

**CULTURAL RESOURCES SURVEY OF THE  
CANE BAY 115kV TRANSMISSION PROJECT,  
BERKELEY COUNTY, SOUTH CAROLINA**



**CHICORA RESEARCH CONTRIBUTION 466**

# **CULTURAL RESOURCES SURVEY OF THE CANE BAY 115kV TRANSMISSION PROJECT, BERKELEY COUNTY, SOUTH CAROLINA**

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## **CHICORA RESEARCH CONTRIBUTION 466**



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## ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 4.0 mile corridor in Berkeley County, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line that will connect two existing lines while running parallel to an existing third transmission line. The topography is low and flat with wetlands consuming much of the property.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission project was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology failed to identify any previously recorded sites in the project APE.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. No sites were found. In addition, a 1989 countywide architectural survey failed to show any sites within 0.5 mile of the project area.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 75-foot right-of-way, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 211 shovel tests excavated along the corridor.

As a result of these investigations no sites were identified. This is likely the result of very poorly drained soils and the lack of distinct ridge topography.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such structures were found.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).



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## INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a 4 mile corridor to be used for the Cane Bay 115kV Transmission Line in Berkeley County (Figure 1). The project runs approximately north-south between two existing transmission lines. The corridor also parallels an existing transmission line for most of the route.

The proposed corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing, and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area.

Construction and maintenance of the transmission line may also have an impact on historic resources in the project area. The project will not directly affect any historic structures (since none are located on the survey corridor), but the completed facility may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) about 0.5 mile radius around the proposed survey corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Berkeley County.

We were requested by Mr. Tommy L.

Jackson of Central Electric Power Cooperative to conduct a cultural resources survey for the project on January 12, 2007.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. As a result of that work, no archaeological sites were found within a 0.5 mile area of potential effect (APE).

The South Carolina Department of Archives and History GIS was consulted to check for any NRHP buildings, districts, structures, sites, or objects in the study area. No properties were found in the project APE. A comprehensive countywide architectural survey has been completed for Berkeley County and also failed to reveal any sites in the project APE (Schneider 1989).

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from February 7-8 by Ms. Nicole Southerland and Ms. Julie Poppell under the direction of Dr. Michael Trinkley. The survey failed to produce any sites. This is likely the result of the poorly drained soils and lack of any distinct ridge tops.

The architectural survey of the APE, designed to identify any structures over 50 years in age that retain their integrity and were potentially eligible for the National Register of Historic Places, revealed no such structures.

Report production was conducted at Chicora's laboratories in Columbia, South Carolina from February 13-15. The only photographic materials associated with this

CULTURAL RESOURCES SURVEY OF THE CANE BAY 115kV TRANSMISSION PROJECT

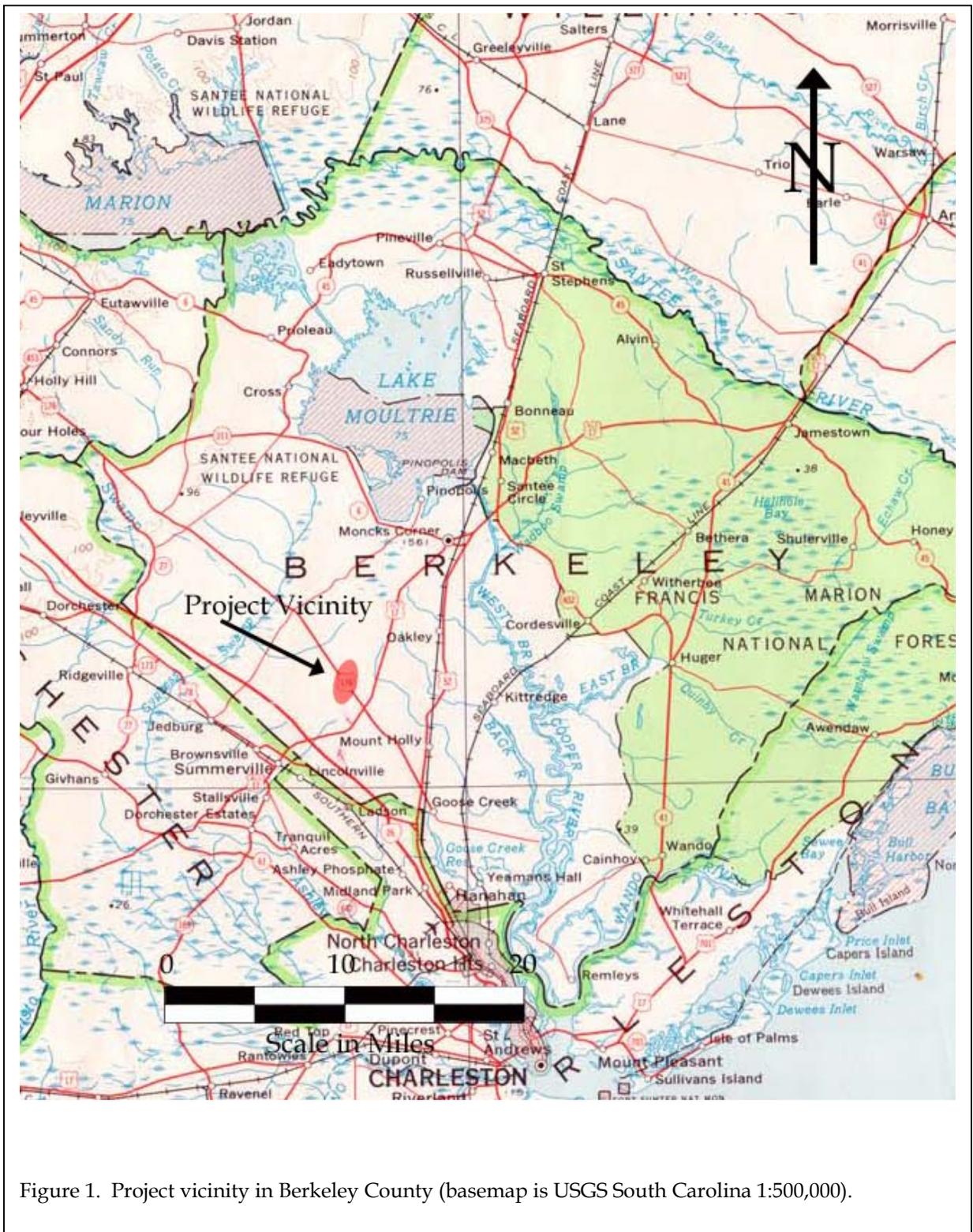


Figure 1. Project vicinity in Berkeley County (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

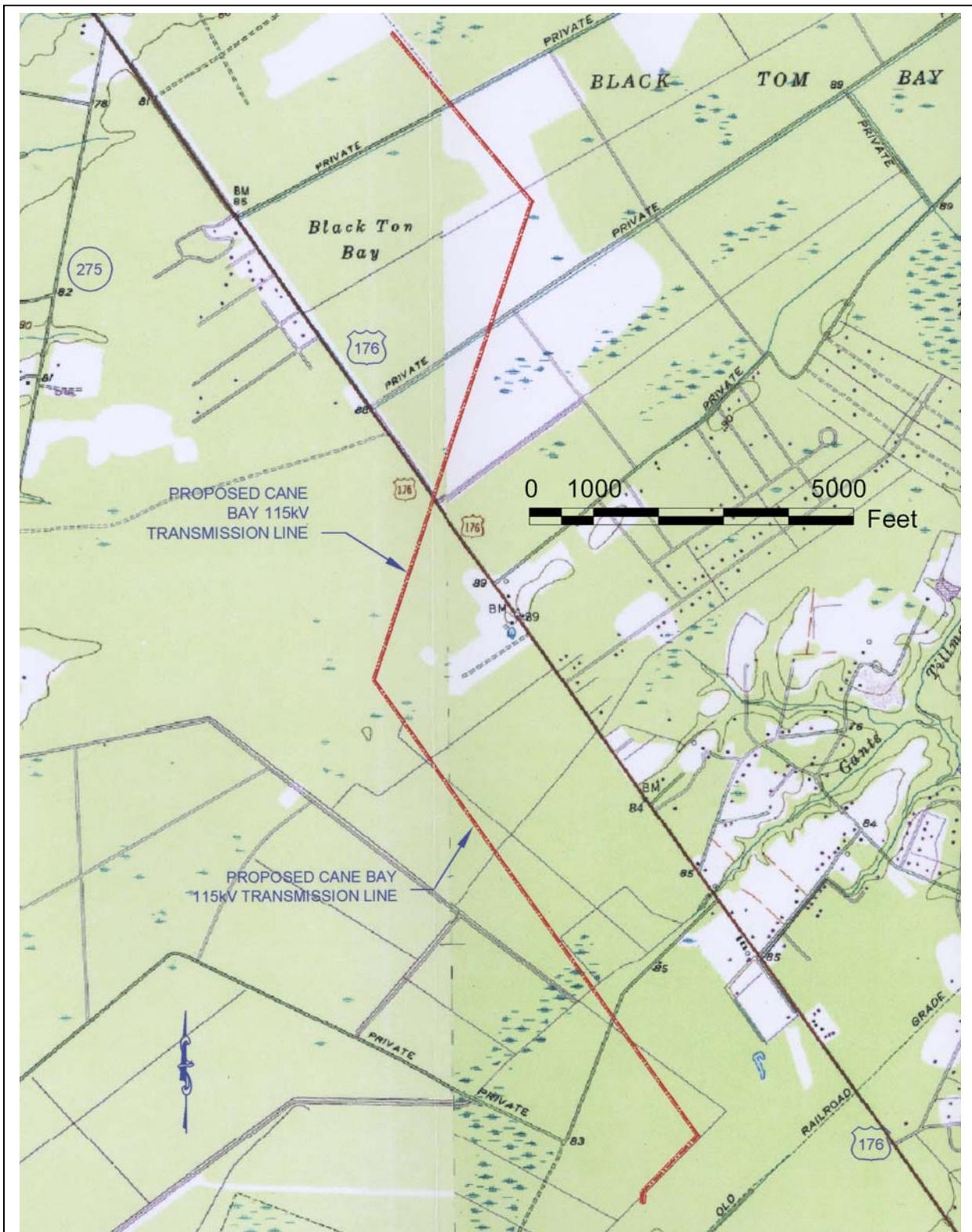


Figure 2. Project corridor (basemap is USGS Summerville and Mt. Holly 7.5').

project are digital, which are not archival. Chicora Foundation retains the digital images for 90 days.

## NATURAL ENVIRONMENT

### Physiography

Berkeley County is situated in the lower Atlantic Coastal Plain of South Carolina. Containing about 1,100 square miles, it is bordered by Georgetown County to the northeast, Charleston County to the southeast and southwest, Dorchester County to the west, Orangeburg County to the northwest, and Clarendon and Williamsburg counties to the north.

The topography of the county is characterized by subtle undulations characteristic of beach ridge plains. The elevations range from sea level to approximately 105 feet above mean sea level (AMSL). The elevation along the project corridor ranges from about 90 to 100 feet AMSL.

Berkeley is drained by three significant river systems: the Santee, Wando, and Cooper rivers. The Santee has a large freshwater discharge and forms the northern boundary with neighboring Georgetown County. The Wando is a coastal river and is dominated by tidal action. The Cooper River, which flows through the center of the County, was also originally a tidal river, but has been modified by a large volume of fresh water diverted from the Santee through Lakes Marion and Moultrie. In addition, there are a number of broad, low gradient interior drainages that are present either as extensions of tidal streams or flooded bays and swales (Long 1980).

### Geology and Soils

As previously mentioned, Berkeley County is made up of one broad physiographic area, often called the lower Atlantic Coastal Plain or the Atlantic Coast Flatwoods (Long 1980). The surface soils are almost entirely sedimentary and were transported into the area from other places. The geology of Berkeley County is characteristic of the region with sands, clays, gravels, and phosphates covering the surface dating to the Pleistocene (Long 1980).

Five soils are found along the survey corridor. The most common soil types are the very poorly drained Pantego Series and the poorly drained Rains Series. Found in more isolated contexts are the somewhat poorly drained Lynchburg and Ocilla series. The only moderately well drained soil was the Goldsboro Series, which at the time of the survey was wet.

Pantego soils typically have an A horizon



Figure 3. Portion of the corridor crossing a ditch.



Figure 4. Project corridor through a construction area (parallel to the existing transmission line).

of black (10YR2/1) fine sandy loam to 1.2 feet in depth over a gray (10YR5/1) fine sandy loam to a depth of 1.7 feet. Rains soils have an A horizon of black (N2/0) fine sandy loam to 0.5 foot in depth over a gray (10YR5/1) fine sandy loam.

Lynchburg soils have an A horizon of black (10YR2/1) fine sandy loam to 0.3 foot in depth over a light yellowish brown (2.5Y6/4) fine sandy loam to 0.6 foot in depth. The Ocilla Series has an Ap horizon of dark grayish brown (10YR4/2) loamy fine sand to 0.6 foot in depth over a pale brown (10YR6/3) loamy fine sand to 1.0 foot in depth.

Goldsboro soils have an A horizon of very dark grayish brown (10YR3/2) loamy sand to 0.6 foot in depth over a light yellowish brown (2.5Y6/4) loamy sand to 1.2 feet in depth.

### Climate

Berkeley County has a subtropical climate, characterized by warm summers, mild winters, and adequate precipitation fairly evenly spread throughout the year. Except in the summer, when maritime tropical air controls the climate of the area, the daily weather patterns are controlled by west to east moving pressure systems and

associated fronts.

Yearly precipitation averages 47 inches, but ranges from 39 to 55 inches (Long 1980). The growing season, from April to September, receives an average of 31 inches or about 66% of the yearly total. The average length of the freeze-free growing season is approximately 260 days, although frosts can occur as early as October 26 and as late as April 15 (Long 1980).

Mills remarked in 1826 that Carolina was similar to European climates, lying at a

similar latitude. He noted that:

in comparing the climate of South Carolina, with similar climates in Europe, we find it lying under the same atmospheric influences with Aix, Rochelle, Montpelier, Lyons, Bordeaux, and other parts of France; with Milan, Turin, Padua, Mantua, and other parts of Italy (Mills 1972[1826]).

The coastal region is a moderately high risk zone for tropical storms, with 169 hurricanes being documented from 1686 to 1972 (0.59 per year) (Mathews et al. 1980). One of the most devastating in the eighteenth century was the hurricane of September 15, 1752. One report listed 92 people drowned, although the dearth toll, especially among the African American slaves, was likely much higher. The storm also had considerable long-term effects. Calhoun notes:

the destruction of trees was severe; one plantation owner's loss was assessed at \$50,000 and many of those trees which survived were "heart-shaken,"

and unfit for use. Crops were even more damaged as the storm followed a severe drought. It was necessary to enact laws to regulate the exportation and sale of corn, "Peafe," and small rice, so that "the poor may be able to purchase Provisions at a moderate Price" (Calhoun 1983).

swamp. The northern portion of the corridor runs through Black Tom Bay, however, ditches have been constructed to help divert the high water content (Figure 3). Planted pines cover most of the project corridor with smaller areas of mixed pine and hardwood forests. The portion of the corridor just north of SC 176 is currently being developed, so the landscape has been severely altered (Figure 4).

### Floristics

Speaking of the coastal plain, Braun observed that:

the vegetation of this region is in part warm temperate-subtropical, in part distinctively coastal plain, and in part temperate deciduous.

It is made up of widely different forest communities - coniferous, mixed coniferous and hardwood, deciduous hardwood, and mixed deciduous and broad-leaved evergreen hardwood -- interrupted here and there by swamps, bogs, and prairies. The large number of unlike communities is related to the diverse environmental conditions of the region (Braun 1974).

Indeed, an examination of the region around Berkeley County reveals tremendous diversity. One detailed study revealed a mosaic including the oak-hickory-pine forest common to upland areas, oak-gum-bald cypress forest typical of southern floodplains, pine forests found in mesic to xeric upland sites, mesophytic broadleaved forests on more mesic slope sites, old rice fields, and a variety of swamp forests such as the tupelo-cypress, low hardwood, and ridge hardwoods (Federal Power Commission 1977). All of these forest types have different dominants and different understory vegetation (see Barry 1980).

Although most of the project corridor was wet at the time of the survey, it is not located in a



## PREHISTORIC AND HISTORIC BACKGROUND

### Previous Research

Berkeley County has received a significant amount of archaeological attention. The Summerville area has received some attention with works for the Wastewater Facilities (Brooks and Harmon 1981), road extension and widening projects (Harvey 2001), and developments (Campo 1999; Trinkley et al. 2002).

The southern portion of the project corridor goes through an area previously surveyed through a cultural resource assessment (Chicora Foundation 2004). Although an intensive survey was recommended for the well-drained portions of the tract, none of those well-drained areas are located on the current project corridor.

### Prehistoric Overview

The Paleoindian period, lasting from 12,000 to 8,000 B.C., is evidenced by basally thinned, side-notched projectile points; fluted, lanceolate projectile points; side scrapers; end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleoindian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleoindian groups were at a band level of society (see Service 1966), were nomadic, and were both hunters and foragers. While population density, based on the isolated finds, is thought to have been low, Walthall suggests that toward the end of the

period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

The Archaic period, which dates from 8000 to 2000 B.C., does not form a sharp break with the Paleoindian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited mammal. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the South Carolina coastal plain and piedmont. Archaic period assemblages, exemplified by corner-notched and broad-stem projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

In the Coastal Plain of the South Carolina there is an increase in the quantity of Early Archaic remains, probably associated with an increase in population and associated increase in the intensity of occupation. While Hardaway and Dalton points are typically found as isolated specimens along riverine environments, remains from the following Palmer phase are not only more common, but are also found in both riverine and interriverine settings. Kirks are likewise common in the coastal plain (Goodyear et al. 1979).

The two primary Middle Archaic phases found in the coastal plain are the Morrow Mountain and Guilford (the Stanly and Halifax complexes identified by Coe are rarely encountered). Our best information on the Middle Woodland comes from sites investigated west of

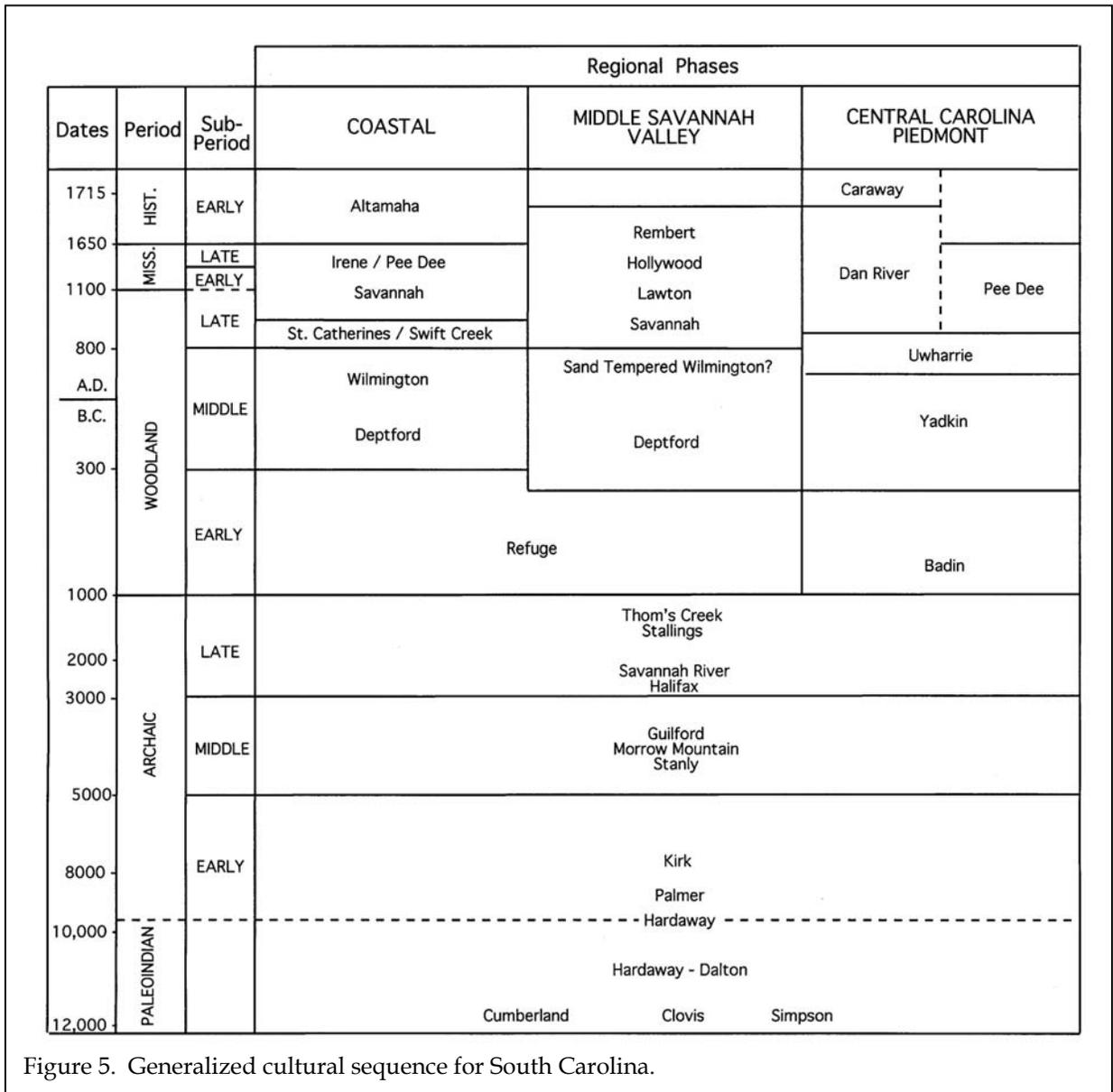


Figure 5. Generalized cultural sequence for South Carolina.

the Appalachian Mountains, such as the work in the Little Tennessee River Valley. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and South Carolina, where axes, choppers, and ground and polished stone tools are very rare.

The Late Archaic is characterized by the appearance of large, square stemmed Savannah

River projectile points (Coe 1964). These people continued the intensive exploitation of the uplands much like earlier Archaic groups. The bulk of our data for this period, however, comes from work in the Uwharrie region of North Carolina.

The Woodland period begins by definition with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast (the introduction of pottery, and hence the beginning

of the Woodland period, occurs much later in the Piedmont of South Carolina). It should be noted that many researchers call the period from about 2500 to 1000 B.C. the Late Archaic because of a perceived continuation of the Archaic lifestyle in spite of the manufacture of pottery. Regardless of terminology, the period from 2500 to 1000 B.C. is well documented on the South Carolina coast and is characterized by Stallings (fiber-tempered) pottery (see Figure 5 for a synopsis of Woodland phases and pottery designations). The subsistence economy during this early period was based primarily on deer hunting and fishing, with supplemental inclusions of small mammals, birds, reptiles, and shellfish.

Like the Stallings settlement pattern, Thom's Creek sites are found in a variety of environmental zones and take on several forms. Thom's Creek sites are found throughout the South Carolina Coastal Zone, Coastal Plain, and up to the Fall Line. The sites are found into the North Carolina Coastal Plain, but do not appear to extend southward into Georgia.

In the Coastal Plain drainage of the Savannah River there is a change of settlement, and probably subsistence, away from the riverine focus found in the Stallings Phase (Hanson 1982:13; Stoltman 1974:235-236). Thom's Creek sites are more commonly found in the upland areas and lack evidence of intensive shellfish collection. In the Coastal Zone large, irregular shell middens, small, sparse shell middens; and large "shell rings" are found in the Thom's Creek settlement system.

The Deptford phase, which dates from 1100 B.C. to A.D. 600, is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland, sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Coastal Plain, although sandy, acidic soils

preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980b). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98).

Throughout much of the Coastal Zone and Coastal Plain north of Charleston, a somewhat different cultural manifestation is observed, related to the "Northern Tradition" (e.g., Caldwell 1958). This recently identified assemblage has been termed Deep Creek and was first identified from northern North Carolina sites (Phelps 1983). The Deep Creek assemblage is characterized by pottery with medium to coarse sand inclusions and surface treatments of cord marking, fabric impressing, simple stamping, and net impressing. Much of this material has been previously designated as the Middle Woodland "Cape Fear" pottery originally typed by South (1976). The Deep Creek wares date from about 1000 B.C. to A.D. 1 in North Carolina, but may date later in South Carolina. The Deep Creek settlement and subsistence systems are poorly known, but appear to be very similar to those identified with the Deptford phase.

The Deep Creek assemblage strongly resembles Deptford both typologically and temporally. It appears this northern tradition of cord and fabric impressions was introduced and gradually accepted by indigenous South Carolina populations. During this time some groups continued making only the older carved paddle-stamped pottery, while others mixed the two styles, and still others (and later all) made exclusively cord and fabric stamped wares.

The Middle Woodland in South Carolina is characterized by a pattern of settlement mobility

and short-term occupation. On the southern coast it is associated with the Wilmington phase, while on the northern coast it is recognized by the presence of Hanover, McClellanville or Santee, and Mount Pleasant assemblages. The best data concerning Middle Woodland Coastal Zone assemblages comes from Phelps' (1983:32-33) work in North Carolina. Associated items include a small variety of the Roanoke Large Triangular points (Coe 1964:110-111), sandstone abraders, shell pendants, polished stone gorgets, celts, and woven marsh mats. Significantly, both primary inhumations and cremations are found.

On the Coastal Plain of South Carolina, researchers are finding evidence of a Middle Woodland Yadkin assemblage, best known from Coe's work at the Doerschuk site in North Carolina (Coe 1964:25-26). Yadkin pottery is characterized by a crushed quartz temper and cord marked, fabric impressed, and linear check stamped surface treatments. The Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least A.D. 300 coexisted with this Triangular Tradition. The Yadkin series in South Carolina was first observed by Ward (1978, 1983) from the White's Creek drainage in Marlboro County, South Carolina. Since then, a large Yadkin village has been identified by DePratter at the Dunlap site (38DA66) in Darlington County, South Carolina (Chester DePratter, personal communication 1985) and Blanton et al. (1986) have excavated a small Yadkin site (38SU83) in Sumter County, South Carolina. Research at 38FL249 on the Roche Carolina tract in northern Florence County revealed an assemblage including Badin, Yadkin, and Wilmington wares (Trinkley et al. 1993:85-102). Anderson et al. (1982:299-302) offer additional typological assessments of the Yadkin wares in South Carolina.

Over the years the suggestion that Cape Fear might be replaced by such types as Deep Creek and Mount Pleasant has raised considerable controversy. Taylor, for example, rejects the use of the North Carolina types in favor of those

developed by Anderson et al. (1982) from their work at Mattassee Lake in Berkeley County (Taylor 1984:80). Cable (1991) is even less generous in his denouncement of ceramic constructs developed nearly a decade ago, also favoring adoption of the Mattassee Lake typology and chronology. This construct, recognizing five phases (Deptford I - III, McClellanville, and Santee I), uses a type variety system.

Regardless of terminology, these Middle Woodland Coastal Plain and Coastal Zone phases continue the Early Woodland Deptford pattern of mobility. While sites are found all along the coast and inland to the Fall Line, shell midden sites evidence sparse shell and artifacts. Gone are the abundant shell tools, worked bone items, and clay balls. Recent investigations at Coastal Zone sites such as 38BU747 and 38BU1214, however, have provided some evidence of worked bone and shell items at Deptford phase middens (see Trinkley 1990).

In many respects the South Carolina Late Woodland may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500 to 700 years (cf. Sassaman et al. 1990:14-15). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

The South Appalachian Mississippian Period (ca. A.D. 1100 to 1640) is the most elaborate level of culture attained by the native inhabitants and is followed by cultural disintegration brought about largely by European disease. The period is characterized by complicated stamped pottery, complex social organization, agriculture, and the construction of temple mounds and ceremonial centers. The earliest phases include the Savannah and Pee Dee (A.D. 1200 to 1550).

### Historic Overview

The English established the first permanent settlement in what is today South Carolina in 1670 on the west bank of the Ashley River. Like other European powers, the English were lured to the New World for reasons other than the acquisition of land and promotion of agriculture. The Lord Proprietors, who owned the colony until 1719-1720, intended to discover a staple crop whose marketing would provide great wealth through the mercantile system.

By 1680 the settlers of Albemarle Point had moved their village across the bay to the tip of the peninsula formed by the Ashley and Cooper rivers. This new settlement at Oyster Point would become modern day Charleston. The move provided not only a more healthful climate and an area of better defense, but:

[t]he situation of this Town is so convenient for public Commerce that it rather seems to be the design of some skillful Artist than the accidental position of nature (Mathews 1954:153).

The early settlers of the Carolina colony came from other mainland colonies, England, and the European continent. But the future of Carolina was largely directed by the large number of colonists from the English West Indies. This Caribbean connection has been discussed by Waterhouse (1975), who argues that the Caribbean immigrants were largely from old families of economic and political prominence, which formed the Barbados elite. Waterhouse observes that while elsewhere in the American colonies the early settled families were displaced from their established positions of power and economic superiority by newcomers, this did not occur in South Carolina. In Carolina,

a relatively large proportion of those who, in the middle of the eighteenth century, were among the wealthier inhabitants, were

descended from those families who had arrived in the colony during the first twenty years of its settlement (Waterhouse 1975).

This immigration turned out to be a significant factor in the stability and longevity of South Carolina's colonial elite. It also firmly established the foundations of slavery and cash crop plantations.

Many of these Barbadian immigrants settled in the Goose Creek area, southeast of the survey corridor, forming one of the most influential political and economic groups in the colony (Stoney 1938). The "Goose Creek Men" included individuals such as Maurice Mathews, James Moore, and John Boone. They favored increased Indian slavery, trade with the pirates or privateers that sailed the Carolina coast, and generally ignored the efforts of the Lords Proprietors to control the Colony's economic and political future. While the political power of the Goose Creek faction peaked in the 1720s, it continued to evidence considerable economic power well into the late 1740s (see Morgan 1980; Sirmans 1966).

Early agricultural experiments, which involved olives, grapes, silkworms, and oranges, were less than successful. While the Indian trade was profitable to many of the Carolina colonies, it did not provide the Proprietors with the wealth they were expecting from the new colony. This trade was also limited since the Indian population was so dramatically reduced by European disease, the sale of alcohol, and slavery.

Cattle raising was also an easy way to exploit the region's land and resources, offering a relatively secure return for very little capital investment. Few slaves were necessary to manage the herd. The mild climate of the low country made winter forage more abundant and winter shelters unnecessary. The salt marshes on the coast, useless for other purposes, provided excellent grazing and eliminated the need to provide salt licks. More interior swamps found

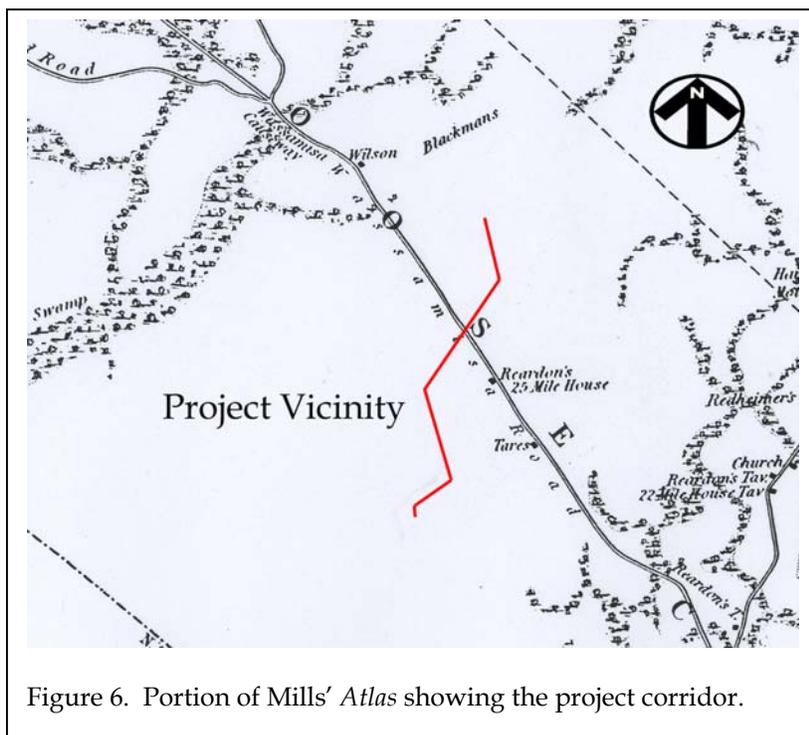


Figure 6. Portion of Mills' Atlas showing the project corridor.

similar vegetation and provided a constant water supply (Coon 1972; Dunbar 1961). Production of cattle, hogs, and sheep quickly outstripped local consumption and by the early eighteenth century, beef and pork were principal exports of the Colony to the West Indies (Ver Steeg 1975). This allowed the ties between Carolina and the Caribbean to remain strong and provided essential provisions to the large scale, single crop plantations.

Rice and indigo both competed for the attention of Carolina planters. Although introduced at least by the 1690s, rice did not become a significant staple crop until the early eighteenth century. At that time, it not only provided the Proprietors with the economic base that the mercantile system required, but it formed the basis of South Carolina's plantation system – slavery.

South Carolina's economic development during the pre-Revolutionary War period involved a complex web of interactions between slaves, planters, and merchants. By 1710, slaves

were starting to be concentrated on a few, large slave-holding plantations. By the close of the eighteenth century some South Carolina plantations had a ratio of slaves to whites that was 27:1 (Morgan 1977). And by the end of the century, over half of eastern South Carolina's white population held slaves. With slavery came, to many, unbelievable wealth. Coclanis notes that:

on the eve of the American Revolution, the white population of the low country was by far the richest single group in British North America. With the area's wealth based largely on the expropriation by whites of the golden rice and blue

dye produced by black slaves, the Carolina low country had by 1774 reached a level of aggregate wealth greater than that in many parts of the world today. The evolution of Charleston, the center of the low-country civilization, reflected not only the growing wealth of the area but also its spirit and soul (Coclanis 1989).

Only certain areas of the low country, however, were suitable for rice production. During the early years, rice was grown as an upland crop, in small fields adjacent to freshwater streams where water could be easily impounded and applied to the crop. By the early 1700s, planters found that upland swamps, such as those in the Goose Creek area, were even better suited for rice, although the soils were quickly exhausted (Meriwether 1940; Sellers 1934). These upland swamps, distinct from well-drained uplands, remained the focus of Carolina rice agriculture during the entire Colonial period.

Hewat, writing in 1779, describes the process of upland swamp rice cultivation:

after the planter has obtained his tract of land, and built a house upon it, he then begins to clear his field of that load of wood with which the land is covered. Having cleared his field, he next surrounds it with a wooded fence, to exclude all hogs, sheep, and cattle from it. This field he plants with rice . . . year after year, until the lands are exhausted, or yield not a crop sufficient to answer his expectations. Then it is forsaken, and a fresh spot of land is cleared and planted, which is also treated in like manner, and in succession forsaken and neglected (Hewat 1836).

This rather simplistic commentary failed to observe the engineering feat that upland swamp rice cultivation really was. Clearing, which alone was a monumental undertaking, was followed by the construction of dams, dikes, and trenches. By one estimate, a 500 acre rice field required 60 miles of dikes and ditches (Gunn 1976). Fields were carefully leveled to ensure that they could be completely covered by water. Rice was planted during two periods - March 10 to April 10 and June 1 to June 10 - avoiding may since vast migrations of "rice birds" passed through the state during that period and could destroy a crop. Rice was harvested in late August.

By 1730 the majority of the population of the colony, both rural and urban, was black (Wood 1974). By 1850, 46% of Charleston District's population (which included today's Berkeley County) consisted of African-American slaves (DeBow 1854), although Hilliard (1984) indicates that more than 60% of the Charleston slaveholders by 1860 owned fewer than 10 slaves.

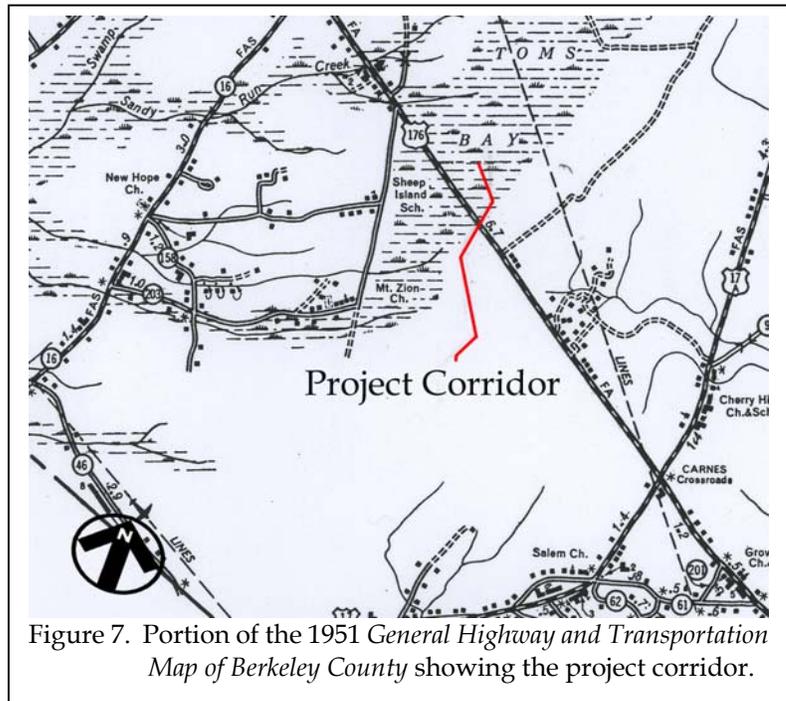


Figure 7. Portion of the 1951 *General Highway and Transportation Map of Berkeley County* showing the project corridor.

Regardless, there remained vast plantations where the owner's wealth was achieved by the labor of black slaves.

During the eighteenth century, the profits to be gained from rice were extraordinary, ranging from 12% to nearly 28% net return on the investment, well exceeding other cash crops such as tobacco or indigo (see Coclanis 1989). Charleston was the mecca around which the economic, political, and social world of Carolina revolved. Charleston provided the essential opportunity for conspicuous consumption, a mechanism that allowed the display of wealth accumulated from the plantation system.

By the end of the eighteenth century and the beginning of the nineteenth century, the rate of return on rice had been reduced, at best, to about 2% and many years the rate of return was a staggering -3% to -7%. In 1859, just before the start of the Civil War, the return is reported to have been -28%. As Coclanis observes:

the economy of the South Carolina low country collapsed in the nineteenth century. Collapse

did not come suddenly – many feel, for example, that the area’s “golden age” lasted until about 1820 – but come it did nonetheless. By the late nineteenth century it was clear that the forces responsible for the area’s earlier dynamism had been routed, the dark victory of economic stagnation virtually complete (Coclanis 1989).

It was the demise of these areas that facilitated the growth of the town of Summerville in 1831, located southwest of the survey corridor. The town of Summerville was established when the railroad company laid out 300 acres of town lots for sale (Charleston Courier 8/20/1831). Summerville was mainly settled by planters from the area who built houses and summer settlements there. Mills’ *Atlas*, showing the Charleston District (which contained the current project corridor) in 1825, fails to show any settlements along the corridor (Figure 6). To the south along Wassamisa Road (today SC 176), is Reardon’s 25 Mile House and Tares, but these are the closest settlements.

By 1832, Summerville had grown to the extent that the area was referred to as an “Old Summerville” and a “New Summerville” when the S.C. Canal and Railroad Company began building a railroad line (Walker 1941). Growth in the general area prompted the creation of new counties such as Colleton County in 1800 and Dorchester County in 1897. The area of Charleston District that contained the project corridor became Berkeley County in 1882.

In 1888, the D.W. Taylor Company owned 25,000 acres, mostly in Berkeley County, and a ten-mile long rail line, the Summerville and St. John’s Railroad. Taylor had mills in Summerville and at the upper end of its holdings (Fetters 1990:31). By 1909, the firm had cut over most of its land, and the rail line was purchased by Prettyman Lumber Company, which began in Summerville by J. Frank Prettyman in 1902. By 1910, Prettyman was

cutting 40,000 feet of lumber daily. The railroad eventually extended as far as Cross, where it connected with the Atlantic Coast Line (Fetters 1990:31-32).

The 1951 *General Highway and Transportation Map of Berkeley County* fails to show any settlements along the project corridor (Figure 7). Most of the northern portion of the corridor is in Black Toms Bay and no settlements appear to be located off the main system of roads.

## RESEARCH METHODS AND FINDINGS

### Archaeological Field Methods and Findings

The initially proposed field techniques for the transmission corridor incorporated shovel testing along the center line of the corridor, which had a right-of-way of 75 feet.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

A total of 211 shovel tests were excavated along the corridor, which paralleled an existing transmission line for all but 1,400 feet at the southern end.

Sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by

the lead agency in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey failed to identify any remains. This is most likely due to the amount of poorly drained soils and the



Figure 8. View of corridor through wet areas paralleling the existing transmission line.

lack of distinct ridge tops.

**Architectural Survey**

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have retained “some measure of its historic integrity” (Vivian n.d.:5) and which were visible from public roads.

For each identified resource, we would complete a Statewide Survey Site Form and at least two representative photographs would be taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The site forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

**Site Evaluation and Findings**

Archaeological sites would be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials,

workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose

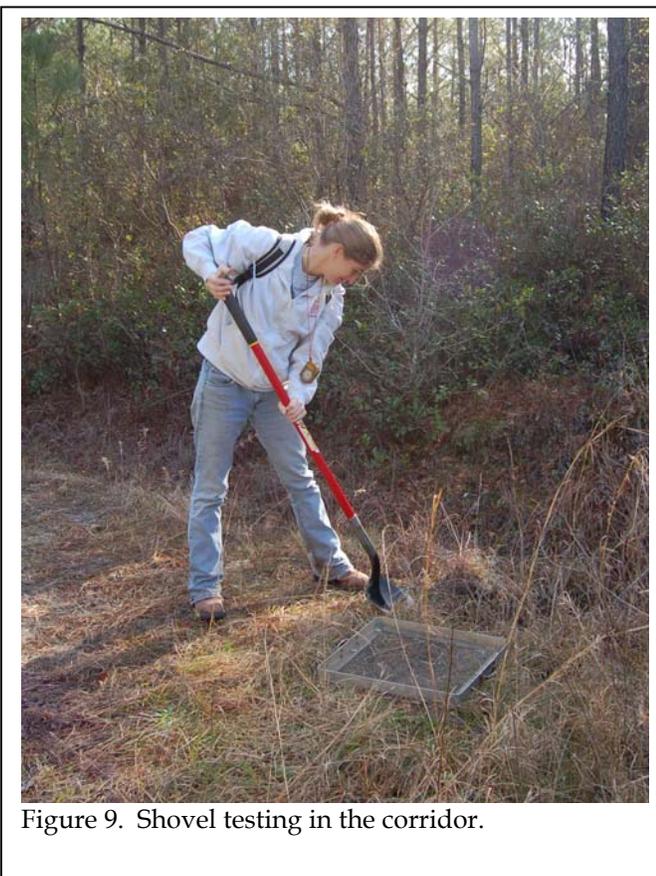


Figure 9. Shovel testing in the corridor.

components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

*National Register Bulletin 36* (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site's eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site's data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;
- identification of the historic context applicable to the site, providing a framework for the evaluative process;
- identification of the important research questions the site might be able to address, given the data sets and the context;
- evaluation of the site's archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and
- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to

other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the context of its available data sets.

A 1989 county-wide architectural survey has been performed for Berkeley County (Schneider 1989) and that information is thought to be complete. No additional structures were found in the APE that contain enough integrity to be eligible for the National Register of Historic Places.



## CONCLUSIONS

This study involved the examination of an approximately 4 mile corridor for a transmission line Berkeley County. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist Central Electric Power Cooperative in complying with their historic preservation responsibilities.

As a result of this investigation, no archaeological sites were found on the survey corridor. This is likely the result of the poorly drained soils found throughout the project area and the lack of distinct ridge tops.

A survey of public roads within 0.5 mile failed to identify any structures. Considerable

construction is taking place in Berkeley County, especially at the northern portion of the corridor.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).



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