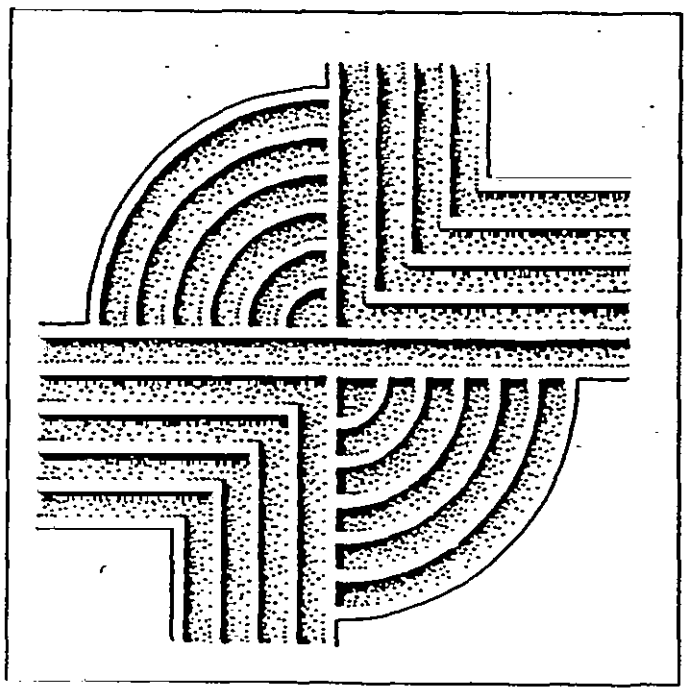
MANAGEMENT SUMMARY OF ARCHAEOLOGICAL TESTING CONDUCTED AT 38GE350, WILLBROOK PLANTATION DEVELOPMENT, GEORGETOWN COUNTY, SOUTH CAROLINA



RESEARCH CONTRIBUTION 24

MANAGEMENT SUMMARY OF ARCHAEOLOGICAL TESTING CONDUCTED AT 38GE350, WILLBROOK PLANTATION DEVELOPMENT, GEORGETOWN COUNTY, SOUTH CAROLINA

Prepared For:

Mr. Steve Goggans
Goggans and Associates
P.O. Box 1859
Pawleys Island, SC 29585

Prepared By:

Michael Trinkley

Chicora Foundation Research Contribution 24

Chicora Foundation, Inc.
P.O. Box 8664
Columbia, SC 29202

Introduction

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Steve Goggans, authorized agent of Litchfield by the Sea which is developing the Willbrook Plantation tract (see Trinkley 1987). This tract is situated 15 miles northeast of Georgetown and in the vicinity of the Pawleys Island and Litchfield communities in Georgetown County (Figure 1). The previously conducted archaeological survey report (Trinkley 1987) should be consulted for additional information on the proposed development project, the effective environment, and a summary of the project area.

Site 38GE350 is situated about 100 feet southeast of River Road, 400 feet northeast of the South Oatland drainage, and in the vicinity of the proposed golf clubhouse for the Willbrook development. At the time of the original survey this site appeared to represent a primarily South Appalachian Mississippian site, which contain Pee Dee pottery dating to about A.D. 1400 (Reid 1967). Based on a series of nine shovel tests and good surface visibility, the site was estimated to cover an area of 150 feet southwest-northeast by 80 feet northwest-southeast, for a total of 12,000 square feet. The site was situated in an area of thin hardwoods with a light understory. Damage to the site was limited to minor ground "scuffing" and a sprinkler system ditch (1 foot in width) which bisected the site southwest-northeast.

Based on the early collections it was clear that the site contained both Middle Woodland and later, South Appalachian Mississippian remains. There was an absence of shell midden, although occasional shells were observed throughout the site area. The shovel tests revealed no evidence of extensive disturbance and the remains were found in the upper foot of the site profile. The shovel tests revealed what appeared to be a "site core" with denser remains situated as a band running in the approximate area of the previously laid water line. In addition, 38GE350 was situated in an environmental context more distant from water sources than the other prehistoric sites on the property.

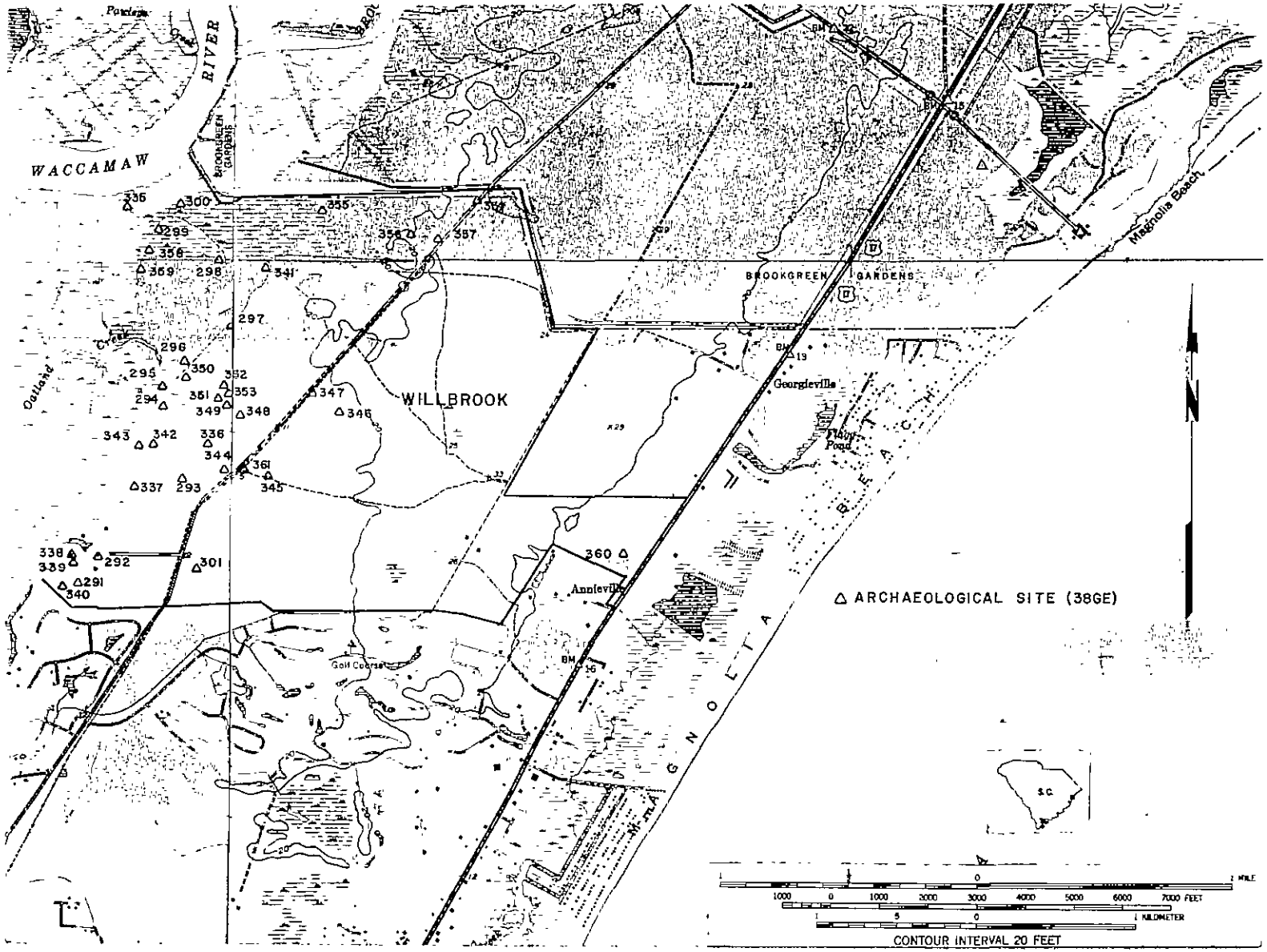


Figure 1. Location of 38GE350 in the Willbrook development, Waccamaw Neck.

very limited. The Acting Deputy State Historic Preservation Officer (SHPO), in her letter of December 4, 1987, recognized the potential significance of the site, while requesting that additional information be obtained. The Acting Deputy SHPO also indicated that the effects of development at 38GE350 might be adequately mitigated by the testing to determine eligibility. In late January Mr. Steve Goggans contacted Chicora, requesting that additional testing at the site be conducted since development of the golf clubhouse was planned for the near future. This summary is intended to provide a synopsis of the archaeological testing of previously identified 38GE350. This site will be discussed in greater detail when additional mitigation studies are completed on the Willbrook development.

The research design used at 38GE350 was essentially explorative, that is, it was directed toward answering certain fundamental questions such as, does the site possess any integrity, what is the range of artifacts present, and what can archaeological study reveal concerning the site's inhabitants? While portions of the research are guided by the need to determine and document site eligibility, other aspects are oriented toward obtaining additional information on what appeared to be a Pee Dee phase hamlet. Although considerable research has been conducted at several Pee Dee phase temple mound sites, the only recent investigations at non-ceremonial Pee Dee sites involves the work at the Wachesaw site in Georgetown County (Trinkley et al. 1983) and at the Lowders Ferry site in North Carolina (Billy Oliver, personal communication 1988). Additional research at small, Pee Dee phase sites such as 38GE350 is essential to our understanding of the daily lives of late prehistoric and immediately pre-contact Indian groups in South Carolina.

Field Methods

The additional work at 38GE350 was intended to (1) identify the site boundaries, (2) determine intra-site densities of artifacts, (3) collect a larger sample of artifacts useful for chronological and functional studies, and (4) determine if subsurface features were present. These goals were selected to not only contribute toward a clear determination of site eligibility, but also to yield significant archaeological research.

We chose to satisfy our first two goals through extensive auger testing, while the latter two goals could be better addressed through the excavation of several 5-foot units placed in areas of suspected high archaeological density. The 5-foot units were selected because we felt that they were more likely to identify (and allow the interpretation of) in situ remains and features than would smaller units. The field work was conducted by Trinkley and Ramona Grunden from February 10 through 12 for a

total of 51 person hours.

The site grid, established at an angle of N45E, was used for both the auger tests and the location of the excavation units. The site datum was established on the west face of a concrete Toro sprinkler system pad at the east edge of the site (Figure 2). Vertical control was maintained using a temporary survey datum with an elevation of 10.37 feet MSL, situated on the north edge of the site adjacent to River Road.

The site area was laid out in 25-foot grid units for the auger test survey, with each point numbered sequentially from grid west to east and grid south to north. These numbers, at 50 foot intervals, were used to number blocks, with each block designated by its southeast corner auger test number. Within these blocks a modified Chicago 10-foot grid was established, with each square designated by its southeast corner, from a 0R0 point at the southwest corner of the 50-foot block. Thus, square 12-10R10 would be located in the 50-foot square auger test block number 12 and the southeast corner of the square would be north 10 feet and right (or east) 10 feet from the 0R0 point (at the block's southwest corner).

A series of 50 auger test grid points were laid out over the site at 25 foot intervals. The boundaries for this auger survey were based on previous shovel testing and previous development (which had established some arbitrary boundaries -- golf courses to the northeast and southwest and River Road to the north). The area examined measured 225 feet by 100 feet. In addition, a series of five shovel tests extended the testing data to the southwest. The auger used a 10-inch bit and tests were dug into the yellow sand subsoil. All soil was screened using 1/4-inch mesh and all cultural material (including brick and shell) was collected. For the purpose the computer mapping, all prehistoric material was lumped together. While the final maps are not yet available, draft maps were immediately made and guided the placement of the excavation units. The draft maps indicated a fairly dense concentration of remains along the western edge of the site, gradually thinning to the east and very quickly thinning to the west. The northern and southern boundaries were not as clear, but River Road continues to be an arbitrary boundary, based on the extensive disturbance on the north side of the road.

Based on the auger tests three 5-foot units were excavated in the denser areas of the site, at 3-0R10, 21-45R40, and 43-0R15. Soil was screened through 1/4-inch mesh using a mechanical sifter. Units were troweled, photographed in b/w negative and color slides, and plotted at a horizontal scale of 1 inch to 2 feet and a vertical scale of 1 inch to 1 foot. Field notes were prepared on archival paper and photographic material was processed to archival standards. All original field notes, with

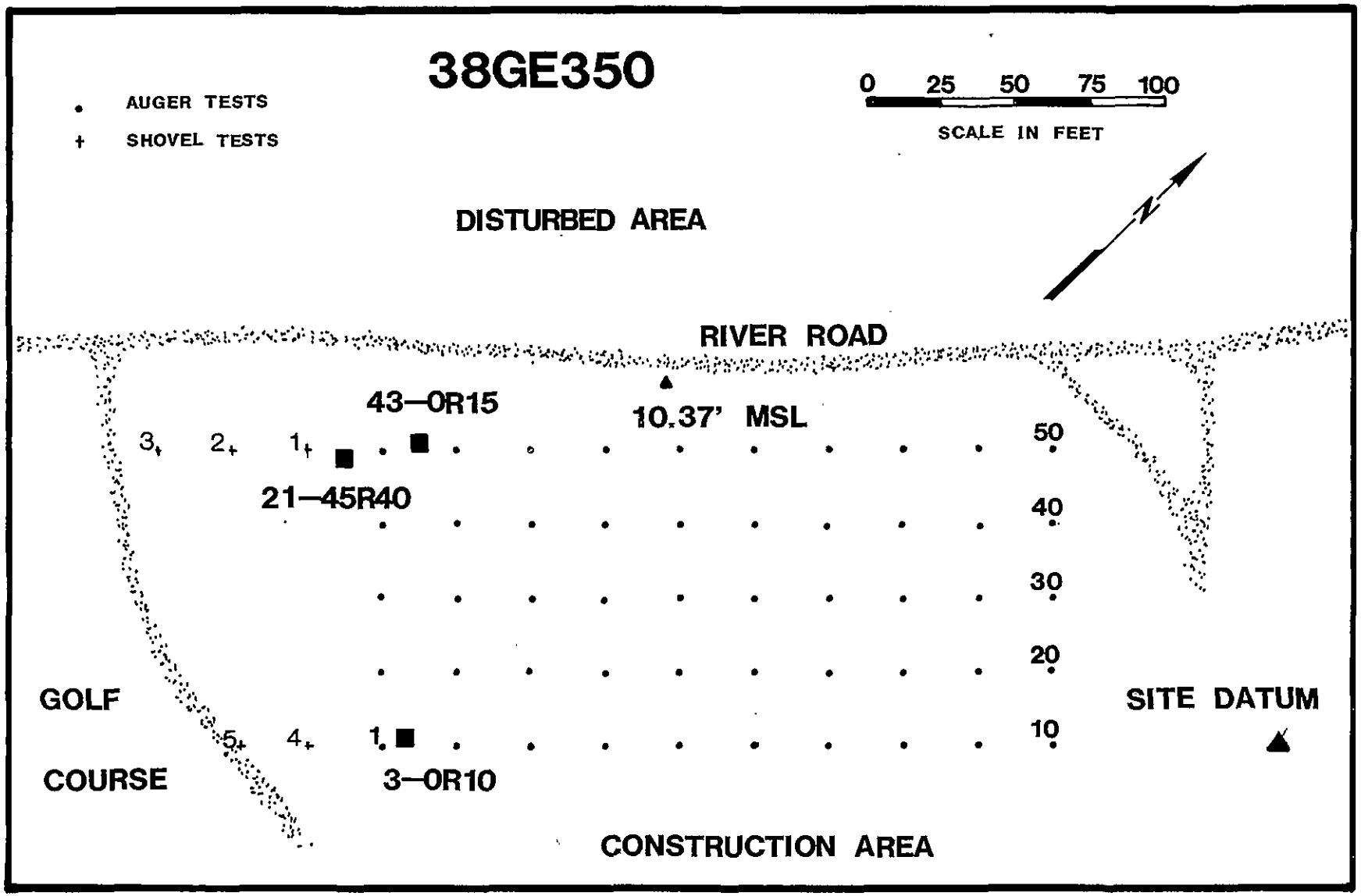


Figure 2. Site 38GE350.

archival copies, will be curated at The Charleston Museum, along with the collections, as Accession Number 1988.--. All specimens have been evaluated for conservation needs; no treatments were necessary. The collections have been lot cataloged using the system of The Charleston Museum (ARL 38963 - ARL 39001) and have been packed according to the Museum's specifications.

Stratigraphy throughout the site area is fairly simple, consisting of a dark tan fine sand plowzone about a foot in depth overlying a light tan leach zone which grades into a yellow sand subsoil 1.5 to 2.0 feet below the modern grade. These soils are representative of the deep, well drained Wakulla Series sands. Toward the east this stratigraphy appears to lack a well-defined plowzone and the soils are more suggestive of the poorly drained Leon Series. The site is situated on the transition between these two soil series, although the major occupation appears confined to be better drained soils (Stuckey 1982:Map 26).

Unfortunately, additional grubbing and mechanical equipment activity took place on this site prior to these investigations. This resulted in areas of disturbance to the site, including stripping, filling, and mixing. In the eastern third of the site humic soil had been removed, while in the northwest quadrant of the site fill up to 0.3 foot in depth was recorded. Heavy equipment tracks occurred throughout the site area.

If fill was identified in the excavation units it was removed without screening or any attempt at the recovery of included remains. The plowzone, identified more on the basis of the types and quality of incorporated remains than on soil characteristics, was removed as Zone 1. The underlying leach zone was identified as Zone 2, although in no case were the excavations continued into this zone.

Unit 3-0R10 was situated at the southwestern edge of the site, in an area of dense remains based on the auger tests. The unit was 1.05 foot in depth and the Zone 1 soil rested on a mottled leach zone. No features were identified. Unit 21-45R40, located at the northwest site edge, was also placed on the basis of the dense remains identified during the auger test. The excavation was 1.1 foot in depth, with the upper 0.2 foot consisting of graded fill. This fill apparently protected the recent humic zone formed over the old plowzone. The humic zone of gray sand and roots was 0.3 foot in thickness and was included in Zone 1. At the base of this unit was a dark black charcoal stain bisected by the north profile. Brief examination revealed that this stain represented a burned tree. No further excavation was conducted. Unit 43-0R15, 0.98 foot in depth, was situated at the north central area of the site core, adjacent to River Road. This unit also evidenced a thin humic zone overlying the plowzone. At the base of the plowzone there was evidence of a possible plowscar, running grid east-west, parallel to River

Road.

Laboratory Methods

The cleaning of artifacts was conducted both in the field and in Columbia on February 15. Cataloging follows the system of The Charleston Museum, where the collections have been accessioned (ARL 38963 through ARL 39001). As previously discussed, the collections have been evaluated for conservation needs and no treatments are necessary.

Analysis of the collections followed professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. Prehistoric ceramics were classified using the previous work of Coe (1952), Reid (1967), and Trinkley (1983). Prehistoric lithics are uncommon at the site, although the single biface was identified on the basis of Coe (1964). The historic remains were very sparse and may relate to the site identified by Lepionka north of River Road, immediately across from 38GE350.

Results

The auger tests and excavations yielded a total of 1397 prehistoric artifacts and 6 historic specimens (Table 1), as well as small collections of brick and shell remains. The six historic artifacts allow dating only within very broad parameters, but appear to have been deposited during the nineteenth century. They include one annular pearlware, one undecorated pearlware, and four fragments of clear glass. The brick remains found at the site, while not modern, are too fragmentary to indicate even a broad temporal period.

The prehistoric remains include 1383 sherds, only 409 (29.5%) of which can be identified to type, one baked clay fragment, one clay disk, two clay pipe fragments, seven flakes, one grinding stone fragment, one Morrow Mountain projectile point, and one biface. The prehistoric pottery includes primarily Pee Dee types (89.2% of the identifiable sherds), including complicated stamped, incised, simple stamped, corn cob impressed, textile wrapped, and check stamped (see Reid 1967). There were 188 Pee Dee Plain sherds, although some of these may represent plain examples of other pottery types. Other prehistoric pottery included the Early and Middle Woodland Deptford, Deep Creek, Mount Pleasant, and Hanover types (see Trinkley 1983).

The identification of Pee Dee pottery is usually a simple matter because of its distinct, "sugary" paste, clear surface treatments, and burnishing or careful smoothing. The collection from 38GE350, however, presented a range of problems. The sherds, being from a plowzone context, were generally small (over

	AT	ST	3-0R10	21-45R40	43-0R15	Totals
Pee Dee Complicated Stamped	14	2	20	38	32	106
Pee Dee Incised				1		1
Pee Dee Simple Stamped	2		23	13	2	40
Pee Dee Corn Cob Impressed					1	1
Pee Dee Textile Wrapped	1		1	1		3
Pee Dee Check Stamped	1		2	1		4
Pee Dee Plain	11	11	59	49	58	188
Pee Dee UID	22			1		23
Deptford Check Stamped					1	1
Deep Creek Simple Stamped					1	1
Deep Creek Fabric Impressed	1			3	7	11
Deep Creek Cord Marked				12	10	22
Mount Pleasant Cord Marked				3	4	7
Hanover Cord Marked	2					2
UID sherds	14		47	29	9	86
Small sherds (<1 inch)	9	10	327	233	309	888
Pee Dee pipe frags					2	2
Pee Dee pottery disk					1	1
Baked clay object					1	1
Flakes			3	1	3	7
Grinding stone frag	1					1
Biface					1	1
Morrow Mountain CSPP	1					1
Pearlware, undecorated	1					1
Pearlware, annular			1			1
Glass, clear	1			3		4

Table 1. Materials recovered from 38GE350.

64% of the collection is characterized as "small" or under 1-inch in diameter) and heavily worn. In addition, the Pee Dee pottery from this site exhibits considerable variation in both quality of surface treatment and in paste. The complicated stamps include the fine carving and careful application typical of Pee Dee, as well as cruder carving and sloppy overstamping more suggestive of a later time period. The paste includes both "classic" Pee Dee examples, with "quartz river sand in moderate to abundant amounts" yielding a "compact, granular, sugary" texture (Reid 1967:42) as well as a much finer paste and texture. It seems likely that the 38GE350 collection may represent a mixture of both "early" and "later" Pee Dee pottery, although it is impossible to accurately separate the two based on this work.

The Pee Dee collection from Willbrook does contain specimens characteristic of the Pee Dee from Town Creek in North Carolina, including nodes and punctations, reed impressed fillet appliques, lip notching, and the application of small incisions along the shoulder of carinated vessel fragments. a very small number of textile wrapped, check stamped, and simple stamped motifs is consistent with the Pee Dee series (the Pee Dee Simple Stamped type is described in Trinkley et al. 1983:77-78).

Also indicative of the Pee Dee occupation are two matching fragments of a Pee Dee pipe. Both have a fine sandy paste and are typical of "classic" Pee Dee pipes (see Coe 1952:Figure 165S, T). In addition, a simple pottery disk, made from a Pee Dee sherd, was recovered during these excavations.

The remaining pottery types are common to the north coast of South Carolina and the North Carolina coast (Phelps 1983; Trinkley 1983), although none are particularly common at 38GE350. The Morrow Mountain projectile point, made of rhyolite, is suggestive of a Middle Archaic occupation about 4000 B.C.

Site Significance and Recommendations

It is generally accepted that "the significance of an archaeological site is based on the potential of the site to contribute to the scientific or humanistic understanding of the past" (Bense et al. 1986:60). If a site exhibits integrity it is likely that it may address research questions; in the absence of site integrity then it is more difficult to obtain significant research contributions from an archaeological site.

The archaeological testing at 38GE350 revealed that the site represents a Pee Dee phase site dating to about A.D. 1400 - 1500. It is also clear that earlier activity took place in the site area, although these earlier occupations were probably concentrated further to the north or west, adjacent to the swamp bank. The Pee Dee phase site appears, based on its artifact density and variety, to represent a small hamlet probably

emphasizing agricultural activity. This is a type of site about which very little is know from either South or North Carolina. As a consequence, this type of site is very significant for future research on the South Appalachian Mississippian in South Carolina.

Unfortunately, the archaeological investigations at 38GE350 have failed to reveal a high level of site integrity. It appears that considerable damage has been done to the site by previous cultivation, perhaps dating to the early twentieth century. The site remains were entirely found in the thoroughly mixed plowzone. Soil acidity is such that it is unlikely that subsistence remains will be present outside of features and shell middens. No subsurface features were identified through either the excavations or the auger tests and shell is very sparse at the site.

In addition, recent construction related grubbing and mechanical site preparation has resulted in further damage to the site. Although this damage at the western site edge is limited to the upper 0.5 foot of soil, the damage to the east appears to be greater and may have affected the site's integrity.

Although sites such as 38GE350 are significant to a complete understanding of past lifeways and although this site represents a period in the prehistory of the Willbrook tract about which we have very few data, the site does not appear to possess the integrity necessary to make a significant contribution to archaeology. Consequently, it is the opinion of the author that the site is not eligible for inclusion in the National Register of Historic Places and that no further work at the site is warranted. The work conducted during this testing phase is sufficient to mitigate the additional damage expected as a result of the golf clubhouse construction.

Sources Cited

Bense, Judith A., Hester A. Davis, Lorraine Heartfield, and Kathleen Deagan

1986 Standards and Guidelines for Quality Control in Archaeological Resource Management in the Southeastern United States. Southeastern Archaeology 5:52-62.

Coe, Joffre L.

1952 The Cultural Sequence in the Carolina Piedmont. In Archaeology of Eastern United States, edited by James B. Griffin, pp. 301-311. The University of Chicago Press, Chicago.

1964 The Formative Cultures of the Carolina Piedmont. Transactions of the American Philosophical Society

54(5).

Phelps, David S.
1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In The Prehistory of North Carolina: An Archaeological Symposium, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Department of Archives and History, Raleigh.

Reid, James Jefferson
1967 Pee Dee Pottery from the Mound at Town Creek. Unpublished M.A. thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

Trinkley, Michael
1983 Ceramics of the Central South Carolina Coast. South Carolina Antiquities 15:43-54.

1987 An Archaeological Study of Willbrook, Oatland, and Turkey Hill Plantations, Waccamaw Neck, Georgetown County, South Carolina. Research Series 11. Chicora Foundation, Columbia.

Trinkley, Michael, S. Homes Hogue, Martha Zierden, and Jack H. Wilson, Jr.
1983 Test Excavations at the Wachesaw Landing Site, Georgetown County, South Carolina. Publication No. 20. North Carolina Archaeological Council, Raleigh.

Stuckey, Benjamin N.
1982 Soil Survey of Georgetown County, South Carolina. U.S.D.A., Soil Conservation Service, Washington, D.C.