

### Cultural Resources Reconnaissance Survey Edgefield Development Site Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640

#### PREPARED FOR

Luck Companies P.O. Box 29682 Richmond, Virginia 23242

#### PREPARED BY:

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



# Cultural Resources Reconnaissance Survey Edgefield Development Site Clarks Hill, Edgefield County, South Carolina

Prepared for:

Luck Companies P. O. Box 29682 Richmond, Virginia 23242

Prepared by:

S&ME, Inc. 134 Suber Road Columbia, South Carolina 29210

**S&ME Project No. 22350640** 

Vim Dagle

Kimberly Nagle, M.S., RPA Principal Investigator

Authors: Clayton Moss, B.A. and Heather Carpini, M.A.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### **Management Summary**

On behalf of Luck Companies, S&ME, Inc. (S&ME) has completed a cultural resources reconnaissance survey of the proposed approximately 434.93-acre project area associated with the proposed Edgefield Development Site in Edgefield County, South Carolina (Figures 1.1 and 1.2). The project area is located south of Steven Creeks and north of Woodlawn Road, approximately 10.7 miles northwest of the city center of North Augusta, South Carolina.

The purpose of the survey was to assess the project area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required pursuant to the South Carolina Mining Act and Section 106 of the National Historic Preservation Act, as amended, and other pertinent federal, state, or local laws. This work was done in anticipation of federal permitting and was carried out in general accordance with S&ME Proposal Number 22350640, dated November 21, 2022.

Fieldwork for the project was conducted on January 3 and 4, 2023. This work included the excavation of 122 shovel tests (81 regular and 41 radial), as well as an architectural survey of structures within the project area and within a 0.5-mile search radius.

Background research indicated that there are 38 previously recorded archaeological sites and no previously recorded aboveground resources within the project area or a 0.5-mile search radius of the project area. One previously recorded site (38MC2549) is located adjacent to the northwest corner of the project area; the site is a prehistoric lithic scatter that is not eligible for inclusion in the National Register of Historic Places (NRHP). As a result of the investigations, five new archaeological sites were identified and recorded (38ED1085 through 38ED1089) and no above ground resources were identified during the survey. The newly recorded archaeological sites are recommended not eligible for inclusion the NRHP (Figures 1.1 and 1.2; Table 1.1).

It is S&ME's opinion that the entire 434.93-acre project area should be considered low probability for containing significant cultural resources. Portions of the project area have been disturbed by recent logging activities, no intact soil stratigraphy is present at the site, and subsoil is present at surface throughout the project area. Based on the information present above, S&ME recommends that no further cultural resource work should be needed for the project area as currently proposed.

Table 1.1. Cultural resources identified during the survey.

Resource	Description	NRHP Eligibility	Recommendation
38ED1085	Historic Ceramic Scatter	Not Eligible	No Further Work
38ED1086	Prehistoric Lithic Scatter	Not Eligible	No Further Work
38ED1087	Prehistoric Lithic Scatter; Historic Ceramic and Glass Scatter	Not Eligible	No Further Work
38ED1088	Prehistoric Lithic Scatter; Historic Ceramic and Glass Scatter	Not Eligible	No Further Work
38ED1089	Historic Ceramic and Glass Scatter	Not Eligible	No Further Work

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### **Table of Contents**

Table of Contents  1.0 Introduction  2.0 Environmental Setting  2.1 Location  2.2 Geology and Topography	1444
2.0 Environmental Setting	4 4 4
2.1 Location	4 4 4
2.2 Geology and Topography	4
	4 4
	4
2.3 Hydrology	
2.4 Climate and Vegetation	10
2.5 Soils	
3.0 Cultural Context	12
3.1 Prehistoric Context	12
3.1.1 Paleoindian Period (ca. 13,000–10,000 B.P.)	12
3.1.2 Archaic Period (ca. 10,000–3000 B.P.)	13
3.1.3 Woodland Period (ca. 3000–1000 B.P.)	15
3.1.4 Mississippian Period (ca. 1000–350 B.P.)	18
3.2 Historic Context	18
3.2.1 Exploration and Early Settlement	18
3.2.2 The American Revolution	20
3.2.3 Antebellum Period	20
3.2.4 Civil War and Reconstruction	23
3.2.5 Twentieth Century	24
3.3 Background Research	25
3.4 Potential for Archaeological Resources	37
4.0 Methods	39
4.1 Archaeological Field Methods	39
4.2 Architectural Survey	39
4.3 Laboratory Methods	39
4.4 National Register Eligibility Assessment	40

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



5.0	Results		41
5.1	1 Archae	ological Survey Results	41
	5.1.1 38ED10	985	50
	5.1.2 38ED10	986	53
	5.1.3 38ED10	987	56
	5.1.4 38ED10	988	59
	5.1.5 38ED10	989	62
5.2	2 Archite	ctural Survey Results	65
6.0	Conclusions an	d Recommendations	66
7.0	References Cite	ed	67
8.0	Appendix A – A	Artifact Catalog	75
I		ic map showing project area and 0.5-mile search radiusshowing project area and 0.5-mile search radius	
		ep slope within the project area, facing east	
		ea within the project area, facing north.	
		nted pine within the project area, facing north	
		growth and timber piles within the project area, facing west	
	,	rithin the project area, facing north	
	· ·	s pipeline within the project area, facing northwest	
		sh pile/timber pile within the project area, facing northwest	
		s within the project area, facing southeast	
	2	t stream within the project area, facing southwest	
I	Figure 2.10. Area that I	has been timbered throughout the project area, facing east	9
	9	o showing different soil types within the project area	
F	Figure 3.1. ArchSite m	ap showing 0.5-mile search radius.	27
		Mouzon's map (1775), showing vicinity of project area	
I	Figure 3.3. Portion of N	Mills' Atlas map of Edgefield District (1825), showing vicinity of project area	28
	9	he 1892 topographic map showing vicinity of project area	
I	Figure 3.5. Portion of U	JSGS Clarks Hill 7.5-minute quadrangle (1921), showing project area	30

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Figure 3.6. Portion of 1935 USDA soil survey map of Edgefield County, indicating vicinity of the proarea	•
Figure 3.7. Portion of 1939 SCDOT map of Edgefield County, showing vicinity of the project area	32
Figure 3.8. Portion of USGS Clarks Hill 7.5-minute quadrangle (1942), showing project area	33
Figure 3.9. Portion of 1956 SCDOT map of Edgefield County map, showing vicinity of the project are	ea.34
Figure 3.10. Portion of USGS Clarks Hill 7.5-minute quadrangle (1957), showing project area	35
Figure 3.11. Portion of 1966 SCDOT map of Edgefield County map, showing vicinity of the project a	
Figure 3.12. Aerial map showing probability areas within the project area	38
Figure 5.1. Aerial map showing transect locations within the project area.	42
Figure 5.2. Wooded area within the project area, facing northwest.	43
Figure 5.3. Area of planted pine within the project area, facing east.	43
Figure 5.4. Secondary growth and timber piles within the project area, facing east	44
Figure 5.5. Steep slope within the project area, facing east	44
Figure 5.6. Dirt road within the project area, facing north	45
Figure 5.7. Natural gas pipeline within the project area, facing northwest	45
Figure 5.8. Typical push pile and timber piles within the project area, facing west	46
Figure 5.9. A gravel pile within the project area, facing southeast.	46
Figure 5.10. Intermittent stream within the project area, facing northwest	47
Figure 5.11. Area of logging activity and debarking area within the project area, facing west	47
Figure 5.12. Typical soil profile in areas where plow zone transitioned to subsoil	48
Figure 5.13. Typical soil profile in areas where subsoil was on the surface.	48
Figure 5.14. Subsoil on surface throughout the project area, facing south.	49
Figure 5.15. General vicinity of structure depicted on historic maps, facing south.	49
Figure 5.16. General vicinity of structure depicted on historic maps, facing northwest	50
Figure 5.17. Site map for 38ED1085.	51
Figure 5.18. Overview of site 38ED1085, facing east.	52
Figure 5.19. Typical soil profile at site 38ED1085.	52
Figure 5.20. Site map for site 38ED1086.	54
Figure 5.21. Overview of site 38ED1086, facing northeast.	55
Figure 5.22. Typical soil profile at site 38ED1086.	55
Figure 5.23. Site map for site 38ED1087.	57
Figure 5.24. Overview of site 38ED1087, facing west.	58

October 2023 iv

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Figure 5.25. Typical shovel test profile at site 38ED1087	58
Figure 5.26. Site map for site 38ED1088.	60
Figure 5.27. Overview of site 38ED1088, facing west.	61
Figure 5.28. Typical shovel test profile at site 38ED1088.	61
Figure 5.29. Site map for site 38ED1089.	63
Figure 5.30. Overview of site 38ED1089, facing north.	64
Figure 5.31. Typical shovel test profile at site 38ED1089.	64
Figure 5.32. Brick noted on the surface of site 38ED1089.	65
ist of Tables	
Table 1.1. Cultural resources identified during the survey	i
Table 2.1. Specific soil types found within the project area.	10
Table 5.1. Summary of transects within the project area	41
	Figure 5.27. Overview of site 38ED1088, facing west.  Figure 5.28. Typical shovel test profile at site 38ED1088.  Figure 5.29. Site map for site 38ED1089.  Figure 5.30. Overview of site 38ED1089, facing north.  Figure 5.31. Typical shovel test profile at site 38ED1089.  Figure 5.32. Brick noted on the surface of site 38ED1089.  Sist of Tables  Table 1.1. Cultural resources identified during the survey.  Table 2.1. Specific soil types found within the project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



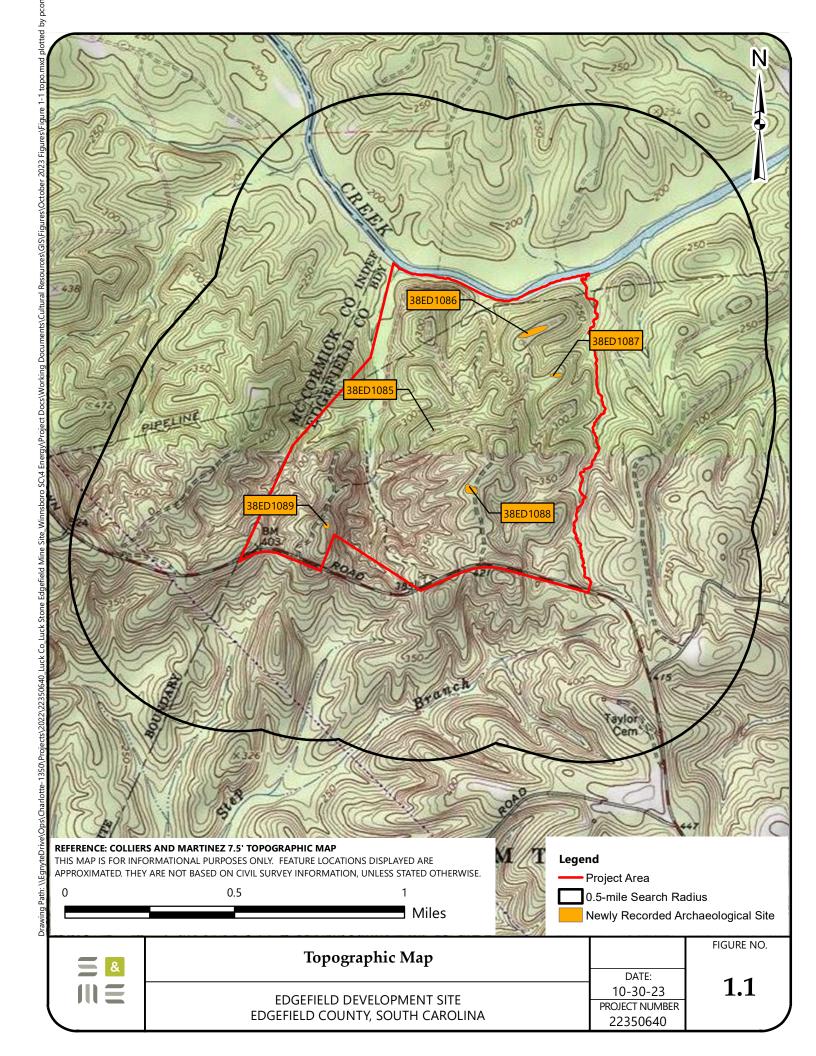
#### 1.0 Introduction

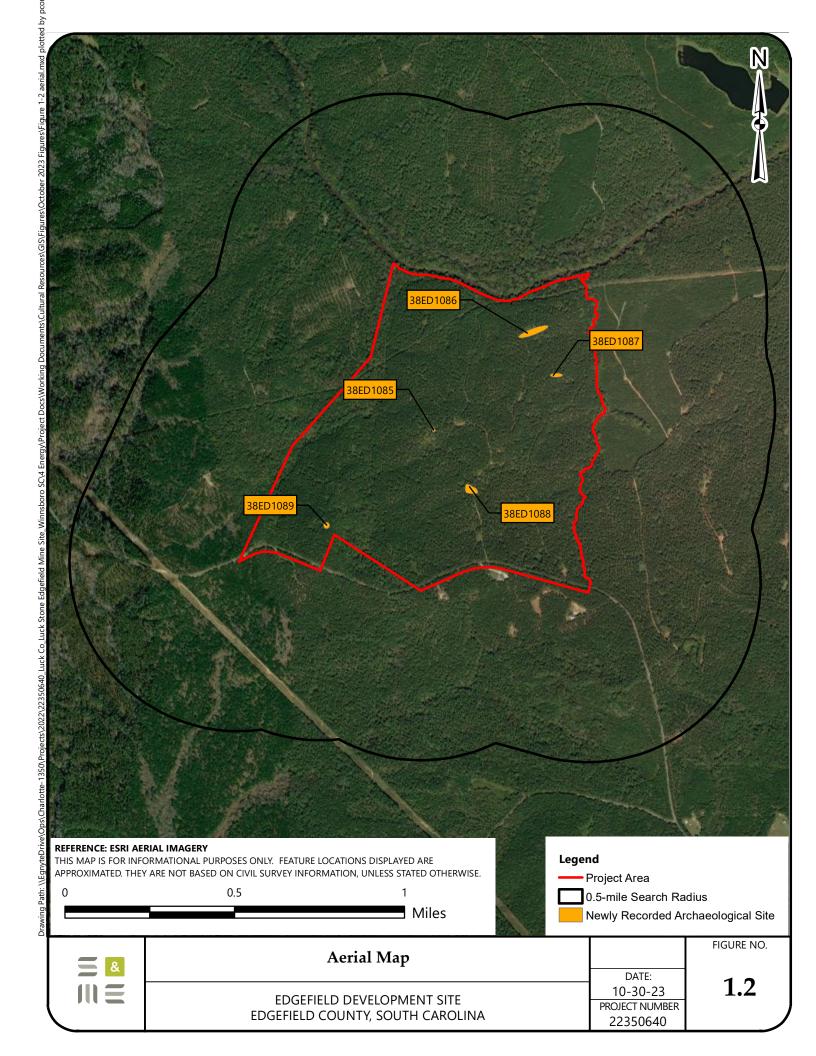
On behalf of Luck Companies, S&ME has completed a cultural resources reconnaissance survey of the proposed approximately 434.93-acre project area associated with the Edgefield Mine Site in Edgefield County, South Carolina (Figures 1.1 and 1.2). The project area is located south of Steven Creeks and north of Woodlawn Road, approximately 10.7 miles northwest of the city center of North Augusta, South Carolina.

The purpose of the survey was to assess the project area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required pursuant to the South Carolina Mining Act and Section 106 of the National Historic Preservation Act, as amended, and other pertinent federal, state, or local laws. This work was done in anticipation of federal permitting and was carried out in general accordance with S&ME Proposal Number 22350640, dated November 21, 2022.

S&ME carried out background research and field investigation tasks in December 2022 and January 2023. The fieldwork was conducted by Principal Archaeologist Kimberly Nagle, M.S., RPA, Field Director Paul Connell, B.A., and Crew Chief Clayton Moss, B.A. Fieldwork consisted of excavating shovel tests and photo documenting the project area. Graphics, GIS maps, and photographs were prepared by Mr. Moss, Ms. Nagle, and Principal Architectural Historian/Historian Heather Carpini, M.A. Architectural evaluations and historic research for the project was conducted by Ms. Carpini. The report was senior reviewed by Ms. Nagle.

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.





Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### 2.0 Environmental Setting

#### 2.1 Location

The project area is located along the southwestern boundary of Edgefield County and McCormick County, approximately 10.7 miles northwest of the town of North Augusta, South Carolina. Edgefield County, which covers approximately 507 square miles, is bounded by McCormick County to the west; Greenwood and Saluda counties to the north; Aiken County to the southeast, and the Savannah River to the southwest.

#### 2.2 Geology and Topography

The project area is located at the interface of the Piedmont and Sand Hills physiographic provinces of South Carolina (Kovacik and Winberry 1989). The Piedmont is a 100-mile-wide belt that encompasses most of the northwest portion of the state (Kovacik and Winberry 1989:16). The Piedmont physiographic province, which is underlain by soils weathered in place from the parent crystalline bedrock material. Rocks found in the Piedmont are generally metamorphic, with igneous granite intrusions (Kovacik and Winberry 1989). While the Sand Hills form the most inland portion of the Coastal Plain and are underlain by mostly sandy Cretaceous age sediments of the Black Mingo and Middendorf formations. These soils were eroded from a range of mountains in the northwest portion of the state approximately 65,000,000 years ago, and laid down in their present positions as fan deposits where they have weathered in place. Sediments rest unconformably on top of the underlying Piedmont crystalline bedrock at depths of between 20 and 120 feet. Massive, buff or tan kaolin beds are prevalent throughout the sequence, alternating with coarse-grained water-bearing sands and gravels which become increasingly prevalent near the base of the formation. Soil layers exhibit considerable lateral and vertical discontinuity.

The topography and soil deposition within the current project area are indicative of the Piedmont physiographic province with steep slopes, narrow valleys, and narrow ridge lines (Figure 2.1). Elevations range from 190 ft above mean sea level (AMSL) along Steven Creeks on the northern edge of the project area to 460 ft AMSL on a hilltop in the central portion of the project area (Figure 1.1).

#### 2.3 Hydrology

The closest permanent water source to the project area is Stevens Creek which flows along the northern edge of the project area; there are several intermittent streams that flow into Stevens Creek within the project area (Figure 1.1). Stevens Creeks flows east then south into the Savanah River, which continues southeast and empties into the Atlantic Ocean approximately 126 miles southeast of the project area.

#### 2.4 Climate and Vegetation

The climate in Edgefield County is characterized by warm summers and mild winters. The average daily temperatures range from 38° F in winter to 78° F in summer. Edgefield County receives an average of 48 inches of annual precipitation, which is adequate for most crops during the peak growing season lasting 210 days (Kovacik and Winberry 1987).

Vegetation within the project area consists of a mix of wooded areas and areas of secondary growth (Figures 2.2 through 2.4); the project area has been heavily disturbed by logging activities with most of the project area being deforested and additional disturbances include utility corridors, push piles, gravel piles, and roadways (Figures 2.5 through 2.10).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 2.1. View of steep slope within the project area, facing east.



Figure 2.2. Wooded area within the project area, facing north.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 2.3. Area of planted pine within the project area, facing north.



Figure 2.4. Secondary growth and timber piles within the project area, facing west.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 2.5. Dirt road within the project area, facing north.



Figure 2.6. Natural gas pipeline within the project area, facing northwest.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 2.7. Typical push pile/timber pile within the project area, facing northwest.



Figure 2.8. Gravel piles within the project area, facing southeast.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 2.9. Intermittent stream within the project area, facing southwest.



Figure 2.10. Area that has been timbered throughout the project area, facing east.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640

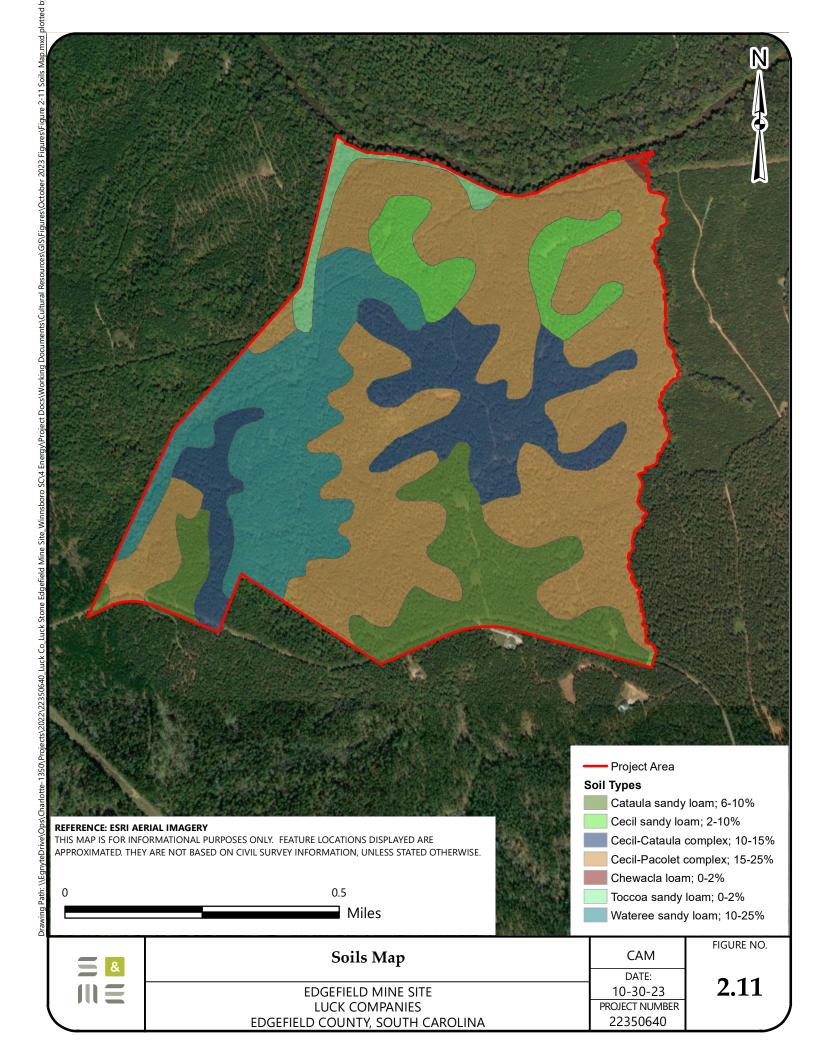


#### 2.5 Soils

There are seven soil types located within the project area (Figure 2.11); their descriptions can be found in Table 2.1 (USDA Web Soil Survey, Accessed October 30, 2023).

Table 2.1. Specific soil types found within the project area.

Soil Name	Туре	Drainage	Location	Slope	% in AOI
Cataula	Sandy loam	Moderately well drained	Hills	6–10%	12.4%
Cecil	Sandy loam	Well drained	Interfluves	6–10%	5.9%
Cecil-Cataula	Sandy clay loam	Well drained	Interfluves	10–15%	14.8%
Cecil-Pacolet	Sandy loam	Well drained	Hills	15–25%	47.6%
Chewacla	Loam	Somewhat poorly drained	Floodplains	0–2%	0.2%
Toccoa	Sandy loam	Moderately well drained	Floodplains	0–2%	2.0%
Wateree	Sandy loam	Well drained	Hills	10–25%	17.1%



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 3.0 Cultural Context

The cultural context of the region is reviewed below for two purposes: first, to outline previous research in the region as well as 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 area of potential effects (APE) in order to better understand their potential significance and NRHP eligibility. The cultural context of the project area includes the prehistoric record and the historic past, which are discussed in this section of the report.

#### 3.1 Prehistoric Context

Over the last three decades there has been much debate over when humans first arrived in the New World. The traditional interpretation is that humans first arrived in North America via the Bering land bridge that connected Alaska to Siberia at the end of the Pleistocene, approximately 13,500 years ago. From Alaska and northern Canada, these migrants may have moved southward through an ice-free corridor separating the Cordilleran and Laurentide ice sheets to eventually settle in North and South America.

Some researchers have suggested that initial colonization of the New World began well before Clovis, with some dates going back more than 35,000 years (Dillehay and Collins 1988; Goodyear 2005). Evidence for pre-Clovis occupations are posited for the Meadowcroft Rockshelter in Pennsylvania, the Cactus Hill and Saltville sites in Virginia, and 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 better 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, Missouri, Oregon, Tennessee, Texas, Wisconsin, and southern Chile. Despite this, the earliest definitive evidence for occupation in the Southeastern United States is at the end of the Pleistocene, approximately 13,000 years ago (Anderson and O'Steen 1992; Bense 1994).

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

Unfortunately, most information 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 multicomponent, 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 the hunting (or scavenging) of the 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 interriverine contexts (Charles and Michie 1992:193). Paleoindian projectile points appear to be concentrated along major rivers near the Fall Line and in the Coastal Plain, although it is almost certain that many additional sites

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



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, gravers, 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), however, radiocarbon data indicate that a more accurate time frame for the Clovis subperiod in North America may be 11,050 to 10,800 B.P. (Waters and Stafford 2007); 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 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 Period typically has been 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 are presumed to reflect a fairly high degree of mobility, making use of seasonally available resources in the changing environment across different areas of the Southeast. The people relied on large animals and wild plant resources for food. Group size gradually increased during this period, culminating in a fairly complex and populous society in the Late Archaic.

#### Early Archaic (10,000–8000 B.P.)

During the Early Archaic, there was a continuation of the semi-nomadic hunting and gathering lifestyle seen during the Paleoindian Period; however, there was a focus on modern game species rather than on the megafauna, which had become extinct by that time. During this time there also appears to have been a gradual, but steady increase in population and a shift in settlement patterns. In the Carolinas and Georgia, various models of Early Archaic social organization and settlement have been proposed (Anderson et al. 1992; Anderson and

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



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 river (Anderson and Hanson 1988: Figure 2). 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 other band territories was limited. At a higher 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 water fowl, and white-tailed deer.

Diagnostic markers of the Early Archaic include a variety of side and corner notched projectile point types such as Hardaway, Kirk, Palmer, Taylor, and Big Sandy, and bifurcated point types such as Lecroy, McCorkle, and St. Albans. Other than projectile points, tools of the Early Archaic subperiod include end scrapers, side scrapers, gravers, 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 Tennessee (Chapman and Adovasio 1977).

#### Middle Archaic (8,000–5000 B.P.)

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. By approximately 6000 B.P., extensive riverine and coastal swamps were formed by rising water tables as the sea level approached modern elevations (Whitehead 1972). It was during this subperiod that river and estuary systems took their modern configurations. The relationship between climatic, environmental, and cultural changes during this subperiod, however, 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 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.

During the Middle Archaic, groundstone tools such as axes, atlatl weights, and grinding stones became more common, while flaked stone tools became less diverse and tend to be made of locally available raw materials (Blanton and Sassaman 1989). Middle Archaic tools tend to be expediently manufactured and have a more rudimentary appearance than those found during the preceding Paleoindian and Early Archaic periods. The most common point type of this subperiod is the ubiquitous Morrow Mountain, but others such as Stanly, Guilford, and Halifax also occur, as well as transitional Middle Archaic-Late Archaic forms such as Brier Creek and Allendale/MALA (an acronym for Middle Archaic Late Archaic) (Blanton and Sassaman 1989; Coe 1964). The major

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



difference in the artifact assemblage of the Stanly Phase seems to be the addition of stone atlatl weights. The Morrow Mountain and Guilford phases also appear during the Middle Archaic, but Coe (1964) considers these phases to be without local precedent and views them as western intrusions.

#### 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.

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). 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 traditionally divided into three subperiods—Early Woodland (3000–2300 B.P.), Middle Woodland (2300–1500 B.P.), and Late Woodland (1500–1000 B.P.)— based on technological and social advances and population increase. Among the changes that occurred during this period were a widespread adoption of ceramic technology, an increased reliance on native plant horticulture, and a more sedentary lifestyle. There is 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). In addition, ceramics became more refined and regionally differentiated, especially with regard to temper.

#### Early Woodland (3000–2300 B.P.)

By 2500 B.P., pottery was used throughout most of the Southeast and there is 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 period. This pottery is characterized by coarse sand-tempered wares with surface treatments that

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



include simple stamping, punctate, plain, and dentate stamping (DePratter 1979, Sassaman 1993, Williams 1968). In the Piedmont, Early Woodland assemblages are identified by the presence of coarse sand-tempered Badin and Dunlap fabric impressed and cord marked pottery. Diagnostic bifaces of this period 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).

The limited data available on Early Woodland settlement patterns in the sandhills indicates a shift away from riverine settings, with small, semiautonomous groups living in the uplands at sites containing relatively few artifacts and little artifact diversity (Sassaman et al. 1990:13). In the Piedmont, there are few Early Woodland sites and a low population density is inferred (Ward and Davis 1999:83). Subsistence data indicate a continuation of Late Archaic diet, including white-tailed deer, bear, small mammals, reptiles and freshwater fish (Hanson and DePratter 1985; Marrinan 1975). One major difference, however, is that shellfish apparently are not an important part of the diet.

#### 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). On the northern South Carolina coast and in coastal North Carolina, a similar series, Deep Creek, has been identified. Like Deptford, this is a coarse sand-tempered pottery that contains cordmarked and simple stamped surface treatments. Unlike Deptford, however, fabric and net impressed surface treatments are prevalent and check stamping is absent (Phelps 1983; Trinkley 1990).

In the upper Coastal Plain and Piedmont, Early/Middle Woodland pottery consists of the Yadkin series, which is characterized by its crushed quartz temper and cordmarked, fabric impressed, check stamped, linear check stamped, and simple stamped surface treatments (Blanton et al. 1986, Coe 1964, Ward and Davis 1999). Yadkin Large Triangular points are the most common diagnostic projectile points of the Middle Woodland (Coe 1964), although Trinkley (1989:78) mentions a very small stemmed point he calls Deptford Stemmed. 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).

Middle Woodland occupations in South Carolina are not well documented, especially in non-coastal areas. Coastal 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 increase 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,

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



including pits, posts, human burials, and dog burials, were found at the site. White-tailed deer was the primary food source, with alligator, turtle, fish, turkey, freshwater mussels, hickory and acorns also being consumed (Sassaman et al. 1990:96). On the other end of the settlement spectrum, site 38LX5, located approximately 1.5 miles northwest of the project area, contained few features and little artifact diversity, suggesting a repeatedly occupied, seasonal hunting/butchering camp (Anderson 1979:123). 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 period (1500-1000 B.P.) in South Carolina and sites of this time period are rarely encountered. Some have suggested (e.g., Trinkley 1990) that the South Carolina Piedmont may have been a relatively uninhabited buffer zone between groups as it was during the subsequent Mississippian period. A more likely explanation is that sites of this time period are underrepresented because of the difficulty in recognizing Late Woodland artifact assemblages. In general, Late Woodland societies tend to be marked by an increasingly sedentary lifestyle and improvements in food storage and preparation technologies. Although corn and squash were used in the region at this time, they did not comprise a significant part of the diet.

Pottery of the Late Woodland period throughout much of the Piedmont is characterized by the later stages of the Yadkin-Uwharrie sequence proposed by Coe (1964). Uwharrie ceramics include plain, brushed, cordmarked, textile-impressed (including net and fabric), simple stamped, and curvilinear complicated stamped types that are tempered with sand and crushed quartz inclusions (Anderson et al. 1996). Associated lithic artifacts include small and medium sized triangular projectile points (e.g., Uwharrie points). In the upper Savannah River Valley and surrounding areas of the Piedmont, a variety of complicated stamped Swift Creek and Napier period ceramics are found in Late Woodland assemblages. Anderson and Joseph (1988:246) also believe that that Middle Woodland Cartersville and Connestee ceramics with plain, simple stamped and checked stamped surface treatments may extend later in time than originally thought.

In the Coastal Plain, there is a confusing proliferation of ceramic types for the Late Woodland period, including Wilmington, Hanover, Mount Pleasant, and Cape Fear (Anderson et al. 1996). Ceramics are 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. (1996:264) 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 found along the

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



lower coast, with surface treatments that include cordmarked net impressed, plain and burnished plain (Anderson et al. 1996; 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).

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

The Mississippian Period saw dramatic changes across most of the Southeast. 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, to as far north as Wisconsin (Aztalan). Mound centers were surrounded by outlying villages that usually were built along major rivers to take advantage of the rich floodplain soils. Smaller hamlets and farmsteads dotted the landscape around villages and provided food, tribute, and services to the chief in return for protection and inclusion in the sociopolitical system. 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 area 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).

Diagnostic artifacts of the Mississippian Period include small triangular projectile points and sand-tempered Lamar, Savannah, and Etowah pottery types (Anderson and Joseph 1988; Elliot 1995). These types are primarily identified by their complicated stamped designs, although simple stamped, check stamped, cordmarked, and other surface treatments also occur. Various ceremonial items made from stone, bone, shell, copper, and mica were used as symbolic markers of chiefly power and status.

#### 3.2 Historic Context

The project area is located between Stevens Creek and the Savannah River, in southwestern Edgefield County on it border with McCormick County. Edgefield County was created in 1785 from the southern section of Ninety-Six District and then was divided further into smaller counties. Parts of Edgefield County were later used to form Aiken, Saluda, Greenwood, and McCormick counties.

#### 3.2.1 Exploration and Early Settlement

The project area was part of the backcountry region of South Carolina, which remained sparsely populated during the early days of colonial settlement. Spanish explorers were the first Europeans to visit South Carolina, with expeditions by Lucas Vazquez de Ayllon and Hernando de Soto occurring in the area during the first half of the sixteenth century. However, the exact routes of these expeditions are debated and European presence in the area during the 1500s can only be speculated. It was once thought that the Silver Bluff area contained the town of Cofitachequi visited by de Soto in 1540 (Swanton 1939); however, more recent research places this town in the Wateree Valley near Camden (Hudson et al. 1984). After attempts by the Spanish and French to establish colonies

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



along the South Carolina and Georgia coasts, the English settlement at Charles Towne became the first permanent European settlement in South Carolina (Weir 1997:4–8, 58; Edgar 1998: 22–30, 47–48).

After the settlement of Charles Towne, in 1670, the English proprietary government sought to establish favorable trade relations with the Native American groups living in the Colony. The government encouraged traders to venture inland and settle among the tribes. Savano Town was a prominent native settlement, located on a high bluff along the Savannah River near present day North Augusta. By 1700, white colonists had moved into the area and established a profitable deerskin trade. The trade networks that they established with the native tribes based near Augusta, exchanging manufactured European goods for skins and Indian slaves, would provide the economic basis for the colony during the early eighteenth century. In 1715, white encroachment onto traditional tribal lands caused the Yamasee to attack English settlements in South Carolina, beginning in the Beaufort area and moving northward toward Charleston. Lasting for nearly two years, the Yamasee War was devastating to the new colony, resulting in the deaths of over 400 colonists and significant loss of property. The conflict convinced the colonial government to build fortifications to protect its trading interests in the interior, resulting in the construction of Fort Moore on the bluff where Savano Town was located. Begun in 1715, the fort served as a measure of protection and a trading center for half a century, until its abandonment in 1766 (Polhemus 1972; Edgar 1998:101; Vandervelde 1999:14–16).

Although Indian traders roamed through inland areas of the colony during the seventeenth and early eighteenth centuries, settlement of South Carolina was primarily concentrated along the coast during the first years of settlement. When the European colonists began to expand their territory, as the population increased and land around Charleston became scarce, they did so by moving slowly northeastward along the coastal rivers (Kovacik and Winberry 1989:76). Backcountry settlement underwent a significant boost with the adoption of Governor Robert Johnson's township plan in 1731. This plan, which created 11 townships along the South Carolina frontier, was an effort to promote population movement into the backcountry. The two primary goals of the plan were to create a barrier to prevent runaway slaves from the Lowcountry from escaping into the backcountry, and to provide a line of protection from Indian attacks for the coastal settlements (Johnson 1997:3). Combined with the establishment of Georgia as a buffer against Spanish Florida in 1732, these townships provided an impetus for settlers to migrate into the backcountry. The New Windsor Township was established along the Savannah River, encompassing both Fort Moore and the Savano Town site and, by 1736, about 100 settlers had moved into the township (Kovacik and Winberry 1989:79; Benson 2006:67-68; Edgar 1998:53). Although not all of the townships were successful, inland settlement increased during the mid-1700s. Between 1730 and 1760, the population of South Carolina nearly tripled, from approximately 30,000 to 80,000 people, and most of this population increase occurred in the backcountry (Kovacik and Winberry 1989:78; Edgar 2001:2).

In addition to the townships, other local governmental units were established by the colonial government, although most colonial business, including land grants and transfers, still took place in Charleston. During the earliest period of South Carolina's colonial history, the area encompassed by Edgefield County was part of Ninety-Six County. Following the American Revolution, the districts would be divided into counties and the project area would become part of Edgefield County until 1871 (Stauffer 1998:9–12).

European settlement along the Savannah, near Savano Town and New Windsor Township, had begun in the late 1600s, but migration to the more inland areas was not documented until the 1730s. These early settlements were generally concentrated along creeks and streams, with colonists choosing land in close proximity of one another, usually within 10 miles of their neighbors (Benson 2006:68; Meriwether 1940:163). Land grants along Horse Creek

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



begin in 1737, with Martin Campbell claiming 300 acres along the creek. Grants continued through the 1770s, although much of the land along the upper portions of Horse Creek was inhabited by members of the Chickasaw during the mid-1700s. A group of Chickasaw had settled in the area at the request of the South Carolina government in 1723 and they remained until the 1780s, when their lands were confiscated for their support of the British during the American Revolution (Edgar 1998:137; Cashin 2009:80–84, 143).

In the years prior to the American Revolution, the majority of settlers in the Sand Hills and lower Piedmont, including the area that is now Edgefield County, were self-sufficient farmers. The primary crop planted in the region was corn, which was supplemented with flax, tobacco, oats, wheat, and garden crops. Settlers also raised livestock, including cattle and hogs, for their own consumption (Kovacik and Winberry 1989:80; Benson 2006:68). In conjunction with farming practices, settlers also built mills along streams and creeks to process corn and wheat. For the most part, however, these crops were generally grown and processed for home consumption, since the scarcity of transportation networks hindered the movement of these commodities to coastal markets (Benson 2006:69). The lack of a single staple crop during the eighteenth century resulted in a large white population in the backcountry, with few slaves owned in the region prior to the American Revolution (Edgar 2001:2; Kovacik and Winberry 1989:80).

#### 3.2.2 The American Revolution

Backcountry residents generally had ambivalent feelings about the American Revolution. Survival and protection from Indian raids were more realistic concerns for the residents of these interior areas than the actions of the British monarchy, which primarily affected the residents of Charleston and other coastal cities (Edgar 1998). Although no military activity took place in the territory that would become Edgefield County, Ninety-Six District experienced significant fighting throughout the war. In July 1775, Fort Charlotte, located along the Savannah River to the north of New Windsor Township, saw South Carolina's first military action of the war when it was seized by a group of Patriots. The fort, originally erected to guard against Creek warriors crossing a nearby ford, had its ammunition confiscated, including over a ton of gunpowder, with no resistance. During the transport of their spoils to Ninety-Six, one member of the Patriot force changed his loyalties, eventually convincing several others to join him. When the ammunition arrived at Ninety-Six, the British recaptured it with no resistance (Ripley 1983:2–3; Gordon 2003:22–23).

Following the capture of Charleston after a 42-day siege, backcountry residents began to realize the immediacy of the war as their own homes and families were suddenly in danger. During this period, some interior residents switched from an essentially neutral stance to Patriot sentiment. The Ninety-Six District, however, remained a Loyalist stronghold, and in late 1780, General Horatio Gates charged Thomas Sumter with harassing the Ninety-Six area. A skirmish occurred at Long Canes in December 1780 and fighting continued throughout 1781, with the siege of the fort at Ninety-Six and battles at Horner's Creek, Stevens Creek, and Turkey Creek to the northwest of the project area. Although most of these resulted in Patriot victories, the ultimate outcome of these battles were of little consequence as Patriot forces were steadily defeating the British in other areas of the country (Gordon 2003:124, 155, 171; Benson 2006:72).

#### 3.2.3 Antebellum Period

Although there were already some thriving backcountry settlements, the end of the American Revolution ushered in a period of significant growth for the interior regions of South Carolina. In many cases, soldiers were offered unclaimed backcountry lands as payment for their service during the war. Some soldiers chose to settle on these

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



lands, while others sold them to families looking to migrate inland (Williams 1971). In 1785, the South Carolina government began dividing its districts into counties, as it sought a better mechanism of local authority to serve the increased population. Ninety-Six District was split into six counties with the project area contained within Edgefield County (Stauffer 1998:9).

Prior to the American Revolution, the Edgefield County area was dominated by small farmers who primarily participated in subsistence-based agriculture. Eli Whitney's cotton gin, patented in 1793, would significantly alter the agricultural character of region. A South Carolina judge indicated the importance of the cotton gin with his explanation that "the whole interior of the southern states was languishing, and its inhabitants emigrating for want of some object to engage their attention and employ their industry. We cannot express the weight of obligation which the country owes to this invention; the extent of it cannot be seen" (Edmonds 2001:10).

With locally made gins becoming available in the early 1800s, short-staple cotton became the primary crop in most of area. The cotton gin made production of this type of cotton easier and more profitable by significantly reducing the effort required to separate the seeds from the fibers. The initial capital investment needed to grow cotton was small, since the only tools required were a plow, hoe, gin, and baler. Many small farmers did not have a gin or baler of their own, but they could pay a small fee to use their neighbor's equipment, allowing them to participate in the new cotton growing boom. The enormous profits available from cotton growing and processing during the early nineteenth century influenced a large number of upcountry farmers to engage in this activity. The result was a change in agricultural practices, from primarily subsistence-based farming in the 1700s to the development of large inland cotton-producing plantations during the early 1800s (Kovacik and Winberry 1989:85–89).

Cotton production began with the tilling of land in early spring, followed by the liberal sowing of seeds shortly afterwards. In July, the young crops were thinned, reducing the number of plants to one per square foot. With periodic weeding, the plants were allowed to grow until they were ready to be harvested in the fall, when up to three harvests were made. After harvesting, the cotton fibers were removed from the seedpod and seeds; the ginned cotton was then generally made into bales of approximately 400 pounds each and shipped to market (Richter and Markewitz 2001:122).

Cotton would soon become the staple of the South Carolina backcountry where it could be grown on large tracts of land. By 1801, South Carolina was producing 20,000,000 pounds of cotton and ten years later it had more than doubled that production to 50,000,000 pounds. This amounted to approximately half of the cotton production in the entire country at the time (Edgar 1998:271; Benson 2006:73). The development of a profitable staple crop allowed the area to recover from the devastating effects of the American Revolution, which had ravaged a large percentage of agricultural lands (Edgar 1998:244). The desire to acquire more land for cotton cultivation resulted in white settlers pushing further inland and bringing more land under their control. High profits allowed cotton farmers to purchase more land and slaves, ultimately creating a plantation-based economy in much of the area (Edgar 1998:271).

Richland County was the first inland county to benefit from the large-scale cotton economy, with the first large harvest for export being available in 1799. By 1803, cotton production had spread into Edgefield County and by 1810, the lower Piedmont region, including Edgefield County, had become the primary cotton producing area of the state (Edgar 1998:271).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



The adoption of cotton as a staple crop led to a significant demographic change in the region. In 1790, South Carolina had a total population of 249,073, with approximately 43 percent of the population, or 107,094 people, being slaves. During the waning years of the eighteenth century, the slave population was generally concentrated in the coastal region, with 73 percent of the slaves in South Carolina living in these areas. In contrast, the interior of the state contained approximately 80 percent of South Carolina's white population (Benson 2006:73).

Although these numbers show the growth of slave ownership in the area, and much cotton was grown on large plantations by landowners who had numerous slaves, not all residents of the area fit this model. While the number of backcountry families owning slaves grew significantly during the antebellum period, from 25 percent in 1800 to 40 percent in 1820, most families owned less than three slaves, and there were still a large number of white families who did not own any slaves (Edmonds 2001:20; Edgar 1998:272). Unlike other staple crops such as rice, cotton could be grown by farmers on small patches of land the same as large landowners did on plantations. These farmers toiled in the fields alongside their families and one or two slaves to produce the cotton (Benson 2006:74). With the promise of high profits, farmers abandoned their traditions of subsistence farming. Acreage that had once been utilized for food crops that fed the farm's residents was now devoted to cotton. Between 1850 and 1860, the percentage of Piedmont farms that were self-sufficient fell from about 75 percent to around 25 percent (Edgar 1998:275).

The reliance on cotton as a singular cash crop caused serious depletion of the nutrients in the soil and severe erosion. Although cotton was sometimes rotated with other crops, more often fields were abandoned when their yields fell because land was so plentiful. John Drayton noticed this practice, stating that "when one piece of land has been exhausted by agriculture, another has been cleared of woods for similar purposes" (Edgar 1998:275). Fertilizers were not commonly advocated until the mid-nineteenth century, and even then they were not widely used by farmers (Richter and Markewitz 2001:122). Robert Mills noted the poor soil conditions in his Statistics of South Carolina in 1826, wishing that the planters might "[give] back to the soil some portion of the nourishment they take from it; otherwise the most deplorable results must follow: short crops and barren fields, the disappearance of the forests, and a desolate country" (Mills 1826:350).

Cotton was also a somewhat unreliable crop during the first half of the nineteenth century. Early in the century, farmers reaped large profits from good cotton harvests sold at high prices. In 1818, cotton was selling for about 30.8 cents per pound; the Panic of 1819, however, caused economic depression throughout the country and by 1823, the price per pound of cotton had dropped to 12 cents. In the years between 1826 and 1832, cotton averaged only nine cents per pound, but between 1832 and 1837, the price rose steadily, hitting 17 cents per pound in the beginning of 1837. By May of that year, another economic depression had hit the United States and cotton prices again fell, hitting a low of eight cents per pound. Although the 1840s were wrought with a series of floods and droughts that destroyed large portions of the cotton crop, 1849 was a particularly good harvest, not only for cotton, but also for corn, oats, and sweet potatoes, which gave farmers hope of economic recovery. A severe drought in 1850, however, brought another poor cotton year and low prices (Edmonds 2001:20–22). Planters during this period were relying on a long term credit system, buying on credit throughout the year until they sold their cotton crop. Bad market prices undermined this credit and farmers began bringing more acres under cultivation for cotton to try to increase their profits (Edmonds 2001:23).

Mills had been built in South Carolina since the eighteenth century; these were often small enterprises used for sawing lumber or processing the crops of a single farm, such as milling corn and grinding wheat. Mill owners sometimes allowed neighbors to utilize their facilities, often for a portion of the products, but by the turn of the

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



nineteenth century some of these mills had grown into larger, more significant enterprises. Textile manufacturing began in South Carolina in 1776 and multiple small spinning and weaving factories were begun during the next 50 years. The most significant development for South Carolina's textile industry, however, occurred in 1828, with the opening of the Vaucluse Mill along Horse Creek, southeast of the project area (LaBrie 2010:8).

The Vaucluse Mill was built by Christian Breithaupt, an Edgefield County planter. Between 1831 and 1833, the mill burned down and the new mill, incorporated as the Vaucluse Manufacturing Company, was a four-story building constructed of granite that housed 1,800 spindles and 35 looms. Changes in mill ownership occurred throughout the 1830s and in the early 1840s the Vaucluse Manufacturing Company was purchased by James Jones and William Gregg, each owning half interest in the company. William Gregg was instrumental in the growth of the textile industry in South Carolina; in 1846, he opened the massive Graniteville Manufacturing Company mill facility three miles south of the Vaucluse mill on Horse Creek. By 1856, after additional reorganization and ownership changes, Gregg owned full interest in both the Vaucluse Mill and the Graniteville Mill, and he worked on the expansion and modernization of the older mill. By 1859, the Vaucluse Mill was equipped with nearly 2,900 spindles, as well as a repair shop, carding engines, drawing frames, and yarn bundling and balling machines. The mills at both Vaucluse and Graniteville employed numerous workers, both black slaves and free whites, during the first half of the nineteenth century. They utilized the raw materials produced by the region's farmers and produced finished goods, and by the end of the Civil War these were the only remaining Southern textile mills producing fabric for Confederate uniforms. This innovative venture also set a pattern for the industry that would transform the region following the Civil War (Downey 1995; Toole 1958:261–265).

One of the most significant technological advances of the early 1800s was the railroad, which made transportation of people and goods cheaper and more efficient. South Carolina was at the forefront of railroad development in the United States and the construction of the state's first railroad played an important role in the growth of the Aiken County area. Railroads allowed cotton from the region to be easily transported to markets for export and finished goods to flow into the region. Additionally, the railroad allowed the Vaucluse and Graniteville mills to develop into successful enterprises, as the raw cotton from farms could be brought to the mills and the finished cloth and yarn could be transported to Charleston or Augusta. The South Carolina Rail Road and Canal Company (SCRRCC) was incorporated in 1827 and sought to reinvigorate Charleston's commercial port status by linking trade in the western portion of the state, which was going to Augusta at the time, to the port city. The planned route ran from Charleston to Hamburg, which was directly across the Savannah River from Augusta, and the 136-mile track was the longest steam locomotive railroad in the world when it was completed in 1833 (Kovacik and Winberry 1989:96; LaBrie 2010:5).

#### 3.2.4 Civil War and Reconstruction

Although the Civil War officially began with the Confederate shelling of Fort Sumter, major battles did not begin until nearly seven months later. Early in 1861, while excitement for the war was high and Southerners were rallying to the Confederate cause, companies of men, both young and old, traveled to the coast to help defend Charleston. Regiments from the region gathered and drilled, before eventually heading out to campaigns in Virginia and other states. Women in the counties organized relief and aid organizations, raising money and performing whatever services they could to help the war effort and the soldiers (Edgar 1998). The only significant military action in the area was the Battle of Aiken in February 1865, south of the project area. General William T. Sherman's Union cavalry troops, under Brigadier General Hugh J. Kilpatrick, destroyed large sections of the Charleston to Hamburg railroad line and entered Aiken, looking to move on to destroy the mills at Vaucluse and Graniteville. After multiple skirmishes within the town, the Union troops were repulsed by Confederate forces

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



under General Joseph Wheeler and retreated to join the rest of General Sherman's army on its march toward Columbia (LaBrie 2010:9).

Reconstruction brought significant changes to the Sand Hills and southern Piedmont. Much of the wealth of the planter class had been based on the value of their slaves. With the abolition of slavery at the close of the Civil War, many planters found themselves in significant debt. Planters also found themselves without a readily available free workforce, and paying wages to former slaves would only add to their financial difficulties. Additionally, many former slaves moved away from their plantations, often looking for family members who had been sold before the war, while others simply refused to work for their former owners. In addition to labor shortages, weather wreaked havoc on postwar crops, resulting in poor harvests in five out of the first six years following the end of the Civil War (Benson 2006:76; Baker 1931:44; Bellardo 1979:x).

Buried under large amounts of debt, many former planters and small farmers lost their lands to foreclosure. In the decade following the Civil War, two types of arrangements emerged— tenancy and sharecropping— as landless farmers, both black and white, sought arrangements that would allow them to continue farming to support their families. The newly freed black slaves were forced into these arrangements because they had no land, little money, and few other options. As the 1800s drew to a close, many white farmers succumbed to large debts and also became tenants for large landholders. Two categories of tenancy developed, cash tenants and share tenants. Cash tenants provided their own tools and seed, gaining ownership of the crop they produced while paying rent on their house and land to the landlord. Sharecroppers could not afford their own tools or seeds; the landlords supplied these items and subtracted their value from the farmer's share of the crop. Both systems resulted in many small farmers living meager existences (Orser 1998:57).

By 1880, tenancy arrangements accounted for approximately 47 percent of all farms operated in the state (Kovacik and Winberry 1989:106). Throughout the state, large farms were being divided into smaller units and let out to either tenants or sharecroppers. In 1860, the average farm size in South Carolina was 569 acres. By 1880 it had decreased to 143 acres and at the turn of the twentieth century it was down to 90 acres (Kovacik and Winberry 1989:106; Social Explorer 2022).

Cotton continued to be grown in the area throughout the second half of the nineteenth century. Because of its scarcity, in 1866 cotton was selling for 66 cents per pound; by 1869, the price had fallen to 31.75 cents per pound and to 20 cents per pound by 1871. These prices were still higher than during many of the prewar years, so farmers continued to grow cotton in an effort to increase their income. By 1890, when cotton production levels equaled those of 1860, the price per pound fell significantly and more farmers faced foreclosure and were forced into tenancy arrangements (Edmonds 2001:27–32; Edgar 1998:428). The Reconstruction era brought changes to the area. Destruction of the railroad tracks halted rail service between Charleston and Hamburg until 1869, when limited service was restored; complete restoration of the tracks and rail service did not occur until 1879.

#### 3.2.5 *Twentieth Century*

The twentieth century brought many changes to the area. During the early twentieth century, the lands of Edgefield County were still primarily used for agriculture. Cotton remained the primary crop, with estimates as high as two-thirds of the acreage devoted to cotton. Farmers also grew corn on their lands and this took up most of the remaining acreage. Other food crops were grown in small quantities, including oats and sweet potatoes for home consumption (Benson 2006:78). Cotton had become profitable again in the years preceding World War I, with a record harvest in 1914.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Similar to the situation during Reconstruction and the late 1800s, many of the farmers in Edgefield County did not own the land they worked on. Instead, they were either renters or sharecroppers, renting the land and an associated residence from a large landowner in exchange for either cash or a portion of the yearly crop. Essentially, there were five classes of agricultural workers. Owners held the legal title to the land they farmed, while on the opposite end of the spectrum were squatters who lived on land without the owner's permission. Between these two categories fell renters, who paid cash for the use of a house and the right to farm a tract of land; tenants, who paid a specific portion of their crop yield for a horse and the right to farm a tract of land; and sharecroppers, who borrowed all necessary farming implements from the landowner and essentially sold their labor for the right to farm a tract of land, live in a house, and receive a small portion of the crop they produced (Blackwell 1937:23).

In this region of South Carolina, the majority of farmers did not own their land, yet neither did many qualify as squatters. Instead, during the early twentieth century, most agricultural families in this area fell into the three middle classifications. A 1935 study of 3,324 families in portions of the Piedmont indicated that 75 percent (2,493 families) were engaged in farming. Of these farming families, 25 percent were owners and only one percent were squatters, with the remaining 74 percent split between the three categories of tenancy: 25 percent were renters, 26 percent were cash tenants, and 23 percent were sharecroppers. Ownership, however, was more prevalent among white farming families, with 75 percent of the 628 landowning families being white. In contrast, 79 percent of renters, 72 percent of tenants, and 92 percent of sharecroppers were black (Benson 2006:79).

#### 3.3 Background Research

In December 2022, 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 3.1). 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 38 previously recorded archaeological sites, no above ground resources, and nine previously conducted cultural resource surveys within a 0.5-mile radius of the project area (Figure 3.1, Table 3.1). One of the archaeological sites (38MC2549) is adjacent to the northwestern boundary of the project area; the site is a prehistoric lithic scatter and was recommended eligible for inclusion in the NRHP (Table 3.1). The remaining archaeological sites and previously completed surveys are not within or 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); United States Geological Survey (USGS) topographic maps from 1892, 1921, 1942, and 1957; a USDA soil survey map from 1935; and South Carolina Department of Transportation (SCDOT) maps from 1939, 1956, and 1966 and were examined. Mouzon's map indicates that the project area was located within Ninety-Six Precinct with an unnamed road in the vicinity of the project area; Londonerry and New Bourdeaux are established north of the project area (Figure 3.2). Mill's Atlas (1825) of Edgefield District shows Mrs. Graftons was the nearest property owner and is located along an unnamed road to the south of the project area and A&C Andersons Mill to the east of the project area (Figure 3.3). The 1892 topographic map depicts the project area and surrounding area as uninhabited; the community of Woodlawn is to the west (Figure 3.4).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Table 3.1. Previously recorded cultural resources within a 0.5-mile search radius.

Resource No.	Description	NRHP Eligibility	Source
38ED0072	No Site Form Scanned		ArchSite
38ED0074	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0075	Middle Woodland lithic and ceramic scatter	Not Eligible	ArchSite
38ED0153	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0458	Middle Archaic lithic scatter; 19th century artifact scatter	Not Eligible	ArchSite
38ED0460	Historic Cemetery, 19th/20th century	Not Eligible	ArchSite
38ED0461	19th/20th century house and outbuilding	Not Eligible	ArchSite
38ED0482	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0483	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0812	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0814	Middle/Late Archaic lithic scatter	Additional Work	ArchSite
38ED0817	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED0818	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED1024	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED1027	20 <sup>th</sup> century house	Not Eligible	ArchSite
38ED1074	Prehistoric lithic scatter	Additional Work	ArchSite
38ED1076	Archaic-Mississippian lithic and ceramic scatter	Additional Work	ArchSite
38ED1078	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED1079	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED1080	Prehistoric lithic scatter	Not Eligible	ArchSite
38ED1081	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC0455	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC0458	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC0459	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC0460	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC0707	No Site Form on Record		ArchSite
38MC0860	19 <sup>th</sup> /20 <sup>th</sup> century house site	Not Eligible	ArchSite
38MC2531	No Site Form Scanned		ArchSite
38MC2532	No Site Form Scanned		ArchSite
38MC2533	No Site Form Scanned		ArchSite
38MC2536	No Site Form Scanned		ArchSite
38MC2537	No Site Form Scanned		ArchSite
38MC2548	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC2549	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC2550	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC2551	Prehistoric lithic scatter	Not Eligible	ArchSite
38MC2821	Late Archaic lithic scatter; 19th/20th century house site	Not Eligible	ArchSite
38MC2826	20 <sup>th</sup> century house site	Not Eligible	ArchSite

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



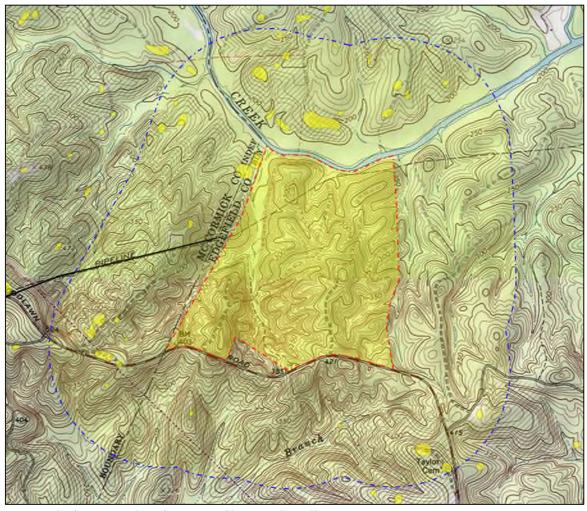


Figure 3.1. ArchSite map showing 0.5-mile search radius.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 3.2. Portion of Mouzon's map (1775), showing vicinity of project area.

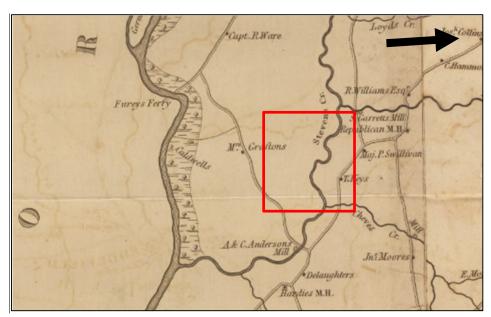


Figure 3.3. Portion of Mills' Atlas map of Edgefield District (1825), showing vicinity of project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



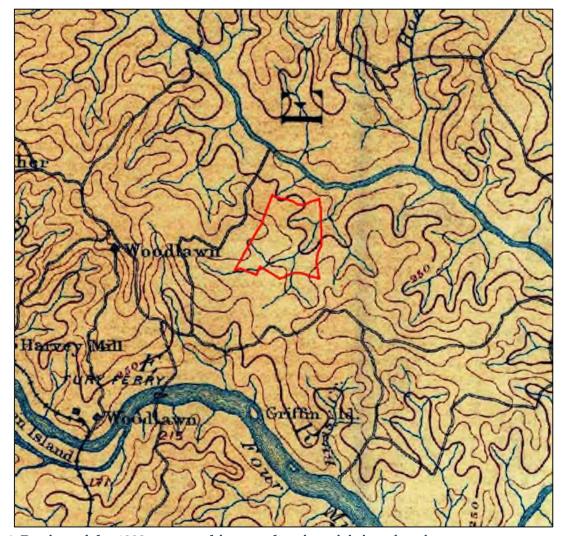


Figure 3.4. Portion of the 1892 topographic map showing vicinity of project area.

The 1921 topographic map shows five structures within the project area and a dirt road along the southern boundary; a few structures are depicted in the area around the project area (Figure 3.5). The 1935 soils map depicts only one structure in the southwestern portion of the project area and a dirt road along the southern boundary; there appear to be numerous outbuildings along the ridgelines surrounding the project area along other dirt roadways (Figure 3.6). The 1939 SCDOT map shows no structures within the project area and a few structures to the south (Figure 3.7). The 1942 topographic map depicts the five structures shown on the 1921 topographic map, as well as the structures in the vicinity of the project area (Figure 3.8). The 1956 SCDOT map shows no structures within the project area or in the surrounding area; a few structures and the Spring Grove Church are depicted southeast of the project area (Figure 3.9). The 1957 topographic map shows one structure in the southwestern portion of the project area; a dirt road is also depicted bisecting the project area and crossing Stevens Creek and the road forming the southern boundary of the project area is shown as being improved (Figure 3.10). The 1966 SCDOT map shows no structures within the project area, a gas line is present within the northern portion of the project area (Figure 3.11).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



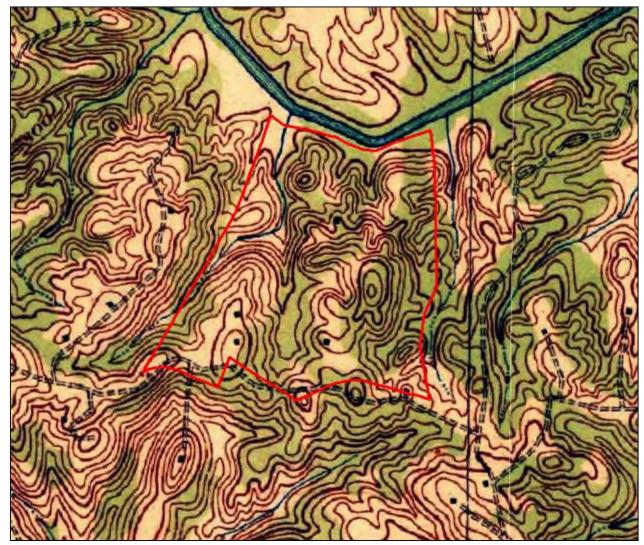


Figure 3.5. Portion of USGS Clarks Hill 7.5-minute quadrangle (1921), showing project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



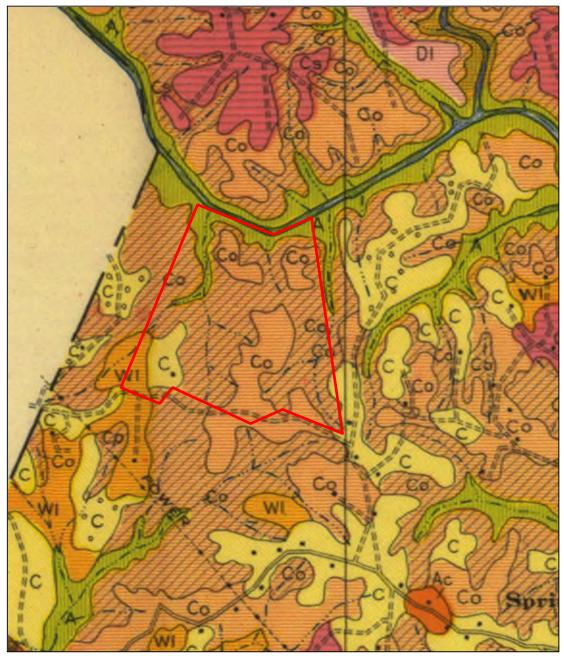


Figure 3.6. Portion of 1935 USDA soil survey map of Edgefield County, indicating vicinity of the project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



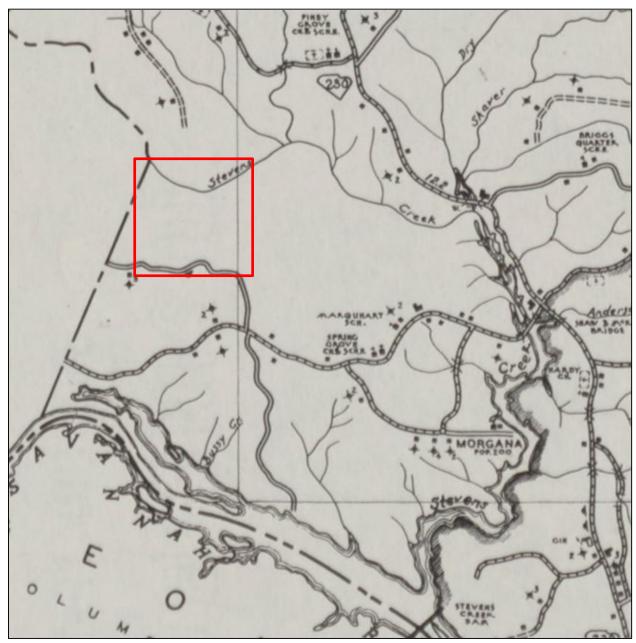


Figure 3.7. Portion of 1939 SCDOT map of Edgefield County, showing vicinity of the project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



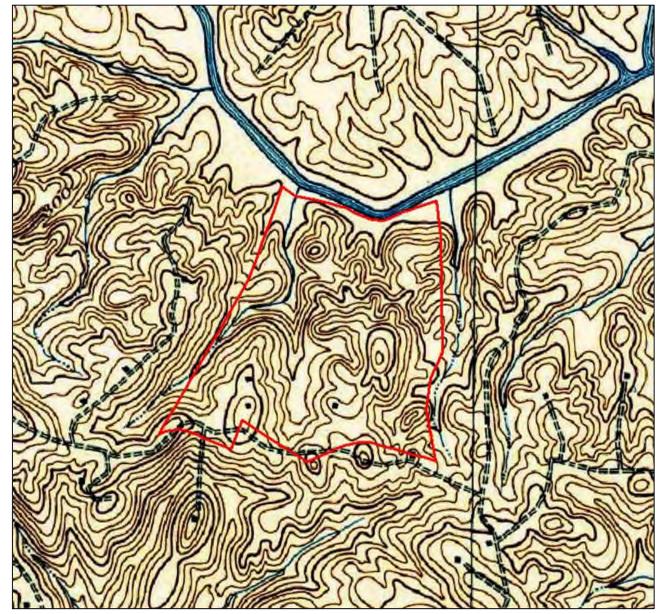


Figure 3.8. Portion of USGS Clarks Hill 7.5-minute quadrangle (1942), showing project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



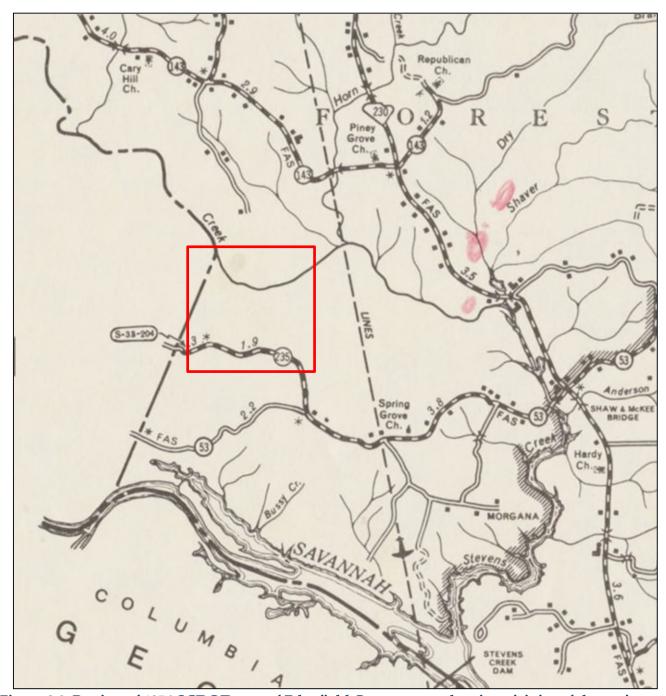


Figure 3.9. Portion of 1956 SCDOT map of Edgefield County map, showing vicinity of the project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 3.10. Portion of USGS Clarks Hill 7.5-minute quadrangle (1957), showing project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 3.11. Portion of 1966 SCDOT map of Edgefield County map, showing vicinity of the project area.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



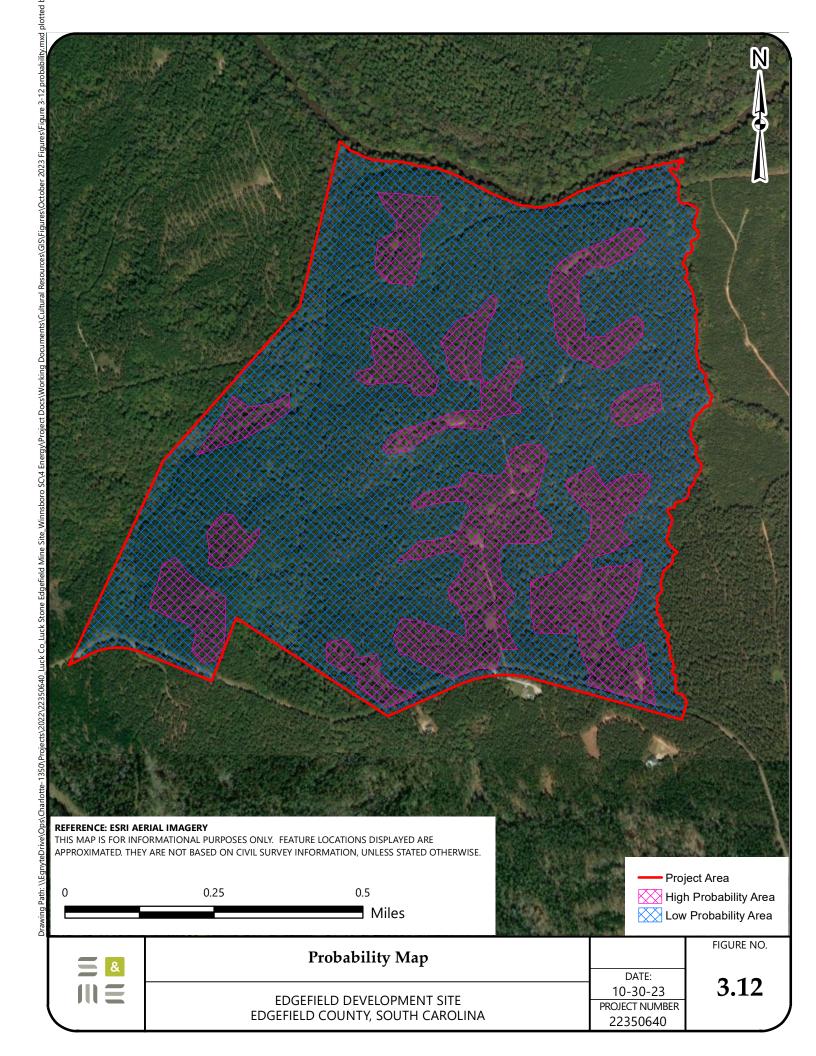
#### 3.4 Potential for Archaeological Resources

Various predictive models assist researchers in identifying areas having a high potential for containing archaeological sites (e.g., Benson 2006; Brooks and Scurry 1978; Cable 1996; Scurry 2003). In general, the most significant variables for determining site location are distance to a permanent water source, proximity to a wetland or other ecotone, slope, and soil drainage. Prehistoric sites tend to occur on relatively level areas such as ridge tops or knolls, with well drained soils that are near a permanent water source or wetland. Historic home sites tend to be located on well drained soils near historic roadways.

The South Carolina Standards and Guidelines for Archaeological Investigations outlines three site occurrence probability categories. The categories listed in South Carolina Standards and Guidelines for Archaeological Investigations (2013) are:

- A. Indeterminate Probability. Areas that are permanently or seasonally inundated; tidal areas; and active floodplains (or other active depositional environments) where deposits are so deep that finding sites using conventional methods is unlikely.
- B. Low Probability. Areas with slopes greater than 15 percent; areas of poorly drained soil (as determined by subsurface inspection); and areas that have been previously disturbed to such a degree that archaeological materials, if present, are no longer in context. Documentation of disturbance can include recent aerial photographs, ground views, or maps showing the disturbance (e.g., recent construction).
- **C.** High Probability. Areas that do not meet any of the foregoing criteria are considered to possess high probability.

Based on soil characteristics, topography, historic maps, and distance to a permanent water source, approximately 117.9 acres (27 percent) of the project area are considered high probability for containing significant archaeological sites; the remaining 317.03 acres (73 percent) are considered low probability (Figure 3.12).



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 4.0 Methods

#### 4.1 Archaeological Field Methods

A cultural resources reconnaissance survey for the approximately 434.93-acre Edgefield Mine Site was conducted on January 3 and 4, 2023. The archaeological reconnaissance survey was conducted primarily with shovel tests in areas of high and low probability for containing archaeological sites based on landform type, soil drainage, distance to water, and the results of the background research. Pedestrian survey was undertaken along dirt roads and other areas with good ground surface exposure.

Shovel tests were at least 30 cm by 30 cm and excavated to sterile subsoil or 80 cm below surface (cmbs), whichever was encountered first. Soil from the shovel tests was screened though ¼-inch wire mesh and soil colors were determined through comparison with Munsell Soil Color Charts. If sites were identified, they would be 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 Architectural Survey

In addition to the archaeological survey, an architectural survey was conducted to determine whether the proposed project would affect aboveground National Register listed or eligible properties. Existing aboveground resources within the project area and within a 0.5-mile search radius were examined for National Register eligibility using the criteria established by the U.S. Department of the Interior and the National Park Service and previously recorded aboveground resources were revisited. Previously unrecorded resources 50 years or older were digitally photographed and marked on the applicable USGS topographic quadrangle maps. State resource forms were filled out and submitted to SCDAH once fieldwork was complete.

#### 4.3 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).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



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 (1977), and Miller (1991).

The artifacts, field notes, maps, photographs, and other technical materials generated as a result of this project will be temporarily curated at the S&ME office in Columbia, South Carolina. After conclusion of the project, S&ME will either return the artifacts to the landowner or transfer the artifacts and relevant notes to a curation facility meeting the standards established in 36 CFR Part 79, Curation of Federally-Owned and Administered Archaeological Collections.

#### 4.4 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:

- 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.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 5.0 Results

A cultural resources reconnaissance survey for the approximately 434.93-acre Edgefield Mine Site was conducted on January 3 and 4, 2023. As a result of the survey, five new archaeological sites (38ED1085 through 38ED1089) were identified and recorded, no above ground resources were identified. Each of the resources listed above is discussed below in the archaeological and architectural survey results sections.

#### 5.1 Archaeological Survey Results

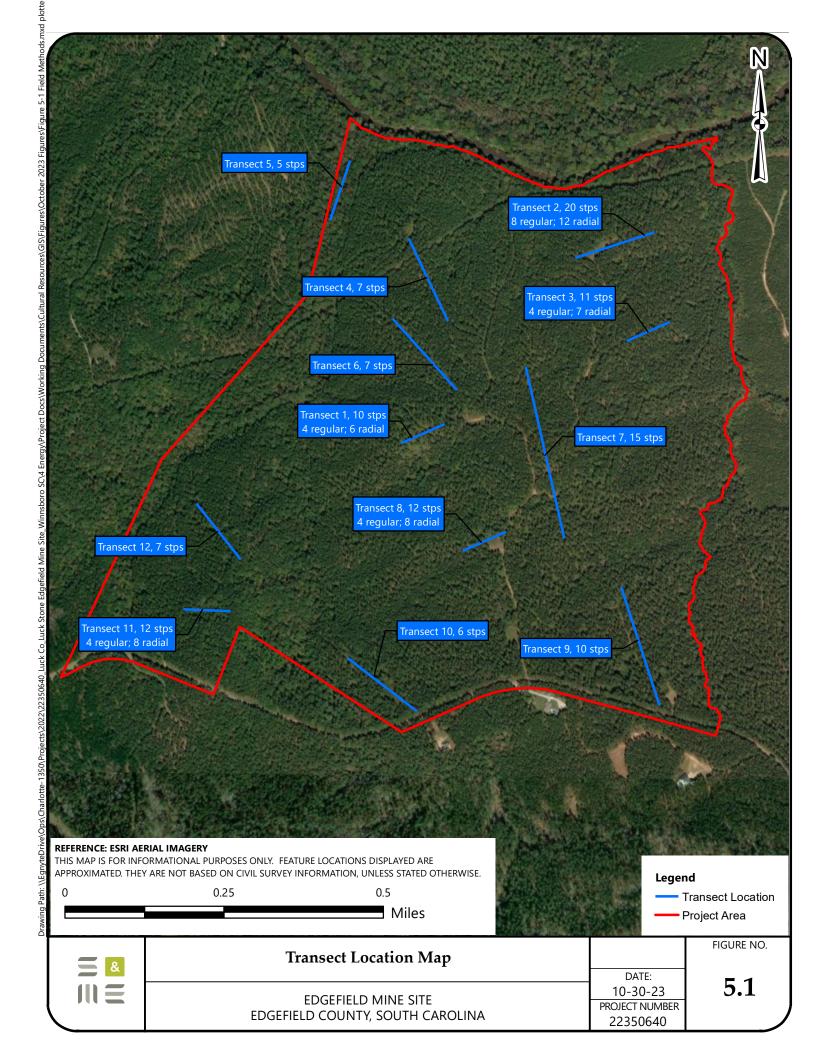
A total of 122 shovel tests (81 regular and 41 radial) were excavated within the project area along 12 transects (Figure 5.1; Table 5.1). Vegetation within the project area consists of a mix of wooded areas and areas of secondary growth (Figures 5.2 through 5.4); the project area contains steep slopes and has been heavily disturbed by logging activities with most of the project area being deforested and additional disturbances include utility corridors, push piles, gravel piles, and roadways (Figures 5.5 through 5.11).

Table 5.1. Summary of transects within the project area.

Transect No.	No. of Shovel Tests	Landform	Findings	Typical Soil Profile
1	10 (4 regular/6 radial)	Ridgeline	38ED1085	Subsoil on surface
2	20 (8 regular/12 radial)	Ridgeline	38ED1086	Plow to subsoil
3	11 (4 regular/7 radial)	Ridgeline	38ED1087	Subsoil on surface
4	7	Ridgeline/Hillslope	None	Subsoil on surface
5	5	Floodplain	None	Plow to subsoil
6	7	Ridgeline	None	Subsoil on surface
7	15	Ridgeline/Hillslope	None	Subsoil on surface
8	12 (4 regular/8 radial)	Ridgeline	38ED1088	Plow to subsoil
9	10	Hilltop/Hillslope	None	Plow to subsoil
10	6	Ridgeline	None	Subsoil on surface
11	12 (4 regular/8 radial)	Ridgeline	38ED1089	Gravel impasse
12	7	Ridgeline/Hillslope	None	Subsoil on surface

Two soil profiles were encountered throughout the project area: the first consisted of plow zone transitioning to subsoil and the second profile consisted of subsoil on the surface. The typical soil profile in areas where plow zone transitioned to subsoil consisted of 20 cm of brown (10YR 4/3) sandy loam, terminating with 10+ cm (20–30+ cmbs) of red (10R 4/6) sandy clay loam subsoil (Figure 5.12). The typical soil profile where subsoil was encountered at the surface consisted of 10+ cm of red (10R 4/8) sandy clay subsoil (Figure 5.13). The majority of the project area contained deflated soils with subsoil exposed on the surface (Figure 5.14).

An attempt was made to re-locate each of the structures depicted on the historic maps. None of the structures remained standing, artifacts that likely represent the houses were found at three locations and are recorded as archaeological sites 38ED1088 and 38ED1089. No artifacts were identified at the two other structure locations (Figures 5.15 and 5.16). As a result of the survey five new archaeological sites (38ED1085 through 38ED1089) were identified. Each site is discussed in greater detail below.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.2. Wooded area within the project area, facing northwest.



Figure 5.3. Area of planted pine within the project area, facing east.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.4. Secondary growth and timber piles within the project area, facing east.



Figure 5.5. Steep slope within the project area, facing east.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.6. Dirt road within the project area, facing north.



Figure 5.7. Natural gas pipeline within the project area, facing northwest.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.8. Typical push pile and timber piles within the project area, facing west.



Figure 5.9. A gravel pile within the project area, facing southeast.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.10. Intermittent stream within the project area, facing northwest.



Figure 5.11. Area of logging activity and debarking area within the project area, facing west.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.12. Typical soil profile in areas where plow zone transitioned to subsoil.



Figure 5.13. Typical soil profile in areas where subsoil was on the surface.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.14. Subsoil on surface throughout the project area, facing south.



Figure 5.15. General vicinity of structure depicted on historic maps, facing south.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.16. General vicinity of structure depicted on historic maps, facing northwest.

#### 5.1.1 38ED1085

Site Number: 38ED1085NRHP Recommendation: Not EligibleSite Type: Artifact ScatterElevation: 390 ft AMSL

Components: 20<sup>th</sup> century

Landform: Ridgeline

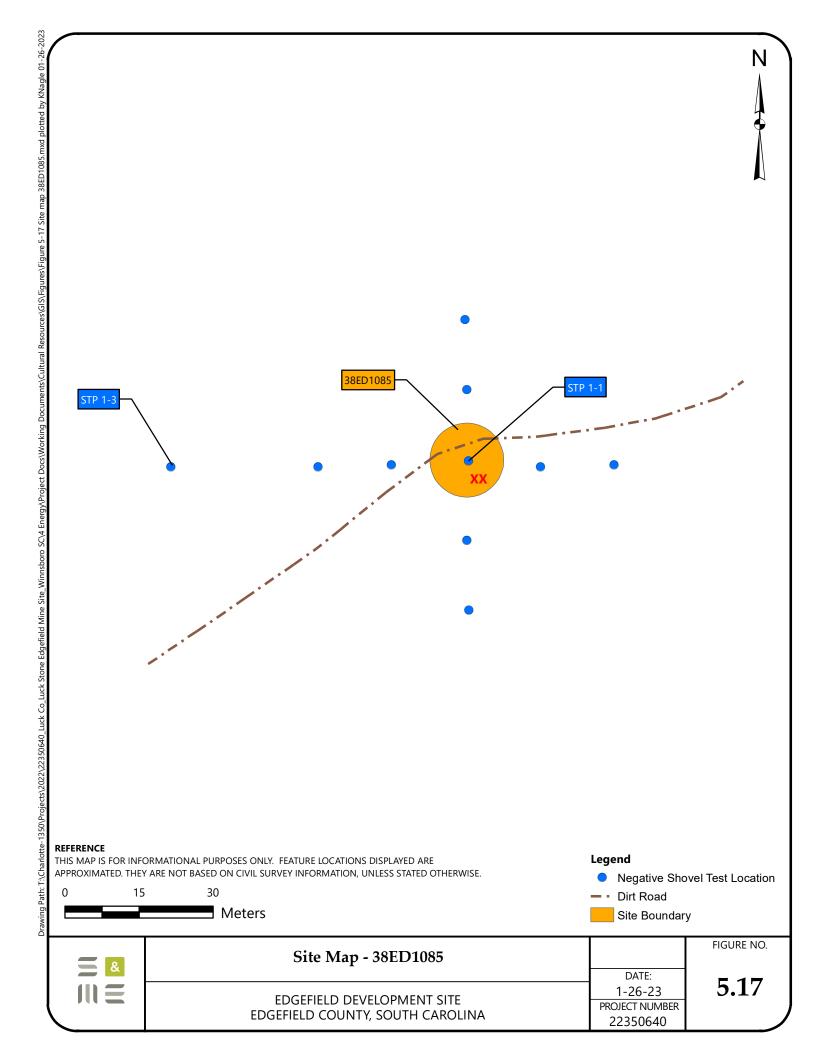
**UTM Coordinates**: E398633, N3721227 (NAD 83) **Soil Type**: Cecil-Pacolet Complex

**Site Dimensions**: 15 m N/S x 15 E/W m **Vegetation:** Clear cut

Artifact Depth: Surface No. of STPs/Positive STPs: 9/0

Site 38ED1085 is a twentieth century artifact scatter located on a ridgeline in the central portion of the project area (Figures 1.1 and 1.2). The site consists of a small surface scatter and is located within and adjacent to a dirt road in an area that has been clear-cut; the site measures approximately 15 m north/south by 15 m east/west and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.17 and 5.18).

Nine shovel tests were excavated at the site; none of the shovel tests yielded artifacts. A typical soil profile consisted of 10+ cm of red (10R 4/8) sandy clay subsoil (Figure 5.19). A total of three artifacts were recovered from the surface of the site; the artifacts include one piece of gray glazed stoneware, one piece of plain ironstone, and one piece of plain whiteware (Appendix A). The whiteware dates from 1815 to the present and the ironstone dates from 1840 to the present. A structure is depicted on the historic maps on a landform to the north of the site (Figures 3.5 and 3.8); the artifacts may be associated with the structure, but the distance is too great to be able to say for sure.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.18. Overview of site 38ED1085, facing east.



Figure 5.19. Typical soil profile at site 38ED1085.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Site 38ED1085 is a twentieth century artifact scatter located in an area that has been heavily disturbed by timbering and contains deflated soils with subsoil on surface. There is a minimal quantity and variety of artifacts that represent a single historic function group with no clear association with a structure. 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, site 38ED1085 is recommended ineligible for inclusion in the NRHP.

#### 5.1.2 38ED1086

Site Number: 38ED1086 NRHP Recommendation: Not Eligible

Site Type: Lithic ScatterElevation: 300 ft AMSLComponents: PrehistoricLandform: RidgelineUTM Coordinates: E399105, N3721695 (NAD 83)Soil Type: Cecil Sandy Loam

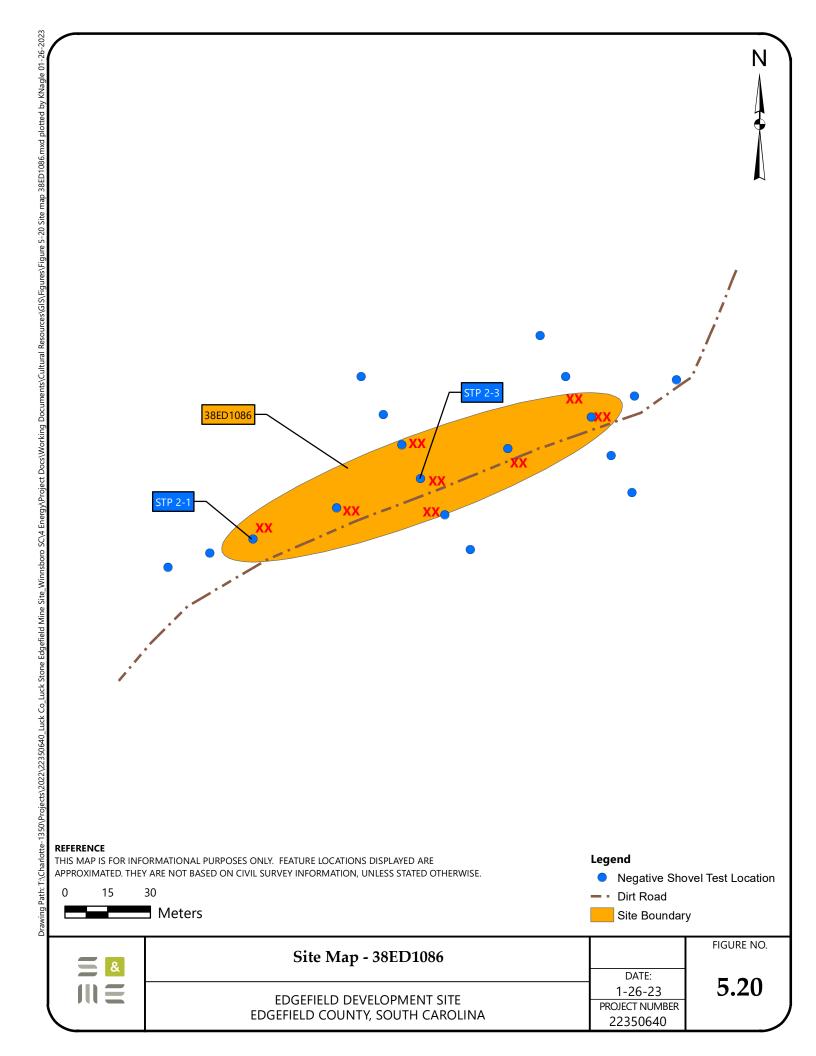
**Site Dimensions**: 150 m NE/SW x 30 m NW/SE **Vegetation:** Clear Cut

Artifact Depth: Surface No. of STPs/Positive STPs: 21/0

Site 38ED1086 is a prehistoric lithic scatter located on a ridgeline in the northeastern portion of the project area (Figures 1.1 and 1.2). The site is located within and adjacent to a dirt road in an area that has been clear-cut, measures approximately 150 m northeast/southwest by 30 m northwest/southeast, and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.20 and 5.21).

Twenty-one shovel tests were excavated at the site; none of the shovel tests yielded artifacts. A typical soil profile consisted of 20 cm of brown (10YR 4/3) sandy loam followed by 10+ cm (20–30+ cmbs) of red (10R 4/6) sandy clay subsoil (Figure 5.22). A total of 29 artifacts were recovered from the surface of the site; the artifacts include one quartz projectile tip fragment, two quartz biface fragments and two quartz utilized flakes, 23 pieces of lithic debitage (19 quartz, two rhyolite, and two Coastal Plain chert), and one piece of fire cracked rock (Appendix A). None of the artifacts are temporally diagnostic.

Site 38ED1086 is a prehistoric lithic scatter located on a ridgeline that has been disturbed by timbering. Although a variety of artifact types and raw material is present at the site, none of the artifacts are temporally diagnostic and the artifacts were recovered from the ground surface. There is no intact soil stratigraphy remaining at the site. 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 38ED1086 is recommended ineligible for inclusion in the NRHP.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.21. Overview of site 38ED1086, facing northeast.



Figure 5.22. Typical soil profile at site 38ED1086.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 5.1.3 38ED1087

Site Number: 38ED1087 NRHP Recommendation: Not Eligible

Site Type: Lithic scatter; Historic artifact scatterElevation: 320 ft AMSLComponents: Middle Archaic; 20th centuryLandform: Ridgeline

**UTM Coordinates**: E399214, N3721489 (NAD 83) **Soil Type**: Cecil sandy clay loam; Cecil-Pacolet complex

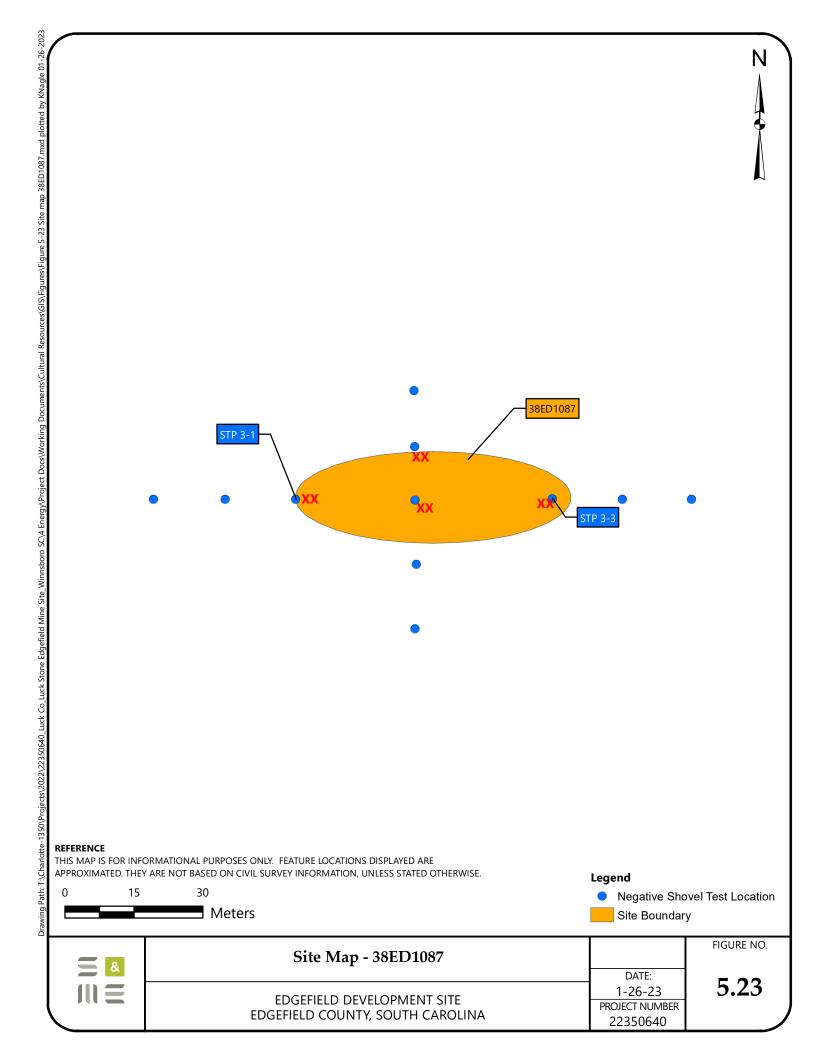
**Site Dimensions**: 60 m NE/SW x 20 NW/SE m **Vegetation:** Clear cut

Artifact Depth: Surface No. of STPs/Positive STPs: 12/0

Site 38ED1087 is a Middle Archaic lithic scatter and twentieth century artifact scatter located on a ridgeline in the northeastern portion of the project area (Figures 1.1 and 1.2). The site is located in an area that has been clear-cut, measures approximately 60 m northeast/southwest by 20 m northwest/southeast, and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.23 and 5.24).

Twelve shovel tests were excavated at the site; none of the shovel tests yielded artifacts. A typical soil profile consisted of 10+ cm of mottled red (2R 4/8) and white (10YR 8/1) sandy clay subsoil (Figure 5.25). A total of 10 artifacts (eight prehistoric and two historic) were recovered from the surface of the site. The historic artifacts include one piece of alkaline glazed stoneware and one piece of clear glass; the prehistoric artifacts consisted of one quartz Morrow Mountain projectile point fragment, five pieces of quartz debitage, and one hammerstone (Appendix A). The Morrow Mountain projectile point dates to the Late Archaic and the alkaline glazed stoneware dates from 1880–1950.

Site 38ED1087 is a Middle Archaic lithic scatter and twentieth century artifact scatter located on a ridgeline that has been disturbed by timbering. Although a temporally diagnostic projectile point was recovered from the site, it was recovered from the surface in an area that contains deflated soils. The site lacks stratigraphic integrity and artifacts are recovered from the surface of the site. 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 or history of the area (Criterion D). As such, site 38ED1087 is recommended ineligible for inclusion in the NRHP.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.24. Overview of site 38ED1087, facing west.



Figure 5.25. Typical shovel test profile at site 38ED1087.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 5.1.4 38ED1088

Site Number: 38ED1088 NRHP Recommendation: Not Eligible

Site Type: Lithic scatter; House SiteElevation: 410 ft AMSLComponents: Prehistoric; 20th centuryLandform: Ridgeline

**UTM Coordinates**: E398801, N3720952 (NAD 83) **Soil Type**: Cataula sandy loam

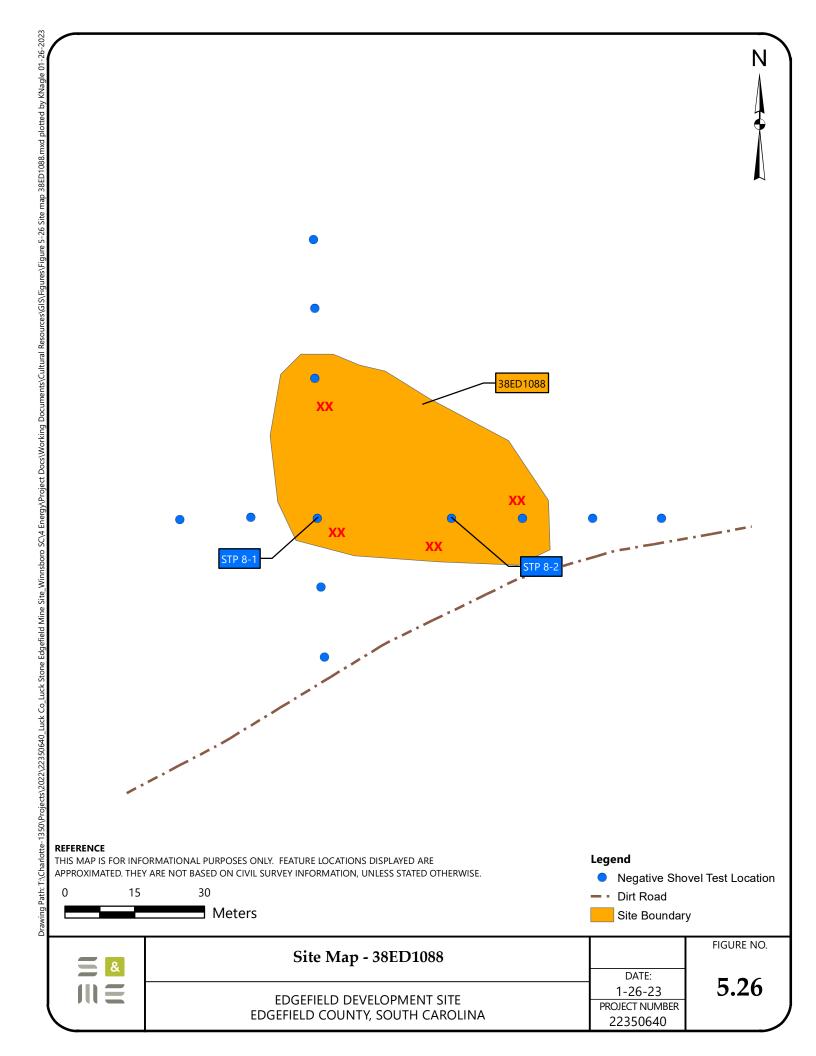
**Site Dimensions**: 45 m N/S x 30 E/W m **Vegetation**: Clear cut

Artifact Depth: Surface No. of STPs/Positive STPs: 12/0

Site 38ED1088 is a prehistoric lithic scatter and twentieth century house site located on a ridgeline along a dirt road in the central portion of the project area (Figures 1.1 and 1.2). The site is located within and adjacent to a dirt road in an area that has been clear-cut, measures approximately 45 m north/south by 30 m east/west, and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.26 and 5.27).

Twelve shovel tests were excavated at the site; none of the shovel tests yielded artifacts. A typical soil profile consisted of 10 cm of grayish brown (10YR 5/2) sandy loam followed by 10+ cm (10–20+ cmbs) of pale yellow (2.5Y 8/4) compact sand (Figure 5.28). A total of 19 artifacts (two prehistoric and 17 historic) were recovered from the surface of the site. The prehistoric artifacts consisted of one quartz biface fragment and one piece of quartz debitage; the historic artifacts included 12 pieces of plain whiteware, one piece of brown glazed stoneware, and four pieces of glass (one green, one milk, one amethyst/solarized, and one window) (Appendix A). The whiteware dates from 1815 to present and the amethyst/solarized glass dates from 1880 to 1915. The historic maps show a structure in this location from roughly 1921 through 1942 (Figure 3.5 through 3.10).

Site 38ED1088 is a prehistoric lithic scatter and twentieth century house site located on a ridgeline that has been disturbed by timbering. Although a structure was depicted in this location there was no evidence of a structure at the site location. The artifacts were recovered from the ground surface and no intact soil deposits remain. 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 or history of the area (Criterion D). As such, site 38ED1088 is recommended ineligible for inclusion in the NRHP.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.27. Overview of site 38ED1088, facing west.



Figure 5.28. Typical shovel test profile at site 38ED1088.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



#### 5.1.5 38ED1089

Site Number: 38ED1089 NRHP Recommendation: Not Eligible

Site Type: House siteElevation: 450 ft AMSLComponents: 20th centuryLandform: Hilltop

**UTM Coordinates**: E398124, N3720776 (NAD 83) **Soil Type**: Cecil-Cataula complex

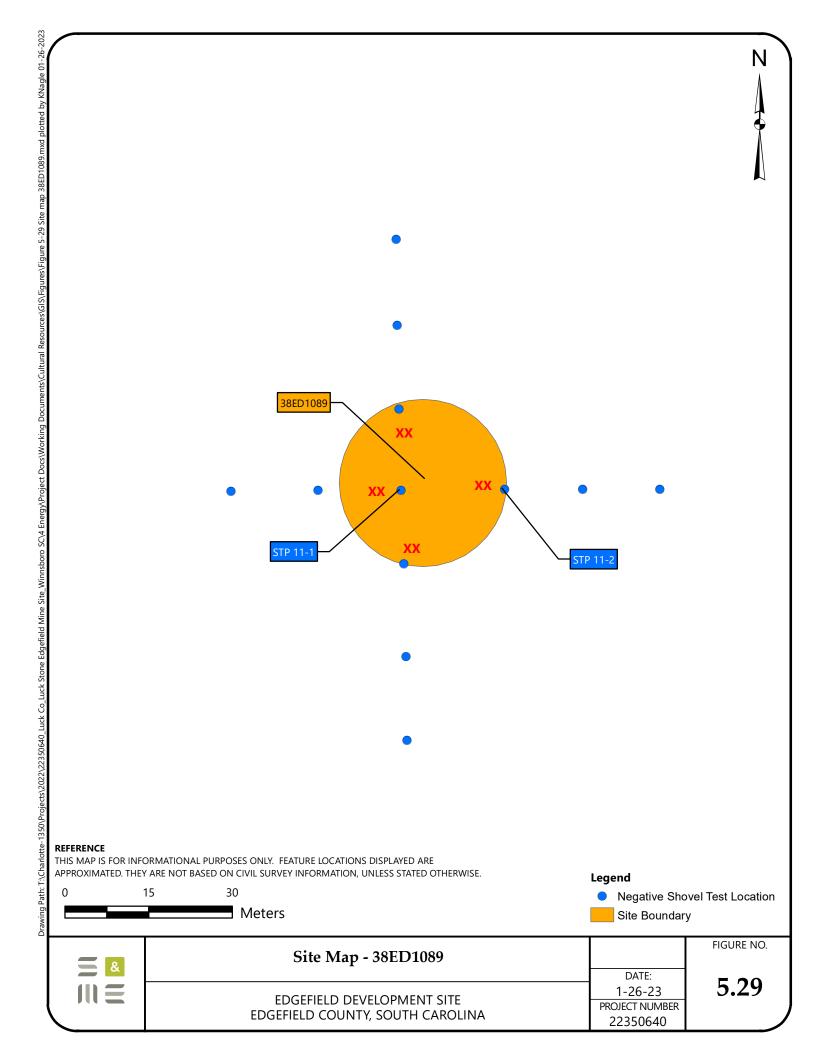
**Site Dimensions**: 30 m N/S x 30 E/W m **Vegetation:** Clear cut

Artifact Depth: Surface No. of STPs/Positive STPs: 12/0

Site 38ED1089 is a twentieth century house site located on a hilltop in the southwestern portion of the project area (Figures 1.1 and 1.2). The site is located in an area that has been clear-cut, measures approximately 30 m north/south by 30 m east/west, and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.29 and 5.30).

Twelve shovel tests were excavated at the site; none of the shovel tests yielded artifacts. A typical soil profile consisted of 5 cm of brown (10YR 4/3) sandy loam and terminated at a gravel impasse (Figure 5.31). A total of 12 artifacts were recovered from the surface of the site. The historic artifacts included six pieces of whiteware (five plain and one embossed), one piece of lead glazed stoneware, four pieces of glass (one clear, one amethyst/solarized, one aqua, and one olive green), and one white glass 4-hole button (Appendix A). Brick was noted on the surface of the site, but was not collected (Figure 5.32). The whiteware dates from 1815 to present and the amethyst/solarized glass dates from 1880 to 1915. The historic maps show two structures in this location from roughly 1921 through 1942 (Figure 3.5 through 3.10).

Site 38ED1089 is a twentieth century house site located on a hilltop that has been disturbed by timbering. Although two structures were depicted in this location there was no evidence of a foundation of structural remains other than a scattering of brick. The artifacts were recovered from the ground surface and no intact soil deposits remain. 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, site 38ED1089 is recommended ineligible for inclusion in the NRHP.



Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.30. Overview of site 38ED1089, facing north.



Figure 5.31. Typical shovel test profile at site 38ED1089.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640





Figure 5.32. Brick noted on the surface of site 38ED1089.

#### 5.2 Architectural Survey Results

An architectural survey was conducted to determine whether the proposed project would affect aboveground historic properties. Accessible public roads within the project area and 0.5-mile search radius were driven and existing resources greater than 50 years old were photographed. There are no previously recorded historic structures within the search radius and no standing structures that meet the criterion outlined above. No above ground resources were recorded during the survey (Figures 1.1 and 1.2).

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### 6.0 Conclusions and Recommendations

On behalf of Luck Companies, S&ME has completed a cultural resources reconnaissance survey of the proposed approximately 434.93-acre project area associated with the proposed Edgefield Development Site in Edgefield County, South Carolina (Figures 1.1 and 1.2). The project area is located south of Steven Creeks and north of Woodlawn Road, approximately 10.7 miles northwest of the city center of North Augusta, South Carolina.

The purpose of the survey was to assess the project area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required pursuant to the South Carolina Mining Act and Section 106 of the National Historic Preservation Act, as amended, and other pertinent federal, state, or local laws. This work was done in anticipation of federal permitting and was carried out in general accordance with S&ME Proposal Number 22350640, dated November 21, 2022.

Fieldwork for the project was conducted on January 3 and 4, 2023. This work included the excavation of 122 shovel tests (81 regular and 41 radial), as well as an architectural survey of structures within the project area and within a 0.5-mile search radius.

Background research indicated that there are 38 previously recorded archaeological sites and no previously recorded aboveground resources within the project area or a 0.5-mile search radius of the project area. One previously recorded site (38MC2549) is located adjacent to the northwest corner of the project area; the site is a prehistoric lithic scatter that is not eligible for inclusion in the NRHP. As a result of the investigations, five new archaeological sites were identified and recorded (38ED1085 through 38ED1089) and no above ground resources were identified during the survey. The newly recorded archaeological sites are recommended not eligible for inclusion the NRHP (Figures 1.1 and 1.2; Table 1.1).

It is S&ME's opinion that the entire 434.93-acre project area should be considered low probability for containing significant cultural resources. Portions of the project area have been disturbed by recent logging activities, no intact soil stratigraphy is present at the site, and subsoil is present at surface throughout the project area. Based on the information present above, S&ME recommends that no further cultural resource work should be needed for the project area as currently proposed.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### 7.0 References Cited

Adovasio, James M., J. Donahue, and R. Stuckenrath

1990 The Meadowcroft Rockshelter Radiocarbon Chronology, 1975–1990. American Antiquity 55(2):348–354.

Adovasio, James M., J.D. Gunn, J. Donahue, R. Stuckenrath, J.E. Guilday, and K. Lord

1979 Meadowcroft Rockshelter—Retrospective 1977: Part I. North American Archaeologist 1:3-44.

1980a Meadowcroft Rockshelter—Retrospective 1977: Part 2. North American Archaeologist 1(2):99–137.

Adovasio, James M., J.D. Gunn, J. Donahue, R. Stuckenrath, J.E. Guilday, and K. Volman 1980b Yes Virginia, It Really is that Old: A Reply to Haynes and Mead. *American Antiquity* 45:588–595.

### Ahler, Stanley A.

1989 Mass Analysis of Flaking Debris: Studying the Forest Rather Than the Tree. In *Alternative Approaches to Lithic Analysis*, edited by D.O. Henry and George H. Odell, pp. 85 118. Archeological Papers of the American Anthropological Association No. 1.

### Anderson, David G.

- 1979 Excavations at Four Fall Line Sites: The Southeastern Columbia Beltway Project. Report prepared for the South Carolina Department of Highways and Public Transportation, Columbia, by Commonwealth Associates, Inc., Jackson, Michigan.
- 1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast.* University of Alabama Press, Tuscaloosa.
- 1996 Approaches to Modeling Regional Settlement in the Archaic Period Southeast. In *Archaeology of the Mid-Holocene Southeast*, pp. 157-176, University Press of Florida, Gainesville.

### Anderson, David G., and Glen T. Hanson

1988 Early Archaic Occupations in the Southeastern United States: A Case Study from the Savannah River Basin. *American Antiquity* 53:262–286.

### Anderson, David G., and J. W. Joseph

1988 Prehistory and History Along the Upper Savannah River: Technical Synthesis of Cultural Resource Investigations, Richard B. Russell Multiple Resource Area. 2 vols. Commonwealth Associates, Inc., Jackson, Michigan. Submitted to Interagency Archeological Services, National Park Service, Atlanta.

### Anderson, David G., and Lisa O'Steen

1992 Late Pleistocene/Early Holocene Environmental Conditions in the South Carolina Area. In Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective. Edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge. Project of the Council of South Carolina Professional Archaeologists, Columbia.

### Anderson, David G., Lisa O'Steen, and Kenneth E. Sassaman

1996 Environmental and Chronological Considerations. In *The Paleoindian and Early Archaic Southeast*. Edited by D.G. Anderson, and K.E. Sassaman, pp. 3–15. University of Alabama Press, Tuscaloosa.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Anderson, David G., and Kenneth E. Sassaman (editors)

1996 The Paleoindian and Early Archaic Southeast. University of Alabama Press, Tuscaloosa.

Anderson, David G., Kenneth E. Sassaman, and Christopher Judge (editors)

1992 Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective. Council of South Carolina Professional Archaeologists, Columbia.

### Benson, Robert W.

2006 Cultural Resources Overview of the Sumter National Forest. Francis Marion and Sumter National Forests CRM Report 06-07. Prepared for Francis Marion and Sumter National Forests, USDA Forest Service, Columbia, South Carolina. Prepared by Southeastern Archaeological Services, Inc., Athens, Georgia.

### Blanton, Dennis B., and Kenneth E. Sassaman

1989 Pattern and Process in the Middle Archaic Period of South Carolina. In *Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*. Anthropological Studies 9. Occasional Papers of the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia, pp. 53–72.

Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.

1986 An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina. Garrow and Associates, Inc., Atlanta.

### Braun, E. Lucy

1950 Deciduous Forests of Eastern North America. Free Press, New York.

### Cable, John

2000 Demographic Succession as a Factor in Explaining Offsetting Occupation Spans at Mississippian Mound Centers. Paper presented at the Southeastern Archaeological Conference, Macon, Georgia.

### Cantley, Charles E. and John S. Cable

2002 Archaeological Data Recovery at Sites 38SU136/137 and 38SU141, Poinsett Electronic Combat Range, Sumter County, South Carolina. Report prepared for the U.S. Army Corps of Engineers, Savannah District, by New South Associates, Inc. Stone Mountain, Georgia.

### Cashin, Edward J.

2009 Guardians of the Valley: Chickasaws in Colonial South Carolina and Georgia. University of South Carolina Press, Columbia.

### Coe, Joffre Lanning

1964 *The Formative Cultures of the Carolina Piedmont.* Transactions of the American Philosophical Society 54(5):1–130. The American Philosophical Society, Philadelphia.

Council of South Carolina Professional Archaeologists [COSCAPA], South Carolina State Historic Preservation Office, and South Carolina Institute of Archaeology and Anthropology

2005 South Carolina Standards and Guidelines for Archaeological Investigations. South Carolina Department of Archives and History, Columbia.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### Daniel, I. Randolph. Jr.

1992 Early Archaic Settlement in the Southeast: A North Carolina Perspective. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*. Edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 68–77. Council of South Carolina Professional Archaeologists, Columbia.

Hardaway Revisited: Early Archaic Settlement in the Southeast. University of Alabama Press, Tuscaloosa.
 Stone Raw Material Availability and Early Archaic Settlement in the Southeastern United States. American Antiquity 66:237–265.

### Delcourt, P. A., and H. A. Delcourt

1985 Quaternary Palynology and Vegetational History of the Southeastern United States. In Pollen Records of Late-Quaternary North American Sediments, edited by V. M. Bryant Jr. and R. G. Holloway, pp. 1–37. American Association of Stratigraphic Palynologists Foundation.

### DePratter, Chester B.

1979 Ceramics. In The Anthropology of St. Catherines Island 2: The Refuge-Deptford Mortuary Complex, edited by D. H. Thomas and C. S. Larson, pp. 109–132. Anthropological Papers of the American Museum of Natural History 56(1).

### DePratter, Chester B., and Chris Judge

1990 A Late Prehistoric/Early Historic Period Ceramic Sequence for the Wateree River Valley, South Carolina. In *Lamar Archaeology: Mississippian Chiefdoms in the Deep South*, edited by Mark Williams and Gary Shapiro, pp. 56–58. University of Alabama Press, Tuscaloosa.

### Dillehay, T. C.

1989 Monte Verde: A Late Pleistocene Settlement in Chile. Smithsonian Press, Washington, D.C.

### Dyer, James M.

2006 Revisiting the Deciduous Forests of Eastern North America. *Bioscience* 56(4):341-352.

### Edgar, Walter

1998 South Carolina: A History. University of South Carolina Press, Columbia.

### Edmonds, Bobby F.

2001 McCormick County, Land of Cotton. Cedar Hill, Unlimited, McCormick.

### Glassow, Michael A.

1977 Issues in Evaluating the Significance of Archaeological Resources. American Antiquity 41(3):413–420.

### Goodyear, Albert C., III

1979 A Hypothesis for the Use of Cryptocrystalline Raw Materials Among Paleo-Indian Groups of North America. Research Manuscript Series No. 156. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



2005 Evidence of Pre-Clovis Sites in the Eastern United States. In Paleoamerican Origins: Beyond Clovis, edited by Robson Bonnichsen, Bradley Lepper, Dennis Standford, and Michael Waters. Center for the Study of the First Americans, Department of Anthropology, Texas A&M University.

### Goodyear, Albert C., III., James L. Michie, and Tommy Charles

1989 The Earliest South Carolinians. *In Studies in South Carolina Archaeology, Essays in Honor of Robert L. Stephenson*, pp. 19–52, Anthropological Studies 9. Occasional Papers of the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia

### Gordon, John W.

2003 South Carolina and the American Revolution: A Battlefield History. University of South Carolina Press, Columbia.

### Hanson, Glen T., and Chester B. DePratter

1985 The Early and Middle Woodland Periods in the Savannah River Valley. Paper Presented at the 42nd Annual Meeting of the Southeastern Archaeological Conference, Birmingham.

### Heide, Gregory, and Michael Russo

2003 Investigation of the Coosaw Island Shell Ring Complex (38BU1866). Report prepared for the South Carolina Department of Natural Resources Heritage Trust Program. Report prepared by the Southeast Archeological Center, National Park Service, Tallahassee.

### Herbert, Joseph M., and Mark A. Mathis

1996 An Appraisal and Re-evaluation of the Prehistoric Pottery Sequence of Southern Coastal North Carolina. *In Indian Pottery of the Carolinas: Observations from the March 1995 Ceramic Workshop at Hobcaw Barony.*Council of South Carolina Professional Archaeologists, Columbia.

### House, John, and David Ballenger

1976 An Archaeological Survey of the Interstate 77 Route in the South Carolina Piedmont. South Carolina Institute of Archaeology and Anthropology Research Manuscript Series 104, University of South Carolina, Columbia.

### Hudson, Charles, Marvin Smith, and Chester DePratter

1984 The Hernando De Soto Expedition: From Aplachee to Chiaha. Southeastern Archaeology 3:65-77.

### Johnson, George Lloyd, Jr.

1997 The Frontier in the Colonial South: South Carolina's Backcountry, 1736-1800. Greenwood Press, Westport, Connecticut.

### Judge, Christopher

2003 An Overview of the Mississippian Ceramic Sequence for the Wateree River Valley, South Carolina. Paper presented at 60<sup>th</sup> Annual Meeting of the Southeastern Archaeological Conference, Charlotte, North Carolina.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



Justice, Noel D.

1987 Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States. Indiana University Press, Bloomington.

Kovacik, Charles F. and John J. Winberry

1989 South Carolina: The Making of a Landscape. University of South Carolina Press, Columbia.

Marrinan, Rochelle A.

1975 *Ceramic Artifacts, Molluscs, and Sedentism: The Late Archaic Period on the Georgia Coast.* Unpublished Ph.D. dissertation, University of Florida, Gainesville.

McAvoy, Joseph M., and Lynn McAvoy

1997 Archaeological Investigations of Site 44SX202, Cactus Hill, Sussex County, Virginia. Research Report Series No. 8. Virginia Department of Historic Resources, Richmond.

McDonald, Jerry N.

2000 An Outline of the Pre-Clovis Archeology of SV-2, Saltville, Virginia, with Special Attention to a bone Tool Dated 14,510 yr BP. *Jeffersoniana* 9:1-59.

Meltzer, David J., Donald K. Grayson, Gerardo Ardila, Alex W. Barker, Dena F. Dincauze, C. Vance Haynes, Franciso Mena, Lautaro Nunez, and Dennis Stanford

1997 On the Pleistocene Antiquity of Monte Verde, Southern Chile. American Antiquity 62(4):659–663.

Milanich, Jerald T.

1971 *The Deptford Phase: An Archaeological Reconstruction.* Ph.D. dissertation, University of Florida. University Microfilms, Ann Arbor, Michigan.

Milanich, Jerald T. and Charles H. Fairbanks

1980 Florida Archaeology. Academic Press, New York.

Miller, George L.

1991 The Classification and Economic Scaleing of 19<sup>th</sup> Century Ceramics. In *Approaches to Material Culture Research for Historical Archaeologists*, G.L Miller, O.R. Jones, L.A. Ross, and T. Majewski, compilers, pp.37–58. Society for Historical Archaeology, Ann Arbor, Michigan.

Mills, Robert

1825 Atlas of the State of South Carolina. F. Lucas, Jr., Baltimore. Reprint: South Carolina Historical Press, Inc., Greenville, 1980.

1826 Statistics of South Carolina. Hurlbut and Lloyd, Charleston, South Carolina.

Noel Hume, Ivor

1970 A Guide to Artifacts of Colonial America. Alfred A. Knopf, New York.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### Oliver, Billy

1985 Tradition and Typology: Basic Elements of the Carolina Projectile Point Sequence. In *Structure and Process in Southeastern Archaeology*, edited by R. Dickens and T. Ward, pp. 195–211. University of Alabama Press, Birmingham.

### Orser, Charles E., J

1988 The Material Basis of the Postbellum Tenant Plantation: Historical Archaeology in the South Carolina Piedmont. University of Georgia, Athens.

### Phelps, David G.

1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeology Symposium*, edited by M.A. Mathis and J. J. Crow, pp. 1-51. North Carolina Division of Archives and History, Raleigh.

### Polhemus, Richard R.

1972 "Fort Moore-Savano Town Site (38AK4 and 38AK5)." National Register of Historic Places Inventory Nomination Form. On file with South Carolina Department of Archives and History, Columbia.

### Richter, Daniel D., Jr., and Daniel Markewitz

2001 Understanding Soil Change: Soil Sustainability over Millenia, Centuries, and Decades. Cambridge University Press, Cambridge.

### Ripley, Warren

1983 Battleground: South Carolina in the Revolution. The *News and Courier* and *The Evening Post*, Charleston, South Carolina.

### Ritchie, William A.

1961 A Typology and Nomenclature for New York Projectile Points. *New York State Museum and Science Service Bulletin 384*. Albany, New York

### Russo, Michael, and Gregory Heide

2003 Mapping the Sewee Shell Ring. Report prepared for the Francis Marion and Sumter National Forests. Report prepared by the Southeast Archeological Center, National Park Service, Tallahassee.

### Sassaman, Kenneth E.

1993 *Early Pottery in the Southeast: Tradition and Innovation in Cooking Technology.* University of Alabama Press, Tuscaloosa.

### Sassaman, Kenneth E., and David G. Anderson (editors)

1995 Middle and Late Archaic Archaeological Records of South Carolina. A Synthesis for Research and Resource Management. Savannah River Archaeological Research Paper No. 6, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



### Sassaman, Kenneth E., Meggan E. Blessing, and Asa R. Randall

2006 Stallings Island Revisited: New Evidence for Occupational History, Community Patterns, and Subsistence Technology. *American Antiquity* 71:539-565.

### Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson

1990 Native American Prehistory of the Middle Savannah River Valley: A Synthesis of Archaeological Investigations on the Savannah River Site, Aiken and Barnwell Counties, South Carolina. Savannah River Archaeological Research Papers 1, South Carolina Institute of Archaeology and Anthropology, Columbia.

### Saunders, Rebecca, and Michael Russo

2002 The Fig Island Ring Complex (38CH42): Coastal Adaptation and the Question of Ring Function in the Late Archaic. Report prepared for the South Carolina Department of Archives and History, Columbia.

### South, Stanley

1976 An Archaeological Survey of Southeastern North Carolina. Notebook 8, South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

### Stoltman, James B.

1974 Groton *Plantation: An Archaeological Study of a South Carolina Locality*. Peabody Museum Monographs, No. 1. Harvard University, Cambridge.

### Swanton, John R. (editor)

1939 Final Report of the United States De Soto Expedition Commission, *House Document 71, 76<sup>th</sup> Congress, 1<sup>st</sup> Session*, Washington, D.C.

### Trinkley, Michael B.

- 1989 An Archaeological Overview of the South Carolina Woodland Period: It's the Same Old Riddle. *In Studies in South Carolina Archaeology: Essays in Honor of Robert L. Stephenson*, pp. 73-90, edited by A.C. Goodyear, III., and G.T. Hanson. Anthropological Studies No. 9, Occasional Papers of the South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- 1990 An Archaeological Context for the South Carolina Woodland Period. Chicora Foundation Research Series No. 22. Chicora Foundation, Columbia.

### United State Department of Agriculture

1935 Edgefield Soil Series Map. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.

### United States Geological Survey (USGS)

- 1892 *McCormick Quadrangle.* 15-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.
- 1921 *Clarks Hill Quadrangle*. 15-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.
- 1942 *Clarks Hill Quadrangle*. 15-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



1947 *Clarks Hill Quadrangle.* 15-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.

1983 *Colliers Quadrangle.* 7.5-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.

1983 *Martinez Quadrangle*. 7.5-minute map series. Topographical Maps of South Carolina, 1888–1975. Digital Collection. Map Library, Thomas Cooper Library, University of South Carolina, Columbia.

Ward, H. Trawick, and R. P. Stephen Davis, Jr.

1999 Time Before History: The Archaeology of North Carolina. The University of North Carolina Press, Chapel Hill.

Waring, Antonio J., Jr., and Preston Holder

The Deptford Ceramic Complex. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, pp. 135–151. Papers of the Peabody Museum of Archaeology and Ethnology 58, Cambridge.

Weir, Robert M.

1997 Colonial South Carolina: A History. University of South Carolina Press, Columbia.

West, Allen, and Albert C. Goodyear, III.

2008 The Clovis Comet Part I: Evidence for Cosmic Collision 12,900 Years Ago. Mammoth Trumpet 23(1): 1-4).

Williams, Marshall

1971 The Oconee Station. The Notebook 3(6):134–143.

Williams, Stephen B. (editor)

1968 *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.* Papers of the Peabody Museum of Archaeology and Ethnology 58.

Clarks Hill, Edgefield County, South Carolina S&ME Project No. 22350640



## 8.0 Appendix A – Artifact Catalog

	avterior	CARCILOI																																										,	5		ped rim			1	
Notes	Gray diazed interior	lay glazed linellor, unglazed a	1815-present																													1880-1950						1815_Precent	1815-Present	1815-Present	1815-Present	1815-Present	Over December	1813-Present Brown exterior unalazed interior	1880-1915	1815-Present	1815-Present dots along scalloped rim	1815-Present	1880-1915		
Lithic Size		5 4	2 42		2	3	2 0	7	2	က	3		3	3	c	o 4	-	2	3	4	- 0	2 0	n c	v (c)	<u> </u>		2	က		- m	2	_		1		3		31	3 2	18	18	18	4	~ ~	18	118	18	1 32	181		
Lit																																															_				
Portion		Body	Body	ì								Tip														Base		1	Body			Body			Mid Section			ei a	Body	Base	Body	Base	Body	Body	pody	Body	Rim	Base	Body		Body
Material	5				Quartz	Quartz	Coalstal Plain Chert	Coalstal Plain Chert	Quartz	Quartz	Quartz	Quartz	Rhyolite	Crystal Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Quartz	Rhyolite	Quartz	Quartz	Quartz		Quartz	Quartz	Quartz	1	Ollartz	Quartz		Quartzite	Quartz	Quartz	Quartz															
Type/Description		rielo	Plain		0	<u>G</u>					0	Fragment						0	0	O					2	Morrow Mountain	O		Clear				0	0	<u>0</u>	0		Plain	Plain	Plain	Plain	Plain	Green	Jain	Amethyst/Solarized	Plain	Embossed	Plain	Amethyst/Solarized		Aqua
Sub-Category	Grav Glaze		e		Non-cortical	Non-cortical	Cortical	Non-cortical	Utilized Flake	Non-cortical	Non-cortical	oint		Non-cortical	Biface Fragment	Non-cortical	Biface Fragment	Cortical	Non-cortical	Non-cortical	Cortical	Non-cortical	Non-cortical	Non-cortical		oint	Non-cortical		Unid. vessel	Non-cortical	Cortical	Alkaline-glazed	Hammerstone	Cortical	Biface Fragment	Non-cortical		Whiteware			Whiteware		<u>—</u>	Writteware		Whiteware	Whiteware		el		Unid. Vessel
Category		OWORD						Debitage	Chipped Stone	Debitage	Debitage	Chipped Stone	Debitage	Debitage	Chipped Stone	Debitage	Chipped Stone	Debitage	Debitage	Debitage	Debitage	Debitage	Debitage Chipped Stone	Debitage		Chipped Stone	Debitage	Debitage	Machine Molded	Debitage	Debitage	Stoneware	Other	Debitage	Chipped Stone		7 (7)	Machine Molded			Ref. Earthenware	m	Machine Molded	Ker. Earmenware	Machine Molded	Ref. Earthenware	Ref. Earthenware		Machine Molded	İ	Machine Molded
Sass	Ceramin	56 H Ceramic	0.8 H. Ceramic																													ramic						amir.			7.5 H. Ceramic	ramic	ci cui	35.0 H Ceramic		amic	19.5 H. Ceramic	Ceramic			
Weight	49 7 H	. 4	0.8		2.6 Lithic	0.3 Lithic		1./ LITHIC	4.4 Lithic	1.8 L	1.6 Lithic	1.1 L	1.6 L	1.6 L	11.8 Lithic	0.3 Lithic	8.9 Lithic	3.6 Lithic	0.2 L	0.4 Lithic	66.6 Lithic	3.6 Lithic	0.4 Lithic	1.1 Lithic	1	6.9 Lithic	3.0 Lithic	1.0 Lithic	47.4 Libio	0.5 Lithic	17.5 Lithic	27.3 H	297.0 Lithic	20.9 Lithic	4.0 Lithic	2.1 Lithic	0.3 Glass	4.2 Glass	11.9 H	29.7 H	7.5 H	13.4 H	1.1 Glass	35.0	2.2 Glass	8.1 H. Cer	19.5 H	4.9 H. Cer	5.9 Glass		0.8 Glass
, tall	-			-	-	-				2	3	-	1	-		- 0	ı <del>-</del>	1	-	2	-			- 0	ī	1	-				-	-	-	-	-	-			- 2	-	2	-	← c	7 -		3	-	-	-		-
Depth		Surface	Surface		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface		Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface	Surface		Surface
Cat # Provenience	STD 1-1		STP 1-1		STP 2-1	STP 2-1	STP 2-1	1.04 STP 2-1	STP 2-2		STP 2-3	STP 2-3+15 NW	STP 2-3+15 NW	STP 2-3+15 NW		5.02 STP 2-4	STP 2-5	STP 2-5			STP 2-5+15 SE	STP 2-5+15 SE				STP 3-1	STP 3-1		1.04 OTP G-1		STP 3-2+15 NW	STP 3-2+15 NW	3-3	STP 3-3	1.01 STP 8-1		STP 8-1	1.04 STP 8-1	STP 8-1		2.01 STP 8-1+30 N	STP 8-1+30 N	STP 8-1+30 N	6-2 8-2		4.01 STP 8-2+15E	1.01 STP 11-1		STP 11-1		1.04 SIP 11-1
# 415	ĸ	38ED 1085	38ED 1085		38ED1086	38ED1086	38ED1086	38ED 1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED1086	38FD1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED1086	38ED 1086	38ED 1086		38ED1087	38ED1087	38ED1087	38ED 1087	38ED 1087	38ED1087	38ED1087	38ED1087	38ED1087	38ED1088	38ED1088	38ED1088	38ED 1088	38ED1088	38ED1088	38ED1088	38ED1088	38ED1088	38ED 1088	38ED1088	38ED1088	38ED1089	38ED1089	38ED1089		38ED1089

Appendix A - Edgefield Development Site Artifact Catalog

# Appendix A - Edgefield Development Site Artifact Catalog

		Depth	Ĺ	Weight								Lithic Size	
Site # Cat. # Provenience (cmbs) Count	nce	(cmps)	Count	(B)	Class	Category	Sub-Category	Sub-Category Type/Description	Material	Portion Temper Grade	Temper	Grade	Notes
38ED1089 3.02 STP 11-1+15S Surface	158	Surface	1	0.3 Other		Personal Item	Button	4-hole	Glass				
38ED1089 4.01 STP 11-2		Surface	1	2.9 H. Cera	Ceramic F	ramic Ref. Earthenware Whiteware	Whiteware	Plain		Body		-	815-Present
38ED1089 4.02 STP 11-2		Surface	1	11.8 H. Cer	Ceramic §	ramic Stoneware	Lead Glazed			Body		Ш	Brown interior and exterior
38ED1089 4.03 STP 11-2		Surface	1	7.7 Glass	_	Machine Molded Unid. Vessel	Unid. Vessel	Olive Green		Body			

Artifact measurements in mm