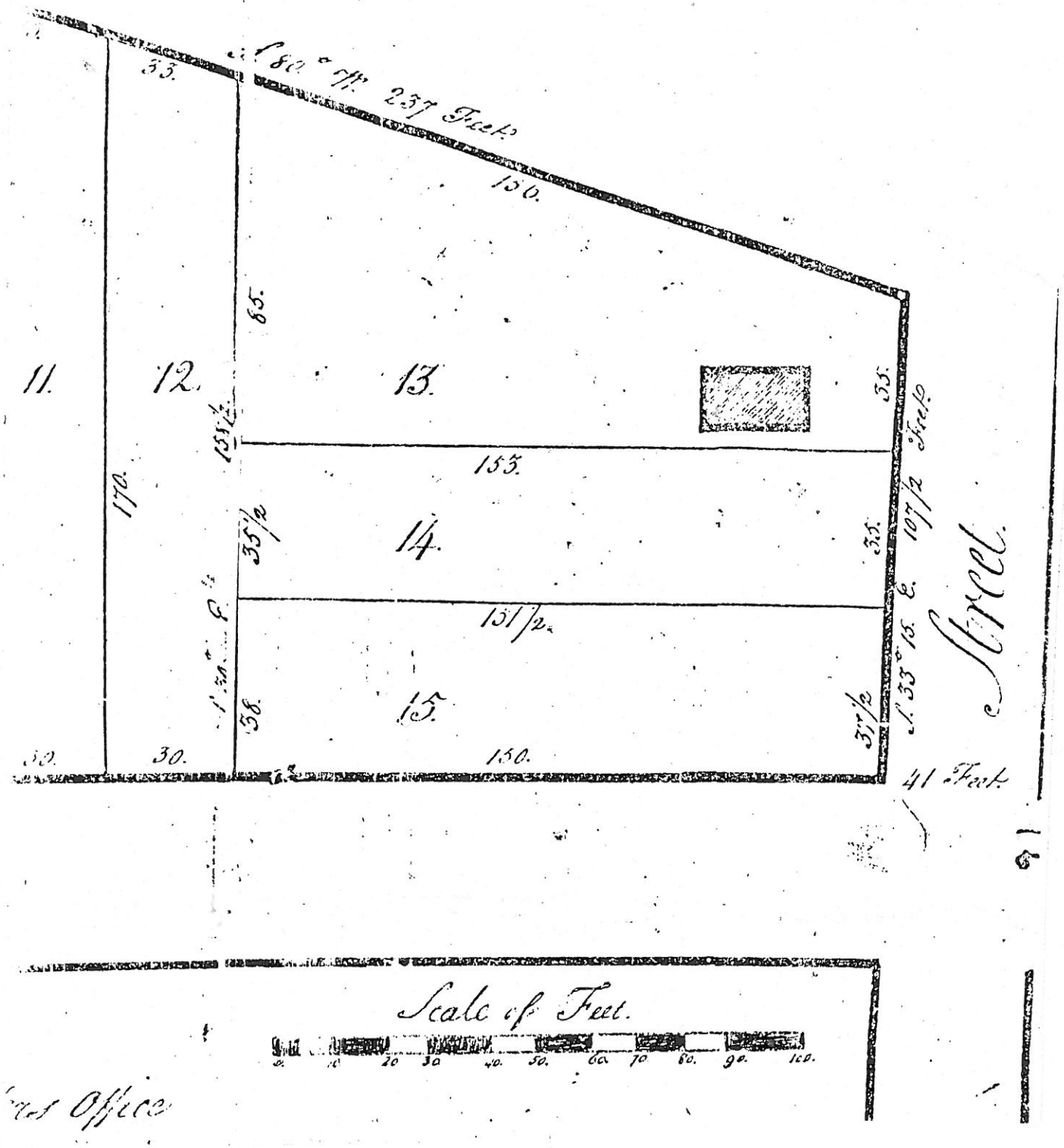


Figure 1
Part of 1785 plat showing lots 14 and 15 laid out by Gillon.

Calder for $1211.67. Apparently the property was used for some commercial purposes during that period. In 1822 Jacob Sluter had a dry goods store at 238 King Street (corner of King and Hasell) and Samuel Simons, a merchant, was located at 236 King (1822 City Directory).

A plat dated April 12, 1834 is the first to show structures on the property. At that time the land was divided into three sections, two facing King Street and one facing Hasell. There were two two-story frame buildings fronting on King Street with kitchens and privies behind them. The property facing Hasell had two frame buildings, a shed, and a well (Figure 2).

Moffett and Calder divided the property, keeping the piece on Hasell and King and the piece fronting on Hasell as one, and selling the third section to the south to James Wilson. Apparently they replaced the frame buildings with a three-story brick house which was used as a carpet and dry goods store between 1834 and 1838, for the Charleston Courier records the burning of a "splendid" three-story brick building in the fire of April 27, 1838 (Charleston Courier, May 1, 1838).

Moffett and Calder rebuilt on the land following the fire, and in 1843 Moffett sold his interest to Calder (CCRMCO V13:166-167). Calder owned the property until his executor, Agnes Calder, sold the land to James Murdock in 1869 (CCRMCO H15:314-316). It remained business property into the twentieth century (Figure 3). The building removed for the parking lot replaced the Moffett and Calder building in 1961 (Herold and Thomas 1981:57).

The lot to the south of the Moffett and Calder store was sold to James Wilson in 1834. It had frame buildings which Wilson used as his house and seed store. These were destroyed in the 1838 fire. The property was sold to Richard Lining in 1843 for $1900. Lining sold it back to William Calder in 1844 for $3000. The rapid increase in price suggests the construction of a building on the land at that time. The 1852 Ward Book indicates that Calder owned a brick building on that land. The building was used for business purposes. By 1900 the building was vacant. After World War II it was replaced by a modern building which was demolished prior to our excavation.

Features

Five features were encountered on the property at the corner of King and Hasell streets. Two were privies, one a well, one a trash pit, and one a drain.

Feature 96 - Feature 96 was a privy located where the privy was indicated on the 1834 plat of the Blum property. It was along Hasell Street near the back of the property at that time, 90 feet from King Street.

The feature was noted about 3.5 feet below the level of the sidewalk along Hasell. It was excavated in two one foot levels, the bottom being

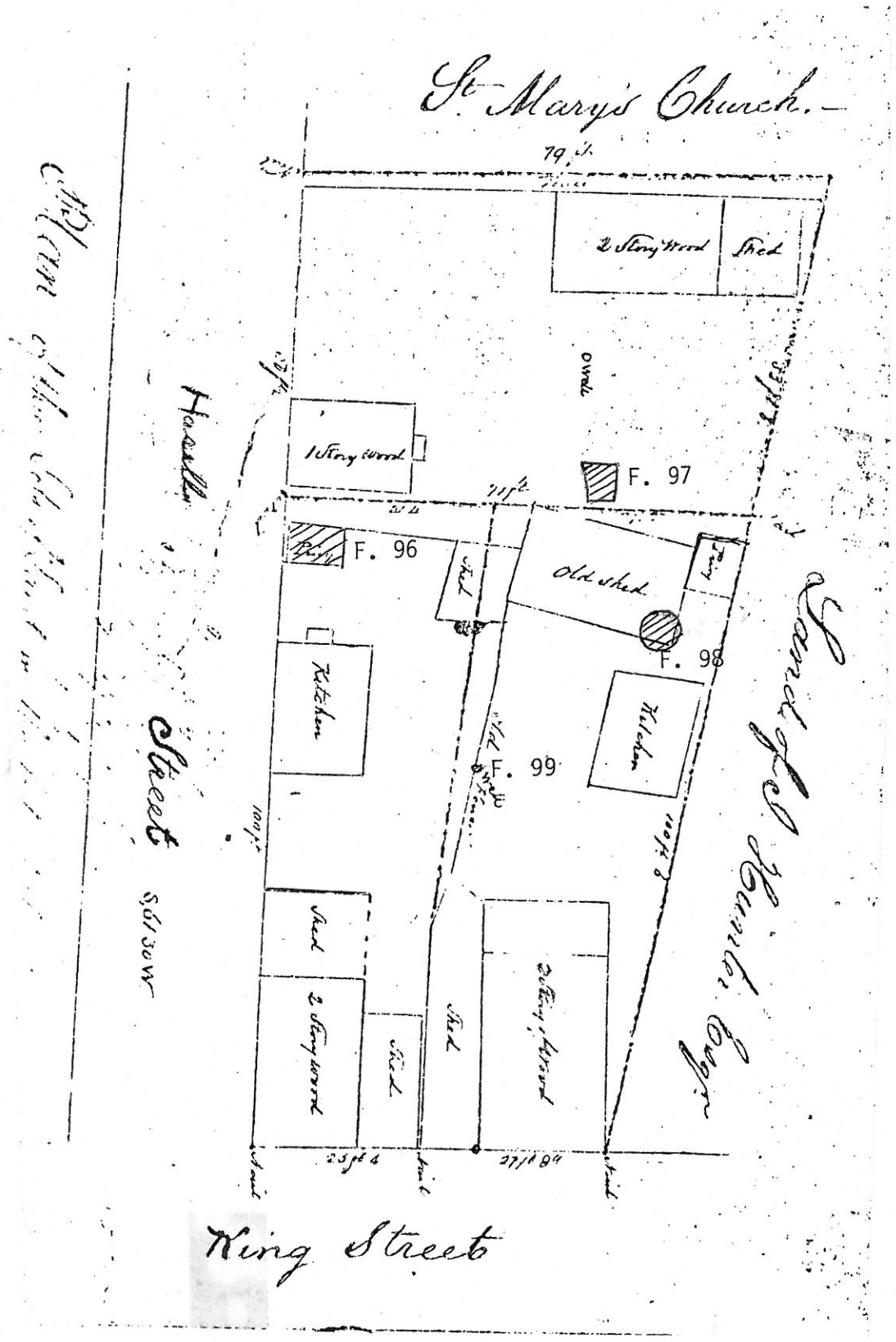


Figure 2

Plat showing three lots in the estate of Andrew Blum in 1834, purchased by Moffett and Calder. Feature 96, the privy along Hasell Street, and Feature 99, the well, are located on this plat. The location of Features 98 and 99 have been added.

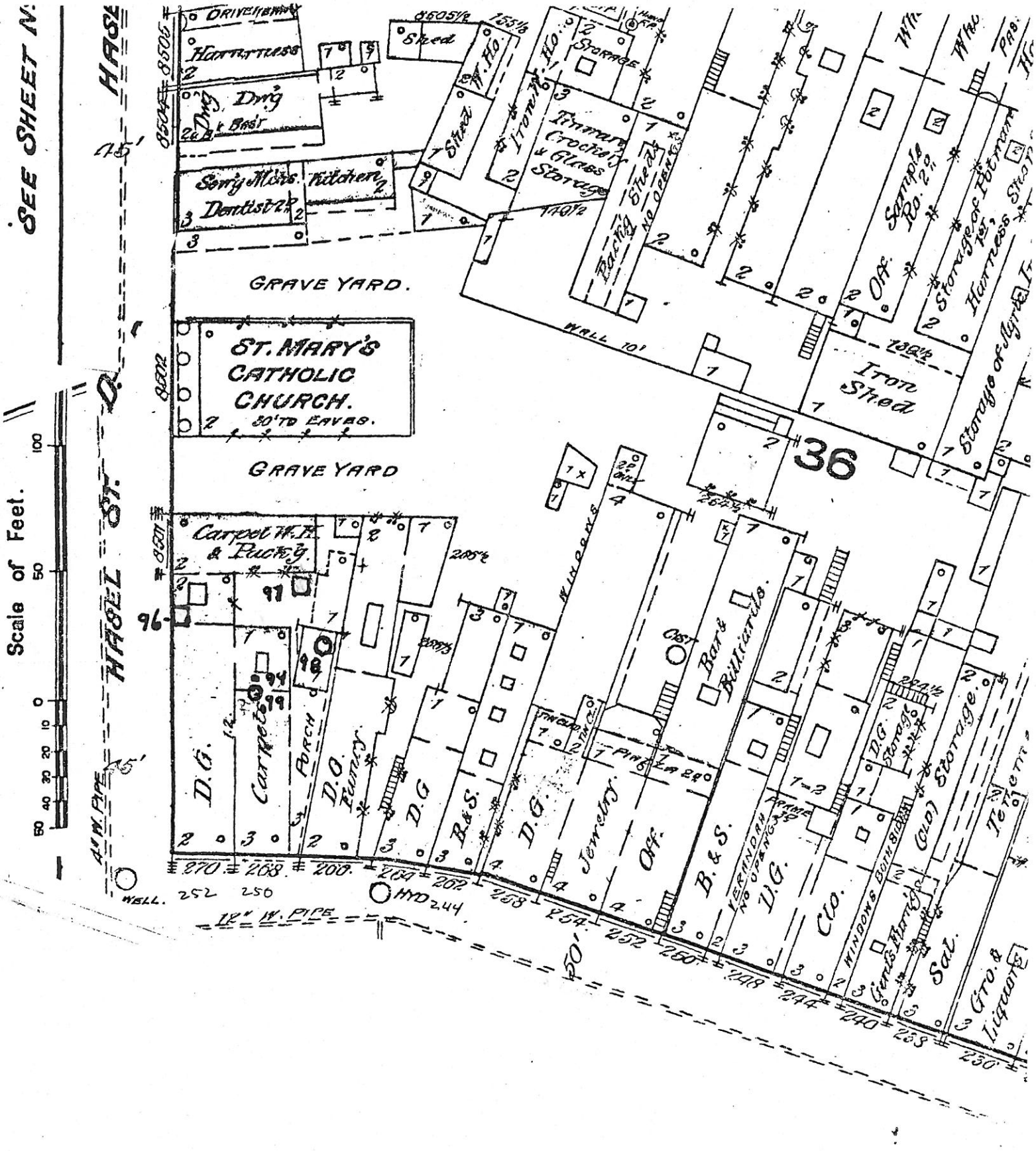


Figure 3 1884 map showing buildings at that time and location of features.

about 5.5 feet below the surface of the present sidewalk. On top of the feature was a layer of yellow sandy soil, probably fill put in before the most recent building was built.

A brick wall was constructed along Hasell Street which destroyed the north edge of the privy. The brick wall was made of bricks 4.5 by 2.5 by 9 to 9.25 inches in size. The wall is believed to have been from the building Calder and Moffett built between 1834 and 1838. Shell mortar was used in the wall. Mortar in the upper part was yellower than that below, suggesting that the wall of the brick building built after the 1838 fire was laid on top of the base of the wall of the earler brick structure.

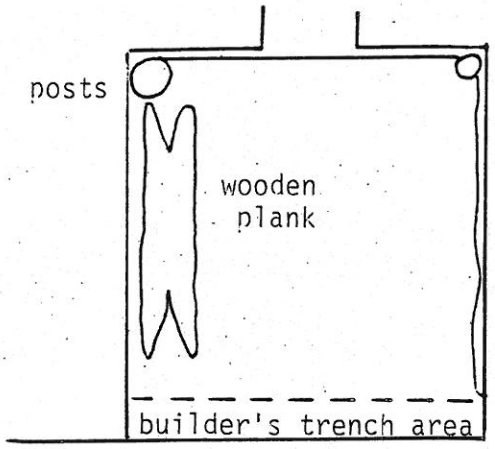
The privy was a wooden one, 6.8 feet east to west and somewhat larger north to south, with standing posts noted in the southeast and southwest corners and horizontal planking along the sides, outside of the posts. One plank on the south side was planoconvex in section with the curved side out. It was .4 feet wide and .25 feet thick. It was identified as southern yellow pine (Michael A Taras, personal communication)(Figure 4).

The entrance was apparently on the south side, as a dark area was noted there which sloped slightly down toward the feature. There was charcoal in the top of the feature suggesting the possibility of it being the level of the 1838 fire. The ground level at the time the privy was in use was 2.5 feet below the present sidewalk surface.

Artifacts recovered from Feature 96 are tabulated in Table 1. It contained the usual ceramic, glass, and other domestic debris. There are no artifacts identifiable with the occupation of butcher. Feature 96 had a mean ceramic date of 1798.3. A Liberty quarter in level 1, dated 1916-1930 and a porcelain insulator indicate some disturbance or perhaps intrusion in the top of the feature. More complete glass bottle fragments are late eighteenth to early nineteenth century. One drawn wine stem falls into the same temporal horizon. Transfer printed pearlware in blue and other colors dates 1790 to 1840. Dates on the artifacts plus the stratigraphic location of the privy below what appears to be the wall of the brick building built between 1834 and 1838 support the conclusion that this privy was no longer in use shortly after 1834.

Feature 97 - Feature 97 was found on the property which faced Hasell Street. It was located where no features were indicated on the 1835 plat. It appears to have been another privy with wooden walls, although all of the wood was gone except for a few traces on the east side.

Feature 97 was excavated in two levels. The upper level was .6 feet thick, the lower 1.0 feet thick. There was some bulldozer disturbance in level 1. This privy was not as deep as Feature 96, the bottom being 3.75 feet below the present sidewalk surface. The privy was approximately rectangular. The east side was longer than the west. The entrance had been in the center of the north side (Figure 5).



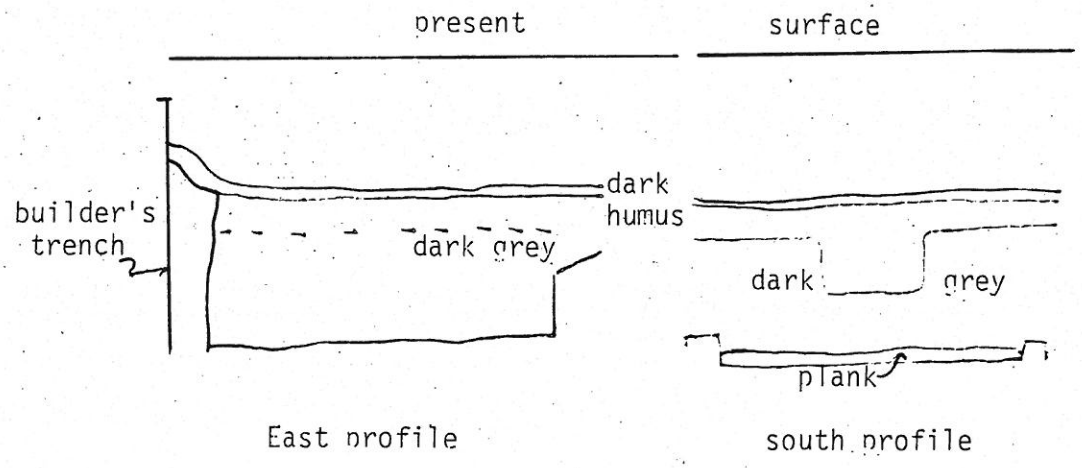


Figure 4

Planview and profile, Feature 96

Table 1

Artifact Tabulation, Feature 96

Kitchen:

Porcelain, oriental	2
b/w underglaze	2
overglazed poly	18
Porcelain, white	3
gilt edged	7
Stoneware, misc	7
unglazed	1
westerwald	2
white saltglazed	1
Earthenware, slipware	8
Creamware, plain	272
hand paint overgl.	3
banded	7
open basket	34
green shell edge	22
transfer print, black	10
Pearlware, plain	126
shell edged	65
banded	13
finger paint	3
poly hand paint	59
blue hand paint	26
stencil, poly	1
brown hand paint	1
overglazed paint	1
transfer print, blue	125
transfer print, green	9
transfer print, purple	1
transfer print, black	1
Delft, white	2
Earthenware, lead glazed	14
Bottle glass; dark green	201
light green	7
med green	5
aqua	69
blue	1
Table glass	27
glass dish	3
Table glass, engraved	5
Goblet frag	3
Tumbler, blown	12
panelled	6
hammered	2
Pharmaceutical glass	8
London bottle, molded	1
glass rods	5
burned glass	1
brass spigot	1
Architecture:	
Window glass, clear	10
light green	47
slate	1
decorative iron	1
porcelain insulator	1
wooden plank	1
Clothing:	
bone 1 hole button	1
brass button	1
leather shoe sole	17
misc leather	4
Personal:	
Liberty quarter	1
Arms:	
gunflint	1
Furniture:	
Drilled brass plate	1
Activities:	
Colono ware	11
flower pots	1
wooden stopper	1
metal syringe	1
misc metal	1
iron razor	1
misc iron	109

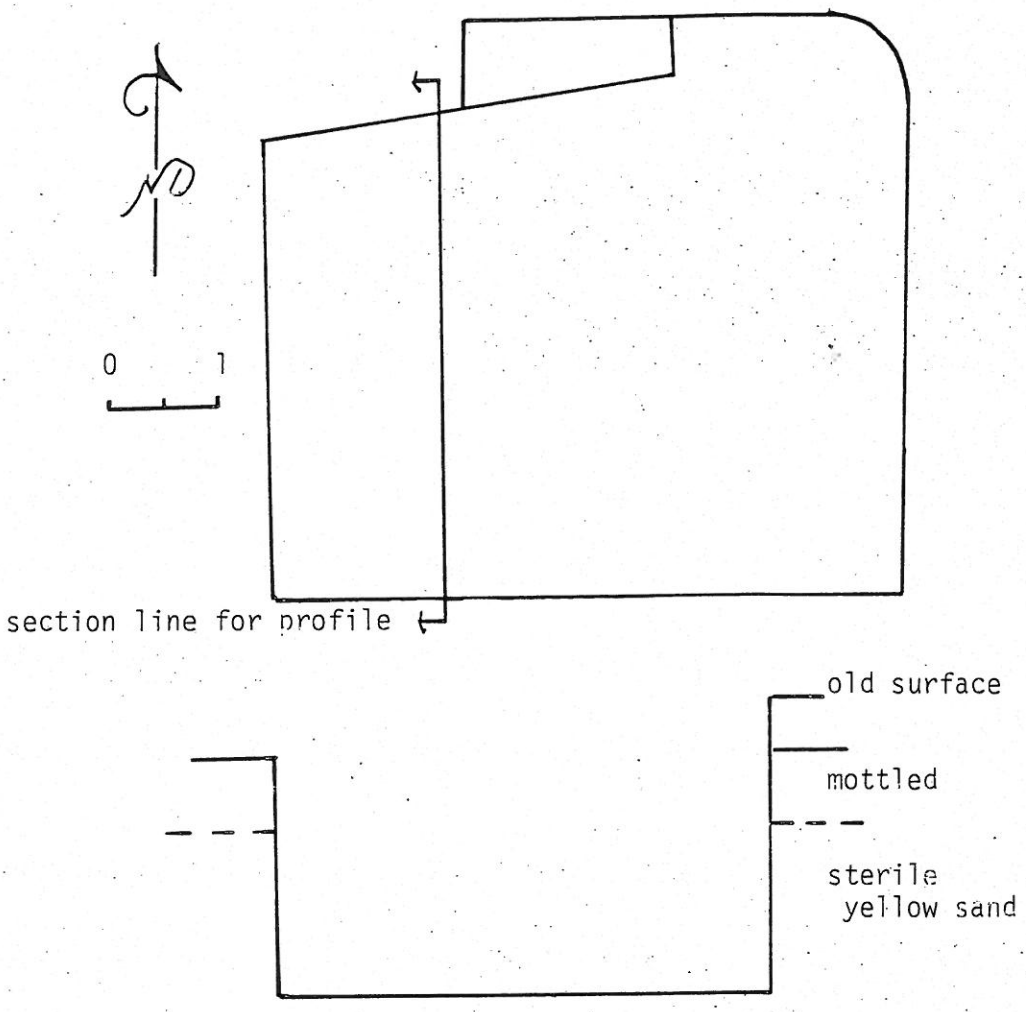


Figure 5

Planview and profile, Feature 97

Artifacts from Feature 97 are tabulated in Table 2. The mean ceramic date for the feature was 1805.6. The late ceramics include transfer printed pearlware in blue and other colors, and a multi-sided wine glass stem which is early nineteenth century.

Feature 97 produced a high concentration of blue and white transfer printed pearlware plates and other dishes. A total of 16 different patterns were identified. Most abundant were the Basket and Vase Floral pattern dated c. 1830 by Coysh (1974:#22). Bowls, cups, and plate fragments in that pattern were recovered. A second pattern which was found in quantity was the Village Church pattern dated c. 1820-1835 (Coysh 1974:#150). Only plates were noted in it.

There was also a large number of creamware sherds. They came from plates, bowls, pitchers or jars, and chamber pots. Three special creamware and pearlware cups for children were also recovered.

The high concentration of ceramics with identifiable patterns from this feature raised the question about whether this privy fill might represent debris from the Moffett and Calder dry goods store after the 1838 fire, rather than just the usual domestic debirs. There are no features on the 1834 plat which coincide with the location of Feature 97, so the historic record is not helpful in identifying it.

Feature 98 - Feature 98 was encountered while attempting unsuccessfully to locate the privy on the south lot of the 1834 plat (Figure 2). The wall of the later building to the south disturbed and obscured the area.

The feature was a rounded, shallow pit (Figure 6) only about 1.2 feet deep, and 5.0 feet in diameter. It was excavated in two levels. Level 1 was .8 feet thick, and level 2 was .4 feet thick. Feature 98 does not conform to the shape of other Charleston privies and there was no evidence of walls around the feature.

Artifacts recovered from Feature 98 are summarized in Table 3. A high concentration of potsherds was noted. Unusual was the fact that 1663 or 67.9% of all potsherds were unglazed red earthenware flower pot fragments. The rims conform to the nineteenth century types illustrated by Audrey Noel Hume (1974). The most common was her type 11, with a discard date of 1885; others included here type 7 with a discard date of 1817 and type 2 with a discard date of 1759 at Williamsburg (Noel Hume 1974:fig 26).

The mean ceramic date for Feature 98 was 1804.5. Pearlware sherds, six whiteware sherds, and nineteenth century stoneware fragments dating to the first quarter of the nineteenth century suggest a later date, and support the hypothesis that this may have been a dump for broken pottery and refuse following the 1838 fire.

The feature does not coincide with the location of any features on the 1834 plat (Figure 2). The property on which it was found was just south of

Table 2

Artifact Tabulation, Feature 97

Kitchen:

Porcelain,	b/w underglaze	5
	overglaze pply	9
	white	17
Stoneware,	westerwald	1
	grey	1
	tan	4
	misc 19th cent	79
	white saltglazed	2
Earthenware,	lead glazed	35
	green lead glaze	8
	purple decorated	3
	white interior	3
	black lead glazed	43
	buckley	1
	green glazed interior	1
	grey green glaze	7
	buff paste	1
Creamware,	plain	759
	blue handpaint	2
	banded	12
	feather edge	1
	royal	5
	grey banded	1
	open basket	26
	child's cup	11
Pearlware,	plain	956
	shell edged	620
	banded	322
	finger paint	101
	mocha	111
	blue hand paint	80
	stippled	1
	blue, yellow interior	2
	transfer print, blue	960
	transfer print, black	21
	transfer print, brown	3
	transfer print, purple	7
	transfer print, red	5
	luster ware	3
Whiteware,	handpaint	42
Lusterware,	red paste	11
Bottle glass,	dark green	486
	light green	30
	medium green	12
	aqua	17
	clear	10
		225
Bottle glass,	br. green	3
	dark blue	17
oil bottles		11
preserve jar		3
London bottle		12
pharmaceutical glass		32
decanter		5
ink well		4
perfume bottle		10
Table glass		13
goblet		6
blown tumbler		17
panelled tumbler		2
ribbed tumbler		4
bottle stopper		1
Architecture:		
Window glass		229
iron nail		27
marble slab		1
Arms:		
gunflint		3
Clothing:		
bone button, 1 hole		2
bone button, 3 hole		1
bone button, 4 hole		4
bone button, 5 hole		2
brass button		3
Personal:		
bone fan slat		1
bone object		1
tooth brush		4
Furniture:		
porcelain knob		1
Pipes:		
kaolin stems		21
Activities:		
colono ware		11
flower pot frags		2
inkwell		1
scissors		1
barrel		1
iron		29

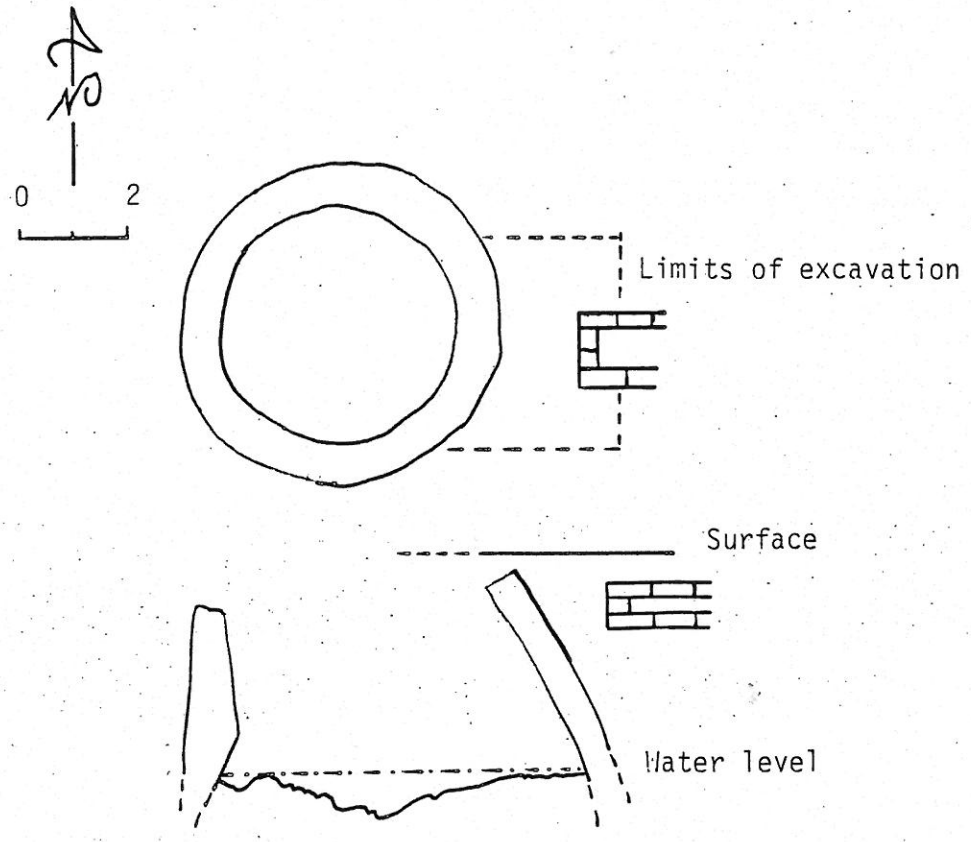


Figure 7

Planview and profile, Features 99 and 94

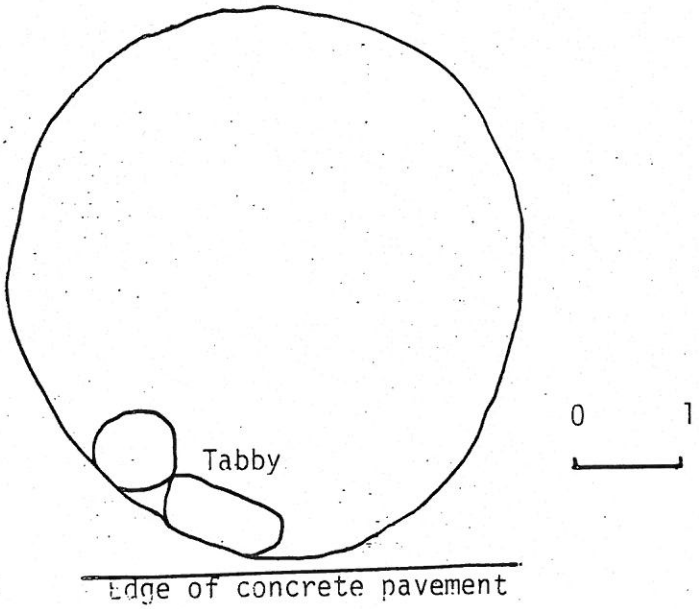


Figure 6

Planview, Feature 98

Table 3

Artifact Tabulation, Feature 98

Kitchen:

Porcelain,	oriental	4
	underglaze b/w	2
	white	7
	decorated euro	4
	b/w european	18
Stoneware,	misc 19th cent	8
	westerwald	1
	bottles	50
	brown glazed	32
	grey-yellow	5
Earthenware,	slipware	24
Creamware,	plain	52
	mocha	1
	open basket	4
Pearlware,	plain	254
	shell edged	68
	banded	19
	finger painted	9
	mocha	6
	blue handpaint	6
	brown handpaint	1
	handpaint, poly	15
	transfer print, blue	129
	transfer print, green	12
whiteware		6
Lusterware		4
Earthenware,	lead glazed	35
	yellow decorated	6
Bottle glass,	dark green	206
	light green	69
	light blue	2
	dark blue	1
	clear	78
goblet		1

Architecture:

window glass	26
roof tile	5
floor tile	3
brick	1
mortar	1
nails	12
misc iron	1

Clothing:

bone button	1
brass button	1

Activities:

flower pot frags	1663

the Moffett and Calder building of 1838. This is the land purchased in 1834 by James Wilson, whose dwelling and seed store were burned in 1838. The flower pot fragments may be from that activity. By 1852 a brick building had been built on this lot.

Feature 99 - Feature 99 is a well, situated 34 feet from Hasell Street and 62 feet from King Street. The well was noted about .3 feet below the surface. The soil above the well and the loose one foot of fill in the top of it contained late nineteenth to early twentieth century objects, including fragments of South Carolina Dispensary bottles and a Coca Cola bottle. The fill of the well, below the loose soil, was excavated in three one foot levels, down to the point where water was encountered and it was difficult to excavate.

The well (Figure 7) had a brick casing. The top part of it was dome-shaped with an outside diameter at the top of 6.2 feet and a diameter of 8 feet four feet below the rim. The bricks were hand made. They were 9.5 inches long, 3.6 inches wide, and 2.5 inches thick. The top sixteen courses were laid in mortar; below that they were laid dry.

The concentration of artifacts in the well was not high compared to the other features. It contained the usual domestic debris. Artifacts recovered are tabulated in Table 4. The mean ceramic date on artifacts from levels 1 to 3, which are regarded as undistrubed, is 1799.5. The presence of transfer printed pearlware sherds and nineteenth century ceramic bottles argues for a somewhat later date.

A few sherds were excavated from a portion of the builder's trench outside the wall of the well. These were stoneware and pearlware sherds and the mean ceramic date was 1802.3.

The location of Feature 99 coincides with the well indicated on the 1834 plat (Figure 2). It was situated on an old fence line between the two properties facing King Street. How long the well was in use is not known. By 1852 a brick building occupied the property.

Feature 94 - Just east of Feature 99 was a brick drain which has been designated Feature 94 (Figure 7). The drain had a brick floor and sides and was capped with brick as well. Mortar in the drain is yellow and contains shell. The drain was 1.6 feet wide and 1.0 feet high.

Very few artifacts were recovered from Feature 94. Shell edged pearlware was the most common type with a TPQ of 1780. The mean ceramic date on the feature is 1781.9, somewhat early for the feature (Table 5).

Conclusions

All of the features encountered at the corner of King and Hasell Streets can be attributed to the early nineteenth century occupation of the property. Feature 96 is the privy identified on the 1834 plat of the Blum property.

Table 4

Artifact Tabulation, Feature 99

Kitchen:

Porcelain, oriental	1
b/w overglaze	2
european	10
Stoneware, utilitarian	15
brown glazed	2
westerwald	1
Earthenware, slipware	2
Creamware, plain	126
hand painted	4
royal pattern	2
open basket	2
overglazed painted	1
Pearlware, plain	48
shell edged	31
banded	20
hand painted	19
transfer print, blue	42
transfer print, brown	9
transfer print, green	8
Ironstone	1
Delft, plain	5
Earthenware, black lead glaze	1
Earthenware, lead glazed	9
Olive jar	1
bottle glass, dark green	18
light green	5
blue	1
clear	4
pharmaceutical	3
bone knife handle	1

Architecture:

Window glass	5
roof tile	14
nails	52
slate	8

Arms:

gunflint	1

Clothing:

porcelain button	1
bone button	2

Activities:

file	1
flower pot	1
glass ink well	1
metal disc	1
misc iron	9

Table 5

Artifact Tabulation, Feature 94

Porcelain,	oriental	4
	b/w underglaze	2
	overglaze poly	1
Creamware,	plain	3
	royal pattern	2
Pearlware,	plain	3
	blue handpaint	1
	green shell edged	1
Architecture,	ornamental iron	2

It was a wooden structure. Feature 99 is the well noted on the same plat.

Features 97 and 98 were not indicated on the 1834 plat. Feature 97, a privy, is located on the part of the property which fronted on Hasell Street in 1834. It may date form after 1834 when the property was sold to Moffett and Calder but before the 1838 fire which destroyed their first brick building. Its contents include a high concentration of creamware and transfer printed pearlware, which suggests that part of the contents may have come from the dry goods business rather than the domestic occupation of the property.

Feature 98 was located on the property purchased by James Wilson in 1834. He operated a seed store there. The high concentration of flower pot fragments suggests the association with his business which burned in 1838.

Editor's Note: Feature 95 was a designation given to a concentration of materials noted by the construction crew and donated to the Charleston Museum crew. Because it was impossible to further define the feature due to disturbance, the collection is not discussed further.

Feature 7M-213 Meeting Street

From June 15 through July 3, 1981 archaeological excavations were conducted at 213 Meeting Street. The site was an open area behind a standing facade - all that remained of a building burned in 1973. The purpose of the research was to locate Feature 7, a well-pit which had been located and partially excavated by Dr. Nicholas Honerkamp and his colleagues during their research at the Charleston Place site (Honerkamp et al. 1982: 94-96).

Dr. Honerkamp provided a map of his excavations in the area, designated Operation 4, Sub-op A. With the additional aid of a member of his crew, we opened an area about 17 feet long and 6 feet wide with a backhoe. Approximately three feet of top fill was removed before the trench excavated by Honerkamp's crew was encountered. Once the feature was located, the remainder of the excavation was carried out with shovels and trowels. Fill from the feature was screened through ¼inch mesh.

Two features were encountered in the excavation. The first was the well pit, designated Feature 7M to distinguish the collection from that obtained by Honerkamp. The second was a portion of a cellar just east of the well pit.

Artifacts encountered in the excavations were returned to The Charleston Museum. They were cataloged and analyzed and are part of the permanent Museum collections.

Much of the excavation and laboratory work was done by a group of Middle School students in the Charleston Public School SAIL program, under the supervision of Dr. Elaine Herold, assisted by Eric Budds, then a student at the College of Charleston.

The history of the site at 213 Meeting Street has been reported in detail by Herold and Thomas (1981:34-36, 100-102). 213 Meeting Street is located on the west side of Meeting Street between Hasell and Market Streets. It was part of Lot 128 of the Grand Model of Charleston, granted to Edith Summers in 1695.

In the early part of the eighteenth century it became the property of Martha Daniel Logan, who left the north half of Lot 128, including this property, to Sarah Beresford in 1742. In 1770 Sarah Beresford sold it to Martha Logan, Jr, daughter of the previous owner. By 1779 the property had been acquired by Elizabeth and Isaac Huger who sold it to John Dart, an attorney. The lot was part of a tract 59 feet 6 inches wide on the street, and the proce of L 9500 suggests that there was a structure on it.

Benjamin Dart sold the land to James Clark in 1803 for L 5000 sterling, and he sold it three years later to John Everingham for L3000. In 1822 it was sold at a sheriff's sale to John Williamson for $4800. Ten years later Williamson's executor sold it to Claude Raime. Until this time it appears

that the owners of the property must have used it for investment purposes, for no record has been found of any of them living there.

Claude Raime had a confectionary on the property which was burned in the fire of 1835. He apparently rebuilt and also rented part of the land to T. Hughes who had a furniture store there. Raime's business and Hughes' one story wooden house and second-hand wear room were destroyed in a second fire in April, 1838.

Raime owned the land until 1846 when he sold it to C. Dutrieux for $10,000. The land changed hands again in 1846 and 1848. The 1852 Ward Book listed George Cameron as the owner of two three-story brick buildings on the property at that time. In 1875 the property was divided and the northern part, which became 213 Meeting Street, was sold to E. Trenholm. A three story brick store was listed on his land.

The building changed hands again in 1893 and was damaged by a fire in 1910. It was repaired and reoccupied after that. The late eighteenth and early nineteenth century occupation of the property must have been largely residential and small business. By the end of the nineteenth century, it was primarily commercial property.

Feature 7M - Feature 7, originally located by Dr. Honerkamp, had been identified as a possible well pit (Honerkamp 1982:94-96). He excavated only a small section of the feature, and found a low density of artifacts.

The Museum excavations revealed that below the layer of rubble was a deposit of sand and clay, which was recent fill and was removed with the backhoe. Below that, on top of the feature, was a thin layer of ash and some sterile sand. The major concentration in the top of the feature was a large quantity of roof slates and broken roof tiles. All of the roof tiles were the curved type, used to cover the crest of a roof.

Below this was a layer of mottled sand containing refuse. The feature extended down to a depth of approximately 8 feet below the surface, and perhaps below that - at that depth we encountered some water and grayish sand.

There was very little brick in the feature - primarily occasional broken fragments. However, at a depth of 3.7 feet below the surface on the southeast side several bricks were noted which were set with mortar. The interior surfaces of the bricks were rough and there were no other bricks below them. There were also a few bricks at the bottom of the feature without mortar.

The feature was about 6 feet across, east to west, and an estimated 7 feet from north to south, and 6 feet deep, deep enough to have been a well. It is possible that the well casing was completely removed before it was used as a trash dump. Feature 7 was situated just west of the center of the three story portion of the building, so it predates the construction of this structure(Figures 8 and 9).

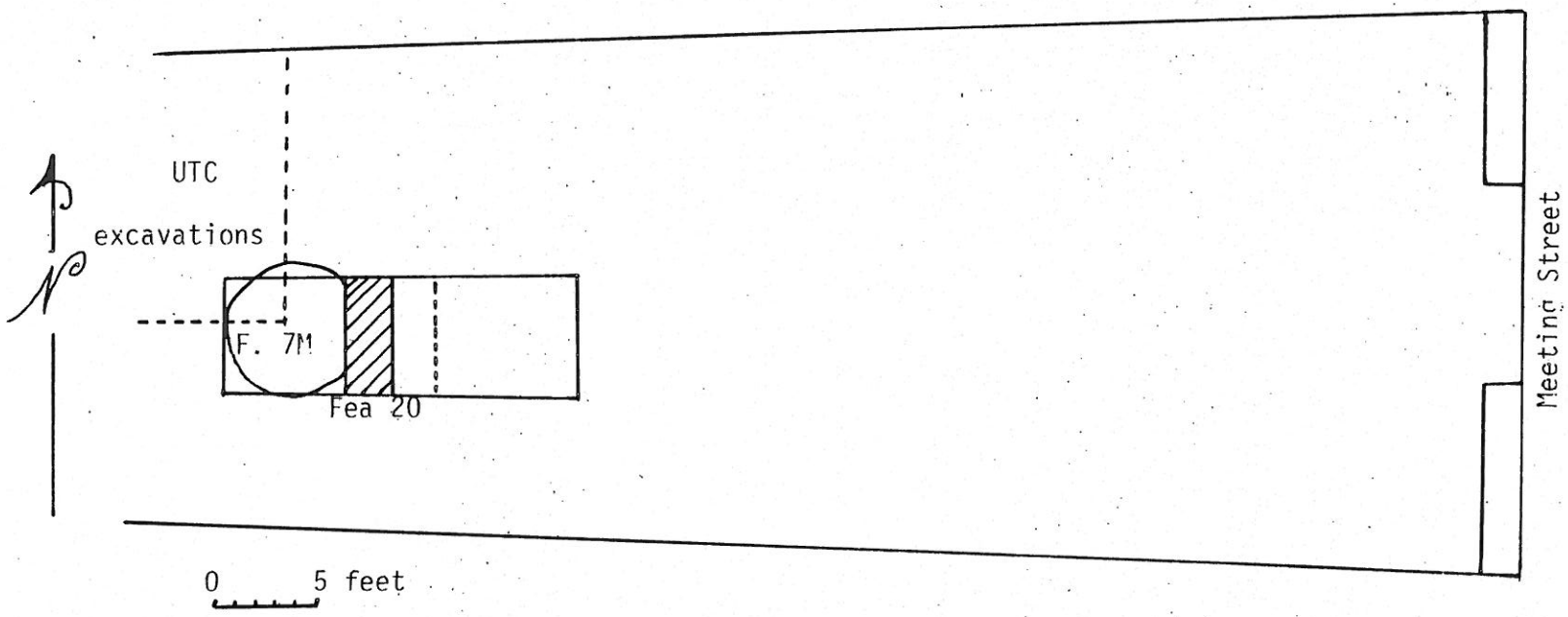


Figure 8

Planview, Features 7M and 20

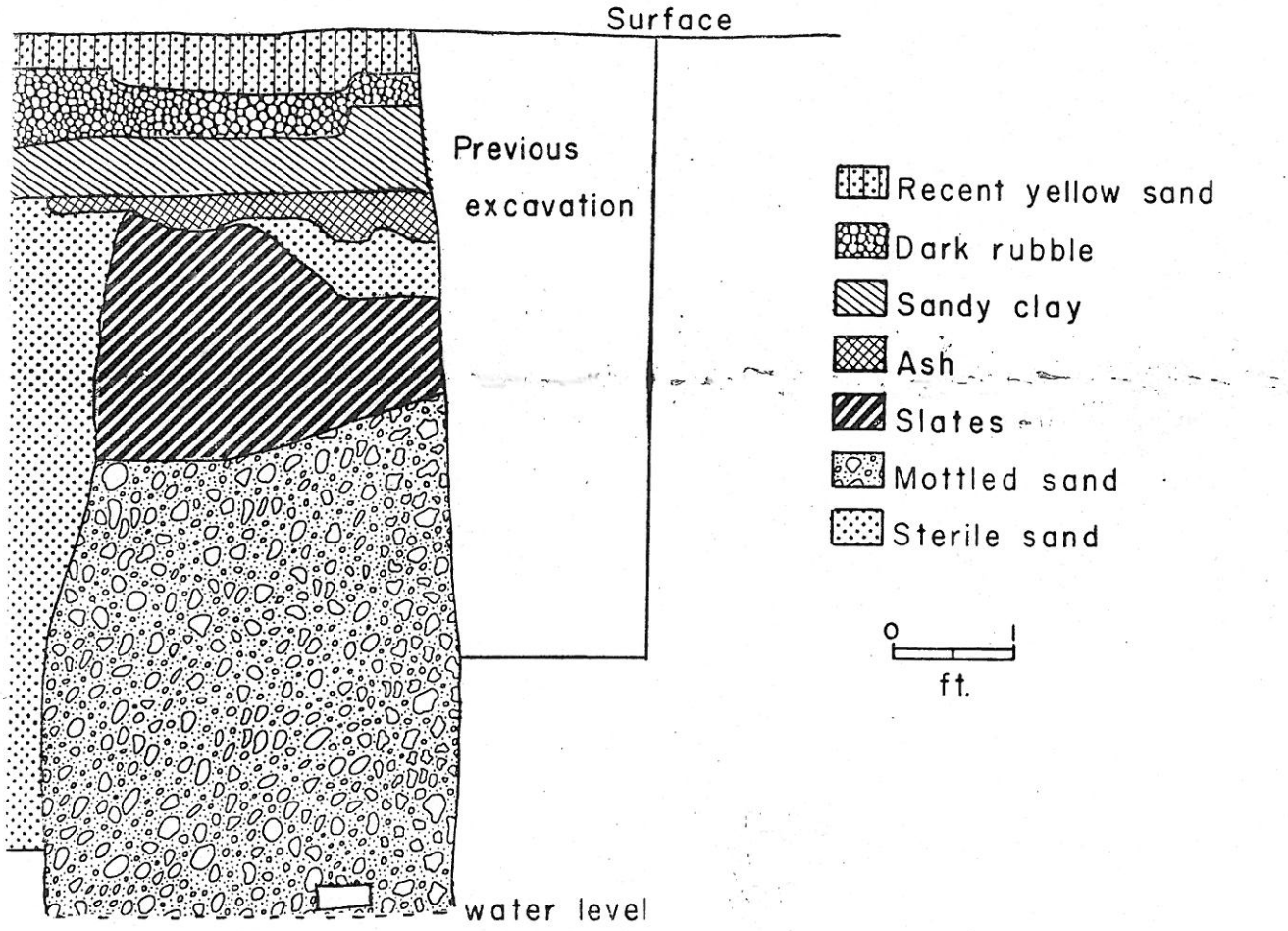


Figure 9

Profile of Feature 7M

Most of the artifacts recovered from Feature 7M conform to the usual domestic debris found in other sites in Charleston. The mean ceramic date for the deposit is 1792.3. The presence of four ironstone sherds and one whiteware sherd suggest that the date is too early. Bases and necks of glass bottles also indicate a later eighteenth to early nineteenth century period of occupation, with one molded bottle base which may be from the 1830s. The two buttons recovered are nineteenth century as well. Two glass fragments and one piece of creamware show evidence of having been in a fire.

Architectural artifacts in the feature include wire nails dating 1850 or later, ceramic roof tiles and a sandstone gate sill. The tiles were concentrated in the upper part of the feature.(Table 6).

There is nothing in the inventory of the artifacts which makes it possible to identify the feature with the activities of the early nineteenth century owners of the property, with the one exception of the brass kettle. Such items were not the exclusive implements of the confectioners, but would have been found in their kitchens (Diderot 1959:480).

Feature 20 - Cutting across the eastern edge of Feature 7 was a substantial brick way laid up in American bond, with three courses of stretchers and one of headers. The brick were .8 feet long, .35 feet wide, and .25 feet thick, and were laid 3½ courses per foot. The east side of the wall was finished with stucco. The wall was the western limit of a cellar with a finished floor. Above the floor were pipes which provided service for the building.

There was no evidence of a builder's trench on the west side of the wall. Apparently only the front part of the building had a cellar below it.

Very little was recovered from Feature 20. The five potsherds are attributable to the eighteenth and the first half of the nineteenth century, and probably are accidental inclusions in the fill.

Rubble and demolition debris noted above the wall indicate that after the building burned in 1973 the shell was demolished, the wall cut down, and the rubble was used to level the area.

Table 6

Artifact Tabulations, Feature 7M

Kitchen:

Porcelain, oriental	7
b/w underglaze	8
overglaze poly	1
white, gilt	1
Stoneware, westerwald	8
grey saltglazed	5
brown glazed	1
white saltglazed	5
Earthenware, slipware	11
brow glaze, yellow dec.	8
Creamware, plain	95
molded	1
royal	6
transfer print, black	6
Pearlware, plain	36
shell edged	5
banded	31
mocha	10
blue handpaint	17
transfer print, blue	33
whiteware	1
ironstone	4
Delft, plain	3
apothecary	4
blue/white	5
polychrome	6
earthenware, unglazed pink	1
redware, lead glazed	3
bottle glass, dark green	80
medium green	5
aqua	7
amber	2
milk	1
clear	18
pharmaceutical glass	2
table glass, goblet	2
decanter	1
stopper	1
tumbler	2
brass pot	1
iron pot	1

Architecture:	
mortar	1
plaster	4
granite	1
slate	57
roof tiles	179
brick	12
sandstone sill	1
cut nails	26
wire nails	46
iron door stop	1
iron lock plate	1
window glass	6
Arms:	
flint nodule	2
Clothing:	
brass button	1
iron button	1
Furniture:	
brass plate	1
Pipe:	
pipe stem	9
Activities:	
misc iron	4
horse shoe	1
brass ornament	1
colono ware	2

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APPENDIX V

TABULATION OF ARTIFACT ASSEMBLAGES

Artifact Tabulation, Feature 130

Kitchen:		
Creamware,	plain	681
	hand painted	4
Pearlware,	plain	235
	hand painted	249
	shell edged	204
	transfer printed	1115
	mocha	8
	annular	45
Whiteware,	plain	45
	blue tr.pr	153
	other tr.pr.	5
	hand painted	1
Pearlware,	blue striped	5
Lead glazed red stoneware		1
Porcelain,	oriental	48
	luster	8
Stoneware,	misc	111
	white saltglazed	6
	westerwald	5
Colono wares		23
Bottle glass,	green	411
	clear	133
	aqua	61
	panel	9
Table glass,	misc	4
	goblet	16
	tumbler	57
Pharmaceutical glass		8
bone knife handle		5
copper lid		1
Delft		14
unglazed earthenware		11
lead glazed earthenware		5
portobello ware		13
yellow ware		5
Jackfield		7
Black basalte		7
semi-porcelain		2

Personal:		
snuff bottle		1
eyeglass lense		1
figurine		1
coin		1
slate pencil		1
bone lid		1
toothbrush		1
brush		2
perfume bottle		2
game piece		1
Furniture:		
lamp base		1
Pipes:		
kaolin fragments		28
Activities:		
marble		15
lime		5
toy dish		1
Architecture:		
Window glass		239
delft tile		1
sandstone tile		1
slate		80
Arms:		
gunflint		2
Clothing:		
bone button		1
straight pin		1

Artifact Tabulations, Feature 132

Kitchen:		
Whiteware,	plain	9
Creamware,	plain	343
	transfer printed	1
Pearlware,	plain	65
	transfer printed	96
	mocha	3
	shell edged	36
	annular	29
	hand painted	29
Porcelain,	oriental	1
	overglazed	2
	transfer printed	2
Stoneware,	brown saltglazed	1
	misc	26
	westerwald	1
Tin Enameled ware		1
Delft		18
Redware		6
Buckley ware		2
Mottled ware		1
Unglazed earthenware		1
Colono wares		1
Bottle glass,	green	41
	clear	22
Architecture:		
slate		5
Clothing:		
bone button		1
Personal:		
pencil lead		1
Pipes:		
kaolin stems		66

Artifact Tabulations, Feature 133

Kitchen:	
Porcelain, oriental	8
Creamware, plain	122
Pearlware, plain	1
shell edged	15
transfer printed	56
annular	3
hand painted	15
Whiteware, plain	3
Stoneware, misc	3
Lead glazed earthenware	1
Buckley ware	1
Nottingham stoneware	1
Slipware	1
Bottle glass, green	32
clear	2
aqua	1
Table glass	2
bone knife handle	1
Architecture:	
Delft tile	1
window glass	38
Pipes:	
kaolin fragments	11

Artifact tabulations, Feature 124

Kitchen:

Porcelain, canton	48
white	139
Semiporcelain	7
Bone china	9
Yellow ware	68
Creamware, plain	7
Pearlware, plain	36
cable	11
shell edged	2
transfer printed	65
Whiteware, plain	1646
hand painted	1
blue tr.pr.	264
other tr.pr.	18
annular	148
flow blue	1
stenciled	15
Luster ware	1
Redware	39
Slipware	9
Stoneware, misc	31
Bottle glass, green	452
green, misc	40
clear	46
brown	1
milk	14
Table glass, misc	3
goblet	11
decanter	4
tumbler	39
Pharmaceutical glass	12

Architecture:

hook	1
window glass	65

Personal:

fan slat	4
razor strob	1
inkwell	12
toothbrush	29
pencil	1

Furniture:

lamp hardware	1

Pipes:

porcelain pipe	1
kaolin stems	10

Activities:

tea set	1
slate weight	1
marble	4
flower pot	33

Artifact Tabulations, Feature 117

Kitchen:		
Porcelain,	oriental	7
Creamware,	plain	16
Pearlware,	plain	32
	hand painted	88
	shell edged	28
	transfer printed	21
	annular	9
Whiteware,	plain	165
	transfer printed	8
	hand painted	1
Stoneware,	brown saltglazed	1
	westerwald	3
Slipware		2
Delft		10
Colono wares		7
Earthenware,	unglazed	3
	lead glazed	37
Bottle glass,	green	91
	brown	2
	clear	1
	light green	2
bone knife handle		1
Architecture:		
window glass		9
Arms:		
gunflint		1
Personal:		
bone comb		1
Pipes:		
kaolin stems		13
kaolin bowls		4

Artifact Tabulations, Feature 115C-E

Kitchen:	
Porcelain, oriental	8
Pearlware, plain	5
hand painted	2
transfer printed	3
shell edged	3
Whiteware, plain	229
shell edged	11
blue tr.pr.	56
other tr.pr.	4
hand painted	1
annular	3
flow blue	14
stenciled	1
Yellow ware	25
Stoneware, misc	8
Redware	10
Bottle glass, green	224
amber	1
brown	7
clear	104
Bottle, panel	24
Table glass, misc	24
Pharmaceutical glass	81
Architecture:	
window glass	120
Clothing:	
porcelain button	9
Personal:	
toothbrush	8
comb	1
ink bottle	1
Furniture:	
lamp glass	10
Pipes:	
kaolin fragments	383
Activities	
glass egg	1
flower pot	4
marble	3
toy dish	3

Artifact Tabulations, Feature 104

Kitchen:	
Porcelain, white	390
Semi porcelain	4
Creamware, plain	4
Pearlware, plain	69
shell edged	8
hand painted	2
Whiteware, plain	308
blue tr.pr.	50
annular	27
other tr.pr.	2
hand painted	27
stenciled	3
sprigged	5
Yellow ware	49
Stoneware, misc	21
Slipware	1
Redware	38
Earthenware, lead glazed	1
Bottle glass, green	144
clear	28
aqua	17
amber	17
panel	11
dispensary	12
soda	1
milk	9
light blue	4
Table glass	68
Architecture:	
door knob	2
window glass	243
marble	4
Clothing:	
bone button	8
shoe leather	6
Personal:	
pencil lead	2
ink well	4
fan slat	1
eyeglass lense	3
comb	2
syringe	2
figurine	1
Furniture:	
lamp glass	8
Pipes:	
kaolin fragments	18
Activities:	
marble	3
doll part	1
flower pot	13

Artifact Tabulations, Feature 100

Kitchen:

Whiteware, plain	151
Creamware, plain	6
Whiteware, hand painted	4
Rockingham ware	4
Delft	2
Stoneware, bottle	246
ginger beer	24
misc	1
Bottle glass, green	362
clear	306
brown	98
amber	47
dispensary	34
blue	1
milk	25
Table glass	2

Architecture:

door hook	1
window glass	191
nails	29

Clothing:

button, porcelain	14

Personal:

comb	1
ruler	1
pencil lead	4

Furniture:

lamp glass	7
caster	1

Pipes:

kaolin stems	18

Activities:

Redware jar	204
marble	9
toy dish	1
doll part	1
brass weight	1
ud metal	43
ceramic insulator	5
plumbing	16
horse tack	1

Artifact Tabulations, Feature 139

Kitchen:		
Porcelain,	oriental	64
Creamware,	plain	9
Pearlware,	plain	37
	transfer printed	54
	annular	45
	shell edged	16
	hand painted	14
Whiteware,	plain	500
	blue tr.pr.	4
	other, tr.pr.	21
	hand painted	2
	stenciled	5
Yellow ware		20
Earthenware,	black lead glaze	1
Stoneware,	misc	4
Bottle glass,	green	142
	aqua	118
	clear	8
Table glass		11
Pharmaceutical glass		6
Architecture:		
tile		3
window glass		67
Clothing:		
bone button		1
Personal:		
toothbrush		1
Furniture:		
lamp hardware		1
Activities:		
flower pot		19
marble		2
Pipe:		
kaolin frag		5

Artifact Tabulations, Feature 129

Kitchen:	
Porcelain, white	12
Pearlware, plain	22
transfer printed	5
annular	1
Whiteware, plain	3
Yellow ware	7
Stoneware, misc	3
Earthenware, unglazed	1
Bottle glass, green	37
brown	1
clear	3
aqua	7
Table glass	6
knife handle	1
Architecture:	
window glass	14
door knob	1
tile	2
Clothing:	
shoe heel	8
Furniture:	
lamp part	1
Activities:	
flower pot	5
wood knob	1
metal sieve	1

Artifact Tabulations, Feature 126

Kitchen:	
Porcelain, oriental	7
Creamware, plain	18
Pearlware, plain	8
transfer print	28
shell edged	8
annular	9
hand painted	3
Whiteware, plain	11
other tr.pr.	5
molded	1
Earthenware, lead glazed	7
Stoneware, misc	1
jackfield	1
Bottle glass, green	82
clear	1
Table glass	1
knife handle	1
Architecture:	
delft tile	1
marble	1
pipe	3

Artifact Tabulations, Feature 131

Kitchen:	
Porcelain, oriental	15
Creamware, plain	6
Pearlware, plain	14
transfer printed	27
shell edged	3
annular	17
Whiteware, plain	56
other tr.pr.	12
blue tr.pr.	1
flow blue	1
Stoneware, misc	10
Colono wares	1
Bottle glass, green	59
brown	6
Bottle glass, clear	16
aqua	1
Table glass	1
Pharmaceutical glass	1
bone knife handle	2
Architecture:	
window glass	13
Furniture:	
lamp glass	1

Artifact tabulations, Feature 103

Porcelain,	4
semi porcelain	24
Creamware, plain	2
Pearlware, plain	3
annular	4
shell edged	2
Whiteware, plain	46
blue tr.pr.	2
other tr.pr.	1
hand painted	2
Yellow ware	2
Slipware	2
Rockingham	1
Stoneware, misc	11
Redware, lead glazed	4
Bottle glass, green	54
clear	1
aqua	7
lt. green	5
milk	1
brown	1
Table glass	1
Window glass	32
Shoe leather	3
lamp	1
pipestem	26
doll part	6
flower pot	7

Artifact Tabulations, Feature 105

Kitchen:		
Pearlware,	annular	3
	shell edged	2
	transfer printed	9
Whiteware,	plain	111
	other tr.pr.	1
Semi porcelain		23
Nottingham stoneware		1
Yellow ware		12
Stoneware,	misc	16
	white saltglazed	1
	elers ware	1

Bottle glass, green	63
clear	2
light green	1
Window glass	75
Bone button	2
Lamp part	2
Pipestem	1
flower pot	4
marble	3

Artifact Tabulations, Feature 118

Kitchen:		
Porcelain,	white	8
Creamware,	plain	32
Pearlware,	plain	82
	annular	12
	transfer printed	27
	shell edged	23
	hand painted	4
Whiteware,	plain	1
	other tr.pr.	1
	stenciled	1
Stoneware,	misc	12
	westerwald	16

Bottle glass, green	43
light green	6
Ceramic insulator	3

Artifact Tabulations, Feature 136

Kitchen:		
Creamware,	plain	34
Pearlware,	plain	20
	transfer printed	42
	shell edged	8
	hand painted	3
	annular	2

Earthenware, ulglazed	3
Bottle glass, green	141
toothbrush	1
pipestem	1

Artifact Tabulations, Feature 138

Kitchen:	
Porcelain, oriental	48
Creamware, plain	68
Pearlware, plain	24
shell edged	11
hand painted	38
transfer printed	3
annular	2
Whiteware, transfer print	60
Elers ware	1
Yellow ware	8
Delft	1
Stoneware, misc	12
Bottle glass, green	19
light green	3
milk	2
Table glass	7
Pharmaceutical glass	1
Window glass	13
Pipestem	5

Artifact Tabulations, Feature 140

Refined earthenware, burned	41
Porcelain, burned	37
Pearlware, shell edged	20
hand painted	8
transfer printed	7
Whiteware, plain	87
transfer printed	19
hand painted	11
shell edged	3
Stoneware, misc	2
Bottle glass, green	1

Artifact Tabulations, Feature 153

Kitchen:		
Porcelain,	oriental	2
	b/w	21
Creamware,	plain	256
	other	24
Pearlware,	plain	152
	hand painted	19
	shell edged	141
	transfer print	134
	annular	2
Portobello	ware	11
Stoneware,	grey saltglaze	1
	misc	3
	white saltglaze	1
	brown saltglaze	1
Slipware		2
Earthenware,	black lead gl.	3
	lead glazed	1
River burnished		1
Bottle glass,	dark green	1099
	clear	333
	light green	3
	milk	11
Table glass,	misc	11
	goblet	3
	tumbler	43
	pressed	6
Architecture:		
nails		2
window glass		221
Clothing:		
bone button		2
straight pin		2
Personal:		
perfume glass		10
Furniture:		
bed post cover		1
drawer pull		1
Pipes:		
kaolin fragments		2
Activities:		
barrel strap		12
wire		1

Artifact Tabulations, Feature 149

Kitchen:

Porcelain, oriental	2
b/w	19
Creamware, plain	152
other	7
Pearlware, plain	134
hand paint	126
shell edged	65
transfer print	159
annular	117
Whiteware, plain	32
shell edged	11
blue tr.pr.	8
other tr.pr.	32
hand paint	4
annular	10
Luster ware	1
Yellow ware	5
Stoneware, grey saltglazed	2
brown sg	4
Redware, unglazed	7
lead glazed	2
Delft	5
Jackfield	1
Faience	1
Black lead glazed earthenware	3
Nottingham stoneware	1
Bottle glass, dark green	110
clear	66
light green	15
aqua	14
Table glass, misc	6
goblet	4
tumbler	4
kettle	2

Architecture:

nails	246
window glass	70
spike	6

Arms:

gunflint	1

Clothing:

buckle	2
lace bobbin	1
button, mother of pearl	1
brass	1
straight pin	6
button, brass	2

Personal:

toothbrush	4
bone comb	1
perfume glass	39

Furniture:

medallion	3
drawer handle	1

Pipes:

kaolin fragments	51

Activities:

barrel strap	7
marble	1
flower pot	1
brass wire	1

Artifact Tabulations, Feature 148

Kitchen:	
Porcelain, white	33
gilt	1
Semi porcelain	42
Yellow ware	11
Pearlware, plain	1
annular	1
Whiteware, plain	1363
molded	55
other tr.pr.	286
blue tr.pr.	165
annular	118
stamped	638
striped	227
luster	1
hand painted	88
Stoneware, misc	4
Earthenware, lead glaze	1
Rockingham	1
Bottle glass, dark green	10
clear	1753
brown	6
aqua	47
blue	1
amber	22
Table glass, goblet	7
molded/pressed	115
compote	96
fluted	20
etched	25
milk	336
Iron container	11
Architecture:	
window glass	65
nail	56
Clothing:	
button, bone	1
porcelain	3
snap	1
bead	1
Personal:	
bone comb	2
toothbrush	1
Furniture:	
tack	1

Pipes:	
kaolin fragments	4
Activities:	
machine parts	5
ud brass	1
flower pot	2

Artifact Tabulations, Feature 150

Kitchen:	
Porcelain, oriental	4
Creamware, plain	84
Pearlware, plain	101
hand painted	30
shell edged	48
transfer printed	130
annular	42
Whiteware, plain	3
other tr.pr.	9
annular	1
Luster ware	6
Yellow ware	1
Elers ware	1
Black basalte	1
Stoneware, grey saltglaze	2
misc	30
brown saltglaze	3
Earthenware, unglazed	1
lead glazed	4
black lead glazed	12
Slipware	6
River burnished	8
Colono-Yaughan	1
Bottle glass, dark green	269
clear	97
light green	1
blue	6
aqua	34
Table glass, misc	5
tumbler	15
goblet	8
cutlery	4
kettle	1
Architecture:	
nails	348
window glass	158
spike	4
roof tile	1
lock	?
Arms:	
gunflint	2
Clothing:	
buckle	1
Button, mother of pearl	2
brass	3
straight pin	1
Personal:	
toothbrush	2
bone comb	1
perfume glass	200
Furniture:	
medallion	3
Pipe:	
kaolin fragments	11
Activities:	
barrel strap	16
marble	1
flower pot	2
brass wire	6

Artifact Tabulations, Feature 147

Kitchen:	
Porcelain, oriental	1
Creamware, plain	3
Pearlware, plain	1
hand painted	3
transfer printed	4
annular	3
Luster ware	1
Stoneware, misc	1
white saltglaze	1
Bottle glass, green	18
clear	3
light green	5
Table glass, tumbler	3
goblet	1
Pharmaceutical glass	1
Nails	76
window glass	29
brass tack	2
brass trim	1
Iron strap	3
flower pot	1
slag	1

Artifact Tabulations, Feature 155

Kitchen:	
Creamware, plain	5
Pearlware, plain	1
shell edged	3
annular	3
Whiteware, plain	1
hand painted	2
shell edged	1
blue tr.pr.	13
other tr.pr.	1
Luster ware	1
Stoneware, brown saltglaze	1
Earthenware, unglazed	1
Jackfield	1
Bottle glass, dark green	40
clear	10
light green	19
Table glass, tumbler	10
goblet	2
Pharmaceutical glass	1
Nail	76
window glass	6
latch	1
pintel	1
slate pencil	1
pipestem	1
wire	2

Artifact Tabulations, Feature 156

Kitchen:	
Creamware, plain	2
Pearlware, plain	2
shell edged	2
transfer printed	1
Whiteware, plain	7
blue tr.pr.	1
Stoneware, alkaline glaze	1
Jackfield	1
Bottle glass, green	4
clear	4
Bottle glass, brown	3
light green	10
nails	124
window glass	13
bone button	1
perfume glass	2

Artifact Tabulations, Feature 145

Kitchen:	
Porcelain, plain	1
b/w oriental	21
Creamware, plain	38
other	12
Elers ware	2
Jackfield	4
Stoneware, grey saltglaze	8
misc	4
white saltglaze	22
westerwald	2
brown saltglaze	1
Delft	38
Slipware	11
Earthenware, unglazed	3
black lead glazed	3
Prehistoric	18
River burnished	2
Colono-Yaughan	8
Bottle glass, green	105
clear	42
light green	21
Table glass, goblet	2
Architecture:	
nails	116
window glass	73
pintel	2
spike	1
Arms:	
shot	1
gunflint	2
Clothing:	
buckle	3
button, bone	1
brass	1
Personal:	
coin	1
Furniture:	
brass tack	1

Pipes:	
kaolin stem	12
kaolin bowl	12
Activities:	
barrel strap	36
ud brass	4
brass nail	1