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April 22, 2021

Attention: Lindsay Martin Georgia Department of Economic Development 75 5<sup>th</sup> Street NW, Suite 1200 Atlanta, Georgia 30308

Reference: Reliance Letter Cultural Resources Reconnaissance Survey White Oak Business Park Columbia County, Georgia S&ME Project No. 3319-19-044

Dear Mr. Martin,

S&ME, Inc. is a consulting engineering firm and offers several primary services lines. Our firm was contracted to perform various due diligence efforts on the approximate 322-acre tract located at 1450 Appling Harlem Road in Appling, Columbia County, Georgia. To assist the Development Authority with their GRAD site certification application for Phase 2 of White Oak Business Park, this letter intends to address the reliability of the due diligence reports.

The Cultural Resource Investigations for Phase 2 at White Oak Business Park was completed and submitted in September 2020. The investigation remains valid, accurate, and may be relied upon for future site development.

If you have questions, please do not hesitate to contact me at 803-561-9024 or via e-mail at knagle@smeinc.com.

Sincerely, S&ME, Inc.

Kim Dagle

Kimberly Nagle, M.S., RPA Senior Archaeologist



#### PREPARED FOR

Development Authority of Columbia County 1000 Business Boulevard Evans, Georgia 30809

#### PREPARED BY

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

September 2020



# Cultural Resources Reconnaissance Survey White Oak Business Park Phase II Columbia County, Georgia

Prepared for:

Development Authority of Columbia 1000 Business Boulevard Evans, Georgia 30809

Prepared by:

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

S&ME Project No. 3319-19-044

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September 2020



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## **Management Summary**

On behalf of the Development Authority of Columbia County, S&ME, Inc. (S&ME) has completed a cultural resources reconnaissance survey of the proposed approximately 312.7-acre project area in Appling, Columbia County, Georgia (Figures 1.1 through 1.5). The project area is located west of Innovation Way and is approximately two miles south of the town of Appling, Georgia. The purpose of the survey was to assess the area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required under Section 106 of the National Historic Preservation Act, as amended. The work was done as part of the Georgia Ready for Accelerated Development (GRAD) Site Certification Program and was carried out in general accordance with S&ME Proposal No. 33-1800282, Revision 1, dated July 9, 2019.

Fieldwork for the project was conducted on August 13, 2019 and August 18, 2020. This work included the excavation of 101 shovel tests in areas with high and low probability for containing archaeological sites and a limited architectural survey. As a result of the investigations, two archaeological sites (9CB666 and 9CB667), one isolated find (IF-1), one historic cemetery (9CB670), and no new aboveground resources were recorded (Figures 1.4 and 1.5, Table 1.1). The two archaeological sites, the cemetery, and isolated find are recommended not eligible for inclusion in the National Register of Historic Places (NRHP).

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Resource	Description	NRHP Eligibility	Recommendatio
9CB666	Prehistoric lithic scatter; 20 <sup>th</sup> century glass scatter	Not Eligible	No Further Work
9CB667	20 <sup>th</sup> century artifact scatter	Not Eligible	No Further Work
9CB670	Graves Family Cemetery	Not Eligible	Avoidance
IF-1	20 <sup>th</sup> century ceramic isolate	Not Eligible	No Further Work

Although site 9CB670, the Graves Family Cemetery, is recommended not eligible for inclusion in the NRHP, cemeteries are protected by state law and avoidance of the cemetery is recommended, as well as its being treated as an Environmentally Safe Area during construction. Since unmarked graves were identified outside the existing stone wall, a 50-ft buffer of temporary orange construction fencing surrounding the entirety of the cemetery should be established prior to construction in the project area (Figure 1.6). If a suitable buffer cannot be established and maintained, it is recommended that the cemetery be moved prior to development.

Based on the results of this study, it is S&ME's opinion that the proposed project will have no effect on significant cultural resources within or adjacent to the project area, as long as site 9CB670 can be avoided and the temporary fencing is used to establish the 50-ft buffer around the site, no additional cultural resource investigations should be necessary.



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## 1.0 Introduction

On behalf of the Development Authority of Columbia County, S&ME has completed a cultural resources reconnaissance survey of the proposed approximately 312.7-acre project area in Appling, Columbia County, Georgia (Figures 1.1 through 1.5). The project area is located west of Innovation Way and is approximately two miles south of the town of Appling, Georgia. The purpose of the survey was to assess the area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required under Section 106 of the National Historic Preservation Act, as amended. The work was done as part of GRAD Site Certification Program and was carried out in general accordance with S&ME Proposal No. 33-1800282, Revision 1, dated July 9, 2019.

S&ME carried out background research and field investigation tasks in August 2019; a revisit was conducted in August 2020. The fieldwork was conducted by Senior Archaeologist Kimberly Nagle, M.S., RPA, Senior Crew Chief Aileen Kelly, B.A., and Crew Chief Paul Connell, B.A. and consisted of excavating shovel tests and photo documenting the project area. Graphics, GIS maps, and photographs were prepared by Mr. Connell, Ms. Kelly, and Ms. Nagle. Architectural evaluations and historic research for the project was conducted by Senior Architectural Historian/Historian Heather Carpini, M.A.

Although this survey was completed under due diligence as part of the GRAD program, it is anticipated that development of this proposed project area will require issuance of a Nationwide Permit from the U.S. Army Corps of Engineers (USACE) to authorize temporary wetland and stream impacts that may occur during development. The GRAD program is a Georgia Department of Economic Development program and falls under the Georgia Environmental Policy Act. As such, 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 Archaeological Investigations (Georgia Council of Professional Archaeologists). Supervisory personnel meet the Secretary of the Interior's Professional Qualifications Standards set forth in 36 CFR Part 61.















## 2.0 Environmental Setting

#### 2.1 Location

The project area is located in the southwestern portion of Columbia County, approximately two miles south of the community of Appling (Figures 1.1 through 1.5). Columbia County, which covers approximately 308 square miles, is considered one of the fastest growing counties in Georgia, and is bounded by Richmond County to the southeast, McDuffie County to the west, Lincoln County to the northwest, and South Carolina to the north and northeast.

The project area is bounded by a manufacturing facility to the east, a frontage road and private property to the south, and private property to the north and west.

#### 2.2 Geology and Topography

The project area is located within the Piedmont physiographic province, which consists of gently to steeply sloping ridges underlain by soils weathered in place from the parent bedrock material. Rocks found in the Piedmont are generally metamorphic with igneous granite intrusions (Kovacik and Winberry 1989). Topography in the project area ranges from level ridge tops to moderately steep slopes adjacent to creeks; elevations range from approximately 270 ft above mean sea level (AMSL), adjacent to Kiokee Creek that forms the northern boundary of the project area, to 370 ft AMSL, on the hilltops throughout the project area (Figure 1.4).

#### 2.3 Hydrology

The proposed project area is located within the Middle Savannah River drainage basin. The closest permanent water source to the project area is an unnamed tributary of Hawes Branch that runs through the north central portion of the project area. Hawes Branch is located directly west of the project area and joins Kiokee Creek northwest of the project area. Kiokee Creek flows east and northeast for approximately eleven miles before joining the Savannah River.

#### 2.4 Climate and Vegetation

The climate of Columbia County is characterized by very hot, humid summers and short, mild winters. The average daily temperatures range from 45° Fahrenheit (F) in January to 82° F in July. The average precipitation for the year is approximately 104 inches, with most of precipitation falling as rain; snow is unlikely, but freezing rain in the winter can be an issue (USDA 1965:1). The property was being timbered while the survey was being conducted, there were a few areas of mixed pine and hardwood forest with secondary growth and scrub brush remaining; the majority of the site had been cleared of vegetation (Figures 2.1 through 2.4). Disturbances in the project area include dirt roads, drainage ditches, a sewer line, and gravel roads (Figures 2.5 through 2.8).





Figure 2.1. View of mixed pine and hardwoods within the project area, facing west.



Figure 2.2. Area of secondary growth within the project area, facing west.





Figure 2.3. Portion of the project area that has been cleared of vegetation, facing north.



Figure 2.4. Portion of the project area that has been cleared of vegetation, facing southwest.





Figure 2.5. Typical dirt road within project area, facing south.



Figure 2.6. Sewer line and gravel road in project area, facing west.





Figure 2.7. Typical drainage ditch within the project area, facing north.



Figure 2.8. Typical stream within the project area, facing southeast.



#### 2.5 Soils

There are six soil types located within the project (Figure 2.9); their descriptions can be found in Table 2.1 (USDA Web Soil Survey, Accessed August 9, 2019).

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

Soil Name	Туре	Drainage	Location	Slope	Percentage in Project Area
Cecil	Sandy clay loam	Well drained	Hills	2–10%	21.8%
Cecil	Sandy clay loam	Well drained	Hills	10–25%	12.5%
Chewacla and Congaree soils		Somewhat poorly drained	Floodplains		6.7%
Madison	Sandy Loam	Well drained	Hills	10–25%	16.1%
Тоссоа	Loam	Moderately well drained	Floodplains		4.3%
Wedowee	Loamy sand	Well drained	Hills	2–25%	36.3%
Wickham	Fine sandy loam	Well drained	Stream terraces	2–6%	2.1%





## 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 two 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.

Recently, this interpretation has been called into question, with several sites providing possible evidence for earlier (pre-Clovis) occupations. These sites include Monte Verde in southern Chile (Dillehay 1989; Meltzer et al. 1997), Meadowcroft Rockshelter in Pennsylvania (Adovasio et al. 1979, 1980a, 1980b, 1990), the Cactus Hill (McAvoy and McAvoy 1997) and Saltville (McDonald 2000) sites in Virginia, and the Topper site in Allendale County, South Carolina (Goodyear 2005). Despite the growing number of sites attributed to pre-Clovis occupations, there are still significant problems surrounding each site that preclude their widespread acceptance

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

The Paleoindian Period can be tentatively dated from about 13,500–10,000 B.P. At the beginning of this period, most of Georgia was cool and dry, with boreal tundra and spruce-pine forests covering most of the state. By the end of this period, the climate ameliorated, rainfall was more frequent, and the state was covered with deciduous forests that contained beech, elm, hickory, oak, and birch (Anderson et al. 1996; Anderson and O'Steen 1992; Goodyear et al. 1989). It was also during this time that the large megafauna, including mammoth, mastodon, and giant sloth became extinct. It is still not clear whether humans, a meteor strike, or the climate played a more prevalent role in the extinction of these large animals, although it is likely that a combination of environmental change and overhunting contributed to their extinction. Another recent hypothesis is that a meteor impact occurred roughly 12,900 years ago that may have led to the extinction of both the megafauna and some Clovis populations (West and Goodyear 2008). This hypothesis, however, is still highly controversial.

Most of our knowledge about the Paleoindian Period in the Southeast is based on surface collections and inference rather than controlled subsurface excavations. The limited information we do have, however, suggests that 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. Settlements 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 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 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). 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 Topper Site (38AL23), located along the Savannah River, approximately 40 miles southeast of the project area, is a coastal plain chert quarry and quarry related habitation site (Goodyear and Steffy 2003). This site would be a source of high-quality raw material that was extremely close to the project area.

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

Environmental change at the 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 concomitant 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. 1996; Delcourt and Delcourt 1985).

The Archaic Period has typically 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.), based on changes in projectile point morphology, settlement patterns, and subsistence practices. Each of these subperiods appears to have been lengthy and successful in adapting technology to prevailing climatic and environmental conditions of the time.

## Early Archaic (10,000-8000 B.P.)

Diagnostic artifacts of the Early Archaic include a variety of side- and corner-notched projectile point types such as Dalton, Hardaway, Palmer, Kirk, and Taylor, bifurcated points such as LeCroy, St. Albans, MacCorkle, and Kanawha, and stemmed point such as Big Sandy. Other tools of this period include hafted and non-hafted unifacial scrapers, perforators, drills, gravers, hammerstones, grinding stones, and choppers (Coe 1964; Daniel 1992:74). There was also a greater reliance on local lithic sources than during the preceding Paleoindian Period and tools were sometimes made of lesser quality materials (Goodyear et al. 1989:38–39).

During the Early Archaic there 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 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 such as the Savannah 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.

#### Middle Archaic (8,000-5000 B.P.)

The Middle Archaic subperiod (ca. 8000–5000 B.P.) coincides with the start of the Hypsithermal, a significant warming trend where pine forests replaced the oak-hickory dominated forests of the preceding periods. It was during this time that extensive riverine swamps were formed and the river and estuary systems took their modern configuration. The relationships between climatic, environmental, and cultural changes during this period, however, are still poorly understood (Sassaman and Anderson 1993:5-14).

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

Large Middle Archaic sites tend to occur along rivers, while numerous small, upland lithic scatters dot the interriverine landscape. Subsistence was likely based on a wide variety of resources such as white-tailed deer, squirrel, nuts, fish, and migratory birds, although direct evidence of Middle Archaic subsistence is generally lacking in Georgia and South Carolina. Unlike the subsequent Late Archaic, shellfish do not seem to have been an important part of the diet, but the presence of manos and matates for grinding plants suggests an increase in plant food harvesting.

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. Diagnostic projectile points of the Middle Archaic include stemmed points, such as Stanly and Morrow Mountain, and several transitional Middle Archaic-Late Archaic forms such as Guilford, Brier Creek, and Allendale/MALA (an acronym for Middle Archaic Late Archaic). Ground stone tools such as axes, adzes, grinding stones, and atlatl weights also became more common during the Middle Archaic.



#### Late Archaic (5000-3000 B.P.)

The Late Archaic subperiod, which lasted from about 5000–3000 B.P., saw a number of important developments in the region, including increasing sedentism, the introduction of soapstone and ceramic vessel technology, the use of pit storage, and possibly the beginnings of small-scale horticulture.

Recent analyses of Late Archaic settlement patterns in the Sand Hills and adjacent areas indicate that groups gathered in large numbers at sites along major rivers in the spring and summer and established base camps near large tributaries that were occupied during the spring through early fall. These large gathering areas may have been used for ritual feasting and other communal activities; at least one site, Stallings Island in the middle Savannah River Valley, seems to have a functioned as a mortuary as well (Sassaman et al. 2006). These congregation areas are probably analogous to the spectacular Late Archaic shell rings on the Coast, which served as seasonal gathering, feasting, and ceremonial areas (Saunders and Russo 2002). In the late fall and winter, populations dispersed into the uplands, living in small, semiautonomous groups (Sassaman and Anderson 1993; Sassaman et al. 1990).

In the spring and summer, Late Archaic people gathered large amounts of shellfish. It is not known why this productive resource was not made use of earlier, but one explanation is that the environmental conditions conducive to the creation 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 anadromous and freshwater 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 Cucurbitae (squash and gourds), sunflower, sumpweed, and chenopod were being cultivated on a small-scale basis, but direct evidence for these cultigens is lacking in the region.

The most common diagnostic stone tool of the Late Archaic period is the Savannah River 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 periods. Other Late Archaic artifacts include soapstone cooking discs, winged bannerstones, cruciform drills, shell tools, worked bone, and most importantly fiber-tempered Stallings Island and sand-tempered Thom's Creek pottery.

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, punctate, and incised designs (Sassaman et al. 1990). For a long time, it was believed that fiber-tempered Stallings Island pottery was the oldest pottery in the region (perhaps in the New World) and that sand-tempered Thom's Creek wares appeared a few centuries later (Sassaman 1993). Recent work at several shell ring sites on the coast, however, has demonstrated that the two types are contemporaneous, with Thom's Creek possibly even predating Stallings Island along the coast (Heide and Russo 2003; Russo and Heide 2003; Saunders and Russo 2002).

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

The Woodland Period saw a number of important developments in the region, including a gradual increase in population and sedentism; the widespread adoption of ceramic vessel technology; the introduction of bow and arrow technology; the intensification of horticultural activities; the establishment of long-distance trading networks; and the use of conical burial mounds for interring the dead. Like the preceding Archaic Period, the



Woodland is traditionally divided into three subperiods: Early Woodland (3000–2500 B.P.), Middle Woodland (2500–1500 B.P.), and Late Woodland (1500–1000 B.P.). Each of these subperiods, in Georgia, is defined by the way pottery was made and what applied decorations were used on the pottery.

#### Early Woodland (3000-2500 B.P.)

By 2500 B.P., pottery was used throughout most of the Southeast and there was a proliferation of pottery styles in the Carolinas and Georgia. In the Coastal Plain portions of the Savannah River region, Refuge phase ceramics are indicative of the Early Woodland subperiod. This pottery is characterized by coarse sand-tempered wares with surface treatments that include simple stamped, punctate, plain, and dentate-stamped (DePratter 1979, Sassaman 1993, Williams 1968). Diagnostic bifaces of this period include Otarre, Swannanoa, Little Bear Creek, Thelma, and Coosa stemmed points and Yadkin Triangular points (Anderson and Joseph 1988; Coe 1964:123–124, Sassaman et al. 1990).

The people of the Early Woodland subperiod began to build larger, more permanent villages that were situated close to streams and trade networks were being established throughout the Southeast. Subsistence data indicate a continuation of the Late Archaic diet, including white-tailed deer, bear, small mammals, reptiles, and freshwater fish and groundstone manos, matates, and nutting stones were used to process plant foods (Hanson and DePratter 1985; Marrinan 1975). One major difference is that shellfish do not appear to have been an important part of the diet.

#### Middle Woodland (2500–1500 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).

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 carry over from the Early Woodland Period into the Middle Woodland Period and 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 shark tooth pendants (Sassaman et al 1990:96, Waring and Holder 1968).

Middle Woodland occupations in coastal areas tend to follow Milanich's "seasonal transhumance" model for the Deptford period in Florida (Milanich 1971, Milanich and Fairbanks 1980), which posits that in the winter and summer months groups moved to the coast and lived in small, semi-permanent villages adjacent to tidal creeks and marshes. From these locations they would fish, gather shellfish, and exploit a variety of other marine and estuarine resources. In the fall, small groups moved inland to terraces adjacent to swamps to gather nuts and hunt white-tailed deer (Cantley and Cable 2002:29; Trinkley 1989:78–79). Horticulture is thought to have increased in importance during this period, with plants such as maygrass, goosefoot, knotweed, and sunflower being harvested.

In contrast to Milanich's model, evidence from the G.S. Lewis West site (38AK228) in Aiken County, South Carolina, (Sassaman et al 1990:96–98), located approximately 12 miles from the current project area, suggests a year round settlement occupied by a small resident population. Over 500 features, including pits, posts, human burials, and dog burials, were found at the site. White-tailed deer was the primary food source, with alligator, turtle, fish, turkey, freshwater mussels, hickory, and acorns also being found (Sassaman et al. 1990:96). Based on the evidence at G.S. Lewis and surrounding sites at the Savannah River Site, Sassaman et al. (1990:98) suggest a pattern where small villages were occupied on a year-round basis, with smaller outlying sites representing seasonally occupied logistical camps.

#### Late Woodland (1500–1000 B.P.)

In general, Late Woodland societies tend to be marked by an increasingly sedentary lifestyle and improvements in food storage and preparation technologies, although hunting and gathering still remained important. Expansion of the previously limited production of agricultural crops like maize, beans, squash, pumpkins, and sunflowers occurred during this subperiod.

The Late Woodland subperiod is difficult to distinguish from the Middle Woodland. Cord marking appears to be added to the surface treatments of Deptford pottery during the Late Woodland, however, cord marking alone is a poor discriminator between Middle and Late Woodland (Sassaman et al. 1990). There is also a decline in stamped Deptford ceramics during the Late Woodland, which is a more commonly used typological break. 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. Potters carved intricate designs into wooden blocks, then stamped the designs on the still moist ceramic vessel. Also found in the upper Savannah River Valley are 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 and Jacks Reef projectile points, possibly indicating the introduction and wide spread use of the bow and arrow.

## 3.1.4 Mississippian Period (ca. 1000–500 B.P.)

The Mississippian Period saw dramatic changes across most the Southeastern United States. Mississippian societies were complex sociopolitical entities that were based at mound centers, usually located in the floodplains along major river systems. The flat-topped platform mounds served as both the literal and symbolic manifestation of a complex sociopolitical and religious system that linked chiefdoms across a broad network, stretching from the Southeastern Atlantic Coast, to the Spiro Mounds in Oklahoma in the west, to as far north as Aztalan in Wisconsin. Major mound centers in the Savannah River basin include Irene near the coast; Lawton, Silver Bluff, and Hollywood in the interior Coastal Plain; Rembert and Beaverdam in the central Piedmont; and Chauga, Tugalo, and Estatoe in the Upper Piedmont. 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).

Diagnostic artifacts of the Mississippian period include small triangular projectile points, ground stone tools, and polished stone objects. Various ceremonial items were manufactured from stone, bone, shell, mica, and copper and they were used as symbolic markers of chiefly power and status. Mississippian ceramic styles were also very different from the preceding Woodland Period, which has allowed archaeologists to differentiate this period into temporal subdivisions and distinct cultural areas.



Mound centers were surrounded by outlying villages that were usually 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. Mound centers have been found along most major river systems in the Southeast, and South Carolina and Georgia are no exceptions. Major Mississippian mounds in the area include the Hollywood, Lawton, and Mason's Plantation mound group located in the central Savannah River Valley (Anderson 1994). There is increasing evidence that territorial boundaries between chiefdoms were closely maintained during the Mississippian period. Within the Middle Savannah River Valley three phases of Mississippian occupation have been identified: Lawton (A.D. 1150–1250), Hollywood (A.D. 1250–1350), and Sliver Bluff (A.D. 1350–1450) (Sassaman et al. 1990).

#### 3.2 Historic Context

The project area is located east of Haws Branch and southeast of Kiokee Creek, in the southwestern portion of Columbia County. Columbia County was the twelfth county formed in Georgia and was formed from a part of Richmond County in 1790.

## 3.2.1 Exploration and Early Settlement

The project area was part of St. Paul Parish beginning in 1758, when a colonial act divided the Georgia territory into eight parishes under the Church of England, located along the eastern colonial boundaries, the Atlantic Ocean and the Savannah River. Located on a high bluff, across the Savannah River, was the prominent Native American settlement of Savano Town. Although the Georgia colony wasn't established until 1732, by 1700, white colonists had moved into the area and established a profitable deerskin trade, encouraged by South Carolina's colonial government in Charleston. 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; 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, as well as discouraging settlers from moving into more rural areas. 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. Native American conflict and the potential threat from the Spanish in Florida, to the south, led to the chartering of Georgia, as the last of the original 13 colonies, in 1732, as a buffer for the profitable colony of South Carolina (Polhemus 1972; Edgar 1998:101; Vandervelde 1999:14–16; Jones and Dutcher 1890).

Indian traders roamed through inland areas of the colonies during the seventeenth and early eighteenth centuries, however, settlement was primarily concentrated along the coast during the first years of occupation. When the European colonists began to expand their territory, as the population increased, they did so by moving slowly westward along the coastal rivers (Kovacik and Winberry 1989:76). The area north of the Savannah River, in South Carolina, had an established settlement before Georgia was granted its colonial charter; 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. This new settlement provided an impetus for James Oglethorpe, the founder of Georgia, to established within the colony, was founded in 1736, under the direction of Oglethorpe. Although located further inland, away from the coastal transportation routes and major population



centers, Augusta's position along the Savannah River allowed it to develop as a trading post, where Indian traders from South Carolina began coming to exchange the goods that they acquired from the Native American tribes, leading to the development of a profitable deerskin trade. In 1739, a fort was constructed near the new settlement of Augusta and the town was laid out by colonial surveyor Noble Jones; the original plan of Augusta was three streets wide by four streets deep and organized around a central square (Jones and Dutcher 1890; Lee 2000).

European settlement along the Savannah River, near Savano Town and New Windsor Township, had begun in the late 1600s, but migration to more inland areas, including that south of the Savannah River, was not documented until the 1730s. After the founding of Augusta, more favorable trade conditions with the Georgia colony prompted a large number of Native Americans to bring their trade business to Augusta over Savano Town across the river. By 1749, the growth of the Augusta settlement prompted the colony to build a church there and petition for a minister, who arrived in 1751, in the person of Jonathan Copp (Jones and Dutcher 1890).

The French and Indian War boosted the population of Augusta, as residents from surrounding areas took refuge in the fort. Following the war, the population in and around the town continued to expand as soldiers, who had seen the Georgia territory during combat, migrated to the area, looking for the cheap, abundant land that surrounded Augusta. Coming from colonies to the north, including Virginia and the Carolinas, many brought the tradition of tobacco cultivation to the Augusta area, resulting in the establishment of a tobacco cash crop system before 1800. Although slavery was originally illegal in Georgia, by the 1750s it had become a widespread practice, allowing for the development of large-scale farming operations. Early homesteads, outside of the boundaries of Augusta, were generally concentrated along creeks and streams, with colonists choosing land in close proximity of one another, usually within 10 miles of their neighbors.

At the beginning of the American Revolution, Augusta was one of the towns located furthest west within the colonies, making it a strategic outpost in the western front conflict with British supporting Native American groups. There were two noted conflicts within the Augusta area during the war. In 1780, British forces under Colonel Thomas Brown took control of Augusta; when Patriot soldiers, under Colonel Elijah Clarke sought to oust the British from Augusta, his militia was overpowered by a combined British and Indian force at McKay's Trading Post, also referred to as the White House, after a siege that lasted five days. A number of wounded soldiers were taken prisoner by the British and 13 of them, including a captain, were hanged by Colonel Brown on the steps of the White House, while the remaining prisoners were turned over to the Native Americans. The following May, the Patriot militia under General Andrew Pickens put three fortifications in the Augusta vicinity – Fort Galphin, south of the city on the Savannah River; Fort Grierson, at the present day corner of 11<sup>th</sup> and Reynold's streets; and Fort Cornwallis (McKay's Trading Post), at the present day corner of Reynolds and Washington streets – under siege. The siege lasted from May 22 through June 5, when Colonel Brown surrendered. From the victory, the Patriots gained supplies, including weapons and ammunitions, and a large quantity of Indian trade goods; additionally, the end of the siege and the defeat of the British forces increased the momentum of the Patriot cause and contributed to the British retreat out of the southern theater (Reynolds 2012).

During the Revolution, the town boundaries of Augusta were expanded to the east, south, and west and in 1777, the old parish governmental system was abolished and the original eight counties of Georgia were established. Augusta was named as the county seat of Richmond County and eventually served as the capital of the newly established state of Georgia from 1786 through 1795. The growth of the town and its governmental position attracted prominent political men and business owners, including George Walton, Christopher Fitzsimmons, and Henry Turknett. The decade following the American Revolution was highlighted by a 1791 visit to Augusta from



President George Washington, who stopped for breakfast at the inn of James Fulcher, a plantation owner in Richmond County, which was located along McBean Creek (Jones and Dutcher 1890).

#### 3.2.2 Antebellum Period

The end of the American Revolution ushered in a period of significant growth for the interior regions of the southern colonies. In many cases, soldiers were offered unclaimed backcountry lands as payment for their service during the war. Some soldiers chose to settle on these lands, while others sold them to families looking to migrate inland (Williams 1971). Prior to the American Revolution, the Richmond County area had a number of larger-scale tobacco growers, along with some 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 Georgia agricultural economy, where it could be grown on large tracts of land; it would dominate the landscape of the area. By 1801, Georgia was producing nearly 3.5 million pounds of cotton and by 1812, Georgia and South Carolina combined produced three-quarters of the cotton in the entire country, over 60,000,000 pounds. This amounted to approximately half of the cotton production in the entire country at the time (Hurt 2002; 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).



Although large-scale cotton production began in South Carolina earlier, and slavery was later to take hold in Georgia because of earlier prohibitions on the practice, by the end of the first decade of the nineteenth century, cotton agriculture had gained a solid foothold in the Piedmont region of Georgia and South Carolina, including Columbia County. By 1803, cotton production had spread into northern Georgia, and by 1810, the Piedmont region had become one of the primary cotton producing areas of the state (Edgar 1998:271).

The adoption of cotton as a staple crop led to a demographic change in the region, although not as significant as happened in other cotton growing areas. In 1790, Georgia had a total population of 82,548, with approximately 35.5 percent of the population, or 29,296 people, being slaves. During the waning years of the eighteenth century, the slave population was generally concentrated in the coastal region and areas with larger plantations, including around Augusta. By 1830, Georgia's population had grown to 516,823, with slaves accounting for 42.1 percent of that number, and by 1860, approximately 43.7 percent of the state's 1,057,286 residents were slaves. Cotton planters saw the availability of larger expanses of previously uncultivated land and were some of the first residents to move from the earlier settlements to the newly coveted areas, accounting for the drop in slave numbers despite the overall rise in population (Jones and Dutcher 1890).

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 and contemporary commentators noted the poor soil conditions that were developing as a result (Richter and Markewitz 2001:122).

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).

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, and allowed the economy of Augusta to grow, despite the steady loss of many large-scale area farmers. South Carolina was at the forefront of railroad development in the United States and the construction of that state's first railroad played an important role in the growth of the Augusta and Richmond County area, but had limited impact to the adjacent Columbia County. 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 nearby 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. Shortly after the completion of the South Carolina Railroad, the Georgia Railroad was chartered to build a line from Augusta westward to Athens, and then toward the future settlement of Atlanta. This line began construction in Augusta in 1835 and the 39 miles of track to Athens was completed in December 1841; a 132-mile extension, to Atlanta, was finished four years later (Jones and Dutcher 1890; Lee 2000).

#### 3.2.3 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 and other coastal settlements. Regiments from the region gathered and drilled, before eventually heading out to campaigns in Virginia and other states; the men from Columbia County served in several companies during the war. 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). Augusta played an important part in the Civil War, as home of the Confederate States Powder Works, which was established by the Confederate government on the Augusta Canal. Begun in 1862, the powder works eventually spanned two miles along the canal banks and consisted of 26 buildings, with the capacity of producing approximately 7,000 pounds of powder per day, for a total production of 2,750,000 while it was in operation. As one of the few industrial cities in the Confederacy, Augusta was also a significant manufacturing hub for the south, providing many commodities, including shoes, cotton goods, and food. Although no battles were fought within county boundaries, there were many residents who felt the reality of the war through shortages of food and supplies, and the loss of loved ones (Jones and Dutcher 1890; Covington 2011).

Augusta was one of the few prominent cities in Georgia and the Carolinas to be spared significant destruction at the hands of General William Tecumseh Sherman, as he bypassed the city on his marches from Atlanta to Savannah and from Savannah to Columbia. Contemporary records observed that Augusta was in "better condition than any other cities in this sector of the south" at the conclusion of the war (*Augusta Chronicle* December 1865). In fact, the population of the city had doubled from its prewar number and the main enterprises were able to recover and grow relatively quickly without having to recover from devastation, and with available capital (Jones and Dutcher 1890; Lee 2000; Covington 2011).

The first decade following the end of the Civil War was better in Augusta than it was in a number of other areas in the South, as it was spared a large amount of destruction and devastation. Augusta began expanding, as older villages around it developed into suburbs of the city, often centered on manufacturing establishments or settled along ethnic lines. Existing industry largely recovered after the war and industrial growth began in the 1870s. In 1875, the Augusta Canal was enlarged and expanded, and new textile mills were constructed (Jones and Dutcher 1890; Lee 2000; Covington 2011).

In many rural areas of Georgia, including Columbia County, Reconstruction brought significant changes. 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 45 percent of all farms operated in the state. Many farms were cultivated under tenancy arrangements, with 13.6 percent let out as fixed price rentals and 26.6 percent farmed under sharecropping arrangements. By 1890, 53.5 percent of Georgia farms were operated by tenants and, at the turn of the century, 60.2 percent of the state's farms were operated by either cash or share tenants.

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 Georgia was 494.5 acres. By 1880 it had decreased to 188 acres and at the turn of the twentieth century it was down to 117.5 acres (ICPSR). 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).

## 3.2.4 Twentieth Century

The twentieth century brought many changes to the area. During the early twentieth century, the lands of Columbia 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. However, the nearly singular production of cotton in the area had "reduced the soil's natural productivity, [causing] immeasurable damage through erosion and loss of topsoil, siltation of streams, and flooding" (Edmonds 2001:116). Another major problem for the cotton farmers was the boll weevil, which reached the area around 1919; by 1921 it was beginning to cause widespread devastation (Edmonds 2001:117–119).



Similar to the situation during Reconstruction and the late 1800s, many of the farmers in Columbia 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 Georgia, 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.

Between 1950 and 1990, the population increased dramatically in Columbia County and agricultural declined as farmland was redeveloped as suburban housing and community centers for people employed in Augusta and nearby Fort Gordon. The unincorporated communities of Martinez and Evans became the population centers of the county due to their proximity to Augusta. During the 1980s and 1990s, Evans gradually became the de facto county seat of Columbia County, with the county government building located there to serve the growing population, however, court functions remained in Appling, as the official county seat. In 1993, legislation passed requiring incorporated cities to provide at least three municipal services, which Appling was unable to do and subsequently lost its status as an incorporated city. Today it is nearly a dead town, with historic sites associated with the courthouse and jail. In 2001, a large courthouse annex was built in Evans and governmental functions for Columbia County are carried out in Evans; Appling retains its status as de jure county seat.

#### 3.3 Background Research

A background literature review and records search was conducted by using the subscriber level membership associated with the Georgia's Natural, Archaeological, and Historic Resources Geographic Information System (NAHRGIS), a GIS-based program with information about Georgia's Historic Resources. The area examined was a 0.5-mile radius around the project area (Figure 3.1).

A review indicated there are two previously recorded archaeological sites (9CB659 and 9CB660), eight historic structures (AS-1 through AS-8), and five previously conducted cultural resource surveys within a 0.5-mile radius of the project area (Figure 3.1, Table 3.1). The 2017 reconnaissance survey of the Appling site located to the southeast of the project area identified both archaeological sites and the eight above ground resources; each of these resources were recommended not eligible for inclusion in the NRHP (Nagle and Carpini 2017). The four other surveys did not identify archaeological sites or historic resources and do not cover a portion of the current project area (Duff 1995; Pomfret 1999, 2000, 2008).

In addition to reviewing the files and records on NAHRGIS, historic maps of the area were reviewed. These maps included an 1850 road map, Lloyd's map (1864), a railroad map from 1883, the United States Department of Agriculture soil survey map of Columbia County (1911), and United States Geological Survey (USGS) topographic maps from 1921, 1943, and 1971. The 1850 road map shows little detail, but the community of Aplington is labeled to the north of the project area and the town of Berzelia had been established along the rail line to the south (Figure 3.2). Lloyd's map shows Appling to the north and a road that follows the path of Old Appling Road to the east of the project area (Figure 3.3). The railroad map from 1883 shows Appling to the north and newly


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

Resource No.	Description	NRHP Eligibility	Source
9CB659	Mid to late 20 <sup>th</sup> century artifact scatter	Not Eligible	Nagle and Carpini 2017
9CB660	20 <sup>th</sup> century house site	Not Eligible	Nagle and Carpini 2017
AS-1	House, circa 1920	Not Eligible	Nagle and Carpini 2017
AS-2	House, circa 1920	Not Eligible	Nagle and Carpini 2017
AS-3	Barn, early twentieth century	Not Eligible	Nagle and Carpini 2017
AS-4	Barn, mid-twentieth century	Not Eligible	Nagle and Carpini 2017
AS-5	House, circa 1920	Not Eligible	Nagle and Carpini 2017
AS-6	House, circa 1955	Not Eligible	Nagle and Carpini 2017
AS-7	House, circa 1950	Not Eligible	Nagle and Carpini 2017
AS-8	House, circa 1955	Not Eligible	Nagle and Carpini 2017



Figure 3.2. Roadway map from 1850, showing vicinity of project area.

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Figure 3.3. Lloyd's map (1864), showing approximate project area.

established Harlem to the south along a new rail line; the western part of what was Columbia County is now part of McDuffie County (Figure 3.4). The USDA soil survey map from 1911 shows Old Appling Road to the east of the project area and no structures within the project area (Figure 3.5). The topographic map from 1921 shows Harlem Road (Old Appling Road) to the east of the project area and two dirt roads with four houses within the project area (Figures 3.6). The topographic map from 1943 shows that Route 47 (Appling Harlem Road) has been constructed and that there are two buildings within the project area along dirt roads (Figures 3.7). The topographic map from 1971 shows that Interstate 20 has been constructed to the south of the project area and that a single dirt road borders the southern end of the project area with no structures shown within the project area (Figures 3.8).





Figure 3.4. Railroad and county map of Georgia (1883), showing approximate project area.



Figure 3.5. USDA soil survey map (1911), showing approximate project area.





Figure 3.6. Portion of USGS *Appling* 15-minute quadrangle (1921), showing project area.





Figure 3.7. Portion of USGS *Appling* 7.5-minute quadrangle (1943), showing project area.

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Figure 3.8. Portion of USGS *Appling* 7.5-minute quadrangle (1971), showing project area.



# 4.0 Methods

## 4.1 Research Method

The purpose of the reconnaissance survey was to assess the project area's potential for containing archaeological sites. 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. Recommendations regarding the likelihood of identifying significant cultural resources within the project area and areas where further cultural resources investigations are recommended are discussed in Chapter 5.

The Georgia Guidelines for Archaeological Investigations (2014) outlines three site occurrence probability categories. The categories listed in Guidelines are:

- 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.
- Low Probability. Areas with slopes greater than 10 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). However, surveyors should be aware of small landforms with high site potential within areas that otherwise are characterized by 10 percent or greater slope.
- High Probability. Areas that do not meet any of the foregoing criteria.

In Georgia an archaeological site is an area yielding three or more artifacts from the same broad cultural period on the surface within a 30-m radius; a shovel test that produces two or more artifacts from the same broad cultural period, as long as the artifacts cannot be fitted together; a shovel test that produces one artifact and at least one surface artifact from the same broad cultural period within a 20-m radius from that shovel test; or an area with visible or historically recorded cultural features (e.g. shell midden, cemetery, rockshelter, chimney fall, brick walls, piers, earthwork, etc.). An isolated find is defined, in Georgia, as no more than two historic or prehistoric artifacts found within a 30-m radius. Deposits of cultural artifacts that have no integrity, such as road fill, stream gravels, or other situations where artifacts clearly are re-deposited, should also be considered isolated finds (Georgia Council of Professional Archaeologists).

By identifying the location and characteristics of archaeological sites, information about the archaeological record is gathered to help discern broad patterns of land use, settlement patterns, technology, subsistence, and culture history. This, in turn, provides a context for evaluating the significance of newly identified archaeological sites and determining how people lived during prehistoric and historic times.



## 4.2 Archaeological Field Methods

A reconnaissance level survey of the 312.7-acre project area was conducted on August 13, 2019. The archaeological survey was conducted primarily with shovel tests in areas deemed likely to contain archaeological sites based on landform type, soil drainage, distance to water, and the results of the background research. Shovel tests were approximately 30 cm in diameter and excavated to sterile subsoil or at least 80 cm below surface (cmbs), whichever was encountered first. Soil was screened through 0.25-inch hardware mesh, and artifacts, if encountered, were bagged according to provenience. Soil color was determined through comparison with Munsell Soil Color Charts.

In general, shovel tests were excavated at 30-m intervals along transects designed to test various landforms. Shovel testing was supplemented by pedestrian survey and the surface collection of artifacts in areas with good ground surface exposure. If artifacts were found, additional shovel tests were excavated at 15-m intervals to help delineate site boundaries. Sites were located using a Trimble Juno and plotted on USGS 7.5 minute topographic maps. Notes were kept in a field journal and on standard S&ME site forms.

Artifacts recovered during the survey were bagged by site and relative provenience within each site. Each site was photographed with digital color images, and documented using Georgia Archaeological Site Forms that were submitted to the Georgia Archaeological Site File upon conclusion of the fieldwork. The Project Archaeologist maintained detailed notes on survey methods, sites identified during the survey, and relevant environmental factors associated with each site.

## 4.3 Architectural Survey

In addition to the archaeological survey, an architectural survey was conducted to determine whether the proposed project would affect any aboveground National Register listed or eligible properties. Accessible public roads within and adjacent to the project area were driven. Existing aboveground structures were examined for National Register eligibility using the Criteria established by the U.S. Department of the Interior and the National Park Service. Structures that were 50 years old or older were digitally photographed and marked on the applicable USGS topographic quadrangle maps. Each structure was photographed with high resolution digital color images, and documented using Georgia Historic Resources Survey Forms that were submitted to the Georgia Department of Natural Resources, Historic Preservation Division upon conclusion of the fieldwork.

## 4.4 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. Provenience and descriptive information for the artifacts recovered during this investigation was entered into an Excel spreadsheet and is presented in Appendix A.

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).

Lithic artifacts were initially identified as either debitage (flakes and shatter) 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), Justice (1987), and Oliver (1985).

Prehistoric ceramics greater than 1 cm<sup>2</sup> were sorted first by sherd type (rim or body), surface treatment, and temper (using the Wentworth scale). Once sorted, these categories were further analyzed for other diagnostic attributes such as paste texture, interior treatment, rim form, and rim/lip decoration. Where possible, this data was used to place the sherds within established regional types. Information on the ceramic typology of the project area was derived primarily from Anderson et al. (1996), Coe (1964), DePratter (1979), Sassaman et al. (1990), Trinkley (1990), and Ward and Davis (1999). Sherds less than 1 cm<sup>2</sup> were classified as "residual sherds" and only their count and weight were recorded.

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. Upon conclusion of the project, project materials will be delivered to the Archaeological Repository at Moundville, Alabama.

## 4.5 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
- are associated with the lives of persons significant in our past; or
- 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
- have yielded or may be likely to yield information important in history or prehistory.

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



# 5.0 Results

The reconnaissance survey included an archaeological survey of 312.7 acres and a historic architectural survey of resources within the project area or within a 0.5-mile search radius of the project area that are 50 years old or older. Based on the probability model presented in Chapter 4, approximately 123.5 acres (39 percent) of the project area are considered high probability and 189.2 acres (61 percent) are considered low probability (Figure 5.1). Shovel testing was conducted in each of these areas along transects (Figure 5.2). As a result of the reconnaissance survey, two archaeological sites (9CB666 and 9CB667), one historic cemetery (Graves Family Cemetery, 9CB670), and one isolated find (IF-1) were identified; no previously recorded structures were revisited due to their demolition and no new structures were identified (Figures 1.4–1.5, Table 1.1).

Based on the historic maps, numerous structures should have been present within the project area. Due to the tree clearing taking place at the site, none of these resources were found extent. The two archaeological sites and one isolated find likely represent what remains of three of these structures and are discussed in greater detail below. No evidence of the other structures was identified (Figures 5.3 through 5.7).

## 5.1 Archaeological Survey Results

During the archaeological survey 101 shovel tests, ranging from 10–35 centimeters below surface (cmbs), were excavated. Three typical soil profiles were encountered within the project area: the first consisted of a disturbed layer due to the tree clearing activity, which terminated with subsoil; the second consisted of plow zone that transitioned to subsoil; the third was located in areas of poorly drained soils. The typical soil profile with a disturbed layer consisted of 20 cm of brown (10YR 4/3) and black (10YR 2/1) sandy loam mottled with strong brown (7.5YR 5/6) sandy clay, terminating with 10+cm (20–30+ cmbs [centimeters below surface]) of a brown (7.5YR 5/6) sandy clay subsoil (Figure 5.8); the second typical soil profile where plow zone transitioned to subsoil consisted of 16 cm of brown (10YR 4/3) sandy loam, terminating with 10+ cm (16–26+ cmbs) of red (2.5YR 4/8) sandy clay subsoil (Figure 5.9); the typical soil profile in areas marked as containing poorly drained soils consisted of 25 cm of gray brown (10YR 5/2) sandy loam, terminating with 10+ cm (25–35+ cmbs) of yellowish brown (10YR 5/4) sandy clay subsoil (Figure 5.10).

As a result of the archaeological investigation, two archaeological sites (9CB666 and 9CB667), one historic cemetery (9CB670), and one isolated find (IF-1), were investigated and recorded (Figures 1.4 and 1.5, Table 1.1). Each of these resources is discussed below.

## 5.1.1 Site 9CB666

Site Number: 9CB666	NRHP Recommendation: Not Eligible	
Site Type: Prehistoric lithic scatter; Historic glass scatter	Elevation: 360 ft AMSL	
Components: Unknown; 20 <sup>th</sup> century	Landform: Hilltop	
UTM Coordinates: E376740, N3708249 (NAD 27)	Soil Type: Cecil sandy clay loam	
Site Dimensions: 60 E/W x 15 N/S m	Vegetation: Clear cut	
Artifact Depth: Surface	No. of STPs/Positive STPs: 10/3	

Site 9CB666 is a prehistoric lithic scatter and twentieth century glass scatter located on a hilltop in the southern portion of the project area (Figures 1.4 and 1.5). The site is located in a clear cut area along a dirt road, and measures approximately 60 m east/west by 15 m north/south and is bounded by two negative shovel tests to the north, east, and west and the project boundary to the south (Figures 5.11 and 5.12).









Figure 5.3. General area of structure listed on 1921 and 1943 *Appling* topographic maps, facing east.



Figure 5.4. General area of structure listed on 1921 and 1943 *Appling* topographic, facing north.





Figure 5.5. General area of structure listed on 1921 *Appling* topographic map, facing north.



Figure 5.6. General area of structure listed on 1921 *Appling* topographic map, facing west.





Figure 5.7. General area of structure listed on 1921 *Appling* topographic map, facing northwest.



Figure 5.8. Typical soil profile with disturbed layer over subsoil.





Figure 5.9. Typical soil profile where plow zone transitioned to subsoil.



Figure 5.10. Typical soil profile in areas marked as having poorly drained soils.







Figure 5.12. Overview of site 9CB666, facing south.

Ten shovel tests were excavated at the site; the artifacts were recovered from the surface at three shovel test locations. A typical soil profile consisted of 20 cm of mottled brown (10YR 4/3) and black (10YR 2/1) sandy loam, terminating with 10+cm (20–30+ cmbs) of strong brown (7.5YR 5/6) sandy clay subsoil. A total of four artifacts were recovered from the site (two prehistoric and two historic); the prehistoric artifacts included one quartz utilized flake and one piece of quartz debitage, while the historic artifacts consisted of two pieces of clear glass (Appendix A). None of the prehistoric artifacts are temporally diagnostic. The site is located just north of one of the standing structures recorded during the survey for the Appling Site (Nagle and Carpini 2017); this structure was demolished when the manufacturing facility was constructed and site 9CB666 is likely what remains of the structure. As the building stood outside the current project area a foundation and building material was not identified.

Site 9CB666 is a prehistoric lithic scatter and twentieth century glass scatter with no remaining integrity. The site has been heavily disturbed due to tree clearing activities and heavy machinery traveling the dirt road adjacent to 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 9CB666 is recommended ineligible for inclusion in the NRHP.

#### 5.1.2 Site 9CB667

Site Number: 9CB667	NRHP Recommendation: Not Eligible
Site Type: Historic artifact scatter	Elevation: 320 ft AMSL
Components: 20 <sup>th</sup> century	Landform: Hillslope
UTM Coordinates: E376930, N3708744 (NAD 27)	Soil Type: Cecil sandy clay loam
Site Dimensions: 45 N/S x 15 E/W m	Vegetation: Mixed pine and hardwood
Artifact Depth: Surface	No. of STPs/Positive STPs: 10/2

Site 9CB667 is a twentieth century artifact scatter located on a hillslope in the east central portion of the project area (Figures 1.4 and 1.5). The site is located in an area of mixed pine and hardwood and measures approximately 45 m north/south by 15 m east/west and is bounded by two negative shovel tests in each of the cardinal directions (Figures 5.13 and 5.14).

Ten shovel tests were excavated at the site; the artifacts were recovered from the surface around two shovel tests. A typical soil profile consisted of five cm of brown (10YR 4/3) sandy loam, terminating with 10+ cm (5–15+ cmbs) of strong brown (7.5YR 5/6) sandy clay subsoil. A total of eight historic artifacts were recovered from the site and included five pieces of plain whiteware, one piece of milk glass, one piece of brown glass, and one piece of clear glass (Appendix A). This site is located near a road that appears on the 1921 and 1943 topographic maps, structures are located to the north and south of the site, but nothing is at this exact location (Figures 3.6 and 3.7).

Site 9CB667 is a twentieth century artifact scatter with no remaining integrity. None of the artifacts were recovered from the shovel tests, there is no intact soil horizon at the site, and there are no structural remains identified 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 or history of the area (Criterion D). As such, site 9CB667 is recommended ineligible for inclusion in the NRHP.

## 5.1.3 Site 9CB670 (Graves Family Cemetery)

Site Number: 9CB670	NRHP Recommendation: Not Eligible	
Site Type: Historic Cemetery	Elevation: 370 ft AMSL	
Components: Early to mid-19 <sup>th</sup> century	Landform: Hilltop	
UTM Coordinates: E376506, N3708407 (NAD 27)	Soil Type: Cecil sandy clay loam	
Site Dimensions: 22 m N/S x 23 m E/W	Vegetation: Hardwoods	

Site 9CB670, the Graves Family Cemetery, is an early to mid-nineteenth century family cemetery located approximately 1000 feet east of Hawes Branch, in the southern portion of the project area (Figures 1.4 and 1.5). The site is located in an area of hardwoods at the intersection of two dirt roads and measures approximately 22 m north/south by approximately 23 m east/west (Figures 5.15 and 5.16).







Figure 5.14. Overview of site 9CB667, facing south.



Figure 5.15. Graves Family Cemetery overview, facing southwest.





The eastern portion of the cemetery is within a stone wall and contains three legible headstones for the Graves family; only two have death dates, 1820 and 1853 (Figures 5.17 through 5.20). Although the three stones are damaged and broken, they have a pedimented tablet shape that is common among grave markers dating to the early nineteenth century; additional graves are marked with fieldstones (Figure 5.21). Field observations noted approximately 33 graves, 16 within the wall and 17 outside of the wall (Figures 5.23 and 5.24). Given the large area that is enclosed by the stone wall and the number of visible depressions both inside and outside the stone wall, it appears that the Graves Family Cemetery contains unmarked burials (Figures 5.24 through 5.27).

Research into the Graves Cemetery found some information on the marked burials in the cemetery. The earliest legible stone belongs to Dr. George H. Graves (1768–1820) and the other dated stone belongs to his wife, Mrs. Mary Graves (1780–1853). The remaining stone, marked with only the initials J. B. G., belongs to their son, John Baptist Graves, who died sometime after 1853. George Graves was the son of Thomas Graves (1702–1775); in 1800, he married Mary Scott, who was the daughter of notable Edgefield County planter Samuel "Ready Money" Scott (1749–1809) and Joyce (Jane) Calliham (1757–1802) (Georgia Marriage Records 1800; *Augusta Chronicle and Gazette of the State* 28 June 1800). Prior to his marriage, George Graves was a successful businessman and property owner in Augusta; during the 1790s he advertised houses, lots, and buildings for rent within Augusta (*Augusta Chronicle and Gazette of the State* 4 October 1794; 26 September 1795). By at least 1797, Graves was one of six doctors practicing medicine in Augusta; in an 1801 deed, he is identified as a "Practitioner of Physic" in the City of Augusta (*Augusta Chronicle and Gazette of the State* 23 December 1797; Columbia County Register of Deeds 1801). Graves was also elected to the City Council of Augusta in 1800 and 1803 (*Augusta Herald* 16 April 1800; 13 April 1803).

Mary Scott Graves was the daughter of a plantation owner and the operator of Scott's Ford/Ferry, in Edgefield County. When Samuel Scott died in 1809, at the Augusta home of his daughter and son-in-law, a portion of his property, including two tracts of land in Edgefield County, was sold and George Graves was named one of the executors (*Columbian Centinel* [Augusta] 11 February 1809; 18 February 1809). The Graves family owned large tracts of property and appeared to have moved from their home in Augusta and plantation property in Edgefield County as the seasons dictated. The couple owned vast amounts of land in Columbia, Richmond, and Wilkes counties in Georgia as well, as evidenced by the early 1800s Richmond County tax rolls (Georgia Property Tax Digest 1813, 1819, 1823, 1831).

In the 1810 census, George Graves was living in Edgefield County, with a household that included one white male over age 45, one white male under age 10, two white females ages 26 and 44, three white females under age 10, and 18 slaves (United States Census Bureau 1810). Following George Graves's death, in 1820, his widow, Mary Graves, remained in charge of his property, per his will. In addition to bequeathing all of his estate to his widow, George Graves instructed her to divide the property or sell it and divide the profits among their seven children as they became of age or married; the children, Mary Ann, George, Carolina Cassandra, Thomas, John Baptist, Sarah Handley, and Chloe Martha, were also each given three named enslaved people (Richmond County Probate Records 1820).





Figure 5.17. Stone wall around Graves Family Cemetery, facing north.



Figure 5.18. Marked grave in the Graves Family Cemetery, facing west.





Figure 5.19. Marked grave in the Graves Family Cemetery, facing south.



Figure 5.20. Marked grave in the Graves Family Cemetery, facing east.





Figure 5.21. Fieldstone marker in the Graves Family Cemetery, facing east.



Figure 5.22. Depression indicating possible unmarked burial in the Graves Family Cemetery, facing east.





Figure 5.23. Graves Family Cemetery overview, facing southeast.



Figure 5.24. Graves Family Cemetery overview, facing northeast.





Figure 5.25. Depression with fieldstone markers in the Graves Family Cemetery, facing west.



Figure 5.26. Fieldstone grave marker in the Graves Family Cemetery, facing east.





Figure 5.27. Depression indicating possible unmarked burial in the Graves Family Cemetery, facing east.

In 1820, Mary Graves's household in Edgefield County included 35 enslaved persons, 20 of whom were engaged in agriculture, and in 1830, the household included four free white females and two free white males, along with 53 enslaved people (United States Census Bureau 1820, 1830). In 1826, Mary Graves advertised for sale a parcel of land, part of the estate of George Graves, containing 930 acres of "excellent quality, nearly all of it in wood and heavily timbered" in Columbia County (*Augusta Chronicle and Georgia Advertiser* 20 December 1826). In 1834, she offered a large amount of additional property for "division among the Legatees of Dr. George Graves" for sale at her residence. This included a 1200 acre plantation known as Meltose on the Savannah River in Edgefield District; a 300 acre plantation on the mouth of the Little Kiokee in Georgia; 544 ½ acres on Big Kiokee Creek in Columbia County; three miles above Appling; 300 acres on Headstall Creek in Columbia County; 3,332 acres on Indian Creek in Warren County; 600 acres on Eight Mile Creek in Burke County; 800 acres on Mulberry Creek in Jackson County; 202 ½ acres on Ockmulgee Creek in Wilkinson County; and houses and lots on Broad Street in Augusta, as well as a variety of personal property and plantation implements (*Charleston Mercury* 19 November 1834). Even after the sale, Mary Graves continued to own large amounts of property in Burke, Columbia, Richmond, Wilkes, and Warren counties, in Georgia, on which she paid taxes (Georgia Property Tax Digest 1835).

By 1840, Mary Graves was living in Columbia County, Georgia, presumably after selling her husband's property in South Carolina; her household included one free white female age 50–59 (herself) and a free colored female age 55–99, as well as 15 enslaved people, 10 of whom were employed in agriculture (United States Census Bureau 1840). Although she does not appear in the 1850 census, she is identified in the slave census of Columbia County, as the owner of 40 enslaved people, 15 males ranging in age from 2 to 75 and 25 females ranging in age from 1 to 68 (United States Census Bureau 1850b). She also appears in the agricultural census, which recorded her farm as having 800 acres, 500 of which were improved, and a value of \$5,000; in addition to horses, mules, dairy cattle,



oxen, sheep, and pigs, the farm grew wheat, Indian corn, cotton, peas and beans, Irish and sweet potatoes (United States Census Bureau 1850a). The following year, in the tax rolls, Mary Graves paid taxes on 400 acres of second quality oak and hickory upland, 400 acres of third quality oak and hickory upland, and 36 slaves in Columbia County; the estate of George Graves also paid taxes on 1600 acres of pineland in the county (Georgia Property Tax Digest 1851).

Mary Graves died in 1853, at the home of her daughter Mary Ann (Graves) Bird; she was identified as a resident of Columbia County in her newspaper death notice (*Daily Chronicle and Sentinel* [Augusta] 23 March 1853). The will of Mary Graves "widow and relict of the late Dr. George Graves" instructs her executors to pay all of her debts and sets up a trust, with Dr. Gilbert Tennant (her son-in-law, husband of Carolina Cassandra Graves), John Lamkin, and William L. Blunt, as trustees for her son, John Baptist Graves. Mary Graves specifically named 20 enslaved people, as well as household property and a tract of 260 acres known as the "Martin Place", which were to be "for the sole use and benefit" of John Baptist Graves during his lifetime; the wording of the will suggests that John Baptist Graves had some infirmity that prevented him from making his own legal decisions. The will also specified that upon his death, the property left in trust would pass to the heirs of "George Graves and myself".

Mary Graves also set aside a portion of property from her estate, to be put in a trust under the control of her grandson, George Graves Bird, for the benefit of his mother, Mary Ann Graves Bird, which was not subject to the control or debts of her husband (Columbia County Probate Records 1853). Shortly after her death, the executors of Mary Graves, and by extension the remaining estate of George Graves, advertised for sale three lots in Augusta on Broad Street, 565 acres in Richmond County, 260 acres in Columbia County, and 2,000 acres in Warren County (*Weekly Chronicle and Sentinel* [Augusta] 26 October 1853). Although they lived in multiple places and owned large tracts of land during their marriage, Mary Graves presumably decided to be buried, along with her husband, on their remaining land in Columbia County, Georgia, likely where she was living at the end of her life. It is unknown whether this was land historically associated with the Graves family that was inherited by George Graves, where a family cemetery already existed. The three identifiable burials in the cemetery correspond to Dr. George Graves, his wife Mary Graves, and one of their children John Baptist Graves; the remaining graves may correspond to other family members, either siblings or parents of Dr. George Graves, or other extended family, and may be either older burials or date to after the burial of Mary Graves. The burial locations of two of the other Graves children, George Crawford Graves and Caroline Cassandra Graves Tennant, are known, so they are not among the unknown burials in the cemetery.

The Graves Family Cemetery is an example of a rural family cemetery. Research into rural cemeteries throughout the south has created a broad definition of a Southern folk cemetery, which was usually a smaller cemetery located close to a homestead, containing burials of one or two related families (Clauser 1994). "The...folk cemetery is a distinctive type of burial ground widely dispersed across the south...characterized by hilltop locations, scraped ground, mounded graves, east-west grave orientation, creative decorations expressing the art of making do preferred species of vegetation, the use of graveshelters, and cults of piety" (Meyer 1989:108). Coffin indicated that "in the country, private family burying places, usually atop a hill in rocky ground unfit for cultivation, appeared on almost every farm (1976:125). Most examples of this type of cemetery have a rectangular form, with graves oriented west-east, in discernable rows, there is much variation among different examples (1994). The Graves Family Cemetery fits into these three broad pattern markers.

Cemeteries are not usually considered eligible for listing in the NRHP; however, they can be eligible under certain Criteria Considerations, usually Criteria Consideration D. Criteria Consideration D states that: "a cemetery is eligible



if it derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events." The people interred in the Graves Family Cemetery are members of a notable family who owned large amounts of property along the Georgia-South Carolina boundary, near the Savannah River, and in Augusta; however, although George Graves was a physician in Augusta, none of the known burials in the cemetery are of transcendent importance. The cemetery dates from the early nineteenth century, as do many other rural family cemeteries in the area, and it does not have an association with a specific historic event. The Graves Family Cemetery has no distinctive design features, nor do the markers possess unique or artistic value. Therefore, it does not meet the conditions of Criteria Consideration D and S&ME recommends the Graves Family Cemetery as ineligible for the NRHP.

Cemeteries are protected by state law. The Graves Family Cemetery does not have a defined fenced boundary; although one portion is within a standing stone wall, there is evidence of unmarked grave depressions both within and to the west of the stone wall; it is recommended that a 50-ft buffer be established around the cemetery prior to construction to ensure the unmarked graves are not disturbed. If a suitable buffer cannot be established and maintained, it is recommended that the cemetery be moved prior to development.

## 5.1.4 Isolated Find (IF-1)

Isolated Find 1 (IF-1) consists of one piece of undecorated whiteware, found on the surface of a dirt road adjacent to a clear-cut area at UTM coordinates E377114, N3708526 (NAD 27) (Figures 1.4 and 1.5, Appendix A). A typical soil profile consisted of approximately 15 cm of brown (10YR 5/5) sandy loam, overlying 10+ cm (15–25+ cmbs) of red (2.5YR 5/8) sandy clay subsoil. Nine shovel tests were excavated at the initial find and at 15-, and 30-m intervals in the four cardinal directions from the surface find; the shovel tests did not recover additional artifacts. Based on the information presented, it is S&ME's opinion that the isolated find is not associated with events that have made a significant contribution to the broad patterns of history (Criterion A), is not associated with the lives of significant persons in the past (Criterion B), does not embody the distinctive characteristics of a type, period, or methods of construction; represent the work of a master; possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C), and is unlikely to yield significant information on the history of the area (Criterion D). As such, IF-1 is recommended ineligible for inclusion in the NRHP.

## 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 and adjacent to the project area were driven and existing resources greater than 50 years old were photographed. No new historic structures were identified during the survey. The previously recorded structures adjacent to the project area were demolished when a manufacturing facility, a retention pond, and Innovation Way was constructed (Figure 5.28).





Figure 5.28. Showing location of previously recorded structures that were demolished during construction of Innovation Way, the retention pond, and the manufacturing facility, facing northeast.



# 6.0 Conclusions and Recommendations

On behalf of the Development Authority of Columbia County, S&ME has completed a cultural resources reconnaissance survey of the proposed approximately 312.7-acre project area in Appling, Columbia County, Georgia (Figures 1.1 through 1.5). The project area is located west of Innovation Way and is approximately two miles south of the town of Appling, Georgia. The purpose of the survey was to assess the area's potential for containing significant cultural resources and to make recommendations regarding additional work that may be required under Section 106 of the National Historic Preservation Act, as amended. The work was done as part of the GRAD Site Certification Program and was carried out in general accordance with S&ME Proposal No. 33-1800282, Revision 1, dated July 9, 2019.

Fieldwork for the project was conducted on August 13, 2019. A revisit was conducted on August 18, 2020. This work included the excavation of 101 shovel tests in areas with high and low probability for containing archaeological sites and a limited architectural survey. As a result of the investigations, two archaeological sites (9CB666 and 9CB667), one isolated find (IF-1), one historic cemetery (9CB670), and no new aboveground resources were recorded (Figures 1.4 and 1.5, Table 1.1). The two archaeological sites, the cemetery, and isolated find are recommended not eligible for inclusion in the NRHP.

Although site 9CB670, the Graves Family Cemetery, is recommended not eligible for inclusion in the NRHP, cemeteries are protected by state law and avoidance of the cemetery is recommended, as well as its being treated as an Environmentally Safe Area during construction. Since unmarked graves were identified outside the existing stone wall, a 50-ft buffer of temporary orange construction fencing surrounding the entirety of the cemetery should be established prior to construction in the project area. If a suitable buffer cannot be established and maintained, it is recommended that the cemetery be moved prior to development.

Based on the results of this study, it is S&ME's opinion that the proposed project will have no effect on significant cultural resources within or adjacent to the project area, as long as site 9CB670 can be avoided and the temporary fencing is used to establish the 50-ft buffer around the site, no additional cultural resource investigations should be necessary.



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# 8.0 Appendix A – Artifact Catalog

September 2020

# Appendix A - White Oak Business Park Phase II Artifact Catalog

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	# Provenience	01 STP 1-2	01 STP 1-2+15E		01 STP 1-2+45E	01 STP 1-2+45E	01   STP 1-2+45E 01   STP 3-1	01 STP 1-2+45E 01 STP 3-1 02 STP 3-1	01 STP 1-2+45E 01 STP 3-1 02 STP 3-1 01 STP 3-1+15S	01 STP 1-2+45E 01 STP 3-1 02 STP 3-1 01 STP 3-1+15S 02 STP 3-1+15S	01 STP 1-2+45E 01 STP 3-1 02 STP 3-1 115S 01 STP 3-1+15S 02 STP 3-1+15S 03 STP 3-1+15S	01 STP 1-2+45E 02 STP 3-1 01 STP 3-115S 02 STP 3-115S 03 STP 3-115S 03 STP 3-115S	01 STP 1-2+45E 02 STP 3-1 01 STP 3-1+15S 02 STP 3-1+15S 03 STP 3-1+15S 03 STP 3-1+15S 01 STP 2-1
	Site # Cat.	9CB666 1.(	9CB666 2.(	9CB666 3.(			9CB667 1.(	9CB667 1.(	9CB667 1.( 9CB667 1.( 9CB667 2.(	9CB667 1.0 9CB667 1.0 9CB667 2.0 9CB667 2.0	9CB667 1.( 9CB667 1.( 9CB667 2.( 9CB667 2.( 9CB667 2.(	9CB667 1.( 9CB667 1.( 9CB667 2.( 9CB667 2.( 9CB667 2.(	9CB667 1.1 9CB667 1.1 9CB667 2.1 9CB667 2.1 9CB667 2.1 9CB667 2.1

**Cultural Resources Reconnaissance Survey White Oak Business Park Phase II** Columbia County, Georgia S&ME Project No. 3319-19-044



# 9.0 Appendix B – Archaeological Site Forms

# GEORGIA ARCHAEOLOGICAL SITE FORM

1990

Official Site Number: 9CB666

Institutional Site Number: WO-1 Site Name:
County: Columbia Map Name: Appling USGS OR USOAA
UTM Zone: <u>17S</u> UTM East: <u>376740</u> UTM North: <u>3708249</u>
Owner: Address:
Site Length: <u>15</u> meters Width: <u>60</u> meters Elevation: + - <u>114</u> meters
<b>Orientation:</b> 1. N-S . E-W 3. NE-SW 4. NW-SE 5. Round 6. Unknown
<b>Kind of Investigation:</b> 1. Survey 2. Testing 3. Excavation 4. Documentary
5. Hearsay 6. Unknown 7. Amateur
Standing Architecture: 1. Present Q. Absend
Site Nature: 1. Plowzone 2. Subsurface 3. Both 4. Only Surface Known
5. Unknown 6. Underwater
Midden: 1. Present Q. Absent 3. Unknown Features: 1. Present Absent 3. Unknown
<b>Percent Disturbance:</b> 1. None 2. Greater than 50 3. Less than 50 4. Unknown
Type of Site (Mill, Mound, Quarry, Lithic Scatter, etc.): <u>Historic Glass and Prehistoric Lithic Scatter</u>
Topography (Ridge, Terrace, etc.): Hilltop
Current Vegetation (Woods, Pasture, etc.): Clear cut
Additional Information: The site is in an area that has been clear cut and is adjacent to a dirt road.

1 N STEL-0 51P1-1 0 Dirt Road HA 0 DE M.E Legend White Ock O= Negative STP Site WO-1 D= Datasm KH = Suffee Find 8/13/19 E 376 758 N 3708457 - : Site Boundary Paul Connell Columbic Co., GA

SKETCH MAP (Include sites, roads, streams, landmarks) OFFICIAL MAP (Xerox of proper map)

State Site Numbe	er: 9CB666	Instituti	onal Site Num	ber: <u>WO</u>	-1
Public Status:	1. National Historic La 3. Georgia Register	ndmark 4. Georgia Hi	2. National N storic Trust	Jatural Landman 5. HABS	'k 6. HAER
National Register 3. Rece	r <b>Standing:</b> 1. Determ ommended Eligible	nined Eligible 4. Nominated	2. Re 5. Listed	commended Ine	eligible 7. Removed
National Register	r Level of Significance	e: 1. Local	2. 8	State	3. National
Preservation Star 4. Subme 9. Graded	te (Select up to Two): 1 rged 5. Lake Floo 1 10. Razed	l. Undisturbed ded 6. Var	2. Culti Idalized	vated 7. Destroyed	<ol> <li>3. Eroded</li> <li>8. Redeposited</li> </ol>
Preservation Pro	spects: 1. Safe 2. E 3. Unknown	Endangered by:	Development	t	
Supervisor: Date:8/13/1 Report Title:	RECO Kimberly Na	RD OF INVES	<b>FIGATIONS</b>	Affiliatio	n: <u>S&amp;ME Inc.</u>
Other Reports: _					
Artifacts Collect	ed: <u>Glass Fragment</u>	s, Quartz Utilized	l Flake, and Qu	artz Debitage.	
Location of Colle Location of Field Private Collectio	ections: <u>S&amp;</u>   Notes: <u>S&amp;</u> ns:	ME Inc. ME Inc.			
Name:		Address: 134	4 Suber Road C	columbia, SC 29	0210
Cultural Periods Phases:	C 20 <sup>th</sup> century and	ULTURAL AFI	F <b>INITY</b> toric		
<b>Date</b> 8/21/19	FORM PR Name Paul Connell	EPARATION A	AND REVISIO Institutiona S&ME Inc.	DN Il Affiliation	

### GEORGIA ARCHAEOLOGICAL SITE FORM

1990

Official Site Number: 9CB667

Institutional Site Number: WO-3	Site Name:					
County: Columbia Map Name:	Appling	USGS OR	<b>USNOAA</b>			
UTM Zone: <u>17S</u> UTM East:	<u>376930</u> UT	TM North: 3708	5744			
Owner: Ade	dress:					
Site Length: <u>15</u> meters Width:	<u>30</u> meters E	Clevation: + - <u>115</u> me	eters			
Orientation: 1 N-S 2. E-W 3.	NE-S 4. NW-S	E 5. Round	6. Unknown			
Kind of Investigation: (1. Survey)	2. Testing	3. Excavation	4. Documentary			
5. Hearsay	6. Unknow	n 7. Amateur				
<b>Standing Architecture:</b> 1. Present	2. Absent					
Site Nature: 1. Plowzone 2. St	ubsurface	3. Both 4.(	Only Surface Known			
5. Unknown 6. U	nderwater					
Midden: 1. Present 2. Absent 3. Un	known Feature	es: 1. Present 2. A	bsent 3. Unknown			
Percent Disturbance: 1. None	2. Greater than 50	Less than 50	4. Unknown			
Type of Site (Mill, Mound, Quarry, Lith	nic Scatter, etc.):	Historic Artifact Scat	tter			
	· · · <u> </u>					
<b>Topography</b> (Ridge, Terrace, etc.): Hillslope						
	1					
Current Vegetation (Woods, Pasture, etc.): Wooded						
Additional Information: The sit	e is located in a wo	ooded area near a dirt re	oad.			



SKETCH MAP (Include sites, roads, streams, landmarks)

OFFICIAL MAP (Xerox of proper map)

Public Status:       1. National Historic Landmark       2. National Natural Landmark         3. Georgia Register       4. Georgia Historic Trust       5. HABS       6. HAER         National Register Standing:       1. Determined Eligible       2. Recommended Ineligible         3. Recommended Eligible       4. Nominated       5. Listed       6. Unknown         National Register Level of Significance:       1. Local       2. State       3. National	1
National Register Standing:1. Determined Eligible2. Recommended Ineligible3. Recommended Eligible4. Nominated5. Listed6. UnknownNational Register Level of Significance:1. Local2. State3. National	1
National Register Level of Significance:1. Local2. State3. National	/ed
	al
Preservation State (Select up to Two): 1. Undisturbed2. Cultivated3. Eroded4. Submerged5. Lake Flooded6. Vandalized7. Destroyed8. Redeposition9. Graded10. Razed	ited
Preservation Prospects:       1. Safe       2. Endangered by: <u>Development</u> 3. Unknown	
RECORD OF INVESTIGATIONS         Supervisor:       Kimberly Nagle       Affiliation: S&ME         Date:       8/13/19	Inc.
Other Reports:	
Artifacts Collected: one mason jar milk glass insert fragment, three pieces of plain whiteware, piece of brown glass, and one piece of clear glass.	one
Location of Collections:       S&ME Inc.         Location of Field Notes:       S&ME Inc.         Private Collections:	
Name:         Address:         134 Suber Road Columbia, SC 29210	
CULTURAL AFFINITY Cultural Periods: 19/20 <sup>th</sup> century	
Phases:	
FORM PREPARATION AND REVISION         Date       Name       Institutional Affiliation         8/21/19       Paul Connell       S&ME Inc.	

# GEORGIA ARCHAEOLOGICAL SITE FORM

1990

Official Site Number: <u>9CB670</u>

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Institutional Site Number:	WO-4 Site Name: Grav	es Cemetery
County: Columbia	Map Name: <u>Appling</u>	USGS OR USNOAA
UTM Zone: <u>17S</u> UT	M East: <u>376506</u>	UTM North: 3708407
Owner:	Address:	
Site Length: <u>22 N/S</u>	meters Width: <u>23 E/W</u>	<u>meters</u> Elevation: + - <u>112</u> meters
<b>Orientation:</b> 1. N-S	2. E-W 3. NE-SW	4. NW-SE 5. Round 6. Unknown
Kind of Investigation:	1. Survey 2. Testing	3. Excavation 4. Documentary
_	5. Hearsay 6. Unknow	vn 7. Amateur
Standing Architecture:	1. Present Q. Absent	
Site Nature: 1. Plowzone	2. Subsurface	3. Both 4. Only Surface Known
5. Unknown	6. Underwater	
Midden: 1 Present Q Al	osent 3 Unknown Featu	res: 1 Present 2 Absent 3 Unknown
Percent Disturbance: 1	one 2 Greater than 50	3 Less than 50 4 Unknown
Type of Site (Mill Mound	1 Quarry Lithic Scatter etc.):	Historic Cemetery
Type of Site (10111, 1010une	i, Quarry, Litine Seatter, etc.).	<u> </u>
Tonography (Ridge Terrac	e etc.): Hillton	
Topography (Ridge, Terrac	e, etc.). <u>Inntop</u>	
Current Vegetation (Weed	a Desture etc.) Wooded	
Additional Information (Wood	is, Pasture, etc.): <u>wooded</u>	·
Additional Information: 1	here are 16 possible graves ins	<u>ide the stone wall, four headstones are present</u>
but only two are legible. Fan	<u>nily name is Graves, death date</u>	es are 1820 and 1853. The remaining 12 graves
inside the wall are unmarke	d depression. Outside of the s	stone wall to the west are 17 possible graves.
Some are marked with broke	en fieldstone head and/or foots	tones, most are unmarked depressions.
There are likely more unr	<u>narked graves within and es</u>	pecially outside the stone wall, a buffer is
recommended around the ce	metery to avoid any possible u	nmarked graves.
	↑ Wo-4 / Graves Cometer	
	Q-Headstone	
	N - Unmarked Depression 0- Fieldstone Marker	
	E3-Tree LIDI	
0 0	8/19/20 AEK	
° (777)	101cm	
• •		SCB77
	D	
		er . Juliskanning
		TOP ICS IN ICS
		TO COE STATE X375
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	07777	
		Call Direction
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£33		
Ewi		

State Site Numb	ber:	Institution	nal Site Numbo	er: <u>WO-1</u>	<u>l</u>
Public Status:	<ol> <li>National Historic La</li> <li>Georgia Register</li> </ol>	ndmark 4. Georgia Hi	2. National N istoric Trust	Vatural Landma 5. HABS	urk 6. HAER
National Regist 3. Re	er Standing: 1. Detern commended Eligible 4	nined Eligible 4. Nominated	2. Re 5. Listed 🤇	commended In 6. Unknown	eligible 7. Removed
National Regist	er Level of Significance	e: 1. Local	2. 8	State	3. National
Preservation St 4. Subm 9. Grade	ate (Select up to Two): 1herged5. Lake Floored10. Razed	1. Undisturbed ded 6. Var	2. Cult ndalized	ivated 7. Destroyed	3. Eroded 8. Redeposited
Preservation Pr	rospects: 1. Safe 2. E 3. Unknown	Endangered by: <u>F</u>	future developn	nent	
Supervisor: <u>Kin</u> Report Title: <u>Ci</u> Other Reports:	RECO nberly Nagle ultural Resources Recom	PRD OF INVES	<b>TIGATIONS</b> tion: <u>S&amp;ME, Ir</u> y, White Oak B	uc. Dat usiness Park	e: <u>8-18-2020</u>
Artifacts Collec	ted: <u>none</u>				
Location of Col Location of Fiel Private Collecti	lections: d Notes: ons:				
Name:		Address:			
Cultural Period Historic- early Phases:	C s y to mid-nineteenth centr	ULTURAL AF	FINITY		
	FORM PR	<b>EPARATION</b>	AND REVISIO	DN	
Date	Name		Institutiona	l Affiliation	

DateNameInstitutional Affiliation8-19-2020Aileen KellyS&ME, Inc.9-2-2020Aileen KellyS&ME, Inc.

\_\_\_\_\_

**Cultural Resources Reconnaissance Survey White Oak Business Park Phase II** Columbia County, Georgia S&ME Project No. 3319-19-044



# 10.0 Appendix C - Resumes



### PROJECT ROLE

Project Manager / Principal Investigator

### LOCATION

Columbia, South Carolina

### EDUCATION

- M.S., Archaeological Resource Management, Ball State University, Muncie, Indiana, 2002
- B.A., Anthropology, California State University, Sacramento, 1997

### YEARS OF EXPERIENCE

Joined S&ME in 2008 with 10 years professional experience

### **PROFESSIONAL MEMBERSHIPS**

- Register of Professional Archaeologists – 2010
- Society for American Archaeology
- Southeastern Archaeological Conference
- NAWIC

### CONTINUING EDUCATION

- Section 106 Essentials
- Advanced Section 106
- FERC Environmental Review for Natural Gas Seminar

# **Kimberly Nagle**

# **Project Manager/Principal Investigator**

Ms. Nagle has 20 years of experience and is responsible for managing all aspects of the cultural resources department in Columbia, including financial and personnel management, marketing, preparing Memorandums of Agreement and data recovery plans, overseeing all aspects of field investigation and laboratory analysis, and ensuring that researching and reporting is to S&ME standards and is accomplished in a timely fashion. She has led numerous archaeological investigations serving a number of industrial, commercial, and residential developers, public utilities, and a variety of local, state, and federal agencies. She has managed projects on a variety of scales ranging from small single-property reconnaissance studies to multi-state pipeline corridors and large hydroelectric relicensing surveys. Ms. Nagle specializes in prehistoric archaeology, cultural resource management, GIS, and artifact curation, and possesses a variety of analytical skills including lithic and ceramic analysis, and human osteology.

### **Key Projects and Assignments**

### **DOT Projects**

### Bridge Replacement Projects, Division 10, NCDOT

Anson, Cabarrus, Stanly, and Union Counties, North Carolina | 2019 (ongoing)

Principal Investigator and project manager for archaeological survey and evaluation activities associated with 10 bridge/pipe replacement project in Division 10. Completed background research, reconnaissance and intensive surveys, and associated reporting for the different project areas.

### **HUD** Projects

### City of Durham – HUD Contract

### Durham County, North Carolina | 2018 (ongoing)

Project/contract manager for the City of Durham's HUD projects. S&ME was approved by the North Carolina State Historic Preservation Office (SHPO) to be certified staff for the City of Durham in relation to their HUD projects. S&ME will approve exempt activities, survey or resurvey areas for project activities, make National Register of Historic Places recommendations when needed, consult with SHPO on rehabilitation and new construction projects, and complete archaeological surveys and tribal consultation when necessary.

### Sanford Housing Authority Lee County, North Carolina | 2017

Prepared historic preservation worksheets for six properties undergoing a mix of interior renovations as part of a Rental Assistance Demonstration conversion program under HUD. Consultation with SHPO was necessary and SHPO determined that no historic resources would be affected.

Kimberly Nagle Senior Archaeologist/Project Manager Page 2



### PIPELINE

### **T-072 Pipeline Project**

### Buncombe County, NC | June 2018-ongoing

Principal Investigator for the T-072 Pipeline Project. Conducted Phase I archaeological investigations along the pipeline corridor, lay down areas, and access roads. Consultation with three Tribal Historic Preservation Offices is being completed for the project and an ARPA permit was given to S&ME to excavate on National Park Service property, which the proposed alignment crossed. This work is ongoing.

### South Conway Loop Pipeline Project Horry County, SC | December 2018-ongoing

Principal Investigator for the project, conducted Phase I cultural resource investigations along the pipeline corridor, lay down areas, and access roads. An ARPA permit was given to S&ME to excavate on US Fish and Wildlife property, which the proposed alignment crossed. This work is ongoing.

### Line 450 Pipeline Project

### Guilford County, NC | July 2018-November 2018

Principal Investigator for the Line 450 Pipeline Project. Conducted Phase I archaeological investigations along 5.1 miles of pipeline corridor and access roads. This was done in support of obtaining a USACE permit.

### T-018B Pipeline Replacement Project Iredell County, NC | March 2018-June 2018

Principal Investigator for the T-018B Pipeline replacement project. Conducted Phase I archaeological investigations along 2.5 miles of pipeline corridor. This was done in support of obtaining a USACE permit.

### **Riverport Pipeline**

### Jasper County, SC | November 2017-March 2018

Principal Investigator for the Riverport Pipeline project. Conducted Phase I archaeological investigations along 10.3 miles of pipeline corridor and access roads. This was done in support of obtaining a USACE permit.

### Line 208 Relocation Project

### Chowan and Gates Counties, NC | December 2017-February 2018

Principal Investigator for the Line 208 Pipeline project. Conducted Phase I archaeological investigations at three bridge locations where HDD would be used to relocate the pipeline allowing for the bridges to be replaced. This was done in support of obtaining a USACE permit.

### Lawyers Road Pipeline Project

### Union County, NC | December 2017-April 2018

Principal Investigator for the Lawyers Road Pipeline project. Conducted Phase I archaeological investigations along 6.7 miles of pipeline corridor. This was done in support of obtaining a USACE permit.



### **Recent Technical Reports**

- 2018 Kimberly Nagle and Heather Carpini. *Historic Property Identification Survey, Bent Creek Sewer Extension, Spartanburg County, South Carolina.* Report prepared for Greer Commission of Public Works. Report prepared by S&ME, Inc., Columbia.
- 2018 Kimberly Nagle, Paul Connell, and Heather Carpini. *Phase I* Archaeological Investigations, Princeton II Quarry Expansion, Johnston County, North Carolina. Report prepared for Hanson Aggregates Southeast, LLC, Raleigh. Report prepared by S&ME, Inc., Columbia.
- 2018 Kimberly Nagle and Heather Carpini. *Phase I Archaeological Survey, Line 450 Pipeline Project, Guilford County, North Carolina.* Report prepared for Piedmont Natural Gas, Charlotte. Report prepared by S&ME, Inc., Columbia.
- 2018 Kimberly Nagle and Heather Carpini. *Phase I Archaeological Survey, Billy Howey Road Residential Development, Union County, North Carolina.* Report prepared for Eastwood Homes, Charlotte. Report prepared by S&ME, Inc., Columbia.
- 2018 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, T-018B Pipeline Replacement Project, Iredell County, North Carolina. Report prepared for PSNC Energy – A SCANA Company, Cayce, South Carolina. Report prepared by S&ME, Inc., Columbia.
- 2018 Kimberly Nagle and Heather Carpini. Cultural Resource Survey, Riverport Pipeline, Jasper County, South Carolina. Report prepared for SCANA, Cayce, South Carolina. Report prepared by S&ME, Inc. Columbia.
- 2017 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, Line 208 Relocations for Three Bridge Replacements, Chowan and Gates Counties, North Carolina. Report prepared for Piedmont Natural Gas, Charlotte North Carolina. Report prepared by S&ME, Inc. Columbia.
- 2017 Kimberly Nagle and Heather Carpini. *Phase I Archaeological Survey, Lawyers Road Pipeline Project, Union County, North Carolina.* Report prepared for Piedmont Natural Gas, Charlotte North Carolina. Report prepared by S&ME, Inc. Columbia.
- 2017 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, Clemmons Line 328 Upgrade Project, Davie County, North Carolina. Report prepared for Piedmont Natural Gas, Charlotte North Carolina. Report prepared by S&ME, Inc. Columbia.
- 2017 Kimberly Nagle and Heather Carpini. *Phase I Archaeological Survey, Line 30 Pipeline Project, Wake County, North Carolina.* Report prepared for PSNC Energy – A SCANA Company, Cayce, South Carolina. Report prepared by S&ME, Inc. Columbia.
- 2017 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, Line T-001 Pipeline Replacement Project, Cleveland, Polk, and Rutherford Counties, North Carolina. Report prepared for PSNC Energy – A SCANA Company, Cayce, South Carolina. Report prepared by S&ME, Inc. Columbia.





PROJECT ROLE Senior Historian / Architectural Historian

### LOCATION

Charleston, SC

### EDUCATION

- MA, Public History/Historic Preservation, University of South Carolina, Columbia, 2005
- BA, History, University of South Carolina, Columbia, 2002

### YEARS OF EXPERIENCE

Joined S&ME in 2006-2012 with 3 years previous experience. Joined S&ME in 2013 with 1 year of outside experience

### PROFESSIONAL MEMBERSHIPS

- National Trust for Historic Preservation
- National Council on Public History
- American Association of State and Local History
- Organization of American Historians
- South Carolina Historical Society

# Heather Carpini, MA Senior Historian/Architectural Historian

Ms. Carpini is the Historian/Architectural Historian for S&ME's Cultural Resources Department. She has been working in the historic preservation field for ten years, previously holding positions at the South Carolina Historic Preservation Office, Historic Columbia Foundation, and with the City of Independence, Missouri. Ms. Carpini has experience providing the following services: Historic and Archival Research; Historic and Architectural Surveys; National Register of Historic Places Nominations; Historic Tax Credit Applications; Historic Preservation Planning; HABS / HAER Documentation; Geographic Information Systems (GIS); and AutoCAD. As a former Historic Preservation Manager for a City, overseeing a large historic district, National Historic Landmark District, and numerous individually designated historic properties, she has worked with design guidelines, rehabilitation projects, tax credit projects, historic preservation commissions, reviewing compatible new construction in historic districts, and zoning and redevelopment within cities.

### **Key Projects and Assignments**

### Cultural Resources Assessment, Proposed United States Courthouse, Anniston, Alabama

### Anniston, Calhoun County, Alabama | December 2016-ongoing

Principal Investigator and author of the cultural resources assessment to assist with the site selection for a proposed United States Courthouse in Anniston, Alabama. Provided analysis of the potential effect that the construction of the proposed federal courthouse would have on significant historic structures, assessing the potential effects for three alternative building sites. Report was prepared in anticipation of compliance with the National Environmental Policy Act (NEPA); prepared for O'Brien and Geer Engineers, Inc., and the General Services Administration. *4213-16-300* 

### **Palmetto Railways Camp Hall Commerce Park Build** Berkeley County, South Carolina | December 2016-January 2017

Principal Investigator and author for the Historic Architecture Survey of approximately 23 miles of proposed rail line corridor in Berkeley County, South Carolina. Project included planning and executing the field survey and photography of over 50 structures that were greater than 50 years of age, providing written descriptions and recommendations for National Register of Historic Places eligibility, and assessing the potential of the proposed rail corridor to have adverse effects on significant historic structures. Report was prepared in anticipation of compliance with the National Environmental Policy Act (NEPA); prepared for Amec Foster Wheeler. *4213-17-003*  Heather Carpini, MA Senior Historian/Architectural Historian Page 2



### **Historic Architectural Analysis, Tips No. R-5710/R-5721/U-5765** Lincoln and Mecklenburg Counties, North Carolina | March 2017-June 2017

Principal Investigator for the historic and architectural analysis of 13 properties, in Lincoln and Mecklenburg counties, North Carolina, identified as needing additional information during the building inventory portion of the project. The project was completed for North Carolina DOT in anticipation of the improvements to NC 73 from US 16 Business to SR 2316 (Northcross Avenue). Project included documentation of the structure and associated outbuildings, research on the history of the property, development of historic and architectural contexts, and evaluation of National Register of Historic Places eligibility; applicable state survey forms, digital photographs, and Geographic Information System (GIS) data were also completed and submitted as part of this project. *4213-17-084* 

### Historic Architectural Analysis of Seven Historic Properties, Replacement of Bridge No. 35

### Hyde County, North Carolina | December 2016-ongoing

Principal Investigator and author of the historic and architectural analysis project for three historic properties in Sladesville, Hyde County, North Carolina. The project was completed for North Carolina DOT in anticipation of the replacement of Bridge No. 35 over a tributary of Slades Creek on SR 1143 (Sladesville-Credle Road). Project included documentation of the structure and associated outbuildings, research on the history of the property, development of historic and architectural contexts, and evaluation of National Register of Historic Places eligibility. *4213-16-313* 

### **Historic Building Inventory, Tips No. R-5710/R-5721/U-5765** Lincoln and Mecklenburg Counties, North Carolina | August 2016-September 2016

Principal Investigator for the Historic Building Inventory of approximately nine miles of NC 73, in Lincoln and Mecklenburg counties, North Carolina. The project was completed for North Carolina DOT in anticipation of the improvements to NC 73 from US 16 Business to SR 2316 (Northcross Avenue). Project included planning and executing the field survey and photography of over 80 structures that were greater than 50 years of age. The results of the project were presented in PowerPoint presentation, which evaluated the integrity of the structures and made recommendations for additional work based on National Register of Historic Places criteria. An associated summary table and Geographic Information System (GIS) data were also completed and submitted as part of this project. *4213-16-199* 

### **Dremak Well Connect**

### Wheeling, Ohio County, West Virginia | November 2016

Historian/Architectural Historian for the Dremak Well Connect project. Surveyed historic structures along 1.66 miles of pipeline, as well as access roads. Researched history of inventoried structures and evaluated National Register

Heather Carpini, MA Senior Historian/Architectural Historian Page 3



eligibility; also developed a historic context for the pipeline project area. Work done in support of obtaining a US Army Corps of Engineers permit. *4324-16-004* 

### **Beta McNichols to Perry Pipeline Project** Greene County, Pennsylvania | May 2015-November 2015

Historian/Architectural Historian for the Beta McNichols to Perry Pipeline project. Surveyed historic structures along 16 miles of pipeline, as well as reroutes, access roads, and temporary workspace areas. Researched history of inventoried structures and evaluated National Register eligibility; also developed a historic context for the pipeline project area. Work done in support of obtaining a US Army Corps of Engineers permit.

7324-15-006

### **Ohio River Pipeline**

# Belmont, Jefferson, and Monroe Counties, Ohio | September 2013-November 2014

Historian/Architectural Historian for the Ohio River Pipeline project. Surveyed historic structures along 55 miles of pipeline, as well as numerous reroutes, access roads, and compressor station locations. Researched history of inventoried structures and evaluated National Register eligibility. Also developed a historic context for the pipeline project area.

1176-13-001

### **Recent Technical Reports**

- 2017 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, Line 36 Pipeline Replacement Project, Harnett and Sampson Counties, North Carolina. Report prepared for Magnolia River of NC, PLLC, by S&ME, Inc., Columbia, SC.
- 2016 Kimberly Nagle and Heather Carpini. Phase I Archaeological Survey, Line T-01, Phase II Pipeline Replacement Project, Cleveland, Polk, and Rutherford Counties, North Carolina. Report prepared for PSNC Energy – A SCANA Company, by S&ME, Inc., Columbia, SC.
- 2016 Kimberly Nagle and Heather Carpini. Historic Architecture Survey, Dremak Well Connect, Wheeling, Ohio County, West Virginia. Report prepared for Appalachia Midstream Services, LLC, by S&ME, Inc., Columbia, SC.
- 2016 Kimberly Nagle and Frank Carvino. Phase I Archaeological Survey, Dremak Well Connect, Wheeling, Ohio County, West Virginia. Report prepared for Appalachia Midstream Services, LLC, by S&ME, Inc., Columbia, SC.
- 2016 Kimberly Nagle and Heather Carpini. Archaeological Survey Wetland C, Richtex System Improvement, Richland County, South Carolina. Report prepared for SCE&G – A SCANA Company, by S&ME, Inc., Columbia, SC.