



Phase I Archaeological Survey
Adrian Sand & Clay Mine
Horry County, South Carolina
S&ME Project No. 24610069
SHPO Project No. 24-RL0024

PREPARED FOR:

Adrian Sand, LLC
3530 Highway 501 West
Conway, SC 29526

PREPARED BY:

S&ME, Inc.
134 Suber Road
Columbia, SC 29210

March 2024



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A handwritten signature in black ink that reads "Kim Nagle".

Kimberly Nagle, M.S., RPA
Principal Investigator

Authors: Paul Connell, B.A. and Heather Carpini, M.A.

March 2024



Management Summary

On behalf of Adrian Sand, LLC, S&ME, Inc. (S&ME) has completed a Phase I archaeological survey of approximately 54.1 acres associated with the Adrian Sand and Clay Mine project area in Horry County, South Carolina (Figures 1.1 and 1.2). The project area is located north of Chow Lane in the community of Adrian and approximately 8.1 miles northeast of the city center of Conway.

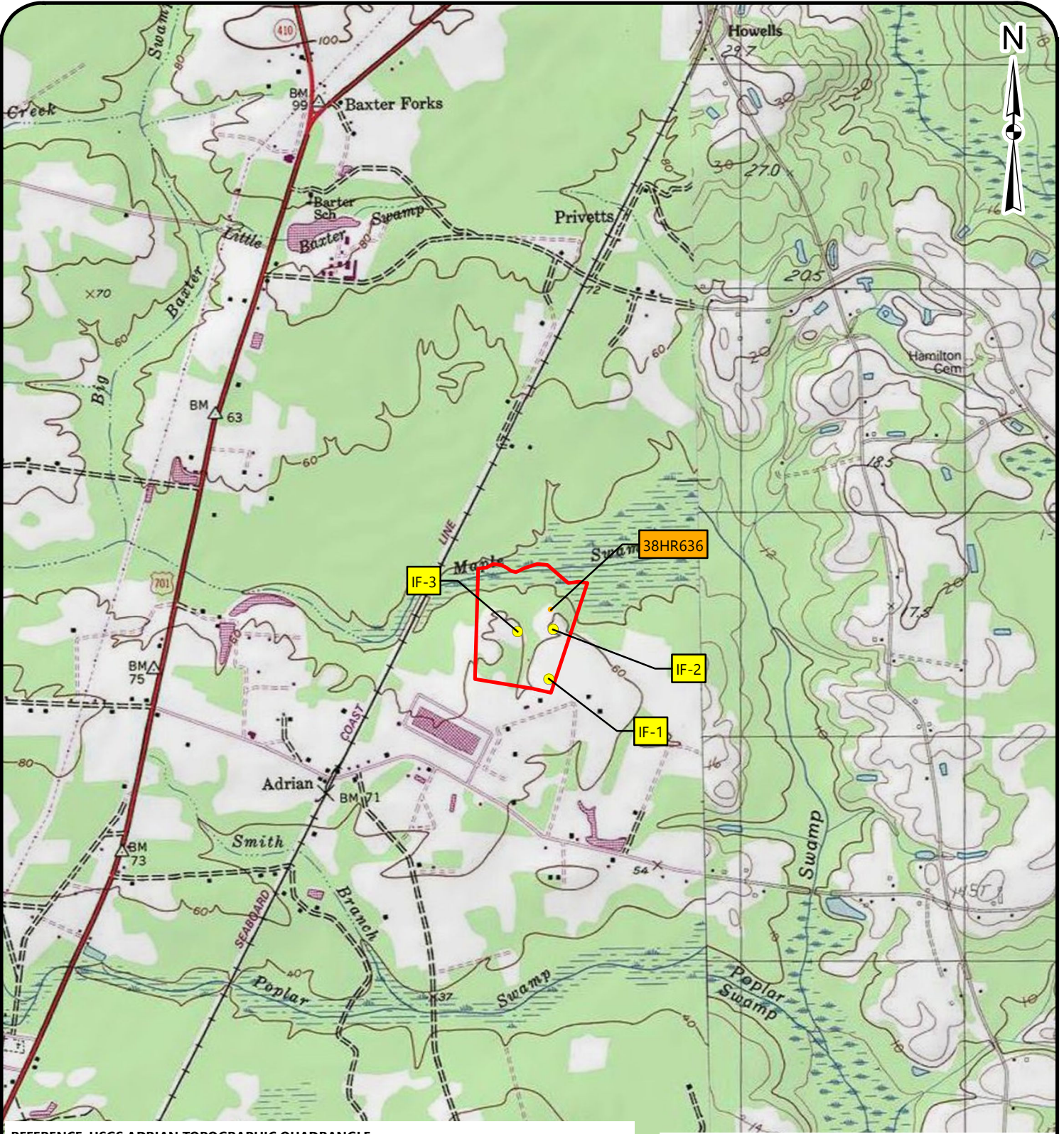
A mining permit application was provided for comment to the South Carolina State Historic Preservation Office (SHPO) by the Department of Health and Environmental Control's Division of Mining and Solid Waste Management (DHEC-MSWM). In a letter dated January 31, 2024, the SHPO recommended a Phase I archaeological survey of the undisturbed, non-inundated uplands along the northern and western edges of Maple Swamp due to their high probability for containing prehistoric archaeological sites (Appendix A). This work was carried out in response to the SHPO letter and in general accordance with S&ME Proposal Number 24610069, dated February 6, 2024.

Fieldwork for the project was conducted on February 20 and 21, 2024. This work included the excavation of 84 shovel tests and the photo documentation of the project area. As a result of the survey, one new archaeological site (38HR636) and three isolated finds (IF-1 through IF-3) were identified and recorded (Figures 1.1 and 1.2; Table 1.1). The archaeological site and three isolated finds are recommended not eligible for inclusion in the National Register of Historic Places (NRHP). Based on the results of the Phase I archaeological survey, it is S&ME's opinion that no additional archaeological work is recommended for the project as it is currently proposed.

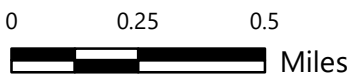
Table 1.1 Summary of archaeological sites identified during the investigation.

Resource	Description	NRHP Eligibility	Recommendation
38HR636	Prehistoric ceramic scatter	Not Eligible	No Further Work
IF-1	Brick isolate	Not Eligible	No Further Work
IF-2	Prehistoric lithic isolate	Not Eligible	No Further Work
IF-3	Prehistoric lithic isolate	Not Eligible	No Further Work

Drawing Path: T:\Columbia-1610\Projects\2024\24610069_Adrian_Sand, LLC_Adrian Mine Ph I_Archaeology_Conway SC\ENV\GIS\Figures\Figure 1-1_Topographic Map.mxd plotted by KNagle 03-07-2024



REFERENCE: USGS ADRIAN TOPOGRAPHIC QUADRANGLE
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- Legend**
- Newly Recorded Isolated Finds
 - Project Area
 - Newly Recorded Archaeological Site



Topographic Map

ADRIAN SAND & CLAY MINE
 HORRY COUNTY, SOUTH CAROLINA

DATE:
 3-7-24
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FIGURE NO.

1.1

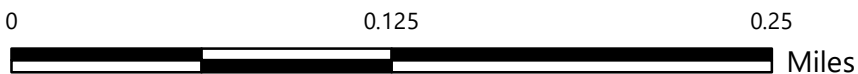
Drawing Path: T:\Columbia-1610\Projects\2024\24610069_Adrian_Sand, LLC_Adrian Mine Ph I Archaeology_Conway SC\ENV\GIS\Figures\Figure 1-2 Aerial Map.mxd plotted by KNagle 03-07-2024



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Legend

- Newly Recorded Isolated Finds
- Project Area
- Newly Recorded Archaeological Site



Aerial Map

ADRIAN SAND & CLAY MINE
HORRY COUNTY, SOUTH CAROLINA

DATE:
3-7-24
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FIGURE NO.
1.2



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1.0 Introduction

On behalf of Adrian Sand, LLC, S&ME has completed a Phase I archaeological survey of approximately 54.1 acres associated with the Adrian Sand and Clay Mine project area in Horry County, South Carolina (Figures 1.1 and 1.2). The project area is located north of Chow Lane in the community of Adrian and approximately 8.1 miles northeast of the city center of Conway.

Fieldwork for the project was conducted on February 20 and 21, 2024, by Field Director Paul Connell, B.A, and Crew Chief Amber Wellings, B.A under the supervision of Principal Archaeologist Kimberly Nagle, M.S., RPA. Mr. Connell wrote the report. Ms. Wellings performed artifact analysis. Ms. Nagle senior reviewed the report. Graphics and mapping were completed by Mr. Connell, Ms. Nagle, and Principal Architectural Historian Heather Carpini, M.A. Ms. Nagle senior reviewed the report.

This report has been prepared in compliance with the National Historic Preservation Act of 1966, as amended; the Archaeological and Historic Preservation Act of 1979; procedures for the Protection of Historic Properties (36 CFR Part 800); and 36 CFR Parts 60 through 79, as appropriate. Field investigations and the technical report meet the qualifications specified in the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register [FR] 48:44716–44742), and the *South Carolina Standards and Guidelines for Archaeological Investigations* (COSCAPA et al. 2013). Supervisory personnel meet the Secretary of the Interior's Professional Qualifications Standards set forth in 36 CFR Part 61.



2.0 Environmental Setting

2.1 Location

The project area is located in the central portion of Horry County and is approximately 8.1 miles northeast of the city center of Conway. The project area is bound by a Chow Lane to the south, wooded area to the west, and Maple Swamp to the north and a residential area to the east. Horry County, which covers approximately 1,254 square miles, is bounded by the Atlantic Ocean to the east, Dillon County to the north west, Columbus County, North Carolina to the northeast, Brunswick County, North Carolina to the east, Georgetown County to the southwest, and Marion County to the west.

2.2 Geology and Topography

The project area is located within the Outer Coastal Plain physiographic province, which is characterized as generally flat and featureless (Kovacik and Winberry 1989). Topography in the project area ranges from 40 ft above mean sea level, (AMSL) in the northernmost portion of the project area along Maple Swamp to 60 ft AMSL in the central portion of the project area (Figure 1.1).

2.3 Hydrology

The project area is located within the Pee Dee River drainage basin. Maple Swamp is closest permanent water source to the project area and is located in the northernmost portion of the project area. Maple Swamp flows east and south from the project area into Kingston Lake, which flows west and south into the Waccamaw River approximately 8.2 miles from the project area. The Waccamaw River flows south joining the Pee Dee River to form Winyah Bay, which flows into the Atlantic Ocean.

2.4 Soils

The project area is located in the Yonges-Meggett soil association described as poorly drained soils that have a loamy surface and a clayey subsoil and the Pocomoke-Echaw-Centenary soil association described as very poorly drained and moderately well drained soils that have a loamy or sandy surface layer and a loamy or sandy subsoil. (USDA 1984). There are six soil types located within the project area (Figure 2.1); their descriptions can be found in Table 2.1 (USDA Web Soil Survey, Accessed February 16, 2024).

Table 2.1. Specific soil types found within the intensive survey areas.

Soil Name	Type	Drainage	Location	Slope	% in Project Area
Blanton	Sand	Moderately well drained	Flats	0–6%	18.6%
Hobcaw	Fine sandy loam	Very poorly drained	Flood plains	0%	23.2%
Kenansville	Fine sand	Well drained	Marine terraces	0–6%	8.0%
Nankin	Fine sandy loam	Well drained	Marine terraces	2–6%	17.0%
Osier	Loamy sand	Poorly drained	Flood plains	0%	0.5%
Yonges	Fine sandy loam	Poorly drained	Flats	0%	32.7%







Drawing Path: T:\Columbia-1610\Projects\2024\24610069_Adrian_Sand, LLC_Adrian Mine Ph I_Archaeology_Conway SC\ENV\GIS\Figures\Figure 2-1 Soils.mxd plotted by KNagle 03-07-2024



Legend

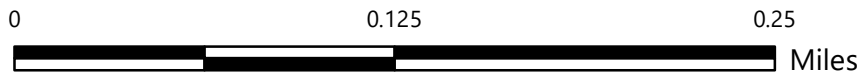
 Project Area

Soil Types

-  Blanton sand, 0-6%
-  Hobcaw fine sandy loam
-  Kenansville fine sand, 0-6%
-  Nankin fine sandy loam, 2-6%
-  Osier loamy sand
-  Yonges fine sandy loam

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Soils Map

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FIGURE NO.

2.1

2.5 Climate and Vegetation

The climate of Horry County is moderate with very warm summers and mild winters. Precipitation averages about 51 inches per year and the growing season is 246 days, so farmers have a long season to grow crops (USDA 1986). Vegetation within the project area consists primarily of fallow fields, wooded areas, and secondary growth vegetation; a pond and standing water were present within portions of the project area; and disturbances include clear cutting push piles, trash dumps, and timber piles (Figures 2.2–2.10).



Figure 2.2. View of fallow field within project area, facing south.



Figure 2.3. View of an area of mixed pines and hardwoods in the project area, facing west.



Figure 2.4. View of an area of secondary growth/wetland vegetation in the project area, facing west.



Figure 2.5. View of pond in western portion of the project area, facing west.



Figure 2.6. View of standing water in project area, facing northwest.



Figure 2.7. View of clear cut area in the project area, facing northeast.



Figure 2.8. View of push pile within the project area, facing northwest.



Figure 2.9. View of modern trash in the project area, facing northeast.



Figure 2.10. Timber piles in the central portion of the project area, facing north.



3.0 Cultural Context

The cultural context of the region is reviewed below for two purposes: first, to outline previous research in the region and the nature of historic and prehistoric resources that might be expected in the project area and second, to provide a comparative framework in which to place resources identified within the project area and APE in order to better understand their potential significance and NRHP eligibility. The cultural context of the project area, for the purposes of the Cultural Resource Survey, includes the prehistoric record and the historic past, which are discussed in this section of the report.

3.1 Prehistoric Context

Most of North America has been occupied by humans since at least 13,000 radiocarbon years before present (B.P.) (Anderson and O'Steen 1992; Bense 1994); however, a date for the initial settlement of North America is part of an ongoing debate (e.g., Adovasio and Pedler 1996; Dillehay and Collins 1988). In South Carolina, archaeologists divide the past 13,500 years into four broad prehistoric periods based on changes in technology, social structure, subsistence, environmental conditions, and presumed ideology. Each of these periods is discussed below.

3.1.1 *Paleoindian Period (ca. 13,500–10,000 B.P.)*

When humans first arrived in North America is a subject of great debate, with suggested dates going back more than 35,000 years (Dillehay and Collins 1988; Goodyear 2005). Evidence for pre-Clovis occupations are posited for Meadowcroft Rockshelter in Pennsylvania, the Cactus Hill and Saltville sites in Virginia, and at the Topper site in South Carolina, although this evidence is not widely accepted and has not been validated (Adovasio and Pedler 1996; Dillehay and Collins 1988; Goodyear 2005). A number of sites providing possible evidence for a presence in the New World dating between 15,000 and 13,500 years ago have been discovered. Although far from numerous, these sites are scattered across North and South America, including Alaska, Florida, Oregon, Wisconsin, and southern Chile. Despite this, the earliest widely accepted dates for occupation in the Southeastern United States are at the end of the Pleistocene, approximately 13,000 years ago (Anderson and O'Steen 1992; Bense 1994).

Unfortunately, most data about Paleoindian lifeways in the Southeast comes from surface finds of projectile points rather than from controlled excavations. However, the Tree House site (38LX531) located along the Saluda River near Columbia, has shed light on Paleoindian lifeways in the area. The Tree House site is a multi-component, stratified site containing occupations ranging from the Early Paleoindian to Mississippian periods (Nagle and Green 2010). Evidence from the site, which yielded an *in-situ* Clovis point, indicated short-term use by relatively mobile populations. The tools found at the Tree House site could have been used for hunting and butchering, and it is likely that the site was used as a hunting camp during the Early and Late Paleoindian subperiods. Lithic raw materials associated with the Paleoindian component tended to be higher quality stone such as Black Mingo chert, Coastal Plain chert, and crystal quartz, although lesser quality local materials such as quartz were used as well (Nagle and Green 2010:264).

The limited information we have for the Paleoindian Period suggests the earliest Native Americans had a mixed subsistence strategy based on hunting (or scavenging) of megafauna and smaller game combined with the foraging of wild plant foods. Groups are thought to have consisted of small, highly transient bands made up of several nuclear and/or extended families. Paleoindian artifacts have been found in both riverine and inter-riverine contexts (Charles and Michie 1992:193). Paleoindian projectile points appear to be concentrated along major

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rivers near the Fall Line and in the Coastal Plain, although it is almost certain that many additional sites along the coast have been inundated by the rise of sea level that has occurred since that time (Anderson et al. 1992; Anderson and Sassaman 1996).

Paleoindian tools are typically well-made and manufactured from high-quality, cryptocrystalline rock such as Coastal Plain and Ridge and Valley chert, as well as Piedmont metavolcanics such as rhyolite (Goodyear 1979). Paleoindians traveled long distances to acquire these desirable raw materials and it is likely that particularly favored quarries were included in seasonal rounds, allowing them to replenish their stock of raw material on an annual basis.

The most readily recognizable artifact from the early Paleoindian Period is the Clovis point, which is a fluted, lanceolate-shaped spear point. Clovis points, first identified from a site in New Mexico, have been found across the nation, although they tend to be clustered in the eastern United States (Anderson and Sassaman 1996:222). Paleoindian artifact assemblages typically consist of diagnostic lanceolate projectile points, scrapers, graters, unifacial and bifacial knives, and burins. Projectile point types include fluted and unfluted forms, such as Clovis, Cumberland, Suwanee, Quad, and Dalton (Anderson et al. 1992; Justice 1987:17–43).

In South Carolina, the Clovis subperiod is generally thought to date from 11,500 to 11,000 B.P. (Sassaman et al. 1990:8). Recent radiocarbon data indicate that a more accurate time frame for the Clovis period in North America may be 11,050 to 10,800 B.P. (Waters and Stafford 2007); however, this has yet to gain widespread acceptance. Suwanee points, which are slightly smaller than Clovis points, are dated from 11,000 to 10,500 B.P. This is followed by Dalton points, which are found throughout the Southeast and date from about 10,500 to 9900 B.P.

3.1.2 *Archaic Period (ca. 10,000–3000 B.P.)*

Major environmental changes at the terminal end of the Pleistocene led to changes in human settlement patterns, subsistence strategies, and technology. As the climate warmed and the megafauna became extinct, population size increased and there was a simultaneous decrease in territory size and settlement range. Much of the Southeast during the early part of this period consisted of a mixed oak-hickory forest. Later, during the Hypsithermal interval between 8000 and 4000 B.P., southern pine communities became more prevalent in the interriverine uplands, and extensive riverine swamps were formed (Anderson et al. 1996a; Delcourt and Delcourt 1985).

The Archaic was characterized by a long postglacial adaptation where technology became more diversified, including the introduction of ground stone woodworking and plant processing tools, carved and polished stone bowls, atlatl weights, stone pipes, and beads (Benson 2006:35). There was also a shift in lithic production toward smaller projectile points, possibly reflecting a change in hunting patterns from large to smaller game (Anderson and Joseph 1988:102; Goodyear 1974, 1982).

The Archaic Period is typically divided into three subperiods: Early Archaic (10,000–8000 B.P.), Middle Archaic (8000–5000 B.P.), and Late Archaic (5000–3000 B.P.). Each of these subperiods appears to have been lengthy, and the inhabitants of each were successful in adapting contemporary technology to prevailing climatic and environmental conditions of the time. Settlement patterns reflected a fairly high degree of mobility, making use of seasonally available resources in the changing environment across different areas of the Southeast. People relied

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on large animals and wild plant resources for food. Group size gradually increased during this period, culminating in a fairly complex and populous society by the Late Archaic.

Early Archaic (ca. 10,000–8000 B.P.)

The Early Archaic subperiod reflects a continuation of the semi-nomadic hunting and gathering lifestyle of the Paleoindian groups, although there was a focus on modern game species rather than megafauna, which had become extinct by this time. Changes during this subperiod include a population increase (Goodyear et al. 1989) and a shift in settlement patterns, with people concentrated in temporary encampments along river floodplains.

In the Carolinas and Georgia, various models of Early Archaic social organization and settlement patterns have been proposed (Anderson et al. 1992; Anderson and Hanson 1988). In general, these models hypothesize that Early Archaic societies were organized into small, band-sized communities of 25 to 50 people whose main territory surrounded a portion of a major drainage (Anderson and Hanson 1988). During the early spring, groups would forage in the lower Coastal Plain and then move inland to temporary camps in the Piedmont and mountains during the summer and early fall. In the late fall and winter, these bands would aggregate into larger, logistically provisioned base camps in the upper Coastal Plain, near the Fall Line. It is believed that group movements would have been circumscribed within major river drainages, and that movement across drainages into the territories of other bands was limited. At a more complex level of organization, bands were believed to be organized into larger “macrobands” of 500 to 1,500 people that periodically gathered at strategic locations near the Fall Line for communal food harvesting, rituals, and the exchange of mates and information.

Daniel (1998, 2001) has argued that access to high quality lithic material has been an under-appreciated component of Early Archaic settlement strategies. He presents compelling evidence that groups were moving between major drainages just as easily as they were moving along them. In contrast to earlier models, group movements were tethered to stone quarries rather than to specific drainages. Regardless of which model is correct, settlement patterns generally reflect a relatively high degree of mobility, making use of seasonally available resources such as nuts, migratory waterfowl, and white-tailed deer.

Diagnostic markers of the Early Archaic subperiod include a variety of side and corner notched projectile point types, including Hardaway, Kirk, Palmer, Taylor, and Big Sandy, and later bifurcate base projectile point types such as Lecroy, McCorkle, and St. Albans. Additional tools of the Early Archaic subperiod include end scrapers, side scrapers, graters, microliths, and adzes (Sassaman et al. 2002), and likely perishable items such as traps, snares, nets, and basketry. Direct evidence of Early Archaic basketry and woven fiber bags was found at the Icehouse Bottom site in the mountains of eastern Tennessee (Chapman and Adovasio 1977). There was also a greater reliance on local lithic sources than there was during the preceding Paleoindian Period and tools are sometimes made of lesser quality materials (Goodyear et al. 1989:38–39).

Middle Archaic (ca. 8000–5000 B.P.)

The beginning of the Middle Archaic subperiod coincides with the start of the Altithermal (a.k.a. Hypsithermal), a significant warming trend where pine forests replaced the oak-hickory dominated forests of the preceding periods. It was during this time that extensive riverine swamps were formed, and the river and estuary systems took their modern configuration. These environmental changes caused changes in human behavior as well (Sassaman and Anderson 1995:10). However, the relationship between climatic, environmental, and cultural

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change during this subperiod is still poorly understood (Sassaman and Anderson 1995:5–14). It is assumed that population density increased during the Middle Archaic, but small hunting and gathering bands probably still formed the primary social and economic units. Larger and more intensively occupied sites tend to occur near rivers, especially within the Coastal Plain, and numerous small, upland lithic scatters dot the interriverine landscape. Subsistence was presumably based on a variety of resources such as white-tail deer, nuts, fish, and migratory birds; however, shellfish do not seem to have been an important resource at this time.

In contrast to both the Early and Late Archaic, there seems to be a wider geographic distribution and a higher density of Middle Archaic sites in the region, suggesting that a mid-Holocene population increase may have taken place. This population increase should be viewed with caution, however, as it is primarily based on the distribution of Morrow Mountain points. Morphological correlates of Morrow Mountain points (e.g., Rossville, [Ritchie 1961]), have been found in other regions dating to the Late Archaic and Early Woodland subperiods. Thus, Morrow Mountain-like points could span a much longer period than is currently believed. Anderson also argues against a substantial population increase, stating “site concentrations in Georgia and the Carolinas are ... unlikely to represent the presence of dense populations, but instead reflect the remains of small, organizationally uncomplicated groups ranging widely over the landscape” (Anderson 1996:164). Regardless of whether there was a population increase, small, mobile hunting and gathering bands probably still formed the core social and economic unit in South Carolina during the Middle Archaic.

During the Middle Archaic, ground stone tools such as axes, atlatl weights, and grinding stones became more common, while flaked stone tool styles became less diverse and tended to be made of locally available raw materials such as quartz (Blanton and Sassaman 1989). In addition to Morrow Mountain points, diagnostic point types of the Middle Archaic include Stanly, Guilford, Halifax, and Brier Creek (Blanton and Sassaman 1989; Coe 1964). Middle Archaic tools tend to be expediently manufactured and have a more rudimentary appearance than those found during the preceding Paleoindian and Early Archaic.

Late Archaic (5000–3000 B.P.)

The Late Archaic is marked by a number of key developments. There was an increased focus on riverine locations and resources (e.g., shellfish), small-scale horticulture was adopted, and ceramic and soapstone vessel technology was introduced. These changes allowed humans to occupy strategic locations for longer periods of time. In the spring and summer, Late Archaic people gathered large amounts of shellfish. It is not known why this productive resource was not exploited earlier, but one explanation is that the environmental conditions conducive to the formation of shellfish beds were not in place until the Late Archaic. Other resources that would have been exploited in the spring and summer months include fish, white-tailed deer, small mammals, birds, and turtles (House and Ballenger 1976; Stoltman 1974). During the late fall and winter, populations likely subsisted on white-tailed deer, turkey, and nuts such as hickory and acorn. It is also possible that plants such as cucurbita (squash and gourds), sunflower, sumpweed, and chenopod were being cultivated on a small-scale basis.

The most common diagnostic biface of this subperiod is the Savannah River Stemmed projectile point (Coe 1964), a broad-bladed stemmed point found under a variety of names from Florida to Canada. There are also smaller variants of Savannah River points, including Otarre Stemmed and Small Savannah River points that date to the transitional Late Archaic/Early Woodland. Other artifacts include soapstone cooking discs and netsinkers, shell tools, grooved axes, and worked bone.

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The earliest pottery in the New World comes from the Savannah River Valley and coastal regions of South Carolina and Georgia. Both Stallings Island and Thom's Creek pottery date from about 4500–3000 B.P. and have a wide variety of surface treatments including plain, punctuated, and incised designs (Sassaman et al. 1990). For a long time, it was believed that fiber-tempered Stallings Island pottery was the oldest pottery in the region (perhaps in the New World), and that sand-tempered Thom's Creek wares appeared a few centuries later (Sassaman 1993). Recent work at several shell ring sites on the coast, however, has demonstrated that the two types are contemporaneous, with Thom's Creek possibly even predating Stallings Island along the coast (Heide and Russo 2003; Russo and Heide 2003; Saunders and Russo 2002).

3.1.3 *Woodland Period (ca. 3000–1000 B.P.)*

Like the preceding Archaic Period, the Woodland is conventionally divided into three subperiods—Early, Middle, and Late—based on technological changes, increasing social complexity, and population increase. Among the changes that occurred during this period was the widespread adoption of ceramic technology, an increased reliance on native plant horticulture, and a more sedentary lifestyle. Ceramics became more refined and regionally differentiated, particularly with regard to temper. There was also an increase in sociopolitical and religious interactions, as evidenced by an increased use of burial mounds, increased ceremonialism, and expanded trade networks (Anderson and Mainfort 2002).

Early Woodland (3000–2300 B.P.)

By 3000 B.P., pottery was used throughout most of the Southeast and there was a proliferation of pottery styles in the Carolinas and Georgia. In the Coastal Plain of South Carolina, Refuge phase ceramics are indicative of the Early Woodland subperiod. This pottery is characterized by coarse sand-tempered wares with surface treatments that include simple stamping, punctate, plain, and dentate stamping (DePratter 1979; Sassaman 1993; Williams 1968). Diagnostic bifaces of this subperiod include Otarre, Swannanoa, and Gary stemmed points, as well as Badin Crude Triangular points (Anderson and Joseph 1988; Coe 1964:123–124, Sassaman et al. 1990).

Subsistence data indicate a continuation of the Late Archaic diet, including white-tailed deer, bear, small mammals, reptiles, and fish (Hanson and DePratter 1985; Marrinan 1975). One major difference, however, is that shellfish do not appear to have been an important part of the diet. Early Woodland sites tend to be small, seasonal camps located away from the marshes where shellfish are found. This may be a result of rising sea levels, which inundated the shellfish beds and possibly any sites located along the coast and tidal marshes (Trinkley 1990:12).

Middle Woodland (2300–1500 B.P.)

Middle Woodland pottery in coastal areas of South Carolina, Georgia, and Florida is represented by the Deptford pottery series, which dates from about 2800–1500 B.P. This coarse sand/grit-tempered pottery represents a continuation of the Early Woodland Refuge series and is often found in association with Refuge pottery. Surface treatments include plain, check stamped, linear check stamped, cordmarked, and simple stamped applications (DePratter 1979; Waring and Holder 1968). Other artifacts found in Middle Woodland assemblages include clay platform pipes, ground and polished stone ornaments, engraved shell and bone, bone tools, bifacial knives, and sharks tooth pendants (Sassaman et al. 1990:96; Waring and Holder 1968).

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Middle Woodland occupations in South Carolina are not well documented and settlement models tend to follow Milanich's "seasonal transhumance" model for the Deptford period in Florida (Milanich 1971; Milanich and Fairbanks 1980), which posits that, in the winter and summer months, groups moved to the coast and lived in small, semi-permanent villages adjacent to tidal creeks and marshes. From these locations they would fish, gather shellfish, and exploit a variety of other marine and estuarine resources. In the fall, small groups moved inland to terraces adjacent to swamps to gather nuts and hunt white-tailed deer (Cantley and Cable 2002:29; Trinkley 1989:78-79). Horticulture is thought to have increased in importance during this period, with plants such as maygrass, goosefoot, knotweed, and sunflower being harvested. Unfortunately, evidence for Middle Woodland horticulture in South Carolina is still lacking.

In contrast to Milanich's model, evidence from the G.S. Lewis West site (38AK228) in Aiken County (Sassaman et al. 1990:96-98) suggests a year-round settlement, occupied by a small resident population. Over 500 features, including pits, posts, human burials, and dog burials were found at the site. White-tail deer was the primary food source, with alligator, turtle, fish, turkey, freshwater mussels, hickory, and acorns also found (Sassaman et al. 1990:96). Based on the evidence at G.S. Lewis and surrounding sites at the Savannah River Site, Sassaman et al. (1990:98) suggest a pattern where small villages were occupied on a year-round basis, with smaller outlying sites (e.g., 38LX5) representing seasonally occupied logistical camps.

Late Woodland (1500–1000 B.P.)

Very little is known about the Late Woodland subperiod in South Carolina. In the Coastal Plain, there is a confusing proliferation of ceramic types for the Late Woodland subperiod, including Wilmington, Hanover, Mount Pleasant, and Cape Fear (Anderson et al. 1996b). Ceramics were tempered with either sand or grog and contain cordmarked or fabric-impressed surface treatments. Grog-tempered Wilmington cordmarked pottery is found more frequently on the southern coast, whereas Hanover grog-tempered fabric impressed pottery is found more often to the north, although there is substantial overlap between the two (DePratter 1979; Herbert and Mathis 1996:149). As the two series are very similar, Anderson et al. (1996b:264) recommend combining them both into the Wilmington series.

Cape Fear pottery is nearly identical to the Hanover series, but is tempered with sand rather than grog. Also, cordmarking seems to be more common on Hanover sherds, while fabric-impressing is more common on the Cape Fear pottery (Herbert and Mathis 1996). Cape Fear ceramics have been found at the Mattassee Lake site (38BK226), with dates ranging from 1240–1430 B.P. (Anderson et al. 1982:354), while similar ceramics have been found at the Sandy Island site (38GE469) with dates ranging from 820–1180 B.P. (Clement et al. 2001:30), and at the Tidewater site (38HR254) dating from 860–1020 B.P. (Southerlin et al. 1997:75–77).

Toward the latter end of the Late Woodland and incipient Mississippian periods, ceramic assemblages in coastal South Carolina show more localized developments. St. Catherines pottery is a fine grog-tempered ware found along the lower coast, with surface treatments that include cordmarked, net-impressed, plain, and burnished plain (Anderson et al. 1996a; DePratter 1979). Along the upper coast and interior Coastal Plain, Santee Simple Stamped is a transitional Late Woodland/Early Mississippian type, with dates from Mattassee Lake ranging from 610–1140 B.P. (Anderson et al. 1982:354).

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3.1.4 *Mississippian Period (ca. 1000–350 B.P.)*

The Mississippian Period saw dramatic changes across most of the Southeastern United States. Mississippian societies were complex sociopolitical entities that were based at mound centers, usually located in the floodplains along major river systems. The flat-topped platform mounds served as both the literal and symbolic manifestation of a complex sociopolitical and religious system that linked chiefdoms across a broad network, stretching from the Southeastern Atlantic Coast to Oklahoma (Spiro Mounds) in the west and Wisconsin (Aztalan) to the north. Mound centers were surrounded by outlying villages, hamlets, and farmsteads that provided tribute and services to the chief. While Mississippian subsistence was focused to a large extent on intensive maize agriculture, the hunting and gathering of aquatic and terrestrial resources supplemented Mississippian diets (Anderson 1994).

Mound centers have been found along most major river systems in the Southeast and South Carolina is no exception. Major Mississippian mounds in the region include the Belmont and Mulberry sites along the Wateree River in central South Carolina; Santee/Fort Watson/Scotts Lake on the Santee River; the Irene site near Savannah; Hollywood, Lawton, Red Lake, and Mason’s Plantation in the central Savannah River Valley; and Town Creek along the Pee Dee River in North Carolina (Anderson 1994). There also seems to have been a substantial Mississippian presence on the coast near Beaufort that includes the Green Shell Enclosure, Indian Hill, Little Barnwell Island, and Altamaha (Green and Bates 2003).

Artifacts of the Mississippian Period include small triangular projectile points, ground stone tools, and polished stone objects. In addition, various ceremonial items were manufactured from stone, bone, shell, mica, and copper that were used as symbolic markers of chiefly power and status. Mississippian ceramic styles were also different from the preceding Woodland Period and are regionally variable. Along the southern South Carolina coast and into Georgia, the Savannah series is the dominant pottery type (DePratter 1979; Williams 1968); however, along the northern coast Late Woodland styles appear to extend into the Middle Mississippian subperiod. Investigations at site 38HR243 along the Little River Neck in Horry County yielded radiocarbon dates of 750±80 B.P. and 790±80 B.P. from a pit feature containing shell-scraped, cordmarked, check stamped, and fabric-impressed pottery (Reid et al. 1999). In contrast, site 38HR254, located less than 600 m to the north (Southerlin et al. 1997), yielded slightly later dates of 660±60 B.P. and 810±60 B.P. (shell, calibrated to A.D. 1430–1645) from a shell-filled pit containing curvilinear complicated stamped pottery. At site 38GE32 along the Sampit River in Georgetown County, Mississippian complicated stamped, check stamped, and textile-impressed pottery were found in association with a feature yielding a human cremation (Green and Holland 2004).

3.2 Historic Context

The history of South Carolina has been ably detailed by Edgar (1998). Except where noted, the following discussion relies on his account of the region’s history. This discussion takes an overall regional approach and then focuses on Horry County, the project area and its surroundings.

The project area lies along the Atlantic Coastline in present day Horry County. Although the area is presently situated in Horry County, as the governmental structure of South Carolina went through significant changes, the designations assigned to the area also underwent alterations. When South Carolina’s original three counties— Colleton, Berkeley, and Craven—were laid out, the project area was located outside all of these areas. The most northern of the counties, Craven, spanned only the area between Awendaw Creek and the Santee River (Rogers

1970:2; Stauffer 1998:6). Eventually, Craven County was expanded to reach the North Carolina border, bringing the project tract within its boundaries.

The establishment of the Anglican Church as the official religion of the colony in 1706 brought the designations of Prince George Winyah Parish, Prince Frederick Parish, and All Saint's Parish to different portions of the region during the eighteenth century (Figure 3.1). Toward the end of the 1700s, the area was incorporated into a judicial district named Georgetown, which was later split into four counties: Winyah, Liberty, Kingston, and Williamsburg. Shortly after the turn of the nineteenth century, the legislature began to permanently divide Georgetown District, with Liberty County becoming Marion District, Kingston County becoming Horry District, and Williamsburg County becoming Williamsburg District. By 1804, only the area encompassed by the old Winyaw County remained within Georgetown District. The districts were later converted to counties in 1868 (Rogers 1970:5-6; Stauffer 1998:13-15).

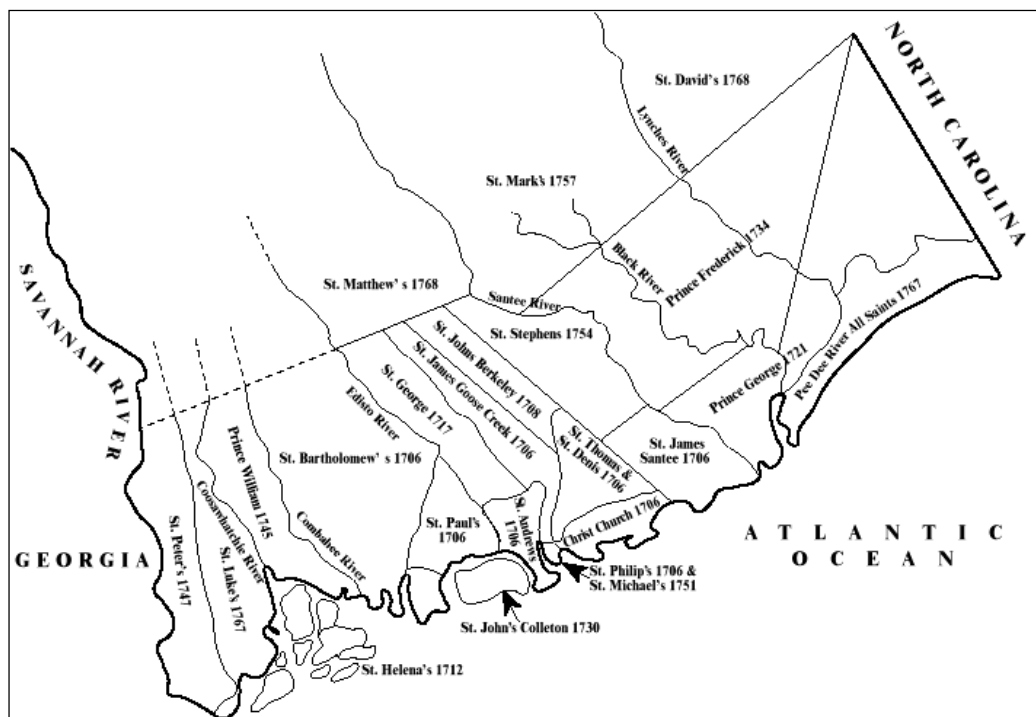


Figure 3.1. Map of the Anglican Parishes in South Carolina. (Stauffer 1998:7)

3.2.1 South Carolina

European colonial powers (England, Spain, and France), Native populations, and enslaved Africans were all embroiled in disputed claims over what became the Southeastern United States. Native groups, in particular, sought political and economic advantage by taking part in the conflicts among Europeans. The Spanish attempted a settlement named San Miguel da Gualdape, apparently located at Winyah Bay, in 1526. The French then attempted a colony, called Charlesfort, on Parris Island in 1562. The French colony lasted less than a year, and the Spanish destroyed what remained of the settlement in 1564. They subsequently established their own settlement, Santa Elena, at the same location in 1566. The Spanish and local Natives did not enjoy cordial relations, but despite numerous attacks and many other problems, the Spanish did not completely abandon the site until 1587, and the outpost served as a base for exploration of the interior.

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The English were the first permanent European settlers in what is now South Carolina. Charles Towne, on the west bank of the Ashley River, was founded in 1670. Settlement quickly spread inland along navigable waterways. However, the population grew slowly and the European and African-American population of the Low Country was only about 5,000 in 1700.

The Colony was established under a 1665 charter from Charles II to a group of courtiers who had supported his return to the throne. The eight "Lords Proprietors" included Sir John Colleton, Sir William Berkeley, and Lord Ashley, Earl of Shaftsbury. By the early eighteenth century, however, proprietary government was becoming increasingly ineffective, and the colonists asked to be become a royal colony in 1719. However, it was 1729 before the Crown purchased the rights of the Proprietors and appointed a governor for the colony.

The charter covered all the land from Virginia south to the vicinity of what is now Daytona Beach, Florida. After Charleston was established as the colonial capital, the area north and east of Cape Fear was separated, with its own deputy governor as early as 1689. A special commission in 1735 finalized the boundary between the two Carolinas. Georgia was split-off in 1732, with the boundary generally agreed to in 1787.

The Colonial economy initially centered on the production of naval stores (the resin-based components used in building and maintaining wooden sailing ships, including turpentine, rosin, pitch, and tar), beef and pork production, and trade with the remaining indigenous populations. While trade with the natives for furs was initially aggressively pursued, by 1716 wars with native groups and disease had all but eliminated coastal populations, although trade continued until the end of the eighteenth century from more inland locations. Production of naval stores was initially encouraged by Royal bounties. However, the large extent of the coastal pinelands was underestimated and the production of naval stores quickly exceeded demand. Potatoes, corn (maize), and tobacco were among the earliest crops. By the end of the seventeenth century, Planters began to experiment with rice cultivation, and in 1715, rice exports exceeded 8,000 barrels annually, increasing to 40,000 by the 1730s.

In the 1740s, experiments with indigo cultivation began. Successes lead to indigo becoming one of the Colony's most important exports. Long-staple cotton also arose as an important crop beginning in the 1790s. Cultivation and processing of rice, indigo, and cotton were all labor intensive, leading to the continuing dependence on enslaved African labor (Wood 1974). Slave traders imported large numbers of Africans throughout the Colonial Period, and their numbers far exceeded those of European descended planters.

3.2.2 *Horry County*

In 1663, the area we now know as South Carolina and North Carolina was part of land granted to eight powerful Englishmen, known as the Lords Proprietors, by King Charles II of England. The western boundary of the land grant was the "South Seas". In 1729, all but one of the Lords Proprietors sold their interest in the grant to England's King George II who later dispatched surveyors to lay out eleven townships in South Carolina to develop the "back country" of the Carolina Province. Kingston Township, located on the Waccamaw River, was one of those original townships. The village located in the township was called Kingston and is now known as Conway (Brosky 2009).

Horry County is named after Brigadier General Peter Horry (Rogers 1972). B.G. Horry was born in South Carolina sometime around 1743 and began his military career in 1775 as one of 20 Captains of the Provincial Congress of

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South Carolina. In 1790 Horry was assigned to the South Carolina militia under Brigadier General Francis "Swamp Fox" Marion.

As settlers moved into Horry County, which was then known as Craven County, some settled along the coast to fish the Atlantic Ocean and its inlets. As a result, the coastal fishing village of Little River developed and is one of the oldest settlements in the county. The fur trade continued to flourish but the naval stores industry and farming eventually became the prevalent industries. In the 1700s and early 1800s, indigo became a major cash crop for the coastal area. The indigo was harvested from plants introduced to the area and from them a dye was made that was very much in demand in Europe. Several indigo plantations were situated along the Horry County coastline. Cattle and pigs were also important commodities in this area, just as they were throughout early coastal South Carolina (Brosky 2009).

From the earliest days of Horry County's history up until the latter half of the nineteenth century, the naval stores industry was prominent in Horry County. The production of pitch, pine tar, turpentine, and a variety of other naval products supplied many Horry County citizens with the majority of their income until the industry moved southward in the late 1800s (Rogers 1972).

The years between the Revolutionary War and the Civil War were peaceful; new commerce and settlers entered the county. The Tariff of 1828, enacted to protect northern industry by imposing duties on imported goods, enraged southern cotton growers who mostly traded with England. This, along with the famous 1857 Dred Scott decision, a Supreme Court case that ruled against the exclusion of slavery in states, served to further divide the country (Brosky 2009).

In 1860, southern states sent delegates to a convention to discuss the issue of Secession. In December of that year, South Carolina, a staunch state's rights supporter, was first to adopt an Ordinance of Secession. Horry County, while not aggressively Secessionist, joined the movement for secession as soon as South Carolina seceded (Lewis 1998).

After the civil war, economic progress gradually returned to the area. This era also marks the end of the naval stores industry that the area's economy had depended on since the arrival of the first settlers. With the profits of cotton falling, the farmers of Horry County started growing tobacco as a cash crop in the late 1890s (Brosky 2009).

In 1898, Conwayborough shortened its name to Conway and was incorporated, 166 years after its founding. The Conway & Seashore Railroad was established from Conway to the seashore at Long Bay in 1900. The new town built at the end of the tracks was named Myrtle Beach, after the native Wax Myrtle shrub which grew behind the dunes (Brosky 2009).

In response to German submarines that had patrolled off the cost of the eastern United States during World War I, the United States Congress commissioned the Intracoastal Waterway in 1919. When finished in 1936, the Waterway stretched across the coastal section of the county, connecting Little River to Socastee Swamp and the Waccamaw River. The final portion of the Waterway to be completed was in Horry County. The official national dedication and opening of the Waterway was held in Socastee at the site of the existing turn-bridge (Brosky 2009). The Intracoastal Waterway became an important means of marine transportation as it provided a safe route for boats. It was common to see German soldiers on the streets of Myrtle Beach and Conway. These soldiers were

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German prisoners of war being held at a camp in Myrtle Beach. The soldiers were often allowed much freedom and many worked in the local communities. In the name of national defense, the United States Army took over 100,000 acres between the Intracoastal Waterway and present-day Highway 90, forcing over 300 families to relocate. The land was used to establish a bombing range and flight school (Brosky 2009).

During the 1950s, the Grand Strand continued to grow into a family vacation destination. Since 1950 a multitude of new residents, businesses, and increased tourism has changed the face of the Grand Strand and Horry County in general. From 2005 to 2006, the Myrtle Beach area was the fourth fastest growing area in the nation. It attracts millions of visitors each year (Brosky 2009).

3.3 Previously Recorded Cultural Resources

On February 16, 2024, a background literature review and records search was conducted at the South Carolina Institute of Archaeology and Anthropology (SCIAA) in Columbia. The area examined was a 0.5-mile radius around the project area (Figure 3.2). The records examined at SCIAA include a review of ArchSite, a GIS-based program containing information about archaeological and historic resources in South Carolina. If cultural resources were noted within the 0.5-mile search radius, then additional reports and site forms contained at SCIAA and the South Carolina Department of Archives and History (SCDAH) were consulted.

A review of ArchSite indicated there are no previously recorded archaeological sites, one previously recorded structure and one previously conducted cultural resource survey within a 0.5-mile radius of the project area (Figure 3.2). The previously recorded structure (SHPO Site No. 0220) was recommended not eligible for inclusion in the NRHP and is not within or adjacent to the project area. The previously conducted cultural resource survey does not cover a portion of the project area.

As part of the background research, Henry Mouzon's (1775) map of North and South Carolina, Mills Atlas map (1825), a USDA soil survey map from 1918, South Carolina Department of Transportation (SCDOT) maps from 1938, 1955, and 1965, and United States Geological Survey (USGS) topographic maps from 1943 and 1981 were examined. Mouzon's map indicated that the project area was located within the Kingston Township in Georgetown Precinct with an unnamed road in the vicinity of the project area (Figure 3.3). Mill's Atlas of Horry District shows that Kingston had been renamed to Conwayborough; the project was located near the road named "From Fork Road to Conwayborough" (Figure 3.4). The 1918 USDA soil survey map showed the project area near the established community of Adrian with a railroad located west of the project area (Figure 3.5).

The 1939 SCDOT map showed no structures present within the project area but showed growth in the surrounding area (Figure 3.6). The 1943 15-minute Adrian USGS topographic map of the project area showed no structures present within the project area and five structures located south of the project area (Figure 3.7). The 1955 and 1965 SCDOT maps depicted no structures within the project area and showed development in the surrounding area (Figures 3.8 and 3.9). The 1981 7.5-minute Adrian USGS topographic map showed an unimproved road is located in the vicinity of current day Chow Lane, south of the project area; no structures were present within the project area (Figure 3.10).

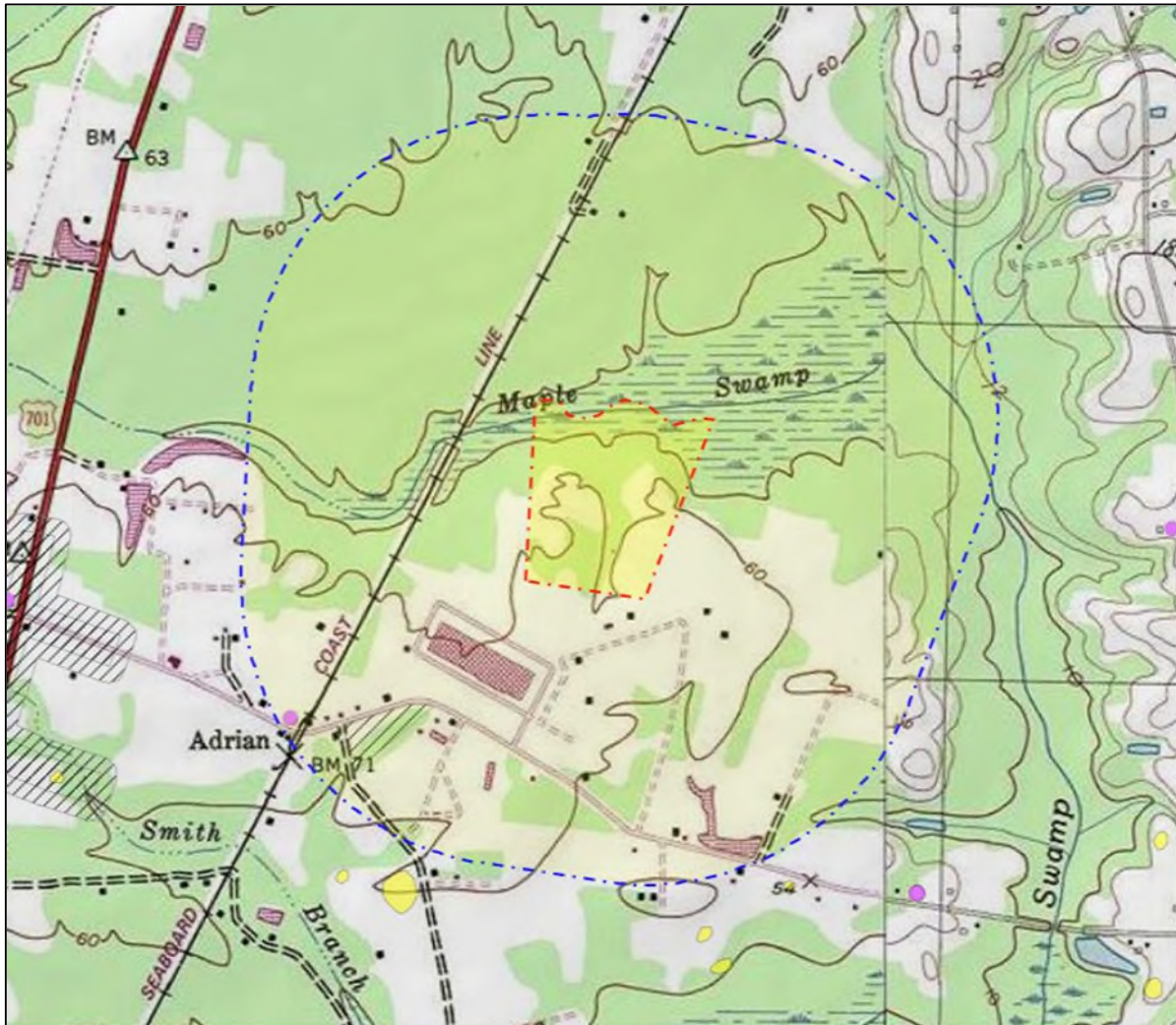


Figure 3.2. ArchSite map showing 0.5-mile search radius.



Figure 3.3. Portion of Mouzon's map (1775), showing vicinity of project area.



Figure 3.4. Portion of Mills' Atlas map of Horry District (1825), showing vicinity of project area.

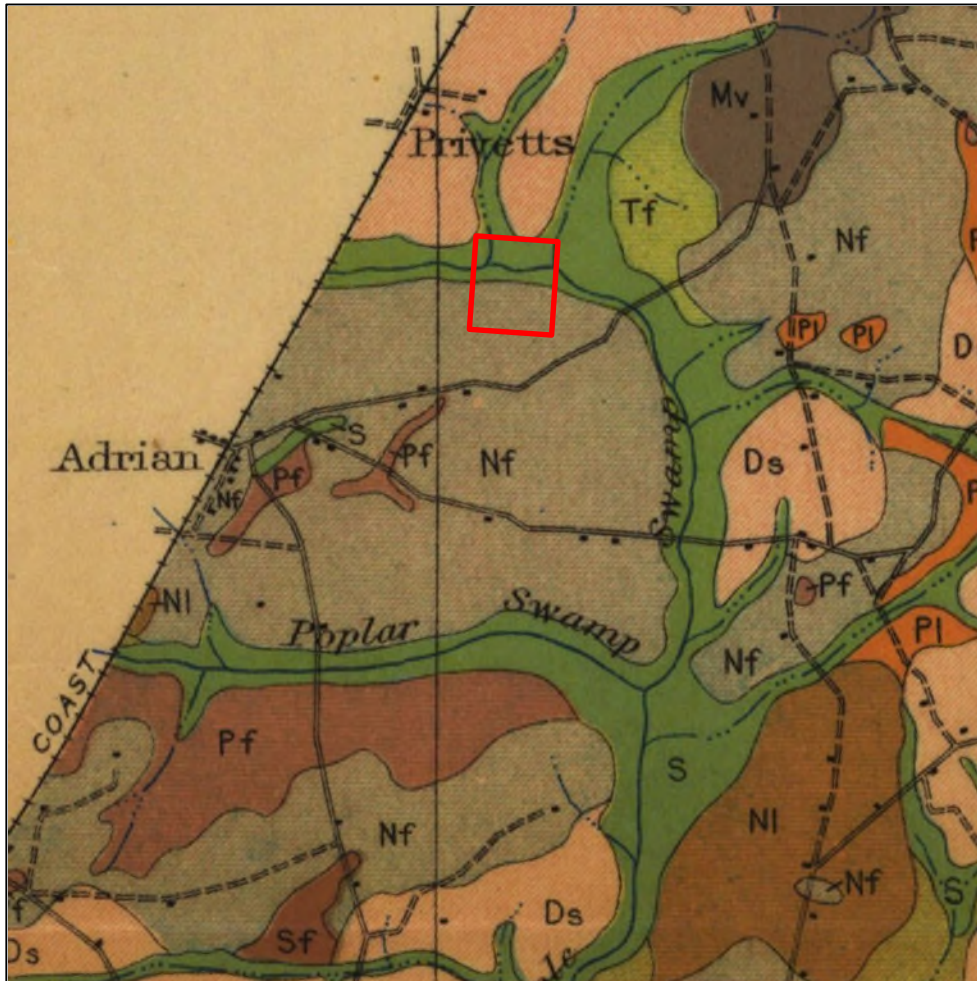


Figure 3.5. Portion of 1918 USDA soil survey map of eastern portion of Horry County, showing vicinity of project area.

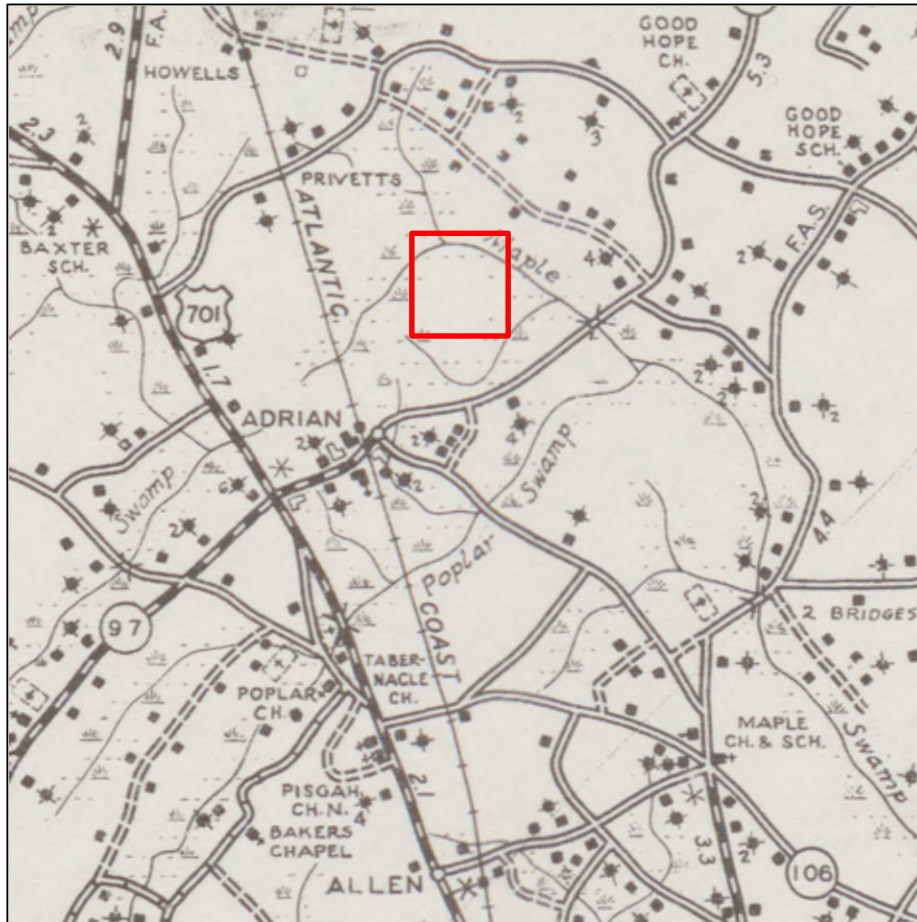


Figure 3.6. Portion of 1938 SCDOT map of Horry County, indicating vicinity of the project area.

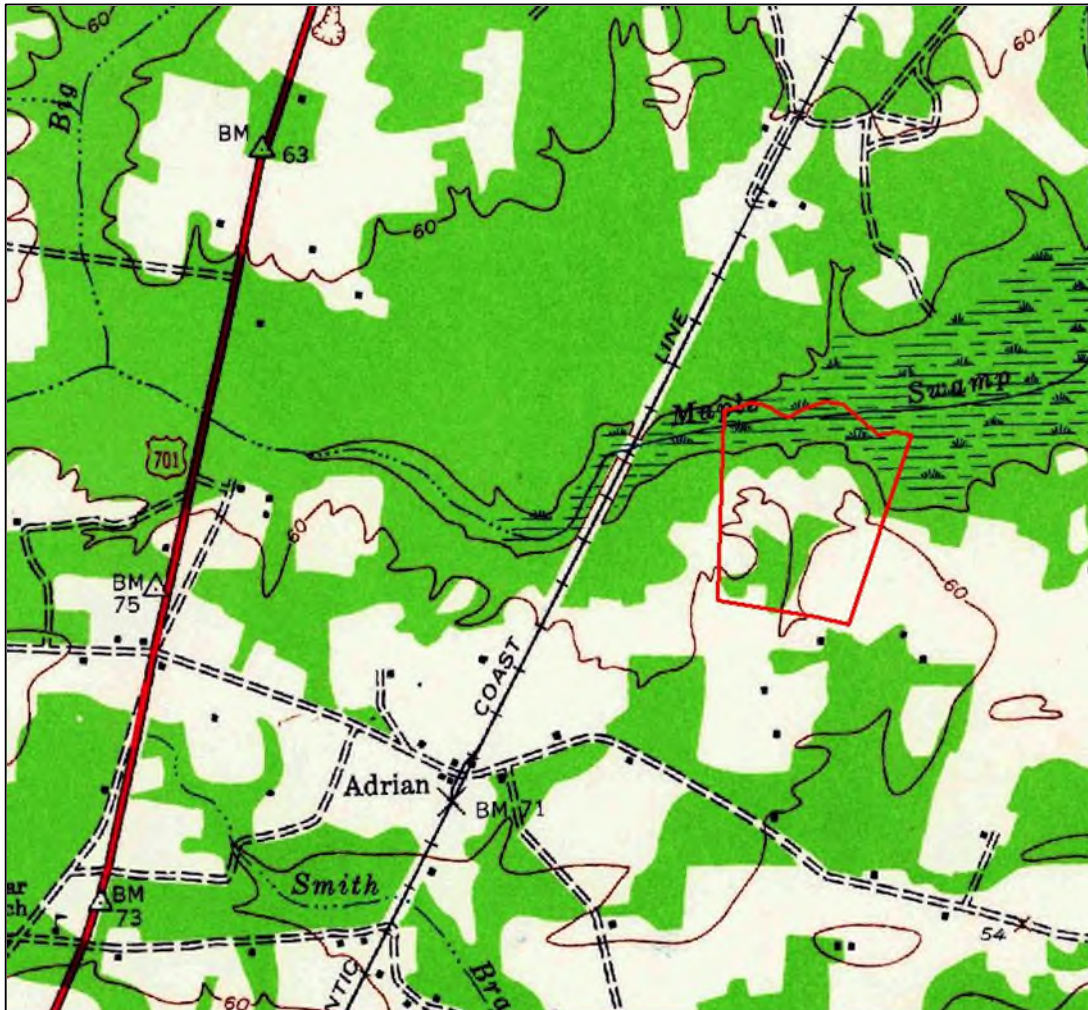


Figure 3.7. Portion of Adrian 1943 15-minute USGS topographic map, showing vicinity of the project area



Figure 3.8. Portion of 1955 SCDOT map of Horry County, indicating vicinity of the project area.

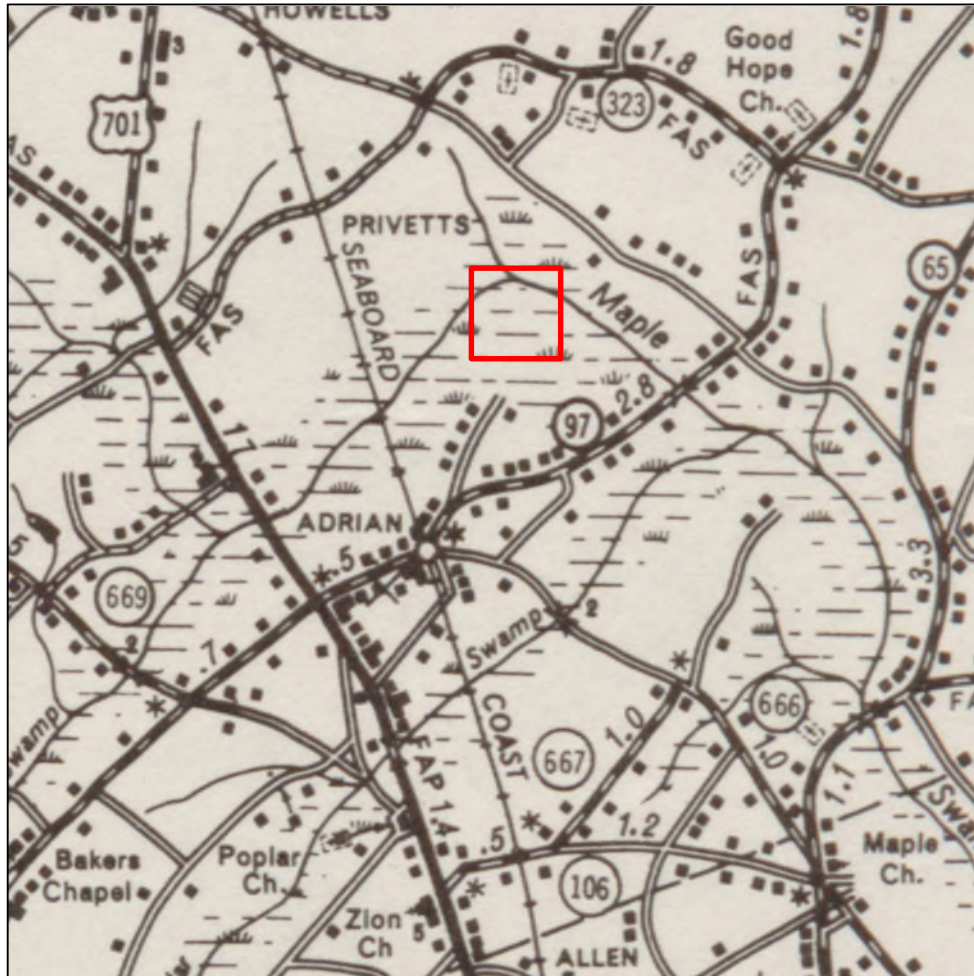


Figure 3.9. Portion of 1965 SCDOT map of Richland County, indicating vicinity of the project area.

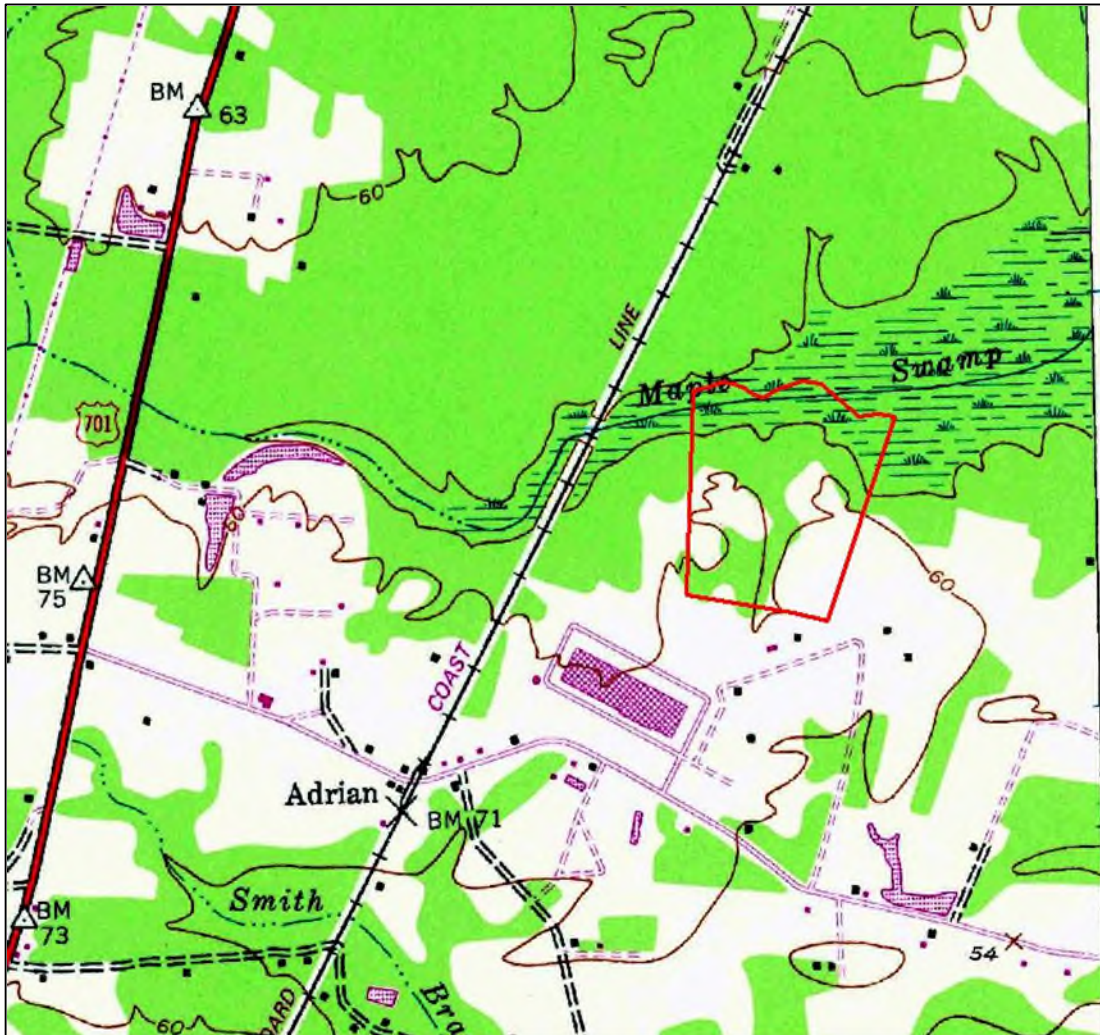


Figure 3.10. Portion of Adrian 1981 7.5-minute USGS topographic map, showing vicinity of the project area



4.0 Methods

4.1 Archaeological Field Methods

An archaeological survey of the project area was conducted on February 20 and 21, 2024. This work included a Phase I archaeological survey of approximately 26.9 acres of the upland areas within the overall 54.1-acre project area; approximately 7.6 acres of the 26.9-acre upland area was not surveyed due to standing water, push piles, or timber piles. During the survey, a total of 84 shovel tests were excavated (Figure 4.1). Pedestrian survey was undertaken along dirt roads and other areas with good ground surface exposure.

Shovel tests were placed at 30-m intervals along transects placed 30-m apart. The shovel tests were at least 30 x 30 cm and excavated to sterile subsoil or 80 cm below surface (cmb), whichever was encountered first. Soil from the shovel tests was screened through ¼-inch wire mesh and soil colors were determined through comparison with Munsell Soil Color Charts. Sites were located using a GPS unit and plotted on USGS 7.5-minute topographic maps. Artifacts recovered during the survey were organized and bagged by site and relative provenience within each site.

Site boundaries were determined by excavating shovel tests at 15-m intervals radiating out in a cruciform pattern from positive shovel tests or surface finds at the perimeter of each site. Sites were recorded in the field using field journals and standard S&ME site forms and documented using digital imagery and detailed site maps. State site forms were filled out and submitted to SCIAA once fieldwork was complete. For purposes of the project, an archaeological site is defined as an area yielding three or more historic or prehistoric artifacts and/or an area with visible or historically recorded cultural features (e.g., shell middens, rockshelters, chimney falls, brick walls, piers, earthworks, etc.). An isolated find is defined as yielding less than three historic or prehistoric artifacts.

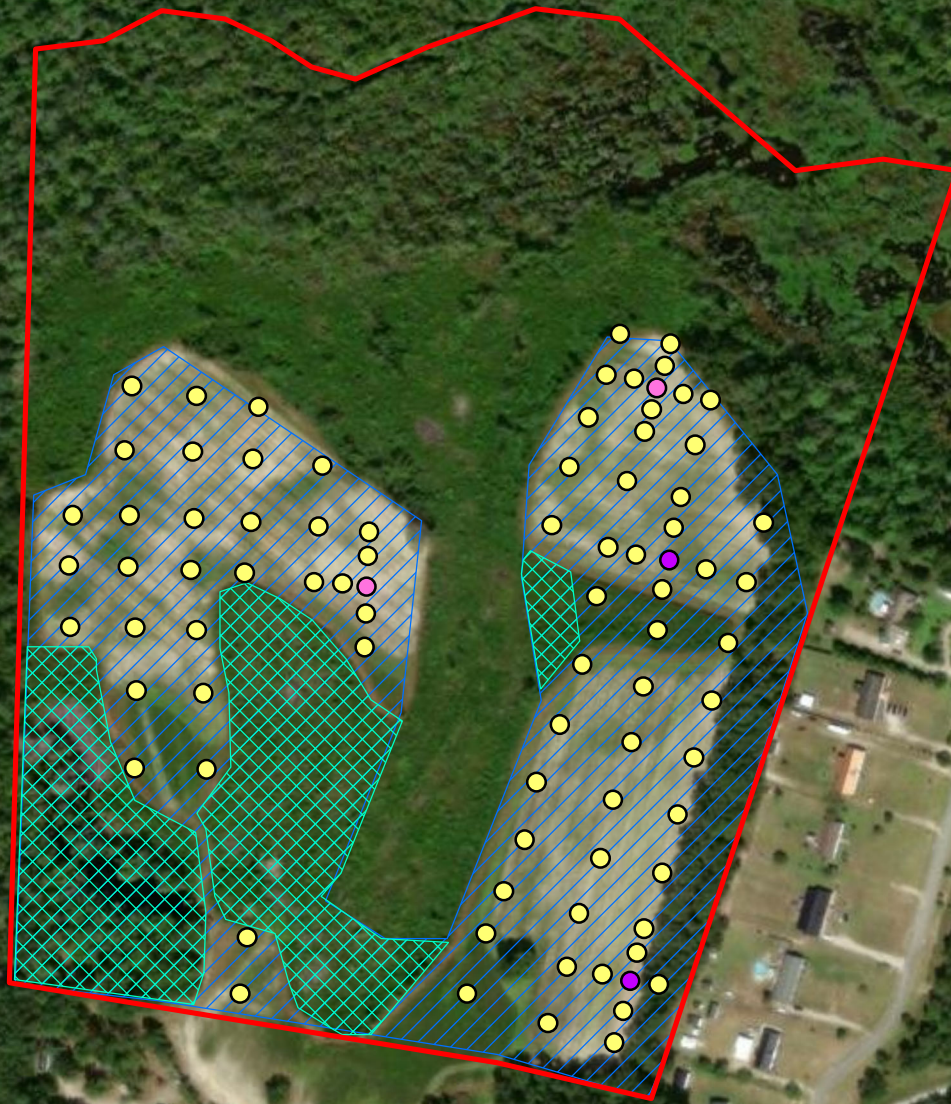
4.2 Laboratory Methods

Artifacts recovered during the survey were cleaned, identified, and analyzed using the techniques summarized below. Following analysis, artifacts were bagged according to site, provenience, and specimen number. Acid-free plastic bags and artifact tags were used for curation purposes.

Lithic artifacts were initially identified as either debitage or tools. Debitage was sorted by raw material type and size graded using the mass analysis method advocated by Ahler (1989). When present, formal tools were classified by type and metric attributes (e.g., length, width, and thickness) were recorded for each unbroken tool. Projectile point typology generally followed those contained in Coe (1964) and Justice (1987).

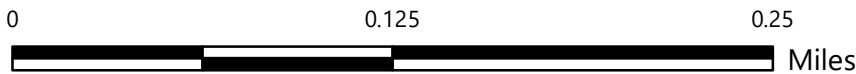
Prehistoric ceramics greater than 1 cm² were sorted first by sherd type (rim or body), surface treatment, and temper (using the Wentworth scale). Once sorted, these categories were further analyzed for other diagnostic attributes such as paste texture, interior treatment, rim form, and rim/lip decoration. Where possible, this data was used to place the sherds within established regional types. Information on the ceramic typology of the project area was derived primarily from Anderson et al. (1996b), Coe (1964), DePratter (1979), Sassaman et al. (1990), Trinkley (1990), and Ward and Davis (1999). Sherds less than 1 cm² were classified as "residual sherds" and only their count and weight were recorded.

Drawing Path: T:\Columbia-1610\Projects\2024\24610069_Adrrian Sand, LLC_Adrrian Mine Ph I Archaeology_Conway SC\ENV\GIS\Figures\Figure 4-1 Field Methods.mxd, plotted by KNagle 03-07-2024









REFERENCE: ESRI AERIAL IMAGERY

GIS BASE LAYERS WERE OBTAINED FROM ARCHSITE DATABASE. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.



Legend

-  Shovel Test Positive on Surface
-  Positive Shovel Test
-  Negative Shovel Test
-  Project Area
-  Areas of standing water or wetlands
-  Phase I Survey Area



Field Methods Map

ADRIAN SAND & CLAY MINE
HORRY COUNTY, SOUTH CAROLINA

DATE:
3-7-24
PROJECT NUMBER
24610069

FIGURE NO.

4.1

Phase I Archaeological Survey

Adrian Sand & Clay Mine

Horry County, South Carolina

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SHPO Project No. 24-RL0024



Historic artifacts were separated by material type and then further sorted into functional groups. For example, glass was sorted into window, container, or other glass. Maker's marks and/or decorations were noted to ascertain chronological attributes using established references for historic materials, including Noel Hume (1970), South (1976), and Miller (1991).

4.3 National Register Eligibility Assessment

For a property to be considered eligible for the NRHP it must retain integrity of location, design, setting, materials, workmanship, feeling, and association (National Register Bulletin 15:2). In addition, properties must meet one or more of the criteria below:

- A. are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. are associated with the lives of persons significant in our past; or
- C. embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. have yielded or may be likely to yield information important in history or prehistory.

The most frequently used criterion for assessing the significance of an archaeological site is Criterion D, although other criteria were considered where appropriate. For an archaeological site to be considered significant, it must have potential to add to the understanding of the area's history or prehistory. A commonly used standard to determine a site's research potential is based on a number of physical characteristics including variety, quantity, integrity, clarity, and environmental context (Glassow 1977). These factors were considered in assessing a site's potential for inclusion in the NRHP.



5.0 Results

A Phase I archaeological survey was conducted on approximately 26.9 acres of upland area within the overall 54.1-acre project area; approximately 7.6 acres of the 26.9-acre upland area was not surveyed due to standing water, push piles, or timber piles (Figure 4.1). Vegetation in the project area consists primarily of fallow fields, wooded areas, and secondary growth vegetation; a pond and areas of standing water were present within the project area; disturbances include areas of clear cut, push piles, trash dumps, and timber piles (Figures 2.2–2.10 and 5.1–5.9).

A total of 84 shovel tests were excavated within the project area. Three typical soil profiles were encountered during the survey; shovel tests with an intact soil horizon where subsoil was encountered, a hydric soil profile, and shovel tests with an intact soil horizon where subsoil was not encountered. A typical soil profile with an intact horizon and subsoil consisted of 20 cm of grayish brown (10YR 5/2) sand, followed by 10 cm (20–30 cmbs) of a yellowish brown (10YR 5/6) sand, terminating with 10+ cm (30–40+ cmbs) of strong brown (7.5YR 5/8) sandy clay subsoil (Figure 5.10). A typical soil profile where hydric conditions were encountered consisted of 25 cm of very dark gray (10YR 3/1) wet sand terminating with 10+ cm (25–35+ cmbs) of gray (10YR 6/1) wet sand (Figure 5.11). A typical soil profile with an intact soil horizon where subsoil was not encountered consisted of 20 cm of grayish brown (10YR 5/2) sand followed by 60+ cm (20–80+ cmbs) of yellowish brown (10YR 5/6) sand (Figure 5.12).

As a result of the survey, one new archaeological site (38HR636) and three isolated finds (IF-1 through IF-3) were identified and recorded. Each of these resources is discussed in greater detail below.

5.1 Site 38HR636

Site Number: 38HR636	NRHP Recommendation: Not Eligible
Site Type: Prehistoric ceramic scatter	Elevation: 60 ft AMSL
Components: Unidentified	Landform: Plain
UTM Coordinates: E684163, N3758777 (NAD 83)	Soil Type: Kenansville fine sand
Site Dimensions: 15m N/S x 15m E/W	Vegetation: Fallow Field
Artifact Depth: Surface	No. of STPs/Positive STPs: 9/0

Site 38HR636 is a prehistoric ceramic scatter located in a fallow field overlooking Maple Swamp (Figures 1.1 and 1.2). The site measures approximately 15 m east/west by 15 m north/south, and is bounded by two negative shovel tests in each cardinal direction (Figures 5.13 and 5.14).

Nine shovel tests were excavated at the site; none of the shovel tests contained artifacts, the three prehistoric artifacts were recovered from the surface of the site. A typical soil profile consisted of 15 cm of grayish brown (10YR 5/2) sand followed by 65+ cm (15–80+ cmbs) of yellowish brown (10YR 5/6) sand, subsoil was not encountered (Figure 5.15). The artifacts consisted of one piece of fine sand tempered pottery with an indeterminate surface treatment, one piece of eroded coarse sand tempered pottery, and one piece of residual pottery (Appendix B). None of the artifacts are temporally diagnostic.



Figure 5.1. View of fallow field within project area, facing south.



Figure 5.2. View of a wooded area, facing northeast.



Figure 5.3. An area of secondary growth in the project area, facing west.



Figure 5.4. View of pond in western portion of the project area, facing west.



Figure 5.5. View of standing water within project area, facing northeast.



Figure 5.6. View of clear cut area in the project area, facing southeast.



Figure 5.7. View of push pile within the project area, facing northwest.



Figure 5.8. View of modern trash in the project area, facing northeast.



Figure 5.9. View of timber piles within project area, facing north.



Figure 5.10. Typical shovel test profile with an intact soil horizon and subsoil was encountered.

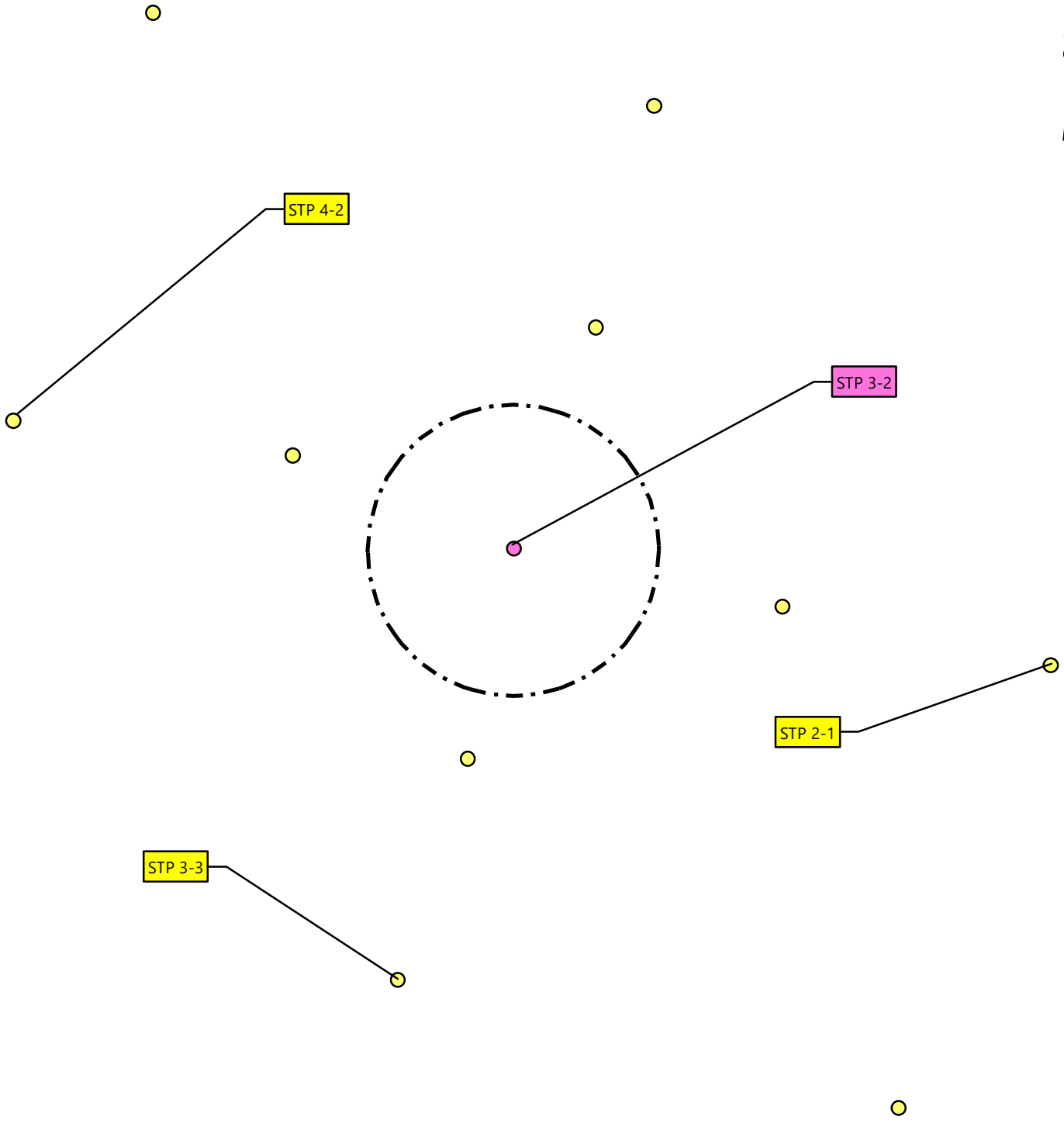


Figure 5.11. Typical shovel test profile where hydric soils were encountered.



Figure 5.12. Typical shovel test profile with an intact soil horizon and subsoil was not encountered.

Drawing Path: T:\Columbia-1610\Projects\2024\24610069_Adrian Sand, LLC_Adrian Mine Ph I_Archaeology_Conway SC\ENV\GIS\Figures\Figure 5-13 Site Map.mxd plotted by KNagle 03-07-2024



GIS BASE LAYERS WERE OBTAINED FROM ARCHSITE DATABASE. THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. FEATURE LOCATIONS DISPLAYED ARE APPROXIMATED. THEY ARE NOT BASED ON CIVIL SURVEY INFORMATION, UNLESS STATED OTHERWISE.



Legend

- Shovel Test Positive on Surface
- Negative Shovel Test
- Site Boundary



38HR636 Site Map

ADRIAN SAND & CLAY MINE
HORRY COUNTY, SOUTH CAROLINA

DATE:
3-7-24
PROJECT NUMBER
24610069

FIGURE NO.

5.13



Figure 5.14. Overview of site 38HR636, facing south.



Figure 5.15. Typical shovel profile at site 38HR636.



Site 38HR636 is a prehistoric ceramic scatter located in a fallow field overlooking Maple Swamp. Given the paucity of artifacts and artifact types, as well as the lack of temporally diagnostic artifacts and intact stratigraphy, the site is unlikely to provide additional information on the prehistory of the area. Based on the information presented, it is S&ME's opinion that the site is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and is unlikely to yield significant information on the prehistory of the area (Criterion D). As such, site 38HR636 is recommended ineligible for inclusion in the NRHP.

Isolated Finds

Isolated Find 1 (IF-1) consists of one piece of machine made brick found in a single shovel test between 20 and 60 cmbs in a fallow field in southern portion of the project area, at UTM coordinates E684155 N3758466 (NAD 83) (Figures 1.1 and 1.2). A total of eight shovel tests were excavated around the initial positive shovel test at 15- and 30-m intervals to the west, north and south and a residential area bound the site to the east. None of the additional shovel tests contained artifacts. Based on the information presented, it is S&ME's opinion that the site is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and is unlikely to yield significant information on the history of the area (Criterion D). As such, IF-1 is recommended ineligible for inclusion in the NRHP.

Isolated Find 2 (IF-2) consists of one piece of coastal plain chert lithic debitage found in a single shovel test between 25 and 80 cmbs in a fallow field, at UTM coordinates E684173 N3758688 (NAD 83) (Figures 1.1 and 1.2). A total of eight shovel tests were excavated around the initial positive shovel test at 15- and 30-m intervals in each cardinal direction. Based on the information presented, it is S&ME's opinion that the site is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and is unlikely to yield significant information on the prehistory of the area (Criterion D). As such, IF-2 is recommended ineligible for inclusion in the NRHP.

Isolated Find 3 (IF-3) consists of one piece of coastal plain chert lithic debitage found on the surface in a fallow field, at UTM coordinates E684016 N3758677 (NAD 83) (Figures 1.1 and 1.2). A total of nine shovel tests were excavated at and around the initial surface find at 15- and 30-m intervals in each cardinal direction. Based on the information presented, it is S&ME's opinion that the site is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and is unlikely to yield significant information on the prehistory of the area (Criterion D). As such, IF-3 is recommended ineligible for inclusion in the NRHP.



6.0 Conclusions and Recommendations

On behalf of Adrian Sand, LLC, S&ME has completed a Phase I archaeological survey of approximately 54.1 acres associated with the Adrian Sand and Clay Mine project area in Horry County, South Carolina (Figures 1.1 and 1.2). The project area is located north of Chow Lane in the community of Adrian and approximately 8.1 miles northeast of the city center of Conway.

A mining permit application was provided for comment to the SHPO by DHEC-MSWM. In a letter dated January 31, 2024, the SHPO recommended a Phase I archaeological survey of the undisturbed, non-inundated uplands along the northern and western edges of Maple Swamp due to their high probability for containing prehistoric archaeological sites (Appendix A). This work was carried out in response to the SHPO letter and in general accordance with S&ME Proposal Number 24610069, dated February 6, 2024.

Fieldwork for the project was conducted on February 20 and 21, 2024. This work included the excavation of 84 shovel tests and the photo documentation of the project area. As a result of the survey, one new archaeological site (38HR636) and three isolated finds (IF-1 through IF-3) were identified and recorded (Figures 1.1 and 1.2; Table 1.1). The archaeological site and three isolated finds are recommended not eligible for inclusion in the NRHP. Based on the results of the Phase I archaeological survey, it is S&ME's opinion that no additional archaeological work is recommended for the project as it is currently proposed.

Phase I Archaeological Survey

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8.0 Appendix A – SHPO Consultation



January 31, 2024

Katelyn Mills
Hydrologist/Geologist I – Project Manager
Mining and Reclamation Section
DHEC-MSWM
2600 Bull Street
Columbia, SC 29201
millske@dhec.sc.gov

Re: Adrian Sand & Clay Mine, Chow Lane, Mine Permit Application I-002411
Conway, Horry County, South Carolina
SHPO Project No. 24-RL0024

Dear Katelyn Mills:

The State Historic Preservation Office (SHPO) has reviewed the permit application referenced above for possible adverse effects to significant cultural and historic sites pursuant to the South Carolina Mining Act (SC Code Title 48, Chapter 20, Sections 10-310) and its implementing regulations found at Chapter 89-120(C)(4) of the SC Code of Regulations. The SHPO recommends a Phase I archaeological survey with shovel testing at intervals of no less than 30 meters per transect be conducted of non-disturbed lands prior to issuing the permit; the survey should be compliant with the *South Carolina Standards and Guidelines for Archaeological Investigations*.

Our Office recommends a Phase I archaeological survey because the northern and western portions of the project tract bordering Maple Swamp represent a medium to high probability area for pre-contact archaeological resources. Our office recommends a focus of the survey be upon undisturbed, non-inundated uplands along the northern and western edges of Maple Swamp, these areas would have a high probability for pre-contact archaeological resources. Archaeological Sites 38HR0290 and 38HR0295, located roughly a mile to the southeast of the current project tract, are Woodland period scatters located on the eastern edges of Maple Swamp; as such, our office believes similar sites might be present in contemporaneous conditions within the current project tract.

The purpose of the recommended survey is to identify cultural and historic sites, particularly archaeological sites, and evaluate their eligibility for listing in the National Register of Historic Places (see <http://shpo.sc.gov/pubs/Documents/htln1210.pdf>). The results of this survey will be used by South Carolina Department of Health and Environmental Control to assess whether significant cultural or historic sites will be adversely affected by the proposed mining.

All fieldwork, analyses, and report writing shall be performed by, or under the supervision of, individuals who meet the Secretary of Interior's Professional Qualifications Standards. Please consult the *South Carolina Standards and Guidelines for Archaeological Investigations* for further guidance on archaeological survey methodologies --

[https://scdah.sc.gov/sites/scdah/files/Documents/Historic%20Preservation%20\(SHPO\)/Publications/Standards_Guidelines2005-13.pdf](https://scdah.sc.gov/sites/scdah/files/Documents/Historic%20Preservation%20(SHPO)/Publications/Standards_Guidelines2005-13.pdf).

Please consult the *South Carolina Statewide Survey of Historic Properties Survey Manual* for further guidance on architectural survey methodologies --

[https://scdah.sc.gov/sites/scdah/files/Documents/Historic%20Preservation%20\(SHPO\)/Survey/Survey_Manual_Dec2018_revised2.pdf](https://scdah.sc.gov/sites/scdah/files/Documents/Historic%20Preservation%20(SHPO)/Survey/Survey_Manual_Dec2018_revised2.pdf).

Information about Section 106 Review, Project Review Guidance, South Carolina and Federal standards and guidelines, and a list of qualified consultants can be found on our website from:

SHPO Review & Compliance -- <https://scdah.sc.gov/historic-preservation/programs/review-compliance>

Project Professionals Lists -- <https://scdah.sc.gov/historic-preservation/technical-assistance/publications/project-professionals-lists>

Thank you for giving our office the opportunity to comment on this permit application. Please refer to SHPO Project Number 24-RL0024 in any future correspondence regarding this project. If you or the applicant has any questions or comments, please contact me at (803) 896-6181 or RLarsen@scdah.sc.gov.

Sincerely,

Robert P. Larsen III

Robert P. Larsen III, MSc., RPA
Archaeologist
State Historic Preservation Office

Phase I Archaeological Survey
Adrian Sand & Clay Mine
Horry County, South Carolina
S&ME Project No. 24610069
SHPO Project No. 24-RL0024



9.0 Appendix B – Artifact Catalog

Appendix B - Adrian Sand and Clay Mine Artifact Catalog

Site #	Cat. #	Provenience	Depth (cmbs)	Count	Weight (g)	Class	Category	Sub-Category	Type/Description	Material	Portion	Temper	Lithic Size Grade	Notes
3PHR636	1.01	STP 3-2	Surface	1	9.1	P. Ceramic	Vessel	Indeterminate			Body	Fine Sand		
3PHR636	1.02	STP 3-2	Surface	1	2.4	P. Ceramic	Vessel	Eroded			Body	Coarse Sand		
3PHR636	1.03	STP 3-2	Surface	1	5.3	P. Ceramic	Residual							
IF-1	1.01	STP 1-2	20-60	1	19.1	Other	Masonry	Brick	Machine made					
IF-2	1.01	STP 2-8	25-80	1	0.4	Lithic	Debris	Non-cortical		Coastal plain chert			3	
IF-3	1.01	STP 7-1	Surface	1	1.4	Lithic	Debris	Non-cortical		Coastal plain chert			2	