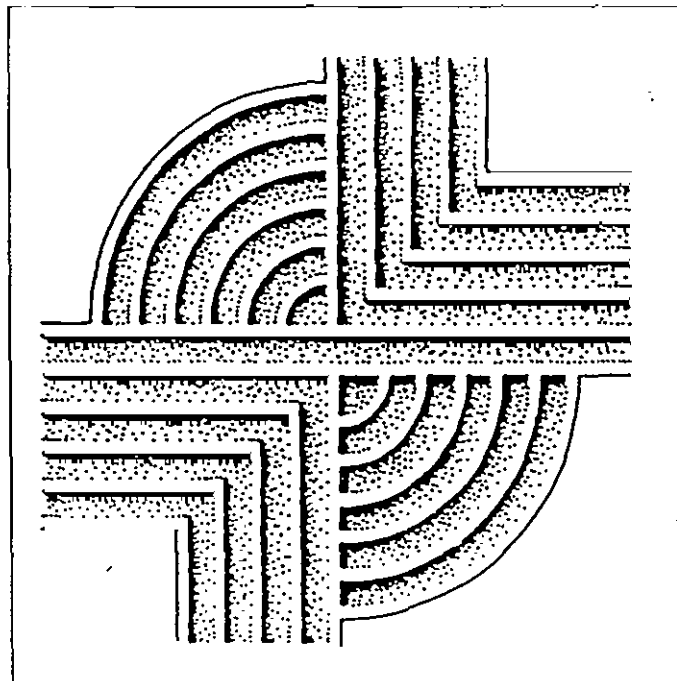


ARCHAEOLOGICAL AND ARCHITECTURAL
SURVEY OF THE CENTRAL ELECTRIC
POWER COOPERATIVE POOLES MILL 115kV
TAP LINE, ORANGEBURG COUNTY,
SOUTH CAROLINA



CHICORA RESEARCH CONTRIBUTION 298

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ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY OF
THE CENTRAL ELECTRIC POWER COOPERATIVE
POOLES MILL 115kV TAP LINE, ORANGEBURG COUNTY,
SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive archaeological survey of a 9.8 mile long transmission line corridor in the north central portion of Orangeburg County, South Carolina which terminates at the Lexington County line. The corridor, a maximum of 75 feet in width, is to be used by Central Electric Power Cooperative for the construction of a new 115kV transmission line running from an existing Aiken Electric Cooperative substation at the intersection of Juniper Street (S-184) and Shamrock Road in Orangeburg County about 4 miles west of Neeses and extending to the Aiken Electric Cooperative Pooles Mill substation on US 178 at the Orangeburg and Lexington county line. The corridor consists of gently rolling lands, much of which runs through agricultural fields and pine forests. The corridor crosses two major drainages, Big Beaver Creek and the North Fork Edisto River. 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.

This line will consist of a series of single poles, about 50 feet in height. Construction of this line will require the clearing of the corridor, followed by augering for placement of poles and laying the wire. Maintenance of the line will consist of periodic bushhogging. All of these activities have the potential to affect archaeological and historical sites and this survey was conducted to identify and assess archaeological and historical sites which may be in the project corridor. Given the narrow corridor and relatively short poles intended for use, we have identified a area of potential effect (APE) about 0.1 mile on either side of the proposed corridor.

Consultation with the S.C. Department of Archives and History revealed no National Register properties in the immediate area. Likewise, an investigation of the site files at the S.C. Institute of Archaeology and Anthropology revealed no previously

recorded archaeological sites in the immediate corridor vicinity.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals on the higher, better drained soils and 200-foot interval shovel testing on the lower, more poorly drained soils. In areas of standing water no shovel testing was attempted. A single transect was run down the center of the 75-foot wide corridor. In areas of recent cultivation a pedestrian survey was also undertaken. All shovel test fill was screened through ¼-inch mesh and the shovel tests were backfilled at the completion of the study.

The archaeological survey identified four archaeological sites (38OR230-233) and one cemetery (38OR235). Three of the four archaeological sites were twentieth century domestic scatters which were determined to lack integrity and were recommended not eligible for inclusion on the National Register of Historic Places. The fourth site was a twentieth century trash deposit which was determined ineligible since it appeared to be recent and was unable to address substantive research questions. All four archaeological sites are within the proposed corridor, but no further management activities are recommended.

The cemetery is recommended potentially eligible for inclusion on the National Register under Criterion D, potential to yield important information. This site, however, is outside the proposed corridor and will not be directly impacted by the undertaking. As a result, no further management activities are recommended.

Because of the nature of the project the area of potential effect seems limited to the area of the corridor or the area immediately adjacent to it. As a result, we examined only the corridor and immediately adjacent areas (using an APE of 0.1 mile) for architectural sites and structures. One was identified. Site

U/75/0000/2180128.00 is the Ralph Gleaton House, representing a ca. 1900 farm complex. Associated with this site is the Gleaton family cemetery, 218128.01. Both are recommended potentially eligible. We do not believe that the site will be affected by the proposed undertaking.

It is possible that archaeological remains may be encountered in the corridor during construction. Construction 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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I appreciate the support and assistance of Central Power Electric Cooperative, as well as their commitment and concern for South Carolina cultural resources. I also want to thank Mr. Tommy Jackson for his continued support and patience.

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project and I appreciate his dedication and willingness to trudge through seemingly endless miles of swamp.

In addition, I appreciate the assistance and cooperation of the staff of the S. C. Institute of Archaeology and Anthropology, particularly Mr. Keith Derting and Ms. Sharon Pekrul. Both went out of their way to make our job easier and the final product more complete and useful.

INTRODUCTION

This intensive archaeological survey of the proposed Central Electric Power Cooperative 115kV transmission line in Orangeburg County was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy Jackson of Central Electric. 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 corridor, approximately 9.8 miles in length, begins in the western portion of Orangeburg County about 4 miles west of Neeses, ending at the Orangeburg-Lexington border, about 5 miles northwest of North. The corridor for the transmission line is proposed to be about 75 feet in width, all of it situated on new alignment. This project will use single poles, each about 50 feet in height above the ground. A series of four wires will be strung on the poles (Figure 1).

The survey corridor begins at an existing Aiken Electric Cooperative substation located southwest of the junction of Juniper Street (S-184) and Shamrock Road (an unnumbered dirt county road). It runs parallel to Shamrock Road, gradually shifting to the west and crossing Honeydew Road (S-1518) where it turns to the west and follows this road for about 1,000 feet before turning again to the north. The line continued roughly north or northwest across a number of fields and forests, eventually crossing Begonia Road, SC 389 (Ninety Six Road), and SC 394. From this point it continues north, crossing several county roads, including Monaco Lane and Saddlecreek Lane. About 1,000 feet east of the Edisto, the corridor turns to the northeast and parallels an existing South Carolina Pipeline Corporation gas line for the remaining 4,000 feet. The project terminates at the proposed new Pooles Mill substation, situated on US 178, about 2,000 feet southeast of its junction with SC 3 (Figure 2).

The corridor consists of a variety of landforms and vegetation types including wetlands and swamps,

agricultural fields, planted pines, and mixed pine/hardwood forests. The corridor crosses two major drainages, Big Beaver Creek and the North Fork Edisto River, as well as crossing several areas of low, wet topography — much of which is very poorly drained and characterized by standing water.

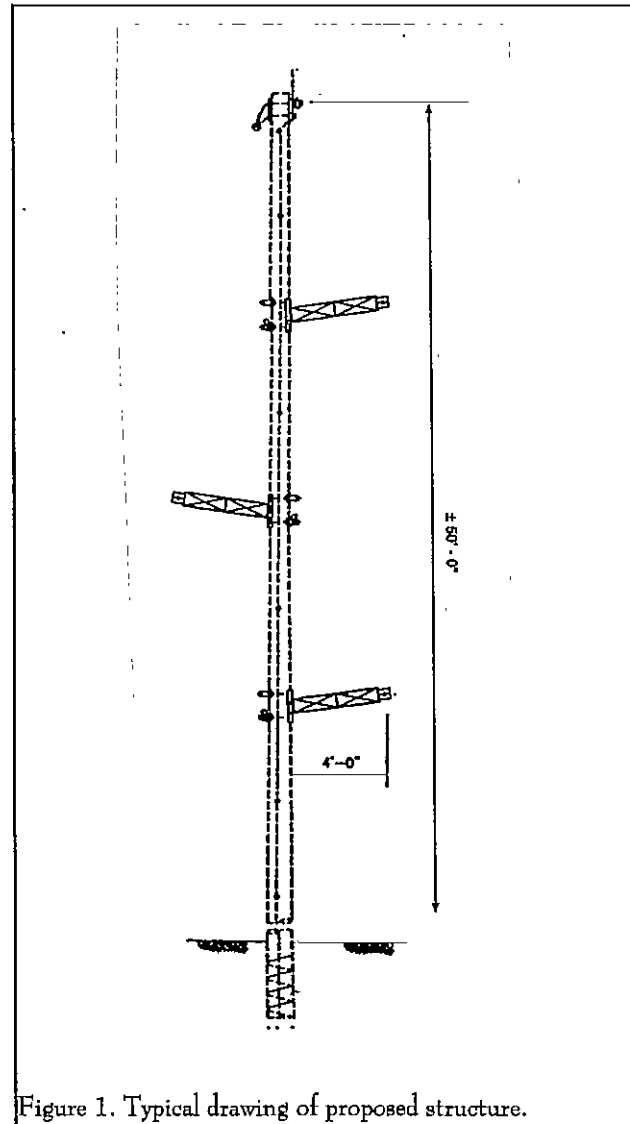


Figure 1. Typical drawing of proposed structure.

ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY OF THE POOLES MILL CORRIDOR

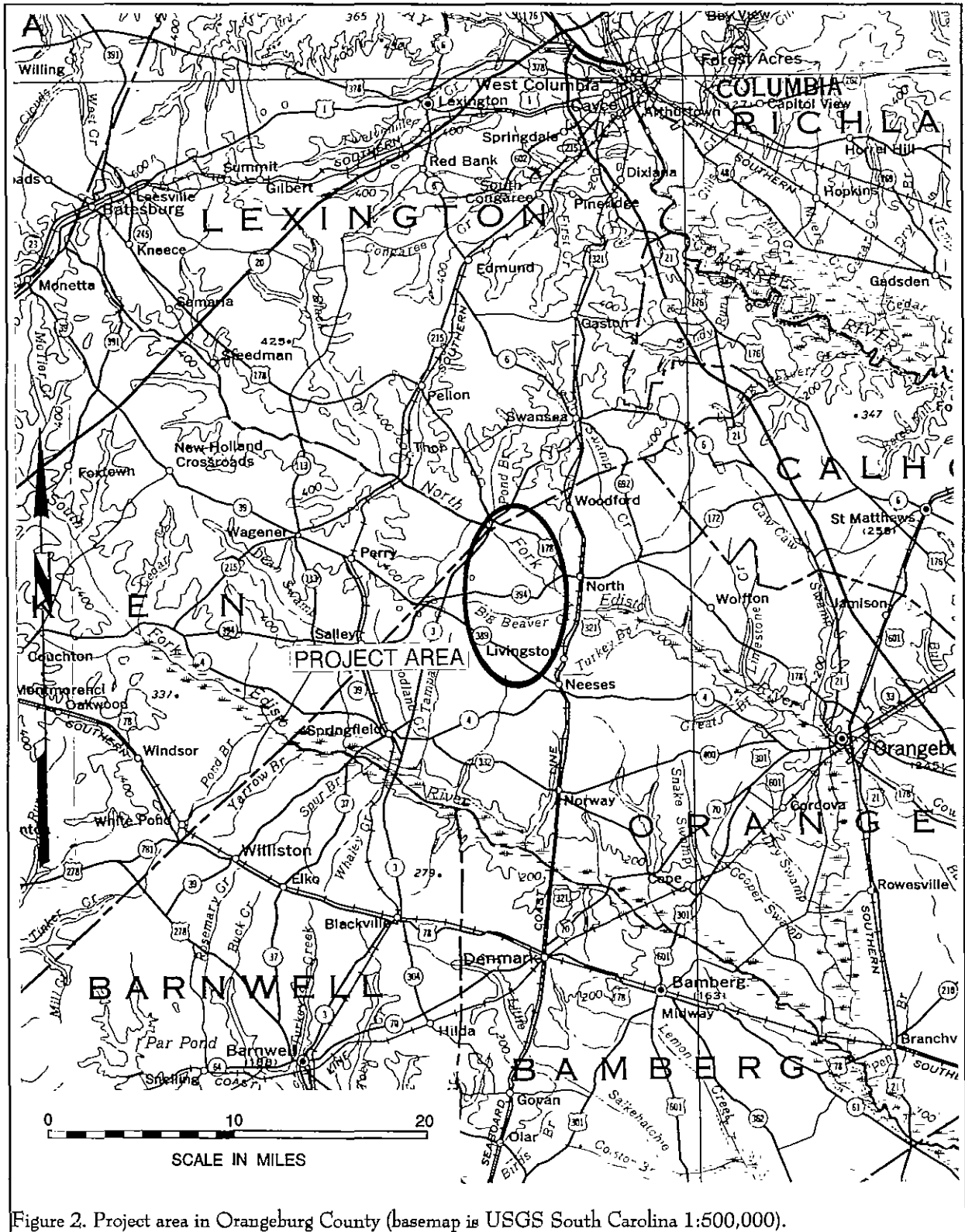


Figure 2. Project area in Orangeburg County (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

The corridor, as previously mentioned, is intended to be used as a power line right of way. Landscape alteration, primarily clearing and subsequent operation of equipment to place the poles, as well as future maintenance, will cause considerable damage to the ground surface and any archaeological resources which may be present in the survey area.

Construction, operation, and maintenance of the powerline may also have an impact on historic resources in the project area. Although the project is not anticipated to remove any structures, powerlines (as well as other above grade projects) may detract from the visual integrity of historic properties, creating what many consider discordant surroundings. Because of the nature of the poles being used on this project, this impact is anticipated to be very minor and to affect only properties which may be either on or immediately adjacent to the proposed powerline. As a result, this survey only reports on structures that are within or within 0.1 mile of the project (defined as the area of potential effect or APE).

This study, however, does not consider any future secondary impact of the project, including increased or expanded commercial or industrial development of this currently rural section of the South Carolina coastal plain.

We were requested by Mr. Robert Kidd of Central Electric Power Cooperative to conduct an intensive survey of the project corridor on November 15, 1999. The topographic survey for the project, coupled with staking of the corridor, was not completed until March 2, 2000.

These investigations incorporated a review of the site files at the South Carolina Institute of Archaeology and Anthropology. No previously recorded sites were recorded within the APE, although the Allan Mack site (38OR67), which is listed on the National Register of Historic Places, is situated about 2 miles to the east.

In addition, the master topographic maps at the South Carolina Department of Archives and History were checked to locate any NRHP buildings, districts, structures, sites, or objects, or structures

surveys in defined APE. There were no NRHP properties or structures surveys recorded for the project area.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files, as well as research at the South Caroliniana Library and the Thomas Cooper Map Repository.

The archaeological survey, which was designed to identify prehistoric or historic resources which may be within the project corridor was conducted intermittently from April 20 through May 5, 2000. The architectural survey, again limited to the corridor and the APE, was conducted at this same time. The field work was conducted by Dr. Michael Trinkley (PI) and Mr. Tom Covington. A total of 96 person hours were spent on the investigations.

NATURAL SETTING

Physiography and Geology

The survey corridor, at the northwestern edge of Orangeburg County, includes sections of both the Upper Coastal Plain and also the Sand Hills, found south of the Fall Line. Elevations in the Upper Coastal Plain range from 350 to 220 feet above mean sea level (AMSL), with the topography being gently rolling. In the Sand Hills the topography may be more rolling and elevations range up to 400 feet AMSL. As Kovacik and Winberry (1987:20) observe, it can be very difficult to distinguish the Upper Coastal Plain from that of the Sand Hills or even the lower Piedmont. You find the flatter, and almost featureless, Coastal Plain topography further to the south and southeast, south of the Citronelle Escarpment (Orangeburg Scarp).

The bordering Carolina Sand Hills are an area of discontinuous hilly topography characterized by rounded hills with gentle slopes, moderate relief, and sandy soils. Although technically part of the Coastal Plain geology, the Sand Hills are distinct geographically. Much of the sand was blown into dunes during the Miocene, although weathered clays and very old river deposits are also present. In many cases these sandy deposits lie directly on the crystalline rocks of the Piedmont (Kovacik and Winberry 1987; Murphy 1995).

Orangeburg is situated in the south-central part of South Carolina. It is bounded on the north by Calhoun and Clarendon counties. To the east is Berkeley County, while to the south is Dorchester. Bamberg and Barnwell counties are situated to the southwest and separated from Orangeburg by the South Fork of the Edisto River. Aiken and Lexington counties are on the northwest boundary. The county is still considered a rural area and about half of its 707,000 acres are still cropland, with much of the remainder being woodlands.

Western Orangeburg County is drained

primarily by the North and South Forks of the Edisto River, which joint together in the lower reaches of the county, about 3 miles west of Branchville. Eastern Orangeburg is drained by Four Hole Swamp and the Santee River. The latter was dammed in the 1930s to create Lake Marion.

In the southern half of the project area the water ways flow primarily north or east into the North Fork of the Edisto River and one of the primary drainages is Big Beaver Creek. In the northern half of the project area creeks flow to the south or east, again flowing into the North Fork of the Edisto River.

Mills also comments on the numerous creeks and rivers of the Orangeburg District. He notes that many were navigable (Mills 1972 [1826]: 664-665) and the highest quality lands are situated along the Edisto. Since the area was subject to flooding, however, relatively little of the land was in active cultivation. He remarks that, "owing to their being so narrow, they would require expensive embankments, which would probably not be repaid in the value of the land thus reclaimed" (Mills 1972 [1826]:659).

Mills also comments that "Orangeburg lies within the alluvial region entirely; the upper edge just dipping into the primitive or granite region" (Mills 1972 [1826]:657). Today we recognize that this "upper region" lies in the northwestern corner of the county, which includes only the Upper Coastal Plain and a small portion of the Sand Hills — where this project is situated. We also recognize the complex geology of the Upper Coastal Plain where there are bedded sands overlaying kaolinitic clays and clayey, quartzose sands (Murphy 1995:93).

In this stone poor section of the state the nearest source of lithic materials for Native Americans would be the metamorphic and volcanic rocks of the Carolina Slate Belt which outcrop to the north of the survey area in Anson County, North Carolina and west

along the fall line in southeastern Lancaster, northern Chesterfield, and Kershaw counties in South Carolina. Far closer are occasional deposits or outcrops of cherts and orthoquartzites (see Anderson et al 1979:11-12 for additional information).

Soils

Mills commented that the Orangeburg distinct included a variety of soils. Most were described as having "a light, sandy nature, thin soil, but bottomed on clay" (Mills 1972 [1826]:658). This clay bottom helps minimize the droughty nature of the sandy soils, many of which are characterized as excessively well drained. Along the Congaree and Santee rivers he observed a very different soil, described as "a stiff, red clay" found on rolling hills — a description of a small area of the piedmont which is today part of Calhoun County to the north (but which was originally incorporated in Orangeburg District).

Today we recognize that the survey corridor consists of four distinct soil associations. At the southern end of the project, in the Sand Hills, is the Fuquay-Dothan-Troup Association, well-drained sandy soils characterized by a loamy subsoil. In this area there are broad to narrow ridges that are gently sloping and have complex slopes, at times up to with up to 15% slopes. These border directly on the Lumbee-Johnson soils which characterize the Edisto River floodplain to the north. These soils, while generally sandy, are poorly to very poorly drained. In spite of the drought in South Carolina during this study these soils were consistently wet and often flooded.

To the north of the North Fork of the Edisto is the Dothan-Fuquay-Orangeburg Association. Here the topography is nearly level to gently sloping. There are narrow to broad ridges with associated side slopes. The drainages in this area are well defined and have narrow floodplains. This is a broad area of Coastal Plain soils which consist of well drained sandy soils. Beyond this, on the Lexington County border, is the Troup-Fuquay-Alpin Association, another Sand Hill association consisting of very well drained soils. Here the topography is generally level to gently sloping. There are broad ridges with associated side slopes separated by well defined drainages.

The proposed transmission line crosses 13 soil series (DeFrancesco 1988). A useful characterization of the soils is by capability classification, which is the grouping of soils to show their suitability for cultivation and woodland species. The soils are typically grouped by their limitations (such as erosion or wetness). Soils from five of the eight classifications are found in the corridor, although most have moderate through very severe limitations. The primary limitation is the shallowness of the soil, typical of the Fuquay sands and Lucy loamy sands. Another significant limitation is the wetness of the soil, most characteristic of the flooded Ellore, Johnson, and Mouzon soils, but also characteristic of the Phelham soils (with a seasonal water table from 0.5 to 1.5 feet below the surface) and Bibb sandy loams (where there are frequent floods).

The soils in the project area closely parallel the physiographic regions crossed by the corridor: the upper elevations with generally well drained, sandy soils; and the low swampy areas of the Edisto and drainages where the water table may be within a few feet of the ground level. Few historic or prehistoric sites are expected on the very wet soils. Historic occupation, especially during the late nineteenth and early twentieth centuries, is expected on upland or sloping, well drained soils suitable for agriculture. Earlier historic sites may occasionally be found on the margins of swamp bottoms, but are not common in this area. Prehistoric sites are expected to be uncommon in the upland areas remote from a water source, and instead are more likely to occur adjacent to the hardwood bottom swamps.

The poorly drained and very poorly drained soils have seasonal high water tables ranging from 0 to 1.5 feet below the surface. For the purpose of this study they are lumped together and account for about 8% of the corridor. These soils are most commonly associated with wooded bays where ponding frequently occurs and the drainages where flooding is common. Although these soils may occasionally be incorporated into cultivated fields if drainage ditches are present, ponding may still be evident.

The well drained to moderately well drained soils have seasonal high water tables ranging from 1.5 to 5 feet below the surface and together account for about 47% of the soils in the study tract. Most of these

NATURAL SETTING

better drained soils are found either where fields have been opened for cultivation or on wooded ridge tops between drainages.

As Table 1 reveals, most of the study area consists of well drained soils. Their reduced capability classifications are often the result of the soils being too well drained, resulting in droughty soils.

Historically these sandy soils have been recognized to have low fertility. During the early nineteenth century, Mills commented that local farmers were beginning to more aggressively deal with the nutritional deficiencies of the soil:

The planters now improve their lands by manuring the corn hills either with cotton seed or swamp mud, throwing up in pens in the fall season, to remain during the winter. By mixing with it cotton seed, stable manure, or decayed vegetables, its fertilizing qualities are greatly increased (Mills 1972 [1826]:660).

Floristics

In the early nineteenth century Mills comments that the river lands — especially those adjacent to the Edisto — were dominated by “the magnolia, beech, willow, ash, elm, oak, birch, walnut, and hickory” while in the deeper swamp were “large groups of cypress, loblolly, bay, sweet bay, maple, tupelo, and poplar trees of an immense height and circumference” (Mills 1972 [1826]:658). In contrast, the uplands were dominated by pines.

Today there are two major categories of plant communities, based primarily on topographic location, which exist in the project area. The first category consists of upland vegetation. Supported here are a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species. Incorporated may be small upland depressions and drainages, which contain more hydric species.

Portions of the upland area were found to

Table 1.
Soils and Capability Classifications for the Survey Corridor

<i>Capability Class II</i> <i>Moderate Limitations</i>		
Dothan loamy sand, 0-6%	WD	15.7%
Fuquay sand	WD	27.2%
Lucy loamy sand	WD	1.3%
Orangeburg loamy sand, 0-6%	WD	2.9%
<i>Capability Class III</i> <i>Severe Limitations</i>		
Ailey sands, 2-10%	WD	5.7%
Blanton sand	WD	7.1%
Pelham loamy sand	PD	0.6%
Troup sand, 0-10%	WD	11.9%
<i>Capability Class IV</i> <i>Severe Limitations</i>		
Alpin sand, 0-6%	ED	19.2%
<i>Capability Class V</i> <i>Severe Limitations</i>		
Bibb sandy loams	flooded	0.6%
<i>Capability Class VI and higher</i> <i>Very Severe Limitations</i>		
Ellore loamy sand	flooded	4.2%
Johnson sand loam	flooded	1.7%
Mouzon fine sandy loam	flooded	1.9%
ED = excessively drained, WD = well drained, PD = poorly drained		

contain pine forest, typically found on soils of low fertility, high acidity, and excessive drainage. Most often these areas have been subjected to extensive disturbance, including repeated logging operations, and the pine represent an early stage of revegetation. A few areas of hardwood forest exist in the project area, where oaks,



Figure 3. Area of mixed hardwoods and pines on an 8% slope.

maple, sweetgum, black gum, and mockernut hickory are prevalent. More common, however are mixed forests, containing both pines and hardwoods.

Lowland forests, which account for the second category, are located on the floodplains and swamps of the corridor. These floodplain soils are forested with bald cypress, gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species (Kovacik and Winberry 1987:45).

The survey area, however, has been extensively

altered by modern land-use activities. Many of the forests have been removed for cultivation and today about half of the project area is open and under cultivation.

Climate

This portion of South Carolina is dominated by the movement of systems across the country, but there are relatively few complete exchanges of air masses in the summer. This results

in few breaks in the midsummer heat, with temperatures ranging from the high 80s to the low-90s. In contrast, winters are mild and relatively short. There are 45 inches of annual precipitation, with nearly 27 inches

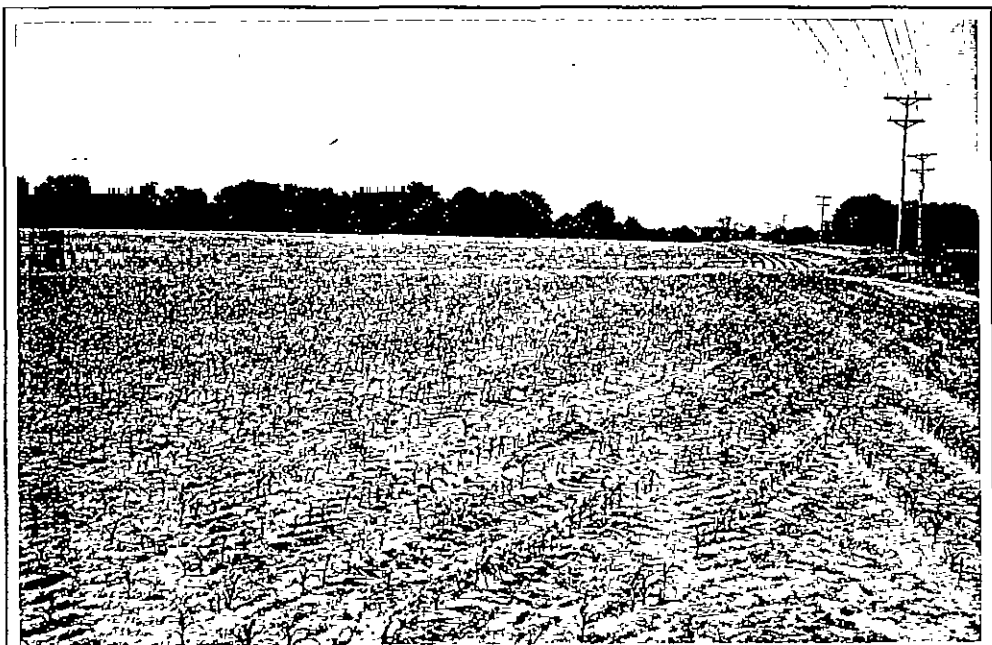


Figure 4. Recently cultivated field with recent rain, planted in corn.

falling in the growing season (DeFrancesco 1988:2).

Like elsewhere in the state, Mills distinguished between the swamp lands and the sand lands in his assessment of Orangeburg's health:

the sandhill section of this district presents as fine and healthy a climate as any country can boast of. Diseases are rare here Along the margins of the creeks and rivers, and within the influence of swamps, bays, and stagnant ponds, fevers and agues, bilious remittents, typhus, and other inflammatory diseases prevail" (Mills 1972 [1826]:664).

PREHISTORIC AND HISTORIC BACKGROUND

Previous Research

Orangeburg, for its size, has received relatively little attention. Derting et al. (1991) cite only 27 studies dealing with the county. Of these 13, or nearly half, are the result of road projects and an additional eight represent other forms of cultural resource studies, only three of which represent any significant aerial extent. The remaining six reports involve a variety of other research, with three specifically associated with work at the Alan Mack site (38OR67).

The Alan Mack site may be the most best known archaeological site in Orangeburg County. It attracted considerable attention in the early to mid-1980s, culminating in its nomination to the National Register of Historic Places. The site exhibits nearly 30 inches of stratified deposits running from at least the Early Archaic (characterized at the site by Palmer points). Above this are levels representing Kirk, Guilford, Savannah River cultures. Above these are somewhat mixed deposits of Deptford and perhaps later pottery. Unfortunately no publications are available for the site beyond a series of papers presented at the Archaeological Society of South Carolina Annual Conference and occasional reports in the society newsletter. Nevertheless, this site is very similar to the Cal Smoak site (38BM4) in nearby Bamberg County for which there is a very detailed report (Anderson et al. 1979).

Prehistoric Overview

The Paleo-Indian 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). The Paleo-Indian occupation, while widespread, does not appear to have been intensive. Points usually associated with this period include the Clovis and several variants, Suwannee, Simpson, and Dalton (Goodyear et al. 1989:36-38).

At least one Paleo-Indian point has been found in the Calhoun area, reportedly from the Little Bull Swamp Creek drainage (Goodyear et al. 1989:33). This pattern of artifacts found along major river drainages has been interpreted by Michie to support the concept of an economy "oriented towards the exploitation of now extinct mega-fauna" (Michie 1977:124).

Unfortunately, little is known about Paleo-Indian subsistence strategies, settlement systems, or social organization. Generally, archaeologists agree that the Paleo-Indian groups were at a band level of society, 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 1000 B.C., does not form a sharp break with the Paleo-Indian period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. The chronology established by Coe (1964) for the North Carolina Piedmont may be applied with little modification to the Calhoun County area. Archaic period assemblages, characterized by corner-notched, side-notched, and broad stemmed projectile points, are common in the vicinity, although they rarely are found in good, well-preserved contexts.

The Woodland period begins, by definition, with the introduction of fired clay pottery about 2000 B.C. along the South Carolina coast, about 1000 B.C. in the Upper Coastal Plain, and much later in the Carolina Piedmont, perhaps 500 B.C. 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 2000 to 500 B.C. was a

ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY OF THE POOLES MILL CORRIDOR

Dates	Period	Sub-Period	Regional Phases		
			COASTAL	MIDDLE SAVANNAH VALLEY	CENTRAL CAROLINA PIEDMONT
1715	HIST.	EARLY	Altamaha		Caraway
1650		LATE	Irene / Pee Dee	Rembert Hollywood	Dan River
1100	MISS.	EARLY	Savannah	Lawton Savannah	
800		LATE	St. Catherines / Swift Creek		Uwharrie
A.D.	WOODLAND	MIDDLE	Wilmington	Sand Tempered Wilmington?	Yadkin
B.C.			Deptford	Deptford	
300		EARLY	Refuge	Badin	
1000	ARCHAIC	LATE	Thom's Creek Stallings		
2000			Savannah River Halifax		
3000		MIDDLE	Gulford Morrow Mountain Stanly		
5000	EARLY	Kirk Palmer			
8000		Hardaway			
10,000	PALEOINDIAN	Hardaway - Dalton			
12,000		Cumberland	Clovis	Simpson	

Figure 5. Generalized cultural periods for South Carolina.

period of tremendous change.

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. Various calculations of the probable yield of deer, fish, and other food sources identified from some coastal sites indicate that sedentary life was not only possible, but probable. Further inland it seems likely that many Native American groups continued the previous established patterns of band mobility. These frequent moves would allow the groups to take advantage of various seasonal resources, such as shad and sturgeon in the spring, nut masts in the fall, and turkeys during the winter.

The South Appalachian Mississippian period, from about A.D. 1100 to A.D. 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 coastal phases are named the Savannah and Irene (known as Pee Dee further inland) (A.D. 1200 to 1550).

However little we know about the various small coastal tribes, considerably less is known about the protohistoric and historic tribes in the Upper Coastal Plain. The study area is, in very general terms, situated between the Congaree and Santee. Mooney (1894:80) devotes a modest two paragraphs to the Congaree and only slightly more to the Santee.

He notes that in 1701, Lawson found the Congaree "on the northeastern bank of the river below the junction of the Wateree" (Mooney 1894:80). In fact, Lawson's account (Lefler 1967:33-35) is the most detailed available for the tribe. He describes their town as consisting "not of above a dozen Houses, they having other stragling Plantations up and down the Country." He reported that they had lost much of their population to smallpox and other European diseases; in spite of this the Congarees were reported to be "kind and affable to the English, the Queen being very kind, giving us what rarities her Cabin afforded, as Loblolly [a thick gruel]

made with Indian Corn, and dry'd Peaches" (Lefler 1967:35). Taukchiray suggests that this village was located on Pinetree Creek, although no archaeological effort has been made to locate the settlement (Hicks 1998:48).

Mooney reports that by 1715 their settlements had shifted to the south bank of the Congaree, perhaps on Big Beaver Creek (Mooney 1894:80). Taukchiray expands on this, suggesting "in 1712-1715, the Congaree lived on Congaree River — first on the west side (now Calhoun County), then on the east side (now Richland County)" with some "on the north/northeastern side of upper Congaree River around Gills and Mill Creeks, on the outskirts of present-day Columbia" (Hicks 1998:50).

The 1715 Yemassee War further reduced their numbers and destabilized their society. Taukchiray suggests that they left their Congaree heartland in late 1716 and moved to the "northwest side of the Waccamaw River in what is now Horry County" (Hicks 1998:50). They stayed in this area until joining the Catawba about 1736. Although largely amalgamated by the Catawba, Taukchiray reports that at late as 1760 one of the Catawba headmen was known to the English as "Congaree Jimmy" (Hicks 1998:50).

For the Santee we know that Lawson found them in the vicinity of the Santee Indian mounds in 1701 (Lefler 1967:25-29; Mooney 1894:79). Again the tribe is reported to live in small hamlets, with Lawson remarking, "there being Plantations lying scattering here and there, for a great many Miles" (Lefler 1967:25). In fact, the settlements continued up river at least to Jacks Creek, and there were hunting camps at least as far up as the High Hills of Santee (Hicks 1998:30).

Mooney reports that just prior to the Yemassee War there were still two village about 70 miles from Charleston and perhaps as many as 160 individuals (Mooney 1894:80). Taukchiray provides a little more detail, revealing that the remains of the tribe were captured by the English and Etiwan Indians and transported to Charleston. There the men were shipped to the West Indies as slaves and the women and children were turned over the Etiwans as slaves (Hicks

1998:30), marking the end of the tribe.

Historic Synopsis

The earliest settlement in the area appears to have begun with the 1704 grant to Robert Sterling of 570 acres on Lyons Creek — in what is today Calhoun County. Situated about 4 miles south of St. Matthews on the Charleston Road, this seems to have served as a focus for additional settlement, largely by English and French Huguenots, who came to the area between 1735 and 1737 (DeFrancesco 1988:1; Mills 1972 [1826]:656-657).

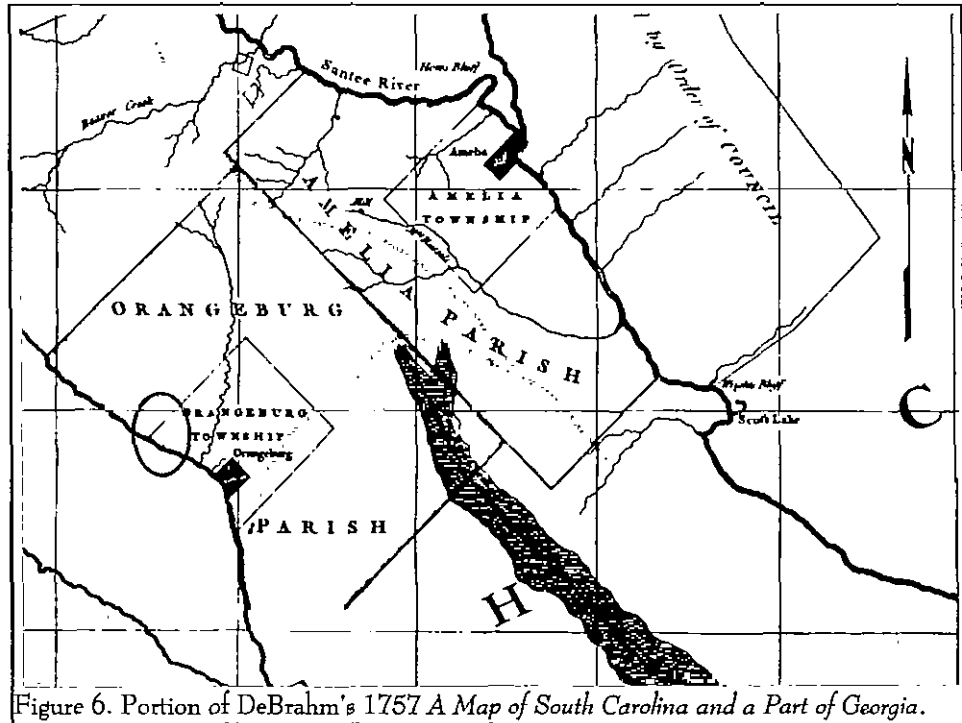


Figure 6. Portion of DeBrahm's 1757 *A Map of South Carolina and a Part of Georgia*.

(Meriwether 1940:45-46).

Settlement in the area was also spurred by the township plan of Governor Robert Johnson in the 1730s. The Amelia Township was situated on the west bank of the Congaree and Santee rivers, with the town site situated at the mouth of the Congaree. Settlement was particularly attracted to the areas of Buckhead, Lyons, and Halfway Swamp Creek (Smith 1977:9). It wasn't until the late 1740s that Amelia began to grow, but it quickly became a planters' parish and by 1757 the population had grown to 700 (Meriwether 1940:49-50). With the end of the Cherokee threat in 1761 the area attracted a second round of growth, with many small planters and farmers coming to the Wateree's west bank, below the shoals (Central Midlands Regional Planning Council 1974:142).

Further to the south the Orangeburg Township was located on the east bank of the North Fork of the Edisto River, bordering Amelia to the north. The middle and upper sections, notably along the rivers, provided excellent agricultural land and this settlement attracted a variety of German and Swiss settlers. By 1740 the population had reached 500

Originally part of Orangeburg District, the 1785 act divided the district into Lewisburg (along the river), Orange, Lexington (to the north), and Winton (an early version of Barnwell along the Savannah). These counties, however, were abolished in 1791 and the Orangeburg District was reinstated. By 1804, however, the district was again subdivided, this time into Lexington (1804), Orangeburg, and Barnwell (1800). Consequently, by the time Mills discussed the region in 1820, Orangeburg was an elongated district and Mills observed that, "its figure is very irregular, having a kind of peninsula, or long narrow strip, running between two rivers, upwards of twenty-six miles from the main body of the district" (Mills 1972 [1826]:657).

During the Colonial period Orangeburg was at best a small village, containing several taverns and stores, a courthouse, a jail, both a Lutheran and an Anglican church, and a few small residences (Edgar 1998:163). The jail, built in 1770, was the one which General Sumter:

besieged and took, during the

revolutionary war. The British had a garrison there consisting of 70 militia and 12 regulars. This village was for some time the seat of war. After Lord Rawdon had retreated from Camden, he took up his quarters here, whither he was pursued by Gen. Green, who offering him battle; but his lordship, secure in his strong hold, would not venture out; and Gen. Green was too weak to attack him in his works, with any prospect of success (Mills 1972 [1826]:662-663).

It was also during this same campaign that General Green and his partisans attacked and took over Fort Motte (in what is today Calhoun County) (Edgar 1998:237).

By the second quarter of the nineteenth century there were only three settlements in Orangeburg. The village of Orangeburg was "not favorably situated for health" according to Mills, although it was "tolerably central to the district." The second was the village of Poplar Spring, about 4.5 miles west of Orangeburg and used primarily as a summer residence. The third settlement was the village of Totness, on the north side of High Hill Creek, about 3 miles from the Congaree River. It, too, was primarily a summer village for the planters, which Mills described as "pleasant . . . and much frequented" (Mills 1972 [1826]:663).

Between 1800 and 1820 the population of the Orangeburg District had increased by over a third, from 10,155 to 15653. But the proportion of white increase was modest, from 5,957 in 1800 to 6,760 in 1820.

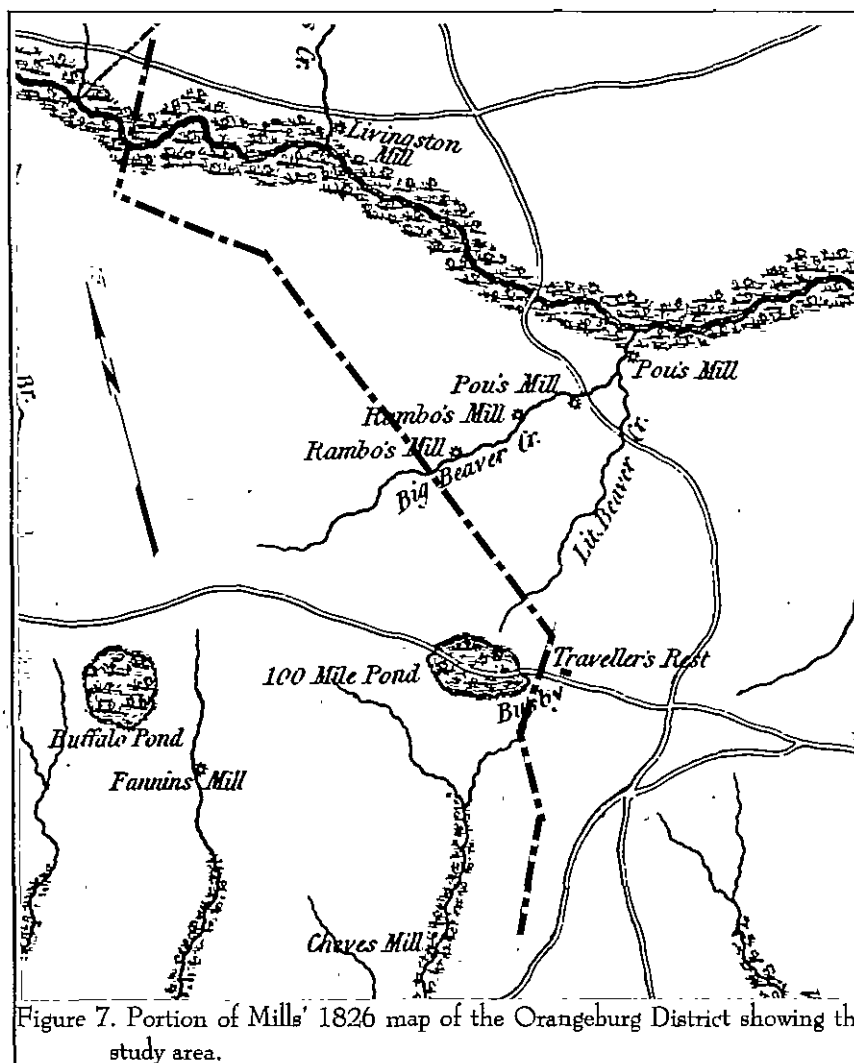


Figure 7. Portion of Mills' 1826 map of the Orangeburg District showing the study area.

The African American slave population, however, had more than doubled, from 4,110 to 8,829. This clearly documents the rise of plantations in the region, primarily along the rivers where the best lands were situated. Although Mills comments that there was a lively timber export trade from the district and that the German settlers "made a decent living" from growing corn, "cotton engrosses most attention" (Mills 1972 [1826]:660). It was certainly cotton which supported the increase in African American bondage in the region.

Mills' map of the district reveals that the proposed corridor is passing through areas with relatively little settlement. The "100 Mile Pond" today remains

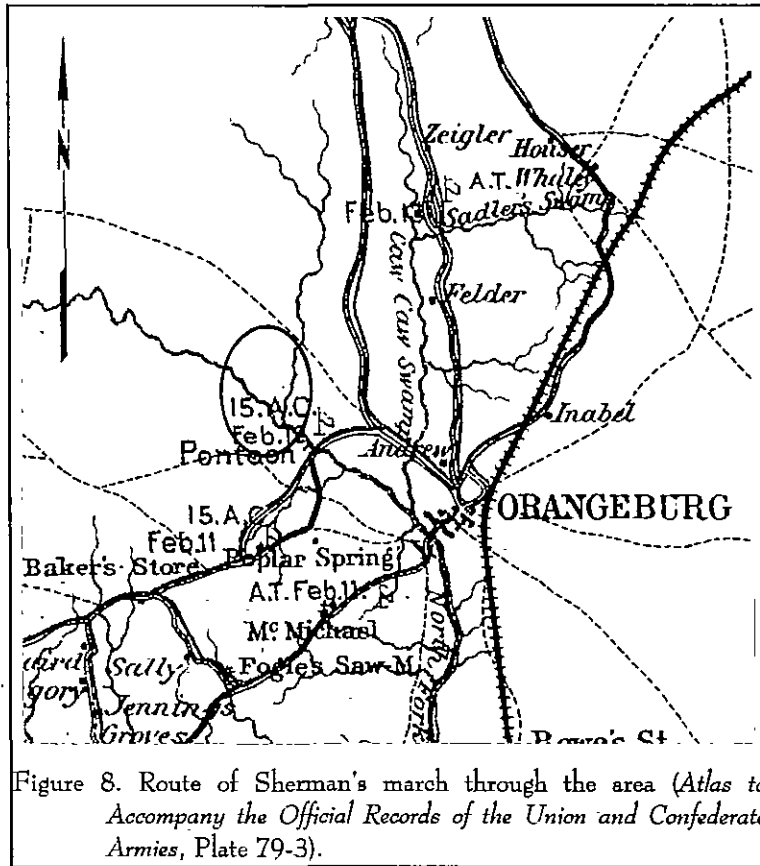


Figure 8. Route of Sherman's march through the area (*Atlas to Accompany the Official Records of the Union and Confederate Armies*, Plate 79-3).

only as a nearly forgotten Carolina bay, completely drained and placed under cultivation. On Big Beaver Creek there were three mills. Two of these are still evidenced today by mill ponds — Jones Pond and Harleys Millpond, both to the east of the survey corridor. The third mill, further to the east, is no longer extant. Livingston Mill, on what was then Glazer's Creek is likely Culler Ponds, now on a drainage called Salem Creek.

By 1850 the population had increased to 18,519, with 15,384 (83%) of these being African American slaves. Orangeburg had 1,206 farms, with an average of 150 improved acres. The district produced 614,418 bushels of Indian corn, ranking it 13th (out of 29). Also produced were 1,299,379 pounds of rice, ranking Orangeburg fifth in the state, behind fourth ranked Charleston with 16,906,273 pounds, but ahead of sixth ranked Anderson District (with 956,940 pounds). In spite of the slave population, Orangeburg

District produced only 10,024 bales of cotton, ranking it thirteenth (DeBow 1854). Lawrence observed that while wheat was grown, it was affected by rust in the late antebellum and stopped being produced until rust-resistant varieties were introduced after the Civil War. He, too, reports that the region's attention was focused on cotton, which remained the area's primary crop until the mid-twentieth century when its prominence was shattered by soybeans (Lawrence 1963:128).

Orangeburg saw little impact from the Civil War until the end, when Sherman's troops came up the north side of the Edisto, followed the North Fork into the city of Orangeburg, which was burned, and then continued north into what is today Calhoun County, crossing over the Santee River (Glatthaar 1985).

After the Civil War, with slaves no longer providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority. Added to the Codes were oppressive contracts which reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to hire "radicals," or blacks associated with radical politics.

PREHISTORIC AND HISTORIC BACKGROUND

While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy — sharecropping and renting — developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else — land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

An 1884 account of the county revealed that while there was only one textile mill (in the town of Orangeburg), there were 112 grist mills scattered across the countryside, along with 31 flour mills. All were

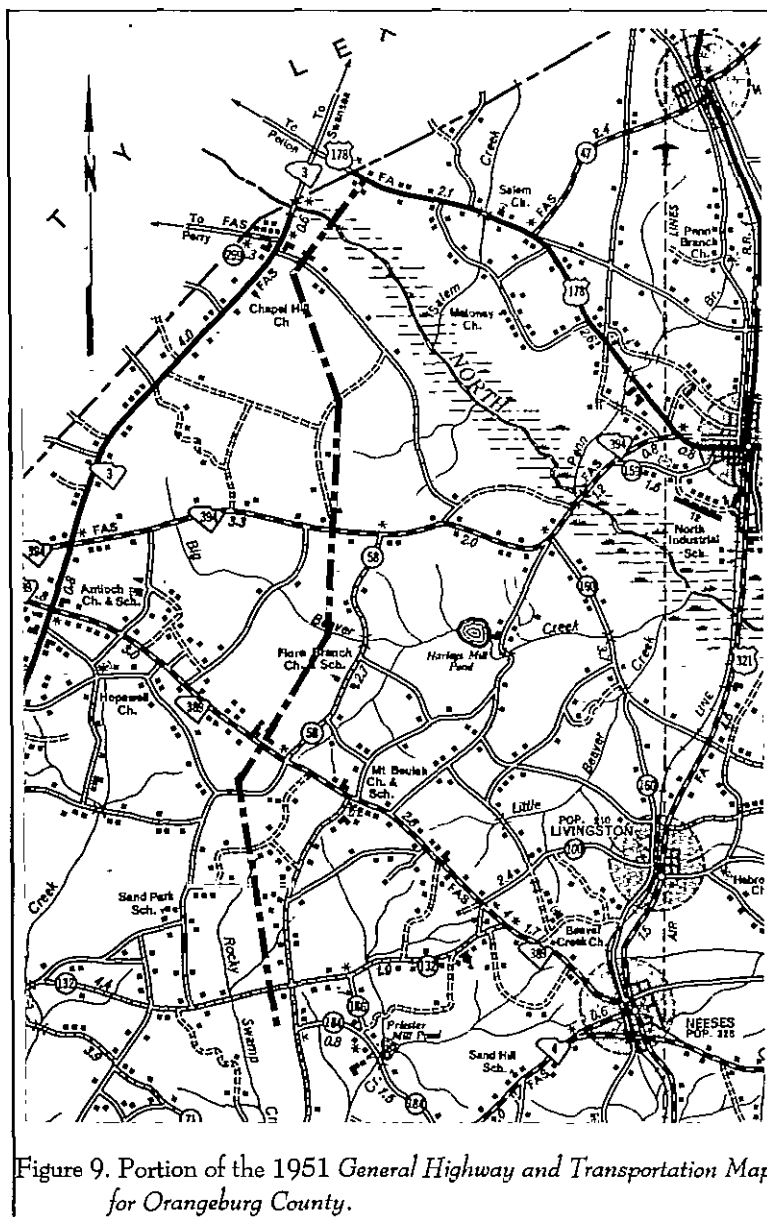


Figure 9. Portion of the 1951 *General Highway and Transportation Map for Orangeburg County.*

using water power. As a vestige of the area's rice cultivation there was also one rice mill. Cash wages, when paid, were \$4 to \$6 a month, with rations, a house, and a small garden spot. The county had 322 cotton gins, each turning out about 4 bales a day. One of the most interesting observations was that South Carolina prohibition law was not observed and not enforced — apparently liquor flowed freely in Orangeburg (Anonymous 1884).

By 1900 the population of Orangeburg County was 59,663, with African Americans still dominating the population (41,442 or nearly 70%). By this time tenancy had become firmly established — there were 8,408 farms in the county, with an average size of just under 80 acres. Nearly 55% of the farms (n=4,613) were operated by cash tenants.

Nevertheless, Orangeburg recovered with a vengeance. By 1900 the county produced 1,172,520 bushels of corn, ranking it first in corn production. Its nearest competitor was Sumter with 762,120 bushels. Orangeburg also ranked first in cotton, producing 65,433 bales or 0.55 bale per acre (again its closest competitor was Sumter County, which produced 48,485 bales or 0.52 bale per acre). While a certain amount of Orangeburg's success was related to its size, it seems clear that the farms were generally profitably operated.

Calhoun County emerged in 1908, created from parts of Orangeburg and Lexington counties. It was small however, accounting for only 377 square miles. The population in 1910 was only 16,663.

By 1920 there were 8,558 farms in Orangeburg County, most of which (n=4,037 or 47%) were between 20 and 49 acres in size. Two-thirds of those farms were operated by African Americans. Of the 8,558 farms, 5,644 (66%) were operated by tenants and 37% of these were share tenants, with an additional 25% being croppers. Orangeburg County was dominated by an agriculture focused solely on cotton and designed to maximize profits to owners while minimizing any hope for small farmers — black or white — to ever own land.

The 1920s, however, were the beginning of the end for cotton. Cotton and tobacco prices both collapsed in 1920. This was followed by both droughts and the boll weevil. Edgar observes that in 1930, "after nearly a decade of difficulties, South Carolina agriculture was about to go under. Farmland and buildings had lost more than one-half of their value. One third of the state's farms were mortgaged, and 70 percent of the state's farmers survived on borrowed money" (Edgar 1998:485).

In 1930 over 68% of all farms were operated by tenants. Only a third of these were operated by cash tenants, with the bulk operated by other forms, primarily sharecropping. The mortgage problem was worse in Orangeburg than statewide — fully two-fifths of the farms were mortgaged, with the average mortgage representing more than 40% of the farm's value.

Cotton production continued to fall, with only a brief upswing during the 1940s as a result of the war effort. While Orangeburg is still part of South Carolina's "cotton belt," production has declined by over 60% since 1949 and today less than 4% of the county's harvested land is devoted to cotton. Of far greater importance are soybeans, corn, wheat and specialty crops, such as cucumbers, watermelons, and cantaloupes (DeFrancesco 1988:2).

METHODS

Field Methods

The initially proposed field techniques involved the placement of shovel tests at 100 to 200 foot intervals. These tests would be placed along the centerline of the corridor, with all fill being screened through ¼ inch mesh. One transect, running down the centerline, was proposed since the corridor is only 75 feet wide. In areas of standing water no tests would be excavated. In areas of good surface visibility (with exposure of 75% or more of the ground surface) a pedestrian survey would be used in conjunction with shovel testing. Although some points were missing, the centerline was staked at the time of our work, and following the corridor was relatively easy.

All soil from the shovel tests 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 1.5 foot. All cultural remains would be collected, except for shell, 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 two or more artifacts from either surface survey or shovel tests within a 25 foot 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 foot 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.

We discovered that the corridor, approximately 9.8 miles in length, consisted of about 7.0 miles of wooded parcels. In these areas conventional shovel

testing was conducted, although we occasionally encountered moist or wet soils, hampering screening. This not so severe in any area that we opted to implement testing at 200 feet intervals. There were about 1.99 miles where the surface visibility was adequate to allow a pedestrian survey. In most of these areas the fields had been recently cultivated, planted, and rained on, allowing excellent (90 to 100%) surface visibility. Nevertheless, where fields were present both shovel testing and a pedestrian survey were conducted.

Approximately 0.66 mile of the corridor was classified as wet — denoting either standing water or soils so waterlogged that shovel tests filled with water as they were being excavated. In these areas no shovel testing was conducted. These wet areas were, however, walked whenever the water was less than about 0.5 foot deep. As the water got deeper, typically only in the swamp areas of the North Fork of the Edisto River, the pedestrian survey was terminated.

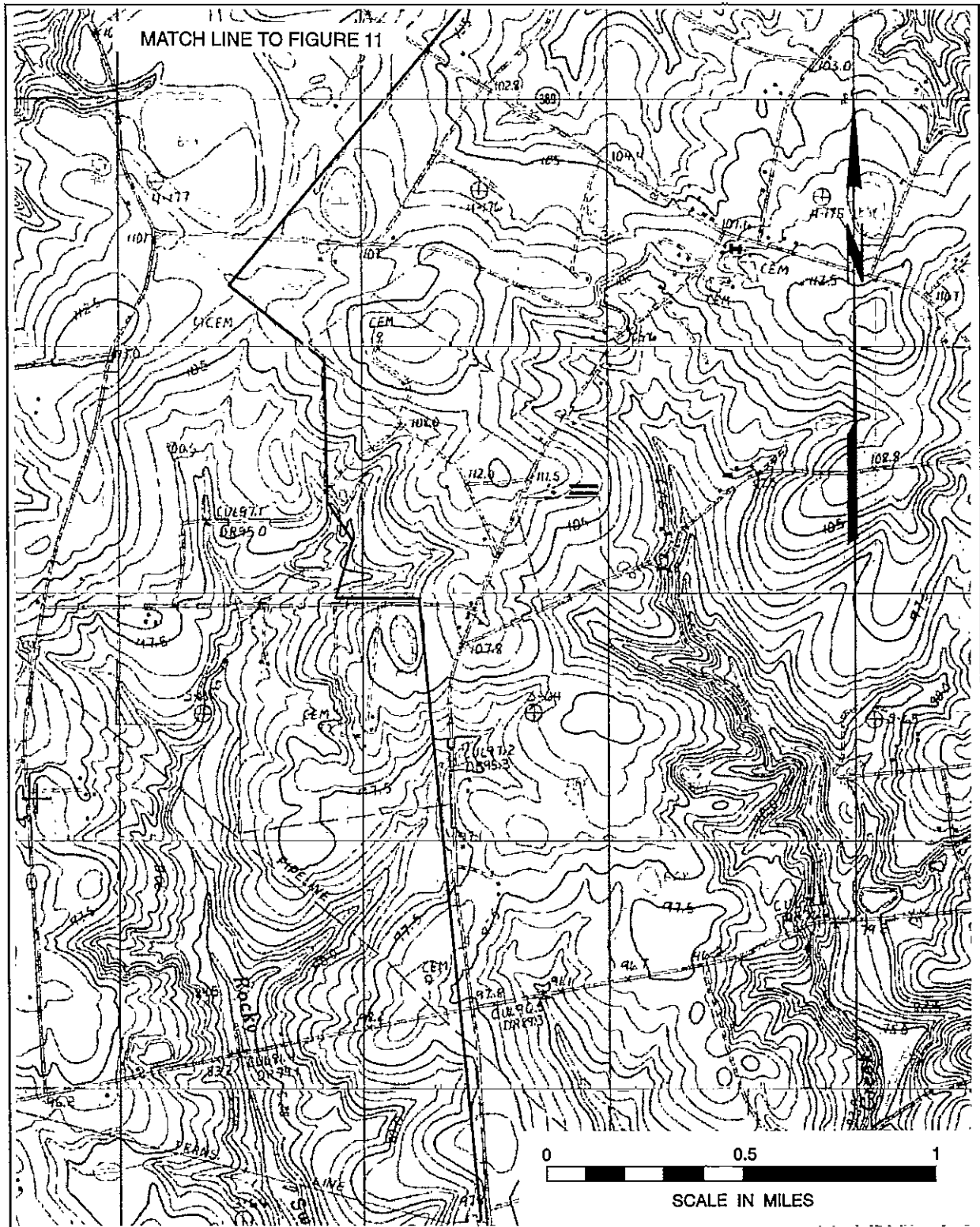
Finally, about 0.19 mile of the corridor consisted of roads. These areas were not shovel tested.

As a result of this work, a total of 475 shovel tests were excavated at 100 foot intervals. Thirty-five shovel tests were not excavated in areas of low, wet soils¹ and an additional 10 shovel tests were not excavated where they fell into roadways.

Architectural Survey

Because this project will use single poles of a very modest height, the architectural survey was limited to structures with an APE defined as being within 0.1 mile of the corridor. This essentially limited the survey

¹ The tests not excavated were between stations 240 and 264 (at a tributary to Big Beaver Creek), 259 and 265 (at Big Beaver Creek), and 475 and 498 (at the North Fork of the Edisto River).



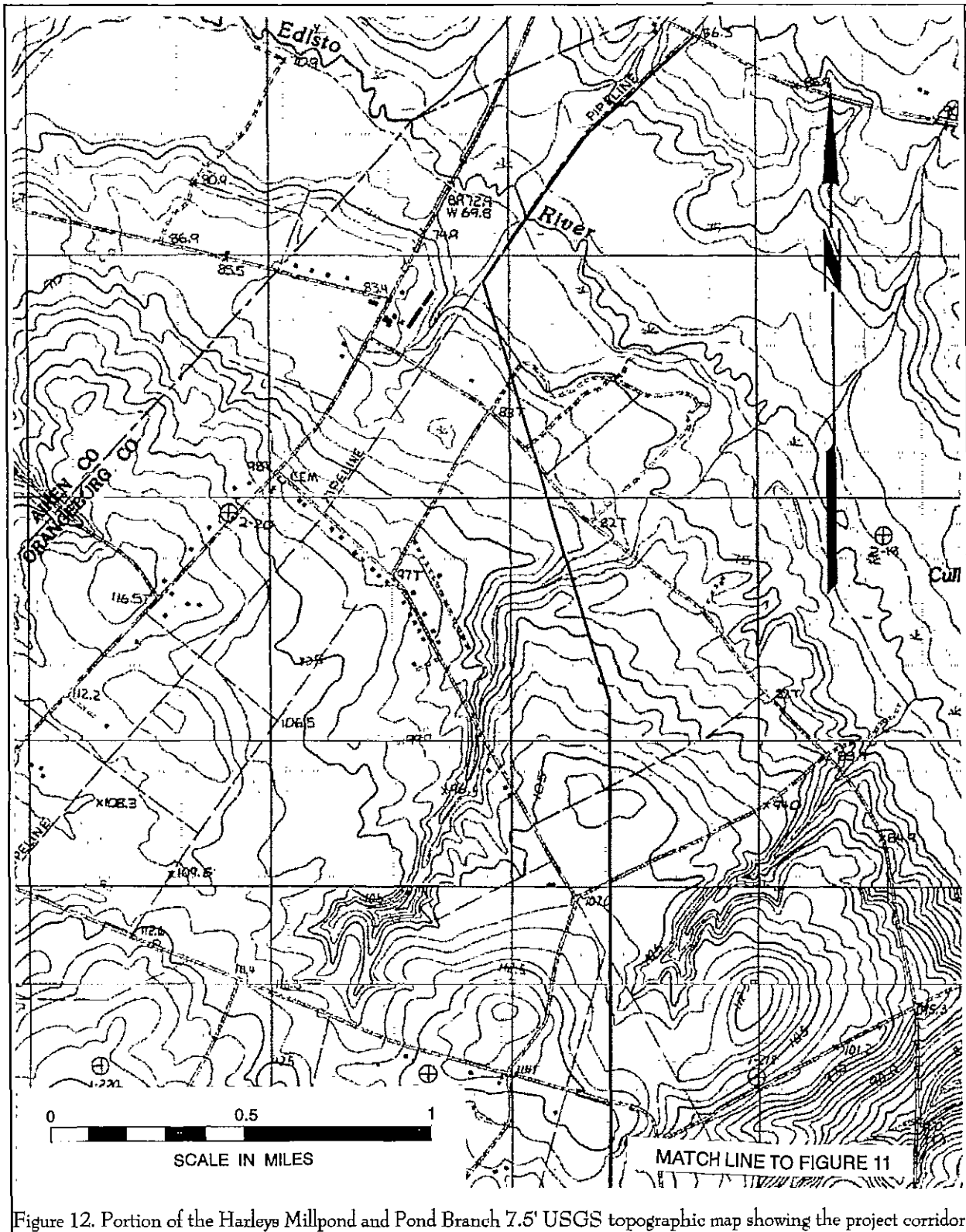


Figure 12. Portion of the Harleys Millpond and Pond Branch 7.5' USGS topographic map showing the project corridor.

METHODS

to buildings either on, or immediately adjacent to, the proposed line. This, of course, was relatively easy to determine since the corridor was staked in the field. For any structures present we anticipated completing a Statewide Survey Site Form with control numbers assigned by the S.C. Department of Archives and History.

Site Evaluation

Archaeological sites will 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 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 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 each archaeological site's ability to address significant research topics within the context of its available data sets.

For architectural sites the evaluative process was somewhat different. Given the relatively limited architectural data available for most of the properties, we have focused on evaluating these sites using National Register Criterion C, focusing on the site's "distinctive characteristics." Key to this concept is the issue of integrity. This means that the property needs to have retained, essentially intact, its physical identity from the historic period.

Particular attention would be given to the integrity of design, workmanship, and materials. Design includes the organization of space, proportion, scale, technology, ornamentation, and materials. As *National Register Bulletin 36* observes, "Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact" (Townsend et al. 1993:18). Workmanship is evidence of the artisan's labor and skill and can apply to either the entire property or to specific features of the property. Finally, materials — the physical items used on and in the property — are "of paramount importance under Criterion C" (Townsend et al. 1993:19). Integrity here is reflected by maintenance of the original material and avoidance of replacement materials.

Laboratory Analysis

The cleaning and analysis of artifacts was conducted in Columbia at the Chicora Foundation laboratories. These materials have been catalogued and accessioned for curation at the South Carolina Institute of Archaeology and Anthropology, the closest regional repository. The site forms for the identified archaeological sites have been filed with the South Carolina Institute of Archaeology and Anthropology. Field notes and photographic materials have been prepared for curation using archival standards and will be transferred to that agency as soon as the project is complete.

Analysis of the historic collections followed

professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains. In general, the temporal, cultural, and typological classifications of the historic remains follow such authors as Cushion (1976), Godden (1964, 1985), Miller (1980, 1991), Noël Hume (1978), Norman-Wilcox (1965), Peirce (1988), Price (1970), South (1977), and Walton (1976). Glass artifacts are identified using sources such as Jones (1986), Jones and Sullivan (1985), McKearin and McKearin (1972), McNally (1982), and Vose (1975). Sutton and Arkush (1996) provide an excellent overview of a broad range of other historic materials.

RESULTS

Introduction

The intensive shovel testing and pedestrian survey identified four archaeological sites, one historic cemetery, and one architectural site on or adjacent to the 9.8 mile corridor (Figures 13-15).

Three of the four archaeological sites consist of twentieth century domestic scatters, while one appears to represent a trash dump from the last half of the twentieth century. None of these sites are recommended eligible for inclusion on the National Register of Historic Places. The cemetery is outside (but close to) the proposed corridor. It is recommended potentially eligible under Criterion D, ability to contribute information. It will not, however, be affected by the proposed undertaking. Finally, one architectural site was identified, a ca. 1900 farm complex, which includes the two previously mentioned cemetery. This site is little altered and is representative of a site type which is rapidly disappearing. With additional research we believe this site is potentially eligible. It will not, however, be affected by the proposed undertaking.

Identified Archaeological Sites

38OR230

Site 38OR230 is a light surface scatter of historic artifacts centered at station 24+37 on the survey corridor (Figures 13 and 16), in a fallow agricultural field just north of a South Carolina Pipeline Company gas easement. The central UTM coordinates for the site are 482400E 3710250N. The site is situated about 450 feet south of the intersection of Shamrock Road and Firetower Road (S-132).

The site was encountered during routine shovel testing and the field's surface visibility was less than 25%, so no surface

collections were made. After the initial positive test a series of two additional shovel tests to the south were both negative, while one of three shovel tests to the west was positive and two of an additional four shovel tests to the north were positive. The location of the easement at the edge of Shamrock Road to the east allowed only one shovel test to be excavated to the east — it was positive. Based on this distribution of positive shovel tests the site is estimated to cover an area about 75 feet in diameter.

The site is situated on a ridge terrace about 2,000 feet northwest of a tributary of Bolan Mill Creek and about 3,000 feet northeast of Rocky Swamp Creek. The elevation of the site is about 320 feet AMSL. The shovel tests reveal an old A horizon to a depth of 0.9 foot consisting of a very dark gray brown (2.5YR4/2) sand overlying a light yellowing brown (10YR6/4) sand which extends to at least 1.8 feet (the maximum depth of the shovel tests at this site). All of the recovered materials came from the upper 0.7 to 0.9 foot of the tests, representing the A or possibly Ap horizon. This soil profile is consistent with that of the Fuquay Sands, on which the site is located. Topography in the area is level with virtually no slope.

Table 2.
Artifacts Recovered from Shovel Testing at 38OR230

Artifacts	N150	N150	N150	N175	N200
	E150	E175	E200	E175	E175
Whiteware, undec.	3			2	
Whiteware, decal	1				
Container glass, brn.	1	2			
Container glass, clr.		1	2	5	4
Container glass, blue				1	
Glass, melted					1
Nail, wire cut	1				
Marble, grn glass			1		
Harness hrd, brass				1	

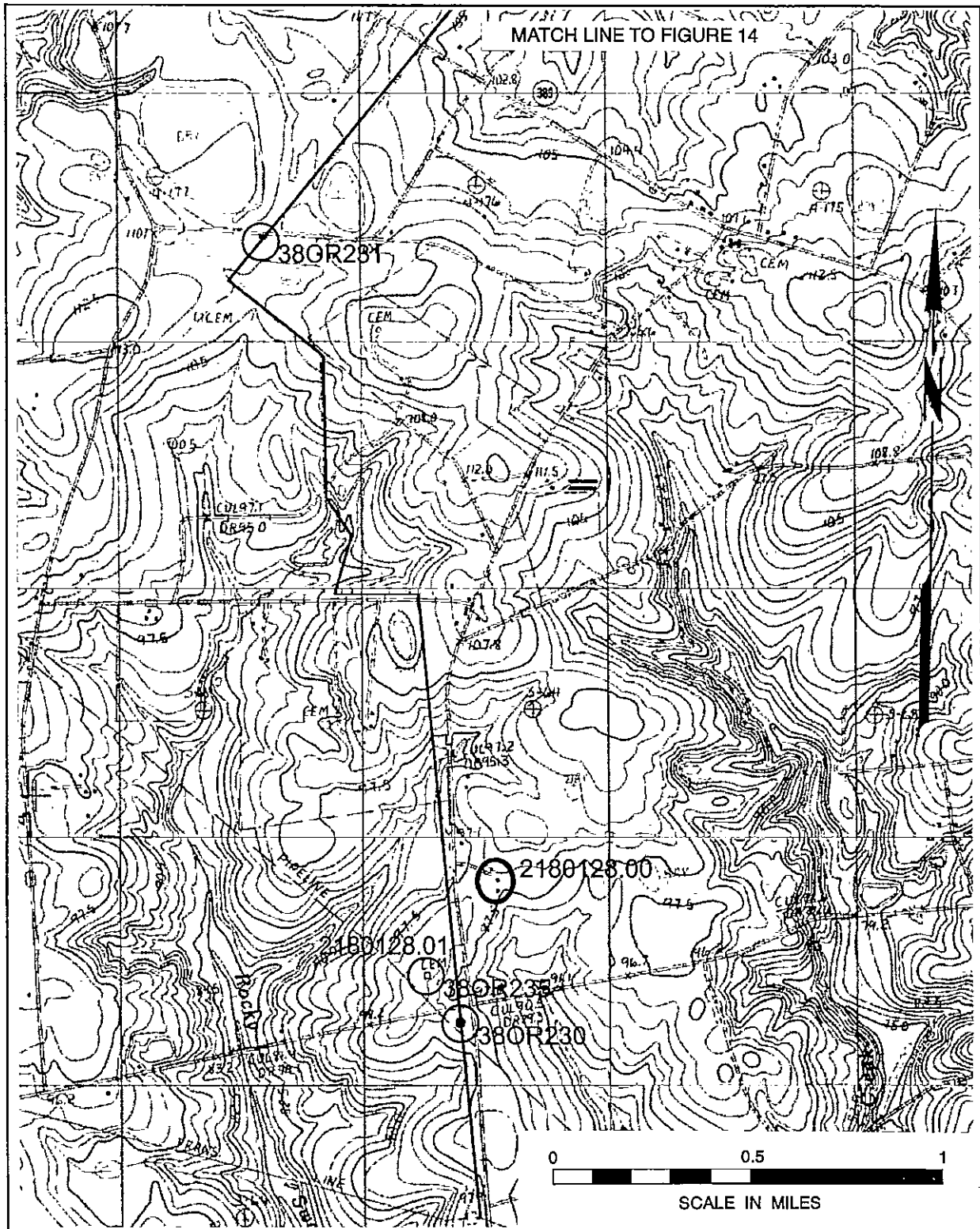


Figure 13. Portion of the Harleys Millpond 7.5' USGS topographic map showing sites identified in the corridor.

RESULTS

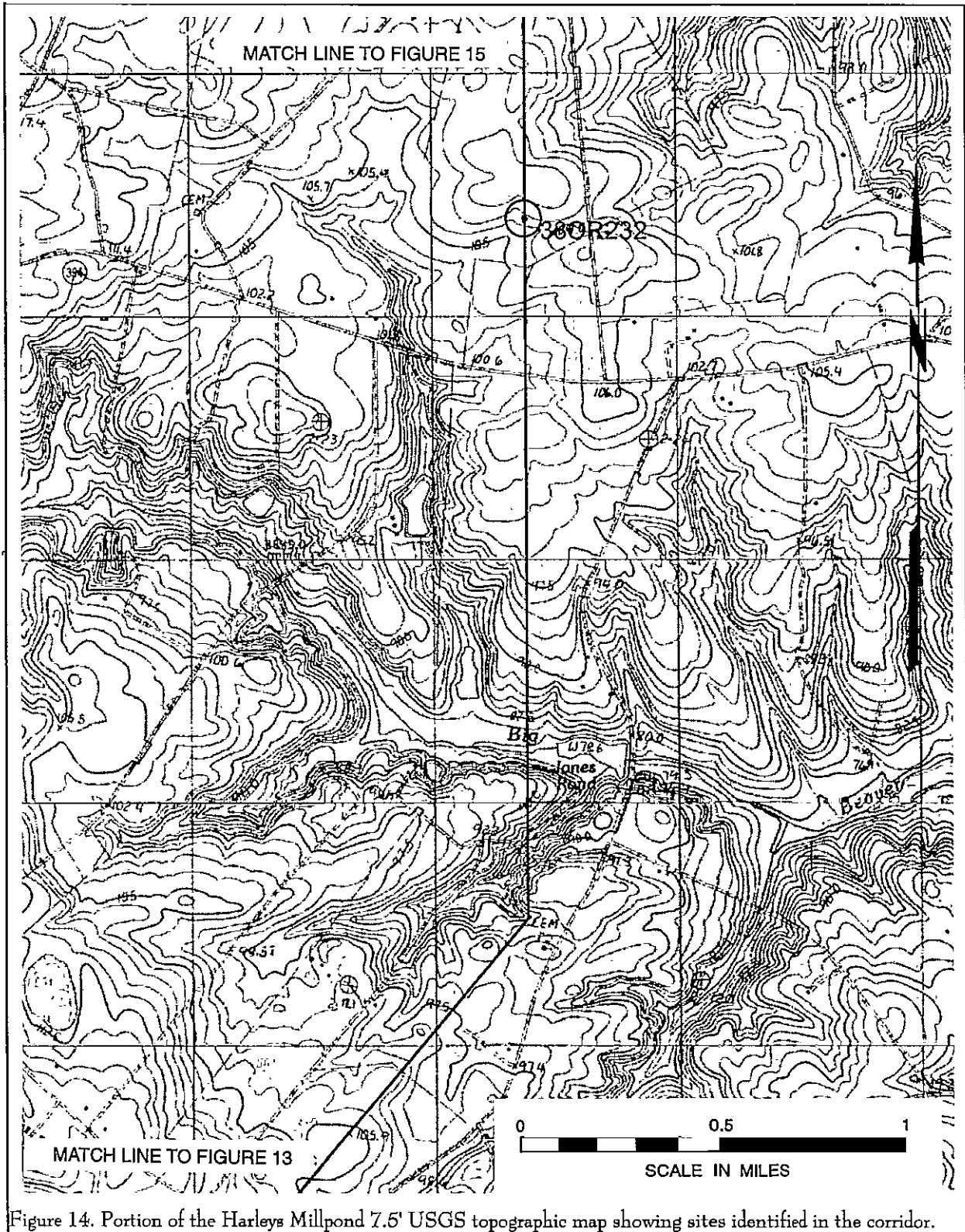
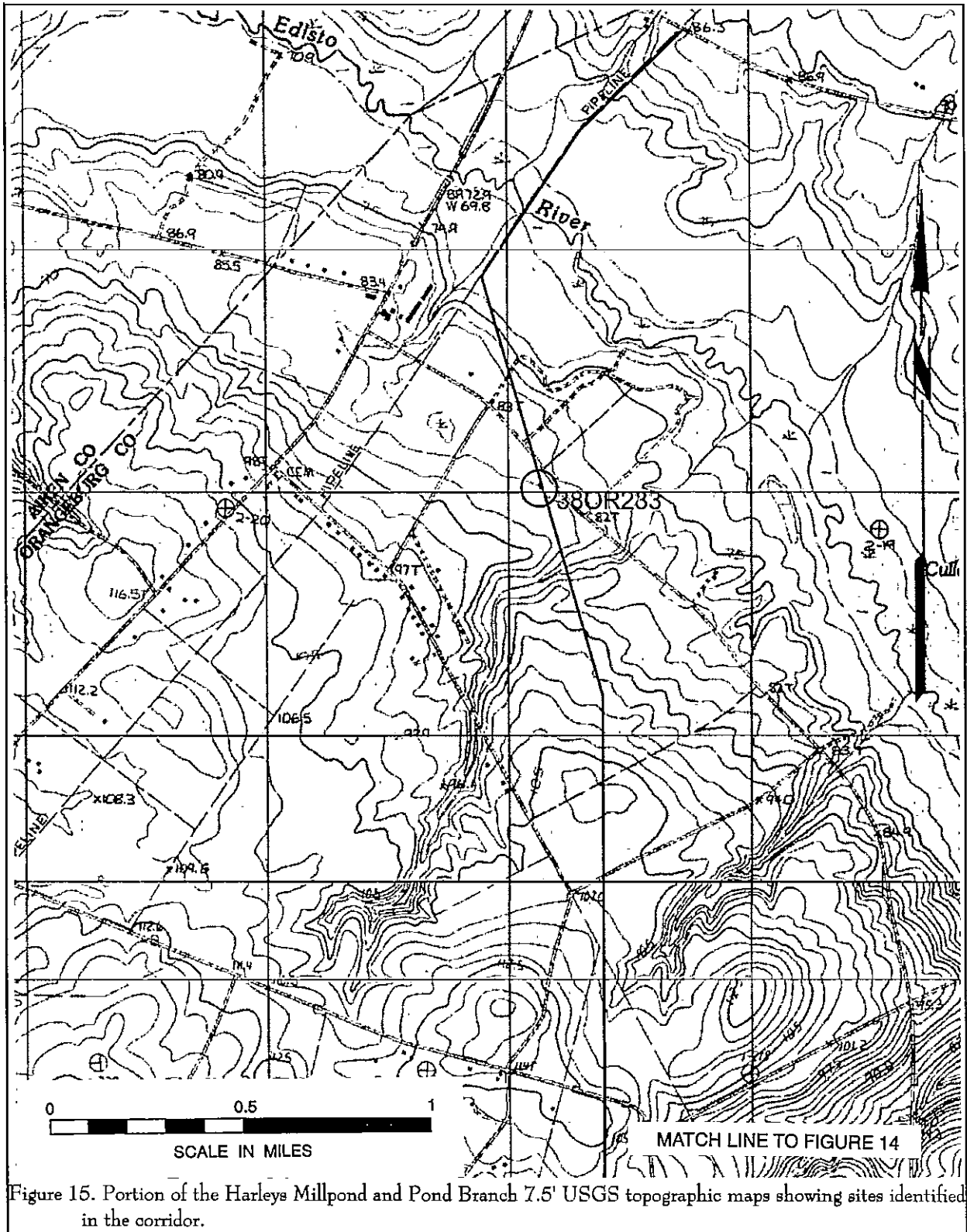


Figure 14. Portion of the Harleys Millpond 7.5' USGS topographic map showing sites identified in the corridor.

ARCHAEOLOGICAL AND ARCHITECTURAL SURVEY OF THE POOLES MILL CORRIDOR



RESULTS

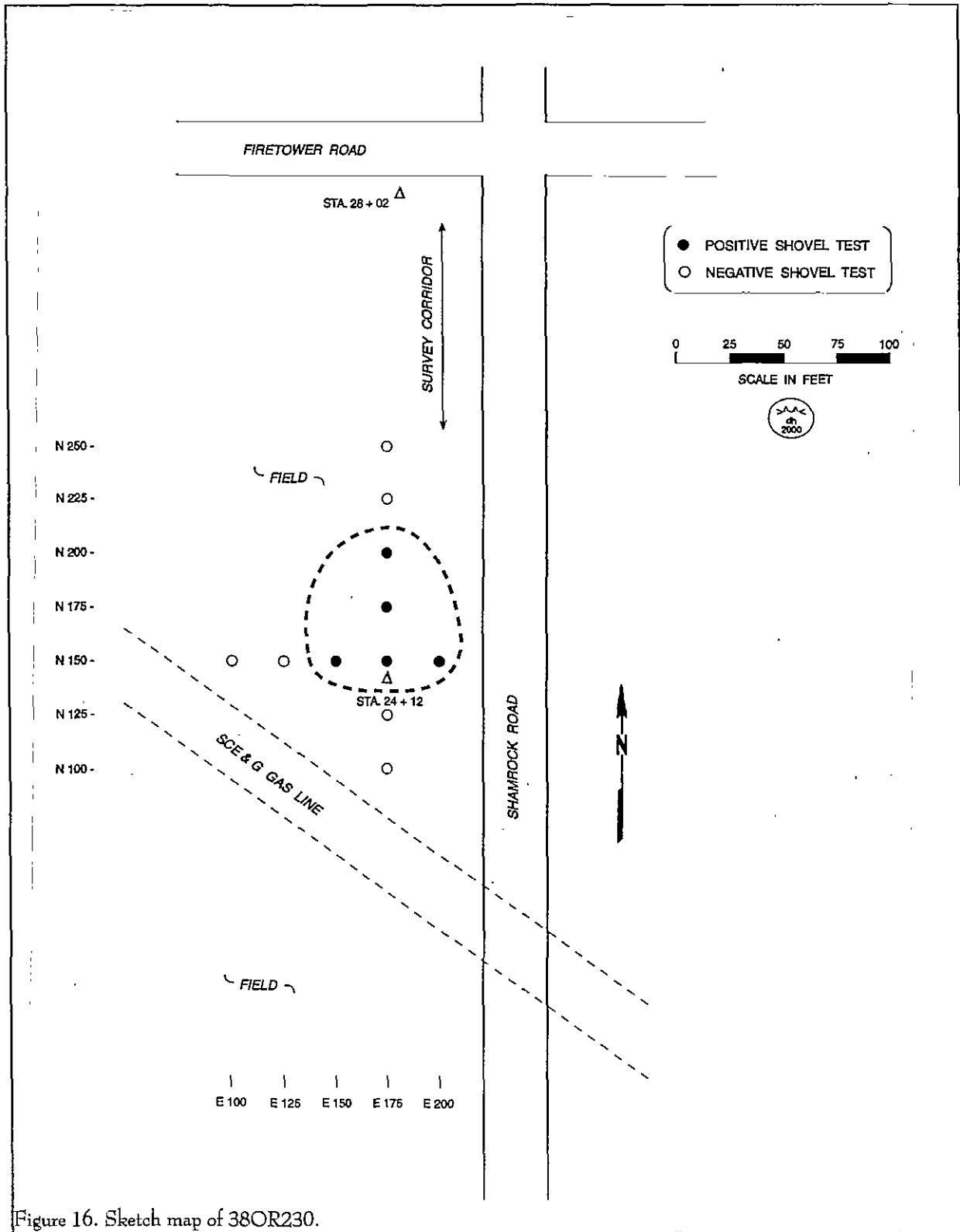


Figure 16. Sketch map of 38OR230.

The historic artifacts recovered from this site are generally late-nineteenth or early-twentieth century in date. The presence of the decalcomania whiteware, however, is indicative of a post 1901 date (Orser et al. 1982) and this type of ware is still being manufactured today (although generally a 1926 mean date is assigned).

The site was being avoided by the plow as late as 1974, when it is shown as a lightly wooded tract on aerial photographs (DeFrancesco 1988:Map 14). The structure is also shown on the 1951 highway map.

This site appears to represent a small, twentieth century farm or tenant site. It was occupied into the 1950s, was still extant (although not necessarily lived in) during the early 1970s, and had been removed from the landscape by the 1980s. In terms of age alone it is questionable if the site meets the threshold for National Register eligibility. However, even assuming that the site was initially settled in the 1920s, prior to the downswing in agricultural activities in the region, the artifact assemblage is very modest. Only 26 artifacts were recovered from the five positive shovel tests. No structural remains are present and no evidence of below-grade features were encountered. Given the nature of mechanized agriculture in the area, it is very unlikely that any shallow piers or other architectural remains are likely present. As a result, we do not believe that this site can address significant research questions appropriate for the period. We recommend the site not eligible for inclusion on the National Register and recommend no further management activities.



Figure 17. View of 38OR231 looking south from Begonia Road.

38OR231

This site was first encountered in and around Shovel Test 34 at station 149+12 on the survey centerline. The site is situated on the south side of Begonia Road about 3,400 feet southwest of its intersection with SC 389 (Ninety Six Road). The central UTM coordinates are 481590E 3713400N (Figure 13). The site consists of a dump area of primarily bottles and cans in close proximity to the road.

The topography in the site area is very level and the elevation is about 560 feet AMSL. The site area is situated on a terrace between Carolina bays to the northwest and southeast, and a tributary of Rocky Swamp Creek about 3,000 feet to the south.

The site area is wooded, with the vicinity of the site primarily in more xeric hardwoods and a few pines. The surface visibility was about 25%, although many bottles and cans were visible above the soil and leaf litter (Figure 17).

A series of three additional shovel tests were excavated to the south, only one of which produced

RESULTS

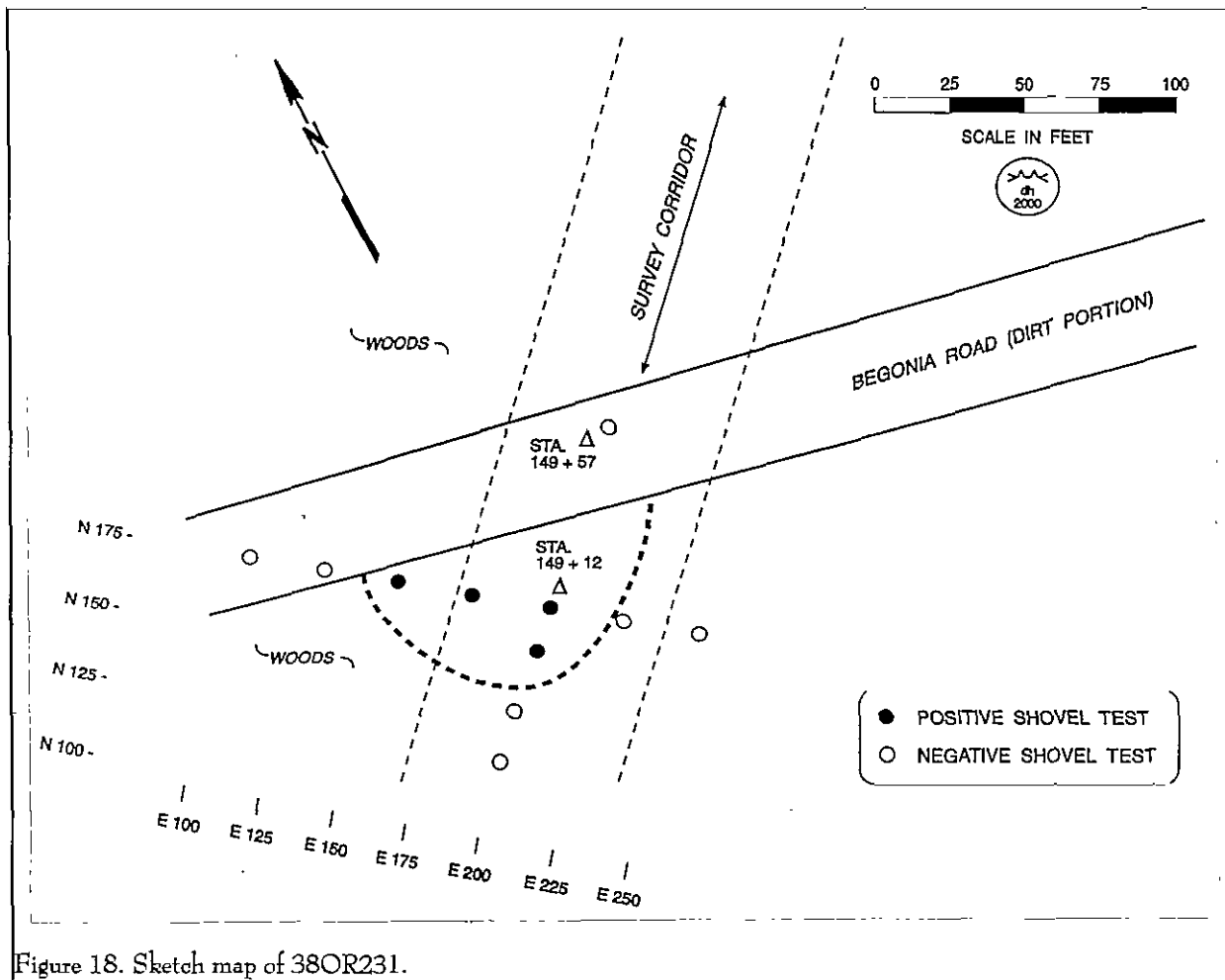


Figure 18. Sketch map of 38OR231.

materials. This was consistent with the surface scatter which extended in from the road about 40 feet. Two tests were excavated to the east — both were negative, again corresponding to the surface scatter, which appeared to extend only 10 or so feet east of Shovel Test 34. An additional four shovel tests were excavated to the west, with the first two positive. This extended the site about 60 feet to the west, off the survey corridor. Using the combined shovel tests and surface scatter the site measures about 40 feet north-south by about 70 feet east-west (Figure 18).

The shovel tests in this area reveal an A horizon of dark gray (10YR4/1) sand about 0.6 foot in depth overlying a very pale brown (10YR7/4) sand to about 0.9 foot. Below this, to the maximum depth of the shovel tests, about 1.8 feet, was a yellow (10YR7/6)

sand. The soil profiles are consistent with Alpin Sands. All of the artifacts were recovered from the upper 0.4 foot of soil.

The shovel test at N150R200 produced 11 fragments of clear glass. The test at N175R150 produced eight fragments of an unidentifiable ceramic with a gray body and a white glaze or slip, one Bayer Aspirin clear glass bottle, and 17 fragments of clear glass. The shovel test at N175R175 produced 13 fragments of brown glass, seven fragments of green container glass, and two fragments of wire. At N175E200 we recovered one clear glass bottle, and four can fragments. All of these materials are mid to late twentieth century.

No structures are shown at this location on the

1951 highway map and we found no evidence in the shovel tests that these remains include any structural debris. The site appears to represent a refuse deposit or dump area in a wooded area on the side of an infrequently traveled county road. The recovered materials (and those not collected) suggest that the site was used from perhaps the late 1950s through the early 1970s (there are no new cans or plastic items among the debris, suggesting that dumping activity stopped around the early 1970s).

While this site might conceivably contain the data sets suitable to address mercantile patterns or consumer choice issues, the quality of the data is uncertain. Being unable to determine whether these remains reflect multiple households, one household, or perhaps even the remains of an extended family, make the research problematic. As a result, we recommend the site not eligible for inclusion on the National Register and recommend no additional management activities.

38OR232

This site was first encountered in Shovel Tests 222 and 223 during the corridor survey. Based on these two positive tests an additional 19 shovel tests were excavated at the site, with five (plus the original two tests) being positive. A small surface collection was also made during the study. The site is centered at

Station 359+87 and the central UTM coordinates are 483390E 3718410N. The site is about 2,400 feet northwest of the intersection of SC 394 and Delray Drive (a county road) (Figure 14).

The site is situated in planted pines on a south facing ridge slope. The topography slopes up to the north and there is a moderate amount of groundcover, with about 25% surface visibility. The nearest water source is a tributary of Big Beaver Creek, about 2,000 feet to the southwest.

With the identification of materials in the initial two shovel tests spaced 100 feet part, additional tests at 25-foot intervals were excavated in order to determine the site boundaries (Figure 19). In all, 21 shovel tests were excavated at this site, with seven being positive. Based on the limits of subsurface materials the site is estimated to measure about 160 feet north-south

Table 3.
Artifacts Recovered from 38OR232

Artifacts	N150	N175	N175	N250	N275	N275	N300	Surface
	E175	E150	E175	E175	E150	E175	E175	
Whiteware, undec	1				1			4
Whiteware, grn tp								1
Yellowware, annular								1
Porcelain, white, undec						1		
Porcelain, white, decal								1
Stoneware, brn sg								1
Stoneware, gray sg								5
Stoneware, Bristol ext								1
Ceramics, burnt								4
Container glass, clr.	1							5
Container glass, aqua								3
Container glass, lt. grn.								1
Container glass, blue			1		1			
Glass, melted				1		4	2	17
Key fragment				1				
Window glass							2	2
Nail, machine cut								1
Hardware, nut/bolt		1						
UID iron fragments					3			
	3							

tp = transfer printed; sg = salt-glazed

RESULTS

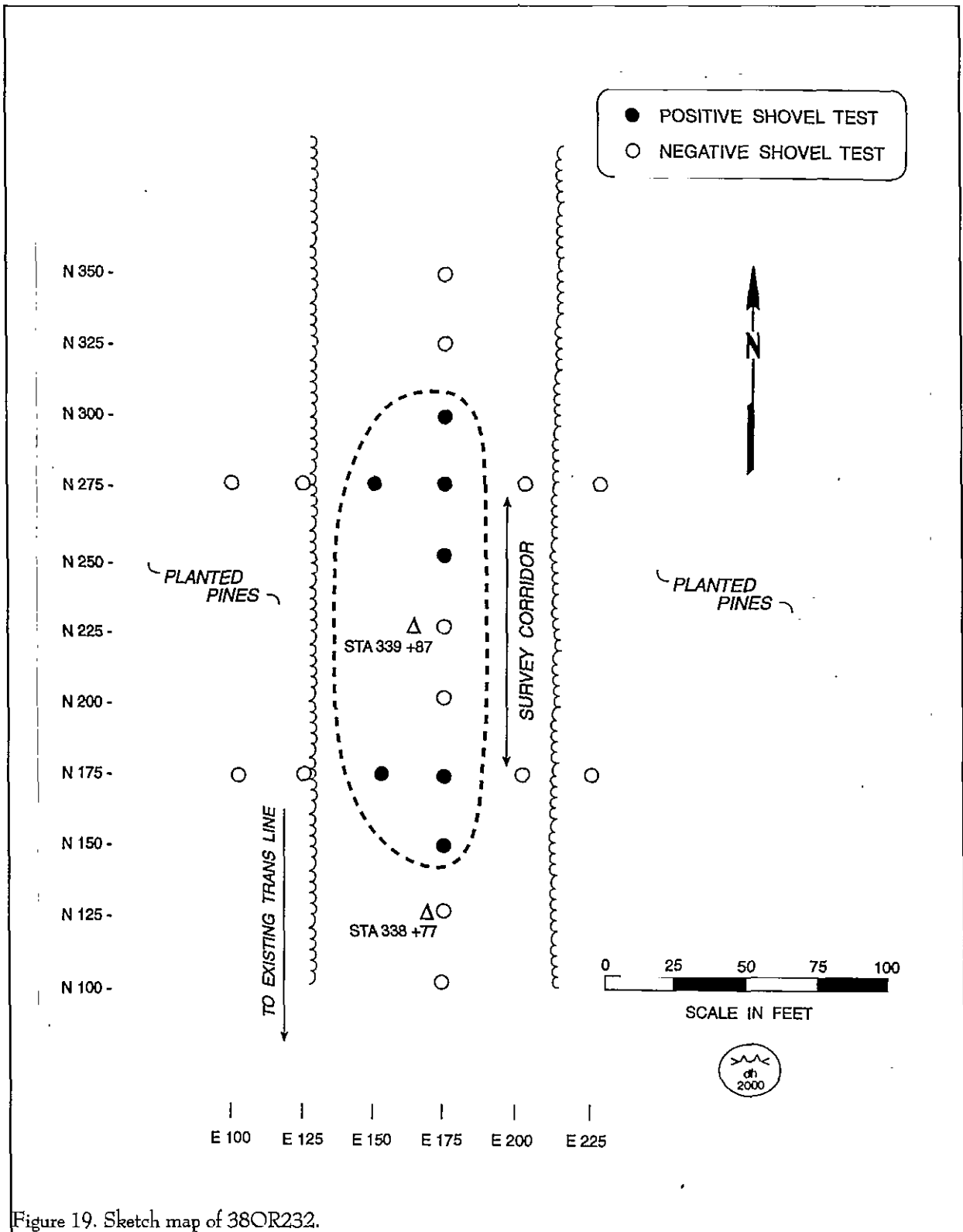


Figure 19. Sketch map of 38OR232.

by 50 feet east-west and to be confined to the survey corridor.

The shovel tests revealed an Ap horizon to a depth of 1.0 foot consisting of a very dark gray brown (2.5YR4/2) sand often mixed with yellow sand and wood debris. This was found overlying a light yellowish brown (10YR6/4) sand which extends to at least 1.8 feet (the maximum depth of the shovel tests at this site). All of the recovered materials came from the upper 0.7 to 0.9 foot of the tests, representing the Ap horizon. This soil profile is consistent with that of the Fuquay Sands, on which the site is located. The shovel tests also contained abundant charcoal and ash in this upper Ap horizon. While this may represent burning to remove a structure prior to planting pines, few of the recovered artifacts were burned. It is more likely that this represents burning of bulldozed trash piles from previous logging. This would also account for the very disturbed soils encountered in the shovel testing.

The artifacts recovered from the site are itemized in Table 3. All of the materials appear consistent with a mid-twentieth century site. There are, of course, some items that are often assigned earlier dates. For example, green transfer printed whiteware is typically given a date range of 1826-1875, and yellowware is often given a range of 1826-1880. Yet for both we know that modern equivalents are still being produced. Orser and his colleagues, given the nature of the site they were working with, expanded the date range of yellowware to 1900 and transfer printed whitewares to 1925 (Orser et al. 1982:642). Even machine cut nails are still being produced and can be readily acquired at any hardware store.

This site is shown on the 1951 highway map, but the area had been planted in timber by 1974, suggesting that the site was abandoned probably by about 1960. There are a number of artifacts present at the site, but they represent a fairly limited range, with only kitchen and architectural remains (as well as the one hardware item) being present. The variety of the data sets, therefore, is not great. Nor did the shovel tests reveal any evidence of features. In fact, it appears that whatever might have been here has been thoroughly disturbed by silvaculture.

It seems unlikely that the remains are capable of addressing significant research questions. Consequently, the site is recommended not eligible for inclusion on the National Register of Historic Places and no additional management activities are recommended.

38OR233

Site 38OR233 is situated about 200 feet south of Saddlecreek Lane and the site's central UTM coordinates are 483150E 3722230N. The site was first encountered in Shovel Test 316 at Station 457+20. The site is situated on a relatively broad northeast facing terrace about 2,200 feet southwest of the Edisto River. There are several tributaries of the Edisto which run as close as about 2,000 feet to the site.

The site is in an area of mixed pine and hardwood. Surface visibility is limited to about 10% and the groundcover is moderate to dense in some areas. To the west of the corridor is an area of plum trees, probably representing an old orchard associated with the site. To the northwest, and off the survey corridor, are the burned remains of a structure which is likely associated with the materials recovered. At the north end of the site there is a single brick pier which appears to be in situ, although no other above grade remains were identified in the immediate area.

A series of 14 shovel tests were excavated to further examine the site. Three were placed to the east, three were placed to the south, three to the north, and five were excavated to the west (taking the boundaries outside the corridor). Of the 17 tests excavated in the site area, 10 were positive. Based on these shovel tests, the site is estimated to measure about 150 feet north-south by at least 150 east-west. The site extends outside the corridor to the west, and possibly to the northwest, so the total extent of the site is unknown.

The shovel tests at this site exhibit an A horizon of dark gray (10YR4/1) sand about 0.5 foot in depth overlying a very pale brown (10YR7/4) sand to about 0.9 foot. Below this, to the maximum depth of the shovel tests, about 1.8 feet, was a yellow (10YR7/6) sand. The soil profiles are consistent with Alpin Sands.

RESULTS

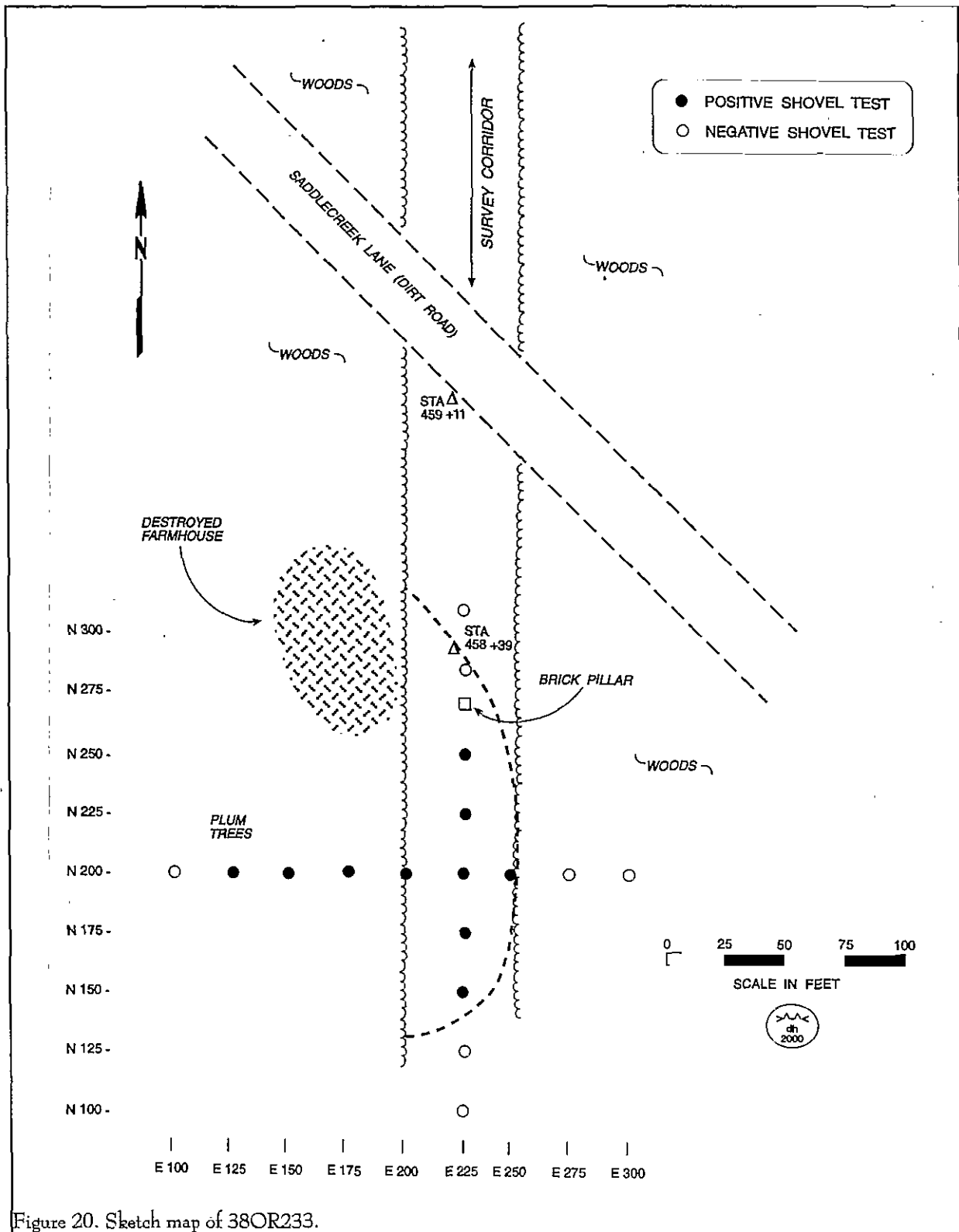


Figure 20. Sketch map of 38OR233.

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Table 4.
Artifacts Recovered from 38OR233

Artifacts	N150 E225	N175 E225	N200 E125	N200 E150	N200 E175	N200 E200	N200 E225	N200 E250	N225 E225	N250 E225
Whiteware, undec.		4		3			1	2	1	
Whiteware, gilt			1							
Container glass, clr.	2	14	14	4	11	32	6	4	8	
Container glass, brn.		2	1		2	5	1		2	
Container glass, grn.			1		1	1			1	
Container glass, lt. grn.						2	1			
Container glass, milk glass						1				1
Window glass	2	2	2	1	1	4	3			3
Nail, roofing				1		1				
Nail, wire								2		
Bolt fragment		1								
Slate fragment					1					
Mortar fragments										3

Table 4 reveals the range of materials collected from this site. The collection is dominated by glass, suggesting a fairly late date for the assemblage or at least that the site had a long occupation span. The whiteware is not particularly helpful for dating, but the one gilt specimen is suggestive of a post-1900 date (Orser et al. 1982:642). The other remains, while not offering a specific date, are most similar to assemblages post-dating about 1940. The 1951 highway map fails to show this site, suggesting that it may post-date even this.

This site does possess a range of data sets. The artifacts, like many late historic assemblages, include only kitchen and architecture remains. The site, however, does possess at least the one pier feature. Nevertheless, given the late date, we are doubtful that this site has the ability to address significant research questions. By the 1950s agricultural tenancy had been greatly reduced in the project area, while there was an upswing in cash or day labor. There are a variety of tools for examining this, most notably the census records. We do not believe that archaeological studies are particularly appropriate. As a result, we recommend this site as not eligible for inclusion on the National Register of Historic Places. No additional management activities are recommended.

38OR235 — Gleaton Family Cemetery

This site is situated about 600 feet northwest

of the intersection of Shamrock (S-279) and Firetower roads in the middle of a cultivated field, with a grassed two-rut road leading to it from Shamrock Road. The central UTM's are 482250E 3170450N and the cemetery is situated about 400 feet west of the survey corridor.

This is a family graveyard in use from the mid-nineteenth century through the mid-twentieth century and it includes approximately 30 burials with markers, most being "Gleatons." The newer monuments are dominated by granite, typically dies on bases. The older markers include a variety of different forms, including several pedestal tombs (a type of obelisk), typically in marble.

The cemetery is situated on the northeast edge of the ridge and was likely placed here not only for its elevation, but also so that it would be visible from the Gleaton farmstead to the northeast of the cemetery (discussed below as architectural site 2180128). The site is on Dothan soils, although no shovel tests were conducted in the cemetery.

This site is recommended potentially eligible for inclusion on the National Register based on its ability to contribute to bioanthropological data concerning relatively small Upper Coastal Plain family populations. The cemetery exhibits considerable time depth, allowing for diachronic studies of the population. There are a number of examples of this type of

investigation, most notably Scurry and Rathbun's (1991) work with a colonial population in the South Carolina low country, as well as the extensive bioanthropological work represented by such studies as Rose's (1985) investigation of an African American cemetery in Arkansas or the work by the Southeast Archaeological Center at a small family cemetery on the Natchez Trace (Atkinson and Turner 1987).

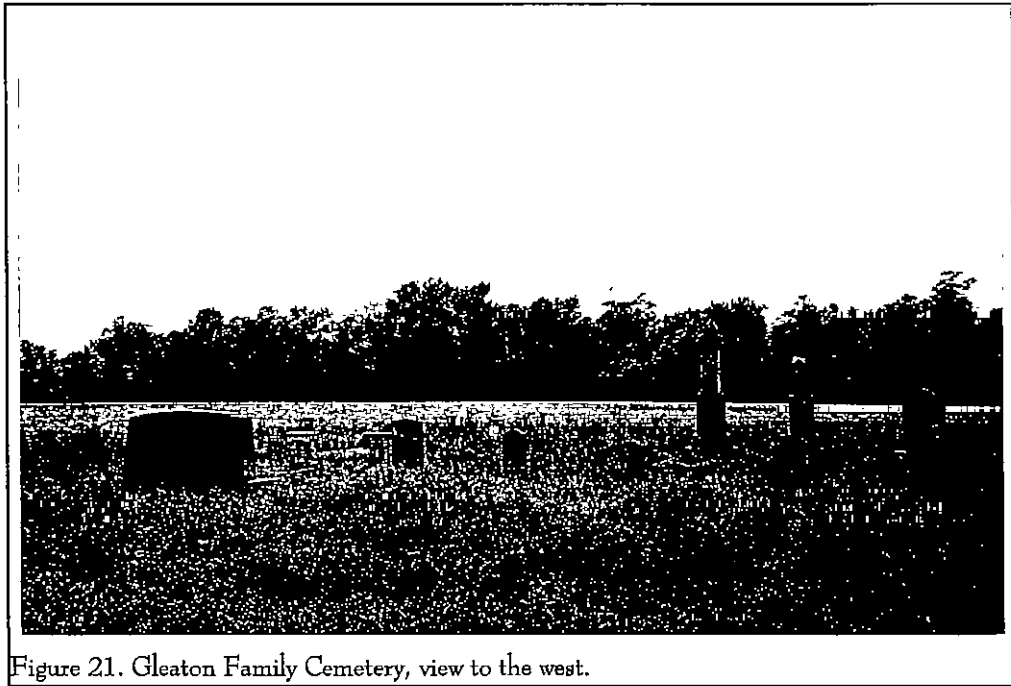


Figure 21. Gleaton Family Cemetery, view to the west.

The cemetery, through both coffin hardware and markers, is likely able to address significant research in status and ethnicity. One interesting example of such work includes the research by Goodwin (1981) at Lancaster County, Virginia cemeteries. Others are presented by Meyer's (1989) edited work *Cemeteries and Gravemarkers: Voices of American Culture*.

Unlike cemeteries eligible under Criteria A, B, or C, those evaluate under Criterion D do not need to meet the special requirements of the Criteria Considerations. The primary issues under Criterion D are integrity of location, design, materials, and association, with integrity of setting often assisting in the evaluative process.

Location refers to the actual physical place. This cemetery exhibits integrity of location. It has not been moved and the location is the same as when it was first begun — an agricultural field in close proximity to the family farmstead. Design, in reference to archaeological sites, means the patterning of features and areas. This cemetery exhibits very high integrity of design. Monuments clearly mark graves, indicated by

sunken areas. There has been no bulldozing or other disturbance of the cemetery. Integrity of materials generally refers to the completeness and preservation of the assemblage. There is no evidence of disturbance or damage to the cemetery. The stones are in good condition and clearly associated with individual graves. There is no special concern regarding the soils — graves have been found capable of providing both metric and non-metric data in similar soils. Coffin hardware is also likely preserved by the sandy soils. Integrity of association, under Criterion D, means only that there is a clear connection between the research questions and the data sets. There are a variety of research questions which this cemetery may address, so we believe that this association is well established. Finally, integrity of setting includes the total landscape, including both natural and man-made features. Clearly there has been little alteration of the landscape. Much of this area still retains a rural agricultural landscape.

Moreover, the family is still tied to the land, so it would be very easy to obtain first-hand demographic data concerning the health and other attributes of the individuals in the cemetery. This close connection between archaeological resource and modern population is not always present. In cemetery research it must be

considered an especially important bonus.

While the site is recommended eligible, it will not be affected by the proposed undertaking and no additional management activities are recommended.

Identified Historic Resources

No historic resources were identified within the proposed corridor. As a result, this proposed undertaking will not have any direct affect on any historic structures, sites, or objects in the project area. The study did, however, identify one historic resource within the 0.1 mile APE. This farm complex is briefly discussed below.

U/75/0000/2180128

This farm complex, known as the Gleaton farm or the Ralph Gleaton House, is situated on Shamrock Road (S-279), 1.8 miles south-southwest of its junction with SC 389. The postal route address is 675 Shamrock Road. The complex is situated back about 500 feet from the road, just within the examined 0.1 mile APE.

The site consists of a 1½ story weather-boarded farmhouse with a cross gable roof, built about 1900. It exhibits a centered front gable with textured shingles and the 6/6 window in the front gable has sidelights. The front door also exhibits sidelights and the porch, found on the front facade and right elevation, exhibits chamfered posts.

Alterations to the structure include concrete block infill around the original brick foundation piers, a one-room rear addition, decorative shutters added to the front facade, and screening on the rear porch.

Associated with the farmhouse is a two-story wood frame barn with a end-to-front gable metal roof which is today in dilapidated condition. Also present is a wood shed with an end-to-front metal gable roof, with shed extensions on the right and left sides. A wood frame garage sits behind the house. Several other farm buildings are in the same complex (Figure 22). To the southwest of the farm complex, and assigned number 2180128.01, is the Gleaton Family Cemetery, previously discussed as 38OR235.

This site has received only minor alterations and exhibits considerable integrity of location, as is illustrated by Figure 22. With additional historical research and documentation it is likely that the site has

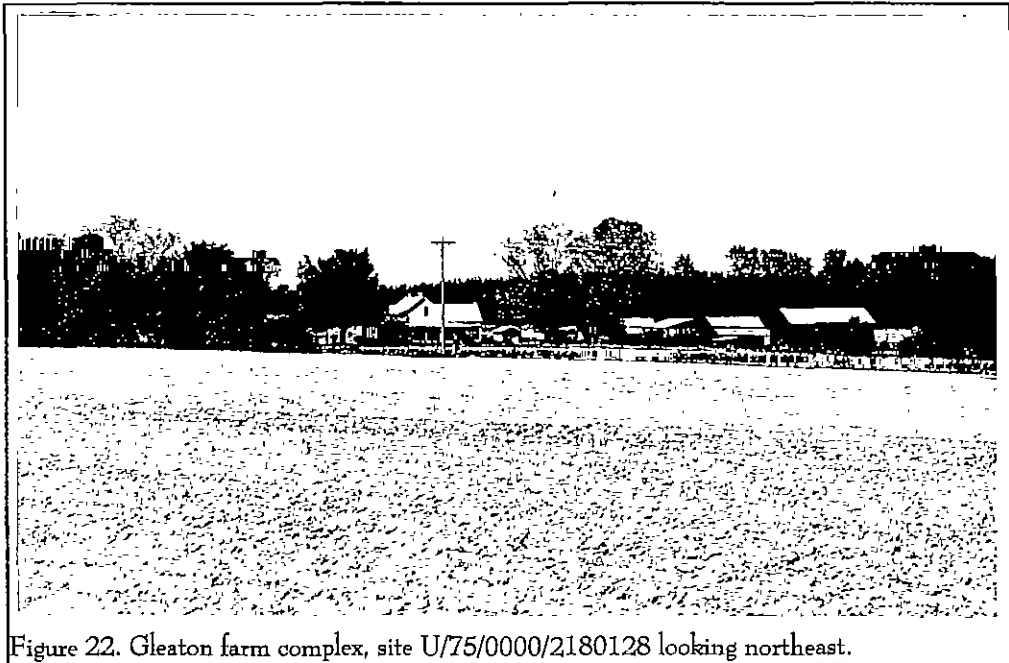


Figure 22. Gleaton farm complex, site U/75/0000/2180128 looking northeast.

the potential to be eligible for inclusion on the National Register of Historic Places.

The proposed undertaking, however, will be situated on the opposite side of the road as the farm

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complex. Moreover, there is already a powerline easement in this area, as shown by Figure 22, with a pole in the viewshed of the complex.

The proposed Pooles Mill line will be no more intrusive than what is already present. Hence, we do not believe there will be an impact. However, if possible, we recommend that the line be designed to maximize the distance of the poles from the house to further assist in buffering the viewshed.

SUMMARY AND RECOMMENDATIONS

This study involved the examination of a 9.8 mile corridor for Central Electric Power Cooperative running from an existing Aiken Electric Power Cooperative substation at the intersection of Juniper Street (S-184) and Shamrock Road in western Orangeburg County northward across Big Beaver Creek and the North Fork of the Edisto River, terminating at a new Aiken Electric Power Cooperative substation on US 178, just within Orangeburg County. The proposed corridor, 75 feet in width, is intended for the placement of single poles, typically about 50 feet in height. As a result, the proposed undertaking is anticipated to have little visual intrusion. An area of potential effect (APE) about 0.1 mile on either side of the corridor has been examined.

We determined that there were no previous archaeological sites identified in the study area and that there had been no previous architectural surveys in the vicinity. Nor were there any National Register listed sites in or adjacent to our study corridor.

Much of the corridor consists of wooded parcels and, in fact, only approximately 1.99 miles were sufficiently open and had sufficient surface visibility to allow a pedestrian survey (conducted in conjunction with the shovel test investigation). Only about 0.66 mile of the corridor consists of poorly drained soils or areas with standing water, water logged soils, or swamp. The shovel testing was conducted at 100 foot intervals with pedestrian survey also undertaken in those areas with good surface visibility.

Of the four recovered occurrences of cultural remains found in the corridor (38OR230-233), three represent twentieth century domestic sites and one represents a twentieth century road-side trash deposit. These sites were evaluated for their potential to address significant research questions. All were found to consist of small data sets and in several cases to have suffered extensive damage from silvaculture or other activities. As a result, we have recommended none of the sites as

eligible for inclusion on the National Register of Historic Places. As such, no additional management activities are recommended at these sites, pending the review and concurrence by the lead federal agency and the South Carolina State Historic Preservation Office.

Also identified was the Gleaton Family Cemetery (38OR235). This site is recommended potentially eligible for inclusion on the National Register because of its potential to contribute significant bioanthropological data on a small Upper Coastal population, as well as to provide research into status and ethnicity. This cemetery, however, is situated outside the proposed corridor and will not be affected by the undertaking.

An examination of the corridor and areas immediately adjacent to it identified on architectural site, the Gleaton farm complex (U/75/0000/2180128). This complex, including the Gleaton Family Cemetery, is recommended potentially eligible for inclusion on the National Register with additional historical research. We do not believe, however, that the undertaking will affect this farm complex. There is currently a utility corridor in the viewshed and the proposed Pooles Mill line will not further affect the site.

It is possible that archaeological remains may be encountered in the corridor during construction activities. As always, the utility's 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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