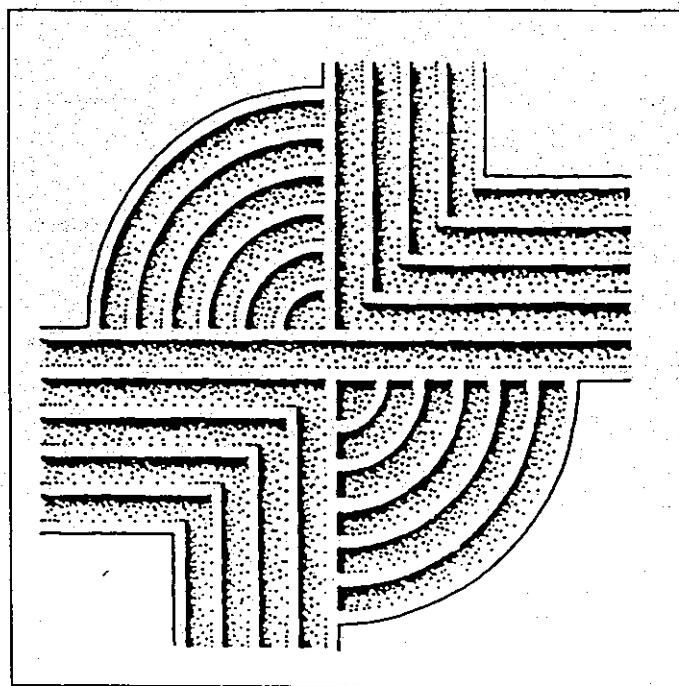


ARCHAEOLOGICAL SURVEY
OF THE WELLMAN BLUFF TRACT,
FLORENCE COUNTY, SOUTH CAROLINA



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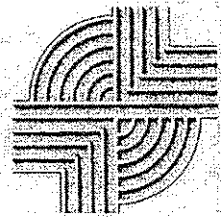
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ARCHAEOLOGICAL SURVEY OF THE
WELLMAN BLUFF TRACT,
FLORENCE COUNTY, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive archaeological survey of a 1 acre tract in the southeast corner of portion of Florence County, South Carolina. The tract, measuring about 300 feet by 150 feet, is to be deeded to the Town of Johnsonville to be used for an expansion of the municipal sewage treatment facilities. This work will require that the tract, currently situated on a bluff overlooking Lynches River to the north, be cleared, grubbed, and the earth excavated down at least 20 feet. In addition, there is the potential for increased siltation, increased construction-related noise, increased particulates from short-term construction activity, and increased traffic in and around the construction site. All of these construction related 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 area.

The tract consists of a narrow ridge parallel to Lynches Creek, with a steep slope to the river on the north and topography which suggests previous ground modifications to the south. To the east is the existing sewage treatment facility, while to the west is a swamp slough and both railroad and highway corridors. Vegetation in the western half of the survey area consists of mixed woods and grassed areas. The eastern half was previously the location of a house which has recently been moved.

Consultation with the S.C. Department of Archives and History revealed no National Register properties in the immediate area. Nor were there any previous architectural surveys in the study area. Likewise, an investigation of the site files at the S.C. Institute of Archaeology and Anthropology revealed no archaeological sites within a half mile from the project.

The archaeological survey of the tract incorporated shovel testing at 50-foot intervals throughout the survey tract. Of the 20 shovel tests

excavated, only one was positive, yielding two artifacts — a clay tobacco pipe stem fragment and a small prehistoric sherd. Additional shovel tests, excavated at 25-foot intervals, revealed no additional materials and this is classified as an isolated find. At the eastern end of the project tract, however, a surface survey identified a sparse scatter of eighteenth century historic remains, designated 38FL380. This site, found entirely on the surface, was exposed by the removal of the house located on the tract.

This site has been extensively damaged by both the original construction and subsequently removal of the structure. In addition, it appears that upwards of two-thirds of the site has been destroyed by the excavation of the existing sewage treatment plant. As a result, 38FL380 is recommended not eligible for inclusion on the National Register.

The historic research identified this as the general location of the Witherspoon Ferry and also located an account of a family cemetery being situated on the bluffs overlooking the river near this ferry. The research suggests that the original ferry was in the vicinity of the original highway crossing, west of the survey area and the railroad crossing. Our work failed to identify any evidence of the cemetery. Although we have no reason to doubt the account, the river edge has seen extensive modifications in the twentieth century, so this cemetery may have already been destroyed.

Our investigations identified no historic structures within a 0.5 mile area of potential effects (APE).

Because we were unable to either confirm or refute the presence of a cemetery on the survey tract, we recommend that controlled stripping be conducted in an effort to identify any grave sites if they are present. Otherwise, it remains possible that archaeological remains (including human remains) may be encountered

on the tract during construction. Construction crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points), brick rubble, or bones of any type 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

The investigation of the 1 acre Wellman Bluff Tract was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Ken Smoak of Sabine & Waters. The tract is situated in the southeast corner of Florence County, about 32 miles southeast of Florence and at the north edge of the Town of Johnsonville on the south side of the Lynches River (Figure 1). This area was incorporated into Florence County in 1921 and has remained relatively rural.

This work was conducted to assist Wellman Corporation and the Town of Johnsonville comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800 and is being conducted in anticipation of requesting permits associated with the expansion of the existing sewage treatment facility by the Town of Johnsonville on land to be provided by Wellman.

This work will involve the construction of various sewage lagoons, clarifiers, and other facilities. We anticipate that the project will involve extensive clearing and grubbing, various soil preparation activities, heavy equipment staging and movement, increased traffic on nearby roads, the potential for siltation and erosion associated with the clearing and grubbing activities, the potential for increased dust levels during construction, and increased noise levels associated with the various construction activities. Ultimately the work will excavate the bluff area overlooking Lynches River to a level equal to that of the existing facility — about 20 feet below the current grade.

This work has the potential for a variety of primary and secondary effects on historic and archaeological sites. Primary effects in the construction area of course include destruction of these resources as well as siltation or other related damages. Secondary effects to historic structures and resources include the potential for nuisance dust and increased traffic.

The study tract is roughly rectangular,

measuring about 150 feet north-south by 300 feet east-west. The northern boundary is the slope associated with Lynches River and throughout much of the survey tract was denoted by the remains of a barbed wire field fence. The eastern boundary is the existing sewage treatment facility, marked by a fence and a steep cut. The southern boundary is an existing paved road leading to the sewage treatment plant. The western boundary was arbitrarily defined on the ground by a Wellman representative.

Chicora was requested to submit a budgetary proposal for an intensive survey by Sabine and Waters on September 7, 2000. A proposal was submitted on September 8, 2000 and a notice to proceed was received September 14, 2000. The archaeological investigation was conducted by Dr. Michael Trinkley on September 18 and required 5 person hours. The architectural survey was conducted by the author at the same time and required 2 person hours.

The statewide archaeological site files held by the South Carolina Institute of Archaeology and Anthropology were examined by Mr. Tom Covington for information pertinent to the project area. No sites were identified within 1.0 mile of the project tract.

In addition, the South Carolina Department of Archives and History GIS database was reviewed. There are no National Register of Historic Places buildings, districts, structures, sites, or objects on or within 0.5 mile of the project area. We also examined the 1982 SHPO reconnaissance survey of the Town of Johnsonville, as well as the 1972/1982 SHPO survey of Florence County. There were no sites from any of these surveys within a mile of the project area.

The project area is situated in a generally rural section of Florence County. To the north most of the area is dominated by swamp, while the Town of Johnsonville is just beyond a mile of the project area to the south and outlying neighborhoods are found about

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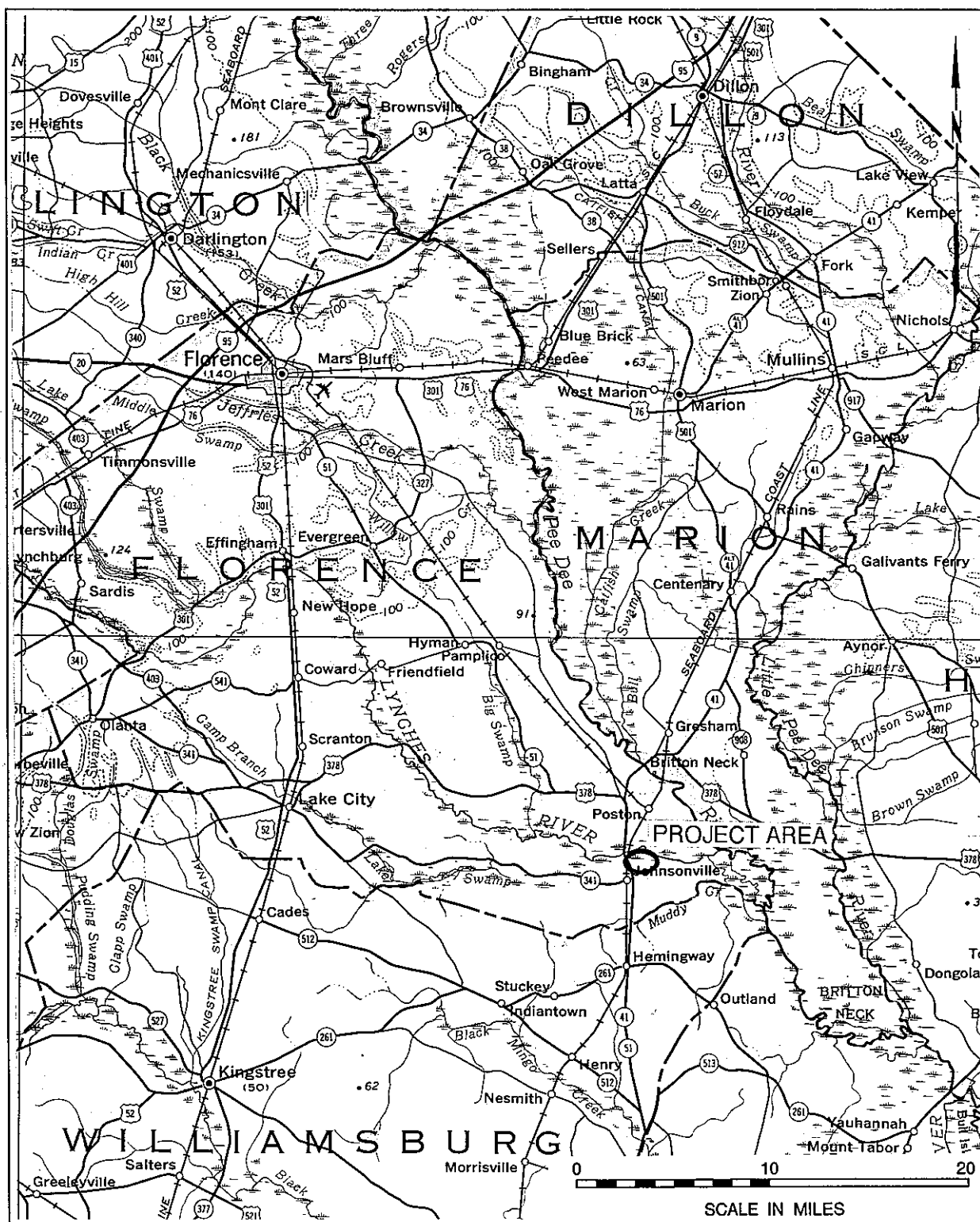


Figure 1. Location of the project in the Florence County area (basemap is USGS South Carolina 1:500,000).

INTRODUCTION

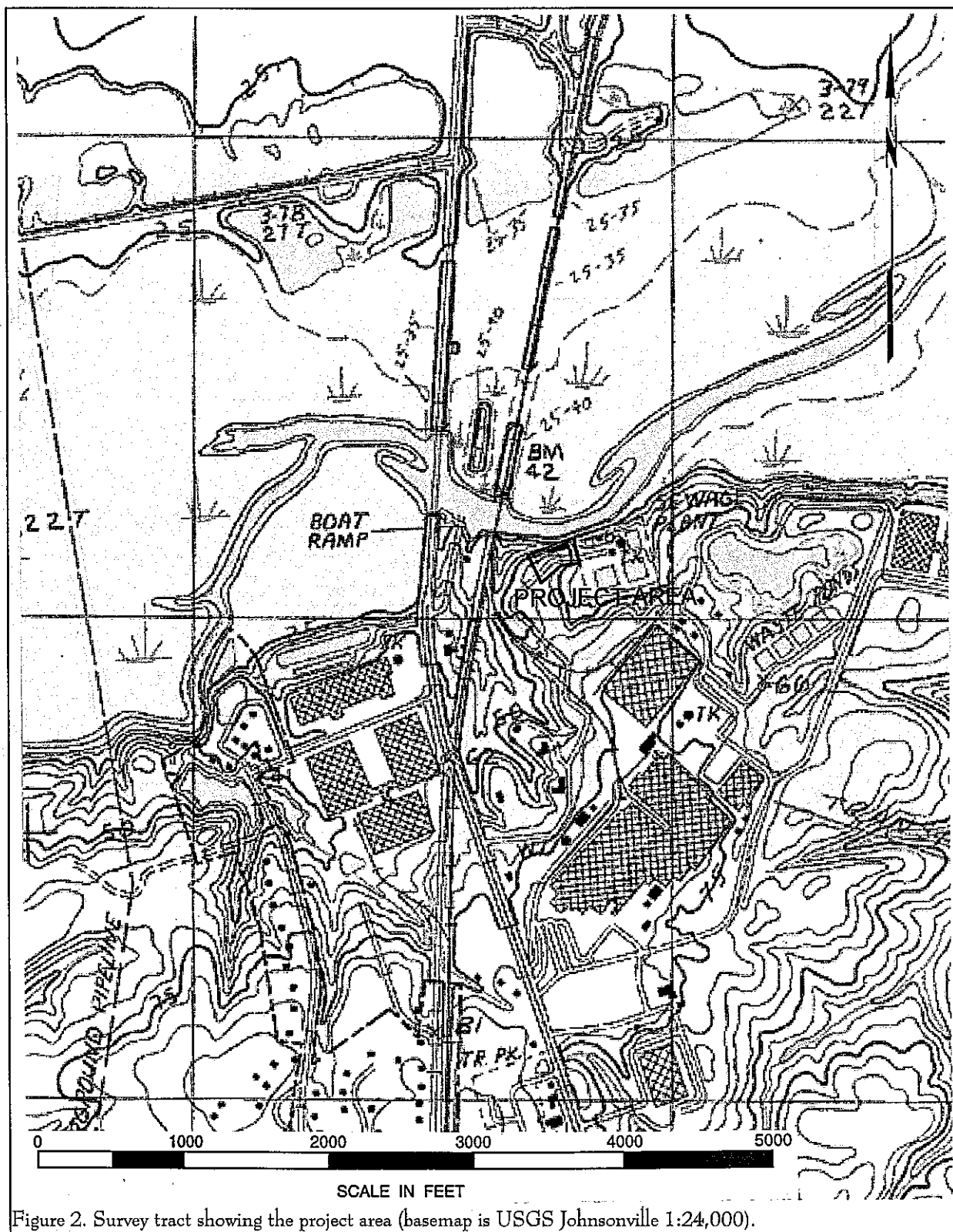


Figure 2. Survey tract showing the project area (basemap is USGS Johnsonville 1:24,000).

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0.8 mile south of the proposed sewage treatment facility expansion. Nevertheless, most of these are buffered by the Wellman property. In addition, the expansion will be situated immediately adjacent to the existing facility. Consequently, there will be no introduction of permanent effects which do not already exist. Consequently, we selected to use a 0.5 mile area of potential effects (APE) for this project.

This report details the study of the project area undertaken by Chicora Foundation and the results of that investigation.

ENVIRONMENTAL BACKGROUND

Physiography

Florence County is situated in the Inner and Middle Coastal Plain of South Carolina and is bounded to the north by Marlboro and Dillon counties, to the west by Darlington, Lee and Sumter counties, and the Lynches River, to the south by Clarendon and Williamsburg counties and to the east by the Pee Dee River, which separates it from Marion County. The land primarily consists of gently rolling hills with elevations ranging from about 20 feet above mean sea level in parts of the river floodplains to a high of about 150 feet above sea level in the Florence-Timmonsville area. Most of the county has an elevation between 70 and 150 feet above sea level (Pitts 1974:109).

The county is drained by the Pee Dee river system which flows in a southeasterly direction and forms somewhat of a dendritic drainage pattern. It includes Lynches River, which merges with the Pee Dee in the southeastern corner of the county, as well as smaller streams such as Claussen Creek, Jeffries Creek, and Muddy Creek. The project area is dominated by Lynches River, which flows east into the Pee Dee. Just to the west of the study area the Lynches River is joined by Lynches Lake. There has been sufficient activity along the bluff edge that small drainages are no longer well defined in many areas, although there was a

drainage to the west in an area which today is dominated by a wetland. A larger north flowing drainage is found about a mile to the east (Figure 2).

The tract is situated in the southeastern portion of Florence County — an area which is generally characterized by low, flatlands interspersed with small drainages, a few larger swamps, and numerous small bays.

The only natural border for the tract is Lynches River to the north. To the east is the existing sewage treatment plant, while to the south is the paved access road to the sewage treatment plant. The western boundary is arbitrary and drawn to incorporate approximately an acre in the survey tract.

The topography is dominated by a bluff ridge

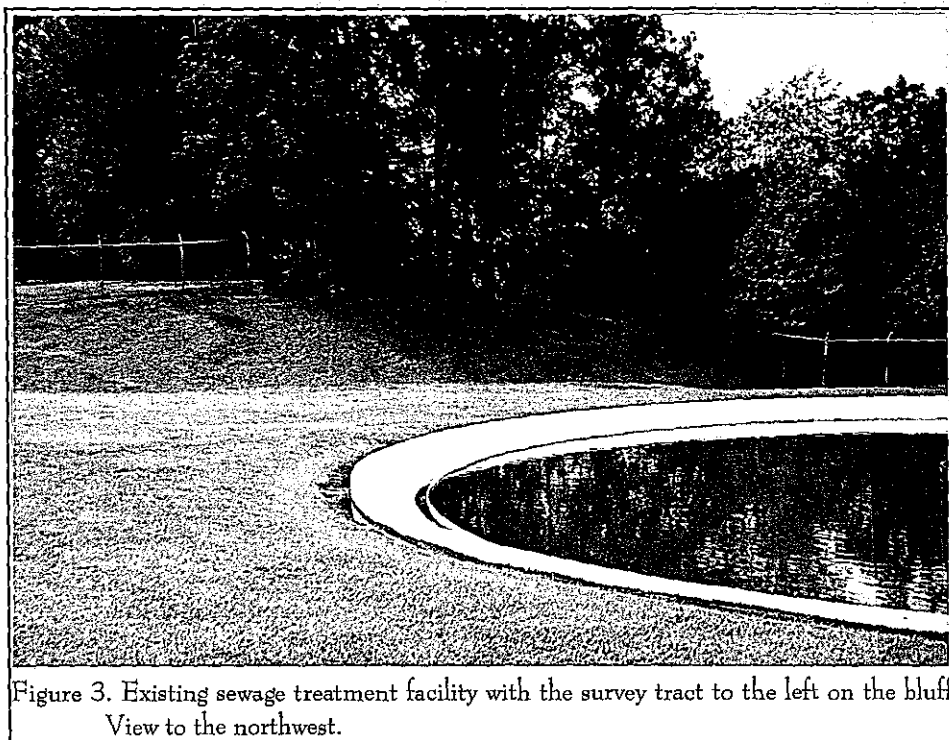


Figure 3. Existing sewage treatment facility with the survey tract to the left on the bluff. View to the northwest.

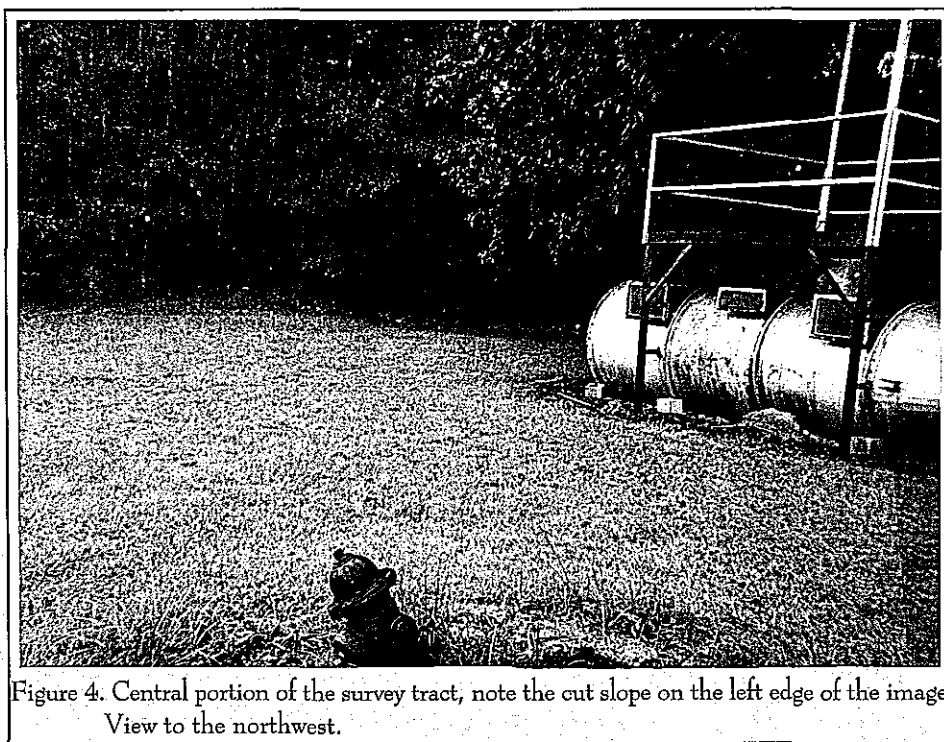


Figure 4. Central portion of the survey tract, note the cut slope on the left edge of the image. View to the northwest.

along the Lynches River. This feature is today only about 50 feet in width and about 200 feet in length, with an unknown portion removed during construction of the existing sewage treatment plant. This ridge slopes steeply to the river and more gradually to the south, into what were once cultivated fields. Nevertheless, the topography suggests that this ridge has been truncated even inland to the south, perhaps by the road construction or perhaps by other activities we have not been able to document. Further compounding the difficulties of reconstructing the area's topography is the presence of the Wellman Bluff House on this tract. Constructed sometime between 1964 and 1969, we have no information on what modifications may have been necessary for this structure.

Often described as flatwoods, the region is characterized by broad flat areas, which consist of a few low ridges and bay depressions. The most common depressions in the Coastal Plain are Carolina bays, usually marshy and oval in shape (Richards 1950:45-46). Water depth varies from shallow lakes to areas with a preponderance of peat and herbaceous species (Barry 1980:131-13). Edmond Ruffin, a mid-nineteenth

century observer, commented that these features provided good pasturage for cattle (Mathew 1992:210). Soils in such areas are generally poorly drained loamy sands and the typical vegetation is usually mesic or swampy, often characterized by bay trees.

Geology and Soils

The geology is characteristic of the Coastal Plain. The parent materials of the soils are marine or fluvial deposits which consist of varying amounts of sands, silts, and clays. There are four

primary geologic formations deposited at different periods during alternating transgression and recession of the ocean: the Duplin Marl Formation underlies parts of the southern and western portions of the county; the Black Creek Formation is found in the northern portion of the county (Park 1980).

Overlying these formations is a relatively thin mantle of undifferentiated light-colored sands and gravels with clay layers of Plioc-Pleistocene age. The Pleistocene deposits include the Brandywine terrace (215 to 270 feet MSL), the Coharie terrace (170 to 215 feet MSL), the Sunderland terrace (100 to 170 feet MSL), the Penholoway terrace (42 to 70 feet MSL), the Talbot terrace (25 to 42 feet MSL), and the Pamlico terrace (less than 25 feet MSL) (Pitts 1974:109-110).

The project area is identified as Duplin and Exum soils with 2 to 6% slopes. These are generally well drained mixed soils. The Duplin soils have an Ap horizon of dark gray (10YR4/1) fine sandy loam about 0.6 foot in depth overlying about 0.3 foot of pale brown (10YR6/3) loam. This overlies about 2.0 feet of

yellowish-brown (10YR5/6) clay loam. The Exum soils have a grayish-brown (10YR5/2) sandy loam Ap horizon about 0.6 foot in depth. This overlies about 2.0 feet of yellowish-brown (10YR5/6) clay loam.

Incorporated into the mapping unit are Sunsweet soils. These have an Ap horizon of dark grayish-brown loamy fine sand about 0.6 foot in depth with a pale-brown (10YR6/3) loamy fine sand A2 horizon. The B horizon consists of a reddish-brown (5YR5/4) clay. Also found as small pockets are Varina soils. These have a 0.6 foot Ap horizon on grayish-brown (10YR5/2) loamy fine sand over an A2 horizon of very pale brown (10YR7/3) loamy fine sand about 0.7 foot in depth. Below is a yellowish-brown (10YR5/6) sandy clay subsoil.

As will be discussed in more detail in a following section, the soils identified in the field survey resemble the Exum and Varina series, although they appear to have had much of the upper zones stripped off. There is little doubt that the project area has had extensive modifications.

Mills comments that the swampland soils are composed of the "richest soil". He notes for nearby Marion District that "[w]hile the swamp lands reclaimed and secured from freshets, will bring 50 dollars an acre; and the oak and hickory lands 15 dollars an acre; the pine lands will scarcely sell for 1 dollar per acre" (Mills 1972:623 [1826]). The flatlands, "are, by comparison, sand barrens; yet occasionally [sic] presenting some good timber land" (Mills 1972:513 [1826]). And while the uplands were healthy, with summers free of disease, he observed that, "on the rivers, creeks, and flat lands, this district is subject to bilious fevers, and cannot be called healthy" (Mills 1972:515 [1826]). The products cultivated during that time were "cotton, corn, wheat, pease, and potatoes" (Mills 1972:623 [1826]).

Climate

The general climate of the Florence county area is characterized by mild humid conditions. This climate is influenced by the warm Gulf Stream, as well as by the Appalachian mountains which block the coldest air masses. Other factors include latitude, elevation, distance from the ocean, and location with

respect to the average tracts of migratory cyclones. Day to day weather is controlled primarily by the movement of pressure systems across the nation. However, during the summer months there are few complete exchanges of air masses because tropical maritime air persists for extended periods (Pitts 1974:108).

The average annual precipitation in the Florence area is 44.5 inches and is unevenly distributed throughout the year, with 28.9 inches occurring from April through October which is the primary growing season (Pitts 1974:108).

The climate, according to Mills (1972:625 [1826]), "taking the whole year round, is pleasant". The annual average temperature in Florence is 63.2°F, and the average monthly temperature ranges from 44.8°F in January to 80.3°F in July. Frozen precipitation occurs only one to three times a year during the winter season. The abundant supply of warm, moist and relatively unstable air produces frequent scattered showers and thunderstorms in the summer (a shower on the day of the survey dumped nearly 0.5 inch of rain in a little under 30 minutes, and then stopped).

Severe weather usually means violent thunderstorms, tornadoes, and hurricanes. The tropical storm season is in late summer and early fall, although storms may occur as early as May or as late as October (NOAA 1977). Heavy rains and high winds occur with tropical storms about once every six years. Storms of hurricane intensity are much more infrequent. Notable droughts have occurred twice in modern times; in 1925 and 1954. Typically a serious drought may occur once every fifty years. Less severe dry periods have occurred more often, normally in late spring or in autumn (Pitts 1974:109).

Floristics

The survey tract is not only small, but has also been extensively modified. Nevertheless, the remnant vegetation is a mixture of coniferous and deciduous forests dominated by pines and broadleaf taxa such as upland oaks, sweetgum, hickories, and various understory species.

Most notable in the survey tract are a series of

large white oaks. While not measured during the survey, we estimate for one a dbh of about 36 inches. At an average growth rate of 1.8 inches in diameter per 10 years, this suggests that some of the trees on the tract are 200 years old, perhaps dating to about 1800.

Down slope, toward Lynches River and in the wetland area to the west are gum, sycamore, water hickory, lowland oaks, soft maples, willows, and other herbaceous species.

In the early nineteenth century Mills observed that:

the long leafed pine is most abundant of the forest trees; next the cypress, various kinds of oak, the hickory, tupelo &c. Of fruit trees the peach, apple, pear, plum, &c. are common (Mills 1972:624 [1826]).

Mills also observed that the major use of these forest resources was construction, also noting that "good clay is found in various places, suitable to make brick" (Mills 1972:625 [1826]). Only lime, largely made of burnt shells, needed to be imported into the area (primarily from neighboring Georgetown). Mills encouraged the residents to make better use of their local "shell limestone" for lime, a suggestion which appears to have made little impact in the local economy (Mills 1972:628 [1826]).

Today, the project area includes a small wooded fringe on the ridge, as well as a moderately thick understory of plants including various shrubs, vines, and herbaceous species. Most common is poison ivy. Toward the access road the area is grassed, while further south, beyond the survey area, there is another dense upland second growth forest, representing fields taken out of cultivation in the mid-twentieth century.

PREHISTORIC AND HISTORIC SYNOPSIS

Prehistoric Overview

Overviews for South Carolina's prehistory, while of differing lengths and complexity, are available in virtually every compliance report prepared. There are, in addition, some "classic" sources well worth attention, such as Joffre Coe's *Formative Cultures* (Coe 1964), as well as some new general overviews (such as Sassaman et al. 1990 and Goodyear and Hanson 1989). Also extremely helpful, perhaps even essential, are a handful of recent local synthetic statements, such as that offered by Sassaman and Anderson (1994) for the Middle and Late Archaic and by Anderson et al. (1992) for the Paleoindian and Early Archaic. Only a few of the many sources are included in this study, but they should be adequate to give the reader a "feel" for the area and help establish a context for the various sites identified in the study areas. For those desiring a more general synthesis, perhaps the most readable and well balanced is that offered by Judith Bense (1994), *Archaeology of the Southeastern United States: Paleoindian to World War I*. Figure 5 offers a generalized view of South Carolina's cultural periods.

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years, has

considerable technological appeal.¹ Oliver suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

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 toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps

¹ While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also Daniel 1992).

ARCHAEOLOGICAL SURVEY OF THE WELLMAN BLUFF TRACT

| 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 | WOODLAND | EARLY | Refuge | | Badin |
| 1000 | | | Thom's Creek Stallings | | |
| 2000 | ARCHAIC | LATE | Savannah River Halifax | | |
| 3000 | | MIDDLE | Guilford Morrow Mountain Stanly | | |
| 5000 | ARCHAIC | EARLY | Kirk Palmer | | |
| 8000 | | | Hardaway | | |
| 10,000 | PALEOINDIAN | | Hardaway - Dalton | | |
| 12,000 | | | Cumberland | Clovis | Simpson |

Figure 5. A generalized cultural sequence for South Carolina (partially adapted from Coe 1964:Figure 116).

reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on 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).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.², does not form a sharp break

² The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics

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 animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts — these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials

provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. 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 the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem, Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for the Middle Archaic

Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the shear distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the "heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for

increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-

44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine which reduced the oak-hickory nut masts which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series

found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., 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 Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). 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; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.³ This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

³ The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there are "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

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 some respects the Late Woodland (1,200 B.P. to 400 B.P.) 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 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historical Synopsis

While the English settled Charleston in 1670, the northern frontier was ignored, except for Indian trade, until 1731, when the first Royal Governor of Carolina, Robert Johnson, directed 11 townships be laid out on the banks of various rivers, including one on the Black River. The settling of Georgetown (with its port of entry), however, greatly assisted in the population of the Williamsburg area. By 1734 the Carolina frontier was being divided into parishes, with the Williamsburg vicinity becoming part of Prince Frederick's Parish (Boddie 1923:9). Prior to that the area was primarily settled by Scotch-Irish, although much of the land was acquired by large planters speculating on the value of the newly opened land.

By 1737 surveys in the region had about ceased as there seemed to be no additional land suitable for cultivation remaining in the township and the population held steady at about 500 individuals (Wallace 1951:151). Boddie notes that John Witherspoon was one of the first settlers in the Boggy Swamp region, just north of Indiantown, about 11 miles northwest of the survey area. In addition, there were a number of English settling in the Black River area (Boddie 1923:30, 33). The tenor of these early

settlers was described by Boddie:

The deepest desire of every one of the original settlers, who came to Williamsburg, was to be let alone by everybody and by everything, from his nearest neighbor to the King of England (Boddie 1923:37).

Initially the settlement was built on subsistence farming, with a focus on corn when wheat proved unsatisfactory. Coupled with this was cattle grazing, which required little capital investment, but a reasonably good return (Boddie 1923:40). As was the case in other frontier areas, indigo was eventually found to be more profitable than herding (Starr 1983), although the two were not mutually exclusive. As Boddie observes, "cattle made Williamsburg substantial; indigo made it rich" (Boddie 1923:90).

The indigo industry flourished in South Carolina because of its unusual advantages — an indirect bounty, a protective tariff, and a monopoly on the British market during the various wars which cut off access to the better Spanish and French indigo supplies (Sharrer 1971). Carolina indigo was typically of middling or poor quality, yet it brought high prices since nothing else was available. When it had to compete with other sources, its price fell — thus the Carolina love affair with indigo ran hot and cold. Nevertheless, it provided a cash crop which required only modest numbers of slaves — and was embraced by the Williamsburg farmers. Although accounts are not clear, it seems that by the end of the first half of the eighteenth century slavery was well established, even if most families owned five or fewer African Americans (Boddie 1923:87).

Mouzon's 1775 map (Figure 6) reveals that a ferry was already present in the study area, on a road which ran from the Black Mingo northward across Lynchess River and then on the west bank of the "Great

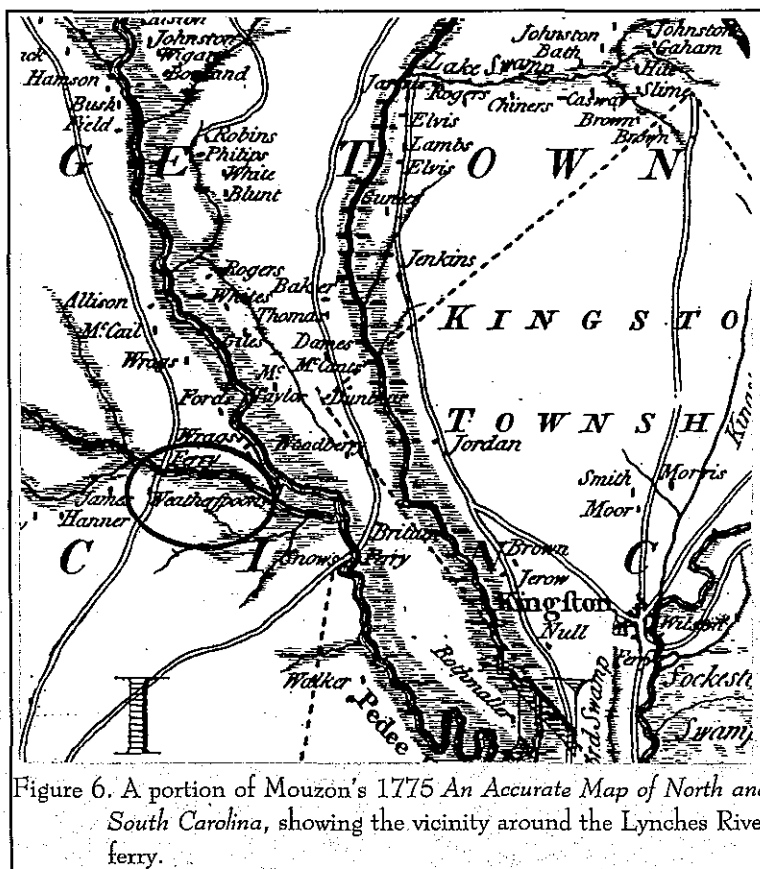


Figure 6. A portion of Mouzon's 1775 *An Accurate Map of North and South Carolina*, showing the vicinity around the Lynchess River ferry.

Pedee River." Although Mouzon provides no name for the ferry, Witherspoon is located only a short distance south along the road leading to the crossing and there is no other nearby residence.

Prior to American Revolution Boddie would have us believe that Williamsburg was idyllic:

Its doors were never locked and its windows were never barred. Its cornfields produced abundantly and its meadows were overflowing with cattle. Indigo ran riot so that cleared acres could not contain it. Tobacco and flax flourished wherever their seeds were sown. Roses bloomed and geraniums grew about the doorways. Morning suns came fresh out of the sea and evening showers brought peace to the troubled sands (Boddie

1923:94).

And the sands were, indeed, troubled. While Williamsburg may have been on the periphery of the economic and social turmoil, revolution was brewing. By December 1779, when Henry Clinton led an expeditionary force from New York to occupy Charleston, the war shifted from the Northern colonies to the South. In 1780 a 300 man battalion was raised in the area by Colonial John James and command was later assumed by General Francis Marion (Boddie 1923:98).

Williamsburg was the scene of an early British campaign as Lt. Colonel Banastre Tarleton sent troops through the area, "to punish the inhabitants in that quarter for their late breaches of parole and perfidious revolt" (Boddie 1923:101). What Tarleton did not accomplish, Major Wemyess attempted when he crossed the Black River in August 1780 continuing to Kingstree, laying waste to the countryside. He was met by Colonel James and after a short skirmish Wemyess turned toward Georgetown, passing through and burning much of Indiantown (Boddie 1923:104). Only a month later Marion and his troops attacked the British at their outpost on the Black Mingo, routing them and ending the British efforts to establish a chain of forts through the region (Boddie 1923:105-106).

After the American Revolution Williamsburg, like many other areas of South Carolina, lost the revenue of indigo. The once numerous herds cattle had been depleted by either Whigs or Tories. Boddie (1923:134) remarks that some cotton was grown, primarily along the Santee, rice was being tried in the Big Dam Swamp, and that some tobacco was planted. But none could quickly, or effectively, replace the reliance on indigo. By 1788 there were only five buildings in all of Kingstree (Boddie 1923:138).

By the 1790 federal census Williamsburg, which was part of Georgetown District, had a population of about 3,372 whites (39.2% of the population) and

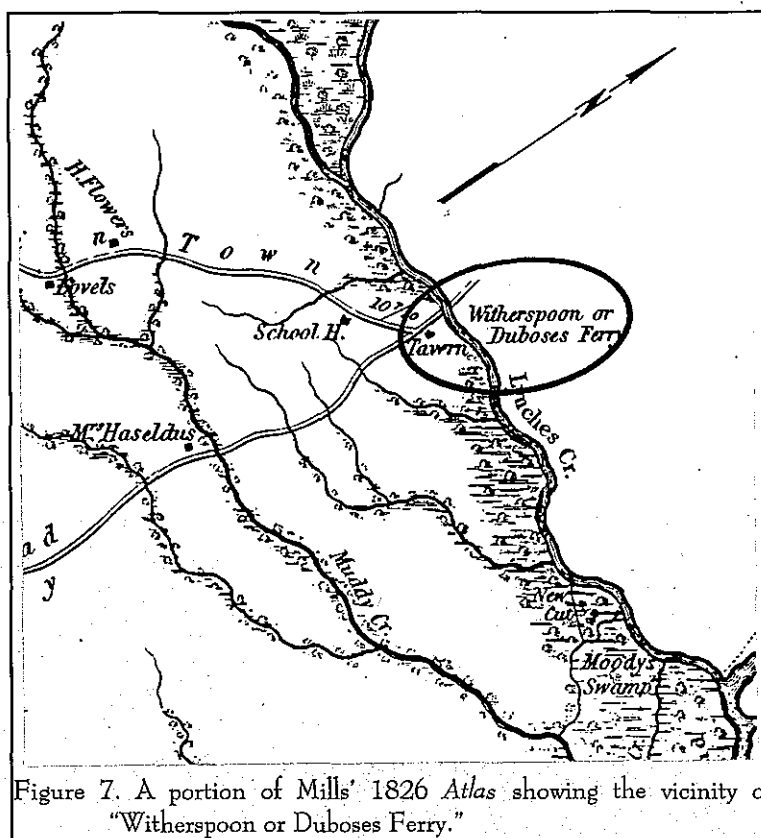


Figure 7. A portion of Mills' 1826 *Atlas* showing the vicinity of "Witherspoon or Duboses Ferry."

5,228 African American slaves (60.8% of the population), indicating that slavery by this point was firmly entrenched in the area. Moreover, while only about 53% of the families possessed slaves, the average holding was nearly 14 (Boddie 1923:154-170).

The end of the eighteenth century and beginning of the nineteenth century was a time of recovery and relative prosperity for the region. By 1826 Mills commented that cotton was the principal cash crop, although corn, potatoes and peas were also being grown in the district. The slave population had grown to only 5,864, although they accounted for 67.3% of the total population (Mills 1972 [1826]:767). The ferry crossing is still present and by this time is called "Witherspoon or Duboses Ferry." In addition, a tavern is shown east of the intersection of the Indian town and Post roads (Figure 7). No residences, however, are shown in the immediate vicinity (although we need to remember that Mills' *Atlas* was by subscription and only the subscribers' residences are shown).

The 1830 census reveals that Williamsburg was still a very rural area. There were only a handful of distilleries or sawmills and the most common industry was blacksmiths, with 22 reporting from the district. By 1850 slaves accounted for over 68% of the population and the white population had grown by only about 600 people since 1790. In terms of agricultural production Williamsburg reveals a very modest economy. There were only 454 farms, possessing 70,360 improved acres. Only Kershaw District had fewer farms and the improved acres represented only 14% of the total farm acreage. However, the average farm size was only 1107 acres compared to nearby Horry District where the farms had a similar proportion of improved acres, but were more numerous and smaller (about 693 acres). Williamsburg produced only 100 pounds of tobacco, with the great bulk being produced by up country planters. There were only 4,298 bales of cotton produced, ranking the district 23rd (out of 29) in cotton production. It ranked 16th in the production of peas and beans and 11th in production of sweet potatoes — reflecting the continuing importance of subsistence crops in the area's economy.

In 1856 the Northeast Railway was built from Charleston northward through Williamsburg, opening the Charleston markets as they never had been before. Cotton production increased to 6,571 bales — 50% more than 10 years previously. Sweet potato production also increased, with Williamsburg ranked 9th in the state, while the area also increased its rank in rice production from 10th to 7th. McGill also observed that:

the railroad advantages were so apparent, perhaps more so in the purchase of plantation implements, which eventually shut off many wood and blacksmith shop, once considered a necessity in every neighborhood. . . . Great quantities of beef cattle were shipped down to Charleston, to the great relief of cattle owners, who when driving them down generally lost a few in the Santee Swamp (McGill 1952:272).

The railroad had two other effects. First, trade

with nearby Georgetown declined as farmers abandoned it in favor of Charleston. And second, the easy access brought in the turpentine industry, largely from North Carolina. Both Boddie (1923:327) and McGill (1952:266) comment on the industry.

The Civil War did not immediately, or directly, affect Williamsburg. Boddie does note that early in the war a number of slaves were sent to the McClellanville shores to produce salt for Williamsburg County (Boddie 1923:372), but otherwise the war effort consisted of planting subsistence crops.

By May 1865 the citizens of the region requested that Union troops from Georgetown be sent to Williamsburg to keep order and the region came under military rule. Reconstruction had begun. With it so, too, had began efforts by white South Carolinians to force African Americans back into something approach bondage, known as the "Black Codes."

In 1865 the South Carolina legislature passed three laws. The first recognized that slavery no longer existed, but placed stringent economic and social restrictions on former slaves. The second law prohibited black farmers from selling anything without "written permission of the employer or District judge." It prohibited the ownership of weapons, and it allowed any white person to arrest any "person of color" for any misdemeanor. The third law instituted a "sunrise to sunset" workday, placed restrictions on movement, and provided liberal justifications for employee dismissal. In addition, the law stipulated that blacks could only be farm laborers or hired servants, unless they purchased an expensive license from the district court. This in effect closed the door on black economic opportunity. Farm laborers were docked pay for leaving the plantation without permission, damaging the owner's property, showing laziness, and even for being sick. Visitors were not allowed without permission, laborers had to work six days a week, and conversations were often not permitted during work. Workers' children could be removed to other plantations and African Americans could still be beaten for their supposed transgressions. In many parts of the state a pass system similar to slavery was again instituted.

By 1880 the South Carolina legislature had

even further limited black economic opportunities, made oral contracts binding, favored white planters in all disputes, and made the breach of contract a criminal offense equivalent to fraud. Another law allowed plantation owners to hold laborers on the plantation who owed them money.

The "Red Shirt Campaign" by Wade Hampton in 1876 was designed to further erode the few freedoms still held by African Americans. The campaign document directs, in part: "In speeches to negroes you must remember that argument has no effect upon them: they can only be influenced by their fears, superstition and cupidity. Do not attempt to flatter and persuade them. . . . Treat them so as to show them you are the superior race, and that their natural position is that of subordination to the white man."

As elsewhere in South Carolina, Williamsburg's economy was in shambles. Planters in many areas attempted to quickly return to cotton in the hopes of restoring some semblance of wealth and prosperity, but frequently found that the freedmen were little interested in returning to cotton. In the Williamsburg area, it seems that while cotton was important, so too was turpentine. In fact, by the 1880s, one source remarked:

There is one great evil this country has to contend with, and which accounts for the low price of land, and that is the deposition of the mass of landowners to neglect their farms and to devote all their time and labor to cutting timber and crossties and working turpentine (Anonymous 1884:np).

In fact there were 16 saw mills in Williamsburg County producing \$298,815 a year, and 26 turpentine stills producing \$420,000 a year. Nevertheless, there were also 1,075 farms in the county. Those owned and operated by whites averaged about 47 acres in size. Those owned by African Americans averaged only 11.7 acres.

By 1900 the number of farms owned and operated by whites had nearly doubled and their acreage

had increased to over 95 acres. In that year cotton production was 18,428 bales, ranking Williamsburg 21st out of 40 counties. But Williamsburg ranked sixth in tobacco production, with a yield of 904,330 pounds. While cotton and tobacco accounted for 30.7% and 0.9% of the improved farm acreage respectively, corn was being planted on 48,919 acres, or 36.6% of the improved land in Williamsburg, suggesting that subsistence farming was still vital to the county's economic base.

By 1910 cotton had grown to cover 41.9% of the improved acreage in Williamsburg County, and there were no fewer than 56 gins (Watson 1916:78). In contrast, tobacco had grown to cover 2.5% of the area's acreage. In contrast, corn acreage fell to only 30.6%. The power of cotton, however, was soon broken by the boll weevil and, in 1930, cotton accounted for only 28.9% of the acreage, while tobacco increased to 10.5% of the available acreage. Improved acres themselves had declined from 156,600 acres in 1910 to only 119,350 acres in 1930.

During the Great Depression Williamsburg County began to change. As one account observed:

many Northerners bought or leased homes in the country; it was a common sight for the Atlantic Coast Line trains to stop in Kingstree and from their pullmans would disembark the wealthy, the powerful, and even national leaders (Anonymous 1976:6).

Many of the once productive plantations were converted into hunting lodges, while others were left to decay.

By 1940, Williamsburg County had drastically curtailed cotton production, and 54.5% of the improved acreage was planted in corn. This echoes the comment of one individual in the Trio area who remarked that one year their gin was worth \$100,000 while a year later, with almost no one planting cotton, it wasn't worth a dollar (Pearl Rowell, personal communication 2000).

It was also during this period that another

change became more pronounced. In 1944 74% of Williamsburg County consisted of forests, with about equal amounts of sweet gum in the lowland areas and planted loblolly pines in the upland areas (Penney 1945:21). These pines represented the new crop — timber.

Of course timber was not really a new crop — as implied by the 1884 account of the county, it had been competing with cotton for years. The largest of the lumber concerns was the Atlantic Coast Lumber Company. From their Georgetown base they created a railroad with 217 miles of main track lines and another 70 miles of logging and tram lines. Although begun in 1899, its predecessor was the Georgetown and Lanes Railroad, which was operating by 1881. By the early twentieth century Atlantic Coast Lumber had hit hard times and much of their track was taken over by the Seaboard Air Lines (Fetters 1990:45-54).

In 1921 the Johnsonville area of Williamsburg County, encompassing about 820 square miles joined Florence County. By the late 1920s the boll weevil was reaching Florence County and one newspaper editorial reported that the weevil had "put a stop to the lazy man's crop," and that now planting took "brains, money, hard work, and poison to raise cotton hereabouts these days" (quoted in King 1981:338). Many of those farms attempting to raise cotton were operated by tenants.

In the most simple of terms, two types of tenancy existed in the South — sharecropping and renting. Sharecropping required the tenant to pay the landlord part of the crop produced, while renting required the tenant to pay a fix rent in either crops or money. While similar, there were basic differences, perhaps the most significant of which was that the sharecropper was simply a wage laborer who received his

Table 1.
Systems of Tenure

| | Share-Cropping | Share Renting | Cash Renting |
|---------------------|--|---|--|
| Landlord furnishes: | land housing fuel tools work stock seed half of fertilizer feed for stock | land housing fuel ¼ or ⅓ fertilizer | land housing fuel |
| Tenant furnishes: | labor half of fertilizer | labor work stock work stock feed for stock tools seed ¾ or ⅔ fertilizer | labor work stock work stock feed for stock tools seed fertilizer |
| Landlord receives: | ½ of crop | ¼ or ⅓ of crop | fixed amount in cash or lint cotton |
| Tenant receives: | ½ of crop | ¾ or ⅔ of crop | entire crop less fixed amount |

portion of the crop from the plantation owner, while the renter paid his rent to the landlord.

Further distinctions can be made between sharecropping, share-renting, and cash-renting (see Table 1). With sharecropping the tenant supplied the labor and one-half of the necessary fertilizer, while the landlord supplied everything else, including the land, housing, tools, work animals, feed, and seed. At harvest the crop would be divided, usually equally. In share-renting the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer, while the tenant supplied everything else necessary, including the animals, feed, seed, and tools. At harvest the crop was divided equal to the portion of fertilizer each party provided. Finally, with cash-renting the landlord supplied the land and the housing, while the tenant supplied everything else. The owner received a fixed rent per acre in cash.

Agee et al. provide some general information on agricultural activities during the early twentieth century, observing that:

Farms operated by tenants are

usually devoted mainly to the production of cotton, corn, and tobacco. The ordinary yield of cotton on such farms is a little over one-half bale per acre, while that of corn is about 16 bushels. These yields could easily be increased, as is demonstrated by the better farmers, who obtain 1 bale to 2 bales of cotton and 40 to 60 bushels of corn per acre. . .

. . . About 65 per cent of the farms are operated by tenants. . . The ordinary yield of tobacco in the county is somewhat over 800 pounds per acre. The price has averaged about 14 cents per pound (Agee et al. 1916:9).

The 1938 General Highway and Transportation Map for the project area (Figure 8), illustrates development in the project area. The Post or Stage Road consisted of S-71 on the north side of Johnsonville and S-111 still led to Indiantown. The map, however, fails to reveal the location of any farms in the immediate project area.

Project Specific History

Boddie (1923:208) briefly mentions that "Witherspoon's Ferry on Lynche's Creek was vested in John Witherspoon in 1801" — providing a clue to the earliest documented owner of the survey tract. This brief mention is further confirmed by McCord (1841:404), who cites the legislation that gave ferry rights to Witherspoon and his heirs for a term of 14 years. The fees were set at 3¢ for foot passengers, 6¢ for a man and his horse, 3¢ for each head of cattle, and 2¢ for each sheep, goat, or hog. Baily and Cooper (1981:783-784) note that John Witherspoon obtained the 634 acre Lynches Creek property through the will of his brother, Robert, who died in 1787. It appears that the lands were acquired through grants and Baily and Cooper (1981:784) also note that Robert operated a ferry, although no additional details are provided.

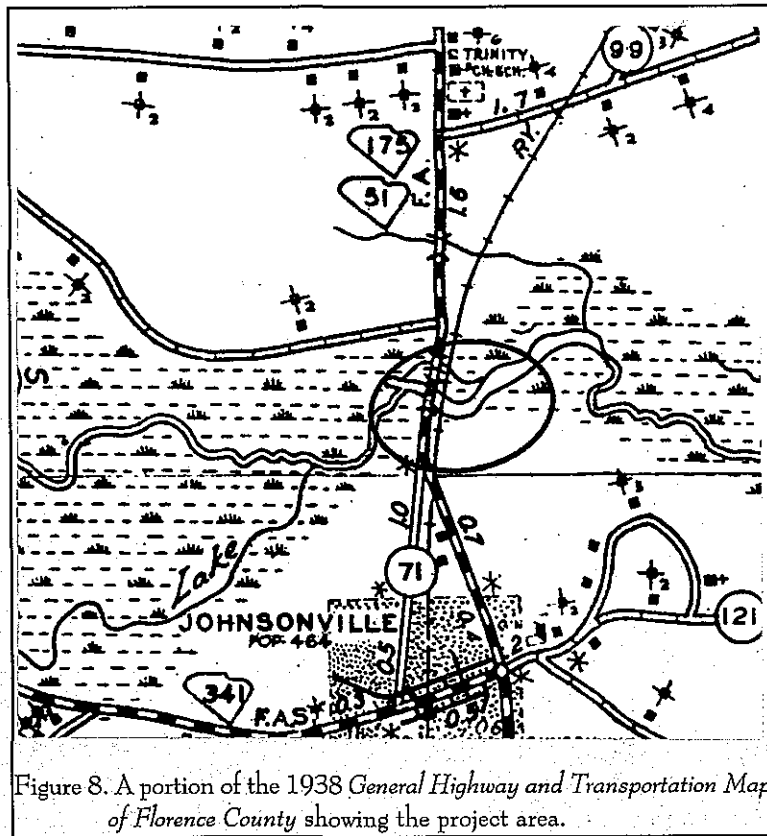


Figure 8. A portion of the 1938 General Highway and Transportation Map of Florence County showing the project area.

At his death in December 1802, John Witherspoon was a very wealthy planter. He owned some 4,373 acres between the Pee Dee and Lynches rivers, as well as 55 slaves. He conveyed his Lynches Creek property to the Aimwell Presbyterian Church, of which he was the founder and ruling elder. He was also buried at Aimwell (Eaddy n.d.:184).

The conveyance, however, must not have been as clear-cut as Baily and Cooper suggest since, in 1815, the ferry was re-established:

and vested in J.D. Witherspoon, executor of John Witherspoon, deceased, his heirs and assigns, for the term of fourteen years in trust for and having the sole use and benefit of the incorporated Presbyterian Church at Aimwell on the Pee Dee River, in conformity to the last will and testament of the said

John Witherspoon, deceased
(McCord 1841:480; see also Boddie
1923:210-211).

Meanwhile, John Witherspoon's only child, Elizabeth, married David R. Williams. On May 10, 1819 the Williamsburg Commissioners of Locations provided Williams with a plat for the 580 acre tract which had passed from Robert to John Witherspoon 32 years earlier (Williamsburg County Plat Book 1, page 85). It is likely that Williams took this action to clear the title, ensuring that the property was recorded in his name and that there were no longer any encumbrances associated with the Aimwell Church.

This plat (Figure 9) shows the ferry, identified as Witherspoons Ferry, crossing in the same general area as the various roads and railroad would use in the twentieth century. There is also a structure shown on the "Stage Road" south of the ferry, indicating that some sort of building was present by the first quarter of the nineteenth century. In fact, it is possible that this represents the original Robert Witherspoon settlement on the bluffs of Lynches River.

The picture is confused by Mills' *Atlas* (Figure 7) which shows a "tavern" at the ferry and also calls it "Witherspoon or Duboses" ferry. This is further compounded by John Wilson's 1822 map, which shows the ferry as Dubose, with Dubose as a resident instead of a tavern (Figure 10). We have found no reference to Dubose — he may have been the ferry tender and tavern keeper. We don't believe that he owned the tract.

In 1829 McCord reports that the South Carolina Legislature vested the Witherspoon ferry in D.R Williams,

until he shall have completed the bridge . . . over Lynch's creek, and a causeway over the low grounds adjacent thereto, at or near Witherspoon's ferry; and that after the completion of said bridge, the ferry shall be discontinued, and the public road so altered or both sides of the creek, as to pass over the said bridge (McCord 1841:583).

Williams was a powerful and influential South Carolinian. He graduated from Rhode Island College (today Brown University) and was admitted into the South Carolina bar. He was a member of Congress from 1805 to 1813 and served as Governor from 1814 through 1816. He is occasionally referred to as "General Williams," since he served as a brigadier general in the regular army for a year prior to being governor. During his later life he was active in the internal improvement movement, focusing on the clearing and navigation of the Pee Dee River. He died in November 1830 — while inspecting his bridge over Lynches River (Kohn and Glenn 1938:600).

The bridge was apparently completed, although how long it remained functional is unknown. Apparently the property passed to Jonathan N. Williams, who in 1842 sold the 580 acre tract to William Johnson for \$7,000 (Williamsburg County Clerk of Court, Deed Book E, page 505). The tract was described as,

Witherspoon Ferry or Williams Bridge and granted to David R. Williams by grant 12 May 1819 . . . also . . . on opposite side of Lynches Creek . . . sold to David R. Williams by Robert Withers [sic] . . . grant of John Withers [sic] date 15th December 1769 for 100 acres in Craven County now Marion District.

McGill comments that,

For the first few months [ca. 1843] Capt. Johnson and family resided in the Old Ferry House, situated on the bluff of Lynche's Creek, but soon we all moved down into his new house just finished, at the junction of the Indiantown and stage road (McGill 1952:173)

It was during this period that McGill also recounts how his ancestor:

often walked up along the high banks of the creek, and coming to one of

uncommon elevation and the swift current of the waters flowing at its foot or base, there were the graves of his mother's ancestors, the James family burying ground, as pointed out by Capt. William Johnson. Here at this hallowed cemetery, amid its solemn silence, on bended knees, Sam attempted to recall the recorded and traditional heroic deeds achieved in the old Revolutionary war by the five brothers of the Jameses as Marion's men (McGill 1952:174).

The reference to the James family suggests that marriage connection between Robert Witherspoon and Mary James resulted in at least some members of the James family being buried on the 580 acre tract.

William Johnson died in 1851 and his will specified,

I give and bequeath unto my beloved wife Sarah Johnson my dwelling house and other buildings and all the track [sic] of land on which I now live lying on Lynch's Creek I mean all the ferry track [sic] on both sides of the Creek including the ferry her life time only and at her death to be Equally divided between my son James H. Johnson and my daughter Sarah C. Johnson (Williamsburg County Wills, Apartment 15, Package 8).

At his death Johnson left an estate valued at \$11,575.28 including 29 slaves. The appraisal reveals a substantial farming interest with 3 yoke of oxen, 4 new plows and 3 old plows and 35 head of cattle. Crops on hand included 300 bushels of corn, 1,000 pounds of fodder, 10 bushels of peas, and 5 bushels of rice. Household goods included seven bedsteads, 10 tables, 19 chairs, and a clock. Books, while not listed, were valued at only \$2.50.

By 1868 Sarah Johnson had died and the William Johnson estate was partitioned between James

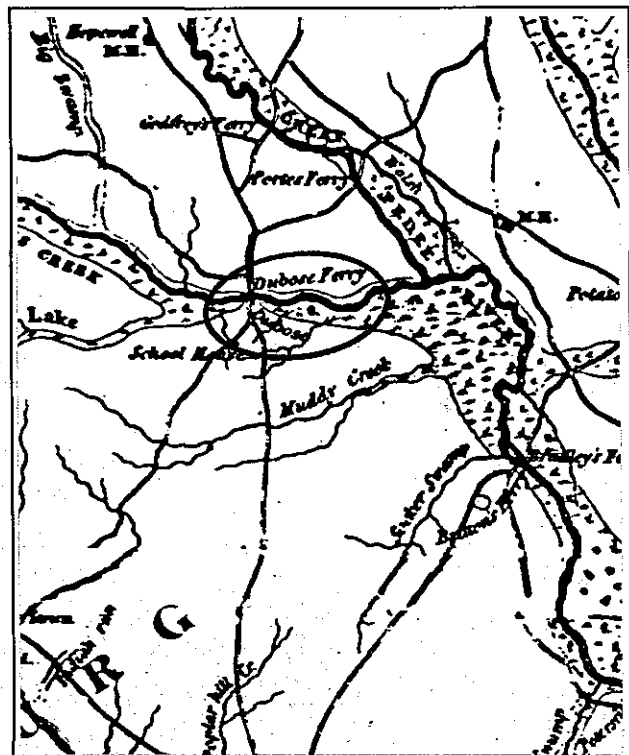


Figure 10. Portion of John Wilson's 1822 map showing the vicinity of Dubose Ferry.

H. Johnson and his sister, Sarah C. (Johnson) Woodbry (who was also deceased). Lot No. 1 was devised to the minor heirs of Sarah C. Woodbry and consisted of,

the ferry with following lands, that is all the lands belonging to the ferry in Marion Co. With so much of the ferry tract in Williamsburg County as is inclosed in the following lines, commencing at the lines of T.R. Grier, Esq. On the Indiantown Road thence down said Road eastward to where it Joins the Stage Road Northward until you reach a small bridge of poles across said Road and perhaps some hundred yards from the ferry near the head of the first natural branch East of Stage Road, thence square across to said branch and down the run of said branch to where it empties into the run of

Lynches Creek which will include all the lands north of Indiantown Road down to said Stage Road together with the little cleared field East of the Stage road on which the old original ferry house stood and whereon J.H. Johnson has recently built a dwelling (Williamsburg County Wills, Apartment 15, Package 8).

Lot No. 2, conveyed to J.H. Johnson (and not part of this study tract) was retained until sold by the Sheriff in 1880 to satisfy a judgement against Johnson which was handed down in 1869 (Williamsburg County Deed Book E, page 557; Judgement Roll 329).

In 1881 at least one of the two minor heirs was old enough to sell their one-half interest in the tract to Thomas R. Grier for \$450. By that time the property was identified as the,

tract of land known as Johnson's Ferry, embracing said Ferry, with 370 acres of land more or less . . . bounded south by Thos. R. Grier's land West by Fayer Lake North by Lynches Creek and East by J.H. Johnson's land but now owned by Thos. R. Grier (Williamsburg County Deed Book O, page 718).

What is perhaps most interesting in these conveyances is that there is no longer any reference to Williams' bridge, suggesting that the bridge was no longer in use and the ferry was still the principal means of crossing the river at this location.

We have not identified any recorded deed which gave Grier the other half interest in the property. However, in 1887 his heir, W.J. Grier, sold the ferry tract to Sarah E. Stuckey for \$500. By this time the property is identified as containing 125 acres — perhaps suggesting that rather than acquiring the entire 325 acres of Lot 1, Grier simply had the tract partitioned and acquired fee simple ownership of his acquired half-interest. Regardless, the sale to Stuckey included that property bounded to the north by Lynches

Creek, to the east by James Johnson's land, to the west by part of the same (i.e., James Johnson's tract?), and south by the Indiantown Road. The property is reported to be shown more fully on a plat by C. Ferri, annexed to the deed, but no such plat has been found, either in the deed book or in the plat index (Williamsburg County Deed Book R, page 508).

In 1897 Stuckey sold (or actually exchanged for other lands) the tract to John T. Gasten (Williamsburg County Deed Book X, page 3). By this time the property was identified as containing 129 acres, although the recital is nearly identical and it is still called the "ferry tract."

Gasten sold the property in 1905 to Mary Ella Creele [sic] for \$1,000. It was described as containing 125 acres and being,

on the south side of Lynches River and known as the Johnson Ferry tract bounded north by Lynches River, east by the Cheraw and Georgetown Old Stage Road and by a branch leading from a small ditch bridge across said road down to said Lynches River, said road and branch being the line of W.W. Johnsons land, on the south by the Indiantown Road, west by W.J. Griers Land (Williamsburg County Deed Book GG, page 429).

The Creels operated a farm on the parcel for the next 26 years. In 1931 Mary Ella Creel died. The appraisal found a fairly sparse estate, consisting of \$3.50 in the bank, a cow valued at \$40, two mules valued at \$150, farm implements valued at \$40, corn and hay valued at \$75, furniture valued at \$150, and the 140 acre Ferry Tract valued at \$2,000. Examination of the probate papers reveals that while some items were sold off, much of the estate was maintained by the heirs, allowing their father to continue farming the tract. Typical of the depression, the estate found that it had to borrow to acquire the funds necessary to continue farming (Florence County Probate Court, Package 2684).

Mary Ella's husband, Mike Creel, continued farming, but died three years later in 1934. At his death probate records reveal that the farm was being sharecropped on a 50-50 arrangement, with 5 acres of tobacco, 4 acres of cotton, and 18 acres of corn being planted. The estate was deeply in debt and several heirs asked for "accounting with full and complete statement of all receipts and disbursements, which would include the farming of the lands belonging to the estates for the 1934," suggesting that there were concerns over the funds being invested in a farm offering almost no returns (Florence County Probate Court, Package 3104). At the same time court action was commenced to have the estate dissolved and in December 1934 the Master sold the lands to Kistler C. Creek for \$2,500. The property was described as containing about 140 acres,

bounded on the north by Lynches River; on the east by State Highway No. 50 and lands formerly owned by W.W. Johnson; on the south by lands of Carolyn H. Husbands; on the west by lands of W.H. Marsh (Florence County Deed Book 15, page 253).

Creel held the property for only four years, selling it in August 1938 to Robert W. Turner for \$3,647.50 (Florence County Deed Book 74, page 243). In 1942 the heirs of Robert W. Turner sold the 140 acre tract to Raleigh E. Turner for \$1 and the assumption of the mortgage on the tract (which amounted to \$3,953.50). The mortgage taken out under the Bankhead-Jones Farm Tenant Act, was in an effort to continue farming the property — which was apparently as unprofitable at the time of the sale as it had been for the Creels during the early 1930s.

In 1956 the estate of Raleigh E. Turner sold

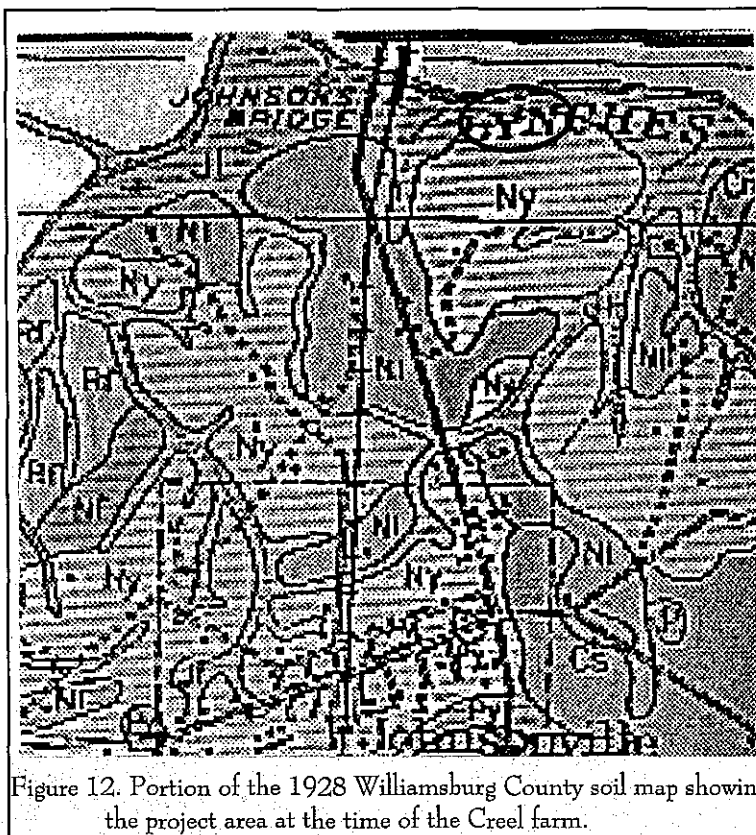


Figure 12. Portion of the 1928 Williamsburg County soil map showing the project area at the time of the Creel farm.

the property to C.C. McDonald, attorney for Wellman Combing Company for \$26,000 — the first time in the twentieth century that the property appears to have been profitable to its owner.

A referenced plat, dated 1954, shows the property as being leased to Arthur O. Wellman and the National Shawmut Bank of Boston. The leased property had already had a mill constructed, along with a number of other improvements. The study tract area, however, is shown as unaffected by this early development (Figure 11).

There are also a few additional maps and aerial photographs which can be used to help outline the area's history. The 1928 soil map, for example, reveals that during the Creel's ownership, their main house was likely along the main highway (Figure 12). It may even have been the original William Johnson house. Today, however, it is under the Wellman parking lot. A second structure, further inland, is likely a tenant house.

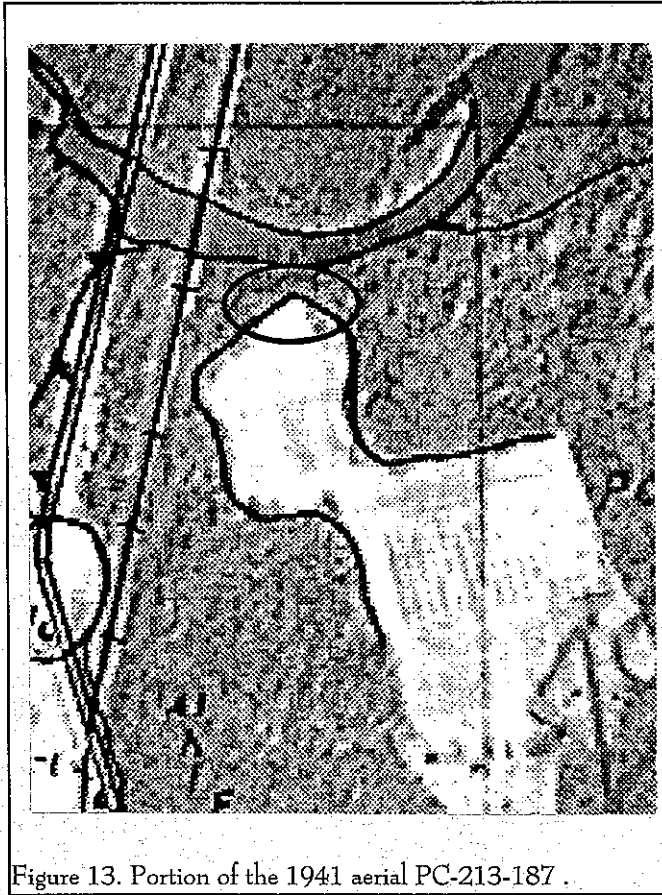


Figure 13. Portion of the 1941 aerial PC-213-187 .

The view is largely unchanged in the 1941 aerial photograph. Now the Turner farm, we suspect that the field locations are identical to those going back at least to the early 1930s, during the Creel tenure. The photograph reveals that the property was cultivated about to what is today the paved road leading to the sewage treatment plant. There was a wooded fringe along the bluff edge overlooking Lynches River. The topography likely prevented cultivation closer to the bluff edge (Figure 13).

Both the 1929 soil survey map and the 1941 aerial photograph reveal the location of the railroad consistent to what is found today. The road crossing Lynches River, however, is closer to the railroad and forms a much sharper angle to the south. We believe that this road is likely very close to, or identical to, the original stage road and also the ferry crossing.

By 1942 a new route across the river and swamp was under construction and the 1949 aerial photograph shows the new road (still in use today) complete. The old bridge has been removed, although the roadway is still clearly visible (Figure 14). This image also reveals the first extensive development of the Wellman mill, taking over the southern half of the fields shown in the 1941 aerial. The northern fields, however, were unaffected and might even have still been cultivated.

A 1954 aerial photograph (PC-2M-58) shows unchanged fields. Sometime between 1954 and 1964 (aerial photograph PC-1EE-62) the fields become joined and there appears to be construction throughout the area. This seems to represent the earliest phase of the Wellman plant construction. Nevertheless, there is no evidence of the Bluff House or any of the Wellman Heights construction.

By 1969 the Wellman tract is intensively developed. To the west, Wellman Heights had been constructed, as had the Bluff House, situated on the eastern portion of the survey area. The aerial also reveals some form of ground modification in the area — perhaps the first indication of the sewage treatment plant under construction. Regardless, the ground is extensively scarred into the survey area (Figure 15). By 1975 the sewage treatment had been constructed and the remaining fields are largely in light woods or brush (PC-1KK-28). The 1981 aerial images reveal that the Wellman facilities have expanded. It also shows the initial sewage treatment facility (first observed on the 1975 aerial) in place, although the westward expansion, south of the study tract, has not been constructed.

Conclusions

This historic research indicates that the property was owned by Robert Witherspoon during the last half of the eighteenth century and it seems likely based on other accounts that the main settlement was situated on the edge of Lynches River, likely on the bluffs because of the protection they offered from flooding. It wasn't until the 1840s that the settlement moved away from the river and toward the Stage and Indian town roads. It's likely that the settlement stayed

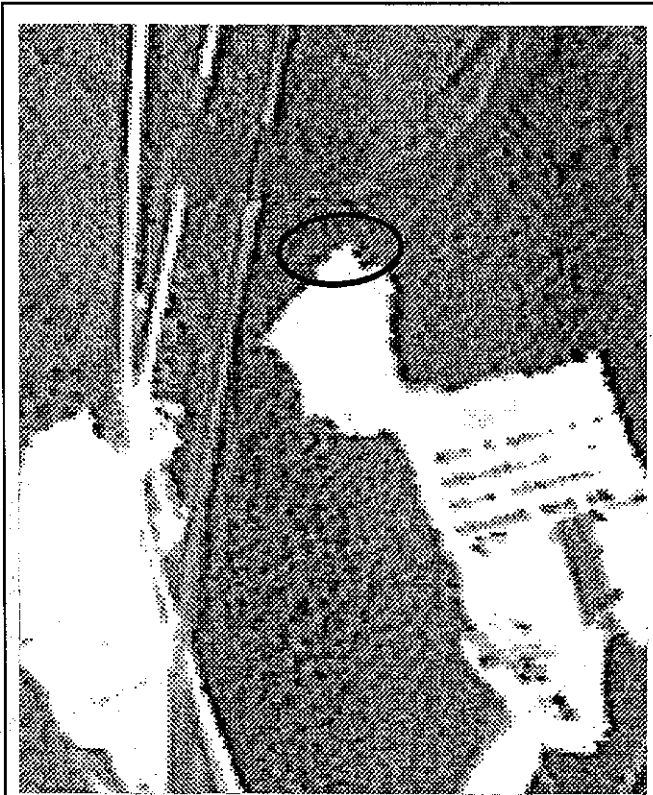


Figure 14. Portion of the 1949 aerial PC-1F-89 .

in this location throughout the remainder of the tract's history.

The original Witherspoon settlement may have included a separate structure for the ferry and tavern, although often all of various functions were combined under one roof. Nevertheless, it is likely that the Witherspoon plat, Mills' *Atlas*, and Wilson's map all show the original, bluff edge settlement. We have been unable to identify any nineteenth century plat or map which shows the location of the Johnson new settlement, although we suspect that the location was unchanged into the twentieth century and is shown on the 1921 soil map.

This research also reveals only one

reference to a cemetery. The mid-nineteenth century description places it on a bluff overlooking the river on the Johnson Tract — a 580 acre parcel which does include the one acre study tract. The account also indicates that it is the James family cemetery. While Eaddy (n.d.:81) places the John James "old place" on the head branches of Muddy Creek, the family was so large that additional family seats are possible. In addition, we know that Robert Witherspoon married into the James family, so there is a potential link. Nevertheless, there is no mention of a cemetery on any of the maps or plats identified, or in any of the property transactions. Of course, this does not preclude a cemetery from being present — it simply makes it impossible to either confirm or deny its location.



Figure 15. Portion of the 1969 aerial PC-1KK-28.

METHODS

Identification of the Survey Area

The survey area was not flagged at the time of our investigation, but was outlined for us by Mr. Brantley Green, Site Operations at Wellman. The eastern boundary was that of the existing sewage treatment plant and the southern boundary was the sewage treatment access road. As a precaution, we extended this boundary slightly to the south, beginning our shovel tests on the south side of the access road. The northern boundary was the edge of the bluff, essentially encompassing all of the level area, but excluding the area sloping toward the river. This boundary was also marked by a collapsed barbed wire fence. The western boundary was identified as an arbitrary north-south line drawn to encompass an area of about 1 acre, measuring 300 feet east-west by 150 feet north-south.

Archaeological Field Methods

The initially proposed field techniques involved the placement of shovel tests at 50 foot intervals along transects spaced 50 feet apart. All soil would be screened through $\frac{1}{4}$ inch mesh, with each test numbered sequentially by transect. Each test would measure about 1 foot square and would normally be taken to a depth of at least 2 feet or until clay 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 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 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.

A series of eight transects were established running north from the access road and numbered from west to east (Figure 16). For most of these the first one or two of the tests were in the grassed area adjacent to the access road. The remainder of the western transects were in the woods at the crest of the bluff. At the east end of the project all of the shovel tests fell into the area of the Bluff House. This house, built between 1964 and 1969, had been removed by the time of this survey. This left behind a fairly disturbed landscape including underground utilities (water, telephone, and a septic tank with drain field), extensive brick and concrete rubble from both the foundation and a rear porch or paved area, and rutting from equipment used to move the house (Figure 17).

Site locations were identified using a Global Positioning System for the recordation of the UTM's. The GPS positions were taken with a Garmin GPS 12XL rover and a Garmin GBR 21 Beacon Receiver. The Garmin 12XL tracks up to twelve satellites, each with a separate channel that is continuously being read. The benefit of parallel channel receivers is their improved sensitivity and ability to obtain and hold a satellite lock in difficult situations, such as in forests or urban environments where signal obstruction is a frequent problem. This was a vital consideration for the study area.

GPS accuracy is generally affected by a number of sources of potential error, including errors with satellite clocks, multipathing, and selective availability. Satellite clock errors can occur when the satellite's clock is off by as little as a millisecond, or when a slightly-askew orbit results in a distance error. Multipathing occurs when the signal bounces off trees, chainlink fences, or bodies of water. Multipathing

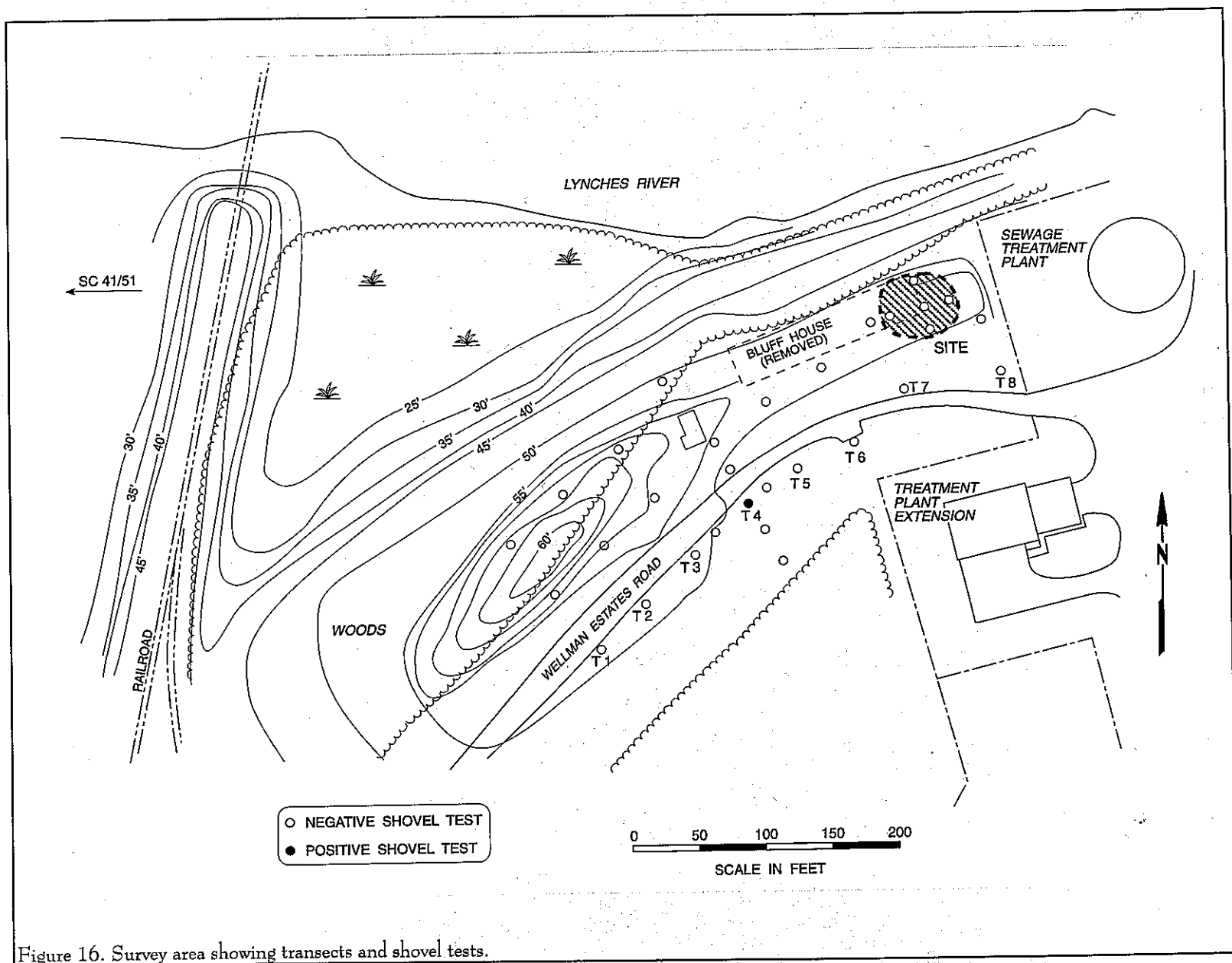


Figure 16. Survey area showing transects and shovel tests.

probably occurred occasionally during this survey, but we attempted to reduce the problem by taking readings in areas of minimal vegetation. The source of most extreme GPS errors is selective availability (SA), the deliberate mistiming of satellite signals by the Department of Defense. This degradation results in horizontal errors of up to 100 m 95% of the time, although the error may be as much as 300 m. However, SA had been turned off by the DOD and we discovered that 3D¹ and DGPS were identical.

Architectural Survey

As previously discussed, given the nature of this project, we elected to use a 0.5 mile area of potential effect (APE), which was calculated from the centerpoint of the survey area. The architectural survey would record buildings, sites, structures, and objects which appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which "have kept their integrity" (Anonymous n.d.:4).

For each identified resource a Statewide

¹ A basic requirement for GPS position accuracy is having a lock on at least four satellites, which places the receiver in 3D mode. This is critical — as an example, positions calculated with less than four satellites can have horizontal errors in excess of a mile, or over 1,600 m.



Figure 17. Area of the Bluff House after removal. View to the north-northwest.

Survey Site Form would be completed 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 survey was conducted by driving the public roads (typically county or state secondary roads) in the APE. For the study area there were very few. None were present north of Lynches River and this half of the APE falls entirely within the swamps associated with that drainage. To the south the majority of the APE fell within property on both sides of SC 41/51 which has already been entirely developed by Wellman. There were several small communities at the southwestern edge of the 0.5 mile APE, but none of the structures were 50 years old.

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 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 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.

The assemblage recovered is very small and the level of analysis is consistent with the nature of the collection. The only raw material identified is white quartz. This material is found throughout the Carolina Piedmont; the identified specimen appears to be a river cobble.

Debitage categories might include primary (defined as flakes with 90% or more cortex), secondary (defined as having less than 90% cortex), or interior (defined as having no cortex). These categories, widely used, are briefly explained by Yohe (1996:54-56; for further information see Blanton et al. 1986 or Oliver

et al. 1986).

The single prehistoric sherd recovered from the study is about ¼-inch in diameter and is classified as "small" (encompassing all sherds 1-inch or less in diameter).

The historic remains found follow the classifications proposed by Noel Hume (1978) and South (1977).

RESULTS OF SURVEY

Archaeological Sites

As a result of this study one archaeological site was identified in the survey tract. The site, designated 38FL380, is situated at the eastern edge of the tract in the area where the Bluff House was originally constructed and just west of the existing sewage treatment facility, north of the paved access road. The central UTM coordinates are E643778 N3745145 (NAD27 datum). The elevation of the site is about 55 feet above mean sea level (AMSL) and the Lynches River is situated about 200 feet to the north.

The site consists of a sparse scatter of historic material on the surface, exposed by the disturbance caused by previous activities in the area. These remains were scattered over an area measuring about 50 feet in diameter. We suspect that the site originally extended to the east, into the area which has now been cut down for the construction of the Johnsonville sewage treatment facility (see Figure 3).

The historic remains found on the surface include five animal bone fragments, six white salt glazed stoneware, one undecorated Chinese porcelain, five blue hand painted Chinese porcelains, one Delft body (no glaze remaining), one undecorated Delft, four blue hand painted Delft, one Westerwald stoneware, one pipe bowl fragment, and one fragment of "black" glass. The single prehistoric item is a quartz secondary flake, probably removed from a quartz river cobble.

The historic remains produce a mean ceramic date of 1744.5 — representing what must be an association with the earliest Witherspoon settlement on Lynches River (Table 2). In fact, no remains were encountered which likely post-date the ownership of Robert Witherspoon. There is no evidence of occupation by John Witherspoon, much less William Johnson.

The shovel tests conducted on the site, however, failed to yield any remains. In fact, they all revealed that the A horizon from this area of the bluff had been almost entirely removed, leaving only the red clay subsoil. Profiles in this area revealed at most 0.2 foot of very pale brown (10YR7/3) loamy sand overlying a yellowish-brown (10YR5/6) to red (10R5/8) sandy clay. This most closely resembles the Varina soils and suggests that upwards of 12 to 14 inches of soil may have been removed. Because of the extensive disturbance, absence of intact soil and exposure of red clay on the surface, and excellent surface visibility, no close intervals shovel tests were excavated in the site area.

This removal may also have resulted in the very narrow ridge parallel to the river, shown in Figure 18: It appears that the interior area has been sculpted or contoured to drop the road elevation down allowing easier access into the sewage treatment facility or perhaps to the Bluff House. This removal of A horizon soil may be what is seen in the 1969 aerial photograph (Figure 15).

In addition, the remains are so sparse that it seems likely that the core of the site was located elsewhere. Since there is no indication of additional substantial remains to the south or the west, and the

Table 2.
Mean Ceramic Date of Artifacts Recovered from 38FL380

| Ceramic | Date | Mean Date | | |
|----------------------------|-----------|-----------|------|-------------|
| | Range | (xi) | (fi) | (fi) x (xi) |
| Underglazed blue porcelain | 1660-1800 | 1730 | 5 | 8650 |
| Westerwald SW | 1700-1775 | 1738 | 1 | 1738 |
| White Saltglazed SW | 1740-1775 | 1758 | 6 | 10548 |
| Decorated Delft | 1600-1802 | 1750 | 4 | 7000 |
| Plain Delft | 1640-1800 | 1720 | 1 | 1720 |
| | | | 17 | 29656 |
| $29656 \div 17 = 1744.5$ | | | | |



Figure 18. View of 38FL380, note the contoured ridge dropping into the road on the right. View to the east.

slope to the north is far too steep, it seems likely that the main Witherspoon settlement was in the vicinity of the Johnsonville Sewage Treatment Plant and has already been destroyed. The few remains found under the Bluff House represent only the western edge of the site.

It is possible that the settlement might have been located further inland, but this seems unlikely based on our knowledge of the early eighteenth century settlement patterns. There was a clear preference for bluff or swamp edges — the area of the modern sewage treatment plant or Bluff House.

An early eighteenth century site in this part of South Carolina, potentially associated with a ferry crossing and tavern, could address a number of very significant research questions. There have been regrettably few such sites examined and most have been in the coastal area. Nevertheless, the data sets presented by this survey are very limited. Only kitchen remains

were encountered. We found no examples of architectural remains, such as nails, brick or mortar, or architectural hardware. In addition, the remains found were small and badly fragmented. Moreover, shovel testing suggests that the site has been extensively damaged, perhaps by the construction of the Bluff House or other activities conducted by Wellman, or perhaps by the construction of the existing sewage treatment facility. Regardless, it

appears that much, probably most, of this site has already been destroyed. The portion that remains failed to exhibit any in situ remains and very little intact A horizon soil. Based on this, it appears that the potential of this site to address significant research questions has been significantly compromised by twentieth century development.

We recommend this site as not eligible for inclusion on the National Register and recommend no additional management activities, pending the review and concurrence of the State Historic Preservation Office.

In addition to 38FL380, these investigations also recovered two isolated remains from Shovel Test 1 on Transect 4. These materials, designated 38FL00 were found about 150 feet southwest of 38FL380. Found in the one shovel test was a small unidentifiable prehistoric sherd and a clay tobacco pipe stem (bore diameter of 5/64-inch). The shovel test exhibited about

RESULTS OF SURVEY

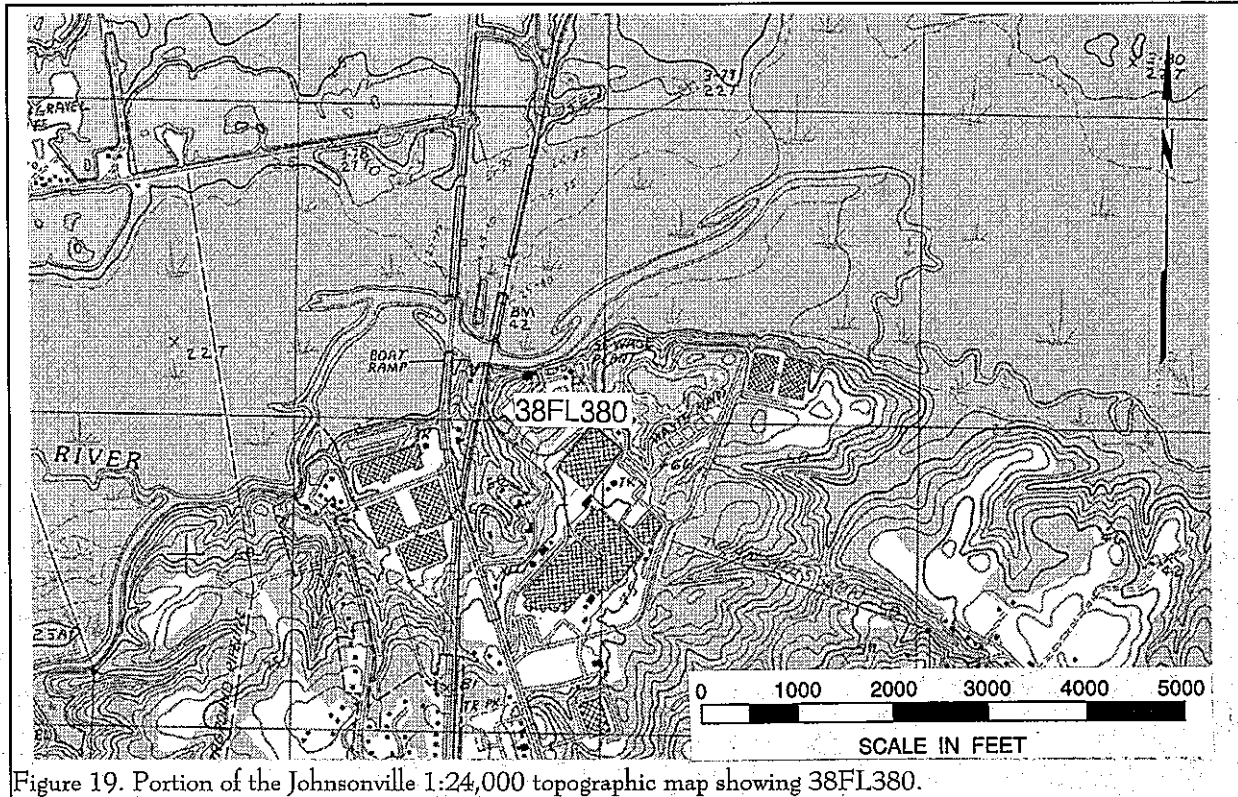


Figure 19. Portion of the Johnsonville 1:24,000 topographic map showing 38FL380.

0.1 foot of very dark brown (10YR2/2) sandy loam overlying 0.8 foot of very pale brown (10YR7/3) loamy sand. The artifacts were recovered from the upper 0.2 foot of this zone. Below 0.8 foot was a firm red clay subsoil. This profile suggests that about 0.8 foot of soil has been removed from this area — consistent with the findings at 38FL380.

Two additional shovel tests excavated at 25-foot intervals to the south were both negative, as were tests at 25-foot intervals to the north, east, and west.

These remains, while spatially separated from 38FL380, are likely associated with that occupation. Nevertheless, they are treated as an isolated find and are recommended not eligible.

Architectural Survey

As previously discussed, the APE for this project was identified as 0.5 mile in diameter. The northern half of the APE consisted of swamp and

wetlands associated with Lynch's River. The southern half consisted almost entirely of structures erected by Wellman since the early 1950s. None of these structures clearly predate 1950. There are a few structures, comprising a small neighborhood at the southwest edge of the APE, but none appear to be 50 years old.

As a result, no architectural sites were identified during this survey.

CONCLUSIONS

This study involved the examination of 1 acre at the north edge of the Wellman facility on the south bank of the Lynches River east of SC 41/51 and north of Johnsonville in Florence County. The one acre tract, proposed to be provided by Wellman for the expansion of the Johnsonville Sewage Treatment facility, was investigated through the excavation of 20 shovel tests on eight transects at 50 foot intervals.

The historic research included examination of both secondary and primary sources. The title search for the tract traced ownership back to the mid-eighteenth century, completing title to Robert Witherspoon and suggesting that the parcel was in the immediate vicinity of the original Witherspoon settlement. The research also documented that the ferry was likely about 1,000 feet west of the survey tract, in the vicinity of the original bridge and causeway across Lynches River and east of the modern SC 41/51 crossing. Remnants of the causeway are still visible on aerial photographs, although this survey did not explore that specific location.

In the mid-nineteenth century the property was owned by William Johnson and the settlement was moved from the bluff edge to the junction of the Indiantown and Stage roads, in the vicinity of modern SC 41/51. We believe that this settlement, which was likely used through the early twentieth century, was destroyed by the construction of the Wellman plant in the 1940s and 1950s.

The historic research also identified that a local history of the area identifies the general vicinity as the location of a James family graveyard. The connection between the James family and the owners of the tract was likely through Robert Witherspoon, who married Mary James. In spite of this, we found no further indications of the graveyard. It was not shown on any of the identified plats (although not all mentioned in documents could be found), nor was it shown on any of the maps (suggesting only that by the

time the area was mapped, the graveyard was no longer visible or recognizable). The original citation to the graveyard fails to make any reference to memorials, markers, or fences, suggesting that even by the middle of the nineteenth century the area was unrecognizable as a graveyard.

The field investigations found one site, 38FL380, and one isolated find, 38FL00, on the survey tract. Both are likely related and represent an early to mid-eighteenth century historic site characterized by generally high status ceramics. It is likely that this site represents the location of the original Witherspoon settlement. Most of the site, however, has been destroyed, either by cultivation, the construction (and subsequent removal) of the Bluff House, or by the extensive cutting conducted for the existing sewage treatment plant. The site and isolated find are both recommended not eligible for inclusion on the National Register since so little remains (at least in the survey area).

The field investigations failed, however, to find any evidence of the graveyard. Vegetation (especially white oak trees) in the survey area may date to about 1800, suggesting that this bluff edge was not cultivated or otherwise disturbed during the historic period. We must point out that finding a graveyard using these traditional archaeological techniques is unlikely. Moreover, the vague description of the cemetery suggests that it might be located anywhere along nearly a mile of bluff overlooking Lynches River. Most of this area has been extensively modified by roads, railroad, and modern construction. Given the information available, it is just as likely that the cemetery was under the sewage treatment plant as in the survey area.

The only practical way to confirm that the cemetery is not within the survey tract is to conduct controlled stripping in the search for grave stains. This would involve the use of a toothless backhoe bucket to remove the upper 0.5 to 1.0 foot soil which would be

subsequently shovel skimmed in the search for rectangular east-west oriented stains suggestive of coffins. The identification of such stains might indicate the presence of the cemetery, which could be verified through additional bioarchaeological investigations. If a cemetery is, in fact, present, Wellman would need to seek permission for the removal of graves from the Town of Johnsonville and/or Florence County under Section 27-43-10 et seq. of the South Carolina Code of Laws (Removal of Abandoned Cemeteries). If no evidence of burials are encountered in the stripping operation then it is likely that the graveyard is, or was, located elsewhere.

It is our opinion that this additional investigative step is prudent and should be undertaken. However, in so far as this represents an unusual survey activity, we recommend that Wellman seek the impartial and unbiased opinion of the State Historic Preservation Office concerning the need for this additional work.

Regardless, it is always possible that archaeological remains may be encountered in the project area 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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