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Camden: A Frontier Town in Eighteenth Century South Carolina

Kenneth E. Lewis

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An examination of the site of the British colonial settlement of Camden, a center of social, economic, and political activity on the' eighteenth century backcountry frontier of South Carolina, permitted the observation of large-scale intrasite patterning through the use of stratified unaligned random sampling of the subsurface remains there. Although disturbed by long-term agricultural activity, patterning in the distribution of archeological materials was discernible. An examination of this patterning reveals not only the spatial and temporal limits of the settlement, but also suggests that Camden shared significant functional similarities with frontier centers in general. In contrast to urban centers with comparable social, economic, and political roles in contemporary Britain, Camden exhibited a markedly more dispersed settlement pattern, a~ well as a smaller population, larger land use units, an apparently greater proportion of activities of a nondomestic (e.g., commercial, industrial) as opposed to a domestic (i.e., residential) nature, and a relatively large proportion of high status residents. These functional characteristics reflect Camden's role as a frontier town, a class of settlement that serves as a locus of those activities associated with the collection and redistribution of goods and commodities passing into and out of the area of colonization. As a frontier settlement, Camden was situated close to remaining aboriginal groups in the area; and as a consequence, participated in extensive direct trade with them. The form of the settlement appears to have remained, in general, relatively unchanged until its abandonment at the beginning of the nineteenth century. Even the brief Revolutionary War period military occupation of the town resulted in few changes apart from the addition of fortification features.

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CAMDEN: A FRONTIER TOWN in Eighteenth Century South Carolina

by

Kenneth E. Lewis

ANTHROPOLOGICAL STUDIES #2

INSTITUTE OF ARCHEOLOGY AND ANTHROPOLOGY
University of South Carolina
Columbia, South Carolina

October, 1976

"Should anyone curious in matters of antiquity set out to find the Camden of Revolutionary memory they would be badly disappointed for not a vestige now remains of that once memorable city, even the ancient city of Nineveh has been found and many relics discovered, but of Camden naught remains. . ."

Sarah Thompson Alexander c. 1850

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LIST OF ABBREVIATIONS

BPJ	Board of Police Journals
CCD	Charleston County Deeds
CCP	Continental Congress Papers
CW/PRO	Cornwallis Papers, Public Record Office
GCP	Sir Guy Carleton Papers
GP/CCP	Nathaniel Greene Papers, Papers of the Continental Congress
KCD	Kershaw County Deeds
KCP	Kershaw-Chesnut Papers
JKP/AB/SHC	Joseph Kershaw Papers, Account Books, Southern Historical Collection
JKP/AB/SHSW	Joseph Kershaw Papers, Account Books, State Historical Society of Wisconsin
LC	South Carolina Loyalist Claims
LCD	Lancaster County Deeds
PD	Preston Davie Collection
SCS	South Carolina Statutes
WHH	William Henry Harrington Papers

Reports on archeological work carried out on historic sites in America have come to be characterized through their emphasis on description of the history of the site involved, followed by a description of the architecture found, followed by a description of the artifacts recovered. Woven through this description is a concern for chronology of the site and the objects and features recovered. It is no wonder that the discerning reader of such reports often looks in vain for a connection between this process and the concepts of anthropology since the missing ingredient in this format is a lack of concern for the testing of ideas about the past, the primary role of archeology.

In his report on the sampling phase of archeological investigation at the eighteenth century frontier town of Camden, South Carolina, Kenneth Lewis's emphasis was not the history, nor the architecture, nor the artifacts, nor the "welding" of the historical data base with the archeological data base, rather it was on the exploration of ideas. As such, this study becomes a truly anthropological product that is, in my opinion, a model of "anthropological studies," envisioned for this series being produced by the Institute of Archeology and Anthropology

By means of a frontier model Ken sets out to understand more about the relationship between past behavior and the material remains surviving in the archeological record at Camden. He is concerned with both the long- and short-term processes of culture change and never loses sight of the fact that Camden is illustrative of the Carolina frontier specifically, the frontier processes of colonization generally, is the result of an interplay of forces originating in diverse parts of the world and, as such, is intimately a part of a "world system."

The success of Ken's effort is attributable to his unique perspective which is oriented to viewing his specific challenge at Camden first from the world view, then from the viewpoint of the processes of colonization, and finally to the role of Camden itself. This is the opposite approach from that taken by most archeologists who invariably begin with the particularistic stance provided by their sponsor's challenge to discover something about that particular site.

The method used to obtain a sample of over 180 five-foot squares through a stratified random sample of the entire town site was dictated by the ideas laid down in the design phase of the research. Sophisticated concepts require sophisticated methods, and the hypothetico-deductive method used by Lewis allowed him to explore the many facets of the historical and archeological records toward testing his ideas. His terms are carefully defined and our expectations for what an historical archeology report should be are met as he deals with settlement patterns, function of the town, function of areas within the town, status, ethnic affiliation of occupants, trade relationships, and intersite synthesis.

The impressive fact about this study is that it was accomplished by means of a sampling phase of study, not the excavation of the entire town of Camden. Such excavation will come later during which many of the

hypotheses outlined in this study will be tested, such being a major advantage of the approach used in this first phase effort. With this foundation laid future studies can focus on the ideas and hypotheses emerging from this study, and in so doing, refine our knowledge of archeological procedures, thus contributing to method and theory in archeology generally.

A critic with a particularistic paradigm may well suggest that when excavation is carried out in an area predicted by Ken to contain one of the ruins of the town of Camden, and no ruin is found, what then? Does this not "prove" that the hypothesis is in error? Lewis would be the last person to be disheartened by such a fact. He would simply ask the next question in the scientific process, "why?" This would lead to further testing and method refinement based on the new evidence. This is the procedure of science. The impotency of such particularistic criticism of generalinzing propositions can be seen in the following illustration.

In my tool room I have a box into which I throw all my miscellaneous nuts and bolts. This classification is based on the idea that there is a relationship between nuts and bolts. If the nuts are separated from the bolts into two piles and experimentation carried out toward fitting the two together, we would find that some of the nuts fit some of the bolts. We might then make the following statements based on our observations involving: 1) the concept of "boltness," 2) the concept of "nutness," and 3) the concept that "nuts are designed to fit bolts," which leads me to throw all my nuts and bolts into the box. The particularist who makes a fourth observation that "this nut doesn't fit this bolt," and hails this as an empirical, inductive observation of data contrary to the general proposition usually does not realize that such an argument has absolutely no impact at all on the general proposition that "nuts are designed to fit bolts." This example might be seen by some as too simplistic, but in my view, it relates to the basic "nuts and bolts of archeology and to the reason that Kenneth Lewis has accomplished what so many others have failed to do. He is after the ideas and the laws that link behavior and the static archeological record and their explanation, and in so doing he demonstrates the significance of the role of historical archeology in the examination of culture process.

Stanley South
Institute of Archeology and Anthropology
University of South Carolina
September, 1976

During the course of the archeological investigations at Camden many individuals and groups have contributed to the success of this project. Support and encouragement has been continually provided by the Camden Historical Commission through whose efforts the site of the eighteenth century town has been acquired and set aside for study. In particular, thanks are due Colonel Lanning P. Risher, Chairman of the Commission, and Mrs. W. A. (Hope) Boykin, Administrator of Historic Camden. During both field seasons Hope Boykin, her assistant Mrs. Shirley Ransom, and the staff of Historic Camden were of inestimable help in coordinating many aspects of the field operation.

Appreciation is expressed to the City of Camden, South Carolina, for its contribution of personnel and heavy machinery in support of the archeological work. A. L. Young, City Lot Manager, obligingly provided a variety of machinery, often on short notice, to facilitate the excavations. Junior Moore of the City Lot was especially helpful in performing many delicate excavation tasks through his skillful manipulation of the backhoe.

Thanks also go to Daniel D. Riddick and his survey crew who conducted the survey of the Camden Historical Commission property. Their laying out of the base line of the site grid west of Broad Street and supplying absolute elevations for control points on the site permitted the archeological excavations to be tied accurately to the plan of the eighteenth century settlement.

The archeological field crews consisted of the following persons: John Prescott, Linda Light, Frank Jordan, Page Luttrell Edwards, Tommy Dallas, and Travis Bianchi in 1974 and Cort Calk, Tommy Dallas, Jacqueline Carter, Carol Sanford, and Bob Burtman in 1975. Michael O. Hartley served as Assistant Archeologist during both field seasons. Additional assistance in the second season was provided by the maintenance crew of Historic Camden consisting of Ricks Vaughn, Sam Higgins, and Fred Swain. All are to be commended for their efforts laboring in either the cold of winter's rain or heat of summer's sun, or both, to complete the field work at Camden.

The documentary information summarized in this report is based upon the research of Jo Anne McCormick, a graduate student in the Department of History, University of South Carolina. This research was carried out in close cooperation with the archeological project and produced a great deal of significant data relating to the early settlement of Camden. Through her efforts the scanty documentary information has begun to take coherent form and the results of her work should form a sound base for future interpretive research relating to the colonial town.

Jacqueline Carter performed the voluminous task of sorting and tabulating the artifacts recovered in the excavations. In addition, she organized this material for analysis by computer. It is not exaggeration to state that without Jacki's assistance the completion of this report would not have been possible.

Assistance from the Computer Services Division of the University of South Carolina is gratefully acknowledged and special thanks are due Joan Combes and Barbara McFadden, Computer Systems Analysists, and Bobby Stein and Steve Straubs, Statistical Counselors.

The Institute of Archeology and Anthropology of the University of South Carolina supplied the laboratory and logistical services in support of all phases of the Camden project. Assistance in the preparation of this report was freely given by the staff of the Institute, the members of which read and supplied helpful criticism on various portions of the manuscript. Thanks go to Robert L. Stephenson, Director and State Archeologist, and Archeologists Stanley South, Richard Carrillo, Albert Goodyear, Leland Ferguson, and John House. Susan Jackson proofread the manuscript and offered many helpful editorial suggestions. Darby Erd produced the excellent graphics that accompany the text and Gordon Brown photographed and prepared the illustrations. Sharon Howard and Nancy Goodyear typed the final copy of the manuscript. Responsiblity for the conclusions drawn in this report is, of course, solely that of the author.

ABSTRACT

An examination of the site of the British colonial settlement of Camden, a center of social, economic, and political activity on the eighteenth century backcountry frontier of South Carolina, permitted the observation of large-scale intrasite patterning through the use of stratified unaligned random sampling of the subsurface remains there. Although disturbed by long-term agricultural activity, patterning in the distribution of archeological materials was discernible. An examination of this patterning reveals not only the spatial and temporal limits of the settlement, but also suggests that Camden shared significant functional similarities with frontier centers in general. In contrast to urban centers with comparable social, economic, and political roles in contemporary Britain, Camden exhibited a markedly more dispersed settlement pattern, as well as a smaller population, larger land use units, an apparently greater proportion of activities of a nondomestic (e.g., commercial, industrial) as opposed to a domestic (i.e., residential) nature, and a relatively large proportion of high status residents. These functional characteristics reflect Camden's role as a frontier town, a class of settlement that serves as a locus of those activities associated with the collection and redistribution of goods and commodities passing into and out of the area of colonization. As a frontier settlement, Camden was situated close to remaining aboriginal groups in the area; and as a consequence, participated in extensive direct trade with them. The form of the settlement appears to have remained, in general, relatively unchanged until its abandonment at the beginning of the nineteenth century. Even the brief Revolutionary War period military occupation of the town resulted in few changes apart from the addition of fortification features.

CHAPTER I

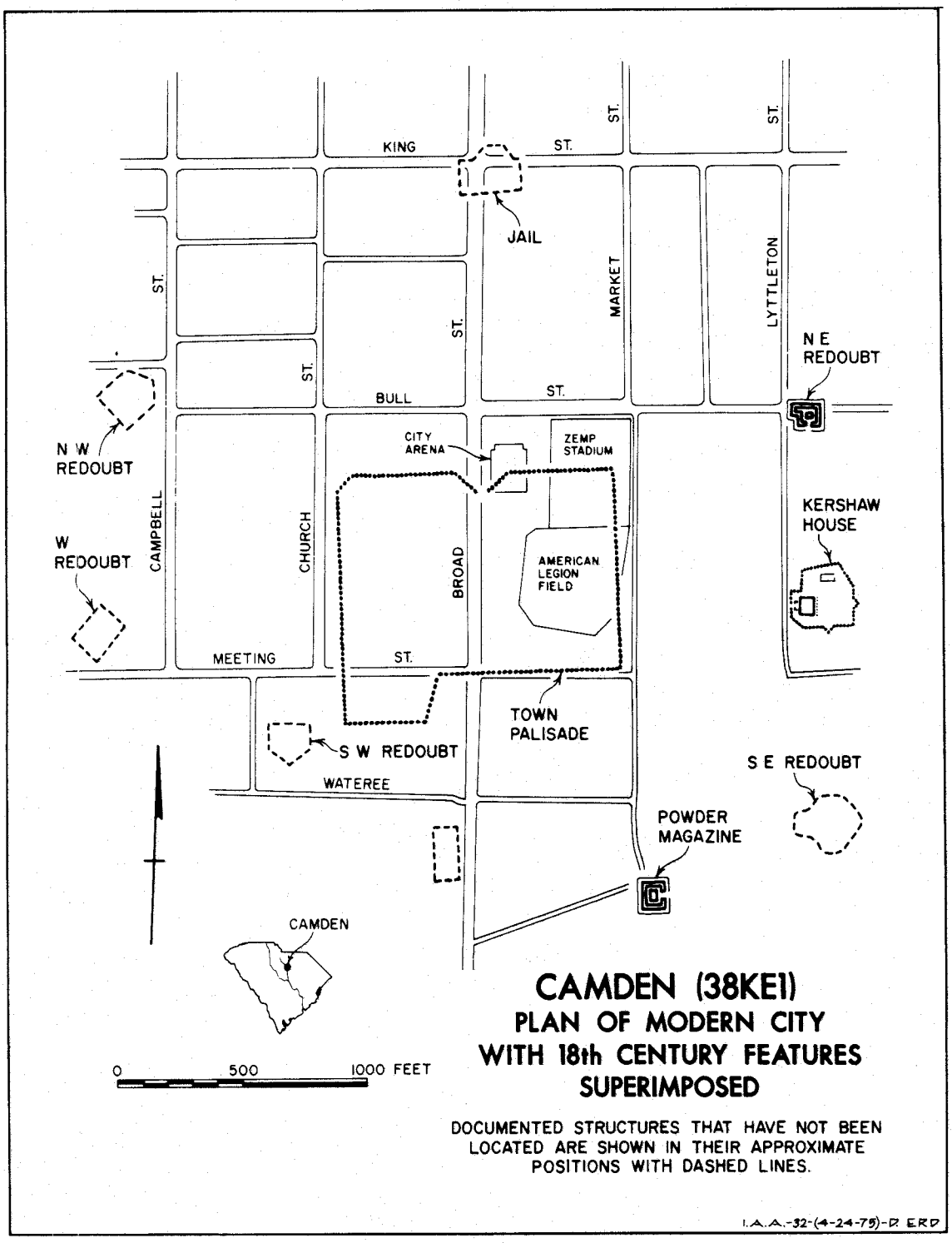
INTRODUCTION

In November and December, 1974, and May-July, 1975, archeological investigations were carried out by the Institute of Archeology and Anthropology of the University of South Carolina at the site of the eighteenth century settlement of Camden in Kershaw County, South Carolina. This work was sponsored by the Camden Historical Commission as part of a continuing program of development at the site. The present excavations involved the investigation of the southwest town palisade and the interior of the enclosed town (Fig. 1). Excavations in the southwest portion of the town were associated with the British fortifications constructed at Camden in 1780 and the archeological work was conducted primarily to assist in its reconstruction. The remainder of this project involved the exploration of the interior of the eighteenth century townsite in order to determine generally the extent and nature of the human occupation there. The findings here may serve as a guide to future, more intensive archeological investigations in this area.

The immediate goals of the Camden archeological project are, of course, descriptive. The excavations will attempt to discover the physical extent, the temporal affiliations, the architectural nature (in the case of the palisade walls), and the cultural affiliation of man-made features within the areas under consideration. Necessary, however, to a fuller understanding of the nature of the cultural processes occurring in this eighteenth century upcountry center is a consideration of more complex problems involving a detailed study of variations in the archeological record. It is for this reason that the bulk of this report will be concerned with a discussion of the results of the extensive excavations within the town where it will be possible to examine the patterning of a wide array of data. While the location of the palisade walls in itself provides an interesting picture of the military fortifications, it also forms a convenient boundary delimiting the spatial extent of the 1780 town, or at least those parts deemed to be of strategic significance, and thereby the archeological universe for this site.

Camden was an important center of political, social, and economic activity on the colonial South Carolina frontier and it should be enlightening to examine the town in terms of a model developed by anthropologists to describe and explain the role of such key settlements in frontiers in general. This report will be organized around such a model of frontier development which will allow an examination of both intra-community organization as well as the settlement's relationship to the rest of the colony and the outside world beyond. This broadly-based model will permit not only the incorporation of the archeological information obtained in the present study but also that recovered in future work based upon the design of this research.

It is perhaps best to preface this report of the most recent archeological investigations by briefly mentioning those excavations carried out there in the past. In 1963 and 1964 Millard Osborne, a local historian, uncovered brick rubble at the sites of the powder magazine and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CAMDEN (38KE1)
PLAN OF MODERN CITY
WITH 18th CENTURY FEATURES
SUPERIMPOSED
DOCUMENTED STRUCTURES THAT HAVE NOT BEEN
LOCATED ARE SHOWN IN THEIR APPROXIMATE
POSITIONS WITH DASHED LINES.
I.A.A.-32-(4-24-75)-D ERD

FIGURE 1

the Kershaw House, located south and east of the town respectively (Fig. 1). Subsequent magnetometer and geohm studies carried out at these two locations by the Applied Science Center for Archaeology of the University Museum, University of Pennsylvania (Ralph and Borstling 1965) led William E. Edwards, then State Archeologist of South Carolina, to conduct test excavations at these locations in 1965 with negative results (Calmes 1968a: 13). Two years later extensive trial excavations were carried out by Alan Calmes, then Research Director of the Camden District Heritage Foundation, at a number of military sites associated with the town. The powder magazine was completely excavated (Calmes 1968b and 1968c), the site of the Kershaw House was partially uncovered, the northeast redoubt located and tested, and the southwest redoubt and town wall located. Explorations for the northwest, west, and southeast redoubts revealed no trace of these features (Calmes 1968a). For a concise narrative of the development of the historic preservation movement in Camden during this time see Byrnes (1973).

Following a brief hiatus,field work was again resumed by Robert N. Strickland who completed excavations at the northeast redoubt in 1969 and excavated the palisade ditch around the southeast portion of the town the following year (Strickland 1971). Both these features have been partially restored. Excavations were also carried out by Strickland at the Kershaw House in 1971, 1972, and 1973 (South 1973: 16).

With the exception of the Kershaw House, all previous archeological work at Camden has been concerned with military features of the site. The present study is an attempt to expand research into that period of time and those activities not associated with the brief span of the Revolutionary War. It is hoped that such a study will not only increase our knowledge of Camden's past development but also allow us to more clearly perceive organizational aspects of settlements on the frontier in a general sense.

CHAPTER II

THE PHYSIOGRAPHIC SETTING

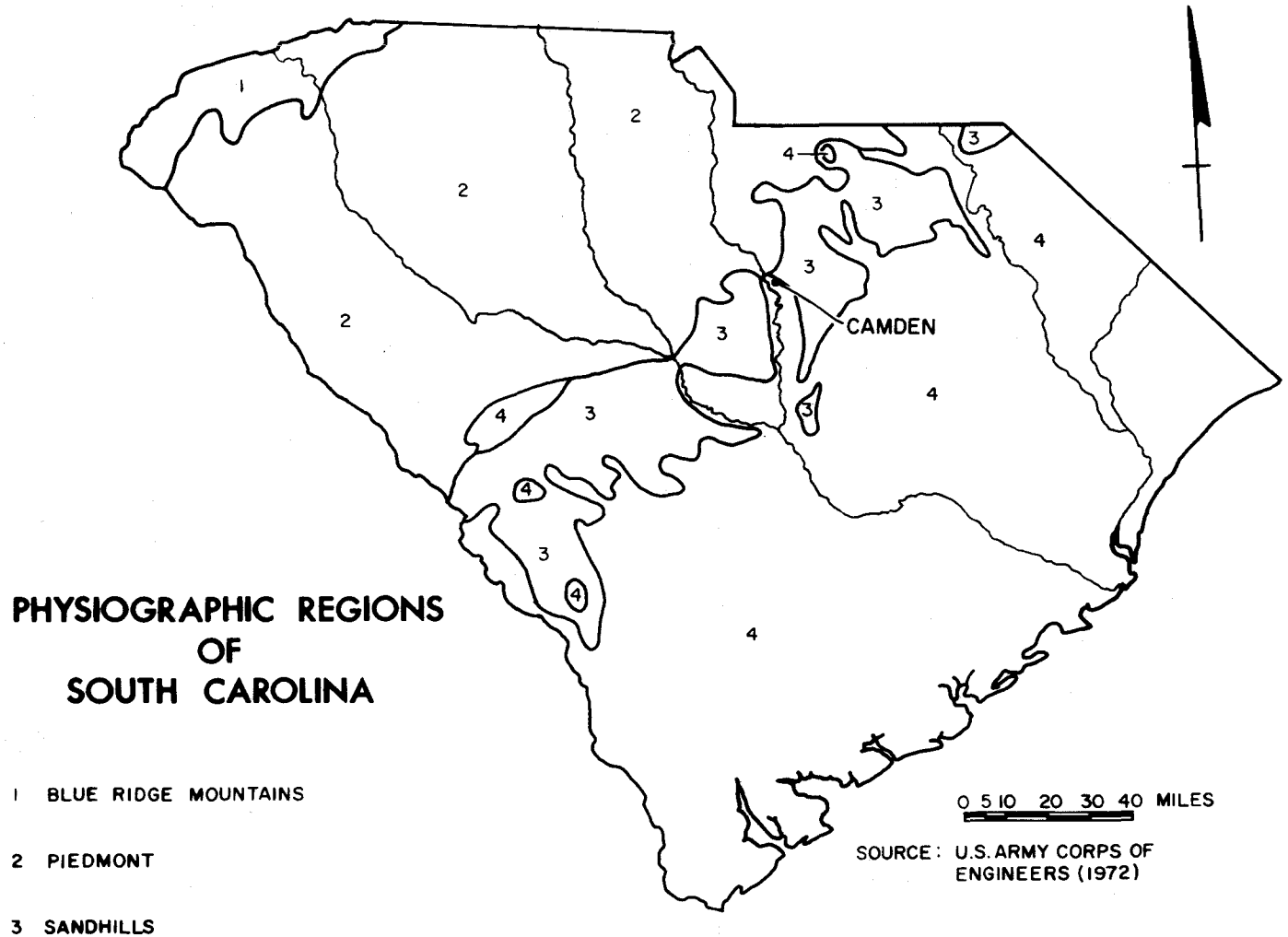
The site of the eighteenth century town of Camden is situated in the southern part of the present city of Camden, in Kershaw County, South Carolina (Fig. 2). It is bisected in a north-south direction by U.S. Highway 521 which also passes through the present city.

Camden lies on the edge of the Sandhills, a physiographic region characterized by gently rolling hills about twenty to thirty miles wide and contiguous with the western edge of the Coastal Plain (Frothingham and Nelson 1944: 5). The Sandhills derive their name from the sand deposits of the Tuscaloosa formation. This Cretaceous deposit overlies late Triassic sandstones, the latter of which is cut by diabase dikes of early Cretaceous age (Overstreet and Bell 1965: 80). Although deposited in a river environment the Sandhills attained their characteristic topography as the result of their having once formed the Atlantic coastline (Robertson 1974: 29).

The Fall Line, forming the transition zone between the older metamorphic and igneous rocks of the Piedmont and the unconsolidated sediments of the Coastal Plain, lies along the inland edge of the Sandhills. This physiographic feature is marked topographically by the deepening of river valleys as the rivers enter the Coastal Plain (Hunt 1967: 145). The major rivers of South Carolina are navigable up to this point. Mills (1972: 157) noted that Wateree River, which flows by the site of Camden, was navigable to steamboats as far as that town in 1825 but immediately inland was interrupted by four separate falls. In addition to the Wateree two other rivers flow through Kershaw County, the Lynches and the Little Lynches which are tributaries of the Pee Dee River. Numerous smaller streams are found throughout the County. Of particular significance to Camden are Pine Tree Creek and its tributary, Little Pine Tree Creek, which flow into the Wateree just south of the city.

The soils of the Camden area have developed on formations of Pleistocene or Recent age which directly overlie unconsolidated Cretaceous deposit on Pleistocene alluvium (Overstreet and Bell 1965: 81). Camden is within the Wickham-Altavista-Roanoke soil association which is characterized by well to poorly drained soils on the Wateree River terrace. The soils here tend to be brownish-grey loams underlain by sandy mottled clays. The surrounding area is characterized generally by well-drained sandy soils usually suitable for cultivated crops though not particularly rich, with poorly-drained soils and swamps present on stream floodplain, especially those below the Fall Line (Craddock and Ellerbe 1966). The wide variety of soil types found in the Kershaw County area was well known to early European inhabitants of the region. Robert Mills' (1972: 588) early geography written in 1826, for example, makes a point of contrasting the "fertility" of the river valley soils with the "sterility" of the sandy uplands.

The Sandhills lie within the Southern Temperate Deciduous Forest biome, a floral formation which covers most of the lowland areas of the Southeastern United States (Shelford 1963: 56). Frothingham and Nelson (1944: 19-21)



PHYSIOGRAPHIC REGIONS OF SOUTH CAROLINA

1 BLUE RIDGE MOUNTAINS

2 PIEDMONT

3 SANDHILLS

4 COASTAL PLAIN

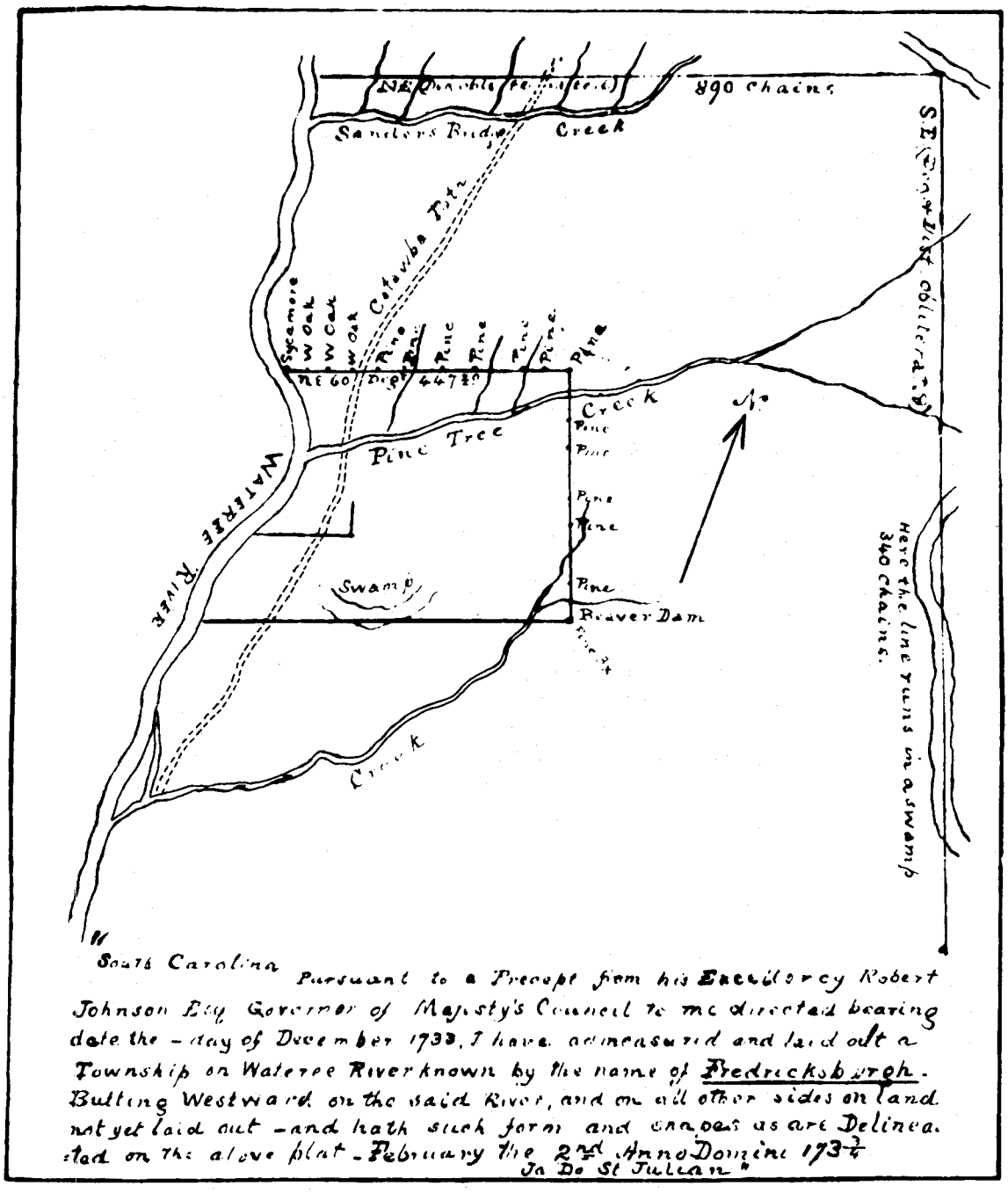
FIGURE 2

define 2 major forest types present in the Sandhills, the most predominant of which is the longleaf pine forest. This community is characterized by longleaf pine (Pinus palustris), generally with an understory of scrub oaks, turkey oak (Quercus laevis), as well as some willow oak (Q. cinerea) and blackjack oak (Q. marilandica) (Braun 1950: 285).

The second forest community is dominated by the loblolly pine (Pinus taeda) with several species of hardwoods, including black gum (Nyssa sylvatica), sweetgum (Liquidambar styraciflua), and scrub oaks forming an understory (Frothingham and Nelson 1944: 19). Longleaf pine, shortleaf pine (Pinus echinata), and pond pine (P. rigida) are also present in this forest which tends to occupy the more moist and fertile soils such as those of the Wateree River Valley (Braun 1950: 286). Loblolly pine has greatly increased in historic times due to its capacity for the rapid invasion of abandoned fields which formerly supported a hardwood with a pine intermixture (Frothingham and Nelson 1944: 20). Loblolly pine is a fir subclimax species; but in the absence of fir, it may be replaced by shade tolorant hardwoods that become the climax species (Spring, Brewer, Brown, and Fanning 1974: 2).

It is difficult to reconstruct the physical environment of this region during the period of eighteenth century European settlement due to the extent of subsequent cultivation and other modification of the land. Early accounts of the area are sketchy but seem to indicate the presence of extensive mixed forest types. The original survey plat of Fredericksburg Township (Fig. 3), drawn in December, 1733, presents a brief list of predominant forest species along the survey route. It indicates a hardwood forest of sycamores (Platanus occidentalis) and water oak (Q. nigra) adjacent to the Wateree River with pines prevalent in all locations away from rivers and streams. Travelling south from Cheraw on the Pee Dee River to Camden in 1825 Karl Bernhard noted (1973: 90-91) "thick woods" and "a superabundance of pine trees and sand." The French botanist Francois Michaux (1973: 41-45) writing in 1805, also mentioned the predominance of pine in the sandy soils but stressed the presence of hardwoods in the Piedmont in general. Mills' (1972: 586-587) 1826 account of Kershaw County stated: "The sand hills are...covered with small pitch pine and black jack or dwarf oaks." The presence of fire subclimax vegetation is possible for the extensive use of fire to clear land for hunting by both Indians and Europeans is mentioned in De Braham's (1971: 80-81) account of his travels in the 1760's and 1770's. Old field clearings would also have been rapidly colonized by pines after their abandonment.

Both of the longleaf and loblolly pine communities may be placed within what Shelford (1963: 86) has designated the Oak-Hickory-Magnolia forest ecotone, a zone of transition between the deciduous forests of the interior and the coast. At the time of early European contact the vegetation of the ecotone appears to have been approaching a deciduous oak-hickory climax, but extensive land clearing and an apparent increase in fir have resulted in the continued predominance of softwoods and other subclimax vegetation. Typical animal constituents of the pineland ecotone are white-tailed deer, gray fox, fox squirrel, eastern cottontail, gray wolf, mountain lion, timber rattlesnake, wild turkey, quail, and gopher tortoise (Shelford 1963: 88). All of these species are mentioned in Mills' (1972: 100-103) account of South Carolina wildlife written in 1826.



FREDRICKSBURGH TOWNSHIP.

Copied from old Plat in office of Secretary of State, Columbia, S.C.

DIAGRAM No. 1.

FIGURE 3: Fredericksburg Township in 1734. Copy of the original survey plat. (Source: Kirkland and Kennedy 1905: 10).

As previously mentioned, much of Kershaw County has been subjected to cultivation despite the predominantly sandy soil. At the close of the nineteenth century nearly 64% of the total land area was farm land and at present the economy is still tied to the production of agricultural products (U.S. Department of Agriculture 1964: 2-3). As in much of the South, agricultural development has resulted in extensive destruction of forests and overcropping of the cleared land. Frequently erosion was the result of improper farming techniques (Latimer, et al. 1922: 15), but was probably not extensive in the late eighteenth century.

The climate of Kershaw County is generally temperate with an average annual temperature of 62.0 degrees Fahrenheit, with the warmest month, July, averaging 80.0 degrees and the coldest month, December, averaging 44.5 degrees. Average rainfall is 49.1 inches with a monthly high average of 5.62 inches in July and a low of 2.91 inches in October. A secondary dry period occurs in May. In the past 50 years 2 disastrous droughts have occurred in the area, with minor droughts occurring about once in seven years (Rogers 1973: 124).

In summary, Camden and the surrounding area appear to have presented an environment amenable to European plow agriculture although the fertility of the soil varies. The predominant vegetation was mixed forest. The presence of navigable water courses and high ground insured the potential accessibility of the entire area from settlements on the Piedmont and Coastal Plain.

CHAPTER III

THEORETICAL FRAMEWORK

Basic Assumptions

This study will look at the historical development of Camden as a center of socioeconomic activity on the South Carolina frontier primarily through the examination of its archeological remains. Archeology may be defined broadly as that branch of anthropology that deals with the material remains left behind by man. It seeks to expand knowledge of human behavior into situations where the latter is not directly observable. Thus, its chief goal is to understand the relationship between past behavior and the material remains left behind. Archeology has a unique ability to study behavior in that its subject matter can extend far into the past, allowing the study of both long- and short-term processes of cultural change.

In order to achieve an understanding of the relationship of man's activities and the archeological record many archeologists have relatively recently begun to organize research within an ecological framework (e.g., see Sanders and Price 1968; Flannery and Coe 1968; Hole, Flannery, and Neely 1969; Flannery 1969). This approach is important because it recognizes man's place within a natural life system and stresses the interrelatedness of human and nonhuman components of this system. Paralleling a trend in ecological studies in general (see Odum 1964), it emphasizes an explanatory rather than a purely descriptive orientation. Such an approach holds much promise for archeology in general and for historical studies in particular as it has the potential for shedding light on the cause and effect relationships of events so often lost to other forms of historical data.

The archeologist's ability to relate past behavior to material remains is based on the following set of basic assumptions which are implicit in this report.

1. Culture may be viewed as those learned patterns of human behavior by which man adapts to his physical and social environment (Kottak 1974: 4). Rather than a sum of traits, culture is a series of interacting components which are continually acting and reacting to one another, resulting in constant variation and change.

2. This interaction implies the existence of a system within which certain cultural mechanisms operate to regulate change or to maintain behavior within certain limits or boundaries (Rappaport 1968: 4). In order to deal with a phenomenon as complex as human culture it is necessary to adopt an approach which stresses the interrelationship of all variables in the system rather than between isolated characteristics of man and his environment (see Geertz 1963: 9-10; Buckley 1967: 41).

3. Just as human behavior may be seen as part of an interrelated system, separate activities not involving all parts of the system or all members of the society may be defined as subsystems. The number of subsystems increases with the level of complexity of the cultural system and, concomitantly, with the degree of specialization within it (Binford 1965: 205).

4. Because behavior is not random, it is possible to observe patterns in human activities. A recognizable structure may be seen to appear in the systemic organization of technology, economics, religion, social organization, and other specialized activities. Changes in these patterns may be traced through time and variation in systemic structure viewed as a historical phenomenon.

5. Of crucial importance is the final assumption that the archeological record will exhibit particular patterns reflecting those in the cultural system which produced them (Longacre 1971: 131) and will reflect as well temporal changes occurring in those patterns and the system. In order to understand more clearly the relationship between a living behavioral system and the material record it leaves behind, recent studies have investigated those processes governing the transfer of artifacts from the former state to the latter (Schiffer 1972, 1975a).

It is also presumed that a comparative study of systemic cultural change will lead to the recognition of regularities which, in turn, may be formulated into processes of human behavior (Steward 1949: 2-3; Binford 1968a: 8). A number of such processes have been proposed by anthropologists including the process to be examined in this report. It concerns the adaptation of complex cultures to the dramatic environmental and social obstacles encountered in frontier* colonization. A model describing these changes will serve as a framework within which to analyze the archeological data from Camden. In a comprehensive study Schulz (1972) has recently demonstrated that Camden passed through a number of economic developmental phases during the eighteenth and early nineteenth centuries. As these phases appear to approximate some of the changes outlined in the frontier model, it will be interesting to examine the archeological record from Camden not only to demonstrate the ability of archeological methodology but, moreover, to increase our knowledge of the cultural-historical development of this important settlement on the South Carolina frontier.

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*In this report the term "frontier" is defined spatially as a zone separating the settled and uninhabited portions of a territory which lie within or under the effective control of a state. Culturally and politically it is a zone of transition stretching from the edge of the state core to the limits of its expansion (Kristof 1959: 274; Weigert, et al, 1959: 115). Given the evolutionary and expansive nature of a frontier, it serves to incorporate newly-occupied territory into the social, economic, and political systems of the state and forms a moving fringe where the attenuation of ties with the state core requires a temporary breakdown of complex institutions until the frontier becomes, in effect, an integral part of the state. Prescott (1965: 35) has drawn the useful distinction between "primary" and "secondary" frontiers, with the former representing the de facto limit of the state's authority and the latter designating those areas originally passed over during initial expansion and settled only later when such less suitable land becomes desirable due to population pressure. The eighteenth century South Carolina frontier examined in this report is clearly a primary frontier.

The Frontier Model

Before attempting to deal directly with the mass of documentary and archeological information from Camden, it will be necessary to discuss the model of cultural change to be used in analyzing this data. The use of a model, such as the frontier model to be described, offers two advantages to the investigator. The first is that it allows the archeologist to simplify the complex observations he makes from his data by constructing hypotheses concerning assumed relationships among them. Second, the hypotheses based on the model form a predictive framework in which to structure observations around central points of reference. This procedure permits the investigator to organize his information in relation to the problem at hand because it provides a given frame of reference within which he may make accurate generalizations while, at the same time, allowing him to temporarily assign relative significance to his data based upon its pertinence to the particular problem (Clarke 1968: 32).

The frontier model deals primarily with cultural change among intrusive cultures faced with adaptation to a frontier situation. It is based upon ethnographic and historical studies from which a number of generalized characteristics have been drawn. These characteristics may serve as a set of hypotheses around which new data may be organized and analyzed. As the scope of the frontier model is limited almost exclusively to those changes within the intrusive culture, it excludes certain other changes that precipitate colonization or those that are the ultimate outcome of it.

Although the frontier model itself is recent, it is largely the result of a synthesis of ideas which have arisen out of the study of colonization. The seemingly common patterns of behavior associated with the acculturation of intrusive societies has occupied the minds of many scholars in various fields over the past three-quarters of a century (Turner 1893; Dawson 1934; Leyburn 1935; Webb 1952; Hallowell 1959; Kristof 1959; Allen 1959; Prescott 1965; Mikesell 1968; Wyman and Kroeber 1957; Casagrande, Thompson and Young 1964; Thompson 1970, 1973; Wells 1973). The frontier model incorporates the thoughts of most of these individuals but is primarily a synthesis of work of the last three.

Several notions underlie the frontier model. First, it is apparent that complexly organized intrusive societies react or adapt in a patterned way to the conditions imposed by a frontier situation. This is not to say that the colonial culture is a product of the settlers' exposure to a wilderness environment in a Turnerian sense (see Turner 1893: 201), but rather that it is the result of changes in the effective environment of the culture as it existed in the homeland.* Second, this adaptation to the

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*The term "effective environment" refers to those aspects of the total environment, social as well as physical, that articulate closely with the particular sociocultural system under study (Binford 1968b: 323). Because the planning, organization, and execution of a colonial venture generally presupposes a very complex level of sociocultural integration, it may be assumed that the effective environment of an intrusive colonial society is more dependent upon, and hence more likely to vary in relation to, changes in variables which regulate its relationship to the larger socio-economic system of which it remains a part, rather than to specific aspects of the "wilderness" environment. Thus, a wide range of physical environments with only broad limitations may be amenable to settlement, as witnessed by the diverse areas subjected to British colonization in the eighteenth century alone.

frontier is characterized by an organizational simplification on the part of the intrusive sociocultural system. Finally, because of its existence within a colonial context, the frontier society must, of necessity, remain an integral part of the culture from which it sprang.

In order for frontier colonization to take place several conditions must be met. First an intrusive society must physically occupy an area on the periphery of or apart from its previously occupied territory. Its level of sociocultural integration must at least be that of a stratified society or state as defined by Fried (1967: 186-190). Normally urban-state level societies have played the role of catalyst in the expansion and development of subsidiary communities through long-range trade and colonization (Sanders and Price 1968: 198). Second, if an indigenous people are present their level of sociocultural integration must be lower than that of the intrusive culture so that prolonged resistance to colonization will not be appreciable. Third, the effective environment of the "area of colonization" (Casagrande, et al. 1964: 311), that geographically defined zone of actual or potential occupancy, must be amenable to exploitation by the intrusive culture. Fourth, conditions there must not preclude access to nearly all parts of the area. The last point is of particular significance in that the maintenance of trade and communication links within the area of colonization are crucial to the survival of a colony.

As a colony, especially a successful one, is constantly expanding, the dynamic aspects of the frontier are particularly important in analyzing the process of colonization. Six characteristics associated with frontier change form the primary distinguishing traits of the frontier model. First, prolonged contact must be maintained between the intrusive society and the potential area of colonization. Second, as a result of its relative isolation and the attenuation of trade and communication linkages with the homeland,the intrusive culture exhibits a sudden loss in complexity. Third, the settlement pattern in the colony will become more geographically dispersed than that of the homeland, or "metropolitan area," unless particular conditions temporarily impede it.

The fourth condition states that despite the dispersion of settlement within the area of the colonization there will be a single focal point, called the "frontier town," which serves as the center of social, political, economic, and religious activities within the colony and as the terminus of the transportation network linking the colony to the homeland or to older, more developed parts of the colony. Frontier towns are connected to entrepots through which they maintain their primary link with the national culture (Casagrande, et al. 1964: 312). The frontier town likewise serves as the center of communications network within the colony.

The interdependence of the interior settlements and the frontier town reflects the essentially dual nature of a frontier colony. It is on the one hand an extension of the metropolitan area, established for the purpose of increasing the economic resources of the latter and as an outlet for its manufactured products. The colony is of necessity linked to the homeland by primarily commercial ties. On the other hand, in order to support pioneer settlement a colony must maintain an agricultural subsistence base sufficient to this end. In a sense, a frontier colony entails an amalgamation of the

characteristics of two types of societies, the agrarian and commercial (see Fox 1971: 34). In terms of economic relationships, the former is characterized by local exchange and redistribution of goods while the latter involves the shipping and receiving of goods in bulk to and from relatively distant points of large-scale production or wholesale distribution. Agrarian societies tend to maintain an areal geographical orientation while commercial societies are organized in terms of linear relationships* (Fox 1971: 35-37). The expansive nature of a colony links its survival and success to its linear organization, however, areal relationships are also significant because the settlement pattern of the colony is constantly tending toward greater density in order to more closely approximate that of the metropolitan area. In subsequent discussion, both the areal and linear aspects of colonization will be discernible in that it is impossible to treat settlement aspects of the frontier apart from its economic role as part of a larger system.

The fifth characteristic of the frontier process is that as the colony moves through time it also travels through space, expanding with the influx of new settlers. As the colony expands outward the structural and organizational pattern tends to replicate itself so that new frontier towns are formed as the centers of new areas of settlement. As this process occurs older areas of settlement change as population density increases, cities form, and the areas become more completely integrated at the national level within the sociocultural system of the homeland (Steward 1955: 48-49). As settlements change roles they may be said to be passing through a "colonization gradient" (Casagrande, et al. 1964: 311) in which smaller settlements grow and take on larger roles within the colony through time. Of course, some settlements are bypassed as lines of communication shift and decline often becoming "ghost towns." The continued expansion of the colony signals the sixth and last characteristic of the model, that of its success. Success generally is measured by the colonists' tendency to remain within the area of colonization.

In the following chapter the rise and development of Camden will be viewed in light of the frontier model. By defining its role in relation to the British colonization of southern North America it should be possible to hypothesize generally that the settlement, as a frontier town, represented a recognizable segment of the British frontier sociocultural system in the Carolinas. As a crucial component of this system it should possess predictable

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*The areal concept refers to the sorting out of sociocultural phenomena based upon similarity within a definable area. It is reflected in the "regional study" which seeks to examine the mutual interdependence of a variety of elements within a specific segment of earth space (James 1972: 462). Because an agrarian society chiefly involves the relationship of the farming communities to the lands they occupy, it lends itself to examination in an areal sense. In contrast, the linear concept stresses the significance of distance to the nature of the relationship between sociocultural phenomena. Hence, linear relationships are extremely important in any discussion of a society in which transportation and communication variables are of paramount significance.

linkages with other components. The activities associated with the settlement's role as a frontier town should be discernible in the archeological record and the task of identifying and interpreting such activities will form the focus of research at Camden. It must be emphasized that our interests need not be confined to this question alone because the utilization of the model of frontier change permits the use of both documentary and archeological data to construct a fuller interpretation of the changing role of Camden during the eighteenth century.

CHAPTER IV

THE DEVELOPMENT OF CAMDEN IN THE HISTORICAL MILIEU OF THE EIGHTEENTH CENTURY

European settlement at the site of Camden began in the 1740's with the occupation of Fredericksburg Township laid out along the Wateree River ten years earlier. From a small scattered population the settlement grew with the addition of a colony of Irish Quakers in the 1750's and later with the establishment of a branch store of a Charleston mercantile firm. The 1770's saw the development of a nucleated settlement around the circuit court house, district jail, and market. Camden grew as a major inland center of redistribution and served as a supply and operations center for the British Army during the American Revolution. After the war the town's fortunes rose with the development of large scale cotton agriculture, declining only when its role was assumed by other settlements better capable of carrying out its political and economic functions (Kirkland and Kennedy 1905, 1926; Schulz 1972).

At first glance this brief historical sketch appears to indicate many similarities with the frontier model, in the development of a center of political and economic activity as a frontier contiguous with a settled area, changes in community form and function (Robinson 1953) through time, displacement of indigenous groups, and the development of a communication system essentially centered around a single settlement directly connected with an entrepot in the settled area on the coast. These observations, in themselves, do not explain Camden's growth but they do relate to several significant generalizations relevant to the development of this settlement on the South Carolina frontier. First, it is obvious that Camden cannot be fruitfully studied in terms of itself because it was part of a larger, ever-changing socioeconomic system. Changes in the organization of such a system are reflected in its parts and thus it is impractical to examine one without consideration of the other. Second, because of the economic orientation of this system, the significant patterns and linkages to be examined should be most clearly manifested in variables relating to trade, redistribution, and communications. Third, it appears that although the frontier model was constructed to incorporate all aspects of the adaptation of complex cultures, the primary variables in the development of a frontier are largely economic in nature. A frontier system is primarily one of attenuated redistribution involving a relatively large amount of goods traveling rapidly outward through one or perhaps a few centers in exchange for products of the frontier, usually in a semiprocessed state. Settlement is spatially linked to this system and political organization is generally associated with the concentrations of frontier economic activity. In order to discuss the South Carolina frontier and Camden's role in its development it is necessary to define the socio-economic system of which it was a part and then examine those variable of the system most strongly affecting this colonial center. This should not only provide the explanation for the events of the historical narrative as revealed by a study of the documents, but serve as a key to the interpretation of the archeological record as well.

A rapid glance at the situation in eighteenth century South Carolina indicates the interplay of forces originating in diverse parts of the world. Commercial and political links tied it directly to other parts of North America, as well as to Europe, Africa, and the West Indies, and indirectly to many other areas. For this reason, it seems best to begin by dealing with as large a socioeconomic entity as possible and then reducing this in scope as it becomes desirable. Studies of this kind are not unknown in anthropology. The need for "area studies" encompassing geographically separated cultures linked by political, economic, social, or religious ties was recognized a quarter century ago by Steward (1950: 10), and more recently Wallerstein (1974: 7) has suggested that it is impossible to examine the national histories of post-medieval European nations without recourse to the concept of a "world-system" in which the cultures of all affected areas are tied in a web of mutual interdependence. He has chosen the term "world-economy" to characterize this system because of the particular nature of its organization. Its self-contained development likens it to an empire but its capitalist economic mode, based upon the fact that the economic factors operated within an arena larger than that which any political entity could completely control, prevented domination by a single nation. This situation gave capitalist entrepreneurs a structurally-based freedom of maneuver and allowed a continual expansion of the world-economy (Wallerstein 1974: 348). The role of such commercial forces in the initiation of British colonial ventures in Scotland, Ireland, and America is well-known. The flexibility of privately-sponsored, economically-oriented companies proved the key to the successful establishmnet of many early sustained colonial settlements (MacCleod 1928; Rowse 1957; and Cheyney 1961).

It is beyond the scope of this report to deal with the complex factors responsible for the world economy, however, it is necessary to cover one aspect of it which has particular relevance to the American frontier, that of the system's boundaries. Obviously an expanding world economy centered in Europe was not isolated and its very existence depended upon exchange with areas outside its boundaries. This trade was of two types, that involving "external areas" dominated by other world systems and characterized by the exchange of preciosities, and that with areas inside the system's own periphery.

> ...that geographical sector...wherein production is primarily of lower-ranking goods (that is, goods whose labor is less well rewarded) but which is an integral part of the overall system of the division of labor, because the commodities involved are essential for daily use (Wallerstein 1974: 302).

Exchange between the periphery and the "core" states at the center of the system tends to be characterized by a "vertical specialization" involving the movement of raw materials from the former to the latter and the movement of manufacturers and services in the opposite direction (Gould 1972: 235-236). Such was the case in much of colonial North America, especially in the agricultural South (Sellers 1934: 4).

Due to the fact that the world economy of the eighteenth century was expanding, it was inevitable that its geographical structure would not remain intact indefinitely. A process integral to expansion is the formation of

"semiperipheral" areas which function as collection points of vital skills and serve to deflect political pressures aimed at the core states from the frontiers of the periphery. Because they are still located outside of the political arena of the core states, however, semiperipheral areas are prevented from entering into political coalitions in the same manner as the core area states (Wallerstein 1974: 350) and thus remain dependent upon them. It would seem that by the last half of the eighteenth century the British American colonies had attained a semiperipheral status, at least in certain coastal areas, with localized political and economic centers whose influence ranged into the interior. With increased interaction between these centers it is possible to view the eventual separation of the American colonies as a political entity within the framework of an enlarged world economy.

At the beginning of the eighteenth century European settlement in South Carolina was primarily confined to the coast (Fig. 4). Charleston had arisen as the major southern port town providing a direct link to Britain and the other coastal American centers of trade and communication. Its location at the mouth of the Cooper River greatly facilitated the emergence of a plantation economy on the Coastal Plain in that it served as a collecting point for colonial export commodities and a distribution center for imported commercial goods and plantation slaves (Sellers 1934: 5). Not only was Charleston the focus of the plantation economy but also the terminus of the British Indian trade in the Southeast (Crane 1956: 108). As the eighteenth century progressed the South Carolina colony expanded after a period of initial confinement due to the proximity of Spanish colonies and aboriginal resistance. The inefficient proprietary government was replaced by a royal administration in 1719, integrating the colony more closely within the rapidly expanding and increasingly centralized politico-economic system of Great Britain (John 1962: 371-72).

The expansion of the colony inland was given official sanction with the township plan of 1730 which projected a series of frontier settlements (Fig. 2), to be settled by small farmers, stretching from the North Carolina border to the Savannah River. Each was laid out along one of the major rivers linking the frontier with the coast. Settlements in these locations were intended not only to strengthen the frontier and increase production of raw export materials but to help counterbalance the rising slave population of the coastal plantations (Brown 1963: 2).

Fredericksburg Township on the Wateree River lay within the boundaries of Craven County, one of three gross political divisions established under the old proprietary government in 1682 (Fig. 5). Like many of the other townships established by the 1730 act, it was not immediately occupied. The future site of Camden was settled only in the 1740's by Irish Quakers who established plantations on the river near its confluence with Pine Tree Creek and built a meeting house on the Catawba Indian Trail, a major land artery between the coast and the upcountry (Kirkland and Kennedy 1905: 9-10).

Like a great number of the settlers moving into the South Carolina frontier the Fredericksburg Quakers came directly from Europe rather than from the earlier coastal settlements. In addition to those migrating to the frontier from Europe, a significant number of settlers also moved south from the northern colonies as did the Pennsylvania Baptists who settled in the Welch Tract on the Pee Dee River in the 1740's (Gregg 1965: 53). The influx of pioneers from a variety of sources was a common feature throughout the period of colonization in the backcountry (Brown 1963: 3).

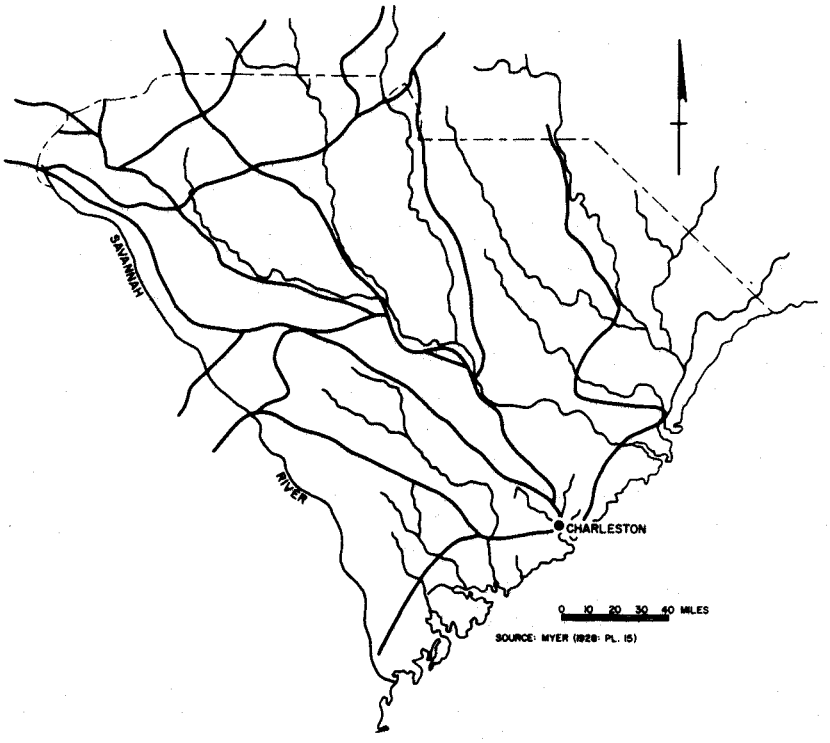


FIGURE 4: Indian Trade Routes in South Carolina in the Early Eighteenth Century.

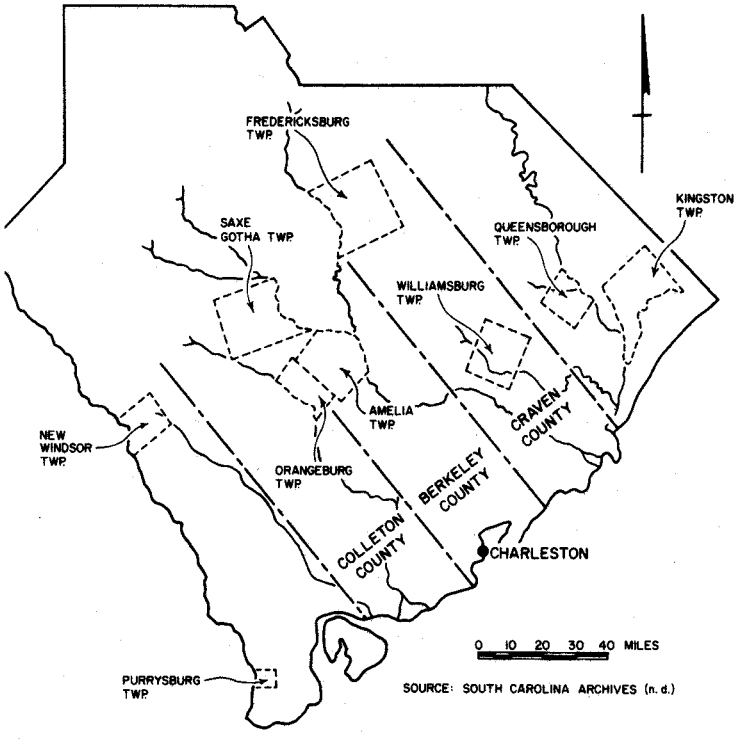


FIGURE 5: South Carolina Counties of 1680 and Townships of 1730.

As the population increased the small settlement on the Wateree began to take on the predictable functions of a frontier town. The social center characterized by the presence of the Quaker meeting house soon took on the economic role associated with a focus of agricultural activity. This change involved the addition of saw and grist mills, a warehouse, and an inn and store (Schulz 1972: 16). This development was clearly associated with the settlement's rise as an inland trading center funnelling such locally-produced commodities as flour, butter, cheese, hemp, flax, and flax seed to the markets of Charleston. By the late 1750's the Fredericksburg settlement, now called Pinetree or Pine Tree Hill (Mills 1972: 586), was a major transshipment point for goods moving from Charleston to the interior as well as a milling center and collection point for South Carolina wheat destined for the coast (Ernst and Merrens 1973a: 561-562). The town's function was not unlike that of others on the Carolina frontier which arose to fill a vital role in the development of the backcountry by providing pioneer farmers with access to the coastal markets.

The location of the settlements of the Carolina Piedmont frontier does not appear to have been determined by a proximity to certain key environmental factors alone. The presence of fertile soils and adequate access to water throughout most parts of the Piedmont permitted potential agricultural settlement over much of the area. Settlement in the Carolina backcountry, however, was not evenly distributed. Instead, it clustered along major transportation routes into the interior, for in a frontier system the crucial variable to settlement pattern is access to trade and communications linkages. The significance of Pine Tree Hill and other frontier towns of the eighteenth century is reflected in their proximity to the inland road system of the period (Fig. 6).

The early road network of the South Carolina backcountry may be seen as a reflection of the initial requirements of transportation and the geographical knowledge possessed by the Englishmen who established it (see Meinig 1962: 395). Here, as in most peripheral areas within a world economy, the paramount requirement of the frontier transportation routes is to provide for the funnelling of the colony's wealth to markets in the core state and the movement of supplies into the colony. Rees (1975: 334) suggests that the emphasis on external trade tends to focus the colonial transportation network around a central port linking the colony to the metropolitan area. This network usually follows the most feasible direct routes, even to the point of superceding less efficient road systems. In South Carolina the initial thrust of inland movement was associated with the deerskin trade which had penetrated as far west as the Mississippi by the early part of the eighteenth century (Phillips 1961/I: 429). One result of this long distance commerce, which required an intimate knowledge of the geography of southeastern North America, was the establishment of trade routes stretching into the interior from the port of Charleston. These trade roads, in turn, formed the network upon which the earliest frontier settlement took place and along which supplies and produce flowed between the entrepot of Charleston and the backcountry frontier.

The frontier town of Pine Tree Hill was linked directly to Charleston which served as the entrepot for the Carolina backcountry (Mills 1972: 590). Charleston's dominance of this area is closely related to the expansion of its mercantile firms into the interior which, in turn, facilitated the channelling of goods through this port (Sellers 1934: 11). Crucial to the

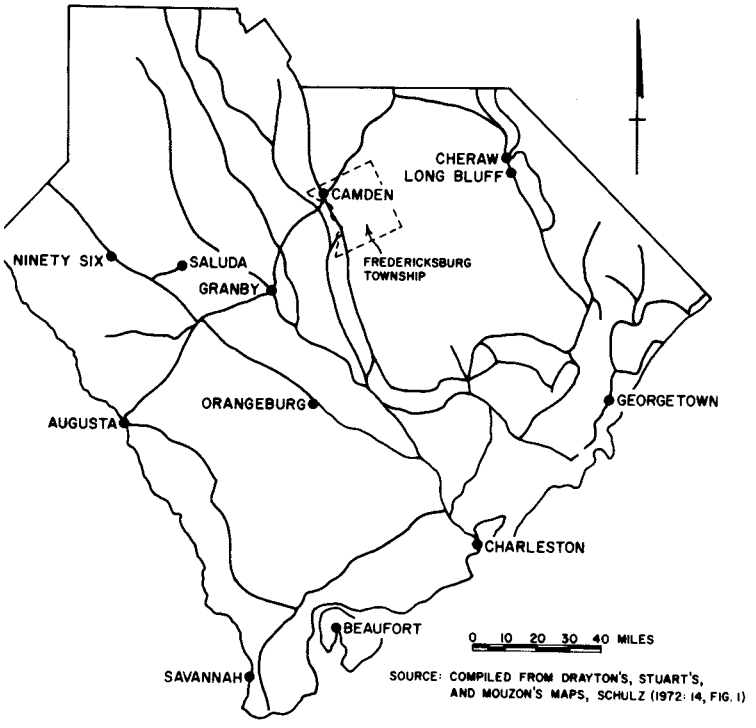


FIGURE 6: Major Overland Routes on the Frontier in Eighteenth Century South Carolina.

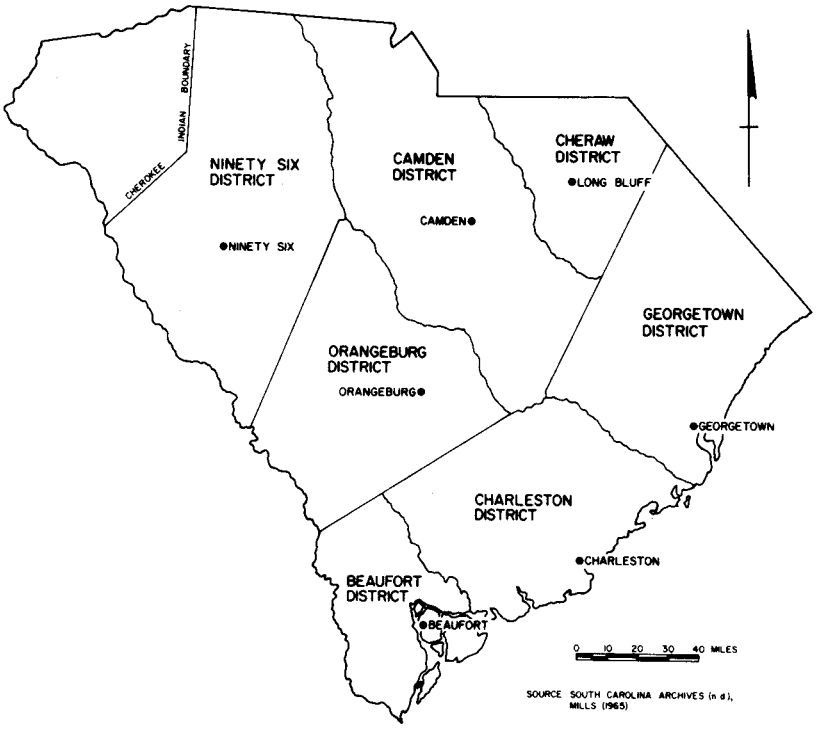


FIGURE 7: South Carolina Circuit Court Districts of 1769.

success of the Pine Tree Hill settlement was the establishment in 1758 of a store and mill by Joseph Kershaw, an agent for the Charleston firm of Ancrum, Lance, and Loocock. Within five years his business was so successful that he had opened two other stores at the heads of navigation of the Congaree and Pee Dee Rivers (Sellers 1934: 89). Both were apparently successful and Kershaw later even made a fruitless attempt to establish Cheraw, the site of the Pee Dee store, as the political center of the Cheraw District (Gregg 1965: 464), one of seven judicial districts formed in 1769 (Fig. 7). The settlement much later assumed this role on a smaller scale as a county seat. It may be well to note that a great deal of Kershaw's economic success was due not only to his firm's Charleston base but to its connections with powerful Philadelphia mercantile families. The latter city not only served as an entrepot for many settlers moving into the Carolina Piedmont frontier from the north, but also appears to have played a significant role in the southern colonial economy (Ernst and Merrens 1973b: 25).

The 1760's saw Pine Tree Hill grow as an inland center for break-in-bulk and small-scale industrial activities (such as brewing and pottery making), surpassing other frontier towns such as Saluda, Ninety Six, Orangeburg, St. Johns, and Cheraw (Schulz 1972: 23; Mills 1972: 589). With the establishment of the frontier circuit court system in 1769 the town became the site of the courthouse and consequently the seat of Camden District, a judicial area of considerable size (Fig. 7). The presence of the Presbyterian Church and Quaker meeting house also assured the settlement a prominent role in frontier religious activities. With its new political role Pine Tree Hill lost its old name and became Camden (Kirkland and Kennedy 1905: 90-95). The increasing importance of Camden on the Carolina frontier has led Ernst and Merrens (1973a: 565-566) to postulate the early development of urban functions here prior to the American Revolution. The occurrence of these centralizing features, however, is not uncommon in frontier towns in the later stages of the frontier process and their presence at Camden reflects the operation of the frontier model.

The end of the eighteenth century saw a marked change in Camden's history as the period witnessed the near destruction of the town during the Revolutionary War followed by radical changes in the economy of the Carolina frontier. Both these factors were to alter not only the form of the town but also its function as a component in the changing frontier system.

The early years of the American Revolution left much of the South untouched. In South Carolina the British made an abortive attack on Charleston in 1776 and sporadic partisan fighting occurred early in the backcountry. Not, however, until after the fall of Charleston to an invasion force in 1780 was the colony actively involved as a direct participant in the war. In order to secure the colony the British set up a chain of interior posts with Charleston serving as the link to the sea (Fig. 8). Camden, together with Ninety Six and Augusta, formed the inland strong points through which all supplies and communications passed (Lee 1969: 163). Additional posts were also established at Rocky Mount on the Wateree, Georgetown, and Cheraw (Ward 1952: 704). Camden's central position in the frontier communications network was quickly recognized by the British who established a magazine there for the redistribution of regimental, artillery, quartermaster, and commissary supplies from Charleston. It was chosen because of its convenience to water transport and "...because it was the most eligible position to support the communication between the army [in the field] and Charlestown" (Tarleton 1967: 88).

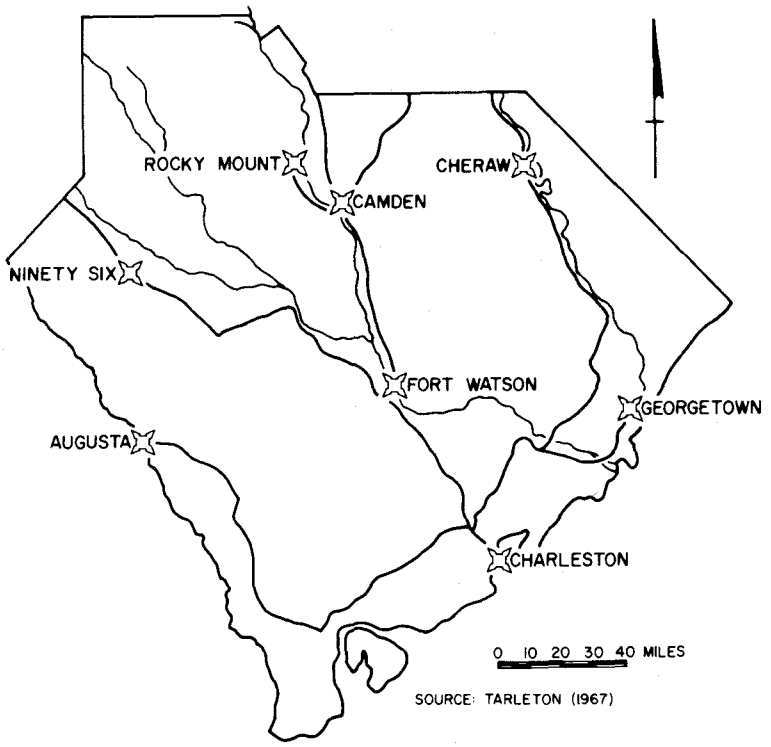


FIGURE 8: British Garrisons in South Carolina During the American Revolution, 1780-1781.

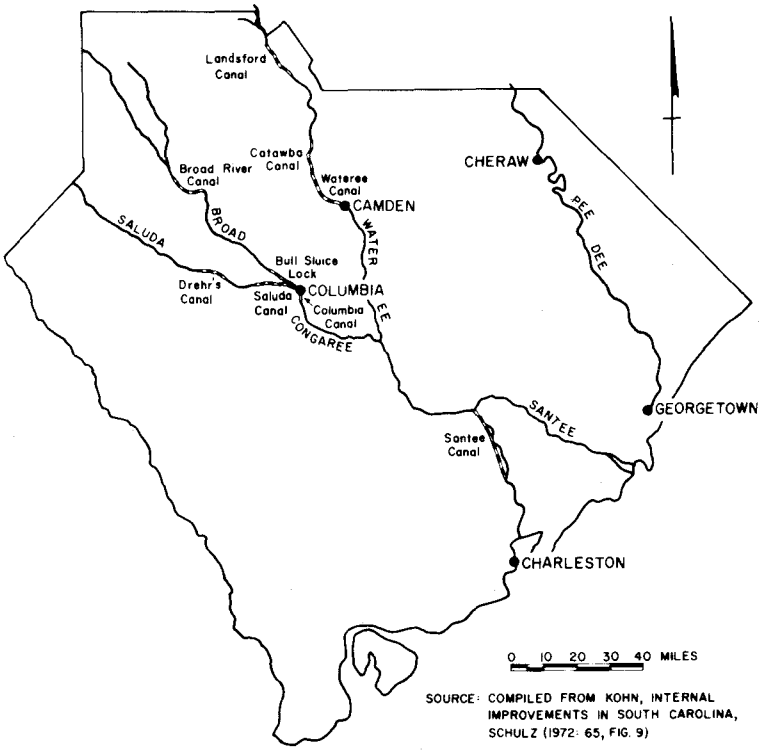


FIGURE 9: The Canal System in South Carolina in the Early Nineteenth Century.

Camden was fortified with a stockade wall surrounding the town and four redoubts. The courthouse and Joseph Kershaw's large manor house were stockaded and the town munitions magazine fortified. Colonel Lord Rawdon, the British commander at Camden, and Lieutenant General Lord Charles Cornwallis, commander of all British troops in the South, made their headquarters in the Kershaw House (Kirkland and Kennedy 1905: 204-205). During their occupation the British also constructed barracks for the troops and set up a hospital in the town (Tarleton 1967: 86, 103). Some idea of the effectiveness of Camden's fortifications may be gained from a letter of General Nathaniel Greene, the American commander facing the town in 1781, who wrote "...we were encamped before Camden, having found it impossible to attempt to storm the town with any hopes of success" (Tarleton 1967: 467).

Two separate military engagements were fought near Camden during the Revolutionary War, neither of which directly affected the town itself. The Battle of Camden on August 16, 1780 resulted in the repulse of American forces under General Gates, preserving the British hold on the Carolinas. The Battle of Hobkirk Hill, fought just north of Camden on April 25, 1781, ended in a draw but convinced Lord Rawdon of the futility of holding the inland post after its communications link to the coast had been cut by the capture of garrisons guarding the supply roads, particularly Fort Watson at the Santee River ferry (Lee 1969: 344). General Greene reported that the British hurriedly evacuated Camden on May 8th, after destroying the greater part of their baggages and stores. They also burned the jail, mills, and other buildings on their departure. Upon taking possession of the town the Americans razed the defensive works (Tarleton 1967: 473-474). Following the evacuation of Camden the British chain of inland garrisons collapsed. By the fall of 1781 the war in the South was over (Mitchell 1962: 201-204).

The immediate change of South Carolina from a colony to part of a separate nation did not directly alter Camden's economic or political role or its position in the transportation network of the backcountry (Schulz 1972: 36). The disruption of the war had, however, resulted in changes in the staple cash crops in the South. The declining market for rice and indigo coupled with the introduction of Whitney's cotton gin in 1794 favored the adoption of a new cash crop that was adaptable to labor-intensive farming (Green 1972: 110). The suitability of the backcountry for the growing of cotton encouraged expansion of large-scale plantation agriculture, displacing the small farms characteristic of a earlier phase of settlement (Edwards 1940: 201). By the second decade of the nineteenth century cotton production had superceded that of wheat as the major agricultural crop of the backcountry (Mills 1972: 588). The early shift to plantation farming can be seen in the doubling of the number of slaves in Kershaw County between 1800 and 1810 while the free white population remained constant (Kershaw County Historical Society 1970: 21 and 1972: 23). Camden continued to be a major break-in-bulk center with a number of diversified activities associated with it. As it grew in the first decade of the nineteenth century the town's location was moved northward, abandoning the less healthful site of the earlier settlement (Schulz 1972: 56). In 1812 a fire destroyed several blocks of the old town (Kirkland and Kennedy 1905: 27).

Although the site of the early Camden settlement was gradually abandoned the new town grew in size and continued to serve a similar function into the early years of the nineteenth century, when a major change occurred in the

nature of the state's transportation network brought about by the improvement of the river system to handle an increased load of mercantile traffic. These river improvements were characterized by the construction of a series of canals designed primarily to facilitate the movement of large quantities of backcountry produce to the port of Charleston. Such an extension of the trading network was especially desirable following the collapse of coastal rise and indigo production after the Revolution (MacGill 1917: 276). The expansion of cotton plantation farming provided a new commodity which lent itself well to bulk shipment by water.

The shift in the transportation network, however, tended to focus trade around new centers situated at the confluence of major river systems. Such a settlement located only thirty-five miles from Camden was designated the new state capital (Fig. 9). Indeed, the rise of Columbia signalled not only the decline of the economic importance of Camden, but also the movement of the major center of commercial collection and redistribution inland from Charleston as witnessed by the following passage written by Mills (1972: 699) in 1826:

> It [Columbia] has engrossed much of the trade which... Charleston formerly enjoyed; the produce of the back country stopping here, to be transported by water to that city, instead of proceeding, as formerly, by land.

The reorganization of the network of trade and communication is crucial to the development of a frontier area into one integrated at the same level of complexity as that of the homeland. This process is one in which the narrow limits of the old areas of colonization are broken down and the attenuated economic and social ties characterized by the singular connection between the old frontier town and the entrepot are replaced by a complexity of direct linkages between all settlements on a much wider scale and over a broader area. A central focus of social, economic, and political activity, such as Columbia, is still present but rather than serving as a line to the outside world it stands out primarily as a center having a greater number of such activities on a large scale. It may, however, also serve as an entrepot to new frontier areas further inland as Charleston had been to Camden, Ninety Six, Cheraw, and other early centers in the Carolina backcountry. Indeed, such a complex level of organization is necessary to the sustained growth of a constantly moving frontier.

The process of settlement pattern change accompanying the socioeconomic reintegration of an old frontier area has been explored by Hudson (1969) who has constructed a model defining three developmental stages covering the period from earliest settlement to the close of the frontier period. The model is based mainly upon analogies drawn from ecological spatial distribution theory and postulates that similar processes affect the morphology of rural settlement during times of rapid expansion. In a recent paper, Swedlund (1975) has demonstrated the consecutive occurrence of the settlement forms which characterize the stages in a study of population growth and settlement expansion in the Connecticut Valley in Massachusetts over a period of 200 years. The stages of Hudson's model also reflect the changing distribution of settlement on the South Carolina frontier.

The first stage is one of colonization, in which the new area is first occupied by the intrusive population. The density of settlement at this time is low and the settlement pattern random. An examination of the distribution of the townships and early settlements occupied in the first half of the eighteenth century (Fig. 5) shows such pattern.

The second stage is one of spread, in which settlement increases as the result of population growth. Because settlement now tends to spread out from population centers established earlier, its distribution becomes clustered. This settlement is perhaps most characteristic of an area of colonization and is evidenced by the proliferation of counties within the larger districts in 1785 (Fig. 10).

Finally, with increased population expansion the vacant land is occupied and a readjustment in the pattern of growth is necessary in order to achieve a state of equilibrium with the size of the settlements approaching an optimum. This process marks a stage of competition between settlements over the finite resources of the area of colonization. At this point frontier towns with a disadvantageous position are most likely to decline or become abandoned. In terms of the distribution of population, the result of competition is an even spacing of settlements. This development is reflected in the restructuring of the Circuit Court Districts in 1800 to correspond to the developing settlement pattern (Fig. 11).

Geographers have observed that population density is directly related to the function of communities with regard to the areas which they serve. Normally within a settled area a hierarchy of community types is present (hamlets, villages, towns, cities) each of which performs certain functions. As the density of population drops, however, an upward shift in these functions occurs so that services normally performed by a community at a lower level in the hierarchy must be performed at a higher one. As the population increases, the opposite effect occurs (Berry 1967: 33-34). In the case of a frontier area, the population is initially too dispersed to support such a hierarchy of settlements, their functions being assumed by a single one, the frontier town. Because of a limited communications network it cannot serve an extremely large area. With the improvement of this system, however, usually coupled with an increase in population density, it is possible to establish such an integrated hierarchy of communities resulting in a shift in the roles of the existing frontier towns.

This process of change was clearly evident in early nineteenth century South Carolina. The spread of settlement inland across the Piedmont was accompanied by the expansion of plantation agriculture, the opening up of the rivers to navigation, and a doubling of the state's population between 1790 and 1820 (Mills 1972: 177). A change in the organizational complexity of the backcountry was at hand. As the routes of communication and transportation were organized along more efficient lines a more complex hierarchy of settlements came into being. The older frontier towns not situated so as to take advantage of the new transportation network declined as commercial centers and were often abandoned. This is particularly true in the South Carolina frontier as old centers such as Long Bluff (Greenville), Ninety Six, Pickensville, and Pinckneyville, all seats of district courts of the late eighteenth century that dwindled into near obscurity in the early 1800's. Other settlements like

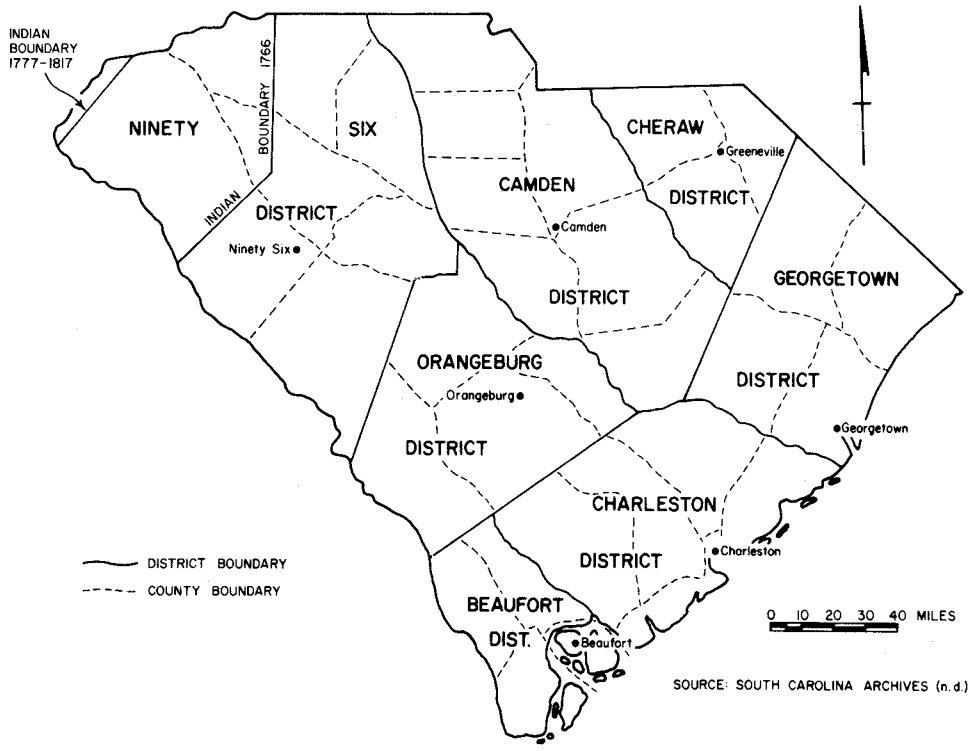


FIGURE 10: South Carolina Circuit Court Districts and Counties in 1785.

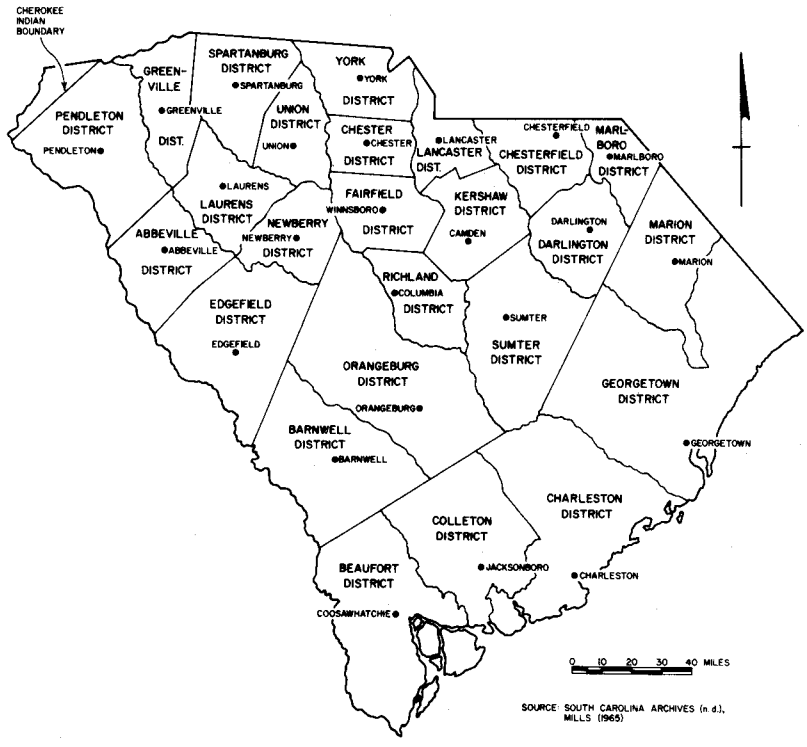


FIGURE 11: South Carolina Circuit Court Districts of 1800.

Camden fit into the new economic system as regional centers while Columbia's central location favored its development as the inland hub of the network as well as an entrepot to further settlement to the west. The removal of the state government to Columbia at the end of the eighteenth century insured its prominence as a social and political center. Camden's political role was greatly reduced with the re-organization of judicial districts in 1800. Once the judicial center of the extensive Camden District (Fig. 4), its jurisdiction was now limited to an area approximately the same size as the present-day Kershaw County.

In summary, Camden arose in the second quarter of the eighteenth century as the frontier town of an area of colonization encompassing the north central part of South Carolina. Its location provided direct access from this area to the entrepot of Charleston which served as the major link to Britain and the northern colonies. Camden's strategic position in the backcountry was realized by the British Army which fortified the town as a supply base during the American Revolution. With the close of the war the former British colonies passed into a semiperipheral status with regard to the European world economy. The expanding western frontier, increasing population, and the necessity of re-organizing the transportation and communications network which accompanied the changing role of the backcountry soon led to a marked change in roles for the older frontier towns. Camden's location allowed it to remain active as a regional center and, although no longer a settlement of paramount significance in the old frontier area, it continued to serve as a focal point of political, social, and economic affairs as the county seat of Kershaw County, South Carolina.

CHAPTER V

THE ARCHEOLOGICAL INVESTIGATIONS

Introduction

The study of the colonial settlement of Camden involves not only the consideration of a particular settlement on the South Carolina frontier but also of the frontier as a whole. The frontier town may be seen as representative of the end product of the frontier process because it originates as the smallest of settlements and passes through the various forms within the colonization gradient to become the focus of frontier activity. Its life history mirrors on a small scale those changes which constitute the frontier process and an examination of the development of such a settlement through time should serve to sample change throughout the area of colonization in both time and space.

Because of the significance of Camden in an investigation of the frontier area in which it played a central role, it is necessary to examine the settlement as an entity rather than confining research to particular aspects of it. At Camden it is possible to define the limits of settlement, and thereby circumscribe the remains of those activities carried out there during the colonial period, by locating the line of the 1780-1781 palisade wall which is assumed to have enclosed all of the structures within the contiguous settlement. It is realized, of course, that given the dispersed nature of industrial activities of the period (Forbes 1958: 150-151) many of the manufacturing and maintenance activities associated with the frontier town may fall outside of this area. We must assume, however, that the town itself will contain at least representative evidence of all activities associated with it.

Methodological Framework

Because it is imperative to study the frontier town as a whole unit, the archeological investigations must be carried out in such a way as to allow an examination of the entire settlement, or at least as much of the settlement as possible. This task may be best accomplished by employing a multistage research design which provides an overview of the entire site yet retains the ability to focus upon desired aspects of it. Ideally, a field research design should contain a number of logically related steps involving progressively more intensive investigation of smaller portions of the total site area (Hanson, Hurwitz, and Madow 1953; Redman 1973: 63-64). Each step of the design should be capable of providing the data which, taken at the end, will allow the investigator to solve the original problem with which he is concerned. At each stage different questions must be asked of the data. These questions are, in turn, based upon the types of observations his design allows him to make.

The first stage must be designed primarily as a discovery phase which serves to guide more intensive archeological investigations to follow later. In a discovery phase only broad patterning in the data is sought. The main

questions to be asked at this time concern: 1) the general condition of the archeological remains at the site; 2) the beginning and termination dates of the site's occupations; 3) the ethnic or cultural affiliation of the settlement; 4) the form and spatial extent of the remains of past human occupations there; and 5) the nature of intra-site variability and the distribution of behaviorally significant archeological materials. The answer to the first question alone will determine to a large extent the precise nature of any future archeological investigations.

This report presents the results of the discovery phase of archeological work conducted at Camden during 1974 and 1975. It is intended to answer the five broad questions outlined above in order to provide a basis upon which to organize future investigations at this site. The conclusions reached here will determine not only the feasibility of such work but also allow the selection of locations where intensive research is most likely to yield the kinds of data capable of answering the questions posed earlier in this section. Because of the general nature of the discovery phase of investigation, it should, in addition, be possible to utilize its results as the groundwork from which to approach other research topics as well.

The discovery phase of archeological work at Camden involved the use of a technique designed to gather a representative sample of the distribution of archeological materials over the entire site. Because statistical treatment of the data obtained is desirable, the sample was based upon the random selection of the sample units. Random sampling offers the advantage of providing every such unit within the population (the total area of the town) exactly the same chance of being chosen (Dice 1952: 28) and eliminates the potential bias inherent in a sample based upon arbitrary measurements established by the investigator (Mueller 1974: 3). Redman and Watson (1970: 281-282) suggest that the stratified unaligned random sample provides the best method for examining artifact patterning because it prevents the clustering of sample units and assures that no areas are left unsampled. It accomplishes this by dividing the site area into a series of large units based upon the coordinates of the site grid. Within each of these squares one unit of a smaller size is randomly chosen. The relative sizes of the units involved will determine the percentage of the site area sampled. Naturally, the greater the size of the sample the more reliable will be the results; however, the difficulty of enlarging the magnitude of such a sample increases with the size of the site. For this reason, the proportionate size of the sample, in practice, usually becomes smaller as the area to be examined becomes larger. A reliable picture of the total population can be best maintained under these conditions by utilizing the smallest sized squares practical. This permits a maximum of area to be covered by a minimum of testing (Redman 1973: 63).

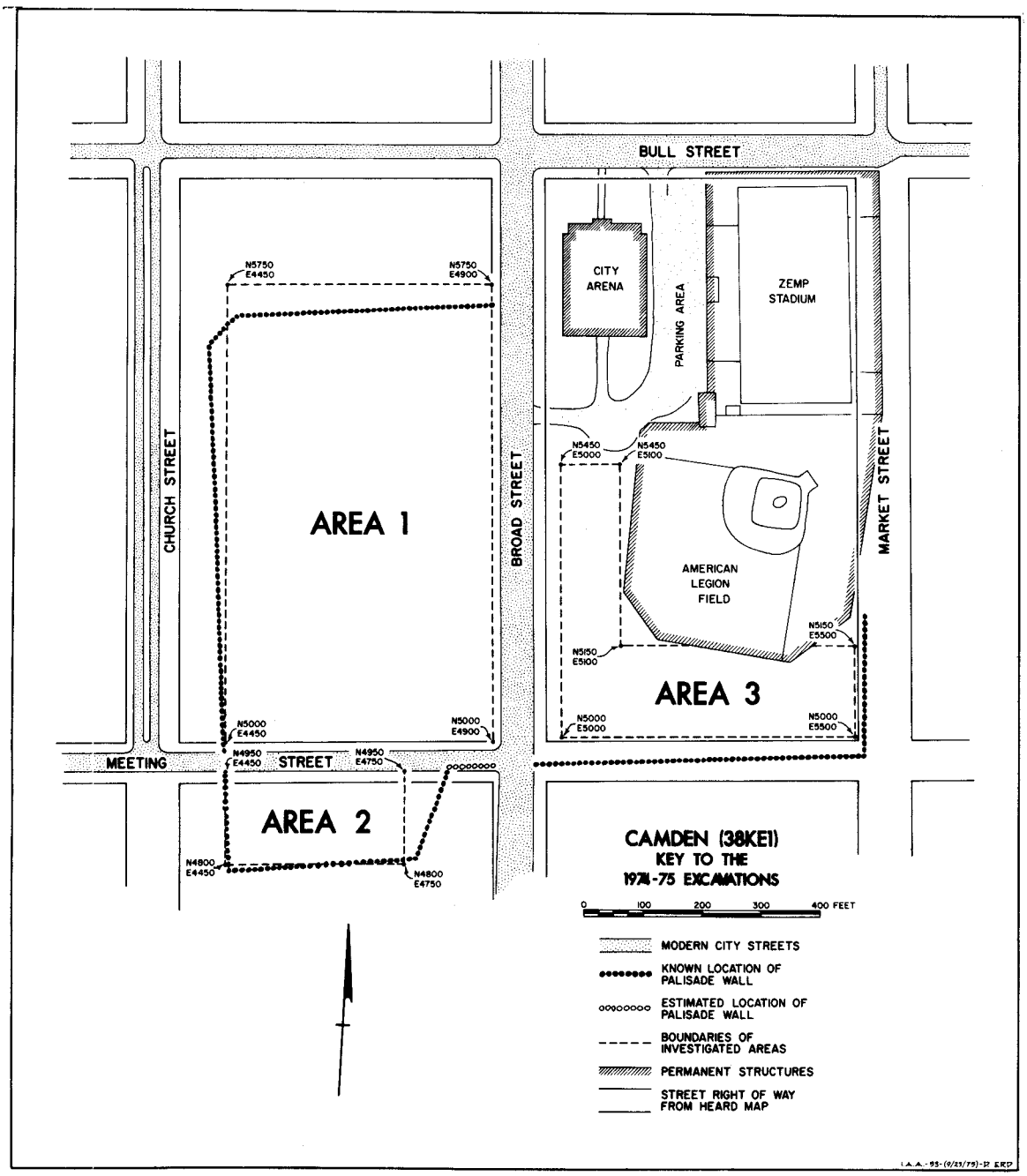
Archeologists utilizing this sampling technique have generally been concerned with the investigation of sites much smaller than Camden (see Redman and Watson 1970). Utilizing a sample approaching 11% of the total site area they have observed variation in the patterning of activities carried out over areas much more limited than those of many activities which might have occurred at Camden. The initial excavations at Camden utilized a smaller sized sample because they were chiefly concerned with identifying general areas of interest rather than precise activities, although many large-scale activities may also be discernible. The discovery sampling design applied here employed a 1% sample consisting of 5 by 5 foot units, each of which was randomly selected from a 50 by 50 foot square.

It was important not to restrict the use of excavation techniques during the discovery phase of the archeological work and in addition to the test pits of the random sample it was necessary to conduct other types of specialized excavations to aid in the interpretation of features on the site. Examples of this were the use of slot trenching to locate the palisade wall trench or the cutting of more extensive trenches to interpret complex site stratigraphy. If desired, structural features might also have been located in this manner preparatory to future intensive excavations. Materials obtained from these excavations will not be included in the statistical analyses of data obtained from the unaligned random sample units in order to exclude inherently biased information from the sampling results.

Excavations at the site of the colonial town of Camden were carried out in two phases during the fall of 1974 and the summer of 1975. The first was designed to determine the precise location of the palisade wall surrounding the settlement and the second to investigate the general conditions of the townsite itself. The site lends itself well to extensive techniques of excavation as it consists of a gently sloping unobstructed plain at present covered with grass and was until recently under cultivation. It is bisected into east and west halves by U.S. Highway 521, part of which is cut below the earlier ground level. Unfortunately much of the northeast quarter of the site is presently covered by a county athletic complex consisting of an auditorium, a football stadium, and a baseball field, precluding archeological investigations here (Fig. 1). No above ground traces of earlier structures are visible on the site though the presence of occasional eighteenth century artifacts suggests a colonial occupation.

In order to maintain horizontal control for the excavations a grid system composed initially of 50 by 50 foot squares was superimposed over the entire site. All points were measured north and east along two axes from a single datum point located south and west of the site. This point was designated North 0, East 0. Excavated units were identified by the coordinates in the southwest corner of each. In the sampling of the town area these pits were 5 by 5 feet in size. Trenches, stratigraphic cuts, and other irregular units were given numerical designations. To take advantage of the axis upon which the town was laid out, the entire grid was offset 2 degrees west of north.

The grid established for the 1974 excavations was based upon an arbitrary datum point (N5000 E5000) situated approximately 40 feet east of the eastern edge of Broad Street (U.S. Highway 521). In the spring of 1975 a survey of the Camden District Heritage Foundation properties was conducted to determine the precise locations of the original street corners based upon the 1774 plat of the town. Because these points were accurately plotted prior to the beginning of the 1975 field work it was decided to realign the site grid to correspond to that established by the town survey. Basically, this involved shifting the base point 15 feet west and 46 feet south. This placed N5000 E4900 on the northwest corner formed by the rights-of-way of Broad and Market Streets. All archeological work conducted on the west side of Broad Street was tied to the new site grid, however, the old grid was retained for the excavations carried out directly west of the baseball field in order to maintain continuity with previous excavations east of Broad Street (Fig. 12). Vertical control was maintained with a transit, measuring all elevations above mean sea level from permanent datum stations.


BULL STREET
CHURCH STREET
BROAD STREET
MARKET STREET
MEETING STREET
CITY ARENA
PARKING AREA
ZEMP STADIUM
AMERICAN LEGION FIELD
AREA 1
AREA 2
AREA 3
N5750 E4450
N5750 E4900
N5450 E5000
N5450 E5100
N5150 E5500
N5150 E5100
N5000 E4450
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CAMDEN (38KE1)
KEY TO THE
1971-75 EXCAVATIONS
0 100 200 300 400 FEET
MODERN CITY STREETS
KNOWN LOCATION OF PALISADE WALL
ESTIMATED LOCATION OF PALISADE WALL
BOUNDARIES OF INVESTIGATED AREAS
PERMANENT STRUCTURES
STREET RIGHT OF WAY FROM HEARD MAP

FIGURE 12

For convenience of reference the excavated portions of the site have been grouped into 3 larger areas (Fig. 12). Area 1 consists of the block west of Broad Street and north of Meeting Street. It is bordered on the north by Bull Street and on the west by Church Street. Area 2 includes the block west of Broad Street and south of Meeting Street. It is bounded on the south by Wateree Street and on the west by the Presbyterian Cemetery. Finally, Area 3 designates that part of the site east of Broad Street, north of the former course of Meeting Street, west of the former course of Market Street, and south of Bull Street. As previously noted, much of Area 3 is covered by public facilities and consequently could not be investigated archeologically at this time.

Although both the excavations conducted by Calmes and Strickland utilized separate grids it has not been possible to re-establish these systems for use in the present excavations because their base points have since been obliterated. Earlier grid systems were established separately for each area of the total site excavated (e.g.,the Kershaw House, the northeast redoubt, the powder magazine) and no attempt was made initially to tie the individual areas into a single grid for the entire site (Calmes 1968a: 2). It is felt that in order to simplify the expression of spatial relationships between various parts of the site a single grid system is desirable. The unity of the town of Camden as a distinct cultural entity was recognized early and is reflected in the single site designation number, 38KE1 (Strickland 1971: 57). The establishment of one grid system encompassing the entire site and its immediate vicinity serves not only the practical purpose of coordinating archeological work over an area as large as the interior of the old town but also to tie together all outside archeological features affiliated with it.

The contents of excavated units were screened utilizing a mechanical sifter with a 1/4 by 1/4 inch hardware cloth mesh. All units were dug by natural stratigraphy except mechanically excavated stratigraphic cuts and slot trenches which were designed solely to investigate gross morphological aspects of the site.

Archeological features were explored extensively only when it appeared certain that they would be contained within the sample unit excavated. It was felt that more could be learned from such features if they are viewed as integral units than by dissecting them as part of the sampling phase of the investigation. Features were exposed in a preliminary manner, recorded, and then sealed so as to protect them until their complete investigation, if desired, could be accomplished during a later phase of the Camden investigations.

The Town Boundaries - the 1780 Palisade Wall

Documentary Evidence and Previous Archeological Investigations

Prior to an examination of the interior of the town of Camden it has been necessary to delineate the spatial extent of the settlement or at least that part of it which was most densely populated. Camden, of course, does not represent a static entity that has remained unchanging through time.

Its early growth, and later expansion, influenced by several destructive fires and a gradual northward movement in the nineteenth century, resulted in a continually changing settlement size and arrangement.

As this study is concerned chiefly with the Revolutionary War Period town, the boundaries of that settlement may be approached from several angles in terms of documentary and archeological research. The earliest surviving plat of the town of Camden (Fig. 13) was drawn by Deputy Surveyor John Heard (SCS/1798/no. 1702) but bears no date. Kirkland and Kennedy (1905: 12) suggest that it was drawn after 1774 because it indicates the locations of the courthouse and jail, built in 1771, and the fairground, first utilized in 1775 and granted in charter in 1774. Sellers (1934: 90), however, asserts that Joseph Kershaw petitioned for a fair as early as 1765 and a pre-1774 map may have assigned space for it. Schulz (1972: 107) points out that the earliest town lots identified by number were sold in 1774 (LCD/P-4:490), suggesting that the survey of such lands occurred before this time. John Heard, the deputy surveyor, lived during the 1770's but his term of office is uncertain. Utilizing the building dates of the courthouse and jail as a terminus post quem and the sale of numbered lots as a terminus ante quem a date range of 1771-1774 may be assigned to this map. To avoid confusion in this report it will hereafter be referred to as the Heard map.

The map is extremely useful in this study for several reasons. Not only does it illustrate the division of the town into 630 lots but also indicates those lots which were occupied by the last quarter of the eighteenth century. It will be noted that the pattern of occupied lots forms a compact square bordered by Church Street on the west and Market Street on the east. The northern boundary of this area is marked by a line running along the south edge of the public square at the intersection of Broad and Bull Streets while the southern boundary runs along Meeting Street for the east half of its length but drops south of that road for a portion of the western half. The two halves of the town are divided by Broad Street which bisects the early settlement in a north-south direction. Other blocks of occupied lots are shown separated from the main settlement to the southwest and southeast. Those directly west of Church Street mark the site of the Presbyterian churchyard (Kirkland and Kennedy 1905: 31). The location of the courthouse and jail a block to the north of the occupied lots is conspicuous because they must have been noticeably separated from the bulk of the town.

The correspondence of the road layout of the eighteenth century town to that of the present City of Camden may be seen by comparing the Heard plan to a modern map. As Figure 12 shows, modern streets fall within the rights-of-way of the original streets. The area originally enclosed by the occupied lots still retains the same relationship to the named streets as in colonial times and, except for the portion covered by the public activities complex, has not been disturbed by subsequent construction. The 1975 resurvey of the lower town confirms the spatial relationships indicated in this comparison. Due to the substantial width allowed for the original streets (66 and 90 feet) all of the modern streets fall within the course of the former and it is assumed that no part of the colonial settlement has been obliterated by the present streets. For these reasons it should be possible to plot the locations of archeological features in the colonial town relative to points of reference nearly unchanged since the eighteenth century.

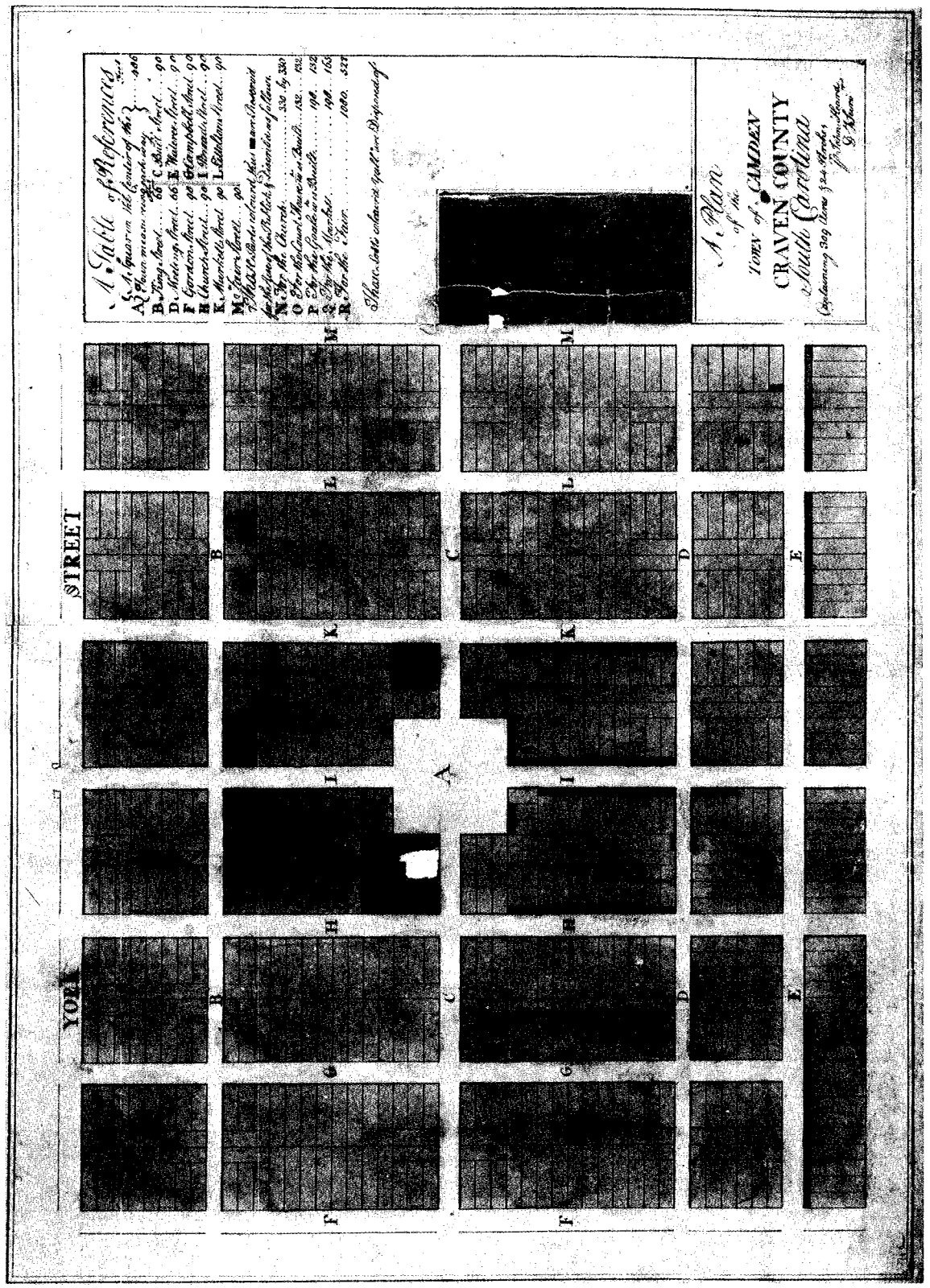


FIGURE 13: The Heard map of Camden, early 1770's. Note the grid pattern of the settlement as originally laid out and the presence of the central square. (Source: SCS/1798/no. 1702.)

The size and shape of the block of occupied lots on the Heard map corresponds remarkably well with that of a palisade wall erected by the British during the 1780-1781 occupation of Camden and illustrated on a plan drawn by an engineer in General Green's Army (Greene to Continental Congress, May 12, 1781/GP/CCP/155/II:161). The plan (Fig. 14) is somewhat crudely drawn and contains no scale or compass direction but illustrates a wall circumscribing the occupied town lots. The separated courthouse and jail also correspond to their locations on the earlier map but their distances are not to scale.

From this information it is possible to infer that at the time of the American Revolution the town of Camden lay well within the area indicated by the Heard map. Certainly some lots outside of this area were owned by this time, as will be discussed later, but these lots must not have been improved to the point that they would have been enclosed as a part of the walled town. It is unlikely that the British would have allowed structures in close proximity to the defensive works for in the eighteenth century it was standard procedure in establishing fortifications to clear the ground around a fort to the limits of common range in order to deny potential cover to an attacking enemy (Vauban 1968: 121-122). The correspondence of the defensive wall to the margins of the town was also common practice during this time. John Muller (1968: 155-156), a contemporary writer on fortification, stressed the necessity of constructing forts designed to "protect trade" large enough to contain the buildings of the town.

Based upon the assumption that British fortifications enclosed all of the contiguous occupied area of colonial Camden, it should be possible to define the latter by plotting the precise location of the palisade wall utilizing archeological techniques assisted by documentary research. The 1781 Greene map is the only contemporary plan of the fortifications and the rectangular shape of the walls follows the standard eighteenth century practice for forts (Muller 1968: 197). The construction of outworks, consisting of redoubts (see Vauban 1968: 155; Muller 1968: 229) and fortified buildings, is recommended by Muller (1968: 151, 202) for forts in which it is not feasible to erect bastions, ditches and other complex defensive works. This must have been the case at Camden for the Greene map shows its simple palisaded wall to be surrounded by six strong defensive positions and two fortified groups of structures (Fig. 14).

The topography of the Camden area provides several clues to the design of the defenses. It will be noted (Fig. 15) that the town of Camden lies on gradually east and southward sloping ground above the swamp of Big Pine Tree Creek and not on a hill commanding the surrounding area. Directly to the east of the town is Pine Tree or Magazine Hill, a small rise atop of which sat the fortified Kershaw House and at least one of two eastern redoubts (Calmes 1968a). These outworks would have established a British position on this high ground. Redoubts to the north and west would have performed a similar function. The protrusion of the southwest wall and a closely placed redoubt may also have allowed the enclosure of an extension of the elevated ground upon which the western portion of the town was situated. The elevated position of the townsite relative to the ground to the south required the placement of fewer fortifications here and only one redoubt and the fortified magazine were located there. The desirability of maintaining fortified positions on high ground near

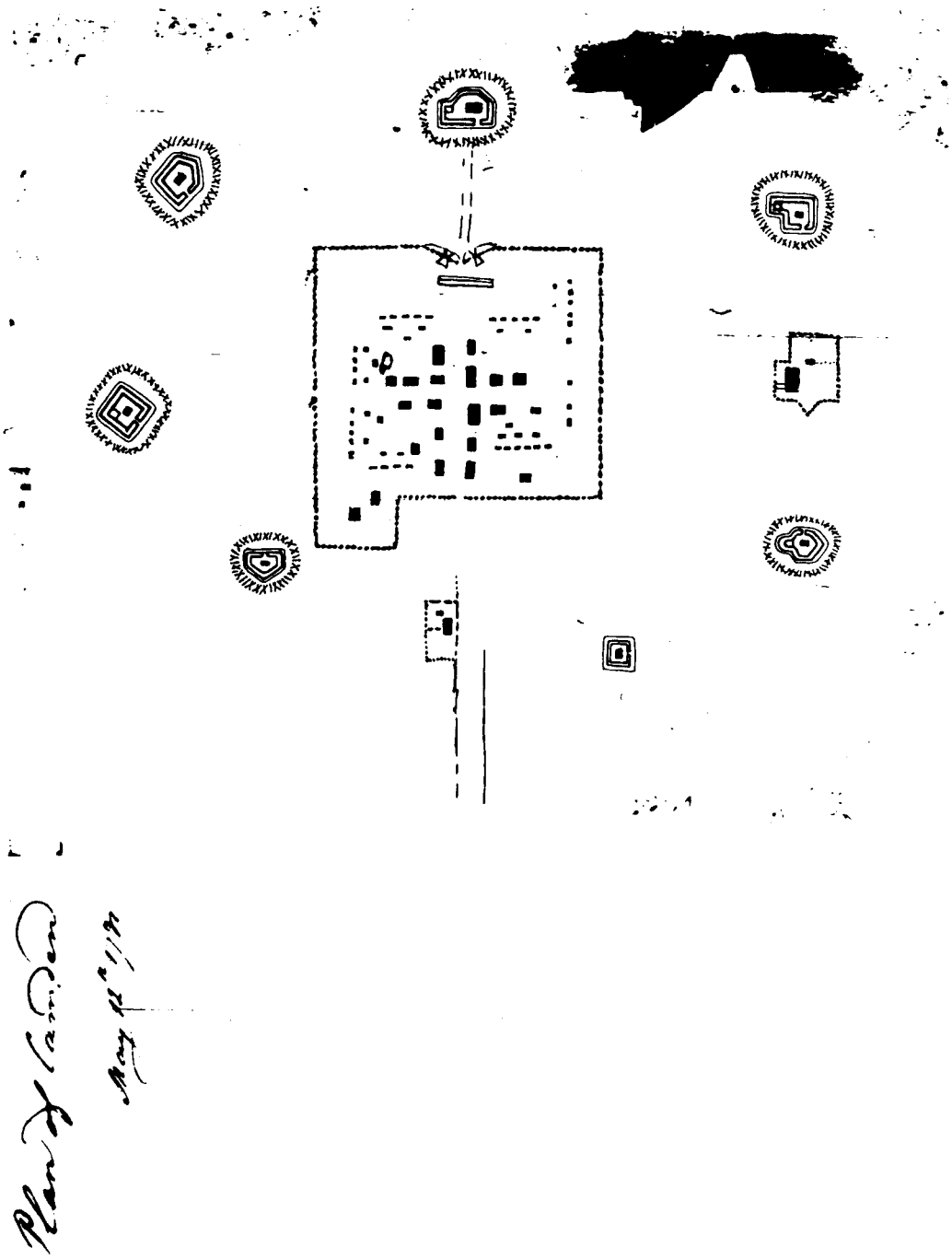
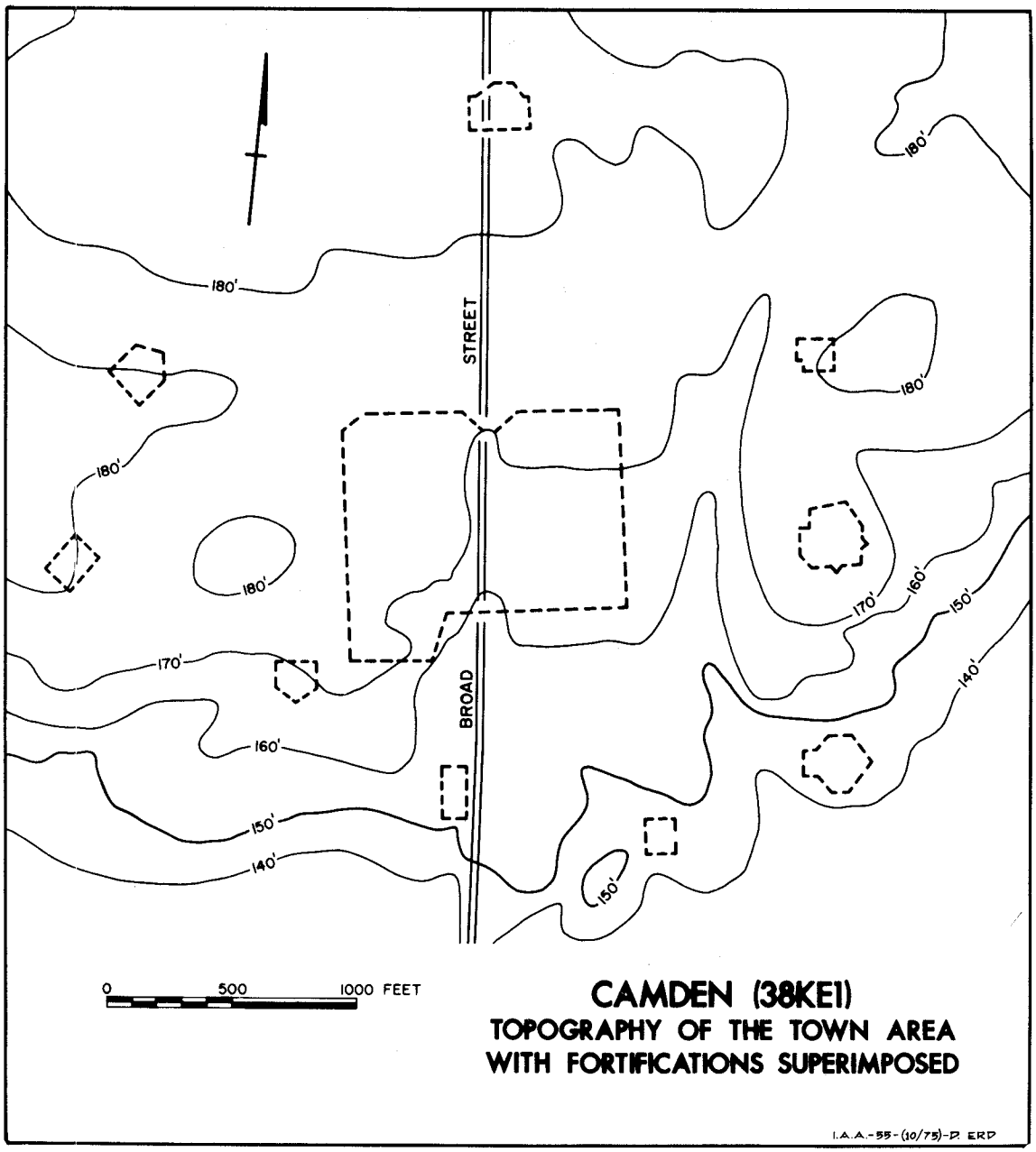


FIGURE 14: The Greene map of Camden and its fortifications, 1781. The town's central square lies approximately in the center of the north line of the palisade. Note the arrangement of structures within the settlement. (Source: GP/CCP/155/II: 161.)


STREET
BROAD
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180'
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180'
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150'
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170'
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140'
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0
500
1000 FEET
CAMDEN (38KE1)
TOPOGRAPHY OF THE TOWN AREA
WITH FORTIFICATIONS SUPERIMPOSED
I.A.A.-55-(10/75)-D ERD

FIGURE 15

the town made the use of separate redoubts and fortified buildings advantageous. Together they constituted a barrier formidable enough to make the construction of ditches and bastions around the town itself unnecessary. In a letter accompanying the 1781 map General Nathaniel Greene (GP/CCP/155/II: 161) noted that the "chain of strong redoubts" effectively prevented his approach to the town from any side.

Because the 1781 map of Camden contains no scale or direction it has been necessary to determine the precise location of the British palisade through the use of archeology. In 1968 Alan Calmes (1968a: 21-22) conducted preliminary excavations in search of the wall. A series of exploratory slot trenches were dug to intersect the north, west, south, and east sections of the town palisade (Fig. 16). The northwest and southeast corners were also explored at this time to determine the locations of these features. The sections of wall trench uncovered by the archeology revealed a palisade wall line slightly different from that which appears in the Greene plat in that the proportion of length to width is greater (see Figs. 14 and 16). This marked discrepancy adds doubt to the scale accuracy of the Greene map and may limit its use to plotting only the relative positions of features appearing on it.

Additional excavations were carried out by Robert Strickland on the town wall in 1970 during which time almost all of its length in the corner of town east of Broad Street and south of the baseball field was completely excavated and a modern log wall reconstructed in its place. He also conducted further explorations in the southwest part of town designed to define more clearly the palisade wall in the area south of Meeting Street (Fig. 16). In the course of this work it was determined that the topography of the southeast area of the town differed from that of the present in that the ground level of the western and eastern extremes appeared to have been at one time higher and that of the center was nearly 4 feet lower than the 1970 surface. Associated with the lowest part of the wall was a feature consisting of a rectangular pit in which several British muskets along with a quantity of gunflints, musket balls, and gun parts had been discarded, presumably at the time of the British evacuation of Camden, and subsequently covered with waterbourne deposits (Strickland 1971: 65). No other structural features were found to be associated with the southeast palisade wall. The absence of a ditch, earthen ramparts, and firing platforms indicates that this was not a strong defensive position as were the redoubts (see Calmes 1968a: 18; Strickland 1971: 60-62).

The presence of numerous post molds and occasional fragments of timber in the palisade wall footing ditch suggest that all of the wall was not removed but, rather, was allowed to deteriorate in place. Contemporary reports indicate that the defenses suffered greatly at the end of the British occupation. Lord Rawdon, British commander at Camden, reported that he "destroyed the works remaining at Camden" prior to his evacuation of the town (Rawdon to Cornwallis, May 24, 1781/CW/PRO/30/II/6:106). Upon his arrival in Camden following Rawdon's departure, General Greene immediately set his men to work tearing down the fortifications (Greene to Continental Congress, May 22, 1781/GP/CCP/155/II:59). It seems most likely that, given the short time Greene occupied Camden, his objective in destroying the fortifications would have been to render them militarily useless rather than obliterating them completely. This assumption is borne out by statements that their remains were still visible ten years later. In the spring of 1791 President George Washington, on a tour of the

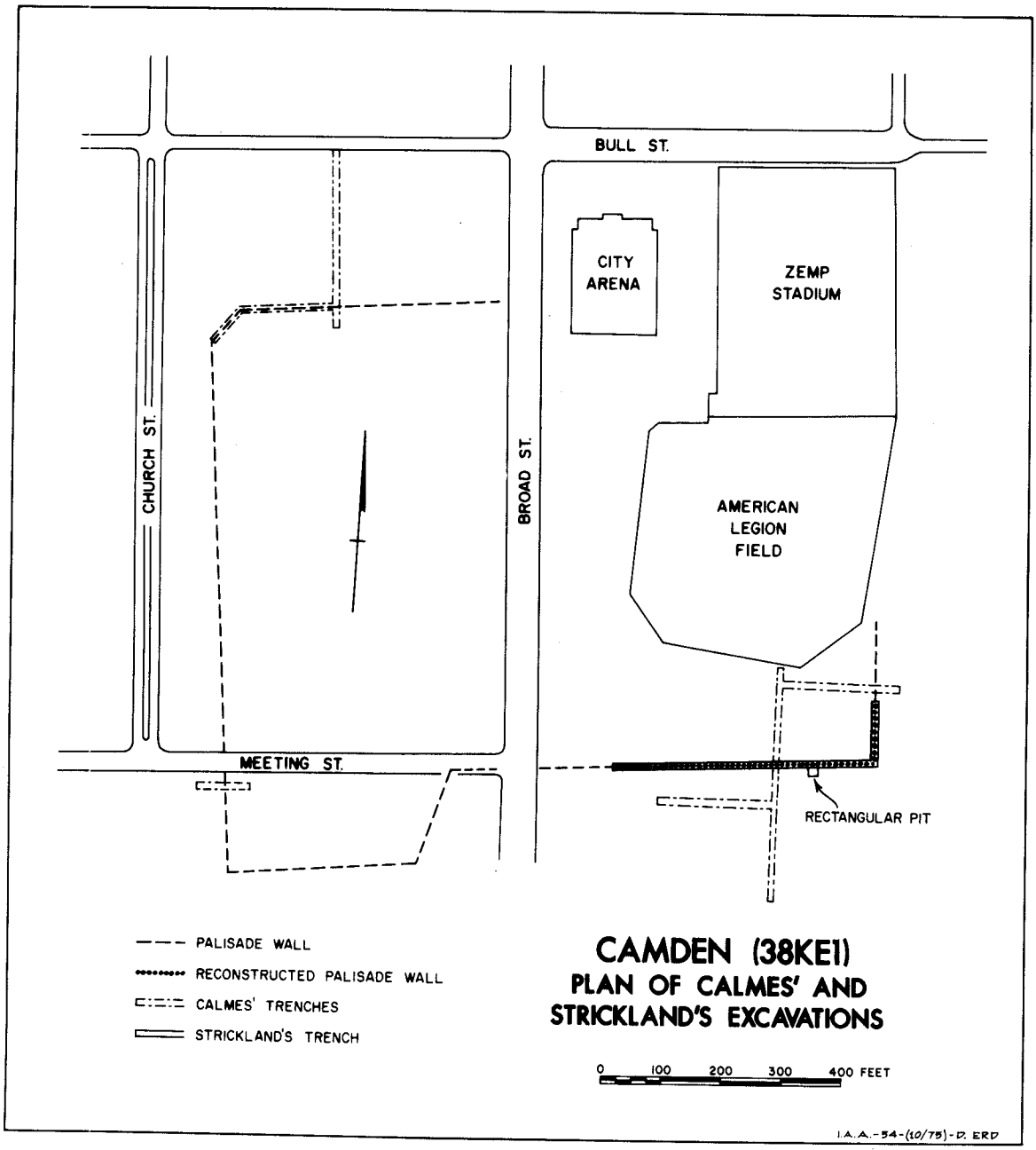

BULL ST.
CITY ARENA
ZEMP STADIUM
CHURCH ST.
BROAD ST.
AMERICAN LEGION FIELD
MEETING ST.
RECTANGULAR PIT
PALISADE WALL
RECONSTRUCTED PALISADE WALL
CALMES' TRENCHES
STRICKLAND'S TRENCH
CAMDEN (38KE1)
PLAN OF CALMES' AND STRICKLAND'S EXCAVATIONS
0 100 200 300 400 FEET
I.A.A.-54-(10/75)-D. ERD

FIGURE 16

South, visited Camden and inspected the "works and redoubts of the British" (Kirkland and Kennedy 1905: 312). The works distinguished from redoubts may refer to portions of the town palisade as well.

By the time of Washington's visit the postwar economic growth of Camden had expanded the boundaries of the town beyond the limits of the earlier wall. Most businesses were now centered around the public square at the north edge of the old wall and extended northward along Broad Street (Schulz 1972: 46). The remains of the British fortifications must by then have lain on the southern outskirts of an enlarged community now seemingly far removed from the desolation of the late war.

The 1974-1975 Excavations

In December 1974 and June 1975 the author conducted archeological investigations in the southwest portion of the fortified town designed to uncover traces of the palisade wall preparatory to the restoration of a portion of the wall south of Meeting Street. These excavations were sponsored by a federal grant from the Coastal Plains Regional Commission. The three goals assigned to this project were the delineation of the palisade ditch and all features directly associated with it, the mapping of the wall and related features, and the excavation of the palisade ditch to allow the placement of posts in a later phase of reconstruction.

The work on the southwest palisade wall in Area 2 was accomplished in several stages. The first of these was carried out in the fall of 1974 and was designed primarily to relocate the west and south lines of the wall trench preparatory to completely exposing it at a later time. In order to locate the footing ditch of the wall a series of slot trenches were cut prependicular to the assumed direction of the wall (Fig. 17), utilizing the measurements provided by Calmes' and Strickland's earlier testing as approximate guides. The dark red clay fill of the wall trench was clearly visible in the tan subsoil at a depth of about 0.5 foot (Fig. 18).

In the summer of 1975 test trenching was conducted to locate the east line of the palisade trench in Area 2. Due to the extremely disturbed condition of the ground in this area the palisade trench was often difficult to define. In recent times a plant nursery occupied the southwestern corner of the intersection of Broad and Meeting Streets and the continual disruption of the soil associated with the planting and replanting of shrubs and trees here seems to have obliterated much evidence of earlier occupations. The effects of the nursery activity will be discussed later in this report. It is also probable that a portion of the eighteenth century surface just south of Meeting Street was removed when the street surface was lowered to its present level. This has resulted in the ground surface here being several feet lower than that on the north side of Meeting Street directly across from it. The stratigraphy of that portion of the site lying north of Meeting Street and west of Broad Street appears to be relatively undisturbed and indicates a present surface closely approximating that of colonial times. The sequence of soil layers present there is not repeated on the south side of the street, however, and the red sandy clay which lies 1.7 feet below the surface on the north side is just below and often outcrops on the surface on the south side.

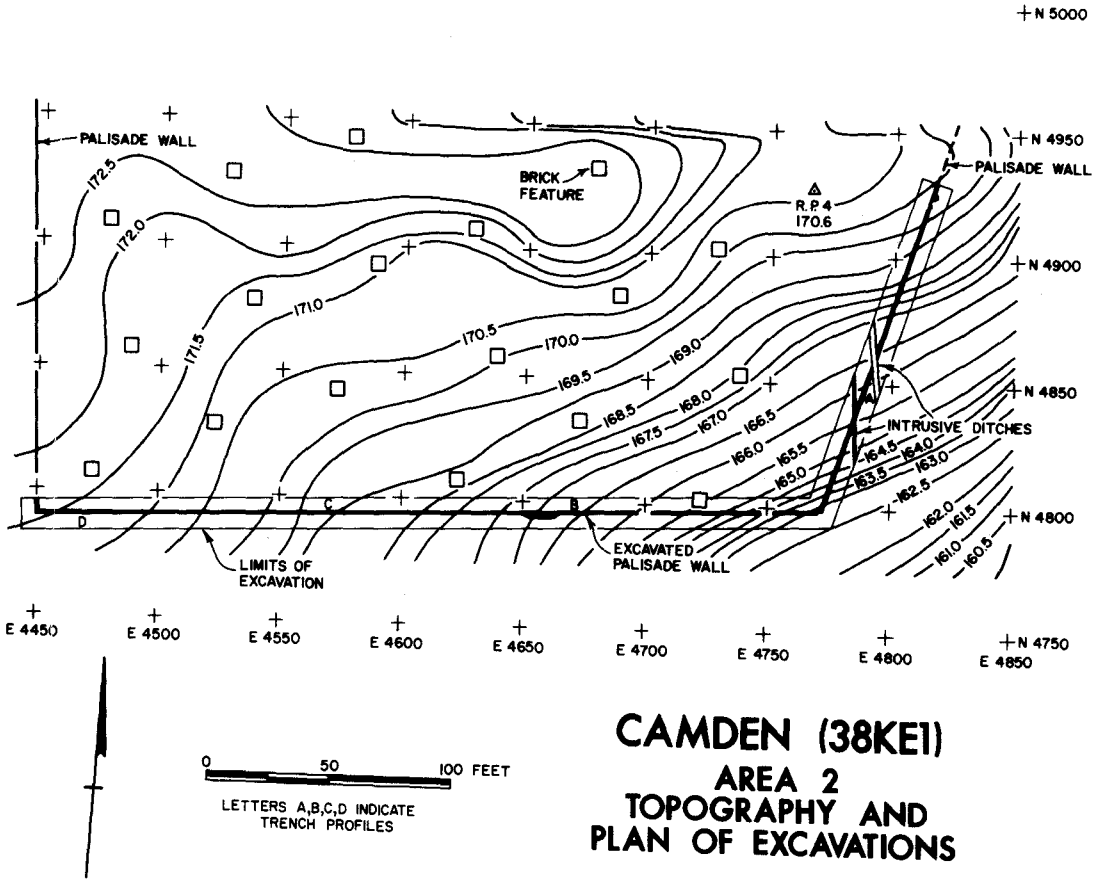

N 5000
PALISADE WALL
172.5
172.0
171.5
171.0
BRICK FEATURE
R.P. 4
170.6
170.5
170.0
169.5
169.0
168.5
168.0
167.5
167.0
166.5
166.0
165.5
165.0
164.5
164.0
163.5
163.0
162.5
162.0
161.5
161.0
160.5
N 4950
PALISADE WALL
N 4900
N 4850
INTRUSIVE DITCHES
N 4800
N 4750
LIMITS OF EXCAVATION
EXCAVATED PALISADE WALL
A
B
C
D
E 4450
E 4500
E 4550
E 4600
E 4650
E 4700
E 4750
E 4800
E 4850
0
50
100 FEET
LETTERS A,B,C,D INDICATE TRENCH PROFILES
CAMDEN (38KE1)
AREA 2
TOPOGRAPHY AND
PLAN OF EXCAVATIONS

FIGURE 17

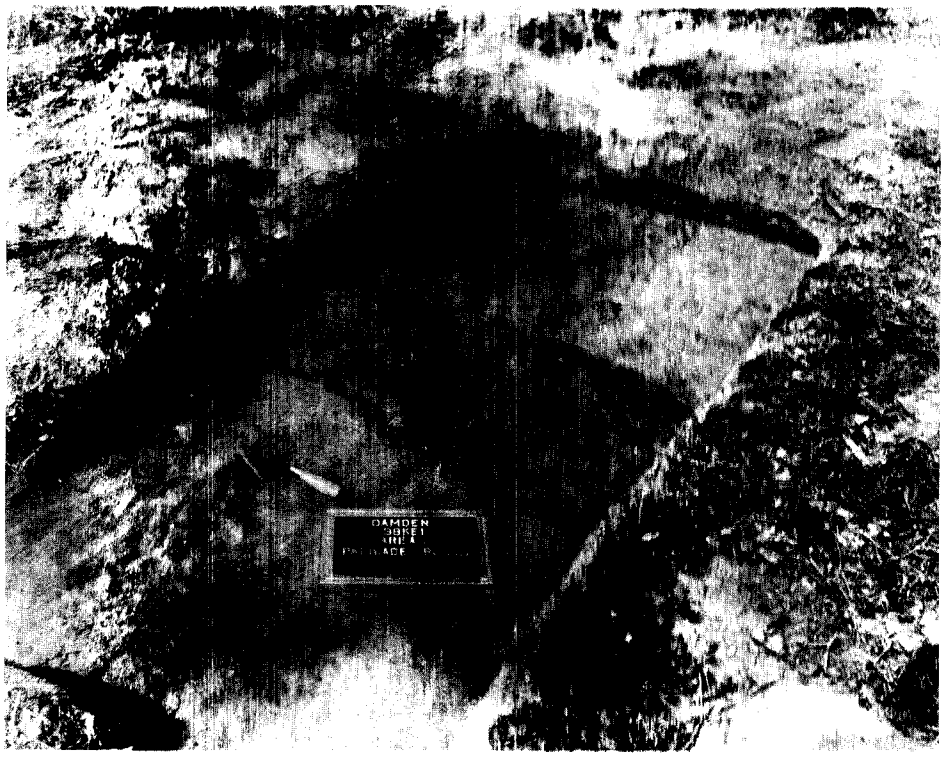


FIGURE 18: Exposed section of Palisade Wall Trench in Area 2.

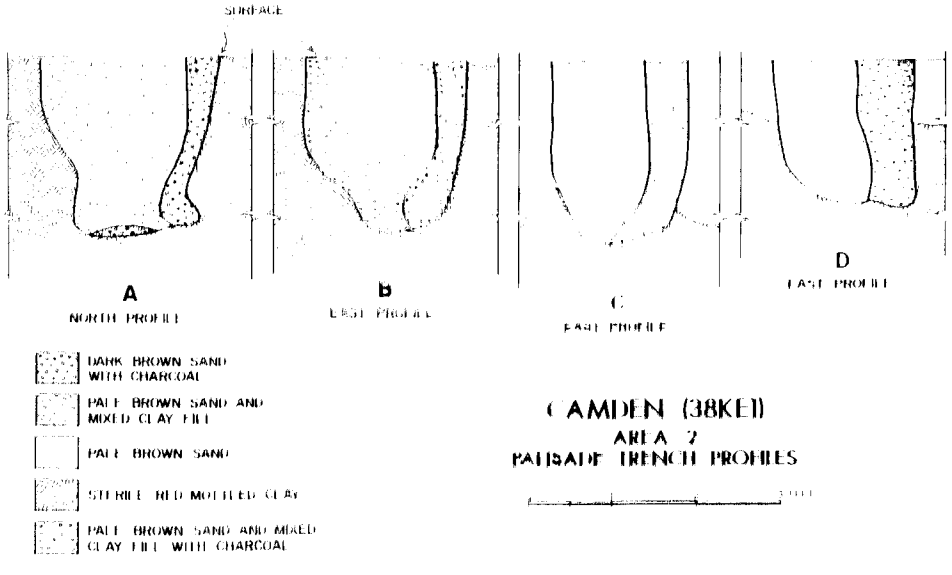


FIGURE 19: Profiles of Palisade Wall Trench in Area 2.

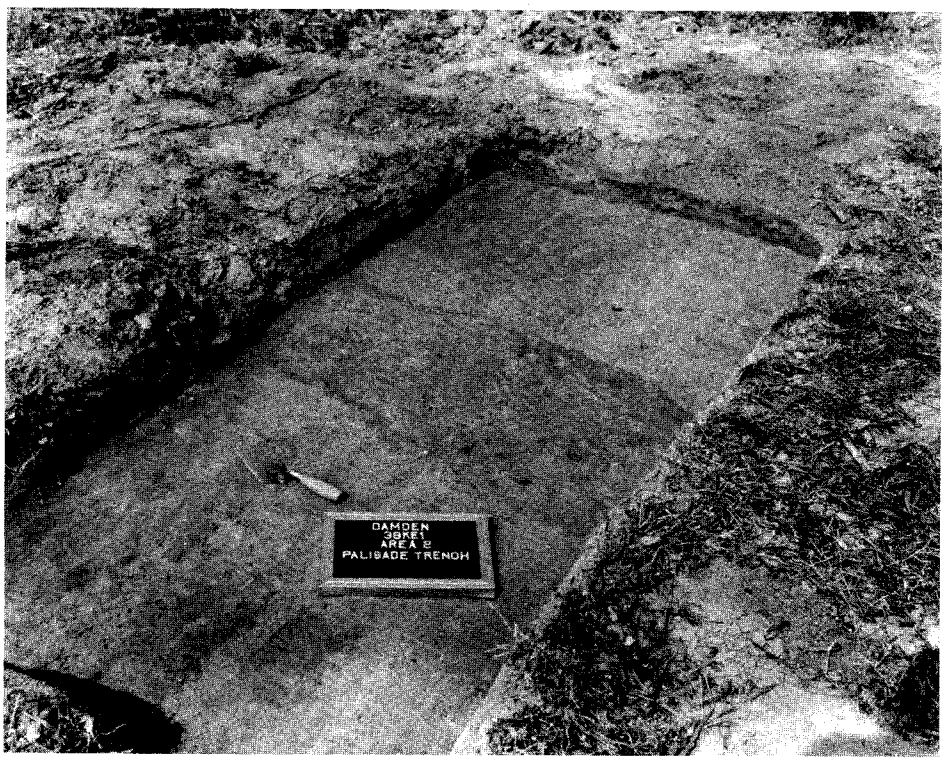


FIGURE 18: Exposed section of Palisade Wall Trench in Area 2.

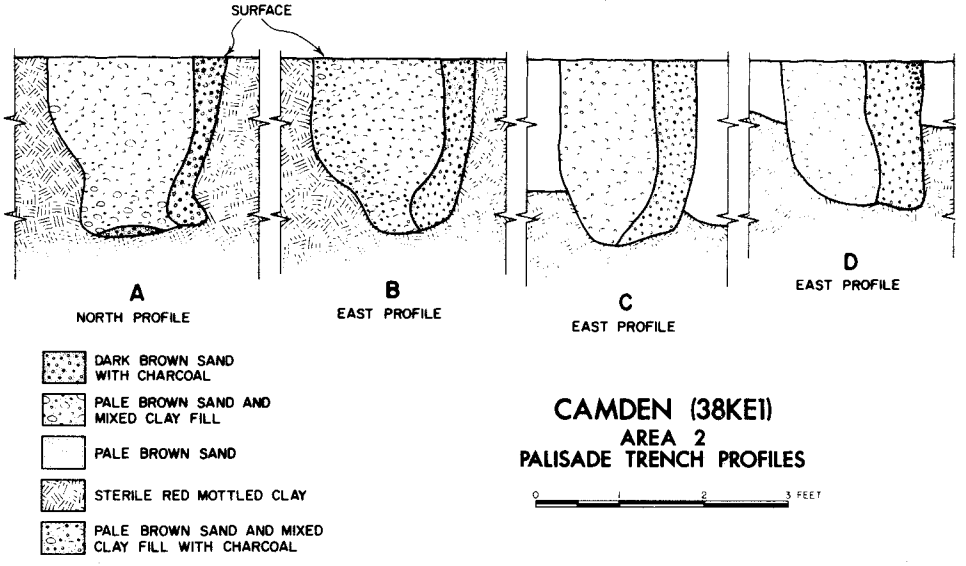


FIGURE 19: Profiles of Palisade Wall Trench in Area 2.

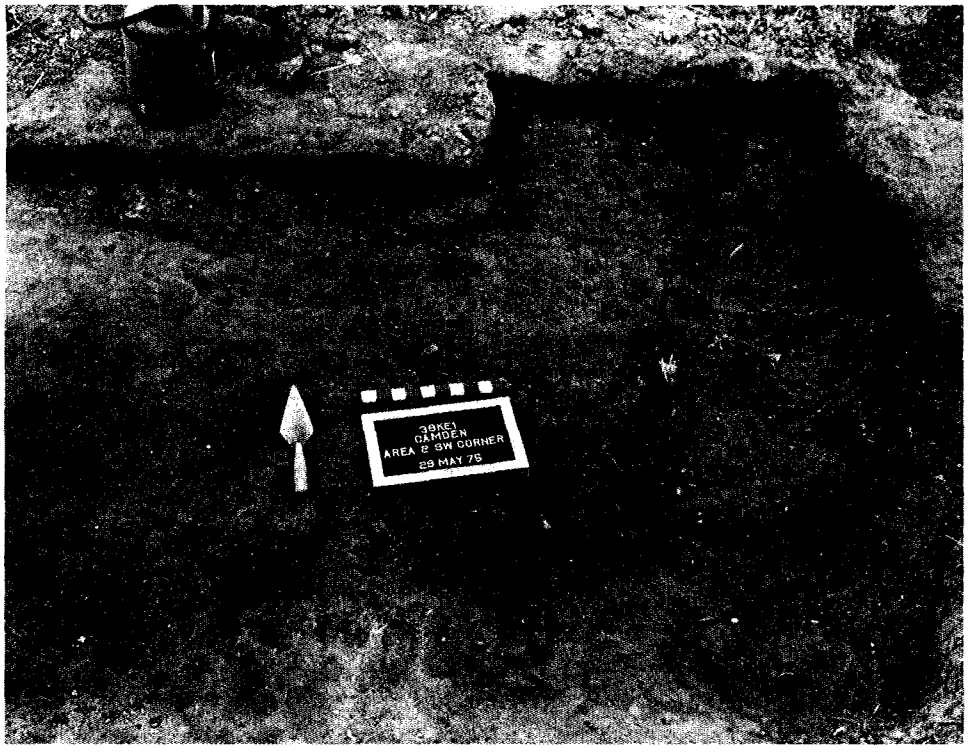


FIGURE 20: Southeast Corner of Palisade Wall Trench in Area 2. (Note: Error in directional marker board.)

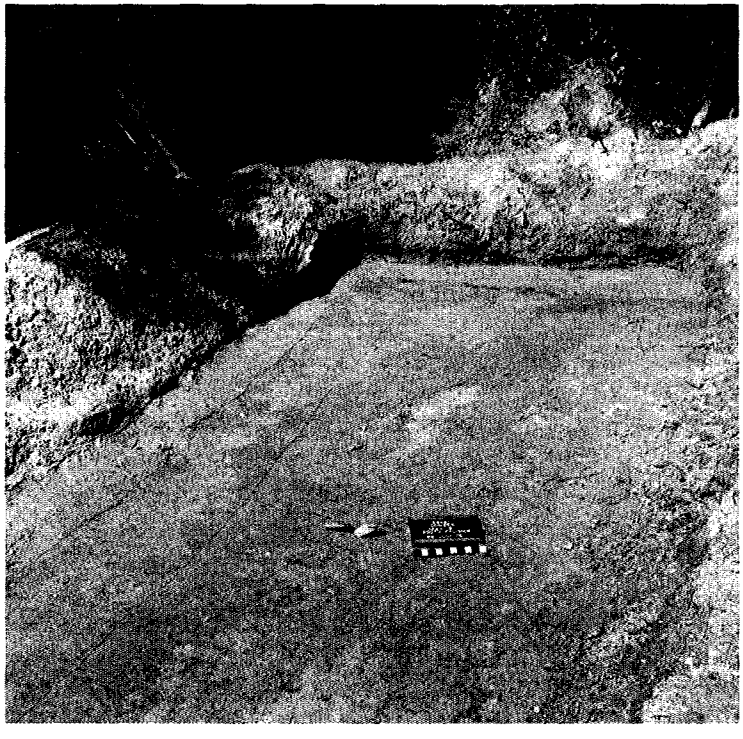


FIGURE 21: Southwest Corner of Palisade Wall Trench in Area 2.

line. The diagonal in the northwest corner of the wall was crosscut in several places to ascertain its precise form. Figure 12 illustrates the placement of the wall as revealed by recent archeological excavations. Overall it does not appear to deviate from the plan drawn by Calmes (1968a: Fig. 14) except that the eastern end of the north line, which was heretofore unexplored, is now shown to extend in a straight line to the edge of Broad Street. Based upon the 1781 Greene map it had previously been assumed to turn inward on either side of the north Broad Street entrance (Fig. 14). The west line aligns with the west line in Area 2 and forms a right angle with the north palisade line.

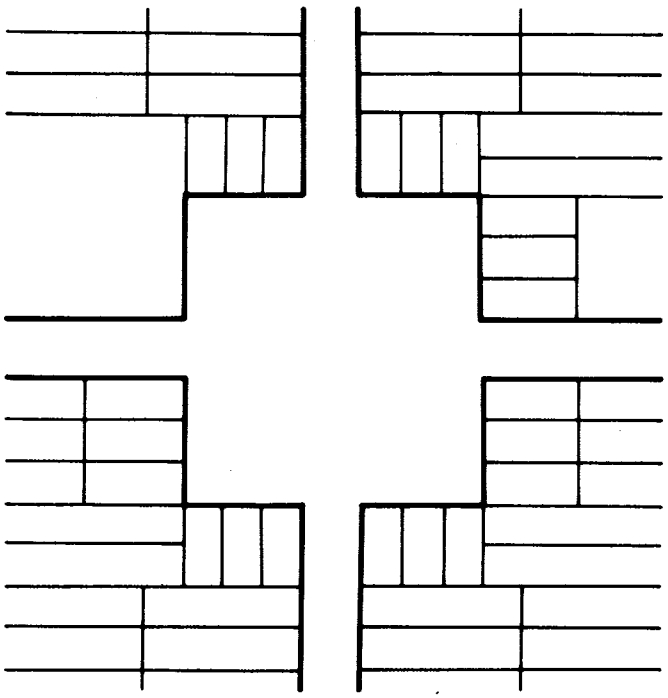
The alignment of the palisade lines in Areas 1, 2, and 3 reveals a rectangular fortification at Camden oriented 2 degrees west of the site grid. The northwest corner of the wall contains a short diagonal section while the southern wall line turns abruptly northward and again eastward forming a southwest extension of the town wall. The excavations carried out on the palisade wall have revealed no evidence of features other than the pit containing small arms and equipment uncovered by Strickland and the double section of the south wall probably associated with repair work. Those portions of wall trench extensively explored contained no evidence of gates or openings. On the whole the wall appears to have been an isolated, carefully laid out structure designed to enclose the 1780 town of Camden within a rectangular fortification. There is no evidence that the town palisade was ever intended to serve as a strong defensive position as this role would normally have fallen to the heavily fortified redoubts surrounding the town.

The Interior of the Colonial Town

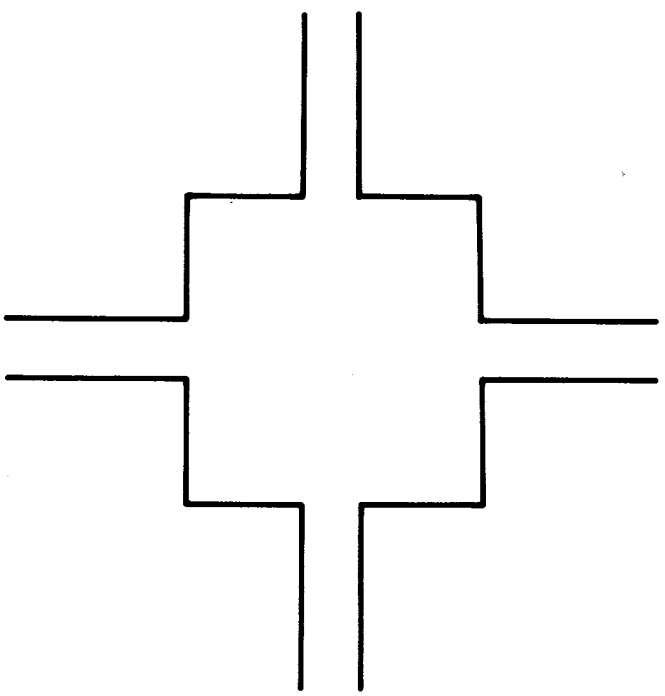
Documentary Evidence and Historical Summary

Introduction

The city plan of Camden reflects the gridiron pattern, a form which predominated in the British North American colonies from Maine to Georgia (Reps 1972: 22). Its design is focused on a central square in the center of the town into which 4 roads enter at a right angle, 1 in the middle of each side. The courthouse, jail, church lands, and market lie just off the central square (Fig. 22A). Price (1968: 39) has demonstrated that this type of square, known as the Philadelphia square, first appeared in North America during the seventeenth century in Pennsylvania and subsequently spread westward and southward in the eighteenth and nineteenth centuries (Fig. 22B). Almost as early as the Pennsylvania examples is that of Charleston, South Carolina, which incorporated a Philadelphia square into its plan in the early eighteenth century. Both Charleston and Philadelphia appear to have utilized not only the central square design but also the arrangement of narrow, deep lots found in plans of early seventeenth century colonial towns in Ireland, notably Londonderry (Reps 1965: 177, Fig. 7). This parallel occurrence suggests that these features of city planning were not adaptations to the American frontier, but instead represent the use of European patterns of urban design adapted to the conditions of rapid settlement by large numbers of people, a situation inherent in colonization in general.



A. CENTRAL SQUARE AT CAMDEN SHOWING POSITIONS OF ADJACENT LOTS
SOURCE: HEARD MAP



B. PHILADELPHIA SQUARE
SOURCE: PRICE (1968: 31, FIG. 2)

FIGURE 22

Camden's plan appears to be an offshoot of Charleston's not only in the design and placement of public buildings and areas but also in the common use of street names such as Broad, Meeting, Market, Bull, King, and Church. The socioeconomic connection between Charleston, Philadelphia, and Camden was, of course, quite strong during the colonial period. Not only did Charleston serve as the major entrepot for immigrants to the Carolina interior, many of whom came from Pennsylvania, but the economic ties between the Charleston Quaker merchants, who often represented Philadelphia interests, and their inland agents, including Joseph Kershaw, effectively tied these three centers together closely throughout the eighteenth century (Ernst and Merrens 1973b: 24-25).

Despite the settlement implied by the layout of lots on the Heard Map at the time of the American Revolution, only two and part of a third blocks were occupied. Following the war, the future expansion of the town adhered to the original plan and the outlines of the old square and surrounding public areas are clearly visible on present day aerial photographs of Camden (Fig. 23).

During the latter part of the eighteenth century Camden lay to the south of the central square (Fig. 13). In order to investigate activities carried out here during this period of time it will be neccessary to focus attention upon the smallest units of space discernible within this area. This may be best accomplished in the documentary presentation by placing an emphasis upon individual lots and the activities associated with their owners. Changes in the use of lots through time may also be viewed in light of larger changes that were occurring in Camden as a whole.

The documentary study of lot ownership and use is of great utility in the interpretation of archeological remains at Camden because the 1975 survey of the site has made it possible to reconstruct the old boundaries on the grounds, thus allowing the assignment of excavated units to particular social units of the past. For convenience, the remainder of this section is organized wherever possible in terms of the three areas designated for the archeological investigations.

In general, the deed record for that part of Camden considered in this report is far from complete. This is the result of a number of factors which affected the disposition of eighteenth century lands. First, the land upon which the town was built was originallv granted to seven men as lots in Fredericksburg Township (Fig. 24). Chief among these owners were William Ancrum, Lambert Lance, and Aaron Loocock of the Charleston trading firm and their agent Joseph Kershaw. Much of the property remained in the hands of this group after the town was surveyed, often being transferred among them either directly or through the use of a third party (McCormick 1975). Kershaw apparently rented much of his property in Camden (Schulz 1972: 34), a practice which left few records and has made land use particularly difficult to trace.

Because Camden lands were originally in the hands of a few persons, much of it was transferred in large blocks composed of groups of lots, fragments of lots recombined, and acreages without reference to lot number.

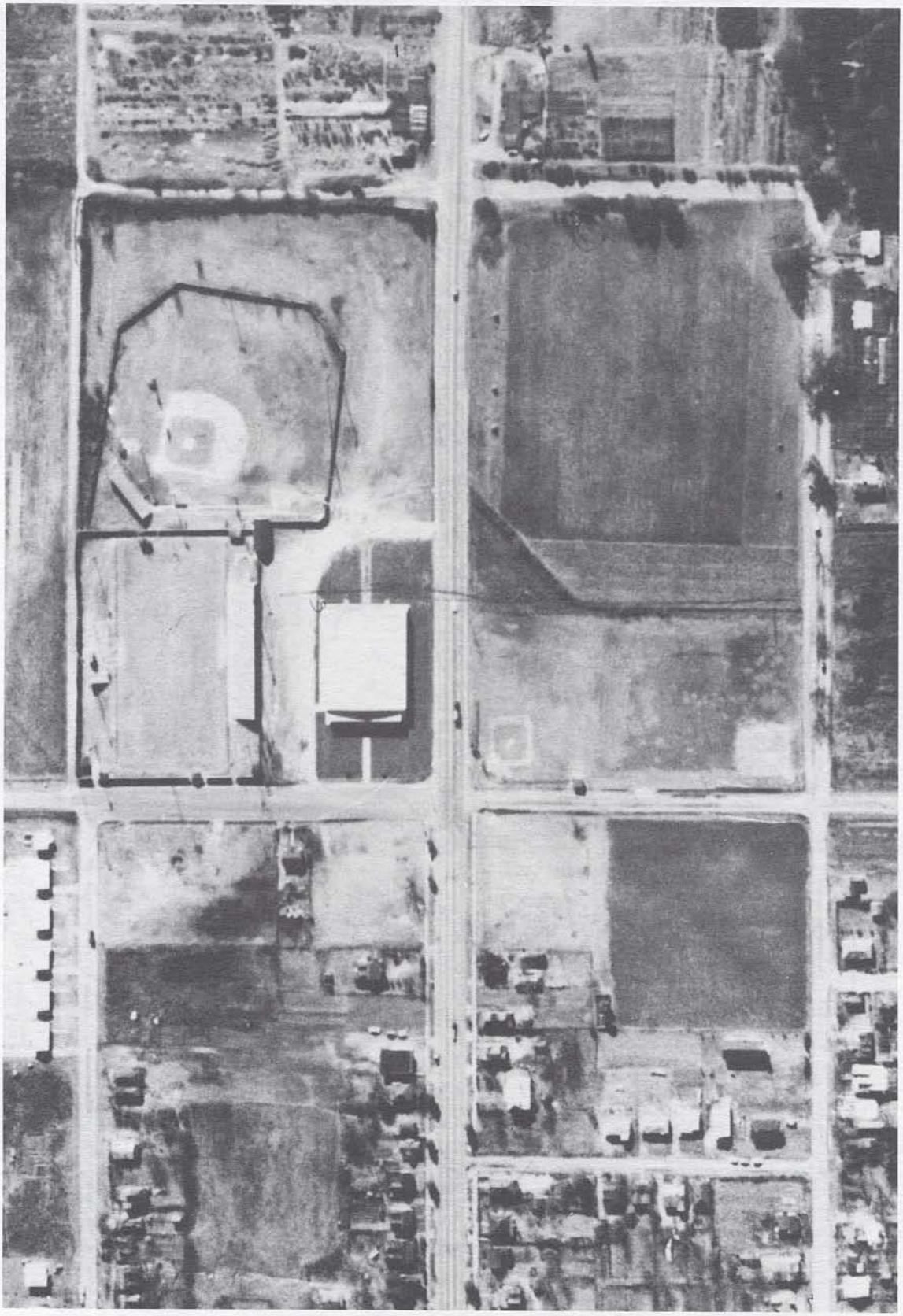


FIGURE 23: Aerial View of the Eighteenth Century Townsite.

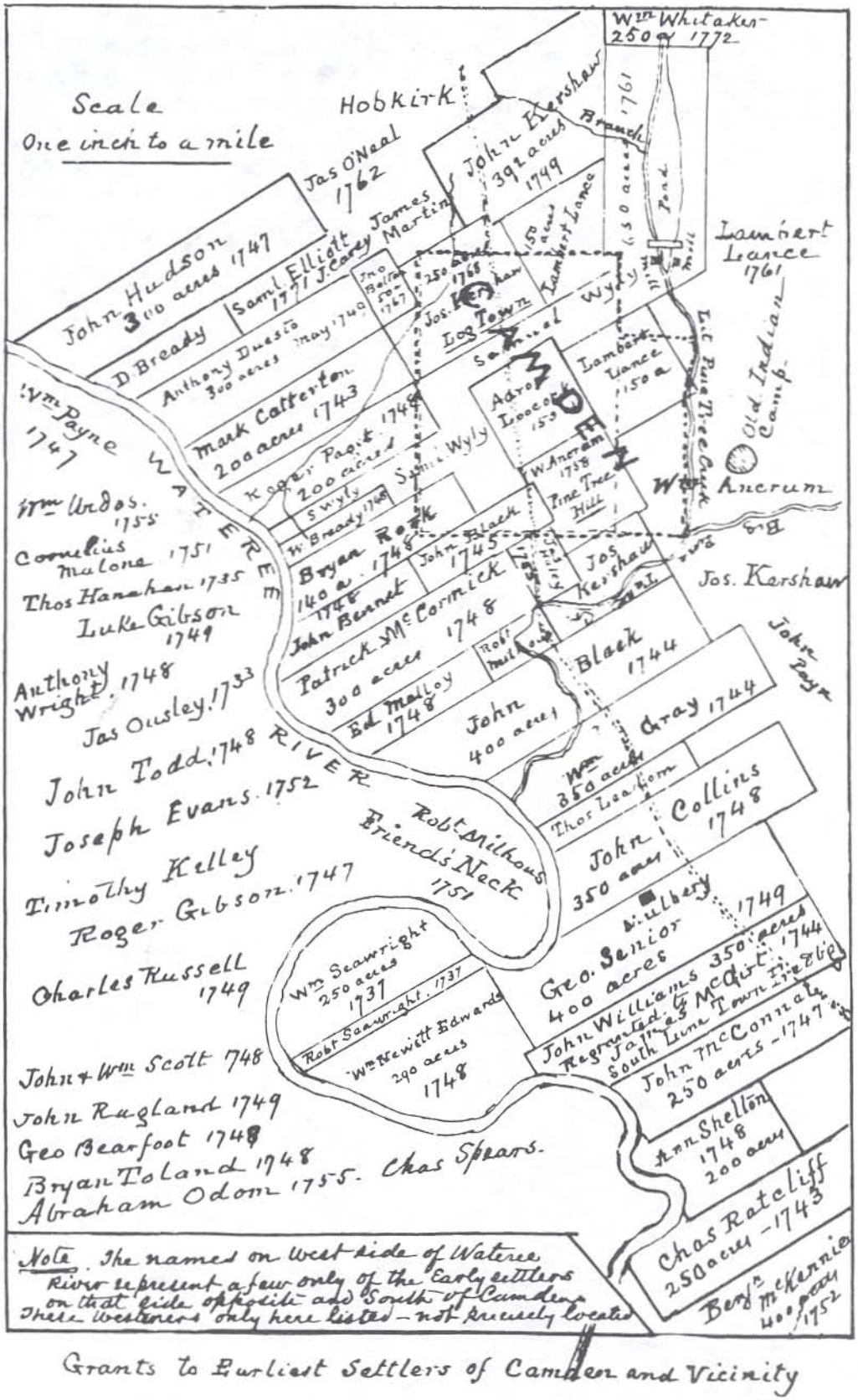


FIGURE 24: Original land grants in Fredericksburg Township. Note the position of Camden and the course of the Catawba Path running through the settlement in a roughly north-south direction. (Source: Kirkland and Kennedy 1905: 69.)

The lot numbers referred to in this study are based on a 1799 plan of Camden by Robert Mathis. Although discrepancies in the layout of lots on this plan and the earlier Heard map occur in several places (see Schulz 1972: 107-108), there are none in that part of town under consideration and the numbers on the Mathis plan are assumed to be original. These are illustrated in Figure 25.

The incomplete nature of the deed record must also be due in part to the relative isolation of Camden from the legal authority in Charleston. The distance over which records had to be filed undoubtedly contributed to their loss and improper transcription. Perhaps the most disruptive factor affecting eighteenth century land records is the American Revolution. The turbulent British occupation late in the war resulted in a gap in the deed record because of the accompanying extralegal appropriations of land, the migration of inhabitants due to the fortunes of war, and the destruction of records and property. In addition, the American Civil War took its toll of Camden's records nearly a century later. In 1865 all town record books prior to 1843 and the Kershaw family papers, so crucial to a study of the development of the early town, were either lost or destroyed (Kirkland and Kennedy 1905: 24).

It is with the above qualifications that the following statements are made concerning the ownership and use of land within the eighteenth century town of Camden.

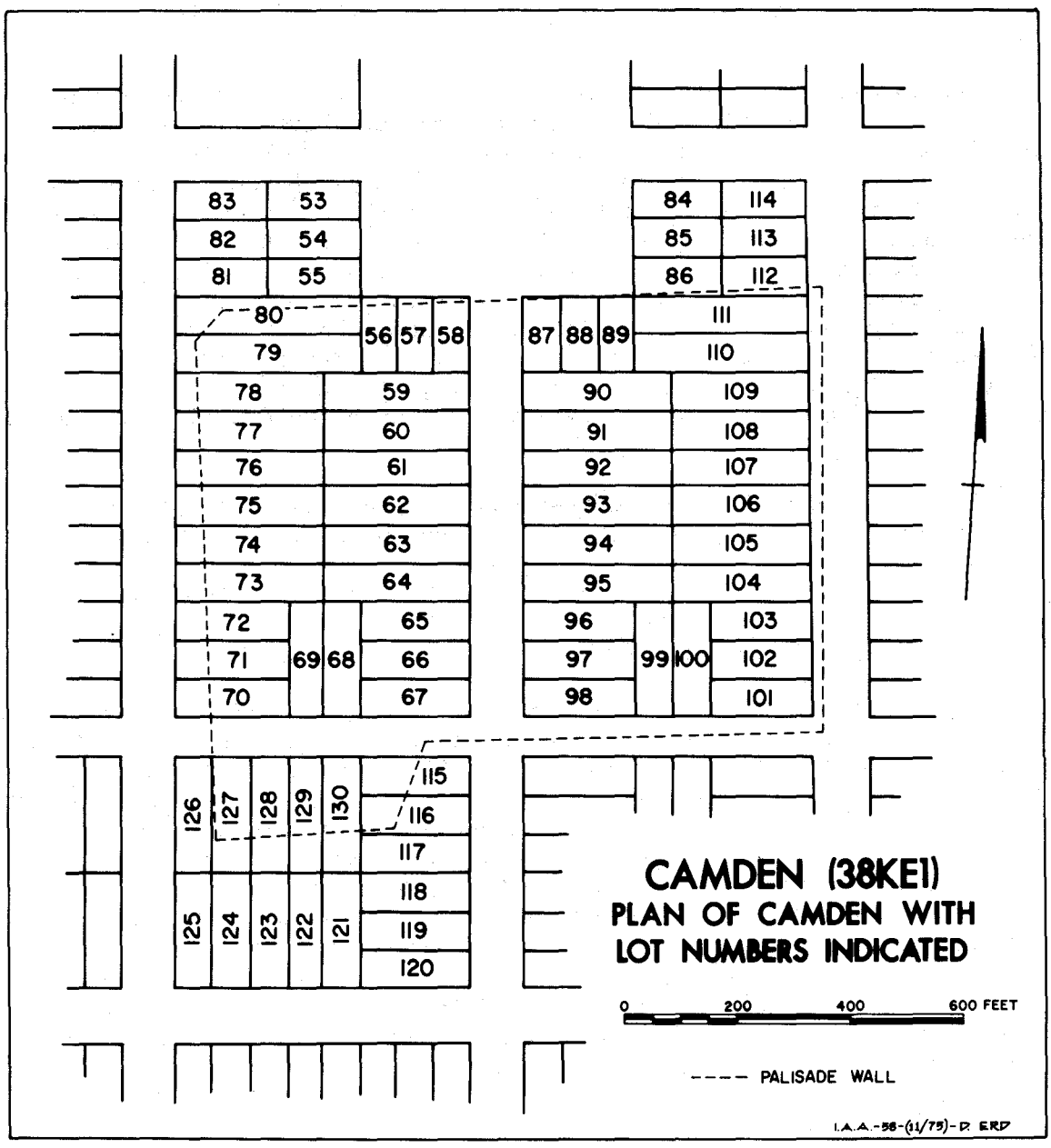
Miscellaneous early land holdings

Two references to lots of unknown location are found in early transactions between the Kershaw brothers, Joseph and Eli, and John Chesnut. Because the transfers were made in 1769, prior to the Heard survey, they do not reflect the lot numbers on his map and may not even conform to the later alignment of lots. The Kershaw brothers and Chesnut each owned large sections of property in Areas 1 and 2 (as will be discussed in detail below) making the locations of the 1769 properties uncertain even in a very broad sense. The base point from which their locations are derived is Kershaw Street, a thoroughfare not mentioned elsewhere or shown on any map. The first deed records the gift of a lot by Joseph Kershaw to John Chesnut. It measured 3 rods by 30 perch (49.5 by 495 feet) (CCD/Q-3: 250). The second lot, given by Kershaw to his brother Eli, was slightly smaller, measuring 3 rods by 7 perch (49.5 by 115.5 feet) (CCD/Q-3: 252).

Area 1

By far the largest portion of the colonial town investigated, Area 1, encloses the greater part of the block west of Broad Street and north of Meeting Street. It encompasses portions of 25 lots and covers approximately 315,000 square feet of space.

The earliest reference to lot occupation here is the Heard plan of the early 1770's. It indicates that all of the lots enclosed by the palisade except 56-58 were "disposed of" but does not indicate to whom the lots belonged.


83
53
82
54
81
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80
79
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58
84
114
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113
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89
111
110
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59
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73
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109
91
108
92
107
93
106
94
105
95
104
72
71
69
68
65
66
70
67
96
97
99
100
103
102
98
101
126
127
128
129
130
115
116
117
125
124
123
122
121
118
119
120
CAMDEN (38KE1)
PLAN OF CAMDEN WITH
LOT NUMBERS INDICATED
0
200
400
600 FEET
PALISADE WALL
I.A.A.-58-(11/75)-D. ERD

FIGURE 25

The first record of individual ownership is found in a transfer of a block of 11 lots which lay just inside the north edge of the palisade (Fig. 25). This 1777 sale for £6000 marked the sale of Lots 56-61 and 76-80 by Joseph Kershaw to John Chesnut (CCD/Q-3: 250).

Nine years later on March 8, 1786, Lot 59 was sold for £130.10 by John Adamson to James Cook (CCD/Z-5: 354). Adamson had been a merchant in Camden prior to the Revolution and in 1782 was a co-partner of John Chesnut, from whom he perhaps received the land (Kirkland and Kennedy 1905: 289). Adamson's holdings also included Lots 56-58 and 79 and 80, which he sold to Dr. Ezekiel DuBose in 1806 for $3,000 (KCD/F). In 1776 Clitherall refers to an Adamson's tavern (Schulz 1972: 105) and the mercantile firm of Adamson and Company is mentioned in Samuel Mathis' diary in April 1781 (Kirkland and Kennedy 1905: 401) and in the Charleston County Deeds (P-4: 490) of the same year. Mrs. Isaac Alexander, an early resident of Camden wrote that in 1807 Adamson's residence had been on the southwest corner of the central square (Lots 56-58) and the store, which later became a post office, was situated just below it (Kirkland and Kennedy 1926: 19). John Adamson's name appears in the first U.S. census of Kershaw County in 1800 as the head of a substantial household, including 41 slaves. The fact that there were 21 free persons, including 9 family members, who resided with him raises the possibility that several dwellings were situated on his property. The 12 other free persons may have included store personnel as well as household servants. It is interesting to note that in 1810, 4 years after Adamson sold his store, his household had dropped to 5 family members and no other free persons. The presence of 132 slaves at this time to indicate a reorientation of his interests to planting or some other labor intensive activity. This assumption is further substantiated by the 1820 census which lists the occupations of all 22 of his household members as agriculture as opposed to manufacturing or commerce (Kershaw County Historical Society 1970: 3, 1972: 22, 1973: 1-2).

The remaining portion of the large holding once belonging to Joseph Kershaw (Lots 60, 61, and 76-78) turns up in the hands of Thomas Dinkins in 1807 at which time he sold it to Burwell Boykin for $1,200. Dinkins' house was apparently built on this property (KCD/F: 363).

A large portion of the southern part of Area 1 was owned prior to 1786 by Joseph Kershaw who in that year transferred it to William Ancrum for £1020. This property included Lots 66,67, 70, and 71 and parts of Lots 65, 68, 69, and 72. The property fronted on Broad Street 165 feet, Church Street 128 feet, and the entire length of the block on Meeting Street (LCD/B:11). Ancrum sold his property minus parts of Lots 65 and 72 to Gayeton Aiguier in 1798 for £300 (Kirkland and Kennedy 1905: 188). Aiguier's name does not appear in the 1800 census and he may have been an absentee landlord (Kershaw County Historical Society 1970: 5).

This parcel apparently included the "Blue House" where General DeKalb of the American Army died of his wounds following the Battle of Camden in 1780 (Kirkland and Kennedy 1905: 188). This house and whatever property was attached to it was owned by Dr. Isaac Alexander in 1802 when he sold it, together with two lots purchased from Fielding Woodruff and several unspecified lots which were formerly the property of his wife, to H. D. Ward for $50 (KCD/D:23). Ward's name is not included in either the 1800 or 1810

census records for Kershaw County, suggesting that he did not occupy his property. Isaac Aldxander, on the other hand, remained in Camden during this time (Kershaw County Historical Society 1970: 3, 1972: 22). Woodruff owned parts of Lots 63 and 74 in 1786 (PD/1786). The extent of Alexander's holding is unclear, however, it is possible that he possessed all of the property that originally belonged to Ancrum, as it would have been contiguous with the Woodruff lots.

The precise location of the Blue House is unknown. Kirkland and Kennedy (1905: 188-189) report that it was located near the corner of Broad and Meeting Streets and only a few yards from the site of DeKalb's first interment. Dekalb's tomb is indicated on 1798 Plan of Camden (SCS/1798/no. 1702). It lies at the southern edge of Area 1 slightly to the left of center (Fig. 26) suggesting a site for the Blue House on either Lot 66 or 67. Kirkland and Kennedy (1905: 257) report that DeKalb was buried between two British officers in what may have been a small wartime military cemetery. The Blue House may not have lasted long into the nineteenth century for the DeKalb gravesite behind it was described as resting "in the middle of a lonely old field" in 1815 (Scott 1884: 18).

The remainder of Lots 63 and 74, together with Lots 62 and 75 formed a block of property which Zachariah Cantey purchased from the estate of Eli Kershaw in November 1786 for £617.14 and immediately resold to John Chesnut (PD/1786). Eli Kershaw came into business with his brother in Camden following an earlier venture of his own in Cheraw. He owned the property at the time of his capture by the British in 1780 and had situated his stores on Lots 62 and 63. Kershaw died in prison in 1780 and his stores were burned the following year during their retreat (Joseph Kershaw to W. H. Harrington, Sept. 25, 1781/WHH/1781; Kirkland and Kennedy 1905: 378-379).

In summary, nearly all of that portion of Area 1 enclosed by the palisade wall may be accounted for in the post-Revolutionary period. No deeds can be found relating to Lots 64 and 73 and those parts of Lots 65, 68, 69, and 72 not included in the Ancrum holding. It is interesting to note that all the rest of that land may be traced back to the ownership of the two Kershaw brothers. There seems to be a tendency for large units of land to have been broken down into smaller ones as time passed. The ownership of several large plots by absentee landlords suggests that by the early nineteenth century parts of the townsite may have been abandoned. Five structures may be roughly located from information in the documents. Four of them, Adamson's house and store, Eli Kershaw's store, and Thomas Dinkins' house are all in the northern part of the palisaded area, while the Blue House alone is in the southern portion. All of these structures seem to have been located adjacent to Broad Street, the principal thoroughfare of the town (Fig. 27).

Area 2

The area enclosed by the 1780 palisade covers only a small portion of the block bounded by Broad, Meeting, and Wateree Streets and the Presbyterian Cemetery (Fig. 25). It includes portions of only 6 lots, 115, 116, and 127-130, totalling approximately 45,000 square feet.

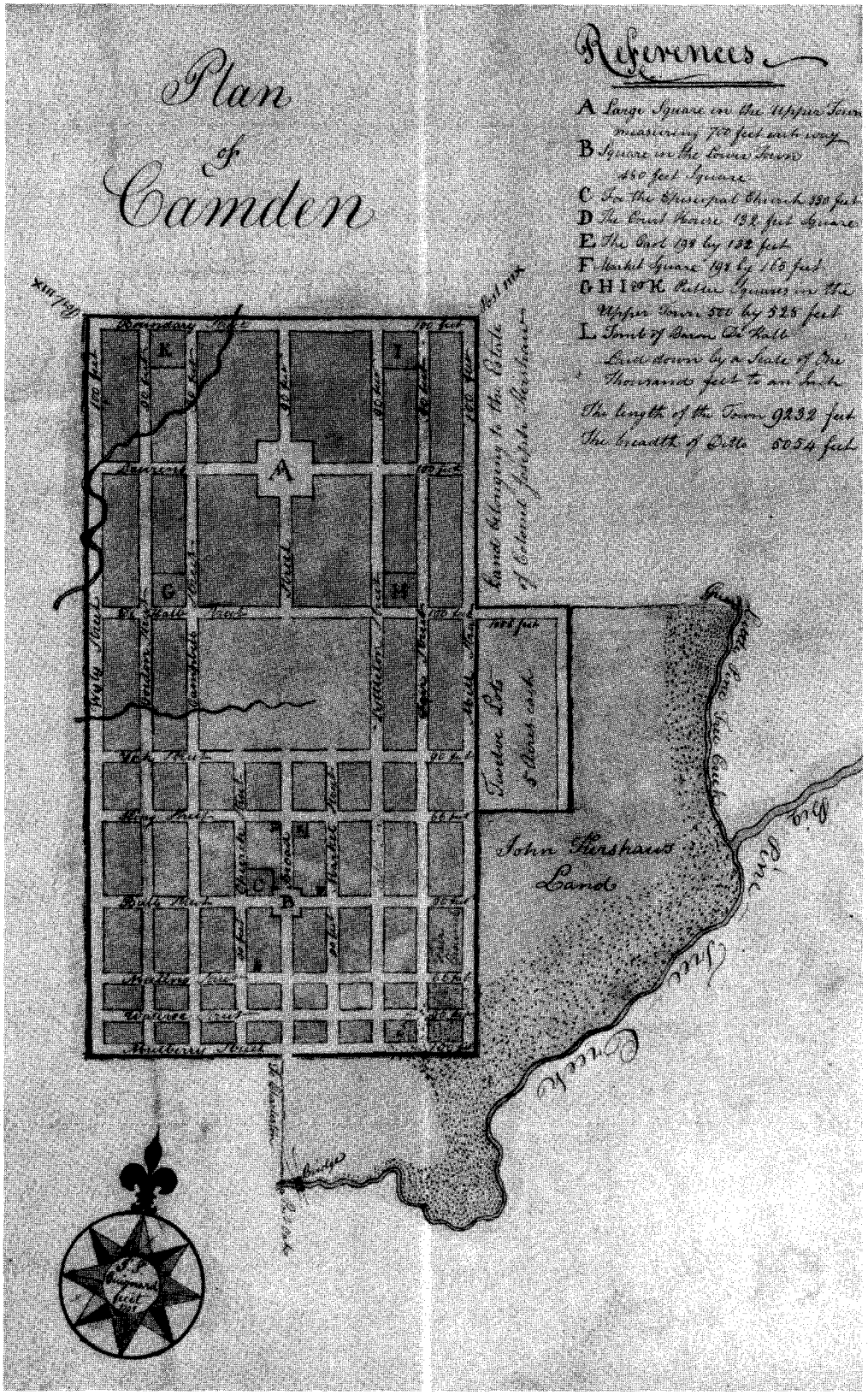


FIGURE 26: The 1798 Plan of Camden. Map of the extended settlement as laid out by legislative act. Note the retention of the Heard plan as the nucleus of the expanded street plan. (Source: SCS/1798/no. 1702.)

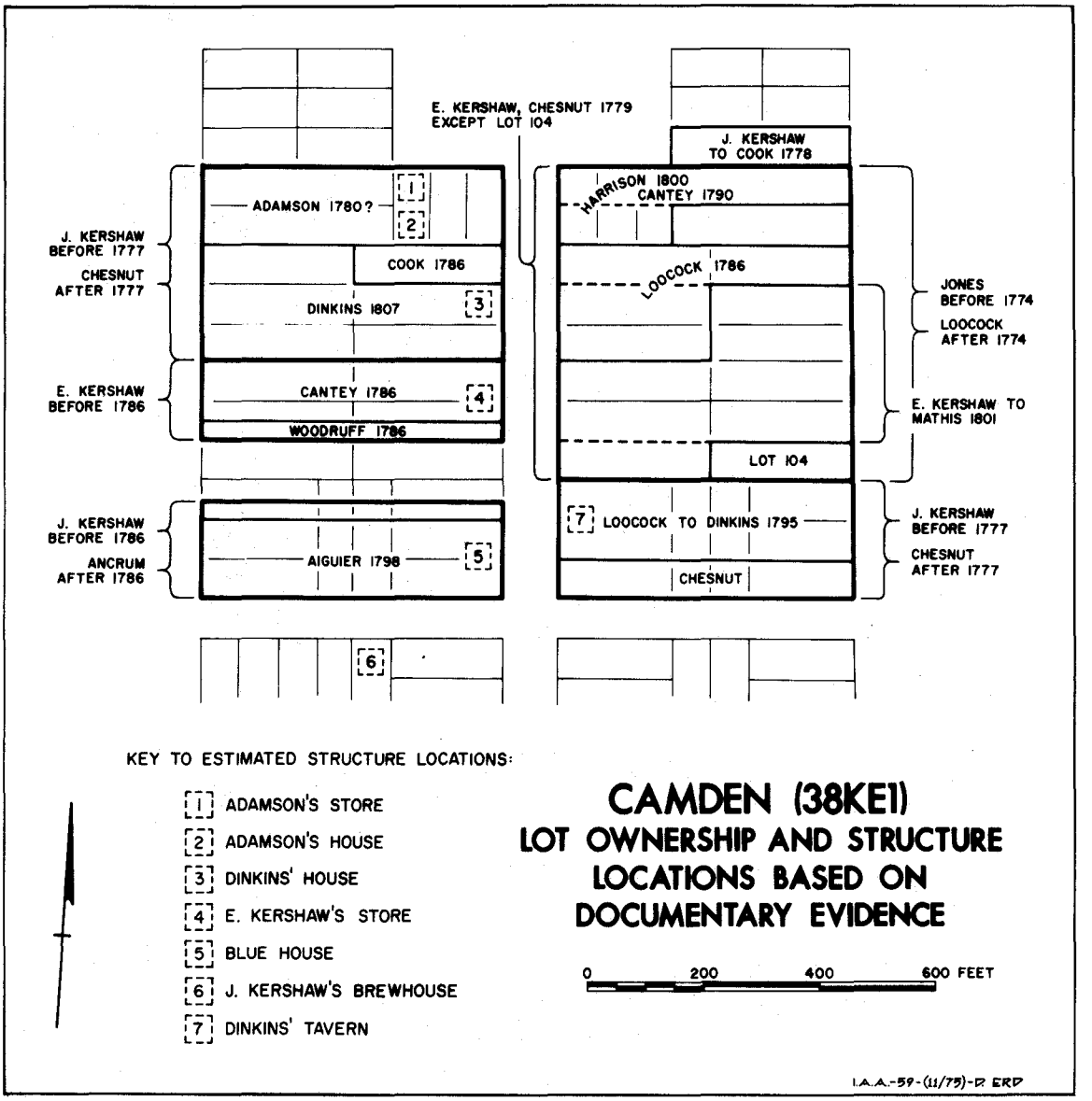

E. KERSHAW, CHESNUT 1779
EXCEPT LOT 104
J. KERSHAW
TO COOK 1778
ADAMSON 1780?
1
2
HARRISON 1800
CANTEY 1790
J. KERSHAW
BEFORE 1777
CHESNUT
AFTER 1777
COOK 1786
LOOCOCK 1786
DINKINS 1807
3
JONES
BEFORE 1774
LOOCOCK
AFTER 1774
E. KERSHAW
BEFORE 1786
CANTEY 1786
4
E. KERSHAW TO
MATHIS 1801
WOODRUFF 1786
LOT 104
J. KERSHAW
BEFORE 1786
ANCRUM
AFTER 1786
AIGUIER 1798
5
7
LOOCOCK TO DINKINS 1795
J. KERSHAW
BEFORE 1777
CHESNUT
AFTER 1777
CHESNUT
6
KEY TO ESTIMATED STRUCTURE LOCATIONS:
1 ADAMSON'S STORE
2 ADAMSON'S HOUSE
3 DINKINS' HOUSE
4 E. KERSHAW'S STORE
5 BLUE HOUSE
6 J. KERSHAW'S BREWHOUSE
7 DINKINS' TAVERN
CAMDEN (38KE1)
LOT OWNERSHIP AND STRUCTURE
LOCATIONS BASED ON
DOCUMENTARY EVIDENCE
0
200
400
600 FEET
I.A.A.-59-(11/75)-12 ERD

FIGURE 27

Area 2 appears to be a portion of a single activity area that presumably occupied the greater part of the block. The nature of this activity is revealed in a 1786 transfer by Joseph Kershaw to Aaron Loocock of the 16 lots (115-130) "on which the Brew House stands" (LCD/B: 10).

Upon Loocock's death, the same property was sold in 1801 to Lewis Cipes, a merchant, who resold the "square upon which the Brewhouse now stands" to William Clarkson, a Charleston merchant (KCD/C: 190).

Reference to the brewhouse is found in Joseph Kershaw's account books as early as April 1774, at which time he paid "Issac Pigeon for a pump for the Brewhouse" and transferred £2000 in funds to the "Proprietor of the Brewery" (JKP/AB/SHC/1774). The same source mentions the brewhouse the following year. In March 1775 Joseph Kershaw paid Robert Morris "for work at [the] Brewhouse" and Richard Stratford "for 2 days work at [the] Brew House." Nathan Thompson was also recompensed in October for his labor there (JKP/AB/SHSW/1775). The Pine Tree Hill brewhouse mentioned by Woodmason (1953: 137) in 1769 may have been Kershaw's and if so would mark the ealiest documented date for its existence.

It is likely that the brewhouse complex occupied only that portion of the entire block in its early days because the Heard map indicates that in the early 1770's only 3 lots adjacent to Meeting Street (115,116, and 130) were owned. Perhaps the heaviest activity and even the brewhouse itself was centered in this small area (Fig. 26).

The brewhouse fell into British hands in 1780 and presumably the extension of the town palisade was designed to enclose improvements on the brewhouse square. Joseph Kershaw reclaimed the property after the war. Writing to Governor John Rutledge in 1784 he reported, "my Brew House & Out Houses were much injured," apparently by fire (Kirkland and Kennedy 1905: 379). Kershaw's fortune had nearly been wiped out by the war and his financial condition apparently forced him to liquidate a great deal of his property, including the brewhouse which he sold in 1786. Under these circumstances its sale to his old business associate, Aaron Loocock, may have served to alleviate Kershaw's recent losses. Kershaw died in 1791 never having fully recovered his former wealth (Kirkland and Kennedy 1905: 381).

The sale, however, did not mark the end of the Kershaw family's interest in the brewhouse, for several references to it appear in the diary of James Kershaw, son of Joseph, in the 1790's. They mention his renting "ye Brewhouse to Geo. Brown at £15 per annum" on Feb. 12, 1793 and selling "ye Brewing Impliments to Wm. Mayrant" on Aug. 14, 1794 (Kirkland and Kennedy 1905: 405-406). These statements suggest the decline and perhaps the termination of the brewing venture for no mention of the brewery appears in records later than the 1790's. They are also somewhat significant in that they imply a control of the business by a Kershaw rather than by Aaron Loocock who legally owned it from 1786 to 1801. Loocock, however, was a Loyalist during the Revolution and was in such local disfavor that a State assembly meeting in 1782 ordered him banished and his estates confiscated (Kirkland and Kennedy 1905: 286). Although this order was never carried out, his unpopular position may have made it more convenient to have the operation of his Camden estate placed in the hands of a trusted associated whom he had recently aided financially.

The failure of Loocock's name to appear in the Kershaw County census for 1800 indicates that he did not reside in Camden at this time (Kershaw County Historical Society 1970).

Area 3

Unlike the other two areas investigated, it was possible to test only a portion of Area 3 with archeological excavations. Of a total of 25 lots and parts of lots enclosed by the 1780 palisade (Fig. 25), only portions of 11 lay outside the boundary of public facilities complex on the east side of Broad Street. Approximately 105,000 square feet of the town area were examined during the 1974-1975 field season.

The Heard map is the earliest reference to the disposal of property in Area 3. It indicates that a total of 23 lots were owned in the early 1770's including Lots 87-89, 90-98, and 101-111.

Here again records of land transactions are few. The earliest reference to ownership is associated with the 1774 transfer of 17 lots (87-95 and 104-111) from Thomas Jones to Aaron Loocock for £6000 (KCP/PDC/Dec. 4, 1774).

Three years later on April 10, 1777 Joseph Kershaw and Company sold Jones Lot 112 (KCD/H: 198). The following day the property was resold to Joseph Kershaw (KCD/H: 301). In 1778 Lot 112 again changed hands. This time it was leased together with adjacent Lot 86 by Kershaw to George Cooke (CCD/E-5: 419).

In 1779 a large portion of the land acquired by Aaron Loocock in 1774 was resold to Eli Kershaw and John Chesnut. This transfer included Lots 87-95 and 105-111 (LCD/D: 8). Lot 104 of Loocock's original purchase was not included in this sale.

Following the Revolution in 1786 several of these lots were again transferred into Loocock's name. These included Lots 90 and 109 which were part of Eli Kershaw's estate and Lot 92 and part of 91 which had in the meantime become brother Joseph's property (LCD/B:8).

Four years later Lot 111 and half of Lots 87-89 were purchased at public auction by Zachariah Cantey. Cantey sold the lots to William Bracy, Jr. who subsequently transferred them to his father, William, Sr. in 1794 (KCD/B: 412). Bracy apparently acquired the remaining portion of Lots 87-89 because he mortgaged the northern half in 1800 at which time he sold the southern half together with Lot 111 to Rubin Harrison (KCD/C: 56).

In 1801 Eli Kershaw's estate sold 8 lots (91-94 and 105-108) to Samuel Mathis (KCD/C: 237). This property included Lots 91 and 92 which had been Aaron Loocock's land in 1786. The same record states that the land to the north belonged to William Kershaw, another brother of Joseph (Kirkland and Kennedy 1905: 144). This presumably would have included Lots 90 and 109, which had also earlier been owned by Loocock, and possibly others.

Eight lots at the southern end of Area 3 were transferred by Joseph Kershaw to John Chesnut in 1777 (PD/1777). These included Lots 96-103. The northern two-thirds of this property, like much property in Camden seems to have been purchased by Aaron Loocock for it was sold by his estate to John Dinkins in 1795. Dinkins' holdings included Lots 96, 97, 102, 103, and parts of 99 and 100 (KCD/A: 182 and B: 461). The strip of land directly to the south (Lots 98, 101, and parts of 99 and 100) remained in John Chesnut's hands as did Lots 95 and 104 just to the north of Dinkins' property (KCD/C:237).

John Dinkins was an innkeeper and operated a large two-storied establishment on the northeast corner of Meeting and Broad Streets opposite the Blue House. He may have been in business there before actually purchasing the property, for Dinkins' tavern was the scene of a banquet given for Citizen-Minister Genet, Ambassador of the new French Republic, on Bastille Day, 1794 (Kirkland and Kennedy 1905: 319) and James Kershaw attended a subscription ball there on March 20 of the same year (Kirkland and Kennedy 1905: 406). Dinkins' tavern remained a social center in Camden and it was described by Mrs. Alexander as the scene of balls, banquets, tea parties, "quiltings," and other activities during the first decade of the nineteenth century (Kirkland and Kennedy 1905: 18-19).

Like Area 1, the palisaded area east of Broad Street seems to have remained in fairly large parcels until the end of the eighteenth century. The deed record indicates that for the most part land remained in the hands of the Kershaw brothers and their associates until 1790, when a number of new names appear. One of the largest new landholders was John Dinkins who owned a tavern and inn, the only activity which can definitely be assigned to Area 3.

The 1780-1781 British Occupation of Camden

The year of the British military occupation marks a time of great confusion with regard to land ownership in Camden. As an occupied town, it housed a garrison of troops together with a contingent of Loyalist followers. At the same time those residents who had shown disloyality to the crown were imprisoned or forced to flee, abandoning their homes and property. Joseph and Eli Kershaw, both of whom were associated with the Rebel cause, were captured in Camden and held in the British Honduras and Bermuda until the end of the war (Kirkland and Kennedy 1905: 387). Much of the land confiscated from Rebels was subsequently redistributed to individuals with Loyalist sympathies. At the close of the war many of the Loyalists departed and their lands were reclaimed or otherwise redistributed. It is in the records of the military activities at Camden during the occupation and in the claims of Loyalists and others after the war that most references to the Revolutionary town are found.

The first category of references deals with the British Army's occupation of Camden. A clue to the nature of the military garrison established there can be gathered from reports submitted by Lord Rawdon, the British commander at Camden, to Lord Cornwallis, commander of British forces in the South. All date from November 1780, 5 months after the capture of the town and 3 months after the Battle of Camden. Rawdon stated that: "Matters are in so backward state here that we shall have difficulty to get the fort into a

proper state before bad weather sets in, [but that] we shall make it moderately convenient and pretty secure" (Rawdon to Cornwallis, Nov. 15, 1780/CW/PRO/30/11/4). Less than a week later he reported that his forces, "... had no hopes of being able to complete regular barracks, but I shall convert barns, stables, etc., into tolerable quarters and shall take huts contiguous to them for the officers" (Rawdon to Cornwallis, Nov. 19, 1780/CW/PRO/30/11/4). It will be recalled that the Kershaw family's old store was utilized as a barracks during the British occupation. Apparently temporary shelters of some sort were utilized prior to this time as Tarleton (1967: 87) mentions "huts of the proper materials to resist the hot weather," but these are not described

Rawdon seems to have found the task of providing adequate quarters more difficult than he originally anticipated. In January 1781 he reported that, "... this village is by no means capable of holding the number of persons who require quarter in it. I have therefore sent a quantity of plank and boards with which I hope we shall fit up some kind of barracks and use huts for officers." At that time the British forces in Camden are reported to have numbered 2410 in addition to "200 prisoners with rebels" (Rawdon to Cornwallis, Jan. 1, 1781/CW/PRO/30/11/4). Presumably the latter were the remnants of an estimated 900 to 1000 Americans captured the previous August following the rout of American forces at the Battle of Camden (Kirkland and Kennedy 1905: 167; Scott 1967: 443). Some idea of the extent to which existing structures were put to use by the British may be gathered from a statement by Nathaniel Cary, a Loyalist, who filed a claim for 23 houses and gardens which were destroyed with the British evacuation. Cary claimed all the buildings were used to house troops (BPJ/May 12, 1781). No locations of property or structures are specified in the documents.

It is assumed that troops were quartered within the town palisade, given the size of that enclosure and the probable absence of significant buildings outside the defensive works. The housing of troops within the fortress was common practice in the eighteenth century, with a tendency to concentrate them in barracks rather than distribute them in inns or private houses. As in the case of the makeshift barracks at Camden, officers' quarters were attached or situated close by (Duffy 1975: 78-80).

One distinct structure associated with the military occupation of Camden is the hospital, mentioned several times but never located. A hospital there prior to the Battle of Camden is mentioned by Tarleton (1967: 99, 103-104), suggesting a use not primarily determined by the presence of combat casualties. This use is confirmed by the report of "great sickness" among the troops (Cornwallis to Clinton, Aug. 23, 1780/GCP). William Allman, an escaped American prisoner captured at the Battle of Camden, stated that an outbreak of smallpox and a general neglect of the wounded (presumably Americans) resulted in many deaths (CCP/154/1: 257). Several references to the presence of a hospital are made later that year including one by the garrison surgeon, Dr. Hayes, who commented on the persistent high rate of sickness there (Hayes to Cornwallis, Nov. 15, 1780/CW/PRO/30/11/4). DeKalb's death in the Blue House suggests that this structure may have been used as a hospital and its survival of the military occupation could well have been due to its employment in this capacity. When Lord Rawdon evacuated Camden in 1781 he was forced to leave about 30 sick and wounded there (Rawdon to Cornwallis, May 24, 1781/Tarleton 1976: 466).

and they may have remained in the hospital in which they had been housed. The American forces under Greene maintained a hospital at Camden after taking possession of the town immediately after Rawdon's departure (Greene to Clay, Feb. 15, 1782/GP), but it is not known if this involved a new structure or a continued use of the British hospital.

The second category of references dealing with the British occupation is associated with Tory activities in Camden. The Loyalists seem to have been attracted to Camden for several reasons. The first was the security for lives and property offered by the garrison there (Smallwood to Davie, Nov. 3, 1780/CW/PRO/30/11/4) and the second was the commercial opportunity offered by the presence of such a substantial military establishment (see Tarleton 1967: 88), especially in light of the fact that most of the town's mercantile businesses had been closed down with the imprisonment of their rebel proprietors.

One Loyalist businessman who operated out of Camden was Thomas Hopper, a resident of Charleston who came there originally to furnish horses for the Army. In October 1780 he entered into a partnership with Thomas Charlton. They operated a store inside the stockade selling mostly goods of British origin. The British evacuation of the town resulted in the destruction of their merchandise (Thomas Hooper/LC/56: 303-309).

Michael Egan, another Charleston merchant, maintained a dry goods business in Camden with Robert and Joseph English. They built a store-house inside the garrison and controlled the distrubution of such commodities as sugar, rum, horses, cattle, and wagons. Their buildings and property were also destroyed with the British evacuation (Michael Egan/LC/54: 449).

Another dry goods business was run by a Major Downes, a former Camden merchant, who also kept a blacksmith's and a turner's shop. Like the other shopkeepers, he lost his property in 1781 (Jane Gibbes/LC/52: 365).

The Loyalist business ventures were all of short duration and largely dependent upon the presence of the military garrison at Camden. As no locations are mentioned for any of these activities, it is uncertain whether the businesses occupied old store buildings and other existing structures or erected new ones. Given the short supply of materials, as witnessed by the problems incurred in the construction of barracks, and the flight of rebel businessmen leaving many structures presumably abandoned, it seems likely that the former would have been the case. In a sense, the wartime businesses appear to represent a continuation of the mercantile role of pre-war Camden. They may even constitute an attempt by the British authorities to maintain the town's central position in the inland trade network for both political and military reasons by replacing the personnel in local mercantile activities with individuals loyal to the Crown.

A convenient termination for the Revolutionary War Period at Camden is provided by the town's destruction by retreating British troops in May, 1781. General Nathaniel Greene, commander of the American troops occupying Camden the day after the British evacuation, found that his adversary had, "... burnt the greatest part of his baggage, stores, and even the effects belonging to the inhabitants; he also set fire to the prison, mill, and several other buildings, and left the town little more

than a heap of ruins" (GP/CCP/155/II: 59). An account by Lieutenant William Feltman of the 1st Pennsylvania Regiment, who passed through Camden on Christmas day 1781 on the way to join Greene's army at Charleston, states that the town was "greatly destroyed by the enemy" and that, "There are yet three houses remaining" (Clark 1956: 204). Mrs. Anne Royall (1831: 41), a later visitor to Camden, recalled that with the exception of Joseph Kershaw's house, which was outside of the palisaded area, only one or two houses had escaped the "general conflagration."

These references suggest that only a portion of the pre-war structures survived into the post-1781 period and that the remains of those destroyed would very likely be characterized by evidence of burning. Those structures remaining from the prewar period would probably have included the Kershaw House, the Blue House, and Joseph Kershaw's "much injured" brewhouse. In the last decades of the eighteenth century there is little documentary evidence indicating new construction in this area with the exception of Dinkins' tavern and several structures built near the public square (Kirkland and Kennedy 1926: 19-21). Thus, the occupation of the 1780's seems to mark the height of intensive settlement in the area of the early settlement.

Summary of documentary material

The documentary sources pertaining to the eighteenth century town of Camden have produced an incomplete deed record of property transfers within the early community. It has, however, been possible to draw several conclusions concerning the pattern of land ownership and changes in it through time. First, nearly all of the land along the old Catawba Indian path which became the settlement of Camden was originally in the hands of Joseph Kershaw and his business partners. Property within the town was usually owned in large blocks, combining and often dividing the numbered lots laid out in the Heard survey of Camden in the early 1770's. As time passed, and presumably as the population density within the settlement rose, a progressive subdivision of the large blocks occurred. The transfer of property without title and the renting of land has tended to confuse the situation with regard to land use and occupation. The disruption accompanying the American Revolution not only appears to have affected the prewar settlement pattern by introducing a military garrison and disrupting the normal functions of the mercantile community, but has been shown to have altered it significantly through the actual destruction of much of the town.

The nature of the deed record and the relatively rapid alteration of Camden's form in the late eighteenth century has made it difficult to establish the locations of structures and various kinds of activity areas within the settlement. The locations of 7 structures have been assigned to individual lots or groups of lots through the use of documentary information. These include 2 stores, 3 houses, 1 tavern, and 1 brewhouse (Fig. 27). It is assumed that there were more structures in the town prior to the Revolutionary War because the Greene map of 1781 illustrates the locations of 20 large structures within the British palisade as well as 57 smaller structures which may represent outbuildings. The regular spacing in rows of some of the latter suggests their association with the military occupation. The 1781 terminus ante quem date assignable to most prewar and wartime structures should be invaluable to

the identification and interpretation of such structures in the archeological record and perhaps avoid their confusion with post-war activities in this area.

The abandonment of the old town in the 1790's seems to have left the area with a less dense population than before and slowed the trend toward subdivision of property. The absense of an extensive later occupation, however, may prove to be of great aid archeologically, for it lowers the possibility of extensive disruption due to construction activities on the earlier site and its consequent contamination with later materials. Apart from the effects of recent construction, the site of eighteenth century Camden is assumed to be relatively undisturbed, permitting an investigation of patterning and change within the early town.

The 1974-1975 Archeological Investigations

Introduction

In the fall of 1974 and the summer of 1975 archeological investigations were carried out in the interior of the palisaded town of Camden. This work was conducted in two parts but the results will be treated together because they form a single phase in the research at Camden. The 1974 excavations were sponsored by a federal grant from the Coastal Plains Regional Commission and included the investigation of that portion of Area 3 south of the American Legion baseball field (Fig. 12). The 1975 archeological work focused on those parts of Areas 1 and 2 enclosed by the palisade wall and that part of Area 3 north of previous year's work there, west of the baseball field, and south of the city arena parking lot. These investigations were sponsored by a federal grant from the National American Bicentennial Committee.

No previous archeological work had been attempted anywhere in the town's interior and in light of the scanty documentary evidence concerning activities, structures and other features, and the absence of visible archeological remains it was decided that the best approach would involve a series of excavation phases designed to answer progressively more complex questions about the site, beginning with those of a very general nature. The first stage is of necessity one of discovery, designed to allow the investigator to ascertain the condition of the townsite and nature of the archeological remains therein. The nonbiased random sampling technique outlined in a previous chapter was selected because it permits the most reliable sample of data to be taken from the entire area of the site with a minimum of destruction to cultural features. It would not only indicate those areas of greatest activity, areas where more intensive future investigations and comparative studies might be concentrated, but also where little or no significant activity occurred and which could be eliminated from consideration of later archeological work. In addition to the excavation of the sample squares it was necessary, in some cases, to utilize other archeological techniques to aid in the interpretation of physiographic aspects of the site or to clarify cultural features of uncertain extent.

The results of the sample would also help to indicate the general location of various types of activities at the site. They may serve as

the first step toward the delineation of activity areas so crucial to the testing of the proposed hypotheses concerning the economic functions of a frontier town. Certainly the temporal span of the site's occupation should emerge as a result of this sampling.

The patterning of activities within the town of Camden is, of course, also very important to the preservation and interpretation of the site as a whole. The conclusions reached through a discovery phase should be of great help in designing later research involving the interpretation of structures and other features representing the eighteenth century occupation of the site. In a sense, then, a study of cultural patterning based upon the results of the random sampling has the potential of offering a data base from which many divergent types of problems may be approached.

The archeological section of this report will be divided into 3 parts. Each will deal with the 3 areas excavated during the 2 field seasons as a single unit although variation will be noted within the site as a whole. The first part of this section deals with the physical condition of the site and the archeological remains therein. It will determine the extent to which the site has been modified since the eighteenth century and the degree to which it is possible to utilize archeological methods of recovery and interpretation. The second part will consist of a discussion of the cultural affiliations and temporal limits of the settlement, providing a framework within which to examine the form and extent of the early settlement at Camden, the third part of this analysis. This final section is necessarily the most comprehensive in that it will deal with the distribution and comparison of artifacts within the site in order to reveal significant patterning. An analysis of such patterning is crucial to the interpretation of the site because it forms the basis for making statements concerning the locations of and relationships between structures and activities within the eighteenth century town of Camden.

The condition of the archeological remains

As a prelude to a discussion of the physical condition of the site, it is first necessary to define the limits of the area examined and its relation to the site grid. The 3 areas which encompassed all accessible portions of the eighteenth century settlement may be defined as follows. Area 1 is the largest single contiguous block, measuring 700 feet north to south and 450 feet east to west (Fig. 28). Its southeastern corner rests on the intersection of the rights-of-way at the northwest corner of Broad and Meeting Streets. This point is N5000 E4900 on the site grid. The south boundary of Area 1 extends west to N5000 E4450, a point just within the line of the 1780 palisade, and then turns north to N5700 E4450, a point near the northwest corner of the palisade. The northeast corner of Area 1 is at N5700 E4900 along the Broad Street right-of-way. Area 1 includes a total of 126 sample squares.

Area 2 is smaller, measuring only 150 feet north to south and 300 feet east to west (Fig. 17). Its northern boundary lies 50 feet south of the southern edge of Area 1 and extends eastward from N4950 E4450 to N4950 E4750. From here it turns southward to N4800 and forms a rectangle

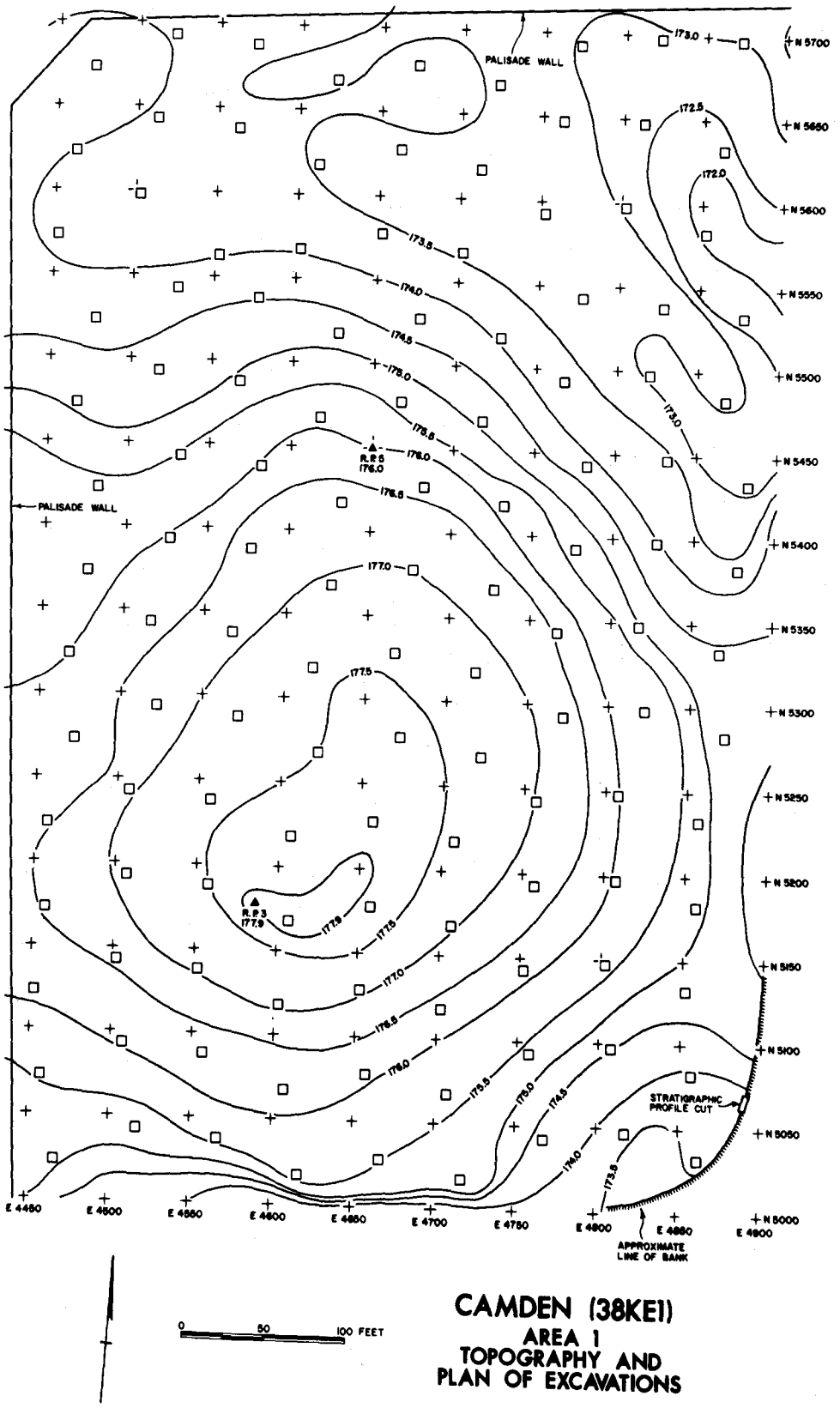

PALISADE WALL
PALISADE WALL
R.P.6
176.0
R.P.5
177.9
173.0
172.5
172.0
173.5
174.0
174.5
175.0
176.0
176.5
177.0
177.5
N 5700
N 5650
N 5600
N 5550
N 5500
N 5450
N 5400
N 5350
N 5300
N 5250
N 5200
N 5150
N 5100
N 5050
N 5000
E 4450
E 4500
E 4550
E 4600
E 4650
E 4700
E 4750
E 4800
E 4850
E 4900
STRATIGRAPHIC PROFILE CUT
APPROXIMATE LINE OF BANK
0
50
100 FEET
CAMDEN (38KE1)
AREA 1
TOPOGRAPHY AND
PLAN OF EXCAVATIONS

FIGURE 28

just inside the line of the palisade wall. Area 2 contains 18 sample squares.

Area 3 (Fig. 29), unlike the others, is not a rectangle, but rather forms an "L" with its upright portion extending north from N5000 E5000 to N5450 E5000, then east to N5450 E5100, and south to N5150 E5100. The horizontal part of the "L" is formed by extending this line east to N5150 E5500, south to N5000 E5500, and then west to the point of origin. Its overall dimensions are 450 feet north to south and 500 feet east to west and it contains 42 sample units. It will be recalled that the grid on the east side of Broad Street is offset 15 feet east and 4 feet north of the site grid.

The key to interpreting the physical structure of the site is stratigraphy because it not only reveals the nature of the site in the past but also provides a record of changes which have taken place up to the present. Excavations uncovered a basic sequence of soil layers which appear to be typical of the entire site. This sequence is most pronounced in Area 1 where it is visible in a vertical section cut into the high bank on the west side of Broad Street, near the southern end of Area 1 (Fig. 28). This bank was apparently formed by lowering the level of Broad Street. Four soil layers are present here (Fig. 30) and are typical of the Marlboro sandy loam formations in the Camden area (Latimer, et al. 1922: 48). The first is a dark grey sandy loam extending down 1.5 feet below the surface. The modern humus forms directly on top of this layer. The plow zone is underlain by a 1.0 foot thick pale brown layer of sandy loam extending to a depth of 2.5 feet where it grades into a red sandy clay. The latter is about 1.5 feet in thickness and lies above a red and pale yellow mottled sandy clay which occurs approximately 4.0 feet below the surface. In general, Marlboro sandy loam develops such a soil profile out of a clayey subsoil, however, in places where erosion is prevalent the profile may be as shallow as 0.5 of a foot (Latimer, et al. 1922: 45-46). Because of their capacity for water retention, Marlboro sandy loam soils were ideally suited to early agriculture and at the Camden site, were cultivated well into the present century.

Excavations in Area 1 indicated a general continuation of this stratigraphic sequence over the entire area. In most parts of Area 1, dark grey sandy loam forms the surface soil below the modern humus and contains the remains of all earlier historic occupations. This layer also represents a plow zone, that portion of the surface disturbed by cultivation, and scars made by the plowshare are clearly visible in the underlying layer of pale brown sandy loam. Along the western edge of Area 1 the grey soil is occasionally absent altogether and the pale brown sandy loam forms the surface layer. Here the plow zone extends to the level of the red sandy clay where plow scars appear. The thickness of the pale grey sandy loam seems to vary throughout the area, and in the northern portion it often becomes so thin as to barely be discerned, and the dark grey loam rests directly on the red clay. Although disturbed by plowing over a period of many years, the occurrence of intact subsurface features throughout the site indicates that the surface level of Area 1 probably has not changed markedly from its present level. The plow zone, though actually composed of different soils, appears to represent a single cultural zone for purposes of study here.

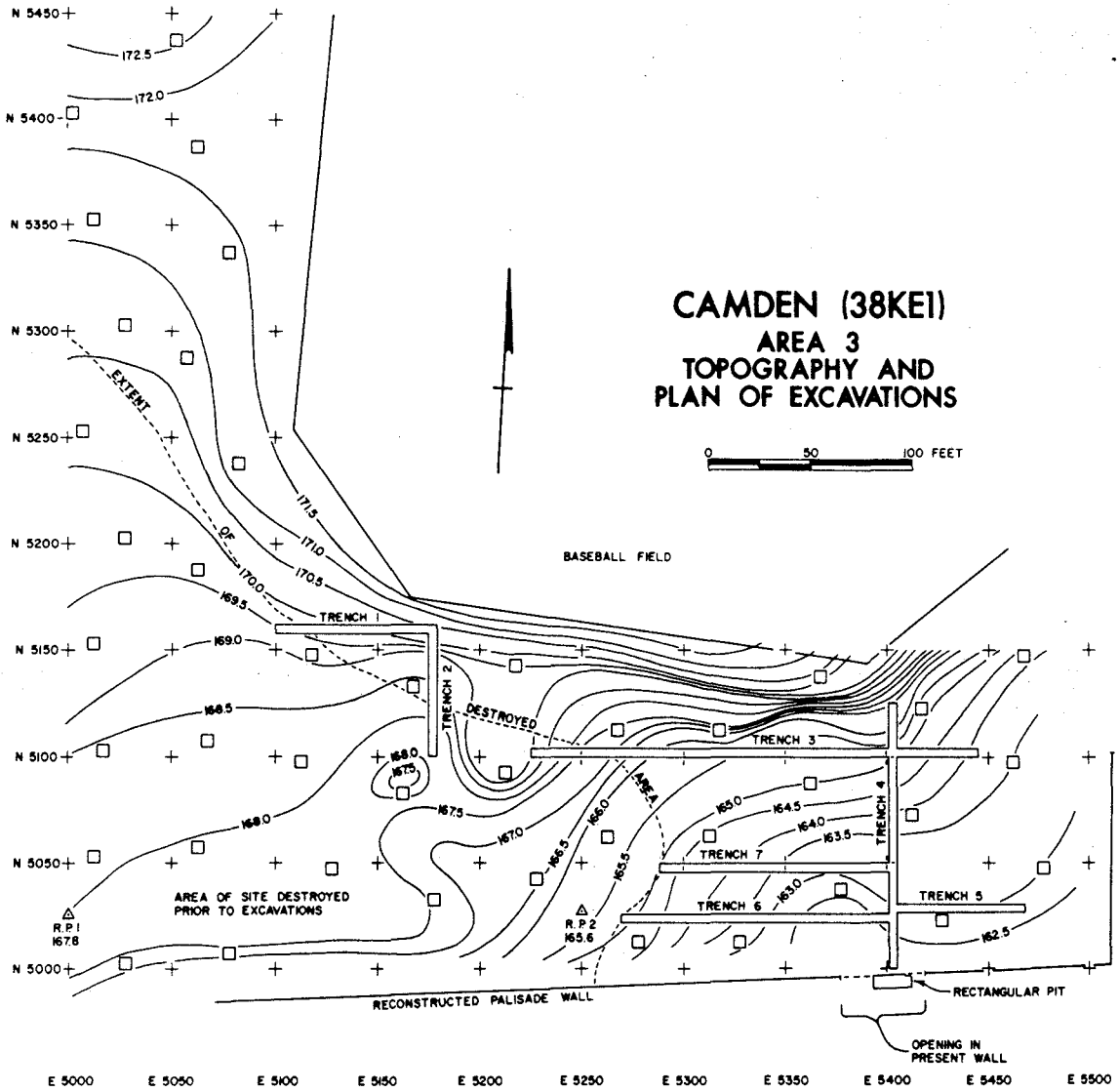

CAMDEN (38KE1)
AREA 3
TOPOGRAPHY AND
PLAN OF EXCAVATIONS
0 50 100 FEET
N 5450
N 5400
N 5350
N 5300
N 5250
N 5200
N 5150
N 5100
N 5050
N 5000
E 5000
E 5050
E 5100
E 5150
E 5200
E 5250
E 5300
E 5350
E 5400
E 5450
E 5500
172.5
172.0
171.5
171.0
170.5
170.0
169.5
169.0
168.5
168.0
167.5
167.0
166.5
166.0
165.5
165.0
164.5
164.0
163.5
163.0
162.5
EXTENT OF
BASEBALL FIELD
TRENCH 1
TRENCH 2
TRENCH 3
TRENCH 4
TRENCH 5
TRENCH 6
TRENCH 7
DESTROYED
AREA
AREA OF SITE DESTROYED
PRIOR TO EXCAVATIONS
R.P.1
167.8
R.P.2
165.6
RECONSTRUCTED PALISADE WALL
RECTANGULAR PIT
OPENING IN
PRESENT WALL

FIGURE 29

FIGURE 30: Stratigraphy of Area 1 Revealed in Cut Bank.

FIGURE 31: Stratigraphy in Pit N5480 E4865, Area 1.

All evidence of the historic occupation of Area 1 is contained in the plow zone and does not extend below it. Although the actual eighteenth century surface has been destroyped by plowing and actual surface features disturbed, the archeological context of which they were a part has not entirely been obliterated because horizontal position of the artifacts in the ground is not likely to have significantly changed. Rather it suggests that artifact associations within the first foot below the surface have been vertically mixed and cultural features which would be clearly visible in an unplowed site have become indistinct here. For this reason our interpretation of the nature of the eighteenth century occupation must rely heavily upon an analysis of the horizontal distribution of artifacts.

The gentle eastward slope of Area 1 is interrupted by a marked depression of about 2.0 feet located in the northeast part of the field adjacent to Broad Street (Fig. 28). The depression is visible in 4 sample squares and is characterized by the presence of what appears to be an old humus zone at a depth of about 2.0 feet. It is overlain by an unevenly distributed zone of yellow sand up to 0.2 foot thick and a heavy stratified layer of water deposited dark grey sandy loam similar to that covering most of Area 1 (Fig. 31). The humus itself consists of a dark reddish brown to black loam directly overlying a pale grey sandy loam of gritty texture grading almost immediately into red sandy clay. In those pits where the old humus is present artifacts were found to be concentrated in this zone. A small amount of material was also recovered from the dark grey loam which appears to have gradually eroded from the surrounding field and filled in this low area. In this instance at least some horizontal movement of artifacts in immediately adjacent areas may be anticipated.

On the whole, Area 1 appears to have been only slightly modified from its original condition. Erosion deposits are present in one portion of the area, indicating that there has very likely been little horizontal movement of artifacts due to natural forces. For this reason it is anticipated that an analysis of the distribution of cultural materials in Area 1 will be extremely helpful in an interpretation of the early historic settlement here.

Area 2, as indicated in the discussion of the palisade excavations, appears to have suffered the removal of a portion of its early surface. At present, the pale brown sandy loam is exposed at the surface throughout the area. Its depth varies from 0.6 to 1.0 foot and rests atop a layer of red sandy clay. The red and pale yellow mottled sandy clay occurs about 1.5 to 2.0 feet below the surface. All artifacts except those associated with subsurface features are confined to the layer of pale brown sandy loam.

The topography of Area 2 reveals an increasingly marked slope to the southeast (Fig. 17). This would seem to be conducive to erosion, however, no gullies, erosion channels, or evidence of sheet erosion detritus at the base of the slope are apparent. Plowing does not seem to have been a factor in the disturbance of the soil here because there is no evidence for this activity having taken place. Perhaps the removal of the grey sandy loam is associated with the nursery occupation of this area. The size of the area utilized for plantings is evident in a modern aerial photograph (Fig. 23). Evidence of nursery activity in the form

of planting pits was found throughout the area. Examples of these features are illustrated in Figure 32.

It is probable that the removal of surface soil in Area 2 has resulted in the loss of archeological material. The seemingly uniform degree to which the top layer of soil was removed does, however, suggest that the destruction of data was not uneven and that the patterning of artifacts originally present should be retained. The remaining material, though numerically fewer per unit of space than in Area 1, should still reflect the same frequency relationships to one another. Therefore, despite the obvious loss of artifacts in Area 2, it should still be possible to recognize significant patterning in the archeological record here. It will, however, be necessary to consider this condition when comparing frequencies of Area 2 artifacts with those of the site as a whole. Cultural material removed from subsurface features should not, of course, be affected by surface destruction and the contents of such features are comparable to those of features elsewhere on the site.

Test excavations in Area 3 revealed stratigraphy which at first appeared to be quite different from that in the Broad Street profile. Those pits dug in the western half of the test area and those at its extreme eastern end encountered the underlying red and pale yellow mottled clay subsoil directly below the modern sod (Fig. 33). This situation immediately suggested the removal of at least 4.0 feet of the overburden present on the Broad Street profile. Other squares excavated near the center of the test area uncovered the same mottled clay subsoil but here it was overlain by a variety of strata up to 6.0 feet in depth in places. These observations indicated extensive modification of the ground in their area. Apparently the east and west portions of the southeast town had been stripped down to the clay subsoil while the center section remained intact and may have been covered with additional fill. In order to clarify the somewhat complicated stratigraphic situation revealed by the sample squares, 6 backhoe trenches were dug crosscutting the area from east to west and north to south. These included 2 short trenches cut in the northwest portion of the test area to follow the edge of outcropping soil strata here (Fig. 29) and four others to map the soil profile across the entire southeast town. Trench 3 presents an excellent picture of the stratigraphic situation in the southeast town area. It exhibits a basic 5 layer profile (Fig. 34) topped by a recent surface cap of red clay which in places is mixed with white sand. The clay is a modern deposit added to stabilize the slope below the baseball field. Below the surface clay lie a pale brown sand usually about 0.6 to 1.0 foot thick and a layer of dark grey loam up to 1.5 feet thick. The poor soil tilth of the latter is reminiscent of that of cultivated fields (see O'Neal and Klingebiel 1952: 2-4) and suggests it is erosion runoff from a cultivated field. It is underlain by a 1.0 foot thick layer of tan and grey waterborne sand containing remnants of a black organic layer up to 0.5 foot thick. The black layer rests directly over the zone of red and pale yellow mottled sandy clay subsoil. This profile is complicated by the basin-like topography of the southeastern part of the town which has encouraged the accumulation of erosional deposits at its center. In several places depressions are cut through the black layer into the sterile clay at the base of the profile. They have, in turn, been filled by dark grey and pale brown and grey deposits. At both ends of the profile the layers below the recent red clay cap may be seen to outcrop on the

FIGURE 32: Intrusive Nursery Pit Features in Area 2.

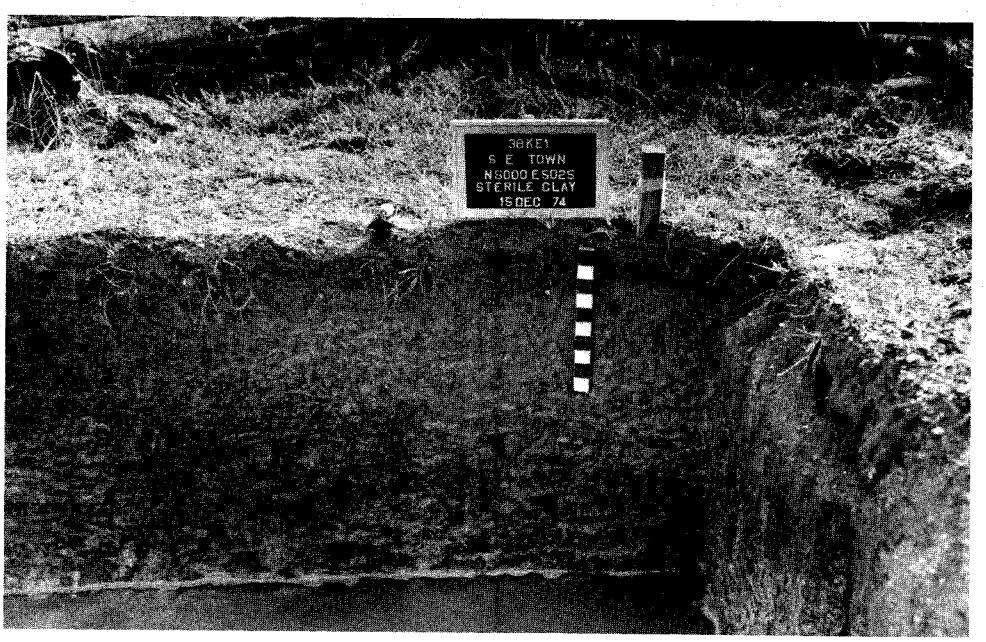
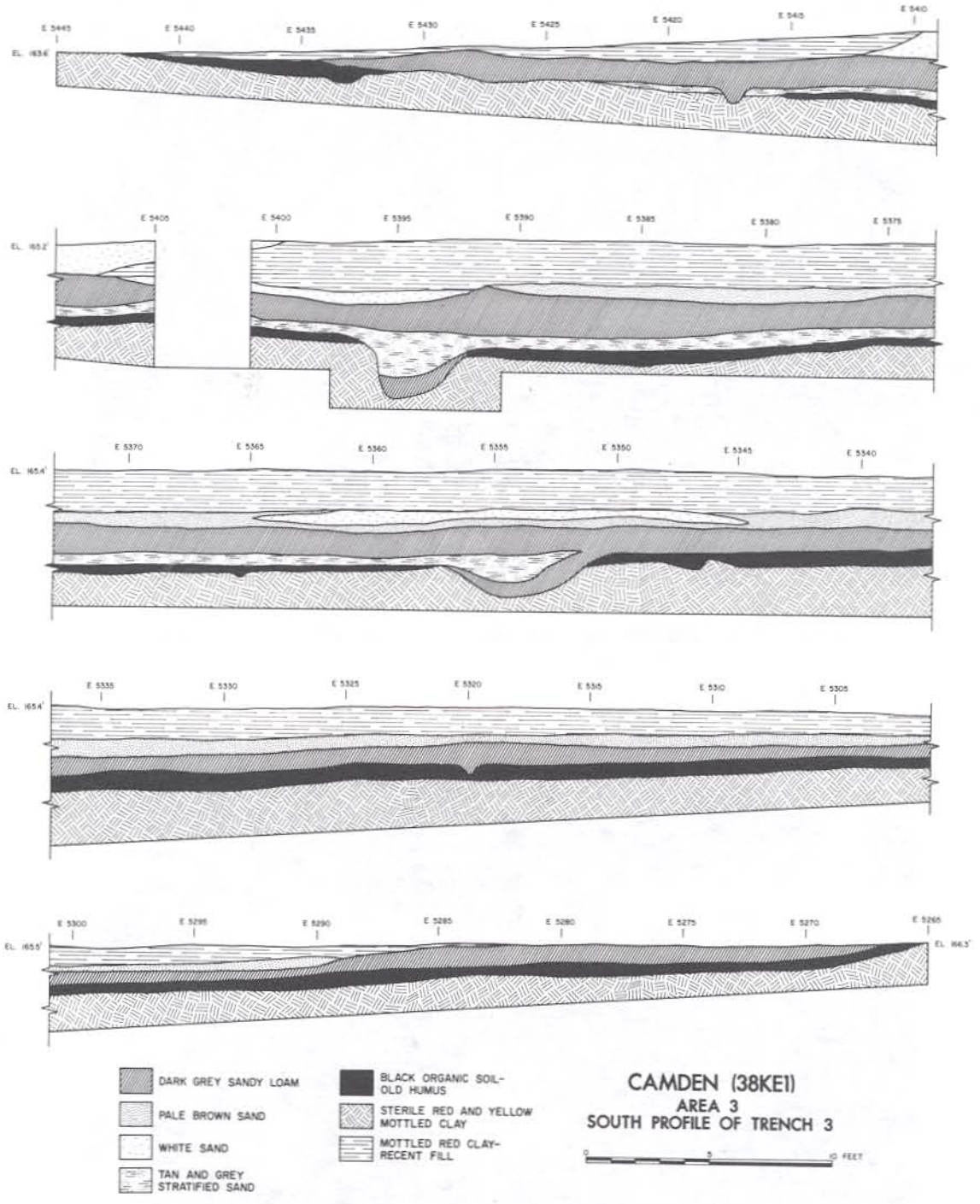


FIGURE 33: Clay Subsoil Exposed at the Surface in Area 3.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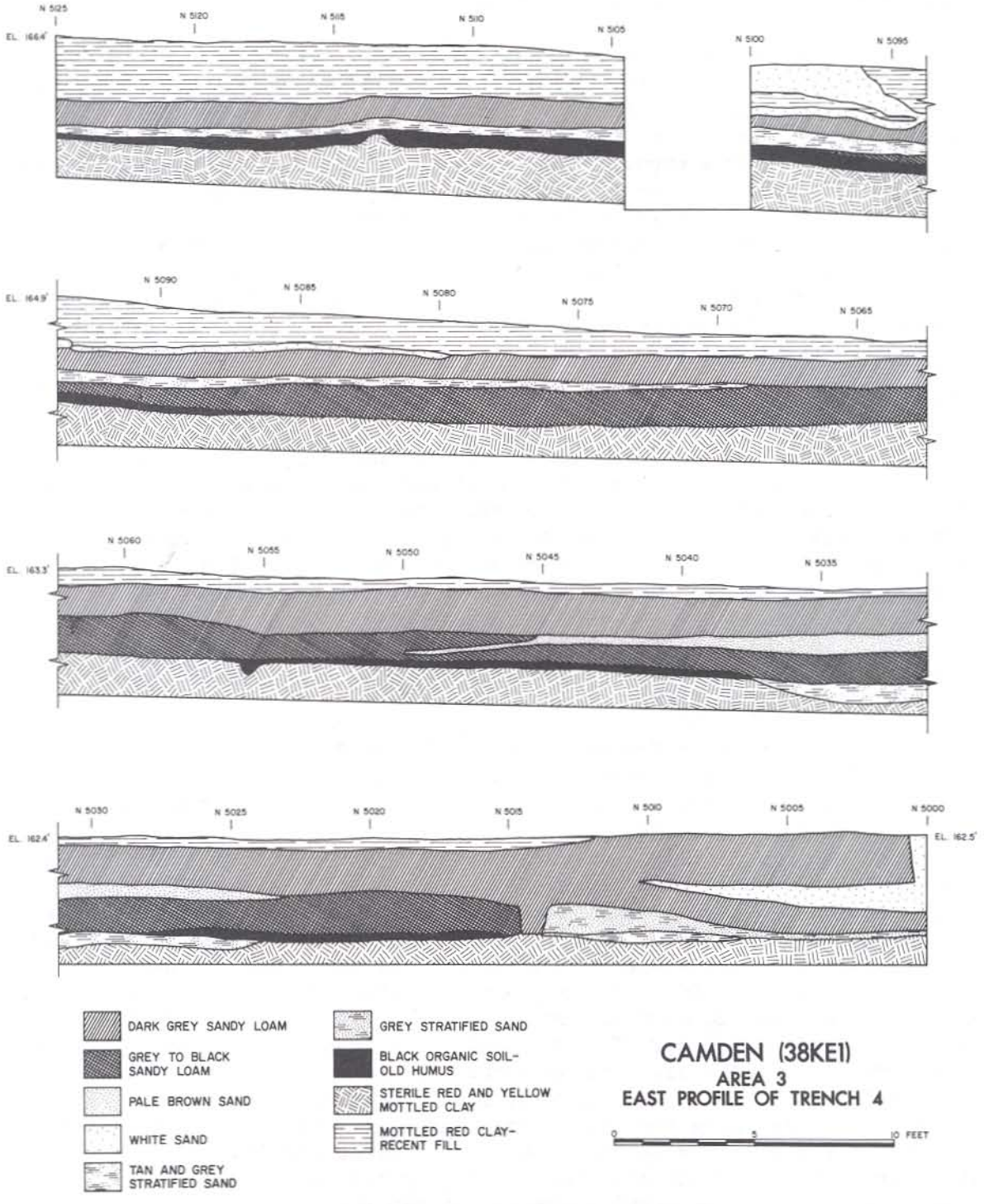
EL. 165.4'
E 5300
E 5295
E 5290
E 5285
E 5280
E 5275
E 5270
E 5265
EL. 165.5'
EL. 166.3'
DARK GREY SANDY LOAM
PALE BROWN SAND
WHITE SAND
TAN AND GREY STRATIFIED SAND
BLACK ORGANIC SOIL-OLD HUMUS
STERILE RED AND YELLOW MOTTLED CLAY
MOTTLED RED CLAY-RECENT FILL
CAMDEN (38KE1)
AREA 3
SOUTH PROFILE OF TRENCH 3
0
5
10 FEET

FIGURE 34

present-day surface, clearly indicating the removal of the earlier soil deposition, perhaps to a considerable depth in these areas. Figure 29 illustrates the horizontal extent of the disturbed area.

This profile of Trench 3 (Fig. 34) seems to represent an old ground surface consisting of a humus layer of black organic soil which had developed on top of a subsoil sandy clay, a condition common to low areas where Marlboro sandy loam soils are present (Latimer, et al. 1922: 45-46). The two cultural features uncovered in these excavations rested on this surface and appear to extend intact beneath it. Runoff from the adjacent slopes would seem to account for the layer of waterborne fill which lies directly over the old humus and composes part of the fill of pits dug through the humus into the underlying clay. Neither these or other pits appear to have contained cultural debris. In addition to these shallow waterborne deposits a slightly thicker layer of dark grey loam, also presumably an erosional deposit related to the cultivation of the steep slope between Area 1 and Area 3 (now totally removed by road construction), is present. It entirely covers the earlier waterborne deposits and fills in some of the pits. The land was still undergoing some modification at this time, for near the east end of the profile part of the humus seems to have been removed by a later pit which cut through the overlying waterborne deposit. The top of the dark grey erosion deposit appears to have been somewhat uneven, still forming a shallow basin. While in this form deposits of pale brown and white sand accumulated or were placed there prior to the laying down of the heavy layer of red clay which now forms much of the surface of Area 3. The removal of the east and west ends of the profile seems to have occurred when the dark grey erosion deposit lay at the surface and probably is associated with an attempt to level this area to approximately the height of present-day Broad Street.

An examination of Trench 4 (Fig. 35), cut from the south edge of the baseball field to the reconstructed palisade wall, reveals a soil profile similar to that in Trench 3 and seems to bear out the hypothetical stratigraphic formation sequence. The greater depth of the old surface at the south end of this profile, however, seems to have resulted in the formation of a thick, very dark grey organic layer on top of the black layer of humus. In places the two layers are indistinguishable. A deposit of pale brown sand occupies gaps in the layer of black humus in two places and may indicate the presence of shallow pits at one time. The south end of the profile is disturbed by the shoulder of nineteenth and twentieth century Meeting Street which was constructed directly over the line of the palisade wall at this point. The dipping layer of white sand sandwiched between two layers of dark grey fill represents a cross section of a roadside ditch which was originally cut into the dark grey fill but later was filled with white sand presumably eroded from the road. At a later time the sand filled ditch was covered entirely with grey fill, perhaps to raise the level of the road. The narrow pit lying directly below the grey fill appears to predate the road construction. It seems to represent the remains of a wide pit excavated into the very dark organic soil directly overlying the old black humus. This pit was later filled with fine layers of light grey waterborne sand. Subsequent to the filling of the pit but prior to the laying down of the dark grey fill the contents of the pit seem to have been partially removed and a narrow pit dug at its northern edge. Both the depression created by the partial removal of the pit fill and the narrow pit were later filled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EL. 166.4'
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N 5035
EL. 163.3'
N 5030
N 5025
N 5020
N 5015
N 5010
N 5005
N 5000
EL. 162.4'
EL. 162.5'
DARK GREY SANDY LOAM
GREY TO BLACK SANDY LOAM
PALE BROWN SAND
WHITE SAND
TAN AND GREY STRATIFIED SAND
GREY STRATIFIED SAND
BLACK ORGANIC SOIL- OLD HUMUS
STERILE RED AND YELLOW MOTTLED CLAY
MOTTLED RED CLAY- RECENT FILL
CAMDEN (38KE1)
AREA 3
EAST PROFILE OF TRENCH 4
0
5
10 FEET

FIGURE 35

with dark grey erosion soil. No cultural material was associated with any of these pits.

In summary, Area 3 seems to represent a natural depression in which sediment has accumulated continually since the eighteenth century, resulting in the burial of the early historic occupation surface. The contours of the early surface are illustrated in Figure 36 and may be contrasted with the modern topography illustrated in Figure 29. The buried surface does not appear to have been disturbed by subsequent plowing and seems to be intact in the lowest part of Area 3. This situation contrasts markedly with that in the east and west ends of the sample area where the original surface and immediate subsurface have been removed. All cultural features associated with these disturbed areas must be assumed to have been obliterated.

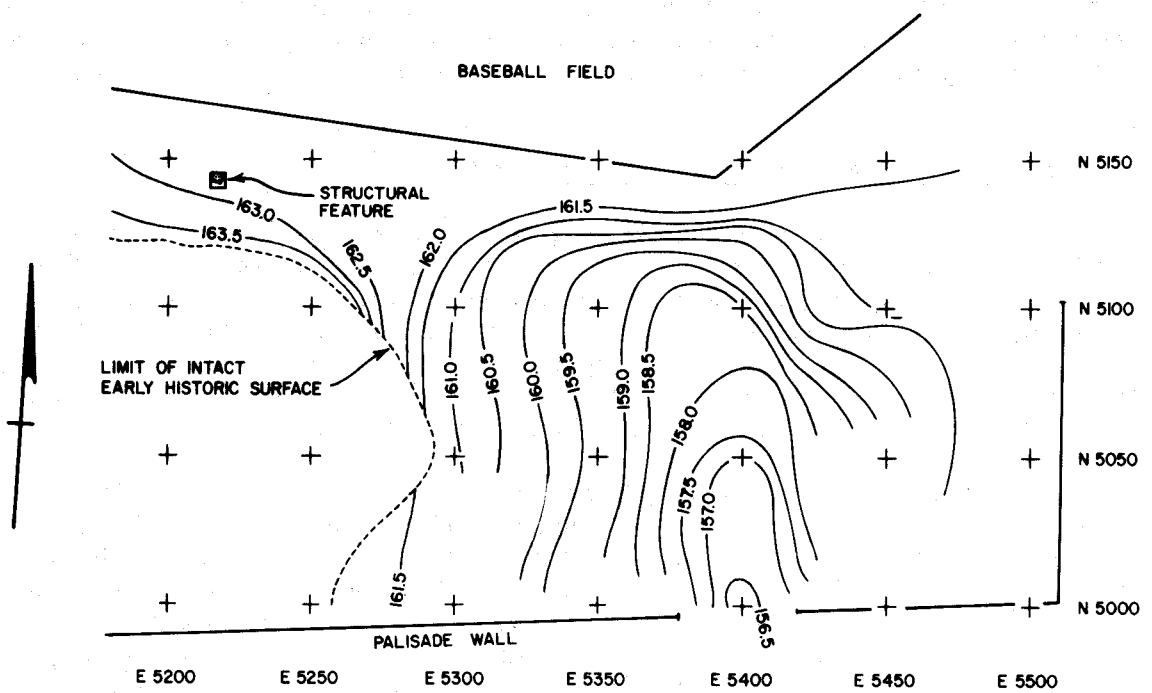
Cultural affiliation and dates of the settlement

In order to determine the ethnic or national affiliation and chronological limits of historic sites it is necessary to consider those artifacts which exhibit diagnostic temporal variation as well as those which differ in frequency of occurrence or in appearance, according to the socioeconomic ties of the particular settlement under consideration. Perhaps the category of artifact that best meets both these criteria is ceramics (Miller and Stone 1970: 98), an item present in great quantity at Camden.

In the eighteenth century, North America occupied the status of peripheral area to the emerging European world economy. Three European nation-states, England, France, and Spain, were rivals for the control of New World land and its resources and each established colonies to secure and exploit its claims. The key to the identification of colonies with regard to their country of origin lies in the differences between the nation-states themselves or more precisely between their colonial systems.

Perhaps the most significant economic phenomenon in late postmedieval Europe was the rise of England as a commercial power. Wallerstein (1974: 227) views this development as partially the result of an early alteration in the composition and destination of her export trade, a change accompanied by social and political realignments which favored economic centralization. This permitted both the accelerated expansion of home industry as well as the incorporation of economic "colonies" within England's sphere of trade. These two factors encouraged an increase in production and innovation in various manufactures on the one hand while on the other it brought the industries and raw materials of other nations and their peripheral areas into the British commercial system. The eighteenth century was a period that witnessed a rapid expansion in English overseas trade, especially in regard to the re-exportation of foreign commodities (Darby 1973: 381). The close ties between peripheral area and core state almost always insure that socio-economic changes in the latter are soon evidenced in the former. It may be assumed that such variability will also be reflected in the archeological record.

In light of the above statements several hypotheses may be developed to establish the presence of British occupations on New World archeological sites. If we assume that Camden represents an English colonial site, as indicated by documentary records, then an examination of the archeological



CAMDEN (38KE1)
AREA 3
TOPOGRAPHY OF EARLY HISTORIC SURFACE

FIGURE 36

evidence gathered there should substantiate the following statements. For purposes of brevity this discussion will be confined to an analysis of a single category of artifacts, ceramics. Ceramics are especially useful in archeological studies because their composition and method of manufacture lend them to wide variation in form (Shepard 1956: 334) and their fragile nature seems to insure a continual deposition of material reflecting past occupations (Ford 1962: 18).

1. British colonial sites, like those of other European states, should be characterized by a predominance of ceramics manufactured in their country of origin or its colonial possessions. In general, this pattern has occurred on North American sites of French and Spanish colonies (see Lunn 1973: 176; Smith 1951: 163-165; Griffin 1962: 36) as well as those of Great Britain (Noël Hume 1970: 5). This situation is the result of the maintenance of direct trade and communications links between the colony and the homeland and a tendency to exclude such links between the colony and other core states, especially those with competing colonial systems. With regard to ceramics, then, a British colonial site would be expected to differ from its French or Spanish counterparts in form more than in content.

2. By mideighteenth century the ceramic industry in Britain was undergoing a transformation in technology characterized by rapid innovation and increasing industrialization (Clow and Clow 1958: 328-329). This enhanced the ability of British products to compete with those of other European countries on the international market and even led to the decline of some foreign ceramic industries, most notably French faience (Haggar 1968: 165). Consequently, British colonial sites should be characterized by a great variety of ceramic wares reflecting technological as well as stylistic differences. Because of the failure of the French and Spanish ceramic industries to develop in a similar manner, this diversity should not be repeated in colonial sites of these nations.

3. Finally, the commercial expansion of Great Britain in the eighteenth century brought an increase in the amount of foreign goods shipped through British ports. Although the re-export of foreign ceramics, most notably oriental porcelains (Noël Hume 1970: 257), was carried out by many other European states, it was Great Britain that came to dominate this trade in the eighteenth century (Mudge 1962: 7-8). Although a government ban limited the re-exportation of foreign earthenwares, large quantities of German and Flemish stonewares in addition to the porcelains were imported into Britain's North American colonies (Noël Hume 1970: 141). The extensive nature of British trade coupled with the exclusive nature of the re-exportation of goods to her colonies should serve to produce an archeological sample of foreign ceramics significant in size yet restricted in variety. Although British colonial sites should be characterized by a predominance of diverse English ceramics, they may also be expected to exhibit a noticeable and relatively constant proportion of foreign products, principally European Westerwald stonewares and oriental porcelains. A comparison of the ceramic collections from eighteenth century British colonial sites suggests that the Westerwald stonewares will comprise up to 6% of the total ceramics by count while oriental porcelains should account for 10 to 28% of the specimens (see Appendix A). Although oriental porcelains are present in both Spanish and French North American colonial sites (Miller and Stone 1970: 81; Fairbanks 1973: 170), Westerwald stoneware occurs in French sites only, and there in small numbers (Lunn 1973: 185-187; Miller and Stone 1970: 76).

An analysis of the ceramic assemblage from Camden substantiates the presence of a British occupation at this site. With regard to the first hypothesis, out of a total of 12,796 identifiable ceramic specimens, 11,963 or 93% are definitely of British or British colonial in origin. Only a small number of sherds represent French or Spanish ceramics. At least 14 of the unidentified earthenware specimens appear to be fragments of Iberian olive jars. One specimen of French "debased" Rouen faience was recovered in the excavation of the palisade trench in Area 2. The regular use of the former as a transport and general utilitarian container in British colonies as well as in northern European countries is supported by strong evidence (Watkins 1973: 192-193), while the latter may be seen as a minor supplement for British ceramic vessels made possible by the removal of the embargo on foreign earthenwares in 1775 (Noël Hume 1970: 142). In both cases these ceramic types may be functionally grouped with other re-exported foreign ceramics reaching the colony via the British transportation network and do not provide evidence for direct colonial contact with either Spain or France.

The occurrence of 32 distinct types of British ceramics supports the second hypothesis concerning the diversity of wares expected in English sites.* These include earthenwares, stonewares, and porcelains, the products of 3 distinct methods of manufacture. Earthenwares run the gamut from heavy-bodied, coarse-paste lead or tin-glazed slipwares to refined creamwares and pearlwares developed in the last half of the eighteenth century. Stonewares range from heavy utility wares to fine white and "scratch-blue" salt-glazed tablewares in use by the 1720's. Unglazed black "basalt" and red stonewares, produced after the 1750's, are present as are the black-glazed "Jackfield" stonewares manufactured from 1745 to 1790. British porcelains consist primarily of "teawares." In short the variety of ceramics recovered at Camden clearly illustrates the proliferation of ceramic technology characteristic of the British potteries in the eighteenth century and mirrors the diversity of ceramic types found on English colonial sites of this period.

The presence of a noticeable quantity of re-exported foreign pottery predicted in the third hypothesis is readily apparent in the Camden collection. The 2 principal categories are Westerwald stoneware and oriental porcelain, containing 74 and 372 specimens respectively. Westerwald stoneware comprises about 0.6% of the total ceramic inventory by count while oriental porcelain accounts for 2.9%. The former falls within the range of these wares found on British colonial sites, however, the latter falls below the normal range for porcelain. The insignificant occurrence of oriental porcelain may be a function of the chronological position of the site. As will be discussed later, the densest occupation appears to have taken place in the 2 decades following 1780. During this time the normal trade links between the colony and the Asian ports were disrupted by the Revolutionary War, temporarily cutting off British supplies (Noël Hume 1970: 261). The American trade was sporadic during the postwar period and did not achieve a consistently high

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*For the definition and dating of these ceramic types and those subsequently discussed in this report see Ivor Noël Hume's A Guide to Artifacts of Colonial America (1970) and South's "Evolution and Horizon as Revealed in Ceramic Analysis" (1972). For a complete listing of ceramics by provenience see Appendix F in this report.

level until the second decade of the nineteenth century following the War of 1812 (Mudge 1962: 18). Consequently, the low frequency of oriental porcelain sherds at Camden could well reflect a readjustment in the commercial ties to the Orient which required considerable time to effect, unlike the immediate re-establishment of trading ties with British ceramic firms (Laidacker 1954).

The Rouen faience and Iberian olive jar fragments mentioned earlier occur in negligible quantities, together comprising 0.1% of the ceramic collection. Their low frequency serves to emphasize the minimal role played by these competing European states in the re-export trade of Great Britain compared to other countries which were noncompetitors and had themselves been economically "colonized." Indeed, by the eighteenth century the manufacture of both Westerwald stoneware and oriental porcelain was geared in part to the British colonial market (Noël Hume 1967: 353; Mudge 1962: 54).

Documentary evidence suggests that the site of Camden was occupied as early as 1758, the date Joseph Kershaw established his Pine Tree store (Kirkland and Kennedy 1905: 11). Following a decline in postwar prosperity and a disastrous fire in 1812 movement of population from the site of the older town to the higher ground to the north increased, leaving the old town virtually abandoned by 1820 (Schulz 1972: 60). The median date of the historic occupation would be 1789. Because these dates are only approximate, it is desirable to compare them with those derived from an examination of the archeological record, for the latter should provide the most accurate direct evidence of the site's temporal limits.

A rough estimate of the occupation span of Camden may be ascertained by comparing the use ranges of the European ceramic types recovered in archeological excavations there. The terminus post quem, or date after which the earliest objects must have found their way into the ground, is determined by the closing date of the use range of the earliest type. The terminus ante quem, or closing date of the occupation, is estimated by the beginning date of the use range of the type commencing latest. The establishment of these dates in this manner is necessary due to presence of a temporally mixed context. In the case of a sealed context (one in which the contents are assumed to have been deposited at one time) these dates would have been determined in reverse (see Noël Hume 1969: 69-70). The date ranges of ceramic artifacts found in the Camden excavations suggest that the beginning date for the occupation was at least as early as 1775 and the termination date no earlier than 1813.*

Several methods for calculating the mean date of an occupation have been developed for use with archeological data from British colonial sites. Perhaps the most accurate is that introduced by Stanley South (1972) based upon the increasing and decreasing popularity of definable ceramic types through time. By measuring the popularity curves for each of the various types, median dates have been calculated based on the time of greatest occurrence. It is possible to arrive at a mean date for an archeological site (or its components) which contains a number of types by considering the frequency of occurrence of specimens of each type together with its

*For the temporal ranges of the individual ceramic types recovered at Camden see South (1972: 85, Fig. 1).

median date (see South 1972: 83-84). Based on a total of 11,394 datable typed sherds, the mean date for Camden is calculated to be 1791 (see Appendix B), only 2 years removed from the median historic date.

Mean ceramic dates have also been calculated for each excavated sample square in which ceramics were present. All fall within the historic date range and together represent a period from 1763 to 1819. A frequency distribution of sample unit mean dates by year forms a unimodal curve (Fig. 37) with a mode of 1791, indicating that the peak of the occupation with the greatest spatial distribution occurred at this time. It must be remembered that the date assigned to each individual unit is only the mean of a range representing a peak in the density of occupation. When viewed together they imply that the occupation of the site reached a peak in the early 1790's following a rise and preceding a decline as indicated by the frequency distribution curve. Presumably this rise and fall is associated with the expansion and contraction of Camden as a commercial center in the last quarter of the eighteenth century and the first decade of the nineteenth century.

Two other methods for determining mean dates of historic occupations are based on formulas derived from measurements of the declining stem hole size of English white clay tobacco pipes. The first, developed by Lewis Binford (Maxwell and Binford 1961: 108) utilizes a straight line regression formula. Due to the inclusion of large quantities of non-English pipes in British sites dating after 1780, however, the formula is limited to the identification of sites dating prior to this time (Binford 1962: 20). Audrey Noël Hume (1963: 23) has suggested that 1760 be the cutoff date for the use of this formula because pipestems recovered from more recent contexts of known age tend to include increasingly greater numbers of specimens with larger hole diameters, producing progressively earlier dates.* In that nearly all of the Camden artifacts presumably date later than 1760, one would expect an unreasonably early date from an application of the straight line regression formula. The Camden pipestems yield a date of 1753, well before the settlement of the site (see Appendix C).

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*Binford (1962: 20) has suggested that the breakdown of the formula is the result of a disruption in the traditional direction of stylistic change following the introduction of pipes from American sources after 1780. Several changes that occurred in the last 2 decades of the eighteenth century are likely to have affected the stylistic elements present in pipes imported into America. The first is the introduction of mass manufacturing, accompanied by the proliferation of pipe models, and the second is a change in the sources of British export pipes, notably to Glasgow following the American Revolution (Walker 1968: 100-101). Recent evidence has shown that the stem hole diameters of pipes manufactured in northern England produce a different pattern than those made in the southern centers of Bristol, London, and supplied colonial America (Belcher and Jarrett 1972: 193). It is likely that the addition of pipes from this and other sources would have produced the change in direction of stylistic variation postulated by Binford and thus bring about the breakdown of all formulas based upon a regular decrease in the diameter of pipestem holes.

CAMDEN (38KE1)
FREQUENCY DISTRIBUTION
FOR MEAN CERAMIC DATES
OF INDIVIDUAL SAMPLE
UNITS

MINIMUM	1763.000
MAXIMUM	1819.000
MEAN	1789.718
MODE	1791.000
KURTOSIS	2.347
MEDIAN	1790.450
VARIANCE	69.031
RANGE	56.000
STD ERR	0.441
STD DEV	8.308
SKEWNESS	-0.213

FIGURE 37

The second pipestem hole formula, based on an exponential curve, was developed by Heighton and Deagan (1972) in an attempt to fit the declining stem hole size to a more accurate curve. Unfortunately this formula also breaks down in the last 2 decades of the eighteenth century for the same reasons as the first formula and the 1758 date (see Appendix D) derived from the Camden material is also too early to represent the historic occupation there.

In summary, an examination of diagnostic artifact types has identified a British occupation at Camden with a mean date of 1791. A comparison of dates from individual sample units suggests an occupation range of at least 1763 to 1819. Both the mean date and the range agree remarkably well with dates derived from documentary sources and clearly show that the settlement sampled archeologically is indeed that described in historical records.

The form and extent of the eighteenth century occupation at Camden -- Expectations

Introduction

In the above discussion it has been determined that the historic occupation zone defined by the Revolutionary War Period palisade has remained for the most part intact despite the long-term cultivation of the site. The archeological assemblage sampled in excavations here represents an occupation which came into being in the third quarter of the eighteenth century and persisted into the first quarter of the nineteenth. The peak of activity, as represented by the greatest deposition of material, occurred around 1791 and was preceeded by a gradual rise and followed by a steady decline.

In short, the site of Camden represents the remains of a human settlement that existed within a definite temporal span. Documentary sources have indicated that it assumed the role of a frontier town serving an area of colonization that included a large portion of the Carolina backcountry. Camden maintained this status until the frontier phase of settlement ended at the close of the eighteenth century. It is useful to examine the archeological data from Camden in light of its historical significance because they offer the potential for exploring a number of general questions relating to frontier development in general and aspects of the South Carolina frontier in particular. The analysis of the archeological data will be organized around the following statements. First, because of Camden's position as a frontier town, it may be expected to have performed certain functions within the frontier system of which it was a part. Evidence of these should be present in the archeological record. It should also be possible to determine with some degree of accuracy the form of the settlement and to trace changes in it through time. Second, the distribution of the artifacts may be examined to discover intrasite patterns of association upon which to postulate the distribution of settlement and other activities. Third, although aboriginal influence in the South Carolina backcountry had greatly diminished by the late eighteenth century, interaction between Europeans and Indians still persisted. Some ideas of the extent of this interaction may be gained from the examination of a settlement whose geographical position would have placed it in relatively close

proximity to remaining Indian settlements. Fourth, the occupation of Camden by the British Army during the American Revolution, though of short duration (1780-1781), entailed the establishment of a permanent military garrison and resulted in destruction of local property and the dislocation of townspeople. Through an examination of the archeological record it may be possible to discern the nature and extent of this occupation. Finally, an analysis of the patterns of artifact occurrence should aid in the study of certain of the cultural formation processes which result in the development of the archeological record.

Through the testing of hypotheses directed along the preceding lines of inquiry it should be possible to verify predicted changes in the systematic (behavioral) context of the society that occupied colonial Camden, thereby demonstrating the ability of archeological methodology to yield results capable of explaining historical phenomena (see Plog 1974: 4). In the remainder of this section each of the general questions outlined above will be examined in light of the data gathered during the discovery phase of excavations at Camden. It must be kept in mind that while these questions are chiefly addressed to behavioral aspects of the settlement's past, their explanations will also yield information useful in the preliminary phase of site interpretation.

The form of the settlement and its change through time

During the second half of the eighteenth century the settlement of Camden apparently underwent a series of changes in its spatial extent and location, finally resulting in the abandonment of the original townsite in the early nineteenth century. In terms of gross characteristics, this change should be visible in the data gathered in the archeological sample. In the following statements a number of characteristics of form and change hypothesized to have occurred at Camden will be examined in light of the archeological data. These hypotheses, and those that appear in the remaining parts of this section of the report, are based on analogies drawn from documentary evidence relating to Camden and the South Carolina frontier, comparative documentary and archeological data, and characteristics embodied in the model of frontier change discussed earlier in this report.

1. The frequency distribution of mean dates at Camden indicates a rise, a plateau, and a decline in the amount of space occupied during the historic occupation of the site. These changes should be associated with an early scattered settlement pattern, a consolidation, and a late dispersed occupation. In addition, a northerly trend in movement should be noted. The British palisade very likely represents the limits of the contiguous settlement in 1780 and the greater part of the occupation previous to this time should fall within this area. On the other hand, evidence of later settlement will probably extend beyond this area, principally to the north.

2. Because most activities in a frontier town would tend to be associated with its function as a center of trade and communications on the frontier, one might expect to find evidence that the heaviest concentration of archeological remains reflects occupation occurring along the major transportation route(s) connecting it with the outside world.

3. In addition to following a tendency toward concentration along the main thoroughfares, the density of occupation may also be affected by unusual physiographic features such as a marked variation in topography. At Camden only one such area is apparent, a deep gully-like depression extending through the southeast quadrant of the enclosed settlement. The presence of waterborne deposits in this area suggests that it once drained much of the townsite to the north and west (see Fig. 36). Such a wet area is not likely to have been inhabited.

Intra-site activity patterning and settlement pattern

Two levels of artifact analysis are inherent in this heading, the first dealing with the distribution of items within the site and the second associated with the larger patterns that may be derived from this distribution. This report will emphasize the latter because the patterns revealed in the archeological record may be linked, through analogy, to aspects of the sociocultural system which existed at the site in the past and may express temporal and spatial relationships between components of such systems. Because the current phase of research is based upon a small representative sample of the site, this analysis will be concerned chiefly with a study of eighteenth century Camden as a whole rather than with the composition of its individual parts. Trigger (1967: 151-152) has stressed the importance of the analysis of settlements as units in archeological studies.

> In more complex societies social, occupational, and ethnic distinctions may be reflected in the patterning of a community. ... The location and nature of individual buildings may indicate something about the government, religious, and other socially integrating institutions of the community. The presence or absence of trade goods and a study of the economic activities of the community as a whole should do much to reveal its economic structure and its degree of self-sufficiency.

As a sociocultural entity on the British North American frontier, Camden should have occupied a status comparable in many ways with certain other contemporary settlements in preindustrial revolution Great Britain and her possessions. Camden's location on the periphery of British colonial expansion, however, caused it to assume characteristics unlike those of settlements in the metropolitan area. Its role on the frontier required it to maintain certain functions* while at the same time adapt to frontier conditions by restructuring its socially integrating institutions and, consequently, altering its form*.

The role of a frontier town as a focus of activity may be compared to that of settlements within a European urban* hierarchy. Blouet (1972)

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*The terms "form," "function," and "urbanism" have been interpreted widely in the literature of social science, making it necessary to clearly define their use in the context of this discussion. Form and function will basically follow Linton's (1936: 403-404) definition. Form is the expression of the directly observable aspect of a sociocultural system. As a

has defined 6 levels of settlements based upon degree of economic development. Only at the third level (town) do we find functions comparable to those of the frontier town, for only here is exchange conducted on an "inter" rather than an "intra" regional basis. The town is characterized by a greater specialization in production, an increase in the variety of employment, and the marketing of a greater range of goods than is found in settlements lower on the urban scale (Blouet 1972: 4). In addition to its inter-regional economic functions, Grove (1972: 560) adds political and social functions to the role of the "town." He also suggests that towns be assigned separate relative statuses in an urban hierarchy based upon the spatial extent of their influence (Grove 1972: 561). Given the generally large area lying within the influence of a frontier town, it is possible to place such settlements relatively high in this hierarchy (see Ernst and Merrens 1973a: 559-560).

In terms of size and form, however, the frontier town differs strikingly from European settlements with comparable functions (see Flatres 1971: 70), a feature which seems to have led many contemporary observers and even later historians (e.g., Sellers 1934: 4) to overlook the actual urban functions of frontier town settlements in the colonial American South. The reasons for the insignificant appearance of these settlements are related to the nature of frontier expansion, specifically the rapid spread, and consequent widely dispersed settlement with a low population density, which prevailed in South Carolina throughout the colonial period (Potter 1965: 661). Unlike the traditional process of European settlement evolution, in which a settlement's relative status as center for socioeconomic activity is tied to its population density and economic complexity so that settlement growth may be seen as a reflection of urban functions (Fox 1973: 76), the frontier town comes into existence relatively rapidly. It does not arise solely to economically integrate settlements within a specified area on an intraregional basis (areal organization), but serves also to tie such settlements into the network of a complex and often far-ranging inter-regional economic system (linear organization). The frontier town is established as an economic center without first passing through a series of intermediate growth stages, and without taking on the roles and the forms

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geographical term form has been used to define the "settlement landscape" (Jordan 1966: 27), which consists of the vertical and horizontal arrangements and dimensions and the material composition of the elements which together comprise human settlements. Function, on the other hand, is an expression of the relationship between the elements within a sociocultural system (Linton 1936: 404). The definition of urbanism involves a consideration of both these terms although it is primarily a functional concept. Urbanism may be seen as both the process and the result of the process by which the growth and structure of specialized networks of social, economic, and political relationships associated with and focused in cities evolves (Smith 1972: 568; Wheatley 1972: 621). The form taken by urban institutions varies cross-culturally because these institutions do not always maintain the same relationship to the landscape. The functional relationships between these institutions, however, are similar cross-culturally (Sanders and Price 1968: 46), and it is on the basis of these regularities that it is possible to identify the process of urbanism in diverse sociocultural contexts.

of less complex settlement types. Consequently, the frontier town need not be as large as an English market town because it is not necessarily a population center that assumed urban functions, but rather a market center set up primarily to coordinate social, economic and political activities.

It may be best to view a frontier town as part of a larger, dispersed social entity. It serves as the site in which are located the nexus of the socially integrating institutions of the area of colonization served by the frontier town. The notion of "community" in an anthropological sense, defined as the "basic unit of organization and transmission within a society and its culture" (Arensberg 1961: 248), appears to be useful in dealing with a settlement of this type. Arensberg's definition stresses function rather than form and sees the community in an organizational rather than a spatial sense as, for example, does Murdock (1949: 79). Thus, a community may include more than a single settlement and its form may even vary periodically according to the adaptive mode of the particular society (Trigger 1968: 60-61). Camden, as a frontier town, seems to represent the focal point of a dispersed community, the limits of which are somewhat difficult to define yet within which primary subsistence production and to a large extent residence lies outside the area of nucleated settlement.

Assuming that Camden was such a part-community, certain alterations in the settlement pattern and the distribution of activities may be expected at the site. These alterations in form have been set forth below in 4 hypotheses. The following postulates embody the characteristics that collectively should identify the frontier town as an entity and that individually should distinguish diagnostic elements of its internal patterning.

4. The large, localized supporting population normally associated with market towns in Europe should not be present in the frontier town. Consequently, the total number of structures is expected to be fewer in the latter. The abundance of land on the frontier and the absence of a need for defense or cooperative subsistence activities (see Page 1927: 450) in the frontier town fail to provide the adaptive pressures that commonly resulted in the concentrated settlement pattern of European towns. It is likely that the pattern of activity and structure location at Camden would not have been contiguous and may possibly have been as dispersed as the documents indicating the retention of large tracts of town property suggest.

5. Structures utilized solely as dwellings are likely to form only a small portion of the total number of structures in the frontier town. In this manner it would have contrasted markedly with its counterpart in the metropolitan area in which dwelling houses were the most numerous type of structure. Those subsistence activities which were normally a part of the eighteenth century household complex are likely to be evidenced here, but the production of farm commodities on a commercial scale is not likely to have occurred in the frontier town.

6. The majority of the structures in the frontier town should not be associated with the centralizing functions of the settlement. These functions would involve activities relating to the transfer and storage of goods and commodities, small-scale manufacturing and maintenance, and

political and social activities associated with the periodic gathering of persons for collective purposes such as trials, markets, and tavern socializing.

7. The central position of the frontier town relative to the dispersed settlements of the area of colonization implies that it would also be the residence of those individuals who oversaw the distribution and collection of goods and commodities passing to and from the entrepot. Although perhaps occupying status positions lower than their counterparts in the metropolitan area, or even the colonial entrepot, individuals involved in commercial activities in the frontier town should possess relatively high status compared to others residing in the area of colonization, including most residents of the frontier town. It is postulated that archeological evidence of status differentiation should be discernible at Camden and that it will be recognizable in a minority of structures there.

Aboriginal influence on the frontier

By the time of the settlement of Pine Tree Hill in the late 1750's the aboriginal groups inhabiting the Wateree River Valley had retreated above the Fall Line to converge around the Catawba settlements to the north. These groups included remnants of the Waterees, Wateree Chickanees, Transequas, and some Waxhaws who had been displaced earlier by the Yemassee War (Baker 1975: 109). Decimated by smallpox in 1759-1760, the survivors of the Catawba Nation were drawn into a close relationship with the expanding British colony and were finally assigned reservation lands on Twelve Mile Creek near the North Carolina border in 1763. The Catawbas became increasingly absorbed into the colonial sociocultural system in the second half of the eighteenth century and acculturation proceeded at an accelerated rate. They did not, however, lose their cultural identity but became rather one element in a plural society (Hudson 1970: 52-53), that is a society within which different sections live side by side but do not extensively mingle.

The disruptions suffered by the Catawba people entailed a series of drastic adaptations to their new social environment. Perhaps the most obvious of these was an economic adaptation which involved the manufacture of native products for sale in a colonial-wide market. This permitted them to retain a tribal identity in the face of intense pressure as well as supplementing increasingly inadequate native procurement systems through trade. Lurie (1959: 60) has observed a similar phenomenon in the case of the Pamunkeys and Mattaponies of eastern Virginia who were also forced to cope with nearly total European absorption at an early date. Like the Virginia groups, the Catawbas began to produce specialized trade goods, particularly pottery imitating European forms. Similar pottery is common in colonial America and has been lumped under the category of "Colono-Indian" ware (Noël Hume 1962). Baker (1972: 16) has examined the occurrence of Colono-Indian pottery in various colonial sites in South Carolina* and

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*Baker mentions the occurrence of Colono-Indian wares at Cambridge, a settlement founded near Ninety-Six in 1782; the Kershaw House Site at Camden, occupied as early as the late 1770's; the Citadel campus at

concludes that its use was quite widespread geographically among all ethnic elements of South Carolina's plural society. Its association with persons of lower socioeconomic status is likely but has not been conclusively demonstrated (see Noël Hume 1962: 5; Baker 1972: 16; South 1974: 188).

It is likely that the indirect nature of European-Indian contact would have involved the Catawbas in the economic subsystem of the colony and it is assumed that the greatest evidence of their influence on English culture might be found by examining this subsystem. An archeological study of the economic subsystem would naturally focus on the distribution of those material items which are suspected as having figured prominently in the Catawba trade. In the South Carolina backcountry this item is likely to be Colono-Indian pottery.

Given the widespread shipment of Catawba pottery during the late eighteenth century and the close ties Camden maintained with the relatively nearby Catawba settlements (Kirkland and Kennedy 1905: 58-59), it is reasonable to assume that Camden figured significantly in the consumption and perhaps also the redistribution of Colono-Indian wares on the frontier. Several hypotheses may be set forth to demonstrate the relationship between Camden and the nearby aboriginal inhabitants in terms of this trade artifact.

8. First, it is necessary to establish the trading link between the inhabitants of Camden and the aboriginal peoples as well as the settlement's participation in the trade and use network of the latter's chief product, Colono-Indian pottery. It is predicted that the consumption of this product will be evidenced in the archeological record at Camden.

9. Because the role of Colono-Indian pottery in the English colonial settlements is uncertain, it is predicted that the occurrence of this ware would very likely have varied between and within settlements. Although it is not possible to assign specific roles or identify particular activities on the basis of the occurrence of this ware, it is predicted that its distribution varies between and within sites and that this variation will be discernible in the archeological record.

10. The temporal affiliation of Colono-Indian pottery is poorly understood. Its association with tightly datable archeological contexts at Camden should help to demonstrate the relative popularity of this ware throughout the period of the settlement's occupation. If Colono-Indian ware does represent the forerunner of nineteenth century Catawba trade pottery then it is possible that an increase in the popularity of Colono-Indian ware with the passage of time would be indicative of the

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Charleston, which contained several structures occupied during the late seventeenth and early eighteenth centuries (South 1962: 8-9); and Albemarle Point near Charleston in a post-1670 context (South 1971: 102). Colono-Indian pottery has also been reported from the Revolutionary War military occupation of Fort Moultrie in Charleston Harbor, where it constituted 37% of the ceramics recovered (South 1974: 181-185); Long Bluff, a courthouse town on the Pee Dee River settled in the 1770's (Lewis 1975b); and on scattered late eighteenth century house sites in the vicinity of Camden (Goodyear n.d.).

development of a trade pottery industry at the close of the eighteenth century.

The Revolutionary War occupation at Camden

Although a significant event in the history of colonial Camden, the British occupation of the town in 1780 was of quite short duration and does not appear to have affected the postwar role of the settlement as a frontier town. The British Army took advantage of Camden's central position in the colonial trade and communications network and made the town a major supply center to support military operations in the backcountry. Apart from the erection of fortifications and the destruction of property associated with the abandonment of the settlement in 1781, there are likely to have been few physical changes to Camden attributable to the military presence. Documents indicate that structures utilized by the military were either existing buildings or temporary ones which apparently did not survive into the postwar period. The bulk of archeological evidence for the military occupation, then, is probably mixed with that of the preceding and subsequent civilian occupations of the town although some may be found in isolated contexts. Evidence of the military presence at Camden may be pursued by investigating the following hypothesis.

11. Although previous excavations have established the locations of the eighteenth century military fortifications at Camden, evidence of the actual occupation of the town itself has not been reported. Because the occupation lasted only a year, it is not likely to have produced a sizable output compared to that of the estimated 61 year occupation of the colonial town. Much of it would probably consist of the residue of subsistence and other activities not directly related to warfare and thus be indistinguishable from the output of civilian activities at Camden. It is predicted, however, that evidence of military related activities will be present in the archeological record at Camden and that their spatial distribution may provide clues as to the relative form of the military occupation there.

In summary, 11 hypotheses predicting conditions relating to the form and spatial extent of the colonial settlement of Camden have been presented. In the following section test implications through which the archeological record may be examined in relation to each hypothesis will be set forth. The degree to which the hypotheses are supported will determine the extent to which Camden conforms to the predicted model of the frontier town.

The form and extent of the eighteenth century occupation at Camden -- Analysis

Introduction

In the above discussions 11 hypotheses have been set forth. Each predicts a particular condition or change in the archeological record which is related to some aspect of Camden's role as a frontier town in the South Carolina backcountry. The remainder of this section will consist of an examination of the archeological data gathered during the 1974-1975 excavations in an attempt to explore the validity of these hypotheses. Test implications predicting the actual form that the archeological data will

take are deduced for each hypothesis. The degree to which the data conform to the former will determine whether or not each hypothesis is supported.

The nature of the first phase of exploratory excavations at Camden will, of course, make the results more amenable to the investigation of some hypotheses than others. For this reason it may not be possible to provide evidence adequate enough to answer all the questions asked of the data. This is not to say that such questions are beyond the scope of archeological inquiry but rather that further field excavations may be necessary to provide the data capable of dealing with them.

The form of the settlement and its change through time

1. The first hypothesis postulates a change in settlement density through time with the greatest consolidation occurring in the midpoint of the period of occupation. A general northerly movement of settlement should also accompany the passage of time at this site. A marked rise and decline in the total area of the site occupied is indicated by a normal curve in the frequency distribution of sample units by mean date (Fig. 37), suggesting variation in the site's form through time. It does not, however, express this change in terms of the actual spatial distribution of the site's occupation.

In order to observe the form of the site at different times it is best to display the mean date information contained in the frequency distribution on a map. A Synagraphic Computer Mapping (SYMAP) program was employed in the analysis of the Camden data because this program has the ability to graphically depict spatially disposed quantitative variables, in this case unit dates or artifact classes by weight or count, and qualitative variables, such as the presence or absence of particular types of archeological data. It accomplishes this by assigning values to the coordinate locations of data points, here the positions of the archeological test units (Dudnik 1971). The patterns formed by these values measure the intensity of occurrence of the particular variables under consideration and may be read in much the same manner as the contour lines on a topographic map. It is important to remember, however, that the patterns produced by the SYMAP program are not pictures of the entire contents of the site, but rather projections of the total based on the sample gathered. Although some distortions may be present, it is emphasized that the patterns displayed on the SYMAP are true reflections of actual patterns in the archeological record.

The distribution of settlement through time should be best indicated by the most temporally significant artifacts at the site, ceramics. Not only do they exhibit a great deal of variation through time, but they also occur over much of the site making it possible to derive reliable mean dates for nearly all areas sampled.

Four test implications pertain to the overall form of the settlement through time. First, the earliest occupation should be not only small in size but also spread out over the site area. It should represent the scattered structures and activities of Camden's first occupants. Second, the middle period should be consolidated and located more centrally in

the site area. Because of the assumed northward movement of settlement in Camden, a marked difference in the spatial distribution of sample units by date should occur with the earlier units exhibiting a more southerly distribution than those of a later date. Third, the latest settlement at the site should also exhibit a scattered distribution, representing the remaining structures or clusters of structures left from the earlier, more extensive occupation. Such a changing pattern has been observed archeologically in frontier towns of the colonial period in Virginia (Lewis 1975a) where it preceded the abandonment of the site. Finally, the general northerly movement of settlement beyond the limits of the 1781 period townsite should be observable.

In order to display the shifting spatial patterns of settlement through time, a SYMAP program was run segregating the sample units by ranges derived from the mean ceramic dates. The year 1790 was chosen as the midpoint of the occupation because it closely approximates the mode of the frequency distribution of sample unit dates. The length of the temporal ranges represented on the map was determined by calculating 1 standard deviation (8.31 years) and defining this period on either side of the midpoint date. This essentially divides the period of heaviest occupation in half (1781-1790-1798) and permits the observation of spatial change during this time. The units with mean dates falling outside of 1 standard deviation were lumped into 2 categories, representing the earliest (1763-1781) and latest (1798-1820) occupation periods of the site. Those areas for which no dates are available are so distinguished on the map.

It must be emphasized that the temporal contours represented on the SYMAP are based upon the means of unit occupations, of which the ranges are unknown. For this reason the contours should be seen as guides to the general flow of settlement intensity rather than as temporal limits to the occupation of any particular area on the site.

An examination of the resulting SYMAP (Fig. 38) illustrates the form and change of the patterns of occupation. When viewed temporally, a definite pattern of movement emerges from the distribution of the unit dates. Areas of early occupation are visible in all parts of the site. They take the form of small, noncontiguous clusters presumably representing scattered activity areas. One major group is situated just east of Broad Street and another in the southeast part of the town. Scattered concentrations are also located in the western parts of Areas 1 and 3 and one lies adjacent to Broad Street.

These areas of early occupation seem to have expanded outward from the scattered loci. It will be noted that each area of pre-1781 settlement is always contiguous with those areas occupied during the immediately subsequent period. During this second period, the occupation grew in a continuous pattern over a large portion of the southern part of Area 1. Settlement also seems to have expanded west of the limits of the 1781 period town.

During the third period of settlement (1790-1798) the occupied area expanded to cover most of the remaining area explored in the archeological investigations. Like that of the previous period, it forms a large continuous mass that lies contiguous with areas of earlier settlement and appears to be

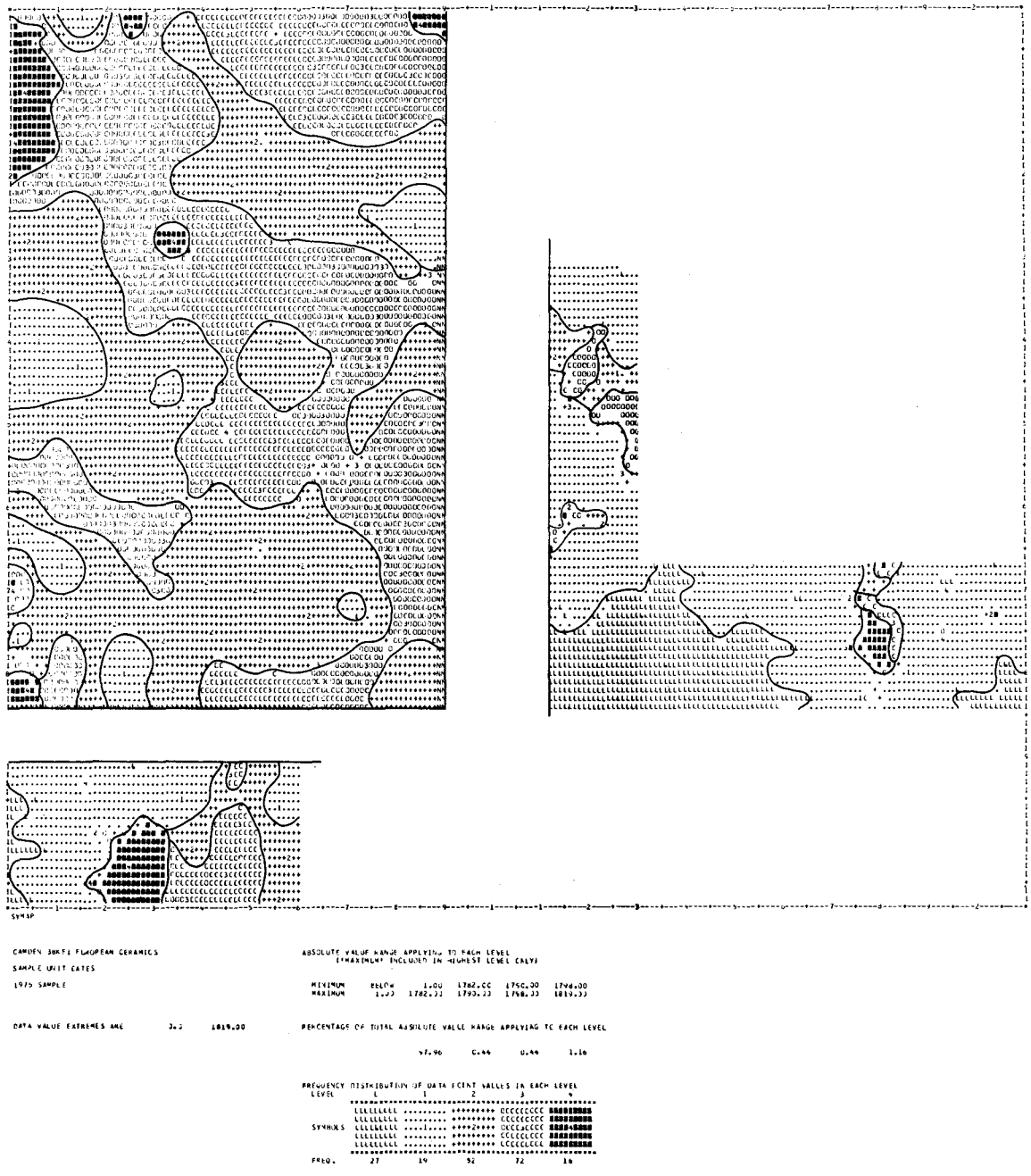

FIGURE 38: Spatial Distribution of Sample Unit Mean Ceramic Dates.

a direct outgrowth of the latter. It is important to note that in Area 1 a significant northerly shift is apparent at this time and the occupied area now extends north beyond the limits of the Revolutionary War period town. The greatest and densest occupation also appears to have occurred during this period. In Area 2 an occupation is present during the third period, having expanded southward from an earlier concentration. Second and third period settlement is much less evident in Area 3 where it forms only 2 small concentrations. One post-1790 occupation appears to be a portion of a much larger area extending eastward into the baseball field.

The areas of post-1798 activity appear as islands within the expanse of third-period occupation and seem to represent contractions of the more widespread previous settlement. Like the first-period settlement at the site, these fourth-period areas are small, scattered, and isolated from one another. Six principal concentrations occur. Four are found in the northern part of Area 1, and 3 of these appear to extend to the north and west. None are adjacent to Broad Street. A fifth concentration occurs in the southern edge of Area 1. One concentration lies in the southern part of Area 2 and appears to be the remnant of the third-period occupation there.

Only a single sample unit yielded a ceramic mean date (1833) falling after the period of the town's occupation. It lies on the northern edge of Area 3 and is characterized by the only large concentration of ironstone-whiteware on the site. Apart from this lone area of late settlement, the site does not appear to have been occupied later than the first quarter of the nineteenth century. Presumably the general northward shift of settlement, most noticeable in Area 1, resulted in the relatively rapid abandonment of the old settled area after the peak of 1790, and apparently little of the old town remained to be affected by the disastrous fire that destroyed much of the area adjacent to Broad Street.

Unfortunately the destruction of a substantial portion of the surface of Area 3 has prevented the extensive exploration of temporal patterning in the eastern half of Camden. Future investigations in the area now occupied by the baseball field and the football stadium, however, should help to define more clearly the town's early growth in this area.

Area 2, on the other hand, yielded a substantial amount of material dating throughout the span of Camden's occupation. It appears to represent the development of a relatively isolated activity, perhaps the brewhouse which documents indicate occupied this general area at least until the end of the eighteenth century.

In summary, the above discussion of the changing form of the historic occupation of Camden illustrates not only the predicted rise and decline of contiguous settlement, but also a movement of settlement through time, eventually beyond the northern limits of the Revolutionary War period settlement. It is interesting to note that in addition to the major area of compact settlement north of Meeting Street, an occupation of limited size yet long duration is evidenced just to the south. The virtual absence of archeological contexts dating after 1819 implies the abandonment of this part of Camden by the second quarter of the nineteenth century.

2. The second hypothesis relates to the distribution of settlement in Camden throughout the period of its occupation. It is postulated

that the colonial settlement tended to lie adjacent to the significant routes of transportation and communication connecting Camden with the outside world. At Camden this road would, of course, be Broad Street which was the principal overland route to Charleston.

Such a settlement pattern is suggested by the Greene map of 1781, but this arrangement also has precedent in medieval and postmedieval English settlement layouts. It has been pointed out that Camden's town plan essentially follows the grid design with central square utilized in English colonies in Ulster, but, unlike its Old World progenitor, did not serve as either a military community to secure the surrounding area or as a principal entrepot. Despite a symmetrical rectangular layout designed for orderly expansion, the eighteenth century town appears to have occupied only the 2 blocks south of the main square with the principal public buildings situated to the north.

This arrangement is strikingly similar to that of medieval "two-row" settlements which were established along transportation routes to take advantage of trade (Page 1927: 448). These linear settlements consist of 2 rows of structures with yards in back, facing one another across an open space, often no wider than a street (Roberts 1973: 48). Cross-streets occur in this type of settlement, but, in general, structures on them do not extend far from the main street.

If it is assumed that colonial Camden represents a two-row settlement, then the distribution of artifacts in the archeological record should reveal a settlement pattern similar to that found in European villages of this type. Perhaps the most significant material element related to the overall pattern of settlement is the distribution of structures. Archeologically this should be evidenced by the differential occurrence of architecturally-related materials across the site. This class of artifacts would include such items as bricks, nails, window glass, and other artifacts associated with the construction of buildings. Even where extensive demolition of the actual structure has occurred, the distribution of these artifacts may be relied upon to provide evidence of its existence (see Lewis 1975c: 67-70; Carrillo, et al. 1975: 57).

The distribution of architecturally-related artifacts, including those in features, at Camden as displayed by the SYMAP program appears in Figure 39. It clearly shows the presence of at least 17 structures. Seven of these are arranged parallel with and roughly adjacent to Broad Street, 5 on the west side and 2 on the east. In addition to paralleling the main thoroughfare of the settlement, the distribution of structural remains implies the presence of 2 roads turning off Broad Street and running west at right angles to it. The more southerly of these is Meeting Street off of which are situated 5 structures to the north and 1 to the south. The other thoroughfare is an unnamed road or alley situated about three-quarters of the way between Meeting Street and the north line of the palisade wall. Six structures occur adjacent to this road. The Greene map (Fig. 14) illustrates an alignment of 5 structures in approximately this position, suggesting that the northern cross-street existed as early as 1781. Its absence on both the Heard map of the early 1770's and the 1798 plat, however, seems to indicate that it was not in use long before or after this time, though it may have persisted as an alley providing access to the rear of structures located along Broad Street.

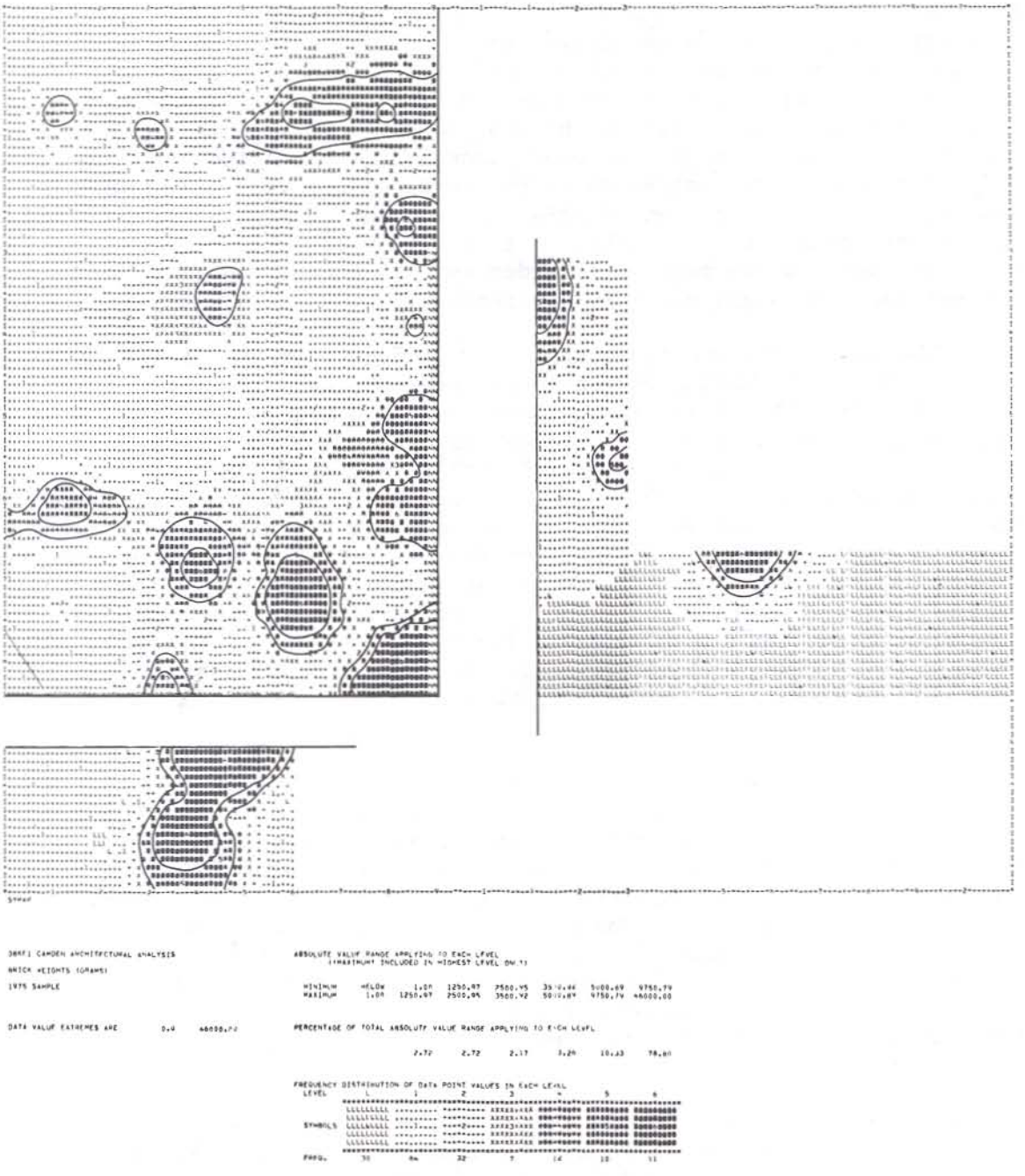

FIGURE 39: Spatial Distribution of Brick and Architectural Features -- Structural Pattern.

Only 3 intact structural features were uncovered in the excavations. The first is a row of single bricks laid side-by-side, 1 course deep and running in an east-west direction in Pit N5090 E4755 (Fig. 40). Along the eastern edge of the pit evidence of a second row was found running southward in a direction perpendicular to that of the first. The bricks are not mortared and are not associated with a footing trench. Rather, they appear to have been set on a ground surface prepared in such a manner that the tops of all the bricks formed an even surface. In several low places brick fragments had been placed under the bricks in order to bring the tops of the latter up to the level of the adjoining bricks. At present, the identification of this feature cannot be made due to the small portion exposed. It is possible that it supported a light frame structure or it may have formed part of a border such as those found in formal gardens and around gravelots in cemeteries.

The second feature is located in Pit N5435 E4580 and consists of a heavy wooden post about 0.7 foot in diameter set in a pit about 3.0 feet in depth (Fig. 41). This pit had been excavated into the sterile red clay and the post placed in it. The space surrounding the post was then filled with mottled clay containing several artifacts. The 12 ceramic sherds yielded a mean date of 1786 for this feature. The size of the post and the depth of its placement suggest that it was a vertical support member for a large structure, the identification and extent of which are unknown. Although not as common as the use of horizontal framing in the architecture of English North America, vertical framing is associated with British colonial sites (Kniffen and Glassie 1966: 47). Following the building's destruction, the post apparently began to decay and as it did the mottled clay fill collapsed into the cavity to seal off, and consequently preserve, the wooden post.

The third feature consists of a 1.0 foot thick layer of rubble in Pit N4930 E4675. The feature does not contain any intact structural elements and appears to represent rubble from a nearby collapsed structure lying on the old land surface. Numerous eighteenth century artifacts are associated with this feature and it is possible that it represents the remains of a portion of Joseph Kershaw's brewing complex, the only activity known to be associated with this area during this time. Only a portion of the brick rubble was removed in order to determine the depth of this feature. The remainder was left in place to be investigated at some future time along with the rest of the larger structural feature to which it belongs.

The interpretation of structural remains on the east side of Broad Street is complicated by the limited extent of the archeological investigations there and the disturbed condition of this part of the site. Evidence of 3 structures is present here and these concentrations of architectural artifacts correspond roughly to the positions of buildings indicated on the Greene map. Two are located adjacent to Broad Street while the third lies to the rear of them. Unfortunately the surface adjacent to the northeast corner of Broad and Meeting Streets has been removed and it is impossible to search for evidence of the structure shown there. The remains of all other structures indicated on the Greene map lie beneath the public facilities in Area 3.

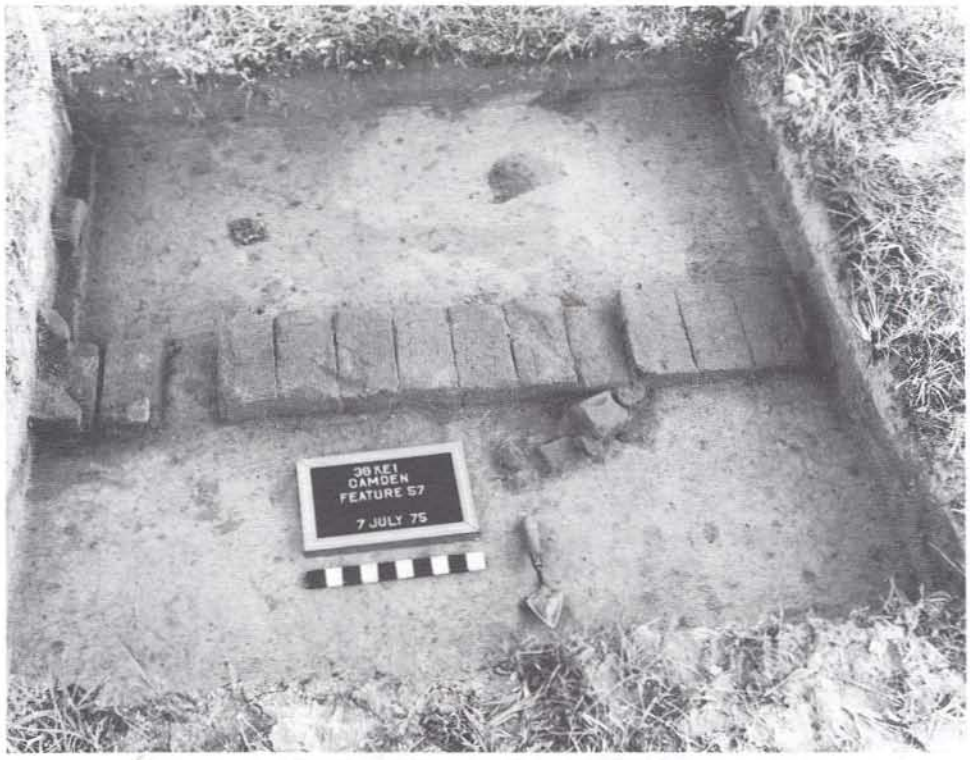

FIGURE 40: Feature 57 -- Brick Architectural Feature in Area 1.

FIGURE 41: Feature 26 -- Post *in situ* with cross-section of pit visible in profile.

In summary, the general form of the colonial occupation at Camden is basically that of an English two-row settlement, with a single main street and 2 cross-streets. This pattern of settlement appears to have evolved in spite of the surveyed town plan's form so as to maximize access to the primary route of transportation and communication connecting the frontier town of Camden with the entrepot of Charleston on the one hand and the scattered interior settlements on the other.

3. It has been shown in the previous discussion that access to the major thoroughfare of the settlement seems to have been the primary consideration governing the placement of structures within the settlement. This pattern of settlement is clearly visible in Figure 39. In addition to access, however, it is likely that certain other variables also affected the placement of structures in the settlement. It has been postulated that areas marked by a topography greatly divergent from that of the settlement site in general or characterized by terrain features unsuited for settlement would have been avoided as living sites. An examination of such areas at Camden should provide the information necessary to determine the validity of this statement.

The site of Camden contains only a single area where the conditions listed above might apply. This is the southeastern portion of Area 3 in which a depression characterized by low, wet ground was present in colonial times (Fig. 36). The topography of this area is likely to have discouraged construction activity, precluding actual settlement here. In contrast, the higher ground to the north and west of the depression would have provided a gently sloping surface much more amenable to habitation. This situation should be reflected archeologically by an absence of structural remains or features in the low lying areas in contrast to their more likely occurrence on the surrounding higher elevations.

An examination of the southern portion of Area 3 reveals a virtual absence of structural material in the depression (Fig. 39) or on the low ground to the east. The higher ground just to the northwest contains not only a high concentration of architectural material but also evidence of a footing trench, indicating a structure aligned roughly parallel to the contour of the slope on which it stood. The area to the west of the depression could not be examined due to the removal of the historic surface here.

Intrasite activity patterning and settlement pattern

4. In order to examine the gross distribution of settlement in colonial Camden, it has been useful to define the locations of structures and structural features at the site. In the discussion of the present hypothesis it will be necessary to more closely consider this distribution in order to compare Camden to contemporary European settlements which performed similar roles. It is postulated that due to the concentration of economic, political and other socially integrating activities in the frontier town and the dispersal of the supporting farming population in the surrounding countryside, the number of structures in the frontier town would be fewer and the overall size of the settlement less than that of a comparable European market town.

This hypothesis may be examined archeologically through several test implications. The first states that the number of structures revealed in the archeological record will be less than that at the lowest end of the range of structures found in comparable settlements in England. Second, because fewer structures were built, it is assumed that the need for access to commercial street frontage was not as acute in a frontier town as in an English market town. For this reason, the distribution of structures should be more dispersed along the thoroughfares in contrast to the nearly contiguous clustered pattern of settlement in English towns. This dispersal should be especially noticeable in Camden because it would directly conflict with the surveyed pattern of long, narrow lots designed to allow a maximum number of property owners to share the commercially important street frontages (see Taylor 1974: 64). Third, due to the more widespread spacing of structures, a variation in the size and shape of their accompanying tofts* should be discernible. Rather than the long, narrow, rearward-facing tofts characteristic of English settlements, those in Camden should represent an adaptation to the more dispersed settlement pattern of the frontier. The tofts here may have extended outward in more than one direction and should exhibit a diversity of forms.

With regard to the first test implication comparative information on the size of eighteenth century English market towns indicates that these settlements varied greatly in size. While provincial centers such as Liverpool and Bristol engaged in extensive overseas trade and respectively supported populations of 60,000 and 50,000 persons by mid-century, medium-sized towns like Leicester, Northampton, and Exeter contained less than 12,000. Smaller centers supporting only periodic markets often had populations ranging from 800 to several thousand (Patten 1973: 129-130). A rough conversion of these figures to the number of structures in a given settlement may be made by dividing the mean family size of 4.75 (Laslett 1972: 126) into the total population of the settlement, assuming that most structures housed at least a single family. The results of this computation with regard to the settlements mentioned above indicate that the number of structures ranged from 168 to 12,630. These figures agree with those derived by F. M. Eden (1973: 32-33, Table 8), who in 1800 published an estimate of the number of houses in contemporary English towns. His figures show a range from 116 to 12,000. The area of colonization served by Camden must certainly have contained a population numbering in the thousands. Kershaw County itself contained over 7,000 in 1800 (Kershaw County Historical Society 1970: 21). Within the settlement of Camden, however, we may

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*The term "toft" is used here to refer to the immediate site of a dwelling or other principal structure and its outbuildings. It is both a spatial and functional unit in that it designates the area within which those activities that lie closest to and are most intimately concerned with the functions of the principal structure occur. As such, the toft is not confined to a specific size or form and may vary considerably according to the nature of the structure with which it is associated. In an urban settlement a toft might comprise an entire holding; however, in a rural settlement where holdings would include agricultural fields the toft includes only that part of the holding in which activities immediately associated with the household are carried out.

predict the population, and consequently the number of structures, to have been only a small part of this and certainly less than that of the smallest English market towns.

Archeological investigations uncovered evidence of 13 clusters of architectural material assumed to represent structures west of Broad Street in Area 1 (Fig. 39). If this number is doubled to estimate the number of structures in the entire 1780 period settlement, including the portion now inaccessible to archeological investigation, a total of 26 structures is indicated. This number is slightly above the 21 large structures shown on the Greene map yet is far below the 116 structures suggested as the lower limit for settlements possessing urban functions analogous to those of Camden.

A comparison of the settlement pattern of Camden with those of contemporary English towns immediately reveals the discrepancy in the layout of the individual structures assumed in the second test implication. Figure 42 illustrates the settlement pattern of Leicester, a regional English market center, as it appeared in the mid-eighteenth century. It is clear that here structures lay adjacent to the major roads as in Camden, but were constructed in a contiguous arrangement. This row pattern of clustered settlement contrasts markedly with the pattern of uneven dispersal of structures situated along the principal roads in Camden. The latter, however, is expected given the absence of pressure to intensively occupy street frontages. The degree of dispersal of structures at Camden may be expressed quantitatively by calculating a nearest neighbor statistic (R) based upon the spacing between the concentrations of architectural materials there (Appendix E). This value expresses the degree to which the distribution of a population, in this case structures, deviates from a random expectation (1.0) toward clustering (0) or even spacing (2.149) (Clark and Evans 1954: 451). The value of R for the Camden structures is 1.558, indicating a nearly random distribution of structures over the site with a significant deviation in the direction of even spacing.

A comparison of the archeological structural pattern with the layout of lots based on the Heard map (Fig. 13) reveals that although several of the structures seem to have been restricted to the boundaries of individual lots, many of the concentrations overlap into several (Fig. 43). This suggests that the structures represented were very likely constructed on holdings composed of more than one lot. It will be recalled that documentary evidence indicates that throughout the period of its occupation, colonial Camden remained divided into fairly large tracts (Fig. 27). Based upon the ownership of land in the late eighteenth century, the distribution of architectural artifacts indicates the presence of 4 structures on the Adamson property of 1780, 3 on the Chesnut property of 1777, 1 on the Cantey property of 1786, 5 on the Ancrum property of 1786, and 1 on the Kershaw "brewhouse" land south of Meeting Street. East of Broad Street 2 concentrations are situated on the Loocock property of 1786, and 1 lies on the property he sold to Dinkins in 1795. Because the actual positions of particular buildings are not obtainable from documentary sources, it will not be possible to assign individual identities or functions to the architectural concentrations until a more complete examination of the contents of each is made later in this report.

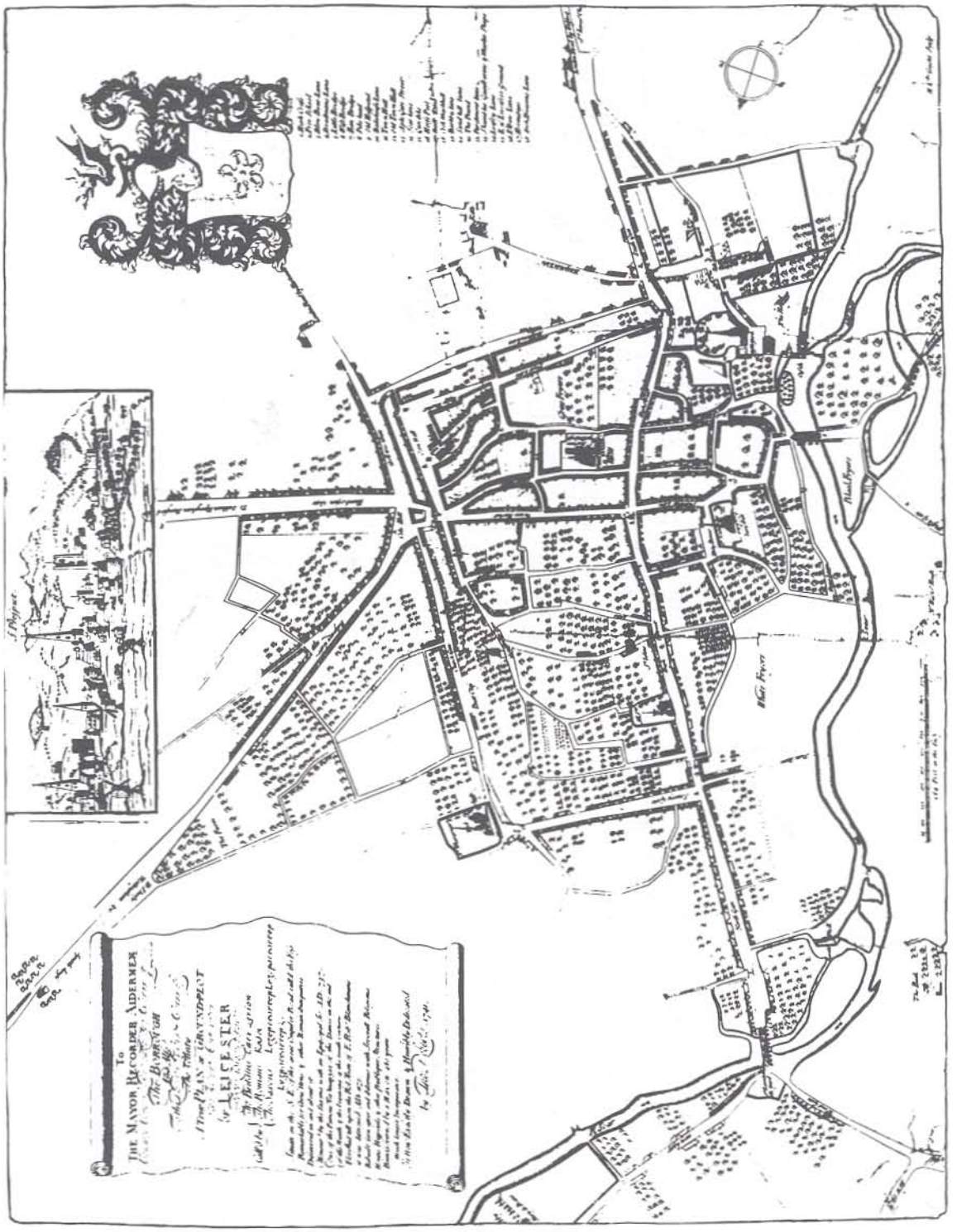

FIGURE 42: Plan of Leicester, an English Market Town, as it Appeared in 1741.

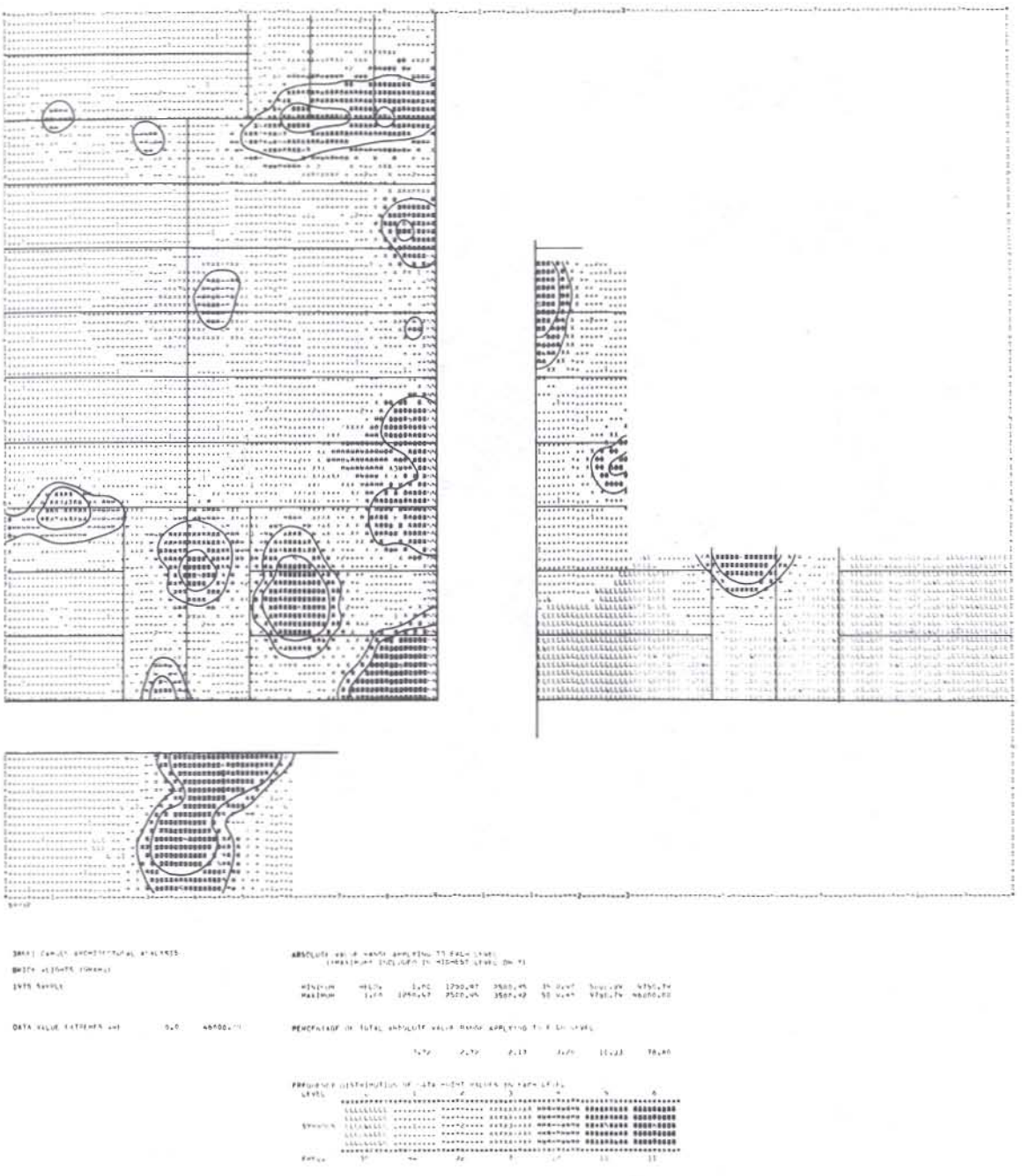

FIGURE 43: Structural Pattern with Lot Boundaries Superimposed.

Closely related to the structural pattern is the distribution of tofts referred to in the third test implication. These areas lie adjacent to primary structures and should contain evidence of those activities associated with them. Because this activity may vary with the function of the structure, it is difficult to define tofts over the site as a whole by attempting to recognize particular activities that might not be common to all tofts. It is also unwise to define tofts on the basis of the total extent of the accumulation of artifacts there, for this may vary considerably with the nature of the occupation as well as the length of its occupation. It should be possible to recognize tofts on the basis of the occurrence of certain physical features associated with the activities normally carried out there. Toft activities may be broken down into 2 basic categories, disposal and maintenance-storage, each of which is generally associated with a different type of feature.

Studies of medieval and postmedieval living sites in England have shown that the toft was the general area for the disposal of household refuse which was buried in pits or scattered on the surface (Hurst 1971: 116). The continual use of the toft for this purpose would eventually result in the development of 1 or more primary refuse areas which may represent the discard of either single or multiple activities carried out there. A similar patter of disposal has been noted in English colonial sites in North America. Here the main deposition took place to the rear of the structure with secondary middens occurring further to the rear and to the sides (South n.d.: 72). The extent of the areas used for the disposal of refuse indicates an expanded toft as opposed to the narrow tofts located to the rear of structures erected in the contiguous European pattern. The expanded toft may be seen as an adaptation to a more dispersed settlement pattern and should be characteristic of Camden. The extent of the toft may be ascertained archeologically by the presence of pit features associated with the disposal of refuse.

In addition to the use of the toft as a disposal area, it was also an area of intense activity related to the primary function of the primary structure. As such, the toft usually contained outbuildings in which activities were conducted and tools and materials were stored. Such outbuildings might include privies, wells, wagon sheds, workshops, storage sheds, barns, corn cribs or other structures for storing cereals, smokehouses, and general purpose sheds (Hurst 1971: 115; Noël Hume 1969; Sloane 1967). Evidence of outbuildings may often be quite scanty because of their light construction and temporary nature. Archeological features indicating the presence of outbuildings may include pits, if the structure extended below the surface in the manner of a privy, as well as postholes dug to secure the supporting members of light structures. Concentrations of structural materials may be present if the outbuilding was of substantial construction, and it is possible that some of the structures defined on the basis of architectural materials represent outbuildings.

It is expected that a comparison of the distribution of the pit and posthole features at Camden with the archeological structural pattern will yield an approximation of the toft patterns associated with structures situated on the site. The results of this comparison are illustrated in Figure 44. It reveals a total of 12 areas of concentrated pit features and 14 areas containing postholes. These appear to cluster around the

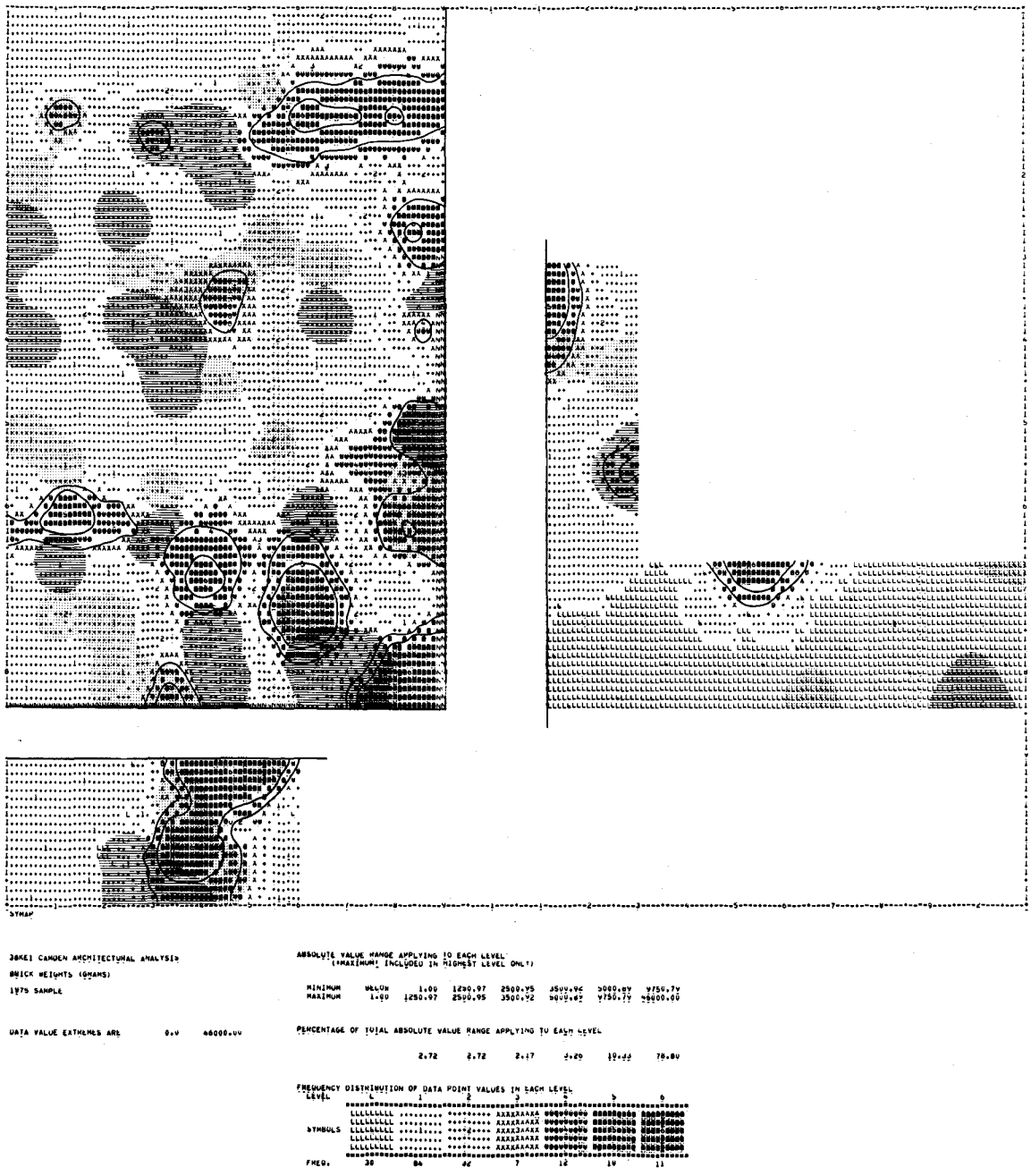

FIGURE 44: Structural pattern with pit and posthole features superimposed. Pit features are indicated by stippled shading and posthole features by the horizontal line pattern.

structural remains to form 10 distinct areas of localized activity which may be tentatively identified as tofts for comparative purposes. These are designated Toft Areas 1-10 and are illustrated in Figure 45. Several of the toft areas contain evidence of more than a single structure and may reflect complexes of related buildings. The expected toft pattern is clearly revealed in the distribution of pit and posthole features at Camden. Tofts here seem to occur both to the rear and the sides of structures and several buildings appear to have been totally surrounded by them. The expanded toft appears to be the universal form except in the case of the structure on the northwest corner of Broad and Meeting Streets where the toft is confined to a narrow strip behind the building.

Although defined only in an approximate manner, the toft pattern at Camden permits the site to be divided into smaller units for the purpose of analysis on the basis of assumed activity localization. It is probable that each of the units defined will yield information relating to the function of the cultural activities that once took place there.

In summary, the overall pattern of structures and tofts at Camden reveals a settlement much smaller and more dispersed than a contemporary English settlement with comparable urban functions. The large tofts at Camden contrast markedly with their narrow, confined counterparts and fall within the pattern characteristic of other English colonial settlements of the eighteenth century. These settlement characteristics clearly reflect a pattern adapted to an absence of a resident supporting population and, consequently, a reduced competition for commercial street frontages.

5. and 6. These hypotheses are concerned with the identification and functional interpretation of past activities within the settlement of Camden. Each hypothesis deals with the recognition of a separate class of activity assumed to be associated with urban functions in the frontier town. Because activities are likely to be assignable to individual spatial contexts, it is possible to investigate such activities by examining specific areas of the site. The toft areas defined earlier may be assumed to approximate areas of activity locations and their comparison should provide the basis for the analysis of activities in the discovery phase of archeology at Camden.

The first hypothesis predicts that of the structural complexes present within the colonial town only a small proportion represent solely subsistence activity areas. Such structures would most likely be dwelling sites alone and should reflect mainly activities characteristic of the eighteenth century English domestic household. These might include the collection, processing, storage, and consumption of subsistence products; storage and repair of tools related to these activities; the housing of people and domestic stock; the disposal of domestic living waste; and to a lesser extent, some small scale manufacturing activities such as spinning or weaving. During this period rural cottage industries were well developed in England and many yeomen and their families were engaged in a variety of specialized trades to supplement their income from agriculture (Thirsk 1973: 94; Notestein 1954: 76). Unlike England, however, the cottage industry system was undeveloped in the American colonies due to high labor costs, poor transportation and marketing facilities, and limitations imposed on colonial manufacturing (Leder 1972: 115). For this reason it is unlikely

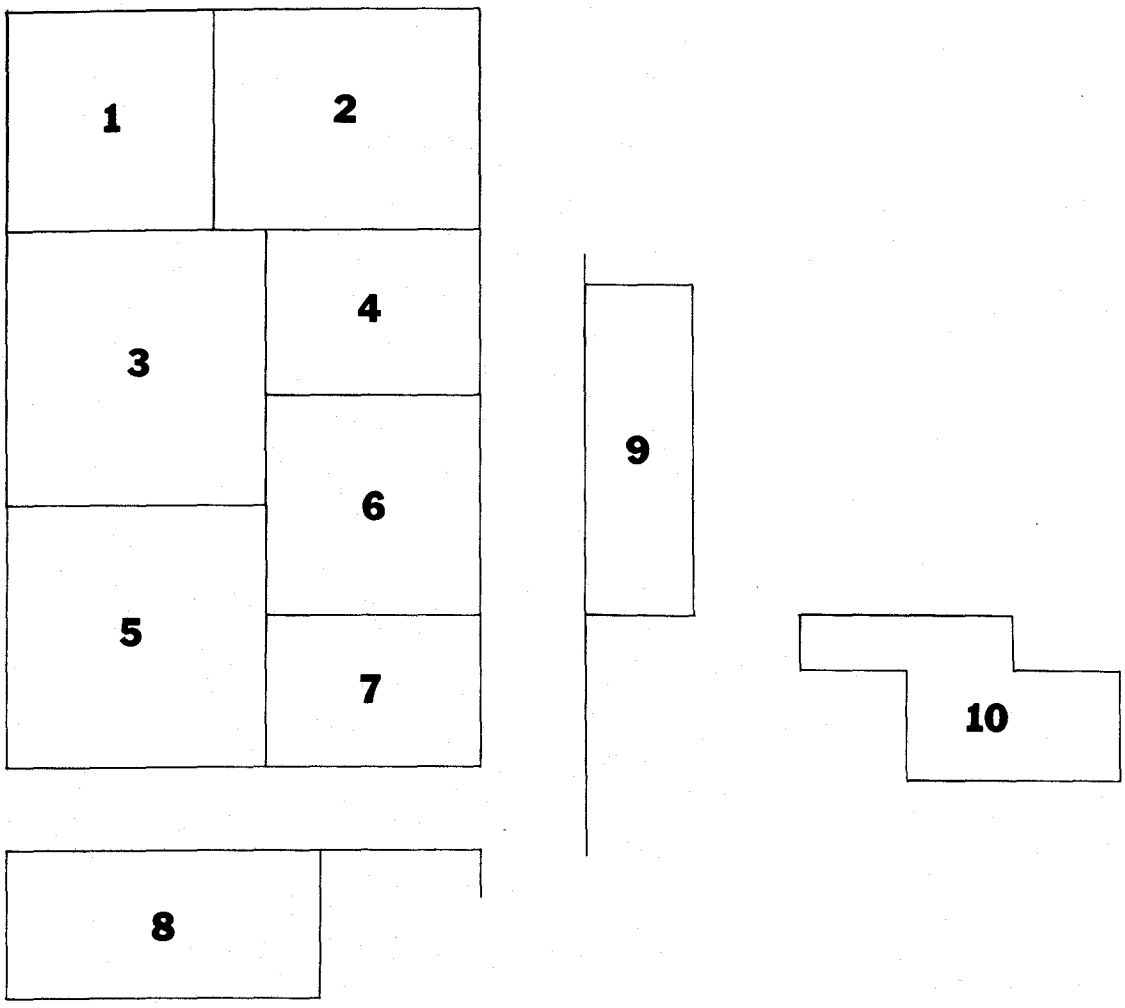

FIGURE 45: Plan of Toft Areas at Camden.

that evidence of extensive specialized manufacturing activities will be found to be associated with domestic structures on the frontier.

The second hypothesis predicts that the majority of the structural complexes in Camden are associated with the economic, social, and political activities centered there in the eighteenth century. Because of Camden's strategic position in the network of trade and communications in the back-country frontier, break-in-bulk, storage, and maintenance activities are likely to have predominated. Historical documents from the last quarter of the eighteenth century indicate that a number of merchants continuously maintained businesses in Camden and such specialized activities as black-smithing, tailoring, shoemaking, brewing, potterymaking, distilling, silversmithing, saddlemaking, tanning, watchmaking, and woodworking were carried out there between 1770 and 1800 (Schulz 1972: 105-109). The town itself also contained structures designed to accommodate the public for social and political purposes (Kirkland and Kennedy 1905: 19, 29).

It is difficult to ascertain how many of these activities were actually carried out within the limits of the 1780 settlement, however, due to several factors. First, many industrial activities involving the initial modification of raw materials (e.g., pottery clay) were situated near the source of these materials, often away from a densely settled area (Thirsk 1973: 103). Others (i.e., milling) would have been located adjacent to sources of natural power, namely running water. Finally, there were industries (i.e., tanning) that required a location near running water for processing (Diderot 1959, Pl. 370). It is likely, then, that industries of the sort mentioned above would have occupied sites peripheral to that of the nucleated settlement. Due to the expansion of Camden to the north during the 1790's, it is also possible that some of the later industrial and commercial activities would lie outside of the area sampled during the excavations.

Other nondomestic activities, however, may be expected to have taken place within the area enclosed by the 1780 palisade. These would, of course, include the stores, tavern, and brewhouse listed in documentary sources, but may also involved some of the other small industries mentioned.

Although the activities discussed here may be generally typified as nondomestic in nature, it is necessary to point out that during the eighteenth century most small-scale economic activities were closely associated with the living areas of those who worked at them (Patten 1973: 136). Therefore, it must be understood that activities referred to as nondomestic in this report may be characterized by the remains of a domestic occupation in addition to those of the specialized activity carried out there.

Because of the complementary nature of the 2 hypotheses considered here, it is possible to deal with them as a single hypothesis in the discussion of the archeological data. Briefly, this may be stated in the following form. Evidence of both domestic and nondomestic activities should be discernible at Camden with the latter being predominant. In order to substantiate this hypothesis it is necessary to develop test implications predicting the nature of the archeological evidence that can

identify strictly domestic activity occupations on the one hand and combined domestic-specialized activity occupations on the other.

First, it is possible to compare the site as a whole with other colonial sites which occupied a similar position on the frontier. This comparison will not aid in the comparison of intrasite activity patterns but, rather, should help determine whether or not the same general artifact pattern present at other comparable sites occurs at Camden. South (n.d.: 155) has recently recognized several broad intersite artifact frequency patterns based upon the relationship of 8 categories (groups) of artifacts recovered from eighteenth century British colonial American sites. An examination of the sites at which each pattern is discernible reveals that the "Frontier Pattern" is generally associated with military and trading post sites on the periphery of or beyond the limits of the actual area of colonization. The "Carolina Pattern," on the other hand, is associated with settlements inside the area of colonization. The differences observed in the 2 patterns have not been linked to specific functional differences in the types of sites in which they occur; however, South (n.d.: 164) has suggested that the higher frequency of the "kitchen group" artifacts in Carolina Pattern sites is closely related to the proximity of these sites to the supply network of the colony. The efficiency of the colonial trade and communications subsystem with regard to the distribution of imported manufactured goods is reflected by the consistency of this frequency in sites from several British American colonies. This test implication predicts that Camden, as a site situated within an area of colonization, will yield an inventory of artifacts which conforms to that of South's Carolina Pattern.

The second test implication states that patterned intrasite variation in the composition of the archeological record will be discernible at Camden. The basic units of intrasite comparison at this site will be the 10 toft areas shown in Figure 45. These areas may be differentiated on the basis of activity by first dividing the archeological materials within each toft area into artifact categories and then comparing the category frequencies by toft area. On the basis of this comparison it should be possible to distinguish patterned artifact variability among the toft areas. This patterning should permit us to combine toft areas into groups and compare the patterns characteristic of each group with regard to possible functions. The second test implication assumes that the patterning discernible in the archeological record will permit the recognition of larger activity patterns within the site.

Third, it should be possible to differentiate these larger patterns on the basis of function through the identification of particular artifacts or clusters of related artifacts indicative of specialized activities. Identification may also be inferred from the nature of the differing categories of artifacts which comprise the larger intrasite patterns. It is predicted that an examination of the data will reveal dissimilarities between these intrasite patterns which are related to functional differences between the classes of activities carried out there. It is also likely that functionally specialized artifacts will be present in those areas which show an indication of having supported nondomestic activities.

The first test implication predicts a similarity in the artifact frequency pattern observed at Camden and that noted at comparable colonial

American sites. South's (n.d.: 125) Carolina Pattern illustrates the frequency relationships of artifact categories that have been abstracted from a number of British sites in the Carolinas. It represents a base line pattern with which the Camden data may be compared. A comparison of the 8 artifact category ranges and the frequencies of occurrence of these categories at Camden is illustrated in Table 1.

It will be noted that, in general, the Camden data category frequencies agree with those of the Carolina Pattern. The frequencies of 4 of the low categories (furniture, clothing, personal, and activities) vary from the Carolina Pattern range by as much as .3% and presumably are the result of sampling error due to the smaller size of the sample. The frequency of kitchen artifacts (2.2%) is greater in size and is very likely due to other factors. Perhaps the chief reason why the category of kitchen artifacts is larger in the Camden sample is that the Camden data represent a sample of the site as a whole, including those parts peripheral to the areas of heaviest activity. The Carolina Pattern, on the other hand, is based upon materials collected in intensive excavations of major site components, including structures, outbuildings, and recognizable midden deposits. This work is not likely to have sampled the scattered deposits evidenced in the stratified random sample. The inclusion of these deposits in the archeological sample is likely to increase the frequency of occurrence of kitchen artifacts because this category of artifacts presumably formed the greater part of scattered deposits than did architectural artifacts, the other large category in the South scheme. This situation is the result of the operation of several cultural transformation processes acting differentially upon the 2 categories of artifacts. Kitchen artifacts consist primarily of portable objects associated with the household. These would most likely have found their way into the archeological record through discard, a process that entailed their disposal and subsequent scattering in the toft. Architectural artifacts would also have accumulated as the result of discard, especially during periods of construction, modification, and repair (Green 1961). The greatest amount of deposition would have been due to its destruction following abandonment, a process involving in-place deposition of material near the site of its use, in this case a structure.

The difference in the distribution of these separate artifact categories may be illustrated graphically by comparing SYMAPs showing the relative occurrence of an artifact type representative of each category. The map of ceramics (Fig. 46), a kitchen artifact, indicates concentrations in certain areas but reveals a relatively heavy distribution over much of the site. The occurrence of nails (Fig. 47), a common architectural item, is much more restricted, with compact concentrations and a limited distribution over the site as a whole.

The closeness of the artifact frequency pattern at Camden to the Carolina Pattern may be seen in a comparison of the former to the predicted range of the latter (South n.d.: 142-144). The limits of this range are based on a computation designed to predict the range within which there is a 95% chance that the next set of data may fall. The predicted range is substantially wider for each artifact category as may be seen in Table 2. The frequencies of all of the Camden artifact categories fall within the limits of this range.

TABLE 1

COMPARISON OF CAROLINA PATTERN OBSERVED RANGES AND CAMDEN ARTIFACT CATEGORY PERCENTAGE FREQUENCIES

Artifact Class	Carolina Pattern Frequency Range (South n.d.: 125)	Camden Artifact Category Frequencies	Deviation	Artifact Class Totals
Kitchen	51.8 - 69.2	71.4	+ 2.2	17,134
Architecture	19.7 - 31.4	22.0	0	5,277
Furniture	0.2 - 0.6	0.08	- 0.12	18
Arms	0.1 - 1.2	0.2	0	52
Clothing	0.6 - 5.4	0.3	- 0.3	60
Personal	0.1 - 0.5	0.004	- 0.096	1
Tobacco pipes	1.8 - 13.9	3.1	0	750
Activities	0.9 - 2.7	2.8	0	683
Totals		99.884		23,975

TABLE 2

COMPARISON OF CAROLINA PATTERN PREDICTED RANGES AND CAMDEN ARTIFACT CATEGORY PERCENTAGE FREQUENCIES

Artifact Class	Carolina Pattern Predicted Frequency Range	Camden Artifact Category Frequencies
Kitchen	47.5 - 78.0	71.4
Architecture	12.9 - 35.1	22.0
Furniture	0 - 0.7	.08
Arms	0 - 1.5	.2
Clothing	0 - 8.5	.3
Personal	0 - 0.6	.00004
Tobacco pipes	0 - 20.8	3.1
Activities	0.1 - 3.7	2.8
Total		99.884

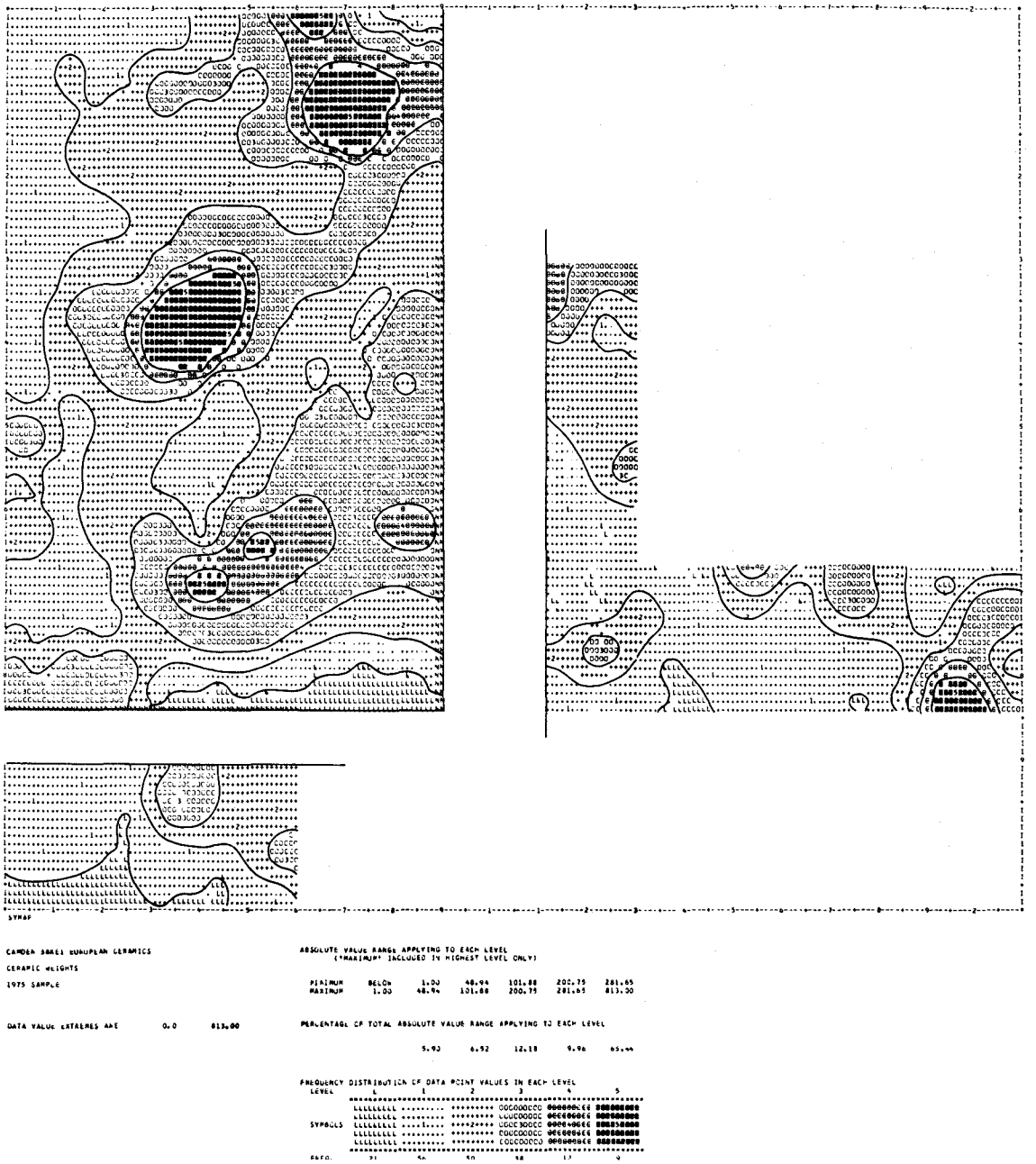

FIGURE 46: Spatial Distribution of Ceramic Artifacts.

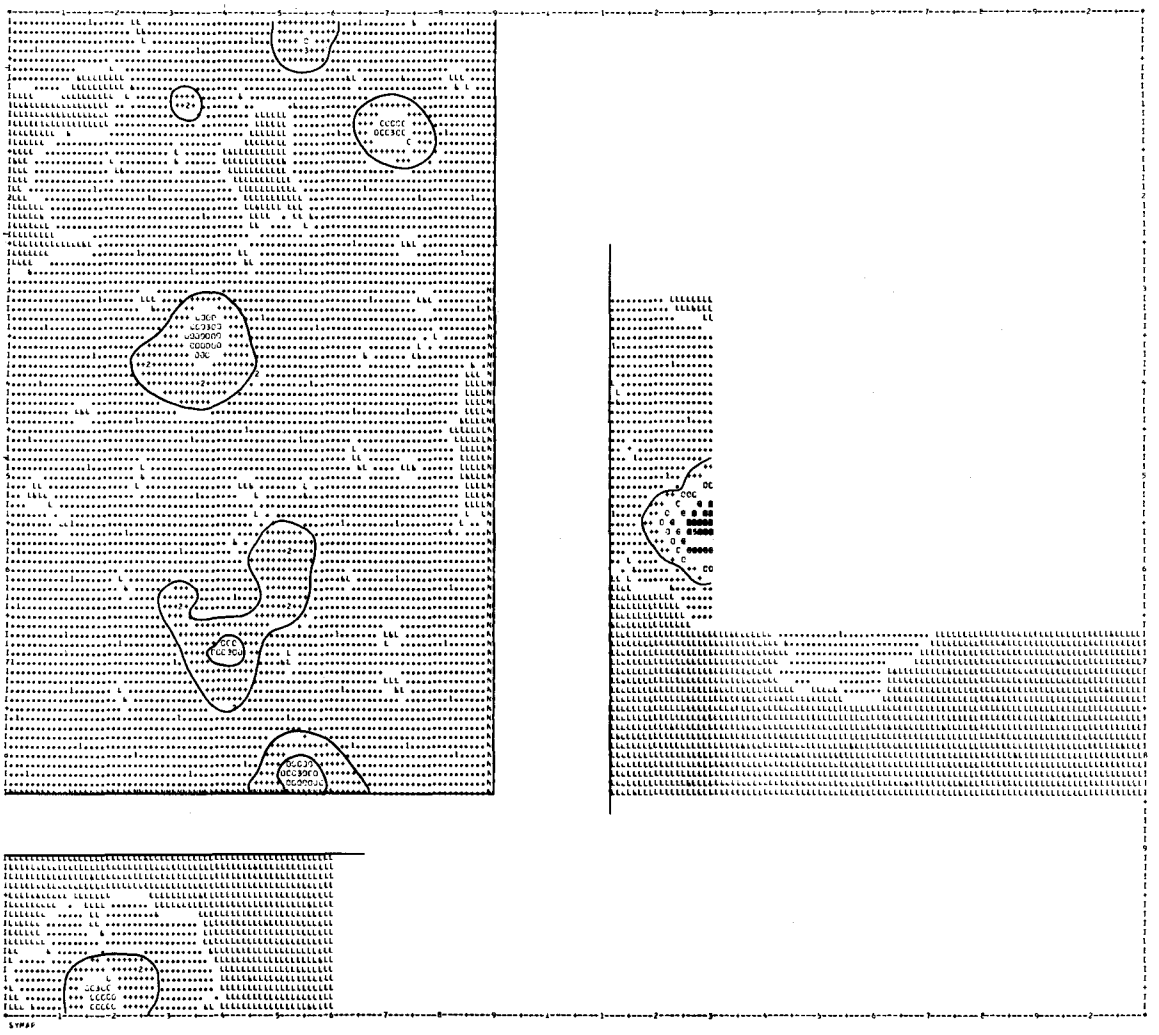

FIGURE 47: Spatial Distribution of Nails.

In summary, the Camden site as a whole may be seen to conform to the expectations of the Carolina Pattern. Adherence to this pattern does not, in itself, prescribe a specific function or set of functions to the settlement. It does, however, indicate a patterned similarity between Camden and other eighteenth century colonial sites of English origin.

The second test implication anticipates that intrasite patterns will be discernible based upon similarities in the frequency relationships between artifact categories. Before attempting to isolate functional categories of artifacts, it is necessary to examine artifact variation through the comparison of use categories such as those developed by South to measure intersite variation. Because this scheme is not designed to distinguish domestic from nondomestic activities, it will not be possible to identify these phenomena here. It is hoped only that a comparison of artifact category relationships will provide a measure of patterned variation in the archeological record.

A comparison of the Camden data by toft area arranged according to South's artifact categories is illustrated in Table 3. Several observations may be made concerning the numerical information revealed in this table. First, the range of the number of specimens per area varies from 865 to 5196. It is possible that this degree of variation has resulted in the misrepresentation of the smaller categories in some of the areas, however, it does not noticeably affect the percentage frequencies of the 2 largest, kitchen and architectural artifacts. The frequencies of these categories are portrayed graphically in Figure 48. The distribution of the toft areas based on these 2 variables may be divided into 2 groups on the basis of whether or not they fall within the predicted range of the Carolina Pattern.

The largest group is composed of those toft areas conforming to the Carolina Pattern. It includes Toft Areas 1-7, 9 and 10. It should be noted that while all the areas lie within the bounds of the pattern, they do not appear to cluster but, rather, seem to represent a linear progression. The distribution of the frequencies suggests only broad homogeneity among the areas based on these 2 variables. While all fit within the pattern, a great deal of variation appears to exist from one to the next. In order to further explore these differences with regard to function, however, it will be necessary to examine the data in terms of variables designed to reveal functionally significant differences among the toft areas at Camden.

The second group consists of a single toft area, 8. Unlike the other areas, it is characterized by almost equal percentages of kitchen and architectural artifacts. This quality places the area approximately midway between the limits of the Carolina Pattern and those of the Frontier Pattern (Fig. 48). Its peripheral position is reminiscent of the Hepburn-Reonalds structure (S7) in Brunswick Town, North Carolina. The relatively low frequency of kitchen artifacts recovered in the area of this structure suggested to South (n.d.: 171) a variation in the type of activities carried out there. This variation may have been due to the presence of mercantile activities in the case of S7 (South 1959: 19), however, it is not possible to assign such a function to Toft Area 8 at Camden on the basis of this similarity alone. It is clear, however, that

TABLE 3

COMPARISON OF SOUTH'S ARTIFACT CATEGORIES (GROUPS) BY TOFT AREA -- COUNTS

Artifact Category \ Toft Area	1	2	3	4	5	6	7	8	9	10	Totals
1. Kitchen	748	3952	3411	1290	1492	2051	1540	966	1077	607	17134
2. Architecture	280	896	641	397	750	432	535	824	321	201	5277
3. Furniture	0	2	4	4	1	1	5	0	1	0	18
4. Arms	2	14	4	5	9	5	10	1	2	0	52
5. Clothing	1	13	17	2	9	8	7	0	2	1	60
6. Personal	0	1	0	0	0	0	0	0	0	0	1
7. Tobacco pipes	36	177	210	58	65	36	64	16	67	21	750
8. Activities	53	141	69	22	110	72	93	41	47	35	683
Totals	1120	5196	4356	1778	2436	2605	2254	1848	1517	865	23975

COMPARISON BY SOUTH'S ARTIFACT CATEGORIES (GROUPS) BY TOFT AREA -- PERCENTAGES

Artifact Category \ Toft Area	1	2	3	4	5	6	7	8	9	10	% of Totals
1. Kitchen	67	76	78	73	61	79	68	52	71	70	71.4
2. Architecture	25	17	15	22	31	17	24	45	21	23	22.0
3. Furniture	0	.04	.1	.2	.04	.01	.2	0	.07	0	.08
4. Arms	.2	.3	.1	.2	.4	.2	.5	.01	.1	0	.2
5. Clothing	.1	.3	.4	.1	.4	.4	.3	0	.1	1	.3
6. Personal	0	.03	0	0	0	0	0	0	0	0	0
7. Tobacco pipes	3	3	5	3	3	1	3	1	4	2	3.1
8. Activities	5	3	2	1	5	3	4	2	3	4	2.8
Totals	100.3	99.97	100.6	99.5	100.84	100.61	99.0	100.01	99.27	100	99.88

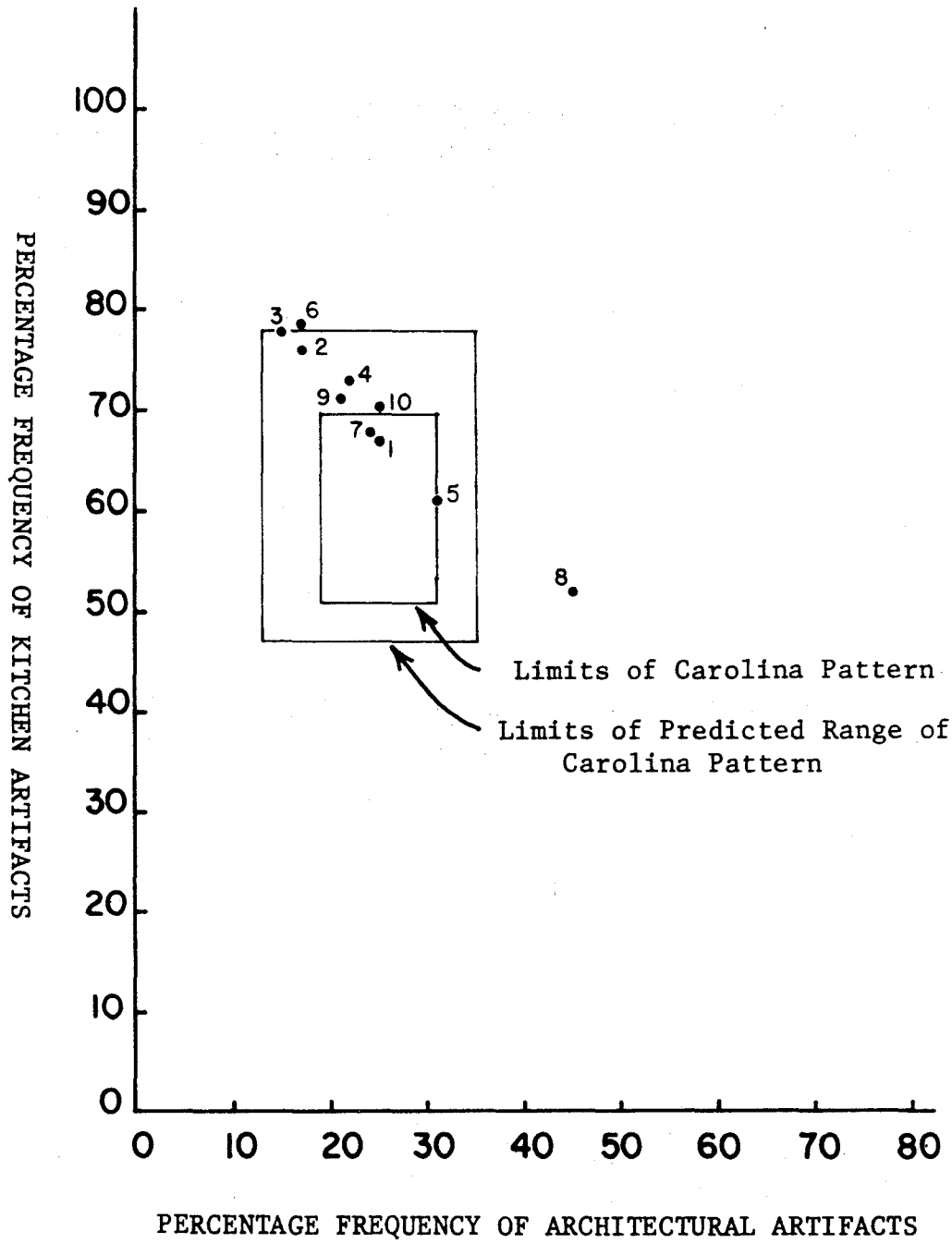

FIGURE 48: Relative Frequencies of Kitchen and Architectural Artifacts by Toft Area.

the differences in the variables noted here set this area apart from the others and may be indicative of functional distinctness as well.

In summary, 2 groups of toft areas have been differentiated on the basis of the covariation of 2 artifact category frequencies. Nine of the 10 toft areas examined conform to the predicted range of the Carolina Pattern. A single area constitutes a separate group lying between the limits of the Carolina and Frontier Patterns. It is not possible at this point to attempt to relate the intrasite patterning discernible here with the presence or absence of particular activities or to the role played by individual areas with regard to the site's function as a frontier town. The pattern described here will serve only as a comparative example in the following examination of functional variability within the site.

The third test implication is addressed to the primary concern of the hypothesis under consideration. It states that intrasite patterning may be shown to relate to functional variation among the toft areas at Camden. Rather than seeking patterns based entirely upon form as we have done in the case of the Carolina Pattern, it will be necessary here to predict patterns assumed to be associated with the domestic-nondomestic functions of the site. These patterns must be based upon relationships between classes of artifacts and activities linked to these functions.

With regard to distinguishing data classes for historic material, only preliminary empirical studies have been conducted and the definition of functional data patterns has not been attempted. For this reason, it is necessary to utilize documentary and ethnographic analogy to develop data classes through which to examine functional variation at the site. In terms of recognizing the dichotomy of orientation in a frontier town, it is necessary to organize research in such a manner as to discern the archeological byproducts of domestic and nondomestic activities.

The archeological record does not represent a total inventory of past activities but only the residue of such activities resulting from the operation of cultural formation processes. At Camden these processes would most likely include discard and loss (see Schiffer 1975a: 4-7). Proceeding on the assumption that loss is related to artifact size and portability and discard is a function of the fragility of the artifact given normal use and the degree of lateral cycling and recycling that it may undergo during its normal use life (Schiffer 1972: 158-159), it should be possible to predict the general types of artifacts that would form the byproducts of various past activities.

It has been noted that a domestic occupation in an eighteenth century British colonial site should be associated with a specific group of domestic-related activities involved with the production, preparation, consumption, and distribution of subsistence products. These activities comprise a subsistence activity set centered upon the principal structure and its toft. The archeological record of a domestic occupation may be expected to represent the byproducts of this activity set. A commercial, industrial, or other nondomestic activity area would involve a technological activity set that would result in an output representing the manufacture, repair, modification, storage, and shipment of goods and commodities. The composition of nondomestic residue would differ from that of a domestic occupation because of the addition of new artifacts and the differential occurrence of those also found in domestic residue.

The latter is likely to reflect the utilization of similar artifacts in separate functional contexts. An example of such an artifact is ceramics, an imported item that played a prominent role in both subsistence and technological activity sets on the colonial frontier. As a domestic artifact, it would have been brought to a living area and utilized there until broken. As there were few uses for broken ceramics, it would have been discarded in the toft to form part of a domestic rubbish deposit that accumulated throughout the duration of the area's occupation. Before finding its way into a domestic context, however, the same ceramic objects would have passed through the hands of merchants, as did nearly all items imported into the colony. Although fragile artifacts, most ceramics would have left the commercial establishments where they were sold intact, leaving little evidence of their presence there. Thus, while the same object may be recovered from several archeological contexts, the nature of its occurrence in each, rather than its presence or absence alone, provides the key to the interpretation of the activities associated with each context.

The nondomestic commercial structure may be expected to contain evidence associated primarily with activities relating to the movement of goods and commodities rather than to these products themselves. Industrial structures likewise should not be characterized by the finished goods they produced, but by the presence of byproducts of manufacturing processes and perhaps distinctive architectural form. It must be remembered that nondomestic structures, especially those situated within a nucleated settlement, are likely to have served as living quarters for those who worked there. Therefore, such a structure is apt to include some elements of both subsistence and technological activity sets and its byproducts will reflect an occupation of this nature.

The archeological record may be viewed as the surviving byproduct of the 2 activity sets. An examination of the archeological data by toft area should permit the observation of these sets in a number of locations at once. If the toft areas are treated as multiple independent refuse areas for the activity sets or combination of sets associated with each type of occupation (that is, each area and its contents are the result of deposition from either a domestic or nondomestic occupation), then it is logical to assume that the artifacts associated with each area will statistically reflect the functional difference in the occupations (see Schiffer 1975b: 64). It is expected that the proportional relationship between artifact classes will vary according to the nature of the activity that produced them. A comparison of the toft areas with regard to the relationship between artifact classes should reveal groups of areas characterized by the statistical similarity of their contents. These groups, in turn, form the basis for interpreting the distribution of domestic and nondomestic activities on the site. The distribution of activities determined here should establish whether or not the pattern of activity occurrence predicted in Hypotheses 5 and 6 did exist in Camden.

The archeological byproduct of a particular activity set is linked to the role the activity played within the larger sociocultural system. Thus, a subsistence activity set would be characterized by the occurrence of artifacts associated with the carrying out of subsistence-related activities. These might include the collection, processing, storage, and

consumption of subsistence commodities as well as the storage and repair of tools and other articles associated with subsistence activities. Because the archeological record at Camden is assumed to be largely the result of the cultural formation processes of discard and loss, the artifact classes expected to characterize a particular activity set would consist of items discarded or lost as the result of related activities. It is predicted that these classes will occur consistently in areas within which this activity set played a similar role. Due to the size of the representative sample obtained at Camden, it has been necessary to combine artifacts representing the byproducts of several types of activities into classes large enough to yield statistically significant amounts of measurable data. Certain specialized artifacts are likely to occur in such low frequencies as not to be amenable to statistical analysis. Their occurrence, however, is significant in that it serves as a source for behavioral inferences that may be tested in subsequent stages of research.

The 3 classes of artifacts associated with a subsistence activity set are as follows.

Class 1: Artifacts associated with the collection, processing, and storage of subsistence products. These items might include broken or wornout farm tools or their parts, fishing equipment, and hunting equipment. All 3 of these subsistence strategies were employed in the Carolina frontier during the eighteenth century (Budd 1973: 23; Lawson 1952; Woodmason 1953: 245). Processing and storage artifacts could include remains of storage containers, food processing tools, and tools utilized in processing raw materials for purposes other than consumption, as in the making of cloth (see Noël Hume 1970; Cripps 1973).

Class 2: Artifacts associated with the consumption of subsistence products. This artifact class subsumes artifacts used in the preparation and consumption of foods. Cooking containers, cooking and eating utensils, drinking containers including case and wine bottles, serving equipment, and fireplace and other cooking hardware fall into this category (Noël Hume 1970).

Class 3: Faunal and floral remains of subsistence foods. The materials in this class consist of items that would form the residue of food preparation and consumption activities. Animal bone, eggshells, nuts, seeds, and pollen retrieved from sealed archeological contexts may be placed in this class.

One other class of artifacts, Class 4, is that associated with technological activities and is included under a single class due to the likelihood of their low frequency of occurrence. These specialized items in this class are apt to be extremely varied according to the nature of the activity involved. Manufacturing activities such as pottery and brickmaking or smithing, for example, would be characterized by a substantial discard output (South 1963, 1967). Light industries producing a perishable byproduct or activities concerned with the transfer, repackaging, storage, or exchange of goods or commodities, on the other hand, are not likely to have left behind a substantial residue in the form of discarded or lost material. In the case of all specialized nondomestic activities it is probable that all the tools and equipment used

would have been valued more or less highly and, therefore, not likely to have become part of a refuse deposit. It will be recalled that, for example, when his brewery in Camden ceased operations, John Kershaw "Sold ye Brewing Impliments..." (Kirkland and Kennedy 1905: 406) rather than discard them.

For these reasons it is likely that the distinguishing characteristics of a specialized technological activity might not consist solely of a high frequency occurrence of specialized artifacts, but rather in the presence or absence of these items themselves. In a small sample, such as that examined at Camden, technological artifacts are likely to represent only a small portion of the total artifacts recovered unless high discard output activities were present. The probability of sampling error is high when the expected occurrence of a particular class of items is low. Therefore, it seems best not to rely entirely upon this class of data to identify the presence of a nondomestic occupation. Rather, it may be more fruitful to observe the technological activity class in combination with variation in the 2 artifact classes discussed below.

The remaining 2 classes of artifacts are unlike those presented above in that they represent the residue of activities that may have been part of either subsistence or technological activity sets, or of a combination of both.

Class 5: Artifacts associated with the housing of persons and goods. This artifact class contains artifacts related to structures and their integral parts.* It is essentially an architectural class that includes such items as nails, spikes, building hardware, window glass, and locks. It might also subsume general household artifacts like furniture and their parts that would have been associated with structures of varied function.

Class 6: Artifacts of a general nature associated with the presence of persons. The present class includes objects that would have been carried on the persons of individuals and which, as a consequence of their mobility, might have been lost or discarded in any or all places frequented by such individuals. This class includes clothing items such as buttons and buckles in addition to coins, tobacco pipes, and other "personables" like rings, bone brushes, watch fobs, spectacle lenses, watch keys, wig curlers, and many others (see South n.d.: 117).

The 2 artifact classes outlined above are of particular significance in the interpretation of the Camden sample data not because they are indicative of the presence of a particular type of past activity but because the substantial quantity of material encompassed by them, when treated as a single category, may be used to measure the relative size of the

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*Although an integral part of structures, bricks and brick fragments are not included in this artifact class because they constitute the principal datum upon which the toft areas here analyzed were defined. In that its presence in each area has been established, it would be inappropriate to utilize this same form of data to substantiate hypotheses predicting the nature of the data in the toft areas. To do so would constitute circular argument.

subsistence artifact component at any part of the site. It is assumed that the architectural-personal artifact component of a toft area will remain consistent regardless of the nature of the activity performed at that area. Thus, the larger the relative size of the subsistence artifact category (composed of the first 3 artifact classes), the greater the likelihood that the subsistence activity set, of which it represents the residue, constituted the major activity in that particular toft area. A toft area characterized by this activity set very likely contained a domestic occupation. Conversely, the smaller the relative size of the subsistence artifact category, the less likely the subsistence activity set is to have represented the principal activity there. As we are concerned with discovering the presence of a nondomestic occupation that is characterized chiefly by the absence of an archeological byproduct, it is logical to expect that evidence of a technological activity set indicative of such an occupation will not be present in the archeological record. Instead, its presence would be evidenced by reduced size of the subsistence component.

The numerical counts and percentages of the 6 artifact classes by toft area are shown in Table 4. In order to examine these classes with regard to area function, they have been combined into 3 activity categories as illustrated in Table 5. An examination of the percentage frequencies of the 3 categories reveals wide variation in the frequencies of the 2 larger categories, subsistence related and combined subsistence-technological related, together with very low percentages in the technologically-related category. When compared graphically (Fig. 49), the percentages of the 2 major categories cluster into 3 groups.

The first group exhibits a high frequency of subsistence artifacts (79-81%) together with a lower frequency of subsistence-technological artifacts (18-20%). Technological artifacts total no more than 1% of the artifacts in any area. On the basis of this relationship it is possible to assign a domestic occupation to Toft Areas 2, 3, and 6.

The second group of tofts includes Toft Areas 1, 4, 7, 9, and 10. Here the percentage of subsistence artifacts is somewhat lower (71-74%) while that of subsistence-technological artifacts is higher than in the previous group (25-28%). Technological artifacts range from less than 1 to 2% of the totals. Although the relative relationship of the 2 larger artifact categories is similar to that in the first group, the tofts in the second group form a distinct cluster apart from those in the first. No "intermediate" toft areas are present (Fig. 49). For this reason it is possible to tentatively identify these areas as sites of less intense domestic occupations, perhaps representing combination residence-businesses.

The third toft group is composed of 2 toft areas (5 and 8) that contain a sizably lower percentage of subsistence artifacts (60 and 67%) and a much higher percentage of subsistence-technological artifacts (33 and 38%). Technological artifacts constitute no more than 1% of the totals. The marked difference between these areas and the other 2 groups is clearly discernible in Figure 49. The relative frequencies of the artifact categories in these areas suggests the presence of a greatly reduced domestic occupation as might be anticipated in an industrial area. The absence of manufacturing debris, however, seems to preclude the presence

TABLE 4

COMPARISON OF ARTIFACT CLASSES BY TOFT AREA -- COUNTS

Artifact Class \ Toft Area	1	2	3	4	5	6	7	8	9	10	Totals
1. Coll., proc., and storage	15	89	57	32	50	28	42	13	30	19	375
2. Consumption	768	3970	3400	1265	1509	2081	1558	965	1058	619	17,193
3. Faunal	30	132	325	14	134	21	65	338	31	13	1,103
4. Architecture	280	898	645	401	751	433	540	825	323	201	5,297
5. Personal	37	190	229	60	74	45	72	16	69	23	818
6. Manufacturing debris	20	48	25	20	1	18	42	29	38	3	244
Totals	1150	5327	4681	1792	2519	2626	2319	2186	1549	878	25,027

COMPARISON OF ARTIFACT CLASSES BY TOFT AREA -- PERCENTAGES

Artifact Class \ Toft Area	1	2	3	4	5	6	7	8	9	10	Totals
1. Coll., proc., and storage	1	2	1	2	2	1	2	1	2	2	1
2. Consumption	67	74	73	71	60	79	67	44	68	71	69
3. Faunal	3	2	7	1	5	1	3	15	2	1	4
4. Architecture	24	17	14	22	30	16	23	38	21	23	21
5. Personal	3	4	5	3	3	2	3	1	4	3	3
6. Manufacturing debris	2	1	1	1	0	1	2	1	2	0	1
Totals	100	100	101	100	100	100	100	100	99	100	99

TABLE 5

COMPARISON OF ACTIVITY CATEGORIES BY TOFT AREAS -- COUNTS

Activity Category \ Toft Area	1	2	3	4	5	6	7	8	9	10	Totals
1. Subsistence	813	4191	3782	1311	1693	2130	1665	1316	1119	651	18671
2. Subsistence-Technological	317	1088	874	461	825	478	612	841	392	224	6112
3. Technological	20	48	25	20	1	18	42	29	38	3	244
Totals	1150	5327	4681	1792	2519	2626	2319	2186	1549	878	25027

COMPARISON OF ACTIVITY CATEGORIES BY TOFT AREA -- PERCENTAGES

Activity Category \ Toft Area	1	2	3	4	5	6	7	8	9	10	Totals
1. Subsistence	71	79	81	73	67	81	72	60	72	74	75
2. Subsistence-Technological	28	20	19	26	33	18	26	38	25	26	24
3. Technological	2	1	1	1	0	1	2	1	2	0	1
Totals	101	100	101	100	100	100	100	99	99	100	100

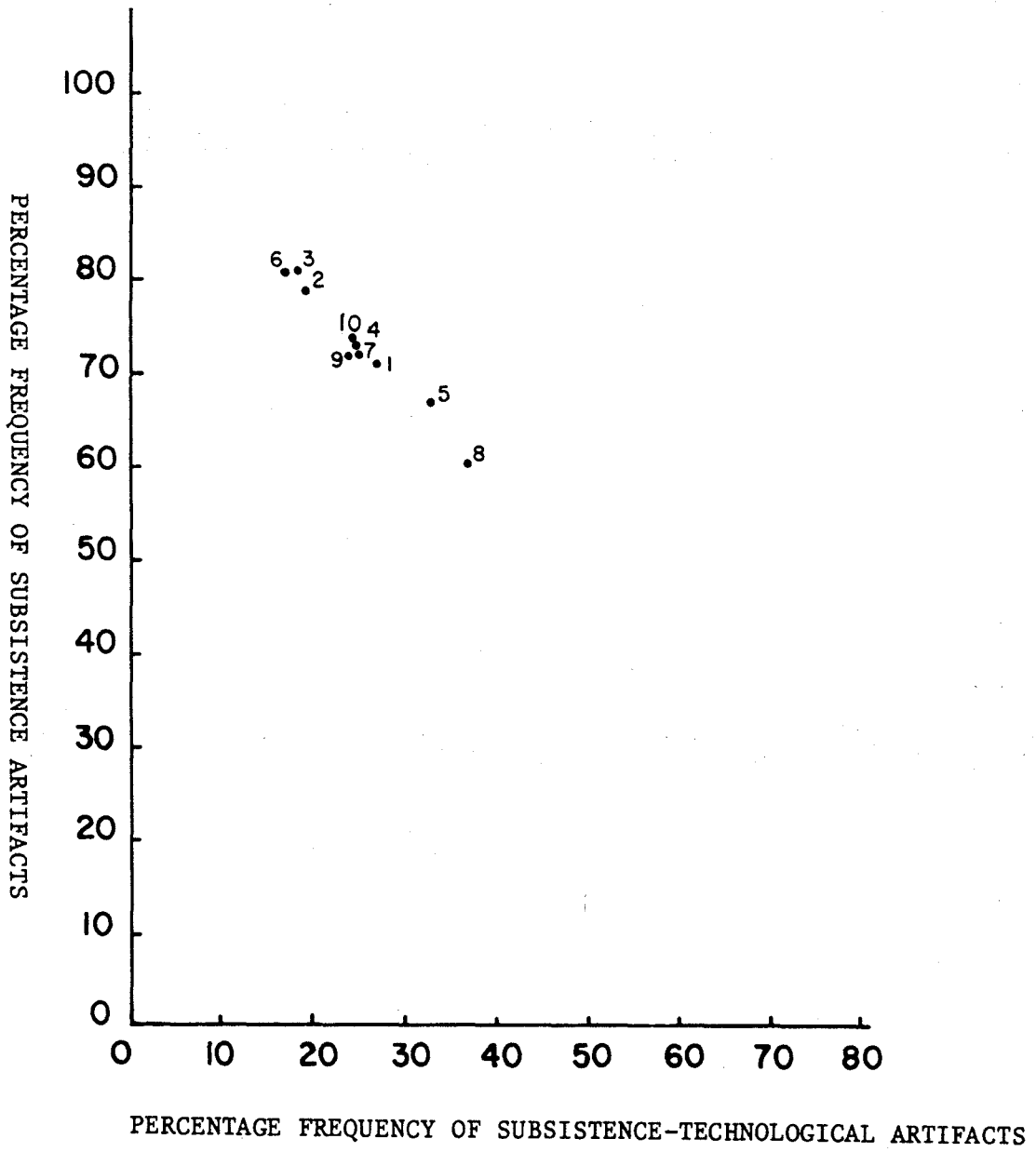

FIGURE 49: Relative Frequencies of Subsistence and Subsistence-Technological Artifacts by Toft Area.

of an industry characterized by a nonperishable byproduct. It is probable, then, that the 2 areas represent the remains of a nondomestic occupation of unknown type.

It is significant to recall here that the only known nondomestic activity center in eighteenth century Camden positively located from documentary sources is Joseph Kershaw's brewhouse, the sole structure known to have occupied the block southwest of the intersection of Broad and Meeting Streets during this period (Fig. 12). This structure is situated in Toft Area 8 and the residue of the brewing activity appears to be evidenced by the low occurrence of the subsistence artifact component.

In summary, a comparison of the percentage frequencies of functionally significant artifact categories has resulted in the division of the 10 Camden toft areas into 3 groups. Although it is not possible to identify the precise nature of the activities represented by the archeological remains in each area, it is possible to distinguish a group that contains a high subsistence artifact component. This group presumably reflects the byproduct of domestic occupation areas. The second group contains a relatively smaller amount of subsistence material and presumably represents a domestic occupation shared with that of another activity. This trend is taken further in the third group where it is likely that the domestic occupation comprised a still smaller portion of the total occupation in the areas falling within this group.

On the basis of this three-fold division it has been possible to demonstrate tentatively the distinction between domestic and nondomestic activity areas addressed in Hypotheses 5 and 6. It was predicted that because the frontier town represents a socioeconomic center in the area of colonization the ratio of nondomestic to domestic activity structures is likely to be high. In that Camden is presumed to have been an eighteenth century frontier town, it was anticipated that archeological evidence would reveal a significant number of nondomestic areas there. An examination of the data indicates that of 10 toft areas defined at the site, only 3 may be tentatively identified as having played a solely domestic role. The results obtained in this discovery phase of research are, of course, preliminary in regard to the precise identification of past activities and the functional definition of areas at the site must await more intensive investigation.

7. This hypothesis postulates that archeological evidence of differential status will be discernible in the toft areas at Camden. Because of the importance of trade and communications activities on the frontier, it is likely that high status would be associated with resident individuals involved in the buying, selling, and processing of goods and commodities passing through the frontier town. The importance of Camden as a frontier economic center and the ties of its merchants to the trading firms of the entrepot of Charleston have been discussed earlier. The settlement's position not only permitted Camden to serve as a redistribution point for finished goods entering the colony from Great Britain, but also as a collecting and processing point for frontier commodities destined for a coastal or foreign market (Schulz 1972: 23). Chief among the Camden merchants was Joseph Kershaw whose commercial interests extended over much

of the South Carolina backcountry. If individuals such as Kershaw lived in Camden, it is expected that the areas they occupied would yield archeological evidence reflecting their wealth relative to persons of lower economic status who also lived in the town. In a stratified society, status is usually associated with the unequal distribution of scarce goods and services. Evidence of this differential allocation should be readily observable in the archeological record.

Perhaps the most direct way to determine the archeological form of a high status occupation is through the examination of the remains of structures known to have been inhabited by such individuals. Unfortunately this is not possible at Camden because the results of archeological research at the only such documented structure, Joseph Kershaw's mansion house situated just east of the town (Fig. 1), are as yet unreported. It is assumed, however, that other persons of relatively high status lived in the colonial town and left behind evidence of their social position in the archeological record. The following test implications are designed to permit us to examine data capable of reflecting such status differences.

First, it is assumed that certain artifacts indicative of high status in the eighteenth century will be found in association with toft areas occupied by high status persons. The distribution of such items is somewhat complicated by the fact that high status artifacts are, in themselves, highly valued objects that are subject to a high rate of retention. For this reason, the occurrence of such items in the archeological record is not usually the result of discard or abandonment as is often the case with less valuable artifacts. Rather, their appearance there is nearly always a consequence of loss. With regard to the process of loss, Schiffer (1975a: 6) has suggested that certain regularities are likely to affect the probability of an object's entering the archeological record as the result of this process. First, the probability of loss should vary inversely with the object's mass. Small objects are more likely lost than larger ones. Second, loss probability varies directly with the artifact's portability. An item more frequently moved or moved longer distances is more likely lost than one that is stationary. It may be added that the probability of loss is also directly related to its usable condition as the result of age or wear. Thus, a worn-out valuable is more likely to be exposed to conditions leading to loss than a new one.

One class of artifact that would fall into the category of small, portable items subject to wear is that of personal objects, especially those associated with dress. In the last half of the eighteenth century a great disparity existed in the nature of Englishmen's dress. This was closely tied to the individual's status. In general, persons of higher status wore elaborate costumes adorned with fasteners of precious metals in contrast to the relatively simple dress of lower status commoners (Steel and Trout 1904/I: 327-328). Because of the perishable nature of clothing, only certain parts such as buttons, buckles, and other fasteners are likely to be retained in the archeological record. Due to their generally small size, these items most probably represent loss or, if worn, discard. These artifacts should be particularly indicative of status because the materials of which they were manufactured seem to have varied according to the wealth of the wearer. Buttons, for example, were made of a variety of materials including lead, bone, pewter, brass,

glass, and wood (see Olsen 1963; South 1964), but those worn by higher status individuals would more likely have been of silver, silver plate, or pearl (Steel and Trout 1904/I: 319, 328). Similarly, clothing buckles were made of materials ranging from iron for the cheapest buckles to pewter, brass, and silver, the latter being associated with persons of wealth and higher status (Noël Hume 1970: 86; Abbitt 1973: 26). It is predicted that the occurrence of high status clothing and personal items will identify high status living areas on the site.

The second test implication is based on the assumption that high economic status within a stratified society is usually correlated directly with the variety of property possessed by persons in that society (Tumin 1967: 40). The variety of property may be expressed in terms of the addition of wealth goods to the normal assemblage of artifacts associated with a domestic occupation. Such items are discussed elsewhere. Perhaps of greater significance is the relative diversity of items within use classes of artifacts. Such classes are common to all socioeconomic levels but the greater diversity of artifacts within them is likely to be correlated directly with higher status.

One class of artifacts which has the potential for great diversity is ceramics. The range of variation here reflects differences in both form and function, both of which vary with the socioeconomic status of the owner. The association of high status and large, diverse ceramic holdings is noted in colonial inventories (Brown 1973: 60), and it is predicted that an increase in the variation in type and quantity of ceramic specimens is directly related to the status of the persons who occupied the area in which the specimens are found (Deetz 1973: 20).

Just as it is possible to observe a correlation between high status and artifacts of greater value, it is equally reasonable to postulate an inverse correlation between the occurrence of artifacts of low value and a high status occupation. Rather than being artifacts of specialized function, as are many of the items associated with high status individuals, artifacts related to low status persons are likely to be common items in widespread use. They may be differentiated mainly by the presence of certain distinguishable forms which for social, economic, political, or religious purposes are restricted to use by low status persons.

A good example of a class of artifacts to which a status distinction might apply is ceramics. As previously noted, the eighteenth century was a period of great technological innovation in the British ceramic industry and new ceramic wares rapidly found their way into colonial markets as a result of the efficiency of the British overseas trade and communications system. Camden, as a center of frontier distribution, would have been amply supplied with imported English ceramic products which were in almost universal colonial use by this time (Deetz 1973: 34). Despite the apparent availability of these artifacts, locally-made American ceramics were manufactured, often in the face of official government policy, and managed to compete favorably with the British products they imitated. The lower cost of local pottery would have made it a less expensive alternative to imported ceramics (Noël Hume 1970: 99), especially to those persons of lower economic status. The manufacture of good quality local cream-colored earthenware at Camden prior to the American Revolution

(Lewis 1975a: 41) provided an active source of this product to the residents of the South Carolina backcountry. The availability of local pottery here would have favored the widespread use of its products. The third test implication predicts that due to their lower cost, local ceramics probably comprised a greater proportion of the ceramic inventories of persons of lower economic and social status. The lower relative occurrence of this artifact in the archeological record should be directly associated with the presence of higher status occupations.

An examination of the archeological data from Camden with regard to the test implications for status provides the following results. The first test implication predicts that high status areas may be identified by the presence of personal items associated with economic wealth. The patterned distribution of such artifacts in the archeological record is clearly discernible due to the small number of items falling into this category. Four artifacts of assumed high intrinsic value were recovered in the archeological excavations. Toft Area 2 contained a silver-plated brass button with an engraved floral design on its face (see South 1964: 117, Type 7). A silver cane tip with the initials "RH" engraved on its head was also recovered from this location. Although it is impossible to identify the owner of this artifact with any amount of certainty, it is tempting to with a Rubin Harrison, an early Camden resident who purchased Lot 111 and half of Lots 87-89 in 1800 (KCD/C: 56). As this property lay just across Broad Street from Toft Area 2 (Fig. 27), it is not unreasonable to assume that the artifact might have been associated with this individual. This object appears worn and the hole through which a pin passed to secure it to the shaft of the cane is torn, indicating that the tip was probably dislodged from the cane and could have been lost. The second area containing high status artifacts is Toft Area 6 where a brass button (Type 7) engraved with the initials "GB" and a silver-plated brass button (Type 7) were recovered. On the basis of the occurrence of these objects, Toft Areas 2 and 6 may be identified as high status locations.

The relative variety of ceramic types discussed in the second test implication may be examined by comparing the total number of ceramic types recovered from each toft area. Table 6 shows that of the 31 ceramic types present at Camden, the number appearing in individual areas varies from 19 to 29. This range forms 2 clusters, the first containing areas possessing from 19 to 22 types and the second containing areas with 25 to 29 types. Four toft areas (1, 4, 8, and 10) fall into the first group and 6 areas (2, 3, 5, 6, 7, and 9) may be included in the second. This nearly equal division of the toft areas suggests that the ceramic variety criterion may be somewhat less sensitive to high economic status and instead tends to separate wealth at a lower level. The inclusion of Toft Areas 2 and 6 in the upper status locations based on ceramic variety is significant in that it supports the results of the first test implication.

The third test implication predicts that high status living and activity areas will be characterized by a lower relative occurrence of locally-manufactured pottery. An examination of the frequency distribution of the percentages of locally-made Carolina cream-colored earthenware to all ceramics by toft area (Fig. 50) clearly reveals a marked disparity in the occurrence of this artifact across the site. Three tofts (2, 6, and 9)

TABLE 6

COMPARISON OF CERAMIC TYPE OCCURRENCE BY TOFT AREA

Ceramic Type \ Toft Area	1	2	3	4	5	6	7	8	9	10
Lead-glazed slipware		x	x	x	x	x	x	x	x	x
Ironstone-whiteware	x	x	x	x	x	x	x	x	x	x
Mocha		x						x		
Jackfield ware			x		x	x	x	x	x	x
Bisque earthenware		x	x			x			x	
Coarse red earthenware	x	x	x	x	x	x	x		x	
Delft	x	x	x	x	x	x	x	x	x	x
Creamware	x	x	x	x	x	x	x	x	x	x
Finger-painted creamware					x					
Annular creamware	x	x	x	x	x	x	x	x	x	x
Overglazed enameled c'ware	x	x	x	x	x	x	x	x	x	
Transfer-printed creamware		x	x		x		x			
Pearlware	x	x	x	x	x	x	x	x	x	x
Underglaze polychrome p'ware	x	x	x	x	x	x	x	x	x	x
Finger-painted pearlware		x	x		x	x	x		x	x
Transfer-printed pearlware	x	x	x	x	x	x	x	x	x	x
Annular pearlware	x	x	x	x	x	x	x	x		x
Hand-painted pearlware	x		x	x	x	x	x	x	x	x
Edged pearlware	x	x	x	x	x	x	x	x	x	x
Carolina creamware	x	x	x	x	x	x	x	x	x	x
Nottingham stoneware		x	x	x	x	x	x	x	x	x
British brown stoneware	x	x	x	x	x	x	x	x	x	x
Westerwald stoneware	x	x	x	x	x	x	x	x	x	x
White salt-glazed s'ware	x	x	x		x	x	x	x	x	x
Scratch-blue stoneware		x	x	x	x	x	x	x	x	
Black basaltes stoneware		x	x	x	x	x	x		x	x
Engine-turned stoneware	x	x			x	x	x			x
Brown stone bottles									x	x
Porcelain	x	x	x	x	x	x	x	x	x	x
Colono-Indian ware	x	x	x	x	x	x	x	x	x	x
Total Types Present	19	26	26	22	29	26	26	22	25	22

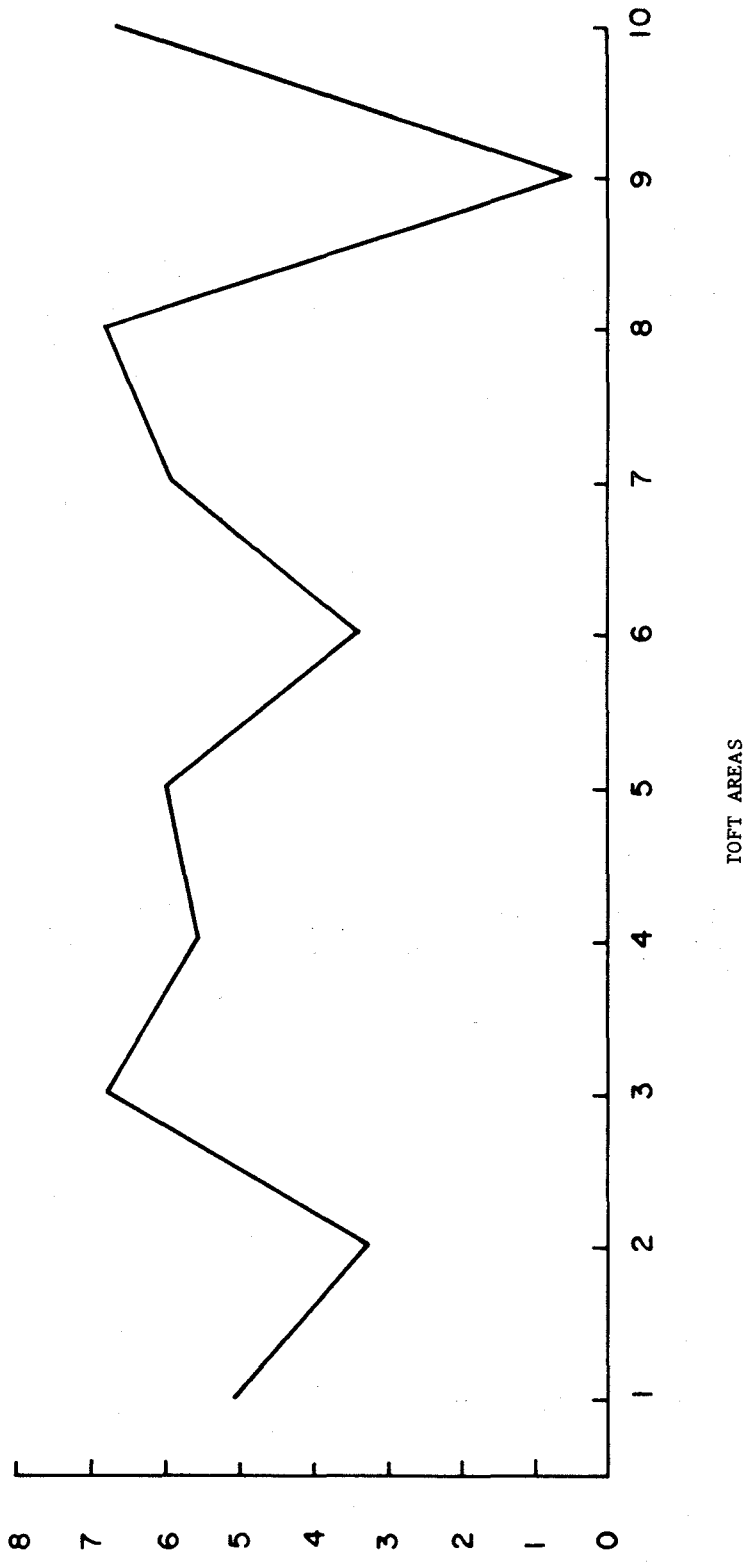

FIGURE 50: Frequency Distribution of Carolina Creamware by Toft Area.

exhibit a low frequency of local ceramics relative to other areas of the site. On this basis it is possible to identify these toft areas as the locations of high status occupations at Camden.

A comparison of the results of the 3 test implications reveals a general agreement that certain toft areas are most likely to have contained high status occupations. Toft Areas 2 and 6 yielded high status artifacts as well as a great variety of ceramic types and a low frequency of locally manufactured ceramics. For this reason, it is probable that these tofts were occupied by high status persons in the past. It is difficult to assign particular individuals' names to these occupations due to the absence of documentary information indicating the precise locations of structures occupied by specific persons or families. Toft Area 2 includes portions of Adamson's property of 1780 and Cook's property of 1786. Prior to this time it was included in a large tract owned by J. Kershaw until 1777 and Chesnut after that. A part of it was also purchased by Dinkins in 1807. The only documented structure that may fall within this area is Adamson's store. John Adamson was a wealthy Camden merchant both prior to and following the American Revolution and maintained a plantation on the Wateree River in addition to his business (Kirkland and Kennedy 1905: 289-290). Toft Area 6 contains portions of property belonging to E. Kershaw's estate prior to 1786 and thereafter to Cantey and Woodruff. Kershaw's store may have been situated here (Fig. 27). The high socio-economic status of the Kershaw family has been discussed earlier.

The presence of a high variety of ceramic types and a low occurrence of locally made pottery in Toft Area 9 also suggest the presence of a high status occupation here. This property falls within a much larger block owned consecutively by E. Kershaw, Chesnut, Loocock, and Mathis. No structures are mentioned here in documents, however, several are indicated by the archeological record. As all of the owners were important merchants on the frontier (Kirkland and Kennedy 1905), a structure occupied by any of them would be likely to produce an archeological output of high status artifacts.

The segregation of 3 toft areas as probable sites of high status occupations is not intended to imply that all other tofts were occupied by the poor. Rather, it serves to indicate those places that, on the basis of archeological evidence, are characterized by the presence of persons who possessed a relatively greater amount of economic wealth than their neighbors. The occupants of several other toft areas also appear to have possessed a moderate amount of economic wealth as reflected by the variety of artifacts recovered from these areas. The diversity of ceramics found in Toft Areas 3, 5, and 7, for example, is great. Areas 5 and 7 also contain a slightly higher percentage of porcelain than the other tofts, a fact that would normally imply a high status for those who lived there (Stone 1970: 88). The very low general occurrence of porcelain at Camden, compared to other eighteenth century sites, however, suggests that perhaps during the immediate post-Revolutionary War Period (during which the greatest part of the site appears to have been occupied) other wares were used in its place. It should be noted that Toft Areas 5 and 7 bear mean ceramic dates earlier than this. For this reason, it is unclear whether the differential occurrence of porcelain here is indicative of status or merely represents temporal change in the use of particular

ceramic types. These 2 areas lie within a large block of property owned by J. Kershaw before and Ancrum after 1786, Angier after 1798, and Dr. Isaac Alexander until 1802. The Blue House of Revolutionary War fame appears to have been located in Toft Area 7.

In summary, several toft areas have been tentatively identified as the sites of high status occupations. These are Toft Areas 2, 6, and probably 9. Of the remaining 7 tofts, 3, 5, and 7 also exhibit evidence of occupation by persons of at least moderate economic wealth.

Aboriginal influence on the frontier

8. This hypothesis and the 2 that follow are related to the presumption that Camden's central position on the frontier allowed it to participate in a trading network that involved the aboriginal inhabitants and the European settlers in the area of colonization. It has been suggested that evidence of this interaction may take the form of aboriginal products which were obtained, utilized, and discarded by Europeans within the frontier settlements. One of the most likely artifacts to fall into this category is Colono-Indian ceramics, an item apparently manufactured by itinerant Indian potters, probably Catawbas in the Wateree River area, and distributed to English settlements throughout the area of colonization. Documentary evidence indicates that aboriginal ceramics manufactured especially for the colonial trade did not circulate through the normal trade channels but, rather, were sold within the immediate area of their manufacture (Baker 1972: 14). For this reason, the archeological remains of this product are likely to occur most heavily in sites in which direct contact existed between colonists and the aboriginal peoples.

Hypothesis 8 predicts that Camden participated in the Colono-Indian pottery trade, thus maintaining a link with the aboriginal inhabitants of the Wateree Valley area. The Colono-Indian ceramics recovered from the archeological context at this site may be assumed to represent the discard of living areas there and reflect the extent of its use in relation to other artifacts of similar use in the colonial settlement.

The first test implication states that Colono-Indian pottery will be present in the archeological record at Camden. The presence of 386 specimens of this ware attests to the fact that Colono-Indian ceramics form a minor component of the ceramic collection from Camden, comprising 3.0% of the total of 12,796 specimens.

The second test implication predicts that the ratio of Colono-Indian ceramics to all other artifacts will reflect a relatively substantial aboriginal pottery trade at Camden. Stanley South (n.d.: 191) has recently attempted to ascertain the relative degree of European-Indian economic interaction by measuring the ratio of Colono-Indian ceramics to other artifacts recovered from British colonial American sites. He concludes that the sites used in his sample may be broken down into 3 groups, those having a low ratio of Colono-Indian ceramics (.001-.006), those with none of this ceramic ware present, and those exhibiting a relatively high ratio of Colono-Indian pottery (.01-1.0). He notes that those sites exhibiting the highest ratio are military sites within the area of

colonization or military and civilian settlements directly relating to the Indian trade. Those with the lower ratios of Colono-Indian ware represent civilian sites within the area of colonization. Camden's position as a frontier town with a predominantly civilian occupation at first suggests that it would probably fall in the latter group. Its proximity to the Catawba settlements and the resulting interaction with these aboriginal people may, however, have made Camden a minor center in the trade for and, consequently, in the use of this pottery. For this reason, it is likely that the Colono-Indian pottery ratio at Camden will fall within the high range of occurrence. Calculation of the ratio for Camden appears below in Table 7.

TABLE 7

CALCULATION OF COLONO-INDIAN CERAMIC RATIO FOR CAMDEN

Colono-Indian Pottery	Total Artifacts Less Colono-Indian Pottery	Colono-Indian Ratio
386	23,977	.016

The ratio of .016 or .02 falls within the predicted high range, implying a relatively high degree of interaction with aboriginal peoples at Camden.

In summary, the occurrence of Colono-Indian ceramics is demonstrated by the archeological data. The relative quantity of this artifact, expressed in a ratio, falls within the range of its occurrence on the sites of settlements characterized by significant aboriginal contact. The presence of this amount of Colono-Indian ceramics at Camden substantiates the assumption that this settlement functioned as a participant in a system of exchange involving both intrusive and aboriginal peoples on the frontier.

9. In this hypothesis it is predicted that the relative frequency occurrence of Colono-Indian ceramics at Camden will exhibit noticeable patterned variation. This intrasite variability is presumed to be indicative of the differential use, and subsequent disposal, of this artifact throughout the site. Because so little is known about Colono-Indian ware, its makers, its method and routes of distribution, and even of its role in colonial society, it is difficult to postulate behavioral correlates between its appearance and the occurrence of particular activities. For this reason, the examination of the archeological data with regard to particular activities does not appear advisable at this stage of research and an attempt will be made only to define the nature and extent of the spatial variation. By comparing the patterns obtained here with information concerning the distribution of other activities in the settlement, it should be possible to suggest relationships between the latter and the occurrence of Colono-Indian ceramics.

Two test implications may be put forth to demonstrate the varied occurrence of Colono-Indian ceramics at the site. The first involves the examination of the site as a whole to determine the extent of variation in this artifact's appearance within the settlement as a unit. The distribution of Colono-Indian ware by intensity of occurrence is expressed on a SYMAP upon which the numerical counts of this artifact are displayed (Fig. 51). The map clearly shows the presence of Colono-Indian ceramics to be extremely varied across the site. Several marked concentrations appear in both portions of the site north of Broad Street, suggesting that its heaviest deposition (and presumably use as well) was not confined to any particular position of the settlement. In most cases the concentrations of Colono-Indian ware lie closest to concentrations of structural debris, implying that their deposition was directly associated with structure sites rather than with dumps separated from them.

The second test implication is that the occurrence of Colono-Indian ceramics will vary from one toft area to the next. In order to demonstrate this, counts of Colono-Indian ware were compared to totals of all ceramics by toft area. The results, expressed in percentage frequencies, are shown in Table 8. The table indicates that Colono-Indian ceramics comprise from 0.3 to 6.3% of the total ceramics. The distribution of toft areas by percentage frequency of this artifact (Fig. 52) permits the toft areas to be broken down into 3 groups. The low group (0.3-1.0%) contains Toft Areas 3, 4, and 9; the middle group includes Toft Areas 2, 6, 7, and 8; and the group exhibiting high Colono-Indian ware percentages (5.0-6.3%) consists of Areas 1, 5, and 10. At present, the significance of the differential occurrence of Colono-Indian ceramics at Camden cannot be fully understood; however, it is clear that the predicted patterning is present.

TABLE 8

RELATIVE PERCENTAGES OF COLONO-INDIAN CERAMICS TO ALL CERAMICS BY TOFT AREA

Toft Area	1	2	3	4	5	6	7	8	9	10
Colono-Indian Specimens #	33	93	43	3	58	53	50	11	9	31
Colono-Indian Specimens %	5.9	3.0	1.5	0.3	5.0	3.3	4.1	3.0	1.2	6.3

Average percentage frequency of Colono-Indian ceramics to all ceramics for the entire site: 3.0

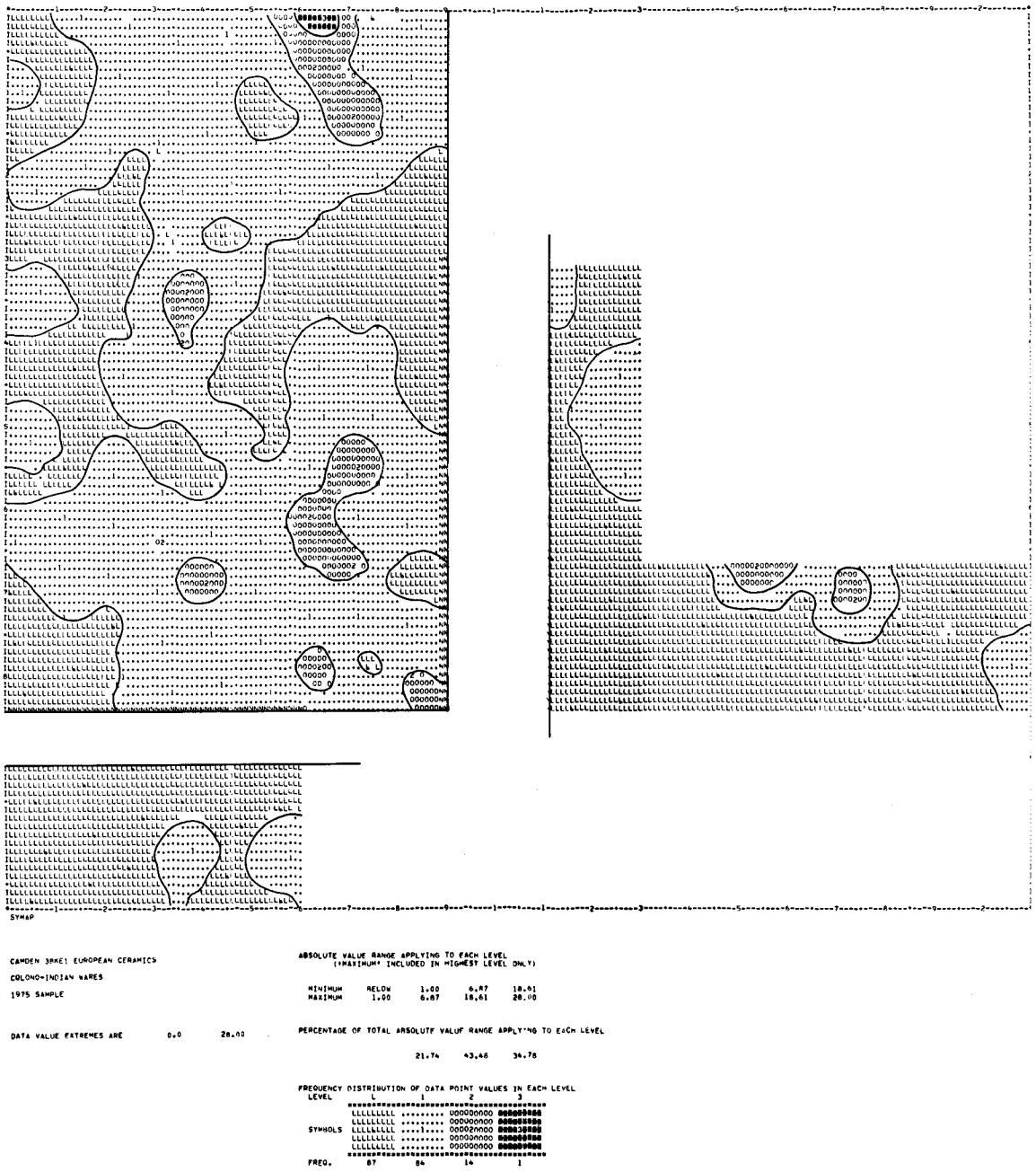

FIGURE 51: Spatial Distribution of Colono-Indian Ceramics

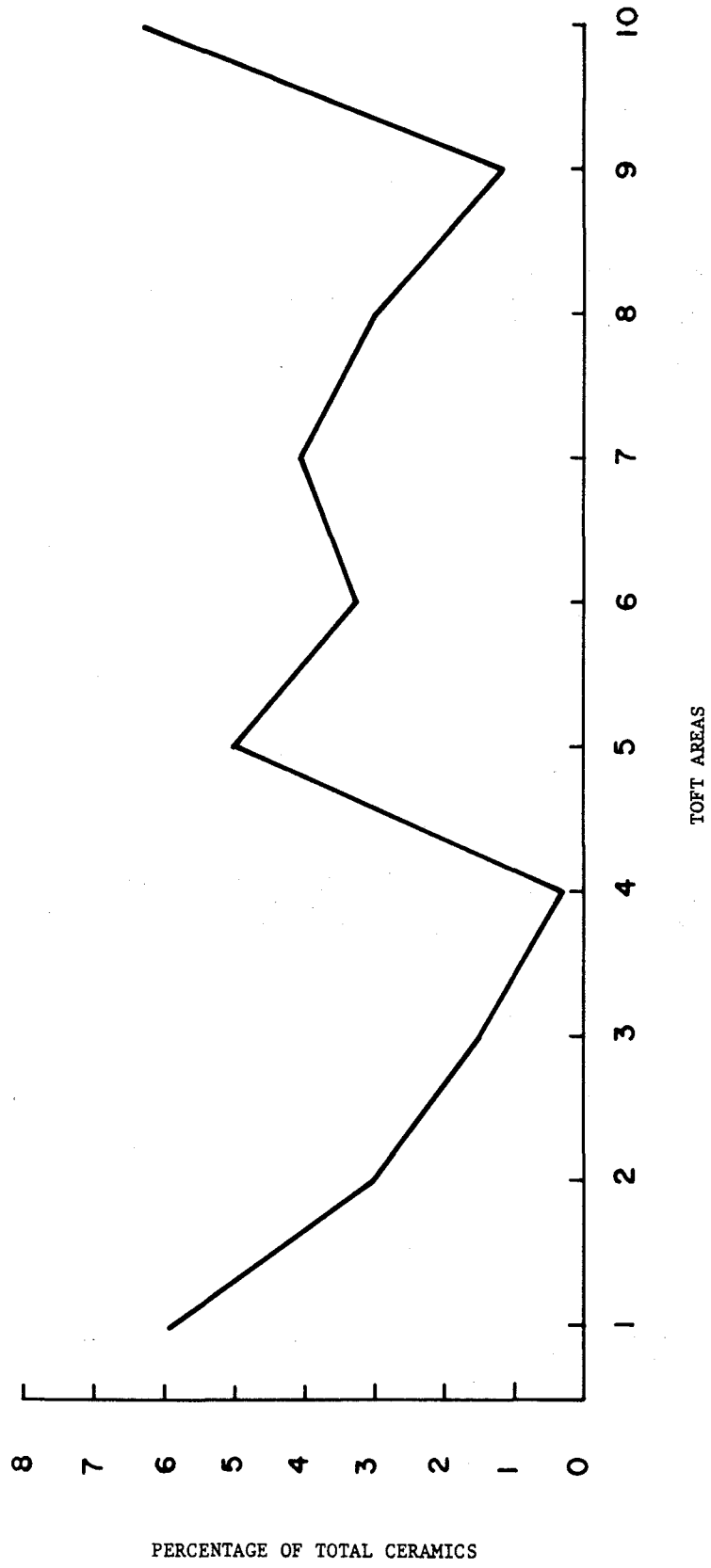

FIGURE 52: Frequency Distribution of Colono-Indian Ceramics by Toft Area.

A comparison of the distribution of Colono-Indian ceramics with those of other variables discernible in the archeological record at Camden permits one to make several interesting observations that may be explored more fully when adequate data is available. The first concerns the association of Colono-Indian pottery use with lower class persons or groups (Noël Hume 1963: 5). If such were the case at Camden, the occurrence of Colono-Indian ware would logically be expected to be lowest in those toft areas identified as the sites of high status occupations. A comparison of the occurrence of Colono-Indian ware by toft area (expressed as a percentage of total ceramics) and the areas identified as high status areas in Hypothesis 7 is inconclusive. Colono-Indian ceramics occur in the lowest frequencies in Toft Areas 4 and 9. While the latter has been tentatively identified as a high status area, the other has not. In addition, the other high status areas, 2 and 6, appear to exhibit moderately high percentages of Colono-Indian pottery. Thus, it would seem that the use of this artifact may have been tied to variables other than economic wealth.

It has been suggested (Baker 1972: 16) that Colono-Indian pottery comprised a part of the culinary assemblage of most colonial households in settlements where it was available. If this statement may be inferred to mean that Colono-Indian ceramics usually constituted a similar portion of this assemblage, then it is possible that variation in this artifact's occurrence is linked to the degree that domestic activity prevailed at a particular place. A comparison of the relative occurrence of Colono-Indian ware and extent of domestic activity by toft area (Table 9) shows virtually no similarity in the distribution of these 2 variables. This result suggests that the degree of domestic activity is not related to the proportion of the ceramic assemblage consisting of Colono-Indian ceramics.

TABLE 9

COMPARISON OF TOFT AREAS BY DEGREE OF COLONO-INDIAN CERAMICS OCCURRENCE AND EXTENT OF DOMESTIC ACTIVITY

	Domestic Activity Occurrence by Area	Colono-Indian Ware Occurrence by Area
High	2, 3, 6	1, 5, 10
Medium	1, 4, 7, 9, 10	2, 6, 7, 8
Low	5, 8	3, 4, 9

10. Colono-Indian ware in the Camden area is generally seen as representing eighteenth-century trade pottery, presumably of Catawba origin. Although documentary information pertaining to the early manufacture and sale of this product is scanty, archeological contexts have yielded specimens of this ware as early as the third quarter of the eighteenth century and possibly even before. The relative volume of the pottery trade, however, is unknown. It is hypothesized that because of Camden's proximity to and close ties with the Catawba peoples, a stable trading relationship would have been maintained between the Indians and the colonists. If it is assumed that one of the principal items in this relationship was Colono-Indian pottery, then volume of this product traded should be evidenced by its use in a settlement such as Camden. This use should be reflected by the occurrence of the artifact in the archeological record. By observing changes in its occurrence through time it is possible to determine if its popularity gained or fell during the period of Camden's occupation

This hypothesis may be examined by comparing the occurrence of Colono-Indian ceramics to all ceramics by sample pit with the mean ceramic date of each pit. In order to calculate the frequency of occurrence of Colono-Indian ceramics by temporal period the 186 sample units were divided into 4 groups representing the following time brackets: 1763-1779, 1780-1789, 1790-1799, 1800-1819. The percentage of Colono-Indian ware was calculated for all pits falling within each of these time periods and is illustrated in Table 10.

TABLE 10

RELATIVE OCCURRENCE OF COLONO-INDIAN CERAMICS TO ALL OTHER CERAMICS BY TIME PERIOD

Period	Percentage of Colono-Indian Ceramics
1763-1779	2.70%
1780-1789	3.75%
1790-1799	2.76%
1800-1819	3.33%

It is clear that the relative proportion of Colono-Indian ware to all ceramics seems to vary slightly during the period of the settlement's occupation, suggesting that the pottery trade remained relatively stable during this time. A slight peak in Colono-Indian pottery usage during the decade 1780-1789 suggests a minor increase in the trade at this time. The absence in the abrupt variation in the occurrence of this artifact

prohibits inferences concerning the temporal limits of Colono-Indian ware use or the degree of its popularity beyond the chronological bounds of the site.

It is evident that Colono-Indian ceramics formed a small but consistent portion of the ceramic assemblage at Camden. Its stable occurrence suggests that the exchange relationship between the makers and users of this artifact persisted relatively unchanged throughout the period observed in the archeological record.

The Revolutionary War occupation of Camden

11. The final hypothesis deals with the military occupation of Camden during the American Revolution. Briefly, it predicts that, apart from the large military fortification features discussed earlier in this report, evidence of the relatively short (1780-1781) British occupation of the town should be discernible at the site. It is unlikely that identifiable military features will be found in this preliminary stage of archeological investigations due both to the condition of the site and the limitations of the sampling design. Rather, evidence of a military presence of short duration is likely to be characterized by a scattering of material, the spatial distribution of which should provide clues to the form and extent of the occupation. If concentrations of military artifacts are present, their proximity to other cultural features, such as structures, may permit the tentative association of these features with the military occupation.

The hypothesis is substantiated by the presence of 39 military artifacts. They are listed in Table 11.

The lead balls exhibit a range of variation in size from .44 to .76 inch in diameter with a modal size of .48 inch. The standard British shoulder arm of the Revolutionary War period, the Brown Bess musket, had a barrel caliber of about .75 inch and took a ball about .69 inch in diameter. The standard French musket with a .69 inch bore fired a ball about .63 inch in diameter. Military rifle balls generally ranged from .50 to .60 inch in diamter (Peterson 1968: 60) and military pistol balls varied from .44 to .63 inch in size (Gluckman 1956: 27). The breakdown of balls by category is shown in Table 11. It clearly indicates that more than 3/4 of these artifacts fall into the pistol or rifle category.

Of these artifacts, only 7 may be definitely assigned to a particular military force engaged in or near Camden. The 3 musket rampipes came from the standard British shoulder arm of the period and the 3 large caliber musket balls may also be attributed to the use of this weapon. The "USA" button was a common American military button in use after 1780.

TABLE 11

MILITARY ARTIFACTS FROM CAMDEN

Artifact	Number Present	Reference
British musket ball (.68 - .76")	3	See text
Military rifle or pistol balls (.44 - .52")	13	See text
Shot	3	Peterson (1956: 227)
Canister (.88 - 1.36")	11	Peterson (1956: 107)
Lead casting sprue	4	
Musket rampipes (British Brown Bess)	3	Peterson (1956: 161)
Jaw screw (Unknown firearm)	1	
Military button (USA)	1	Johnson (1948: 52)
Total artifacts	39	

Because most of the military items recovered were small and in some cases incomplete, it is likely that they represent the results of discard and loss rather than abandonment, as was the case for the cache of arms located in the southeast palisade wall trench. Such loss and abandonment would most likely be associated with those areas of heaviest use. The spatial distribution of the artifacts is illustrated in a SYMAP displaying the artifacts by location and quantity (Fig. 53). The map shows an uneven distribution of military artifacts with several concentrations occurring in the area west of Broad and north of Meeting Streets. In general, the artifacts occur in progressively greater quantities as proximity to the 2 streets increases. The northernmost artifact concentration is situated among the complex of structures in Toft Area 2, while other concentrations appear in Toft Areas 3, 5, 6, and 7. It will be recalled that the structures located in each of these areas correspond roughly to the pattern of structures in the Greene map. The close proximity of the concentrations of military artifacts to the locations of structures known to have existed during the British military occupation, suggests that these structures were converted to military use.

Although rough areas of military activity may be defined at this time, it is impossible to differentiate areas of specialized military activity such as a hospital, prison, storehouses, quarters, or messes. Because evidence of the military occupation in heaviest around the remains

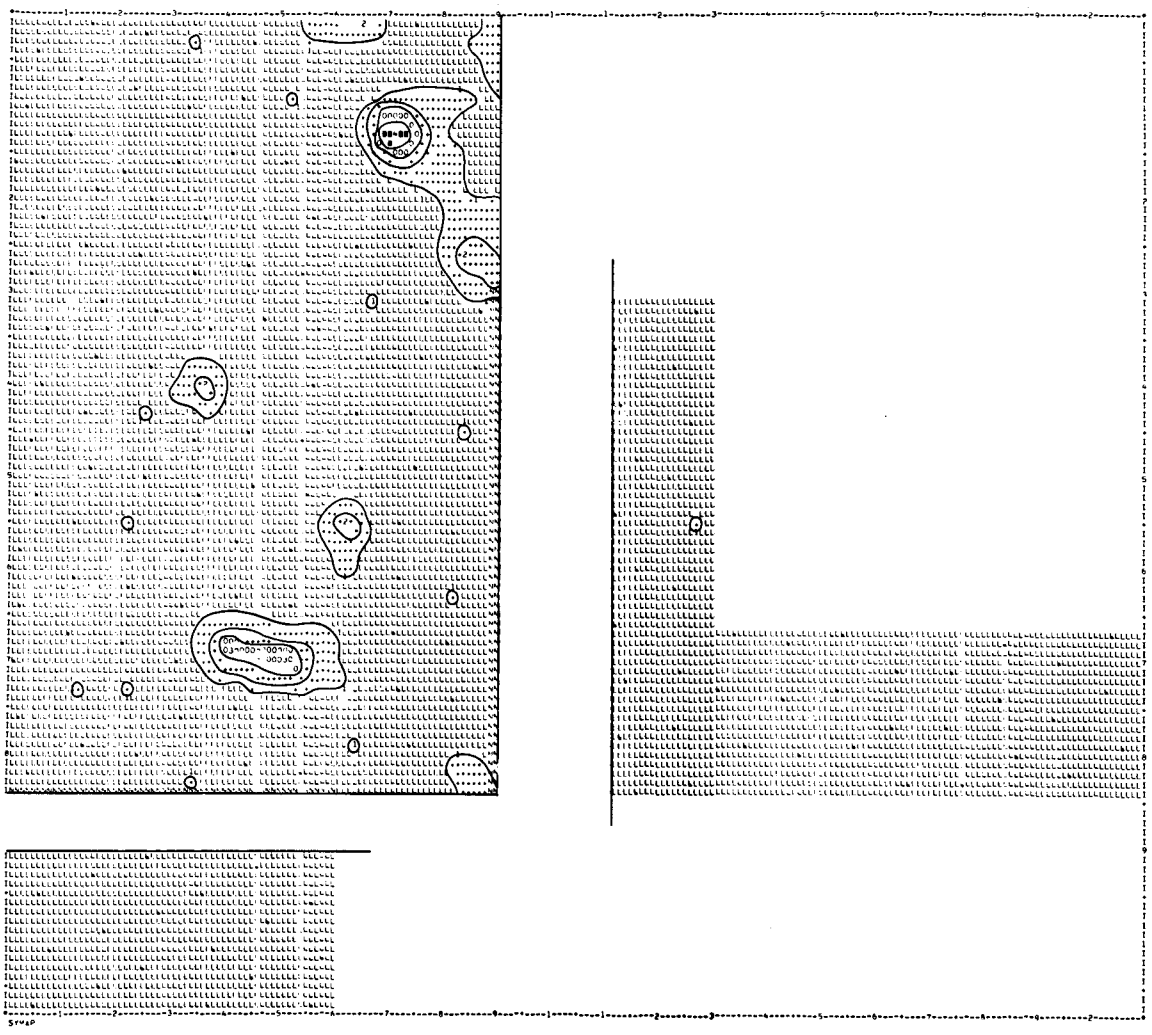

FIGURE 53: Spatial Distribution of Military Artifacts.

of structures that are assumed to predate the British occupation, it is likely that more definitive evidence of the British military presence in Camden will come to light with a more intensive investigation of these features.

Summary

In the preceding portion of this report the results of the 1974-1975 archeological investigations in the townsite of eighteenth century Camden have been presented. Documentary evidence concerning the early settlement has been found to be somewhat restrictive in that it provides little information about the size of the town or the existence and locations of structures and other cultural features within it. For this reason, it was necessary to look to the archeological analysis to provide answers to general questions about the site in order to provide both an outline of potential resources for site interpretation as well as the basis for further anthropological studies of the colonial settlement. This broad approach favored the use of archeological sampling techniques capable of examining the entire site in such a manner as to permit the discovery of patterns in the archeological record. These patterns, in turn, form the basis for the interpretation of the colonial settlement,

Archeological excavations have revealed that the site of the eighteenth century town is largely intact. Continued cultivation of the area has resulted in some vertical mixing of archeological materials but the horizontal distribution of artifacts and their patterns of deposition are still discernible. No substantial posteighteenth century occupation, apart from that associated with the public structures in the northeast quadrant of the site, appears to be present so that the remains of the colonial settlement have not been either contaminated by recent material or greatly disturbed by subsequent construction activities.

Clues to the ethnic affiliation of the settlement and the dates of the site's occupation have been ascertained through an examination of the ceramic artifacts recovered there. The Camden ceramic collection yielded specimens representative of an eighteenth century British colonial settlement. A mean ceramic date of 1791 was derived for the site as a whole while individual sample squares indicate a range of occupation from 1763 to 1819. The occupation of the greatest part of the site has a mean date of 1791. These dates conform closely to evidence obtained from documents indicating a range of occupation from 1758 to 1820, with a median date of 1789.

An estimation of the form and spatial extent of the settlement has been aided by the presence of the British palisade wall that delimited the bounds of the 1780 town. The actual distribution of the structures and activity areas was determined by plotting variation in the frequencies of occurrence of different classes of artifacts across the site. Patterns formed by the differential occurrence of artifacts served as the basis for the interpretation of functional variation within the site. Several significant conclusions have resulted from this aspect of the investigations.

The occupation of the townsite may be seen to have originated in several isolated areas of early settlement, expanded to cover most of the area enclosed by the palisade, shifted slightly to the north, and then retreated again into scattered locations prior to the site's abandonment.

The distribution of structures revealed archeologically indicates a concentration of settlement along Broad Street, Meeting Street, and an unnamed street running perpendicular to Broad Street near the northern edge of the settlement. Wide, expanded tofts, contrasting markedly with the narrow, restricted tofts of European market towns, are associated with the structures at Camden. As expected, those parts of the site characterized by low, wet conditions exhibited the least evidence of occupation.

As a frontier town, Camden was assumed to exhibit evidence of the functions carried out in a comparable market center in England. Due to the dispersed nature of settlement on the frontier, the large supporting population normally associated with a market settlement would not be present at Camden, resulting in a smaller settlement with a less clustered settlement pattern. An examination of the archeological data revealed a small settlement of less than 30 structures situated in a random pattern tending toward even spacing. Nondomestic activities, assumed to play a dominant role in a frontier town, appear to be associated with the majority of the structures and their toft areas. The nature of individual activities is difficult to identify, however, because of the absence of specialized byproducts. It is assumed that most activities at Camden were of a light industrial or commercial nature. Documents indicate the presence of such activities within the settlement. As a central location of socioeconomic activity on the frontier, Camden is expected to exhibit evidence of differential status among its residents. An examination of the archeological evidence has permitted the tentative identification of several toft areas occupied by persons of high economic status.

The proximity of Camden to the Catawba settlements of the Wateree River Valley would have allowed the town to figure prominently in the trade for specialized aboriginal products, principally Colono-Indian pottery. Archeological work revealed that this product was used at Camden in quantities comparable to those present in frontier sites that experienced substantial interaction with aboriginal peoples. The use of Colono-Indian pottery remained relatively constant during the period of Camden's existence. Its uneven distribution throughout the site suggests that its use varied from household to household. Because so little is known about this trade item in colonial society, a functional interpretation of its patterned occurrence cannot be made at this time.

Finally, the 1780-1781 military occupation of Camden appears to be mainly represented archeologically by the town fortifications. A scattering of military items is present in the town with concentrations near several structures. It is possible that these structures were utilized as military structures during the town's occupation.

In summary, the discovery phase of archeology at Camden has answered a number of broad questions about the form and nature of the colonial

town. Its conclusions, though in many cases tentative, demonstrate that the settlement functioned as a frontier town as defined in the frontier model. As such, the future investigation of this site should provide invaluable information concerning the colonization of the South Carolina backcountry. The basic statements about the site's layout and function should serve to lay the groundwork for future investigations aimed at testing the conclusions of the discovery phase as well as guiding research into various aspects of Camden's development. Last, but certainly not least, these results will aid in the early phases of site interpretation by providing information not only on the overall layout and condition of the site as a whole but also on a variety of cultural features within it.

CHAPTER VI

CONCLUSIONS AND RECOMMENDATIONS

Data recovered in the archeological investigations at Camden have provided answers to questions relating to the conditions of the site, the dates and ethnic affiliation of its past occupation, the form and spatial extent of the settlement there, and the distribution of certain behaviorally significant classes of archeological materials. The information gained from this inquiry has made it possible to draw conclusions that will aid in interpretive site studies as well as in the understanding of the past sociocultural system that existed on the eighteenth century frontier.

With regard to the interpretation of the site, the archeology has revealed the approximate locations of structures and their associated toft areas. The intensity of the occupation is clearly discernible as are those parts of the site that were avoided for settlement. One such area is evidenced by the presence of a deep gully in the southeast quadrant of the site. As a result of the long-term cultivation of the site, most cultural features that lay directly on the surface have been disturbed, however, those that extended below the level of the plow zone remain intact. Excavations confirmed the existence of several intact features that appear to offer potential for future intensive research. Dates obtained through an analysis of ceramic artifacts provide chronological limits for the occupation of the settlement and for areas within it. The Revolutionary War palisade wall, the most substantial recognizable military feature on the site, has been relocated and partially explored, establishing the limits of the 1780 settlement. In short, the discovery phase of archeological investigations has resulted in the accumulation of a great deal of information concerning the form and extent of the colonial town of Camden. On the basis of this knowledge, it should be possible to direct future research with far greater insight into the nature of the site and its contents.

With regard to Camden's role on the Carolina frontier, it has been possible to ascertain archeologically that the settlement possessed many of the characteristics of a frontier town. The presence of a sizable portion of structures exhibiting relatively little evidence of domestic activities, together with evidence for differential status among the town's occupants, reflect the role of the settlement as a commercial and administrative center on the frontier. Those conditions support the assumption that Camden, as a frontier town, represents a part community in the sense that the portion of the population involved in subsistence production was dispersed away from the contiguous settlement. The town itself appears to exhibit a much more dispersed settlement pattern than its counterpart in the metropolitan area in England, and because of the reduced domestic component, it is physically smaller and supported a smaller population.

Despite its relative isolation from Britain and the coastal entrepot of Charleston, Camden contains a wealth of imported material goods,

reflecting its full participation in the trade and communications systems of the frontier. Its central position in a network of trade and communications linkages reaching from the backcountry to England, Europe, and even as far as the Orient should not be viewed as a unique situation, but rather as representative for a colonial area on the periphery of a world economic system such as that centered in Europe in the eighteenth century.

Aboriginal influence within an area of colonization is not likely to have existed as a barrier to expansion and settlement, but instead often took the form of supplementing the frontier trade and communications subsystem with raw or finished goods. In South Carolina Colono-Indian ceramics seem to have played a dominant role in this trade which operated largely outside of the distribution network of imported products. The greatest occurrence of Colono-Indian wares is associated with those settlements in closest proximity to its locations of manufacture. Camden's position relative to the Catawbas seems to be reflected in the presence of these ceramics in the archeological record in amounts relatively greater than those found in other British colonial frontier towns further from the source of this product. It is not known to what extent the trade for this aboriginal product was carried out in the dispersed settlements on the area of colonization, especially in those furthest from the frontier town. An examination of the occurrence of this item on sites as a substitute for European wares relative to the site's location in the frontier distribution network may provide valuable insights into the role played by Colono-Indian pottery and its makers in the frontier economy.

This report has attempted to demonstrate the significance of the role of historical archeology in the examination of culture process. Historical archeology offers the advantage of exploring the past utilizing the combined methodologies of documentary and archeological research. This places the investigator in a much more informed position regarding his knowledge of the conditions of change and, therefore, he is better able to examine the validity of generalizing propositions about regularities of behavior. One such regularity is the process of adaptation associated with the movement of intrusive societies into colonial areas. It is summarized in the frontier model. Documentary sources have been utilized to identify such a situation in British colonial South Carolina and to select a representative site within this frontier area for further investigation in terms of archeological data supplemented by documentary information. An analysis based upon the archeological evidence revealed the expected characteristics of the frontier model and, consequently, permitted the confirmation of aspects of the frontier process at Camden.

The methodology employed in the archeological investigations at Camden involved the use of the technique of stratified random sampling which appears to offer several advantages in the explorations of extensive archeological sites. First, it permits the examination of a large area with minimum expense and the least amount of destruction to the site. Second, it allows the location and tentative identification of structures, features, and activities at the site. Third, it provides a progressively more intensive means of exploration, yielding an increase in detail relative to the size of the sample. Fourth, it offers the advantage of sampling all parts of a site, eliminating bias in favor of particular

site elements and against others. This bias is inherently dangerous in the interpretation of sites occupied by complex societies, for the variety of spatially separated activities contained in such settlements may not be adequately sampled if certain areas of the site are systematically ignored. Finally, the use of stratified random sampling in the discovery phase of archeology yields results that may be used in the planning of future archeological research as well as in current and future site interpretive development.

Recommendations concerning the nature of future archeological research at Camden are as follows. Given the intact conditon of the site, it should be possible to conduct further work aimed at: 1) the interpretation of tofts or other large activity areas through sampling increasingly larger percentages of the archeological record, and 2) the intensive investigation of more confined areas representing activities, structures, features, or other significant site elements.*

1. Each of the 10 toft areas should be explored in the second phase of archeological research at Camden. Each should be examined by sampling a larger portion (4-10%) of its total area in order to define the extent of the distribution of cultural materials and features within it. This phase of archeology will also serve to more clearly delimit the boundaries of the toft and to segregate broad use areas within it. Structural areas should be clarified at this time and other features warranting further examination may be determined.

The order in which the individual toft areas are examined needs not be fixed at present. Priority of investigation should be based upon 2 factors, the assumed function of the area in relation to the settlement and the relative condition of the archeological remains there. Several broad activity categories were defined in the discovery phase of archeology. For this reason any area from within the same category might be chosen as a sample of the category. This does not preclude the investigation of the other tofts in that category but, rather, allows the examination of a number of different activity categories without repetition.

The results of the second phase of research should provide more precise data for site interpretation than that uncovered in the discovery phase. They will permit a more accurate designation of the locations of structures and other cultural features in the toft areas as well as a more definite statement on the function of the toft as a unit. The continued reliance on sampling during this phase should minimize expenses by limiting the area of the site examined and also eliminate the need for stabilization at this time.

2. The third phase of archeological investigations will involve the complete excavation of selected features located in the preceding phases

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*The initiation of these 2 phases of archeological research is contingent upon the size of the total accessible site area remaining constant. If it becomes feasible to investigate that area now occupied by the public buildings complex, priority should be given to conducting discovery phase explorations in this area in order to determine the condition of this portion of the site as well as the extent of the colonial settlement there.

of research. The nature of these excavations must be governed by type of feature to be examined, its size, its state of preservation, and its relative significance to the site as a sociocultural unit. Archeological investigations in this phase would be aimed at exposing large areas and their results would provide the most tangible evidence for interpretive site development. Features uncovered at this time may require extensive stabilization and/or partial reconstruction for interpretive purposes. It is anticipated that at least a full field season's work will be involved in the intensive investigation of each toft area.

The archeological data gathered during this phase will aid in determining the precise form, nature, and spatial extent of the activities that took place within the individual toft areas. These data should provide information on a much finer scale than before and will result in the most accurate picture of the residue of past activities in the eighteenth century settlement.

The selection of areas to be excavated during this phase of research may be based on criteria similar to those governing the selection of areas for the second phase work. Certainly it is desirable to consider those areas of the site representing different activity complexes as revealed in previous phases of archeological work. Differential preservation of the remains may also affect the selection of areas for intensive investigation. Of utmost importance in determining the location of future work and the design under which it is conducted are the research questions under consideration. Although it is impossible to predict precisely the form that these questions will take during this later phase of work, 3 general goals are anticipated to govern the third phase of archeology at Camden. These are: 1) the testing of hypotheses derived from the conclusions of the earlier phases of investigation, 2) the development of new hypotheses regarding the nature of intrasite variation in the distribution of functionally significant archeological materials, and 3) the statement of conclusions concerning the role of Camden as a frontier town in the general sense as well as Camden's role within the frontier system of the South Carolina Piedmont.

In summary, it is recommended that future archeological investigations at the site of colonial Camden be conducted in 2 broad phases. These phases are designed so as to provide an increasingly more detailed picture of the site by concentrating a progressively more intensive examination on individual toft areas within it. This approach will permit the concurrent development of site interpretation along with anthropologically oriented research into the settlement's role in a frontier system. The employment of a multiphase plan is advantageous in that it allows choices to be made throughout the course of the work; choices as to which areas are to be investigated, when the investigations are carried out, and to what extent the archeology must proceed in order to produce the desired results. It is hoped that the use of this type of research design will permit the collection of a maximum amount of information while minimizing the expenditure of time and funds necessary to gather it.

APPENDIX A

COMPARISON OF OCCURRENCE OF RE-EXPORTED CERAMICS ON BRITISH COLONIAL AMERICAN SITES

The sites listed below are not intended to form a complete list of all eighteenth century British colonial American sites that have been subject to archeological investigation. Rather, they are only a representative sample of those sites whose data are available in published form.

	Historic Median Date	Westerwald Stoneware #	%	Oriental Porcelain #	%	Total Ceramic Counts
Fort Moore, SC (South 1972)	1732	4	1	57	18	312
Fort Prince George, SC (South 1972)	1761	15	1	93	11	851
Brunswick Town, NC (South 1972)*	1751	126	3	643	15	4304
Spalding's Lower Store, FL (Lewis 1969)	1773	131	5	447	16	2796
Fort Michilimackinac, MI (Stone 1972)	1770	0	0	23	20	114
Fort Moultrie, SC (South 1974b)	1778	66	6	84	7	1140
Trebell Cellar, Williamsburg, VA (South 1972)	1797	2	0.1	151	13	1178

*These figures represent the combined artifacts from 4 structures: S2, S15, S18, and N1.

APPENDIX B

DERIVATION OF MEAN CERAMIC DATE

The mean ceramic date formula was developed as a technique by which to determine a mean date of manufacture for British ceramics found in an archeological context. It is based on the assumption that a ceramic type's popularity will form a unimodal curve through time reaching a peak between the time of its introduction and that of its discontinuance. The median date is represented by the peak in popularity. Utilizing Ivor Noël Hume's A Guide to Artifacts of Colonial America (1970) as a source for the median dates for the use span of each ceramic type, the mean date (Y) for a group of ceramics present at a particular site is calculated by the following formula:

$$Y = \frac{\sum_{i=1}^{n} X_i \cdot f_i}{\sum_{i=1}^{n} f_i}$$

where: X_i = the median date of use

f_i = the frequency of each ceramic type

n = the number of ceramic types in the sample

The calculation of a mean ceramic date for the site of Camden as a whole is accomplished as follows:

Ceramic Type Description	Type Median Date-1700 (X_i)	Sherd Count (f_i)	Product ($X_i \cdot f_i$)
Lead glazed slipware	33	63	2079
Ironstone-whiteware	157	204	32028
Mocha	143	2	286
Jackfield ware	60	26	1560
Green glazed ware	67	8	586
Delft	50	676	33800
Finger-painted creamware	105	6	630
Annular creamware	98	29	2842

Ceramic Type Description	Type Median Date-1700 (X_i)	Sherd Count (f_i)	Product ($X_i \cdot f_i$)
Overglazed enamelled creamware	88	45	3960
Creamware	91	6831	621621
Transfer-printed creamware	90	11	990
Underglazed polychrome pearlware	130	286	37180
Finger-painted pearlware	105	17	1785
Transfer-printed pearlware	118	123	14514
Annular pearlware	105	58	6090
Underglazed blue pearlware	100	551	55100
Blue & green edged pearlware	105	188	19740
Undecorated pearlware	105	1572	165060
Nottingham stoneware	55	27	1485
British brown stoneware	33	153	5049
Westerwald stoneware	38	74	2812
White salt-glazed stoneware plates	58	44	2552
White salt-glazed stoneware	63	217	13671
Scratch-blue stoneware	60	35	2100
Black "basaltes" stoneware	85	17	1445
Red engine-turned stoneware	69	13	897
Ginger beer bottles	160	5	800
Totals		11281	1030612

$$Y = \frac{1030612}{11281} + 1700$$

$$Y = 91.3582 + 1700 = 1791.3582 = 1791$$

APPENDIX C

DERIVATION OF MEAN PIPESTEM DATE BY BINFORD FORMULA

The pipestem dating formula is based upon the observation that the stem hole diameters of English white clay pipes became progressively smaller (4/64 to 9/64 inch) at a constant rate throughout the seventeenth and eighteenth centuries (see Harrington 1954). Lewis Binford (1962: 19) has taken the mean stem hole diameters and their equivalent chronological scale and computed the following straight line regression formula:

$$Y = 1931.85 - 38.26X$$

where: Y = the date to be determined

1931.85 = the theoretical date when the projected regression will reach 0

38.26 = the intervening number of years between the means of any two of the metrical categories

X = the average of the stem hole diameters of the sample (4/64 - 9/64 inch)

This formula is used below to compute the mean date for the settlement of Camden.

Stem Hole Diameter	Number of Specimens	Product
4/64"	185	740
5/64"	319	1595
6/64"	10	60
Totals	514	2395

$$X = \frac{2395}{514}$$

$$X = 4.66$$

$$Y = 1931.85 - (38.26 \times 4.66)$$

$$Y = 1931.85 - 178.29$$

$$Y = 1753.56 = 1754$$

APPENDIX D

DERIVATION OF MEAN PIPESTEM DATE BY HEIGHTON-DEAGAN FORMULA

In an attempt to improve the utility of pipestem hole diameters as a means of dating archeological sites, Heighton and Deagan (1972: 221) have presented another regression formula based upon a second degree polynomial curve popularly known as the Compound Interest Rate Curve. They established seven units of twenty-two years each with values of -3 through +3, with the year 1711 as the midpoint of the curve. In this formula, X is the value the investigator wishes to date expressed in terms of these units. It is derived by utilizing the following formula:

$$X = \frac{-\log Y + 1.04435}{.05234}$$

in which Y is the mean stem hole diameter. To convert this value into a date it must be multiplied by 22 and added to 1600, the origin date of the formula.

The application of this formula to the Camden material is illustrated below. From the Binford formula the mean diameter (Y) is known to be 4.66. The log of 4.66 = .66839. From this information the value of X is derived as follows:

$$X = \frac{-.66839 + 1.04435}{.05234} = \frac{.37596}{.05234}$$

$$X = 7.183034$$

The date may then be calculated as follows:

$$\text{Date} = 1600 + 22X$$

$$= 1600 + 22 \times 7.183034$$

$$= 1600 + 158.02674$$

$$= 1758.0267 = 1758$$

APPENDIX E

DERIVATION OF NEAREST NEIGHBOR STATISTIC FOR SETTLEMENT PATTERN AT CAMDEN

The nearest neighbor analysis is a technique which measures the deviation of the distribution of a population in space from a random toward either an anticlustered or clustered pattern. Here randomness is employed as a spatial concept and is dependent upon the size of the area chosen for investigation. At Camden this area is that part of the site enclosed by the palisade. The measure for spacing is based upon the distance from an individual (in this case a structural concentration) to its nearest neighbor (r). The value of the mean distance to nearest neighbor (r_A) is obtained for the set of observations and compared to the expected mean (r_E) if the individuals were randomly dispersed. The ratio of the observed mean distance serves as the measure of the departure from randomness (R). R is derived as follows:

$$\rho = \frac{N}{\text{Area}} \qquad r_E = \frac{1}{2\sqrt{\rho}} \qquad r_A = \frac{\sum r}{N} \qquad R = \frac{r_A}{r_E}$$

Where: N = the number of distance measurements taken

$\sum r$ = the density of structural concentrations within the site

$N = 16$

$\sum r = 2260$

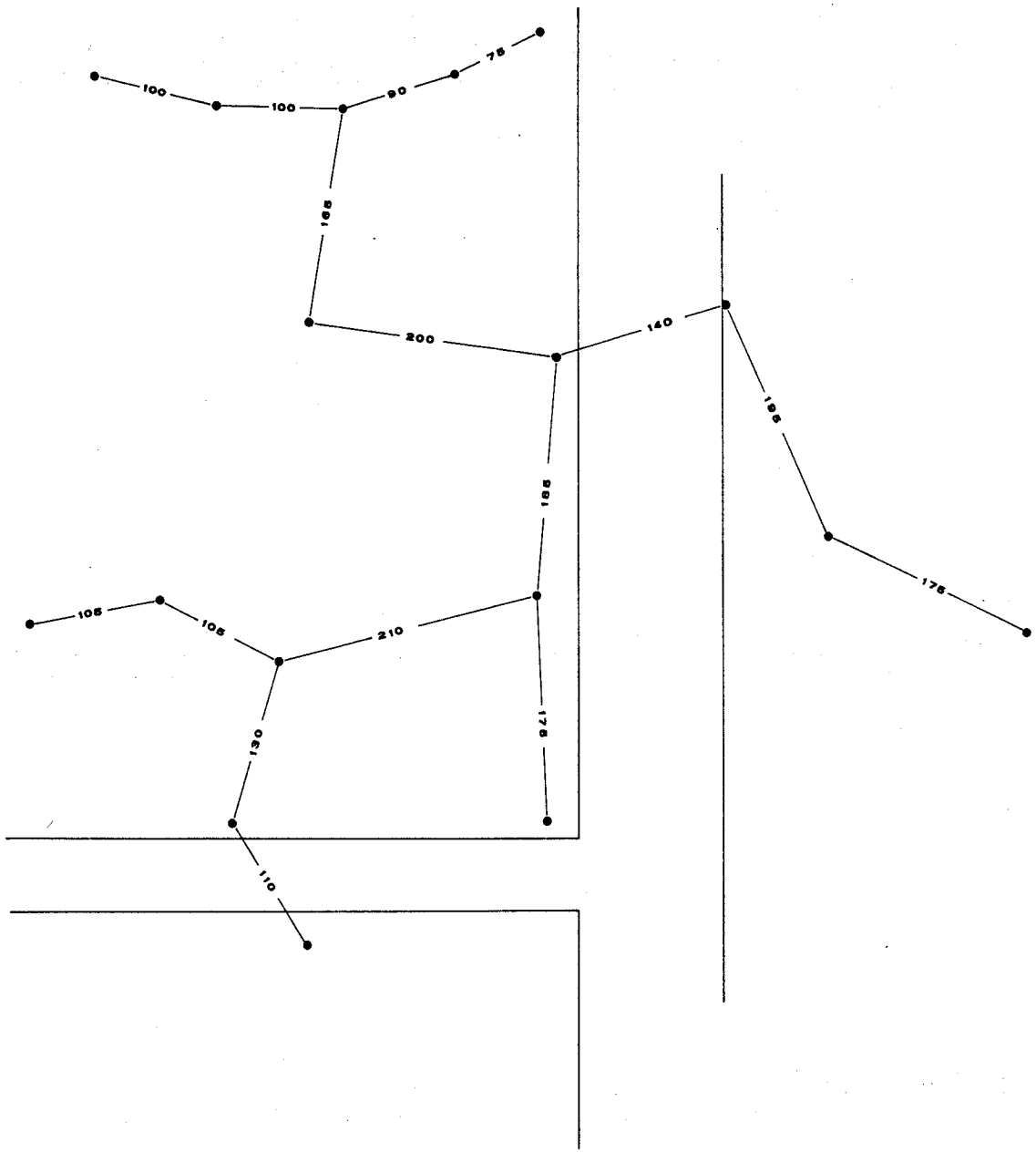
$$\rho = \frac{1}{525000} = .0000304$$

$$r_A = \frac{2260}{16} = 141.25$$

$$r_E = \frac{1}{2\sqrt{.0000304}} = \frac{1}{2 \times .0055136} = \frac{1}{.0110272} = 90.684852$$

$$R = \frac{141.25}{90.684852} = 1.557592 = 1.558$$

If 0 = maximum aggregation, 1 = random distribution, and 2.1491 = even spacing, then 1.558 indicates a near random distribution with a tendency toward even spacing.


100
100
90
75
185
200
140
195
175
185
105
105
210
130
175
110

			Lead Glazed Slipware	Tronstone-Whiteware	Mocha Ware	Jackfield Ware	Green Glazed Creambodied Ware	Bisque Ware	Coarse Red Earthenware	Delftware	Finger-painted Creamware	Annular Creamware	Overglaze Enamelled Hand-painted Creamware	Creamware	Transfer-printed Creamware	Underglaze Polychrome Pearlware	Finger-painted Pearlware	Willow Transfer printed Pearlware	Transfer-printed Pearlware	Annular Pearlware	Underglaze Blue Hand-painted Pearlware
N5026-E4465	Layer 1	36A												2							
	Layer 2	36B		1										2							
N5040-E4515	Layer 1	35A		1					1	1				5							
	Layer 2	35B									1			2							
N5035-E4565	Layer 1	74A		1						5		1		2							
N5015-E4615	Layer 1	79A	1	1						1				10							
N5025-E4665	Layer 1	83A	1	2						1				18						1	2
N5015-E4715	Layer 1	84A		1		1				7			1	53		4				1	11
	Layer 2	84B																			8
N5040-E4765	Layer 1	124A								5		1		63	1	5		1	3		8
N5045-E4815	Layer 1	119A	1	1						1			1	34	1	1		1		1	3
N5030-E4860	Layer 1	120A					1			5				46		6			3		4
	Layer 2	120B									1						1				
N5070-E4455	Layer 1	38A												1							
N5090-E4505	Layer 1	37A		2							1			4			1				
N5085-E4555	Layer 1	73A								2				2					2		2
	Layer 2	73B												1							
N5065-E4605	Layer 1	78A	1							1				25							
	Layer 2	78B												1							
N5075-E4655	Layer 1	80A	1	5						12		1		52		1					4
N5065-E4705	Layer 1	86A	1			1				8	1			52		1	1				5
	Layer 2	86B								1				1							
N5090-E4755	Layer 1	123A					1			5				44		3			2	1	4
N5180-E4855	Layer 1	128A												1							
N5095-E4805	Layer 1	118A				1				3			3	31					1		
N5080-E4855	Layer 1	122A								1				23		2			2		
N5120-E4450	Layer 1	39A		1										1							
N5140-E4500	Layer 1	40A				3				5				8							
	Layer 1	40B	1			1				1											
N5135-E4550	Layer 1	72A	1							3		1		20					2		
	Layer 2	72B												4							
N5165-E4600	Layer 1	76A	1	5					2	6				48						1	4
N5125-E4650	Layer 1	82A	2							6			3	132		1			6	1	11
N5115-E4700	Layer 1	85A	3	6						9			3	90		3					7
	Layer 2	85B												4							
N5140-E4750	Layer 1	116A	2	1		1			1	2				58		5					7
N5145-E4800	Layer 1	117A								2	1			69		3			2		1
N5130-E4850	Layer 1	121A							1	1				41		3	1	2			2
N5170-E4455	Layer 1	41A		2		2								5							
N5190-E4505	Layer 1	42A											1	32					1		1
N5185-E4555	Layer 1	71A		1									1	23		1					2
	Layer 2	71B												5							
N5165-E4605	Layer 1	77A	1	11						4			2	87		1			1		7
N5175-E4655	Layer 1	89A												12							1
N5165-E4705	Layer 1	88A	1			1				14		1	2	175		3	1		5		11
N5190-E4755	Layer 1	114A	3	1				1	1	5		1		69		2			3	1	3
N5195-E4805	Layer 1	115A								6				65		2			3	1	4
N5180-E4155	Layer 1	129A	1						1	3			1	91		8			6	1	
N5220-E4455	Layer 1	44A	1	1						1				19						1	
N5240-E4505	Layer 1	45A		2						1				19							
N5235-E4555	Layer 1	66A								4				12						1	
N5215-E4605	Layer 1	70A							1	3				28						2	
N5225-E4655	Layer 1	91A							2					1							
N5215-E4705	Layer 1	87A		3		1				3	1	1	1	56		3			2	3	1
N5240-E4755	Layer 1	112A				1		1		3			1	70		2				4	3
	Layer 2	112B							2					2							
N5240-E4805	Layer 1	113A								2		1	1	60					3	2	4
	Layer 2	113B																			
N5230-E4855	Layer 1	125A								1		2	1	46		8			2		5
N5270-E4470	Layer 1	46A					1		1	2				10							1
N5290-E4520	Layer 1	48A		1						3				5	1						
N5285-E4570	Layer 1	68A		1					2	10				20					1	1	1
N5265-E4620	Layer 1	67A				1				1		1		31							3
N5275-E4670	Layer 1	90A		1									1	3							
N5265-E4720	Layer 1	92A								5				76		2	1			2	1
N5290-E4770	Layer 1	111A		1						4				39		2					3
N5295-E4820	Layer 1	110A	1							4				45							2
N5280-E4870	Layer 1	126A		1		1			1	1			1	58		7			2	1	4
N5320-E4465	Layer 2	47B		1						6				4							1
N5340-E4515	Layer 1	49A	1						3	30				23							1
N5335-E4565	Layer 1	64A	1	3		1			1	9				47						1	4
N5315-E4615	Layer 1	63A								1				4							1
	Layer 2	63B								18				36							2
	Layer 3	63C	1							1											
N5325-E4665	Layer 1	93A												10							
N5315-E4715	Layer 1	94A							1	3				25							1
N5340-E4765	Layer 1	109A								2				18							
N5345-E4815	Layer 1	108A		1					2				1	31		1					
N5330-E4865	Layer 1	127A				1				4				40		2				1	
N5370-E4475	Layer 1	50A	1							11				7							
N5390-E4525	Layer 1	52A								10				33						1	5
N5385-E4575	Layer 1	60A	2							15		1		148		3	1		1	1	10
	Layer 2	60B												1							
N5365-E4625	Layer 1	62A				1				2			2	57		3			2		
	Layer 2	62B	1						3	37			2	160		3			1	1	10
N5375-E4675	Layer 1	95A	3	2					3	15				173		2				1	8
N5365-E4725	Layer 1	96A							2	6			1	39		2				1	3
N5390-E4775	Layer 1	106A	1						2			1		26		1			1		
N5395-E4825	Layer 1	107A												12							1
N5380-E4875	Layer 1	130A		2					7					57		1					7
	Layer 2	130B							1	2			3	17							
N5420-E4480	Layer 1	51A		1						2				13							3
N5440-E4530	Layer 1	57A								4				26		1		1		1	
N5435-E4580	Layer 1	58A	1							7		1		27		2					3
N5415-E4630	Layer 1	61A				3				15			1	302	1	8				1	45
Feature 27	Layer 2	69A		1				1					2	35	1	4					1
N5425-E4680	Layer 1	97A	1	4		1				9				141	2	8				1	14
N5415-E4730	Layer 1	99A		3					1	4				56		6	1				5
N5440-E4780	Layer 1	102A	1							3				49		6			2	2	3
N5440-E4830	Layer 1	104A												18						2	1
N5430-E4880	Layer 1	131A					1							20							
N5470-E4465	Layer 1	54A	1							2				9		1					
N5490-E4515	Layer 1	56A								4				7		1					1
N5485-E4565	Layer 1	55A								1				34							6
N5465-E4615	Layer 1	59A						1		8				66		2	1		1	1	6
N5475-E4665	Layer 1	101A		2						3				53		6					4
N5465-E4715	Layer 1	100A								6				60		3			1		4
N5490-E4765	Layer 1	103A		1						3				36					5		
N5495-E4815	Layer 1	105A		3						14		1		20					1		1
	Layer 2	105B								1				1							
N5480-E4865	Layer 1	132A	1											5							
	Layer 2	132B								1				1							
N5520-E4475	Layer 1	141A												2							1
N5540-E4525	Layer 1	137A		1						2				12		1			1		1
N5535-E4575	Layer 1	140A							1					12		1				1	2
N5515-E4625	Layer 1	138A		1						6				28		3					2
N5525-E4675	Layer 1	134A								4				32		1					5
N5515-E4725	Layer 1	136A	1							6				31					1		5
N5540-E4775	Layer 1	135A								7		1		24	1	1			1		1
N5535-E4825	Layer 1	133A							1	6				26		2					4
N5530-E4875	Layer 1	148A	2	1						8				27		2					1
N5570-E4450	Layer 1	165A		1										1		2					1
N5590-E4500	Layer 1	164A								1				20					1		2

			Lead Glazed Slipware	Ironstone-Whiteware	Mocha Ware	Jackfield Ware	Green Glazed Creambodied Ware	Bisque Ware	Coarse Earthenware	Delft	Finger-painted Creamware	Annular Creamware	Overglaze Enamelled Hand-painted Creams	Creamware	Transfer-printed Creamware	Underglaze Polychrome Pearlware	Finger-painted Pearlware	Willow Transferprinted Pearlware	Transfer-printed Pearlware	Annular Pearlware	Underglaze Blue Hand-painted Pearlware
N5560-E4550	Layer 1	166A								1				35		1				1	5
N5565-E4600	Layer 1	168A		1						5			1	48		3					4
N5575-E4650	Layer 1	147A	1							6				56		2				1	6
N5565-E4700	Layer 1	144A	2		1					15			1	64							5
N5590-E4750	Layer 1	142A		2					5	7				73	1	3		1			13
N5595-E4850	Layer 1	154A	1	10				1	24	8		2	1	547		16	5		3	3	51
N5595-E4800	Layer 1	149A	1	4					6	3		1		177	1	8			2	4	20
N5620-E4460	Layer 1	163A		3						1				10							1
N5640-E4510	Layer 1	139A												1							
N5635-E4560	Layer 1	167A								4		1		22		3		1			2
N5615-E4610	Layer 1	146A								3				63		3				1	5
N5625-E4660	Layer 1	145A	2						1	3				47		1					7
N5615-E4710	Layer 1	143A												18		1					2
N5645-E4760	Layer 1	150A		3					12	7				169		8		1			18
N5645-E4810	Layer 1	155A		5				1		5			1	127		8		1			17
N5630-E4860	Layer 1	151A		1					1	2			1	90		6		1			4
N5670-E4470	Layer 1	161A												3				1			
N5690-E4520	Layer 1	162A								2				2							
N5685-E4570	Layer 1	160A												7				2			
N5665-E4620	Layer 1	159A								3				17							1
N5675-E4670	Layer 1	158A								2				23							5
N5665-E4720	Layer 1	157A							4	1				60	1	4		1			4
N5690-E4770	Layer 1	156A	1	8					9	4				122		22					17
N5695-E4820	Layer 1	153A								1				46		3					1
N5680-E4870	Layer 1	152A												17		3			1		
	TOTALS		51	119	1	22	3	6	106	556	6	20	41	6180	11	253	14	5	88	50	495

			Blue & Green Edged Pearlware	Undecorated Pearlware	Carolina Creamware	Unidentified Earthenwares	Flower Pot Fragments (Mod.)	Colono-Indian Pottery	Nottingham Stoneware	British Brown Stoneware	Westerwald Stoneware	Moulded White Salt-glazed Stoneware	Scratch Blue White Salt-glazed Stoneware	White Salt-glazed Stoneware	Black Basaltes	Engine-turned Unglazed & Glazed Stoneware	Porcelain	Unidentified Stonewares		TOTALS
N5026-E4465	Layer 1	36A		2																4
	Layer 2	36B		2														1		6
N5040-E4515	Layer 1	35A		3	1					1										13
	Layer 2	35B																		3
N5035-E4565	Layer 1	74A			1			1			1									12
N5015-E4615	Layer 1	79A		9	3	2		5				1		3		1	3	1		41
N5025-E4665	Layer 1	83A		1	2			5		1		1					5	2		42
N5015-E4715	Layer 1	84A	1	7	7			2		1	1		1	6			10			115
	Layer 2	84B		1																9
N5040-E4765	Layer 1	124A	1	21	7	4		9			2	1		6	1		6			145
N5045-E4815	Layer 1	119A	6	11	9									1		2	2			76
N5030-E4860	Layer 1	120A		13		2		2			2			1			9			94
	Layer 2	120B						5												7
N5070-E4455	Layer 1	38A	1	1	1									3			1	1		9
N5090-E4505	Layer 1	37A						1						4			2	1		16
N5085-E4555	Layer 1	73A		1	1									1			1			12
	Layer 2	73B																		1
N5065-E4605	Layer 1	78A	1	2	2	3		3			2			5			4			49
	Layer 2	78B						2												3
N5075-E4655	Layer 1	80A		4	8	6		2	1		1		3	6			11			118
N5065-E4705	Layer 1	86A	1	8	5	2		3		1		1	2	4			9			106
	Layer 2	86B		1				2												5
N5090-E4755	Layer 1	123A	1	6	3	6		3	1		1	2		3			6			92
N5180-E4855	Layer 1	128A		1				1												3
N5095-E4805	Layer 1	118A		2	3			3		2				1			5			55
N5080-E4855	Layer 1	122A		8	1			2		1	1						1			42
N5120-E4450	Layer 1	39A		1								1						1		3
N5140-E4500	Layer 1	40A		2		2		2		1				1			1			25
	Layer 2	40B			1															4
N5135-E4550	Layer 1	72A		4				1		1			1			1	1			36
	Layer 2	72B						3						1						8
N5165-E4600	Layer 1	76A	1	5	7			5				1	1	6		1	3	5		102
N5125-E4650	Layer 1	82A	1	46	25	3		10		2	5	2		9	1		19			285
N5115-E4700	Layer 1	85A		12	21	6		3	3	1	4	3	1	8	1	1	10	1		197
	Layer 2	85B			1															5
N5140-E4750	Layer 1	116A	3	5	4			7		3	2	2	2	4			4	3		116
N5145-E4800	Layer 1	117A	1	4	4			8		1	1	1		1		1	9			110
N5130-E4850	Layer 1	121A	2	8	2				1			1		1	2		2			70
N5170-E4455	Layer 1	41A		6				3		5							1			24
N5190-E4505	Layer 1	42A	1	2	1			2									2			43
N5185-E4555	Layer 1	71A	3	2	1	1		2												37
	Layer 2	71B						1					1	1			3			11
N5165-E4605	Layer 1	77A		8	15	1		7		2		2		4			15			168
N5175-E4655	Layer 1	89A			2			3												18
N5165-E4705	Layer 1	88A	1	17	11	1		4	1		2	2	1	5		1	13			273
N5190-E4755	Layer 1	114A	2	10	6	5		9						4			5			131
N5195-E4805	Layer 1	115A		12	4	7		5			1			1			3	1		115
N5180-E4155	Layer 1	129A	5	28	2	10		2	1				1	5			1			167
N5220-E4455	Layer 1	44A		1	1												1			26
N5240-E4505	Layer 1	45A		4						1		1								28
N5235-E4555	Layer 1	66A		4		3		2		1							1			28
N5215-E4605	Layer 1	70A	1	3	1			1		1			1	2			5			49
N5225-E4655	Layer 1	91A															1			4
N5215-E4705	Layer 1	87A	5		4			2						2			2			90
N5240-E4755	Layer 1	112A	11		4	2		4	1		2			3			3			115
	Layer 2	112B																		4
N5243-E4805	Layer 1	113A	2	9	2	3		7			2			2	1	1	3	1		99
	Layer 2	113B						6												6
N5230-E4855	Layer 1	125A	1	13	2			2			1	1		2			3			90
N5270-E4470	Layer 1	46A	1	4	1			4					1					1		27
N5290-E4520	Layer 1	48A		1	2	5											1			19
N5285-E4570	Layer 1	68A	1	2	7			1			1						1			48
N5265-E4570	Layer 1	67A		1	1	1											1	1		42
N5275-E4670	Layer 1	90A		2	1	1	1	3				1					1			15
N5265-E4720	Layer 1	92A		12	4	3								1			4			111
N5290-E4770	Layer 1	111A		6	3			2		1							2			63
N5295-E4820	Layer 1	110A	1	11	2	2		2		2	1	1					2			76
N5280-E4870	Layer 1	126A	2	16	1	1		1						1			2			101
N5320-E4465	Layer 2	47B		3	2						1			2			2			22
N5340-E4515	Layer 1	49A		5	9	1				2	1			1						77
N5335-E4565	Layer 1	64A		15	10	3		2		4	1			3			2			107
N5315-E4615	Layer 1	63A																		6
	Layer 2	63B		7	5	5		3			2			4			2			84
	Layer 3	63C															1			3
N5325-E4665	Layer 1	93A		1	1	1								1						14
N5315-E4715	Layer 1	94A	1	4	3									1						39
N5340-E4765	Layer 1	109A		9	6			4		1								1		41
N5345-E4815	Layer 1	108A		6	1			3												46
N5330-E4865	Layer 1	127A	2	6	2	2				3							1	2		66
N5370-E4475	Layer 1	50A		4	6	2		1			1			1						34
N5390-E4525	Layer 1	52A		7	10			1		2	2			3				1		75
N5385-E4575	Layer 1	60A	6	33	9	4		1			1			2	1		3			242

			Blue & Green Edged Pearlware	Undecorated Pearlware	Carolina Creamware	Unidentified Earthenwares	Flower Pot Fragments (Mod.)	Colono-Indian Pottery	Nottingham Stoneware	British Brown Stoneware	Westerwald Stoneware	Moulded White Salt-glazed Stoneware	Scratch Blue White Salt-glazed Stonew.	White Salt-glazed Stoneware	Black Basaltes	Engine-Turned Unglazed & Glazed Stonew.	Porcelain	Unidentified Stonewares		TOTALS
	Layer 2	60B																		1
N5365-E4625	Layer 1	62A	1	6	10	2				1			1	2			1			91
	Layer 2	62B	4	49	33	30		7		4	3	2	1	2			8			361
N5375-E4675	Layer 1	95A	4	41	19	3		1						5		1	4			285
N5365-E4725	Layer 1	96A	1	4	7	1				2			1	1			1			72
N5390-E4775	Layer 1	106A	3	8	2	1		1												47
N5395-E4825	Layer 1	107A	1	4	1									1			1			21
N5380-E4875	Layer 1	130A	1	14	4	1			1	1							2			98
	Layer 2	130B	3																	26
N5420-E4480	Layer 1	51A			1			2						3			1			26
N5440-E4530	Layer 1	57A		7	12				1					3			1	1		58
N5435-E4530	Layer 1	58A	2	22	3	3		1				1	1				1			125
N5415-E4630	Layer 1	61A	2	95	17	5		6		2	1	2	1	2			4			513
Feature 27	Layer 2	69A		10	2			5				1		1			5			69
N5425-E4680	Layer 1	97A	6	37	13	5		3	1	4			1	3	1		3			258
N5415-E4730	Layer 1	99A	4	12	7	6				2			1	2						110
N5440-E4780	Layer 1	102A		19	2						2			1			1	1		92
N5440-E4830	Layer 1	104A	1	5	2									2	1		2	3		37
N5430-E4880	Layer 1	131A	2	4	2															32
N5470-E4465	Layer 1	54A		3	2									1			1			20
N5490-E4515	Layer 1	56A		4	2	1				1										21
N5485-E4565	Layer 1	55A	1	13	7													3		65
N5465-E4615	Layer 1	59A	2	20	4	3		1		1				3			1			121
N5475-E4665	Layer 1	101A	2	8	7	8				1				2			1			97
N5465-E4715	Layer 1	100A		11	6			1			1		1	3			2	3		102
N5490-E4765	Layer 1	103A	1	4	5	5		1		1	2		2	2			1			69
N5495-E4815	Layer 1	105A			8								1	1			1	1		52
	Layer 2	105B																1		3
N5480-E4865	Layer 1	132A			5	1				3	2			1				3		21
	Layer 2	132B		5		1														8
N5520-E4475	Layer 1	141A						2												5
N5540-E4525	Layer 1	137A		6				2										1		27
N5535-E4575	Layer 1	140A	1	5	2						1						1			27
N5515-E4625	Layer 1	138A	1	8	8	2		6		1				1			2			68
N5525-E4675	Layer 1	134A		11	8	3		4			1						6			75
N5515-E4725	Layer 1	136A	2	10	7	6		4			1		1	1			1	2		59
N5540-E4775	Layer 1	135A	1	5	5	1		3		1			1	1						54
N5535-E4825	Layer 1	133A		13		2		2		1		1	1	3						62
N5530-E4875	Layer 1	148A	1	6		4			1	2	1									56
N5570-E4450	Layer 1	165A		2		3														10
N5590-E4500	Layer 1	164A		5												1				30
N5560-E4550	Layer 1	166A		14	1	4		3		2							2			60
N5565-E4600	Layer 1	168A		9	8			1		1	2						1			84
N5575-E4650	Layer 1	147A		15	7			2	1								2			99
N5565-E4700	Layer 1	144A		10	16	3		1	2		3				1		2	1		127
N5590-E4750	Layer 1	142A	3	9	7			1		2							1			128
N5595-E4850	Layer 1	154A	6	84	7	20		15	1	5		1		1			16	5		833
N5595-E4800	Layer 1	149A	3	24	3	1		4	1	7	1						6	2		279
N5620-E4460	Layer 1	163A			1	2		2												20
N5640-E4510	Layer 1	139A		1		1														3
N5635-E4560	Layer 1	167A	2	8	2			2									1			48
N5615-E4610	Layer 1	146A	3	32	5	2		6									3	3		129
N5625-E4660	Layer 1	145A		9	13	1		2		2							3	1		92
N5615-E4710	Layer 1	143A		2	2	1			1	1							1			29
N5645-E4760	Layer 1	150A	4	30	6	1		10		5							4			278
N5645-E4810	Layer 1	155A	1	18	2	18		4		6					2	1	2			219
N5630-E4860	Layer 1	151A	2	13	3	7		5		5							4			145
N5670-E4470	Layer 1	161A		1																5
N5690-E4520	Layer 1	162A		1				2		1							1			9
N5685-E4570	Layer 1	160A		8				1									1			19
N5665-E4620	Layer 1	159A		1	3			6										1		32
N5675-E4670	Layer 1	158A		12	5	4		1	1								2	2		57
N5665-E4720	Layer 1	157A	3	5	7	7		4		4	2			1	1		4	1		114
N5690-E4770	Layer 1	156A	3	46	3			28	1	6				1			4	1		276
N5695-E4820	Layer 1	153A		10											2					63
N5680-E4870	Layer 1	152A		4		1		3												24
	TOTALS		242	1307	575	270	1	335	21	116	65	3	30	176	15	12	323	60		

			Unidentified Metal Fragments	Rectangular Unidentified Metal Frags.	Slag Fragments	Lead Fragments	Lead Bullets	Musket Balls	Swan Shot	Canisters	Grape Shot	Sprue	Escutcheon Plates	Jaw Hammer Screw	Rammer Tube Fragments	Flint Chips	Scissor Fragments	Buttons	Thimbles	Glass Beads
N5026-E4465	Layer 1	36A	12																	
	Layer 2	36B	1		1															
N5040-E4515	Layer 1	35A	16		8		1													
	Layer 2	35B	1																	
N5035-E4565	Layer 1	74A	37																	
N5015-E4615	Layer 1	79A	17									1								
N5025-E4665	Layer 1	83A	8		2															
N5015-E4715	Layer 1	84A	1																	
N5040-E4765	Layer 1	124A	37		3															
N5045-E4815	Layer 1	119A	11																	
N5030-E4860	Layer 1	120A	19						1									2		
	Layer 2	120B																1		
N5070-E4455	Layer 1	38A	6		1											2				
	Layer 2	38B	5		1															
N5090-E4505	Layer 1	37A	18		3															
	Layer 2	37B	3					1-21mm					e							
N5085-E4555	Layer 1	73A	3					1-22mm												
N5065-E4605	Layer 1	78A			3	2												1		
	Layer 1	78B	4		2															
N5075-E4655	Layer 1	80A	30		10															
N5065-E4705	Layer 1	86A	20																	
N5090-E4755	Layer 1	123A																		
N5180-E4855	Layer 1	128A	2	1						1										
N5095-E4805	Layer 1	118A	12															1		
N5080-E4855	Layer 1	122A														1				
N5120-E4450	Layer 1	39A	5																	
N5140-E4500	Layer 1	40A	36																	
	Layer 2	40B																		
N5135-E4550	Layer 1	72A	25																1	
	Layer 2	72B																		
N5165-E4600	Layer 1	76A	4															1		
N5125-E4650	Layer 1	82A	23			1		1-18mm				2						3	1	
N5115-E4700	Layer 1	85A	35					1-22mm		1	1				1			1		
	Layer 2	85B	4																	
N5140-E4750	Layer 1	116A	4															1		
N5145-E4800	Layer 1	117A	18															1		
N5130-E4850	Layer 1	121A	10																	
N5170-E4455	Layer 1	41A	7		1															
N5190-E4505	Layer 1	42A	6															1		
N5185-E4555	Layer 1	71A	5																	
N5165-E4605	Layer 1	77A	4		2											2				1
	Layer 2	77B																		

			Unidentified Metal Fragments	Rectangular Unidentified Metal Fragments	Slag Fragments	Lead Fragments	Lead Bullets	Musket Balls	Swan Shot	Canisters	Grape Shot	Sprue	Escutcheon Plates	Jaw Hammer Screw	Ramrod Tube Fragments	Flint Chips	Scissor Fragments	Buttons	Thimbles	Glass Beads
N5175-E4655	Layer 1	89A																		
N5165-E4705	Layer 1	88A	5		1													1		
N5190-E4755	Layer 1	114A	15					1										1		
N5195-E4805	Layer 1	115A	1															1		
N5180-E4155	Layer 1	129A	6			1						1						2		
N5220-E4455	Layer 1	44A			7															
N5240-E4505	Layer 1	45A	4			1														
N5235-E4555	Layer 1	66A	11															1		
N5215-E4605	Layer 1	70A	14																	
N5215-E4705	Layer 1	87A	2																	
N5240-E4755	Layer 1	112A	6					2-33/64 mm										2		
N5243-E4805	Layer 1	113A																		
N5230-E4855	Layer 1	125A	3		1	2														
N5270-E4470	Layer 1	46A	16																	
N5290-E4520	Layer 1	48A																		
N5285-E4570	Layer 1	68A	25															2		
N5265-E4620	Layer 1	67A	8			1														
N5275-E4670	Layer 1	90A	3		1															
N5280-E4870	Layer 1	126A	24																	
N5320-E4465	Layer 1	47B	6																	
N5360-E4515	Layer 1	49A	20		2												1	2		
N5335-E4565	Layer 1	64A								1										
N5315-E4615	Layer 2	63B	17															1		
	Layer 3	63C	3																	
N5325-E4665	Layer 1	93A	3																	
N5315-E4715	Layer 1	94A	3																	
N5340-E4765	Layer 1	109A																		
N5345-E4815	Layer 1	108A	10															1		
N5330-E4865	Layer 1	127A			1							1								
N5370-E4475	Layer 1	50A	9		15													1		
N5390-E4525	Layer 1	52A	15															1		
N5385-E4575	Layer 1	60A	9			3												2		
	Layer 2	60B																		
N5365-E4625	Layer 1	62A																		
	Layer 2	62B	9			1		1-19mm								1		2		
N5375-E4675	Layer 1	95A	20																	
N5365-E4725	Layer 1	96A	32																1	
N5390-E4775	Layer 1	106A	10																	
N5395-E4825	Layer 1	107A	12																	
N5380-E4875	Layer 1	130A	20																	
N5420-E4480	Layer 1	51A	29															1		
N5440-E4530	Layer 1	57A	10																	
N5415-E4630	Layer 1	61A	2															1		
Feature 27	Layer 2	69A	4																	
Feature 27	Layer 3	69B																		
N5425-E4680	Layer 1	97A		2		1							1							
N5415-E4730	Layer 1	99A	3	2		1												1		
N5440-E4780	Layer 1	102A	5		1			1-17mm												
N5440-E4830	Layer 1	104A	55																	
N5430-E4880	Layer 1	131A																		
N5470-E4465	Layer 1	54A	10																	
N5485-E4565	Layer 1	55A	16		1								1							
N5465-E4615	Layer 1	59A																		
N5475-E4615	Layer 1	101A																		
N5465-E4715	Layer 1	100A	10																	
N5490-E4765	Layer 1	103A	19																	
N5495-E4815	Layer 1	105A	15										2							
	Layer 2	105B	1																	
N5480-E4865	Layer 1	132A	20	1					1					1						
	Layer 2	132B	10																	
N5520-E4475	Layer 1	141A	2																	
N5540-E4525	Layer 1	137A																		
N5535-E4575	Layer 1	140A	23																	
N5515-E4625	Layer 1	138A	6		1															
N5525-E4675	Layer 1	134A	7																	
N5515-E4725	Layer 1	136A	65																	
N5540-E4775	Layer 1	135A	6			1												1		
N5535-E4825	Layer 1	133A	10		1			1-13mm												
	Layer 2	133B																		
N5530-E4875	Layer 1	148A	12							1-21mm			1					2		
NN5560-E4550	Layer 1	166A	44																	
N5565-E4600	Layer 1	168A	14																	
N5565-E4700	Layer 1	144A	2		3															
N5590-E4750	Layer 1	142A	10																	
N5595-E4850	Layer 1	154A	55		3	3		4-33/64 mm										4		
N5595-E4800	Layer 1	149A	27		1	2		1-11mm												
N5620-E4460	Layer 1	163A	3		2															
N5640-E4510	Layer 1	139A	1		1															
N5635-E4560	Layer 1	167A	23		1		1													
N5615-E4610	Layer 1	146A	20		1													1		
N5625-E4660	Layer 1	145A	14																	
N5615-E4710	Layer 1	143A	16			1									1				1	
N5645-E4760	Layer 1	150A	25		5															
N5645-E4810	Layer 1	155A	35																	
N5630-E4860	Layer 1	151A	12		1				1											
N5670-E4470	Layer 1	161A	10		3															
N5690-E4520	Layer 1	162A																		
N5685-E4570	Layer 1	160A	25		4															
N5665-E4620	Layer 1	159A	5	1		2		1-12mm												
N5675-E4670	Layer 1	158A	30		8															
N5665-E4720	Layer 1	157A	76	1	1			1-12mm										2		
N5690-E4770	Layer 1	156A	66						1						1			2		
N5695-E4820	Layer 1	153A																		1
N5680-E4870	Layer 1	152A	11		5			1-11mm												
	TOTALS		2332	8	115	23	2	18	4	4	1	5	5	1	4	6	1	48	4	2

			Buckles	Pipe Stem Frags(unmeas.)	Pipe Stem Frags 4/64	Pipe Stem Frags 5/64	Pipe Stem Frags 6/64	Pipe Bowl Frags	Clay Pipe Fragments	Brass Tacks	Furniture Fragments	Chert Chips	Chipped Stone	Nail Fragments (unmeas.)	Spike Fragments (unmeas.)		TOTALS			
N5026-E4465	Layer 1	36A												3			15			
	Layer 2	36B															2			
N5040-E4515	Layer 1	35A												10			35			
	Layer 2	35B						1						2			4			
N5035-E4565	Layer 1	74A						1						19			57			
N5015-E4615	Layer 1	79A			2									16			36			
N5025-E4665	Layer 1	83A												10			20			
N5015-E4715	Layer 1	84A			1	4			1					28			35			
N5040-E4765	Layer 1	124A				3				3			2	3			51			
N5045-E4815	Layer 1	119A				3								13			29			
N5030-E4860	Layer 1	120A			1	2		2		2			5	3			36			
	Layer 2	120B												3			5			
N5070-E4455	Layer 1	38A			1									2			10			
	Layer 2	38B															6			
N5090-E4505	Layer 1	37A												8	2		31			
	Layer 2	37B												1			5			
N5085-E4555	Layer 1	73A											2				6			
N5065-E4605	Layer 1	78A						1						13			20			
	Layer 2	78B										2		2			10			

			Buckles	Pipe Stem Frags(unmeas.)	Pipe Stem Frags 4/64	Pipe Stem Frags 5/64	Pipe Stem Frags 6/64	Pipe Bowl Frags	Clay Pipe Fragments	Brass Tacks	Furniture Fragments	Chert Chips	Chipped Stone	Nail Fragments (unmeas.)	Spike Fragments (unmeas.)		TOTALS		
N5075-E4655	Layer 1	80A				3		3						29			75		
N5065-E4705	Layer 1	86A		2		5		2						18			47		
N5090-E4755	Layer 1	123A												1			1		
N5180-E4855	Layer 1	128A												2			6		
N5095-E4805	Layer 1	118A						1					5				14		
N5080-E4855	Layer 1	122A										1	4	1			3		
N5120-E4450	Layer 1	39A												5			10		
N5140-E4500	Layer 1	40A															36		
	Layer 2	40B												5			5		
N5135-E4550	Layer 1	72A												10			36		
	Layer 2	72B						2				1					3		
N5165-E4600	Layer 1	76A		1		1		3						25			35		
N5125-E4650	Layer 1	82A		1	2	3		7		1				29			74		
N5115-E4700	Layer 1	85A			10	5		12					8	47			114		
	Layer 2	85B											1	8			12		
N5140-E4750	Layer 1	116A			3	2		2					2	10			22		
N5145-E4800	Layer 1	117A						2					3	7			28		
N5130-E4850	Layer 1	121A				1							1	3			14		
N5170-E4455	Layer 1	41A			1									13			22		
N5190-E4505	Layer 1	42A			2												9		
N5185-E4555	Layer 1	71A						2									8		
N5165-E4605	Layer 1	77A		1	4	5		7		1			2	28			54		
	Layer 2	77B		1													1		
N5175-E4655	Layer 1	89A			3	2								7			12		
N5165-E4705	Layer 1	88A			1	4		5						36			23		
N5190-E4755	Layer 1	114A		2										36			55		
N5195-E4805	Layer 1	115A			2	4								12			20		
N5180-E4155	Layer 1	129A				3								9			22		
N5220-E4455	Layer 1	44A												4			11		
N5240-E4505	Layer 1	45A											1	1			6		
N5235-E4555	Layer 1	66A		1										4			17		
N5215-E4605	Layer 1	70A		1		3		1						10			29		
N5215-E4705	Layer 1	87A															30		
N5240-E4755	Layer 1	112A			2	1								13			26		
N5243-E4805	Layer 1	113A			1									25			26		
N5230-E4855	Layer 1	125A				2		2					4	18			28		
N5270-E4470	Layer 1	46A													4		20		
N5290-E4520	Layer 1	48A												2			2		
N5285-E4570	Layer 1	68A	1		4	1											33		
N5265-E4620	Layer 1	67A												12			21		
N5275-E4670	Layer 1	90A															4		
N5280-E4870	Layer 1	126A			1	1		1					5				27		
N5320-E4465	Layer 1	47B				3											9		
N5340-E4515	Layer 1	49A			2	8		4									39		
N5335-E4565	Layer 1	64A				11		3									15		
N5315-E4615	Layer 2	63B				3		3	4					22			50		
	Layer 3	63C															3		
N5325-E4665	Layer 1	93A			1	2								5			11		
N5315-E4715	Layer 1	94A				2						2		9			18		
N5340-E4765	Layer 1	109A				1								11			12		
N5345-E4815	Layer 1	108A												8			19		
N5330-E4865	Layer 1	127A		1									2	17			20		
N5370-E4475	Layer 1	50A			8			5						4			32		
N5390-E4525	Layer 1	52A			4	6		6						4			36		
N5385-E4575	Layer 1	60A			3	8		8					2	25			58		
	Layer 2	60B												2			2		
N5365-E4625	Layer 1	62A			2	3		2						5			12		
	Layer 2	62B			11	20		7						30			82		
N5375-E4675	Layer 1	95A			6	2		1		1				14			44		
N5365-E4725	Layer 1	96A				2				3			1	27			65		
N5390-E4775	Layer 1	106A				2	2	1					5				15		
N5395-E4825	Layer 1	107A															12		
N5380-E4875	Layer 1	130A				2		1					5	3			26		
N5420-E4480	Layer 1	51A			4	3		3						6			46		
N5440-E4530	Layer 1	57A			3			1						8			22		
N5415-E4630	Layer 1	61A			1	4	3	2						16			29		
Feature 27	Layer 2	69A			1	4								29			38		
Feature 27	Layer 3	69B				2											2		
N5425-E4680	Layer 1	97A	1		1	4				1				7			18		
N5415-E4730	Layer 1	99A				4					1		1	3			15		
N5440-E4780	Layer 1	102A			3	5		1						5			21		
N5440-E4830	Layer 1	104A		6		4		1					3	23			89		
N5430-E4880	Layer 1	131A												7			7		
N5470-E4465	Layer 1	54A															10		
N5485-E4565	Layer 1	55A		1	2	1		2						11			35		
N5465-E4615	Layer 1	59A			2	11	1							12			26		
N5475-E4615	Layer 1	101A						1									1		
N5465-E4715	Layer 1	100A			4	2		5						9			30		
N5490-E4765	Layer 1	103A												10			29		
N5495-E4815	Layer 1	105A				8											25		
	Layer 2	105B				1											2		
N5480-E4865	Layer 1	132A			1	1								6			31		
	Layer 2	132B												2			12		
N5520-E4475	Layer 1	141A															2		
N5540-E4525	Layer 1	137A												1			1		
N5535-E4575	Layer 1	140A			1	2								15			41		
N5515-E4625	Layer 1	138A			2	1						1	1	4			15		
N5525-E4675	Layer 1	134A			2			2					4				11		
N5515-E4725	Layer 1	136A				3		4					4				72		
N5540-E4775	Layer 1	135A			1	4		2					1				15		
N5535-E4825	Layer 1	133A				1								7			20		
	Layer 2	133B												1			1		
N5530-E4875	Layer 1	148A			2	2		1						9			30		
N5560-E4550	Layer 1	166A			1		1										46		
N5565-E4600	Layer 1	168A			3			3									20		
N5565-E4700	Layer 1	144A															5		
N5590-E4750	Layer 1	142A												3			13		
N5595-E4850	Layer 1	154A			9	29	1	26					1	33			167		
N5595-E4800	Layer 1	149A			8	5		8						5			57		
N5620-E4460	Layer 1	163A			1			1									7		
N5640-E4510	Layer 1	139A															2		
N5635-E4560	Layer 1	167A			2	1											27		
N5615-E4610	Layer 1	146A			1	3		6						25			57		
N5625-E4660	Layer 1	145A															14		
N5615-E4710	Layer 1	143A															18		
N5645-E4760	Layer 1	150A			7	5		12		1		2	2				57		
N5645-E4810	Layer 1	155A															35		
N5630-E4860	Layer 1	151A				4		3						2			23		
N5670-E4470	Layer 1	161A												3			16		
N5690-E4520	Layer 1	162A				1								10			11		
N5685-E4570	Layer 1	160A				1							3	2			32		
N5665-E4620	Layer 1	159A		3										10			22		
N5675-E4670	Layer 1	158A			3	4		1						8			54		
N5665-E4720	Layer 1	157A		1	2	2		3						34			123		
N5690-E4770	Layer 1	156A			3	9		2						38			122		
N5695-E4820	Layer 1	153A			1	2											4		
N5680-E4870	Layer 1	152A				1								8			26		
	TOTALS		2	22	149	267	8	188	5	13	1	9	87	1154	6				

Nails

			15mm	19mm	23mm	24mm	25mm	26mm	28mm	29mm	30mm	31mm	32mm	33mm	34mm	35mm	36mm	37mm	38mm	39mm
N5040-E4515	Layer 1	35A						1												
	Layer 2	35B																		
N5015-E4615	Layer 1	79A															1			
N5025-E4665	Layer 1	83A																		
N5040-E4765	Laeyr 1	124A																		
N5045-E4815	Layer 1	119A			1															
N5090-E4505	Layer 1	37A		1																
N5065-E4605	Layer 1	78A														1		1	1	
N5065-E4705	Layer 1	86A														1				
N5165-E4600	Layer 1	76A												1						
N5125-E4650	Layer 1	82A								7						2				
N5115-E4700	Layer 1	85A													1					
	Layer 2	85B																		
N5140-E4750	Layer 1	116A																		
N5145-E4800	Layer 1	117A																		
N5130-E4850	Layer 1	121A					1				1		1				2			
N5165-E4605	Layer 1	77A													1	1		2	2	1
N5175-E4655	Layer 1	89A												1						
N5165-E4605	Layer 1	88A										1		1						
N5195-E4805	Layer 1	115A									1									
N5180-E4155	Layer 1	129A							2				1							
N5215-E4605	Layer 1	70A															1			
N5240-E4755	Layer 1	112A																		
N5335-E4565	Layer 1	64A												1						
N5315-E4715	Layer 1	94A																		
N5390-E4525	Layer 1	52A																		
N5385-E4575	Layer 1	60A	4		3	1			1						1				1	
	Layer 2	60B				1														
N5365-E4625	Layer 1	62A											1							
	Layer 2	62B													1		1		2	
N5375-E4675	Layer 1	95A																		
N5365-E4725	Layer 1	96A											1							
N5415-E4630	Layer 1	61A																		1
Feature 27	Layer 3	69B																		
N5425-E4680	Layer 1	97A						1								1				
N5415-E4730	Layer 1	99A																1		
N5440-E4780	Layer 1	102A																	1	
N5480-E4865	Layer 2	132B															1			1
N5595-E4850	Layer 1	154A							1		8							3	1	
N5595-E4800	Layer 1	149A													1	2				
		TOTALS	4	1	4	2	1	2	4	7	10	1	4	4	5	2	6	7	8	3

Nails

			40mm	41mm	42mm	43mm	44mm	45mm	46mm	47mm	48mm	49mm	50mm	51mm	52mm	53mm	54mm	55mm	56mm	57mm
N5040-E4515	Layer 1	35A													1					
	Layer 2	35B																		
N5015-E4615	Layer 1	79A																		
N5025-E4665	Layer 1	83A																		
N5040-E4765	Layer 1	124A						1	1									1		1
N5045-E4765	Layer 1	119A		1																
N5090-E4505	Layer 1	37A																		
N5065-E4605	Layer 1	78A																		
N5065-E4705	Layer 1	86A																		
N5165-E4600	Layer 1	76A																		
N5125-E4650	Layer 1	82A	2			1		1				1		1	2				3	
N5115-E4700	Layer 1	85A		1		2		1							1					
	Layer 2	85B																		
N5140-E4750	Layer 1	116A																		
N5145-E4800	Layer 1	117A																		
N5130-E4850	Layer 1	121A				1														
N5165-E4605	Layer 1	77A				1			1	3		1			1	1				
N5175-E4655	Layer 1	89A																		
N5165-E4605	Layer 1	88A			1						1	1					1		2	
N5195-E4805	Layer 1	115A	1		1	1			1				1	1						
N5180-E4155	Layer 1	129A			1									1						
N5215-E4605	Layer 1	70A				1			1											
N5240-E4755	Layer 1	112A								1										
N5335-E4565	Layer 1	64A			2					1										
N5315-E4715	Layer 1	94A								1										
N5390-E4525	Layer 1	52A			1															
N5385-E4575	Layer 1	60A				1				1	1							1		
	Layer 2	60B																		
N5365-E4625	Layer 1	62A																		
	Layer 2	62B	1	2		4	1	1	1		1			1						
N5375-E4675	Layer 1	95A					2			1								3		
N5365-E4725	Layer 1	96A																		
N5415-E4630	Layer 1	61A			1		1	2										1	1	
Feature 27	Layer 3	69B																		
N5425-E4680	Layer 1	97A							1											
N5415-E4730	Layer 1	99A		1					1										1	
N5440-E4780	Layer 1	102A																		
N5480-E4865	Layer 2	132B																		
N5595-E4850	Layer 1	154A			1				1	1			1					2		
N5595-E4800	Layer 1	149A																		
		TOTALS	4	5	8	12	4	6	8	8	3	3	2	4	5	1	1	8	7	1

Nails

			58mm	59mm	60mm	61mm	62mm	63mm	64mm	65mm	66mm	67mm	68mm	69mm	70mm	71mm	72mm	75mm	76mm	77mm
N5040-E4515	Layer 1	35A																		
	Layer 2	35B																		
N5015-E4615	Layer 1	79A																		
N5025-E4665	Layer 1	83A																		
N5040-E4765	Layer 1	124A			1															
N5045-E4765	Layer 1	119A																	1	
N5090-E4505	Layer 1	37A																		
N5065-E4605	Layer 1	78A																		
N5065-E4705	Layer 1	86A			1															
N5165-E4600	Layer 1	76A		1					1											
N5125-E4650	Layer 1	82A			1		2			1	1						1			
N5115-E4700	Layer 1	85A	1											1		1	1			
	Layer 2	85B																		
N5140-E4750	Layer 1	116A																		
N5145-E4800	Layer 1	117A																		
N5130-E4850	Layer 1	121A																		
N5165-E4605	Layer 1	77A			1							1								
N5175-E4655	Layer 1	89A																		
N5165-E4605	Layer 1	88A							1	1										
N5195-E4805	Layer 1	115A																		
N5180-E4155	Layer 1	129A				1		1										1		
N5215-E4605	Layer 1	70A												1						
N5240-E4755	Layer 1	112A							1											
N5335-E4565	Layer 1	64A				1														1
N5315-E4715	Layer 1	94A																		
N5390-E4525	Layer 1	52A																		
N5385-E4575	Layer 1	60A																		
	Layer 2	60B	1																	
N5365-E4625	Layer 1	62A																		
	Layer 2	62B			1		1			2	1		1							
N5375-E4675	Layer 1	95A						1				1								
N5365-E4675	Layer 1	96A																		
N5415-E4630	Layer 1	61A	1		1						1									
Feature 27	Layer 3	69B																		
N5425-E4680	Layer 1	97A																		
N5415-E4730	Layer 1	99A						1												
N5440-E4780	Layer 1	102A																		
N5480-E4865	Layer 2	132B																		
N5595-E4850	Layer 1	154A			3					2										
N5595-E4800	Layer 1	149A																		
		TOTALS	3	1	9	2	3	3	3	6	3	2	1	2	0	1	2	1	1	1

Nails

			80mm	81mm	84mm	85mm	87mm	88mm	94mm	Spike 68mm	Spike 96mm	Spike 102mm	Spike 135mm		TOTALS				
N5040-E4515	Layer 1	35A													2				
	Layer 2	35B													0				
N5015-E4615	Layer 1	79A													1				
N5025-E4665	Layer 1	83A											1		1				
N5040-E4765	Layer 1	124A													6				
N5045-E4765	Layer 1	119A													2				
N5090-E4505	Layer 1	37A													1				
N5065-E4605	Layer 1	78A													3				
N5065-E4705	Layer 1	86A													2				
N5165-E4600	Layer 1	76A													3				
N5125-E4650	Layer 1	82A	1		1					1	1				30				
N5115-E4700	Layer 1	85A													9				
	Layer 2	85B													0				
N5140-E4750	Layer 1	116A													0				
N5145-E4800	Layer 1	117A													0				
N5130-E4850	Layer 1	121A													5				
N5165-E4605	Layer 1	77A										1			18				
N5175-E4655	Layer 1	89A													1				
N5165-E4605	Layer 1	88A			1										11				
N5195-E4805	Layer 1	115A													7				
N5180-E4155	Layer 1	129A							1						9				
N5215-E4605	Layer 1	70A													3				
N5240-E4755	Layer 1	112A		1											3				
N5335-E4565	Layer 1	64A													6				
N5315-E4715	Layer 1	94A													1				
N5390-E4525	Layer 1	52A													1				
N5385-E4575	Layer 1	60A													15				
	Layer 2	60B													2				
N5365-E4625	Layer 1	62A													1				
	Layer 2	62B													22				
N5375-E4675	Layer 1	95A													8				
N5365-E4675	Layer 1	96A													1				
N5415-E4630	Layer 1	61A													10				
Feature 27	Layer 3	69B													0				
N5425-E4680	Layer 1	97A													3				
N5415-E4730	Layer 1	99A													5				
N5440-E4780	Layer 1	102A													1				
N5480-E4865	Layer 1	132B													2				
N5595-E4850	Layer 1	154A	2												26				
N5595-E4800	Layer 1	149A													3				
		TOTALS	3	1	2	0	0	0	1	1	1	1	1						

			Dark Green Wine Bottle Glass Fragments	Dark Green Case Bottle Glass Fragments	Modern Window Pane Glass	Clear Glass Fragments	Modern Clear Glass Fragments	Pink Glass Fragments	Modern Green Bottle Glass Fragments	Modern Brown Bottle Glass Fragments	Melted Glass Fragments	Cut Glass Fragments	Dispensary Bottle Fragments	Milk Glass Fragments	Bone Fragments	Mortar		TOTALS
N5026-E4465	Layer 1	36A					5		1									6
	Layer 2	36B	1				4		1									6
N5040-E4515	Layer 1	35A	6				8			2								16
	Layer 2	35B	3				2											5
N5035-E4565	Layer 1	74A	7		5	1	20		1						1			35
N5015-E4615	Layer 1	79A	12		3		17									5		37
N5025-E4665	Layer 1	83A	7		11	4	10								2			34
N5015-E4715	Layer 1	84A	22		43		13	1	1	5					1			86
N5040-E4765	Layer 1	124A	27		34	7	11											79
N5045-E4815	Layer 1	119A	10		21	10	6											47
N5030-E4860	Layer 1	120A	15		29	13				2								59
	Layer 2	120B	2		2													4
N5070-E4455	Layer 1	38A	1				16			1					1			19
N5090-E4505	Layer 1	37A	7		8		6		1	1					1			26
N5085-E4555	Layer 1	73A	4				6											10
	Layer 2	73B	1		1													2
N5065-E4605	Layer 1	78A	6		9	8	6								4			33
N5075-E4655	Layer 1	80A	23		11		10								3	6		53
N5065-E4705	Layer 1	86A	19		14	5	7								5	10		60
N5180-E4855	Layer 1	128A		2		5												7
N5095-E4805	Layer 1	118A	28				6									1		35
N5080-E4855	Layer 1	122A	14		8	2	5			1								30
N5120-E4450	Layer 1	39A	3				5											8
N5140-E4500	Layer 1	40A	6				3											9
	Layer 2	40B	1		1		1											3
N5135-E4550	Layer 1	72A			6	4	2		2									14
N5165-E4600	Layer 1	76A	27		10	3	6	3							10			59
N5125-E4650	Layer 1	82A	37		24	10	3								93	3		170
N5115-E4700	Layer 1	85A	55		14		27				1	1			18	2		118
	Layer 2	85B	3		1										33	4		41
N5140-E4750	Layer 1	116A	17	4	5	4									6			36
N5145-E4800	Layer 1	117A	42		13	8				2						1		66
N5130-E4850	Layer 1	121A	25		7		7											39
N5170-E4455	Layer 1	41A	9				6											15
N5190-E4505	Layer 1	42A	13			1	9											23
N5185-E4555	Layer 1	71A	15			5									1			21
	Layer 2	71B			1	1												2
N5165-E4605	Layer 1	77A	23		24	9	12	6	1	2					6			83
	Layer 2	77B	1															1
N5175-E4655	Layer 1	89A	7		3										3			10
N5165-E4705	Layer 1	88A	34		21	9		1							9			74
N5190-E4795	Layer 1	114A	48			8									11			67
N5195-E4805	Layer 1	115A	15		9	10	2											36
N5180-E4155	Layer 1	129A	55	1		6	3	1							1	2		69
N5220-E4455	Layer 1	44A	5		5		3											13
N5240-E4505	Layer 1	45A	4		1	3	6		2						2			18
N5235-E4555	Layer 1	66A	10		3	5										1		19
N5215-E4605	Layer 1	70A	13		9	5			1									28
N5215-E4705	Layer 1	87A	13		4	4	6											27
N5240-E4755	Layer 1	112A	23		5	4	5			1								42
	Layer 2	112B					2											2
N5240-E4805	Layer 1	113A	25	2	13		13	1					1					55
N5230-E4855	Layer 1	125A	53				10	1										64
N5270-E4470	Layer 1	46A	7			1	7											15
N5290-E4520	Layer 1	48A	6		4			1							1			12
N5285-E4570	Layer 1	68A	12				3		3						2			20
N5265-E4620	Layer 1	67A	16		3	4												23
N5275-E4670	Layer 1	90A	2		1		1											4
N5290-E4770	Layer 2	111B				1	1											2
N5280-E4870	Layer 1	126A	39		7		21						1					68
N5320-E4465	Layer 2	47B	3		3		6		1	1					2			16
N5340-E4515	Layer 1	49A	11		1		7	1							10	1		31
N5335-E4565	Layer 1	64A	26				8	15	2						6			57
N5315-E4615	Layer 1	63A	3															3
	Layer 2	63B	33				3	4		2					7			49
	Layer 3	63C	1															1
N5325-E4665	Layer 1	93A	7		2	1												10
N5315-E4715	Layer 1	94A	14	2		4	6	3	1									30
N5340-E4765	Layer 1	109A	12			3												15
N5345-E4815	Layer 1	108A	26			6	3											35
N5330-E4865	Layer 1	127A	42			4												46
N5370-E4475	Layer 1	50A	10		3	1	3	3							4			24
N5390-E4525	Layer 1	52A	11		8		7	2							6			34
N5385-E4575	Layer 1	60A	21			7		20	1						47			96
N5365-E4625	Layer 1	62A	7			3		4					1		26			41
	Layer 2	62B	55	5	8		3	27							63	6		167
N5375-E4675	Layer 1	95A	68		14		22	6				1		1	16	16		144
N5365-E472	Layer 1	96A	29			9		11			2							51
N5390-E4725	Layer 1	106A	16				4					1						21
N5395-E4825	Layer 1	107A	12					2										14
N5380-E4875	Layer 1	130A	42		6			12										60
N5420-E4480	Layer 1	51A	10		1			1										12
N5440-E4530	Layer 1	57A	13		7			2	1									23
N5415-E4630	Layer 1	61A	23				13	12		8					9	3		68
Feature 27	Layer 2	69A	14		2		7	3							121			147
Feature 27	Layer 3	69B	2		2		1											5
N5425-E4680	Layer 1	97A	61					21	2	17					3			104
N5415-E4730	Layer 1	99A	46					14		6		2						68
N5440-E4780	Layer 1	102A	27		11		8	6				3			4			59
N5440-E4830	Layer 1	104A	71		25			16										112

			Dark Green Wine Bottle Glass Fragments	Dark Green Case Bottle Glass Fragments	Window Pane Glass	Modern Pane Glass	Clear Glass Fragments	Modern Clear Glass Fragments	Pink Glass Fragments	Modern Green Bottle Glass Fragments	Modern Brown Bottle Glass Fragments	Wood Fragments	Cut Glass Fragments	Dispensary Bottle Fragments	Milk Glass Fragments	Bone Fragments	Mortar	TOTALS		
N5430-E4880	Layer 1	131A	16															16		
N5470-E4465	Layer 1	54A	11			3	3	2	2									21		
N5490-E4515	Layer 1	56A	7				10											17		
N5485-E4565	Layer 1	55A	23		7		6	5				1		1		2		45		
N5465-E4615	Layer 1	59A	24			13	10					2						49		
N5475-E4665	Layer 1	101A	2															2		
N5465-E4715	Layer 1	100A	55		12		12	12				15						106		
N5490-E4765	Layer 1	103A	34		19			8				19						80		
N5495-E4815	Layer 1	105A	36		12			9										57		
	Layer 2	105B	5															5		
N5480-E4865	Layer 1	132A	10			1		7									10	28		
	Layer 2	132B	11				1									10		22		
N5520-E4475	Layer 1	141A	4															4		
N5540-E4525	Layer 1	137A	3			1		1										5		
N5535-E4575	Layer 1	140A	26			4	2	4	2									38		
N5515-E4625	Layer 1	138A	43		6		7	3								5		64		
N5525-E4675	Layer 1	134A	102			38						2				2		144		
N5515-E4725	Layer 1	136A	116					38				20						174		
N5540-E4775	Layer 1	135A	62	9				33								1		105		
N5535-E4825	Layer 1	133A	99		5		4				1	1						110		
N5530-E4875	Layer 1	148A	59		6		6	5										76		
N5560-E4550	Layer 1	166A	25				6									4		35		
N5565-E4600	Layer 1	168A	15		16			17		1						6		54		
N5565-E4700	Layer 1	144A	1					1										2		
N5590-E4750	Layer 1	142A	1															1		
N5595-E4850	Layer 1	154A	71		71		56	2								125		325		
N5595-E4800	Layer 1	149A	90		36	28		5								1		160		
N5620-E4460	Layer 1	163A	4			3		2										9		
N5640-E4510	Layer 1	139A	1					1										2		
N5635-E4560	Layer 1	167A	8		5	6	2				2					5		28		
N5615-E4610	Layer 1	146A	27		16	11	5		1			1				6		67		
N5625-E4660	Layer 1	145A	1															1		
N5615-E4710	Layer 1	143A	16		1													17		
N5645-E4760	Layer 1	150A	51		32			26	2		3							114		
N5630-E4860	Layer 1	151A	65		36			28						1		1		131		
N5670-E4470	Layer 1	161A					1	3										4		
N5690-E4520	Layer 1	162A	2		3			5			1				1			12		
N5685-E4570	Layer 1	160A	6													1		7		
N5665-E4620	Layer 1	159A	6		2			2			1			3		3		17		
N5675-E4670	Layer 1	158A	22					39	3				3					67		
N5665-E4720	Layer 1	157A	22		14	7	2	14	2									61		
N5690-E4770	Layer 1	156A	57		27	15		16			1					4	4	124		
N5695-E4820	Layer 1	153A	11					14	1					2				28		
N5680-E4870	Layer 1	152A	7		4	2		50										63		
	TOTALS		285	25	750	236	292	856	35	20	1	69	4	11	3	744	73			

Area 2

Artifacts

			Lead Glazed Slipware	Ironstone-Whiteware	Mocha Ware	Jackfield Ware	Green Glazed Creamodded Ware	Delftware	Annular Creamware	Overglaze Enamelled Hand-painted Creamw.	Creamware	Underglaze Polychrome Pearlware	Transfer-printed Pearlware	Annular Pearlware	Underglaze Blue Hand-painted Pearlware	Blue & Green Edged Pearlware	Undecorated Pearlware	Carolina Creamware	Unidentified Earthenwares	Flower pot Fragments (mod.)
N4805-E4470	Layer 1	20A	1																	
N4255-E4530	Layer 1	28A		1			1													2
N4840-E4570	Layer 1	22A		1							1						1			2
N4805-E4630	Layer 1	24A		2				2			16		1				1	1		5
N4830-E4670	Layer 1	27A		3				3			23				2		8	2	1	6
N4850-E4735	Layer 1	33A	2							1					2	2	2	3		
N4855-E4455	Layer 1	19A		3																1
N4875-E4535	Layer 1	18A					2							2						1
N4890-E4685	Layer 1	21A									33						2			
N4855-E4635	Layer 1	23A	4	2		1	1	5			3	2	1	1	3	2	9		3	3
Feature 9	Layer 2	34A									3				1			3		
Feature 9	Layer 2	34B						2		1					1		1		1	4
N4880-E4685	Layer 1	25A		2			1	1	6		42						1	1	4	16
N4800-E4730	Layer 1	32A		1				1		1				2	3	1	1	2	2	
N4905-E4475	Layer 1	16A		2							5									
N4925-E4525	Layer 1	17A		1					1								1			
	Layer 2	17B													2		3			
N4905-E4625	Layer 1	26A	1	1				3			1							4		3
N4930-E4675	Layer 1	29A		1				1			15			1	4	1				2
Feature 11	Layer 2	30A		1							6				2		2	4		1
	Layer 3	30B			1						3							1		2
N4900-E4725	Layer 1	31A						1									1	1		24
	TOTALS		8	21	1	1	5	19	7	3	156	2	2	6	20	6	33	22	11	72

			Colono-Indian Pottery	Nottingham Stoneware	British Brown Stoneware	Westerwald Stoneware	Moulded White Salt-glazed Stoneware	Scratch Blue White Salt-glazed Stoneware	White Salt-glazed Stoneware	Porcelain	Unidentified Stonewares	TOTALS
N4805-E4470	Layer 1	20A										1
N4255-E4530	Layer 1	28A								1		5
N4840-E4570	Layer 1	22A										5
N4805-E4630	Layer 1	24A	1							1		30
N4830-E4670	Layer 1	27A				1				1		50
N4850-E4735	Layer 1	33A			1				1	2		16
N4855-E4455	Layer 1	19A										4
N4875-E4535	Layer 1	18A										5
N4890-E4685	Layer 1	21A										35
N4855-E4635	Layer 1	23A	1		1	1	1			4		48
Feature 9	Layer 1	34A	1									8
Feature 9	Layer 1	34B	1			1						12
N4880-E4685	Layer 1	25A							1		3	78
N4800-E4730	Layer 1	32A	6	2	2					2	1	27
N4905-E4475	Layer 1	16A										7
N4925-E4525	Layer 1	17A			1			2				6
	Layer 2	17B										5
N4905-E4625	Layer 1	26A			1			1	1	2		18
N4930-E4675	Layer 1	29A							1			26
Feature 11	Layer 2	30A	1									17
Feature 11	Layer 3	30B										7
N4900-E4725	Layer 1	31A										27
	TOTALS		11	2	6	3	1	3	4	13		

			Unidentified Metal Fragments	Rectangular Unidentified Metal Fragments	Slag Fragments	Lead Fragments	Musket Balls	Pipe Stem Frags(unmeas.)
N4805-E4470	Layer 1	20A	1					
N4255-E4530	Layer 1	28A	2					
N4840-E4570	Layer 1	22A	35					
N4805-E4630	Layer 1	24A	51	1	3			
N4830-E4670	Layer 1	27A						
N4850-E4735	Layer 1	33A	13					
N4855-E4455	Layer 1	19A	1					
N4875-E4535	Layer 1	18A						
N4890-E4685	Layer 1	21A	33					
N4855-E4635	Layer 1	23A	67		3		1-13mm	
Feature 9	Layer 1	34A						
Feature 9	Layer 1	34B	4					
N4880-E4685	Layer 1	25A	60	3	2			
N4800-E4730	Layer 1	32A	5			1		
N4905-E4475	Layer 1	16A	1					
N4925-E4525	Layer 1	17A	9					
	Layer 2	17B						
N4905-E4625	Layer 1	26A	11					
N4930-E4675	Layer 1	29A	10		3			
Feature 11	Layer 2	30A	3	1	11			
Feature 11	Layer 3	30B						
N4900-E4725	Layer 1	31A						

			Pipe Stem Frags 4/64 Pipe	Pipe Stem Frags 5/64	Pipe Stem Frags 6/64	Pipe Bowl Frags	Brass Tacks	Chert Chips	Chipped Stone	Nail Fragments (unmeas.)	Spike Fragments (unmeas.)	TOTALS
N4805-E4470	Layer 1	20A										1
N4255-E4530	Layer 1	28A										2
N4840-E4570	Layer 1	22A										35
N4805-E4630	Layer 1	24A								45		100
N4830-E4670	Layer 1	27A	4	3						71		78

Nails

4mm	17mm	28mm	30mm	34mm	35mm
	1		1		

	Pipe Stem Frags 4/64	Pipe Stem Frags 5/64	Pipe Stem Frags 6/64	Pipe Bowl Frags	Brass Tacks	Chert Chips	Chipped Stone	Nail Fragments (unmeas.)	Spike Fragments (unmeas.)		TOTALS
N4850-E4735 Layer 1 33A								23			36
N4855-E4455 Layer 1 19A								1			2
N4875-E4535 Layer 1 18A								2			2
N4890-E4685 Layer 1 21A								12			45
N4855-E4635 Layer 1 23A		4			1	2	5	37			135
Feature 9 Layer 1 34A								5			5
Feature 9 Layer 1 34B								3			7
N4880-E4685 Layer 1 25A								80			145
N4800-E4730 Layer 1 32A	1	2		2				11			22
N4905-E4475 Layer 1 16A											1
N4925-E4525 Layer 1 17A								3			12
Layer 2 17B								2			2
N4905-E4625 Layer 1 26A								39			50
N4930-E4675 Layer 1 29A								15	1		29
Feature 11 Layer 2 30A											15
Feature 11 Layer 3 30B								3			3
N4900-E4725 Layer 1 31A											0
TOTALS	5	9	0	2	1	2	5	372			

Nails

	4mm	17mm	28mm	30mm	34mm	35mm	TOTALS
N4850-E4735 Layer 1 33A							
N4855-E4455 Layer 1 19A							
N4875-E4535 Layer 1 18A							
N4890-E4685 Layer 1 21A							
N4855-E4635 Layer 1 23A							
Feature 9 Layer 1 34A							
Feature 9 Layer 1 34B							
N4880-E4685 Layer 1 25A					1		1
N4800-E4730 Layer 1 32A							
N4905-E4475 Layer 1 16A							
N4925-E4525 Layer 1 17A							
Layer 2 17B							
N4905-E4625 Layer 1 26A	1					1	2
N4930-E4675 Layer 1 29A			1				1
Feature 11 Layer 2 30A							
Feature 11 Layer 3 30B							
N4900-E4725 Layer 1 31A							
TOTALS	1	1	1	1	1	1	

Nails

	36mm	38mm	39mm	40mm	41mm	42mm	43mm	44mm	45mm	46mm	47mm	48mm	49mm	50mm	51mm	52mm	53mm	57mm	TOTALS
N4805-E4470 Layer 1 20A																			
N4255-E4530 Layer 1 28A																			
N4840-E4570 Layer 1 22A																			
N4805-E4630 Layer 1 24A																			
N4830-E4670 Layer 1 27A	1			1											2			2	6
N4850-E4735 Layer 1 33A					1	1												1	3
N4855-E4455 Layer 1 19A																			
N4875-E4535 Layer 1 18A																			
N4890-E4685 Layer 1 21A	1	1	1									1							4
N4855-E4635 Layer 1 23A									1				1						2
Feature 9 Layer 2 34A																2			3
Feature 9 Layer 2 34B				1															
N4880-E4685 Layer 1 25A																			
N4800-E4730 Layer 1 32A							1					1					1		3
N4905-E4475 Layer 1 16A																			
N4925-E4525 Layer 1 17A																			
Layer 2 17B																			
N4905-E4625 Layer 1 26A							1	1											2
N4930-E4675 Layer 1 29A											1								1
Feature 11 Layer 2 30A										1				1					2
Feature 11 Layer 3 30B																			
N4900-E4725 Layer 1 31A																			
TOTALS	2	1	1	2	1	1	2	1	1	1	1	2	1	1	2	2	1	3	

Nails

	59mm	60mm	61mm	62mm	64mm	66mm	67mm	69mm	70mm	71mm	72mm	75mm	78mm	79mm	80mm	85mm	87mm	88mm	TOTALS
N4805-E4470 Layer 1 20A																			
N42550E4530 Layer 1 28A																			
N4840-E4570 Layer 1 22A																			
N4805-E4630 Layer 1 24A																			
N4830-E4670 Layer 1 27A		1									1			1					3
N4850-E4735 Layer 1 33A	1			1	1														3
N4855-E4455 Layer 1 19A																			
N4875-E4535 Layer 1 18A																			
N4890-E4685 Layer 1 21A									1	1						1			3
N4855-E4635 Layer 1 23A							1	1										2	4
Feature 9 Layer 2 34A																			
Feature 9 Layer 2 34B																			
N4880-E4685 Layer 1 25A																			
N4800-E4730 Layer 1 32A	1					1						1			1				4
N4905-E4475 Layer 1 16A																			
N4925-E4525 Layer 1 17A																			
Layer 2 17B																			
N4905-E4625 Layer 1 26A			1		1	1												1	4
N4930-E4675 Layer 1 29A																			
Feature 11 Layer 2 30A													1				1		2
Feature 11 Layer 3 30B		1																	1
N4900-E4725 Layer 1 31A																			
TOTALS	2	2	1	1	2	2	1	1	1	1	1	1	1	1	1	1	1	3	

	Dark Green Wine Bottle Glass Fragments	Dark Green Case Bottle Glass Fragments	Window Pane Glass	Modern Pane Glass	Clear Glass Fragments	Clear Modern Glass Fragments	Pink Glass Fragments	Brown Modern Glass Fragments	Melted Glass Fragments	Dispensary Bottles	Purple Glass Fragments	Milk Glass Fragments	Bone Fragments	Mortar Fragments		TOTALS	Curry Comb Fragment		
N4805-E4470 Layer 1 20A	2															2			
N4255-E4530 Layer 1 28A						1										1			
N4840-E4570 Layer 1 22A	2				18				1							21			
N4805-E4630 Layer 1 24A	14				5	14										33			
N4830-E4670 Layer 1 27A	21		3	3	17	14	1	1			1		25	5		91			
N4850-E4735 Layer 1 33A	35													5		40			
N4855-E4455 Layer 1 19A	1					5										6			
N4875-E4535 Layer 1 18A	1					2										3			
N4890-E4685 Layer 1 21A	1					5										6			
N4855-E4635 Layer 1 23A	36	5		15		16		2	1			1	5	10		91			
Feature 9 Layer 1 34A														48		48	1		
Feature 9 Layer 1 34B	5	1	1											255		262			
N4880-E4685 Layer 1 25A	30					165			2	1				2		200			
N4800-E4730 Layer 1 32A	20		6		4	14								1		45			
N4905-E4475 Layer 1 16A	1					1							1			3			
N4925-E4525 Layer 1 17A	3					7		1								11			
Layer 2 17B	1															1			
N4905-E4625 Layer 1 26A	27					9		3						4		43			
N4930-E4675 Layer 1 29A	120		7			237		4						10		378			
Feature 11 Layer 2 30A	223		21	95		90		7	1				1	1		439			
Feature 11 Layer 3 30B	10		1			83	1									95			
N4900-E4725 Layer 1 31A	1			50		34							1	1		87			
TOTALS	554	6	39	163	44	697	2	18	5	1	1	1	33	342					

			Lead Glazed Slipware	Ironstone-Whiteware	Jackfield Ware	Blaque Ware	Coarse Red Earthenware	Delftware	Annular Creamware	Overglaze Enamelled Hand-painted Creamw.	Creamware	Underglaze Polychrome Pearlware	Finger-painted Pearlware	Willow Transfer printed Pearlware	Transfer-printed Pearlware	Annular Pearlware	Underglaze Blue Hand-painted Pearlware	Blue & Green Edged Pearlware	Undecorated Pearlware	Carolina Creamware
N5010-E5325	Layer 1	2676							1											
N5035-E5375	Layer 2	272b						4			2									1
N5045-E5475	Layer 1	2906																		
N5060-E5310	Layer 1	1674						1			8				2				6	
N5085-E5360	Layer 1	1724		1		2		1	1		25	1					2	3	8	3
N5085-E5360	Layer 1	1854a		8	1			8			16	1		1		1	3	2	13	5
N5095-E5460	Layer 1	1904									1						1		1	
N5140-E5215	Layer 1	415a		5				4			78	3	1			1	4	3	30	30
N5110-E5315	Layer 1	675a		3	1			9			40				3		2	3	17	6
N5100-E5350	Layer 3	792b		1				4			24				3			2	7	3
	Layer 4	792c	1					13												
N5150-E5010	Layer 1	2A		1							4				2				2	
N5185-E5060	Layer 1	3A						1			4								1	
N5200-E5025	Layer 1	5A					1	1			8									
N5235-E5080	Layer 1	15A																		
	Layer 2	15B						4			25	3			1		3	1	16	5
	Layer 3	15C		2				7			95	6			9		8	13	66	14
N5250-E5005	Layer 1	6A		4							2									
N5285-E5055	Layer 1	8A																		
	Layer 3	8C	1	4			2	5			9	2						1	8	1
N5300-E5025	Layer 3	7C		3			1	2			12	1					1	1	4	
N5335-E5075	Layer 3	9C					1	3			3				1		1		1	1
	Layer 4	9D					1	9			9								3	1
Feature 2	Layer 4	10A	1					1		1	4								6	
N5350-E5010	Layer 3	11C	1		1	3	1	11			25	3			3		2	1	10	1
N5385-E5060	Layer 3	13C		1				2			3				3				3	
N5400-E5000	Layer 1	12A																		
	Layer 2	12B		1				10			98	11	2				7	9	25	
N5435-E5080	Layer 1	14A		30				1												1
		TOTALS	4	64	3	5	7	101	2	1	495	31	3	1	27	2	34	39	227	57

			Unidentified Earthenwares	Colono-Indian Pottery	Nottingham Stoneware	British Brown Stoneware	Westerwald Stoneware	Moulded White Salt-glazed Stoneware	Scratch Blue White Salt-glazed Stonew.	White Salt-glazed Stoneware	Black Basaltes	Engine-turned Unglazed & Glazed Stonew.	Ginger Beer Bottle Stoneware	Porcelain	Unidentified Stonewares		TOTALS			
N5010-E5325	Layer 1	2676						1									2			
N5035-E5375	Layer 2	272b	1														8			
N5045-E5475	Layer 1	2906		2										2			4			
N5060-E5310	Layer 1	1674				1				1			1				20			
N5085-E5360	Layer 1	1724								3			2	1	2		54			
N5085-E5360	Layer 1	1854a	1	1	1					1				1	1		65			
N5095-E5460	Layer 1	1904						1									4			
N5140-E5215	Layer 1	415a	4	17		1	1	3		4		1	1	7			198			
N5110-E5315	Layer 1	675a	1	11	1	5		2		3	1			3			111			
N5100-E5350	Layer 3	792b				1		1		4				1			51			
	Layer 4	792c				2				5							21			
N5150-E5010	Layer 1	2A								1							10			
N5185-E5060	Layer 1	3A								1							7			
N5200-E5025	Layer 1	5A	2														12			
N5235-E5080	Layer 1	15A		1													1			
	Layer 2	15B		1		2				3	1		1				66			
	Layer 3	15C	13		1	2	4	1	2	2				1			246			
N5250-E5005	Layer 1	6A												9			15			
N5285-E5055	Layer 1	8A		1													1			
	Layer 3	8C	3	1		2				2							41			
N5300-E5025	Layer 1	7C	2	1		6				1				2	1		38			
N5335-E5075	Layer 3	9C		1	1	1				1							15			
	Layer 4	9D		1						1				1			26			
Feature 2	Layer 4	10A															13			
N5350-E5010	Layer 3	11C				2		1		3							68			
N5385-E5060	Layer 3	13C	1			2	1							2			18			
N5400-E5000	Layer 1	12A		1													1			
	Layer 2	12B	3	1		4				2				2			175			
N5435-E5080	Layer 1	14A	1											2			35			
		TOTALS	32	40	4	31	5	10	2	37	2	1	5	34	4					

			Unidentified Metal Fragments	Rectangular Unidentified Metal Fragments	Slag Fragments	Lead Fragments	Musket Balls	Flint Chips	Buttons	Thimbles	Iron Slides (Buckles)	Pipe Stem Frags(umeess.)	Pipe Stem Frags 4/64	Pipe Stem Frags 5/64	Pipe Stem Frags 6/64	Pipe Bowl Frags	Clay Pipe Fragments	Brass Tacks	Chert Chips	Chipped Stone
N5010-E5325	Layer 1	2676																		
N5035-E5375	Layer 2	272b																		2
N5045-E5475	Layer 1	2906	2								1									
N5060-E5310	Layer 1	1674	1											1						
N5085-E5360	Layer 1	1724	13										1	2						
N5085-E5360	Layer 1	1854a	4		3															
N5095-E5460	Layer 1	1904	2																	
N5140-E5215	Layer 1	415a		1										5	1					
N5110-E5315	Layer 1	675a												4			1			
N5100-E5350	Layer 3	792b	31											1						
	Layer 4	792c												2	1					
N5150-E5010	Layer 1	2A	8		5															
N5185-E5060	Layer 1	3A			24									1						
N5200-E5025	Layer 1	5A			1															
N5235-E5080	Layer 1	15A	3																	
	Layer 2	15B	37	1			1-12mm		1	1		1	3	3						2
	Layer 3	15C	16										1	1						
N5250-E5005	Layer 1	6A																		
N5285-E5055	Layer 1	8A																		
	Layer 3	8C	14										5	2						
N5300-E5025	Layer 1	7C	10										1	3						
N5335-E5075	Layer 3	9C	8		1								3	2						
	Layer 4	9D											3							
Feature 2	Layer 4	10A	2										1	1						
N5350-E5010	Layer 3	11C	25										2	7						
N5385-E5060	Layer 3	13C	10					1				2	4	3	1	1			1	
N5400-E5000	Layer 1	12A	11		3															
	Layer 2	12B	17			1							5	7		1		1		
N5435-E5080	Layer 1	14A																		
		TOTALS	224	2	37	1	1	1	1	1	1	3	29	45	3	3	1	1	1	4

			Nail Fragments (unmeas.)	Spike Fragments (unmeas.)	Nails 41mm	Nails 67mm	Nails 88mm		TOTALS
N5010-E5325	Layer 1	2676	1						1
N5035-E5375	Layer 1	272b							0
N5045-E5475	Layer 1	2906							3
N5060-E5310	Layer 1	1674	1						3
N5085-E5360	Layer 1	1724	10						26
N5085-E5360	Layer 1	1854a	50						57
N5095-E5460	Layer 1	1904	1						3
N5140-E5215	Layer 1	415a	33						40
N5110-E5315	Layer 1	675a	24						29
N5100-E5350	Layer 1	792b	18						50
	Layer 2	792c							3
N5150-E4010	Layer 1	2A							13
N5185-E5060	Layer 1	3A							25
N5200-E5025	Layer 1	5A							1
N5235-E5080	Layer 1	15A		1					4
	Layer 2	15B	13		1		1		63
	Layer 3	15C	28						46
N5250-E5005	Layer 1	6A	2			1			3
N5285-E5055	Layer 1	8A							0
	Layer 2	8B							0
	Layer 3	8C							21
N5300-E5025	Layer 1	7A							0
	Layer 2	7B							0
	Layer 3	7C	10						24
N5335-E5075	Layer 1	9A							0
	Layer 2	9B	7						7
	Layer 3	9C							14
	Layer 4	9D	5						8
Feature 2	Layer 4	10A							4
N5350-E5010	Layer 1	11A							0
	Layer 2	11B							0
	Layer 3	11C							34
N5385-E5060	Layer 1	13A							0
	Layer 2	13B							0
	Layer 3	13C	2						25
N5400-E5000	Layer 1	12A							14
	Layer 2	12B	1						33
N5435-E5080	Layer 1	14A							0
	Layer 2	14B							0
	TOTALS		206	1	1	1	1		

Dark Green Wine Bottle Glass Fragment:	Dark Green Case Bottle Glass Fragments	Window Pane Glass	Modern Pane Glass	Clear Glass Fragments	Clear Modern Glass Fragments	Pink Glass Fragments	Green Modern Glass Fragments	Brown Modern Glass Fragments	Melted Glass Fragments
					1				
		1			3				
2					12		1	4	3
7			22				1		20
									2
30				14					
22				12					6
3		1	4	8				3	8
1		3							
1			5		4		3	1	1
4					176	1	2	29	
					90		2		6
1			1	4	29		6	1	
19		5		5	11			1	5
34		22	19	14	17			1	2
2			9		22				
1			3		41			9	
4					1			1	
13		3			36				5
2					95			2	
2					1				
30		3	4	4	8			3	2
					15			1	
13		10			12		2	1	
6		5			18				
14		10		10					
3			1		1		2		
					142			1	
			1		3				
26					20			1	
	9		3		34		2	8	
3					1				
5			3	4					
2			1		26		4	13	
56		39	25		52				
5	1								
255	10	102	101	75	872	1	25	80	60

			Cut Glass	Diepensary Bottles	Purple Glass Fragments	Bone Fragments	Mortar Fragments		TOTALS
N5010-E5325	Layer 1	2676							1
N5035-E5375	Layer 1	272b							0
N5045-E5475	Layer 1	2906				1			5
N5060-E5310	Layer 1	1674							0
N5085-E5360	Layer 1	1724							22
N5085-E5360	Layer 1	1854a				6			56
N5095-E5460	Layer 1	1904							2
N5140-E5215	Layer 1	415a				6			50
N5110-E5315	Layer 1	675a							40
N5100-E5350	Layer 1	792b							27
	Layer 2	792c							4
N5150-E4010	Layer 1	2A	1						16
N5185-E5060	Layer 1	3A					3		215
N5200-E5025	Layer 1	5A							98
N5235-E5080	Layer 1	15A							42
	Layer 2	15B		1		10	2		59
	Layer 3	15C				11	10		130
N5250-E5005	Layer 1	6A			2				35
N5285-E5055	Layer 1	8A							54
	Layer 2	8B							6
	Layer 3	8C							57
N5300-E5025	Layer 1	7A							99
	Layer 2	7B							3
	Layer 3	7C							54
N5335-E5075	Layer 1	9A							16
	Layer 2	9B							38
	Layer 3	9C				3			32
	Layer 4	9D							34
Feature 2	Layer 4	10A							7
N5350-E5010	Layer 1	11A							143
	Layer 2	11B							4
	Layer 3	11C							47
N5385-E5060	Layer 1	13A							56
	Layer 2	13B							4
	Layer 3	13C							12
N5400-E5000	Layer 1	12A							46
	Layer 2	12B				7	2		181
N5435-E5080	Layer 1	14A							0
	Layer 2	14B							6
	TOTALS		1	1	2	34	17		

APPENDIX G

CAROLINA EARTHENWARES FROM CAMDEN

The discovery phase of archeological investigations at Camden yielded a number of ceramic specimens that were produced by colonial pottery industries centered in the Carolinas. The first industry produced ware essentially of European design and composition and was centered in the Moravian settlements of Bethabara and Salem, North Carolina from 1756 to 1773 (Bivins 1973: 264). The second industry reflects as extension of the British creamware industry into the New World. It was centered in Charleston and later Camden, South Carolina and persisted for about a decade from 1770 to 1780 (South 1974: 180). Because the North Carolina pottery industry has been well documented (see Bivins 1972 and 1973; South 1967 and 1972b), a lengthy discussion of its development will not be attempted here. The size and extent of the South Carolina industry, particularly that centered in Camden, is still for the most part unknown, however, due to scanty documentary evidence and an absence of adequate archeological data. The purpose of this appendix is to discuss the colonial ceramics recovered in the recent excavations at Camden together with background information concerning the early Camden pottery industry and offer interpretations regarding the form and diversity of its products.

The Moravian ceramic industry was established as a church-owned enterprise in 1756 in Bethabara, the first of 3 congregation towns in the Wachovia tract in central North Carolina. Gottfried Aust served as master potter there until 1771 when he established a second pottery at Salem. Rudolf Christ, his apprentice, began producing pottery independently at Bethabara after 1786;and after Aust's death in 1789, took over the Salem operation (Bivins 1973: 256-259).

The ceramics made by Aust at Bethabara and later at Salem utilized both red and white paste and employed various combinations of slips and glazes to produce 15 distinct types (South 1972b: 103). The sgraffito decorative technique, commonly used in the pottery of the Moravian settlements in Pennsylvania, is absent here, implying that the North Carolina industry reflected ties closer to Europe, where the technique was not popular, than to its related settlements in British North America. Utility wares predominated in the Moravian potteries although some delicate wares were also produced (South 1967: 36-37).

In the third quarter of the eighteenth century, Salem assumed the role of a major trade and manufacturing center in the North Carolina Piedmont. Products of the Aust pottery were in great demand on the frontier and his wares were transported as far as Camden and the Waxhaw settlements in South Carolina and the Watauga settlements in what is now Tennessee (Bivins 1973: 257).

The manufacture of ceramics at Camden is associated with the names of John Bartlam and William Ellis who pioneered the production of cream-colored earthenware in America. Bartlam's name first appears in 1765 in the correspondence of Josiah Wedgewood, the British potter whose

development of a white paste creamware revolutionized the manufacture of earthenware in the mideighteenth century. In a letter to Sir William Meredith, Wedgewood complained that the ceramic trade to Britain's American colonies was threatened by the establishment of a "potworks" in Charleston, South Carolina by John Bartlam, an unsuccessful master potter (Finer and Savage 1965: 29 and Wedgewood 1783: 4). In 1770 Bartlam announced the opening of his factory in Charleston and the following year advertised "Queensware [creamware], equal to any imported" (Ramsay 1947: 97-98). At the same time Bartlam solicited samples of clay from plantations of the interior. Perhaps subsequent experimentation led to the removal of his pottery to the inland town of Camden within the next few years. An advertisement for a Camden potter who was producing "Queen's and other Earthen Ware" in the South Carolina Gazette on April 11, 1774, very likely refers to Bartlam's business for he is reported to have operated the only pottery industry there prior to the Revolution (Ramsay 1809: 597 and Mills 1972: 589). Bartlam's name appears in entries in Joseph Kershaw's account book twice in April, 1777 (JKP/AB/SHC/1777). James Clitherall, a traveller who passed through Camden in 1776, remarked on the "exceeding good Pans, etc." at the local pottery and attested to the widespread demand for his products in the colony (Schulz 1972: 26). Bartlam manufactured pottery at Camden up to the time of the British occupation of the town in 1780 as witnessed by accounts for his delivery of earthenware as late as December, 1779 (UAB/1779/24, 25, 27). The coming of the war to the Carolina backcountry brought an end to Bartlam's pottery enterprise as well as to other small industries at Camden (Mills 1972: 590). Bartlam apparently moved back to Charleston where he died in 1781 (Inventories/100: 373). The final sale of his "5 valuable lots in Camden" six years later seems to mark the end of his association with the town. These lots included numbers 639-643 (KCD/B: 132) which lie north and south of King Street just east of its intersection with Lyttleton Street (Fig. 1). It is not known if his kiln was located on his property and a cursory surface survey failed to yield evidence of pottery-making activities.

In the fall of 1773 at least one potter from Camden appeared in the Moravian settlement of Salem, North Carolina, where he instructed Gottfried Aust in the manufacture of creamware and tortoise shell ware. The latter is distinguished by the presence of underglaze stippled decoration in various colors (Noël Hume 1970: 125). This man is identified as William Allen and William Ellis (Fries 1968/II: 763, 775). By the time he left the following spring both creamware and stoneware were being manufactured at Salem (Fries 1968/II: 817). The production of these ceramics at Salem has been demonstrated archeologically (South 1971b: 172) and it may be assumed that since the art of making these wares was learned from a Camden potter, William Ellis, the later Salem specimens and those manufactured at Camden should have much in common.

In the course of the previous archeological work at the Kershaw House at Camden both the undecorated creamwares and tortoise shell wares have been recovered (South 1971b: 176). The high-fired stoneware found at Salem, however, was absent at Camden. The creamware from Camden varies from light cream to a rich buff color. Both it and the tortoise shell ware exhibit relief decoration similar to specimens manufactured in North Carolina. The clay from which they were made contains small inclusions

which form reddish blotches on the surface of the white paste when exposed to water. This condition does not occur in specimens made in Britain or North Carolina. Camden creamware has also been recovered in excavations at the British colonial sites of Ninety Six, Fort Watson, and Long Bluff in South Carolina (South 1972c; Ferguson 1975; Lewis 1975b), but is conspicuously absent from the Revolutionary War occupation at Fort Moultrie in Charleston harbor (South 1974: 181). Its presence in large quantities in Charleston prior to the war, however, suggests that the Camden wares were distributed quite widely in the Carolinas.

Six hundred and fifty-one specimens of Carolina earthenware were recovered in the excavations at Camden. In general, these are all quite small sherds and it is not possible to determine the appearance of whole vessels on the basis of these artifacts although some forms are suggested. Most of the specimens of Carolina earthenware from Camden seem to have been pressed in molds rather than having been thrown on a wheel as were Aust's pieces (South 1972b: 113). For purposes of description here, these ceramics will be classified according to the nature of their composition.

1. The first type is made of grey paste covered with a yellow glaze mottled with green and brown on both surfaces. The dark color of the paste gives the surface colors a dull grey cast so that they are not as pronounced as those over a lighter paste. Most of these sherds appear to represent bowl forms and 1 exhibits a portion of a ringed foot.

2. Four types of earthenware are composed of a buff paste. The first is covered on both surfaces with a clear glaze, producing a buff to reddish colored ware. The form of rim sherds suggests that these sherds represent plates or bowls.

3. The second buff paste ware is identical to the first except that the glaze is mottled with green and brown on both surfaces. Bowls or cups are indicated by the presence of footrings. Plate rims with impressed feather edged designs were also recovered. One section of a vertical walled vessel exhibits a pearl gadroon decoration.

4. The third type consists of thin-walled sherds that seem to represent portions of delicate, vertical walled vessels, perhaps teacups, with slightly flaring rims. Both surfaces of the vessels are covered with a clear glaze mottled with green and brown.

5. The fourth buff paste type is represented by only 2 specimens. They are glazed a deep green on the exterior and clear on the interior. The use of this combination of glazes is similar to that of Aust on white paste wares or white slipped red paste wares (South 1967: 37-38); however, its association with unslipped redware suggests that this type may be unique to the Camden pottery industry.

6. The remaining 5 ceramic types are composed of white paste and may be considered creamwares. The first type consists of specimens of plate, cup, and bowl forms covered with a clear glaze to produce a cream colored ware. Surface colors range from light cream to deep yellow. Reddish blotches appear on exposed surfaces of the white paste and apparently are the result of the oxidation of impurities in the clay.

This condition has been noted in other specimens of Carolina creamware recovered in archeological excavations in Camden (Lewis 1975d: 38), but is not present in creamwares found elsewhere in North America or in Britain. Decorations on creamware vessels includes parallel rows of pearl gadrooning just below the rim of vertical-walled vessels and impressed feather edged designs on plate rims.

7. The second type of creamware exhibits a clear glaze mottled with brown or green or both. These sherds represent plates, bowls, and cups. Several fragments of plain handles with oval cross-sections are also present.

8. A third creamware type contains portions of what appear to be bowls or other globular vessels. They are glazed deep green on both surfaces.

9. The fourth type exhibits a clear glaze mottled with brown on the interior surfaces and mottled with brown and green on the exterior surfaces. These specimens also appear to represent bowl forms.

10. The last type of white paste earthenwares consists of what appear to be kiln wasters. It includes bisque-fired and sometimes partially glazed sherds of plates, bowls, cups, and a globular vessel with a raised floral rococo design on the exterior. The decorated specimens are reminiscent of a sauceboat manufactured in Christ's pottery at Bethabara between 1786 and 1789 (South 1972b: 157). One sherd indicates that the handle of this piece terminated in a floral sprig.

These bisque-fired sherds, together with others reported for the site of the Kershaw House east of town, undoubtedly represent wasters from Bartlam's kiln in Camden. The association of these specimens with the settlement as a whole is unclear, however, because unglazed pottery would have been generally unserviceable as domestic ware. It is also unlikely that a single potter's waster dump would have accumulated over so wide an area. It is possible that these sherds found other uses apart from those for which they were originally intended. Perhaps if the kiln were located not far from the settlement, the waster dump there may have served as a source of road metal or as paving material for walks and yards. Wasters from the kiln of William Rogers in Yorktown, Virginia, were utilized in this manner on a large scale during the second quarter of the eighteenth century (Watkins and Noël Hume 1967: 110) and it is possible that the reuse of such materials was a widespread practice.

The presence of bisque-fired pottery at Camden, together with the occurrence of locally distinct impurities in the clay and in the combinations of glaze used, implies that at least a majority of the ceramic specimens were manufactured at the Bartlam kiln there. The similarity of the Camden specimens and those recovered from the waster dump of Rudolph Christ at Bethabara attests to Bartlam's influence on the Moravian potters. It is interesting to note that Christ began producing his "fine" pottery in late 1781 (Fries 1968/V: 1738), only 1 year after the Camden pottery had ceased to operate. It is possible that Christ's production of such wares, which later sharply increased with his setting up a separate pottery in 1786 (Fries 1968/V: 2150), was geared toward a frontier marked for creamwares left open by Bartlam's departure. At

present, this statement must remain hypothetical because it is not known if the geographical ranges of each pottery industry's market overlapped. Conceivably Bartlam's production of creamwares could have effectively limited the market for such wares of a competitive industry. In that both Bartlam and the Moravians established their potteries as profit-making, market-oriented concerns, their production would very likely have reflected the expected demand for their wares. A rise in the demand for creamwares on the frontier would have been brought about by the closing of Bartlam's pottery in 1780, offering the potential for the profitable expansion of an aspect of ceramic production lying dormant in Wachovia since 1774.

In summary, the presence of a substantial quantity of Carolina earthenware recovered in the recent Camden excavations reflects the operation of a local pottery industry in the vicinity of the settlement. Presumably it was the one established there by John Bartlam in the early 1770's and later abandoned or destroyed during the Revolutionary War occupation of Camden. This pottery includes grey, red, and white paste wares in a number of vessel forms reminiscent of contemporary British ceramics. A number of glazes and glaze combinations are present. Although it will not be possible to ascertain the full extent of the pottery produced at Camden until the kiln and its waster dumps are explored, evidence gathered in archeological investigations in the town indicates that a wide variety of wares were manufactured here. Morphological affinities with later Moravian creamwares substantiates documentary evidence indicating that the latter were derived directly as the result of stimulus diffusion from Camden. Perhaps the rapid expansion of the North Carolina creamware industry following the abandonment of the Camden venture reflects an adaptation by the former to meet the demand of a frontier market.

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