# Cultural Resources Survey of The Pineland Mine Tract

**Dorchester County, South Carolina** 

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### **Table of Contents**

1.0 Introduction	1
2.0 Methods of Investigation	4
3.0 Previous Investigations	6
4.0 Results of the investigations	
4.1 Archaeological Survey Results	8
4.2 Architectural Resources Survey	8
5.0 Summary and Recommendations	
References Cited	11

Appendix A- Artifact Catalog

## List of Figures

Figure 1 The location of the Pineland Mine Tract, the APE, and all previously recorded cultural resour	rces
within 0.5 mile, as well as newly recorded historic resources within the APE on the (1979)	
Maple Cane Swamp, SC and (1980) Cottageville, SC USGS quadrangle maps	2
Figure 2 Typical views of the agricultural fields (top) and lowland wetland buffer (bottom) areas of the Pineland Mine Tract, facing east and south, respectively	3
Figure 3 A plan of the survey investigations across the Pineland Mine Tract APE	5

### **List of Tables**

Table 1. Previously recorded cultural resources with a half-mile of the Pineland Mine APE......7

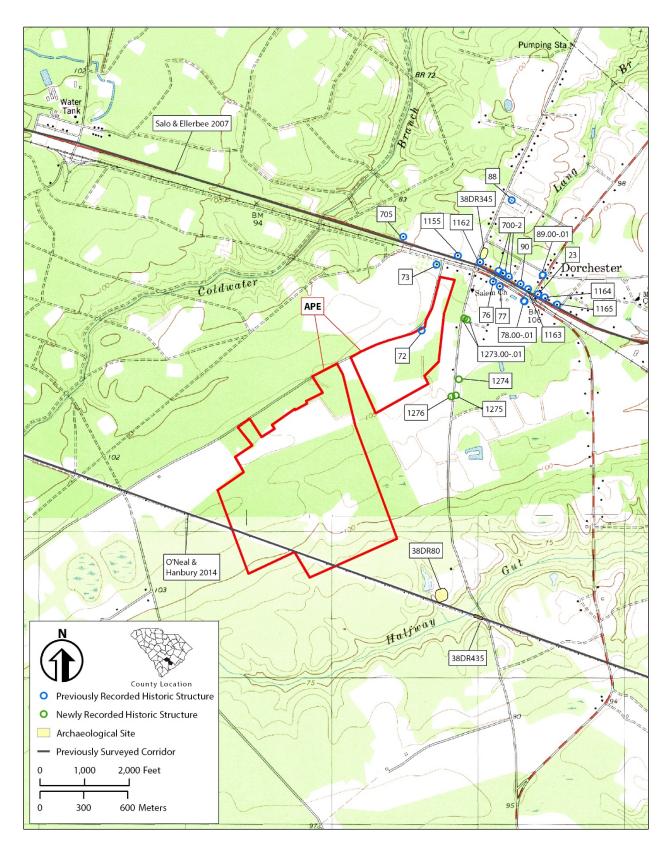
### 1.0 Introduction

In March 2020, Brockington and Associates, Inc. (Brockington) conducted an intensive cultural resources survey of the Pineland Mine Tract in Dorchester County, South Carolina. Brockington conducted the survey on behalf of Sandridge Holdings, LLC, the current property owners, as part of their due diligence process in advance of a permit application to mine sand on a portion of their 318-acre property. This study meets the South Carolina Department of Health and Environmental Control (SCDHEC) and the State Historic Preservation Office (SHPO) mining regulations concerning the management of historic properties (i.e., sites, buildings, structures, objects, and districts eligible for or listed on the National Register of Historic Places [NRHP]) affected through development activities, in pursuant with the South Carolina Mining Act (SC Code Title 48, Chapter 20, Sections 10-310) and its implementing regulations found in Chapters 89-120(C)(4) of the SC Code of Regulations.

The Pineland Mine Tract consists of 318-acres of undeveloped forest and agricultural lands located off Sandridge Road in the town of Dorchester, Dorchester County. The landowner of the Pineland Mine Tract is proposing a mining operation for the extraction of sand deposits on a select portion of the tract. The area of impact for the mine includes a 62.3-acre portion that is compiled from five separate segments of land situated in the northern and southern sections (Segments 1 through 5). An additional 129.8-acre section of uplands located around Segments 1 through 5 will be held as a reserve for future mining operations. The Area of Potential Effect (APE) is the combined 192.1-acre area. A 125.9-acre wetland buffer located adjacent to Segments 1, 3, and 5 and the immediate reserves will be preserved and not mined. Figure 1 shows the location of the Pineland Mine Tract, the project APE, all previously recorded cultural resources within 0.5 mile, and newly recorded archaeological sites within the APE on the (1979) *Maple Cane Swamp*, *SC* and (1980) *Cottageville*, *SC* US Geological Survey (USGS) quadrangle maps.

The environmental setting of the Pineland Tract is consistent with much of this part of Dorchester County. The tract includes mostly agricultural fields surrounded by pockets of dense mixed hardwood and pine forest, along with low-lying swamps. These swamps drain westward towards the nearest drainage of the Halfway Gut Creek located 800 meters (m) southwest of the project tract. The terrain mimics a typical broad upland marine terrace with elevations relatively uniform across the tract between 30 and 31 m (101-105 ft) above sea level. Elevations are highest along Sandridge Road and gradually slope gently north to south towards the Halfway Gut Creek drainage. Moderately well-drained soils across the tract include mostly Echaw fine sand (72 percent) while Lynn Haven fine sand makes up the remaining soils that are poorly drained and located in the surrounding lowlands (US Department of Agriculture [USDA] 2020). Most of the tract's natural vegetation has been cleared for agricultural lands. Figure 2 presents views of the upland and low-lying areas on the Edisto River Tract.

Brockington conducted a cultural resources survey of the 192-acre APE. We encountered five isolated finds during our survey. The isolated finds consist of one undiagnostic pre-contact plain sand-tempered pottery sherd (Isolate 1), one pre-contact residual sherd (Isolate 2), two cobalt-blue container glass shards (Isolate 3), one Eared Yadkin-type translucent quartz projectile point tool (Isolate 4) diagnostic to the Early Woodland period (450 BC to AD 250), and one unidentifiable iron object (Isolate 5). Isolates 1 through 5 were all recovered from a single shovel test. No further management consideration of these isolated finds is warranted. There are no standing structures on the tract. Brockington revisited one resource (Resource 219 0072) and recorded four historic resources (Resources 01273 through 01276) within a .25-mile radius of the project area. Resources 219 0072 and 01273 through 01276 are not eligible for the NRHP. The proposed mining activities within the APE will have no effect on historic properties.



**Figure 1** The location of the Pineland Mine Tract, the APE, and all previously recorded cultural resources within 0.5 mile, as well as newly recorded historic resources within the APE on the (1979) *Maple Cane Swamp, SC* and (1980) *Cottageville, SC* USGS quadrangle maps.



Figure 2 Typical views of the agricultural fields (top) and lowland wetland buffer (bottom) areas of the Pineland Mine Tract, facing east and south, respectively.

### 2.0 Methods of Investigation

**Project Objective.** The objective of this cultural resources investigation was to assess the potential for historic properties within the Pineland Mine Tract APE. Tasks performed to accomplish this objective include background research, field investigations, laboratory analysis, and the assessment of the NRHP eligibility of identified resources. Methods employed for each of these tasks are described below.

*Archival Research.* We examined the listings of known archaeological sites and reports of previous cultural resources investigations included on ArchSite, the state's online cultural resources database. We also reviewed various historic maps of the region to determine if any identifiable settlements or facilities are in this portion of Dorchester County. There are no previously recorded cultural resources on the tract (see Figure 1).

*Field Investigations.* Archaeological survey entailed the systematic examination of the project tract following the *South Carolina Standards and Guidelines for Archaeological Investigations* (South Carolina Department of Archives and History [SCDAH] 2013). Investigators systematically inspected the APE using pedestrian transects spaced at 30-m intervals. Figure 3 shows a plan of the survey investigations across the Pineland Mine Tract APE. Investigators excavated shovel tests at 30-m intervals along each transect, except in areas that were wet and/or disturbed. Each shovel test measured approximately 30 centimeters (cm) in diameter, and they were excavated into sterile subsoil (typically 60 cm below surface [cmbs]). Investigators sifted the fill through 1/4-inch mesh hardware cloth. They recorded information relating to each shovel test in field notebooks. This information included the content (e.g., presence or absence of artifacts) and context (e.g., soil color, texture, stratification) of each test. Investigators flagged and labeled positive shovel tests (those where artifacts were present) for relocation and site delineation.

An archaeological site is a locale yielding three or more pre- or post-contact artifacts within a 30-m radius. Locales that produce less than three contemporaneous artifacts are isolated finds (SCDAH 2013). Redeposited artifacts (even if greater than three in number) are also an isolated find rather than a site unless there is a compelling reason for doing otherwise. Archaeologists defined the boundaries of all isolated finds by excavating additional shovel tests at reduced 7.5 and 15-m intervals around the positive tests. Investigators recorded the location of the isolated finds with a handheld GPS unit. The Universal Transverse Mercator (UTM) coordinates obtained from the GPS readings are put into the ArcView© software program. We plotted these coordinates on the digital USGS quadrangle for the tract (see Figure 1).

*Laboratory Analysis and Curation.* All recovered artifacts were transported to Brockington's Mt. Pleasant laboratory facility where they were washed, cataloged, and analyzed. Laboratory personnel assigned distinct provenience numbers to artifacts from each shovel test. They separated artifacts from each provenience by class/type and assigned catalog numbers.

The basis for typological identification of post-contact and pre-contact artifacts is determined by technological and stylistic attributes. Lab personnel classified all pre-contact ceramic sherds by surface decoration and aplastic content. Sherds smaller than 2-by-2 cm (0.5-by-0.5 inch) in diameter with no recognizable diagnostic attributes are classified as residual sherds and tabulated as a group. Sherds and other analyzable artifacts were compared to published type descriptions from available sources in order to facilitate identification and correct labeling of the collected samples from the field.

Artifacts and research materials associated with this project are located at Brockington's Mt. Pleasant office. Upon acceptance of the final report, Brockington will deliver the curation package to the SC Institute of Archaeology and Anthropology (SCIAA).

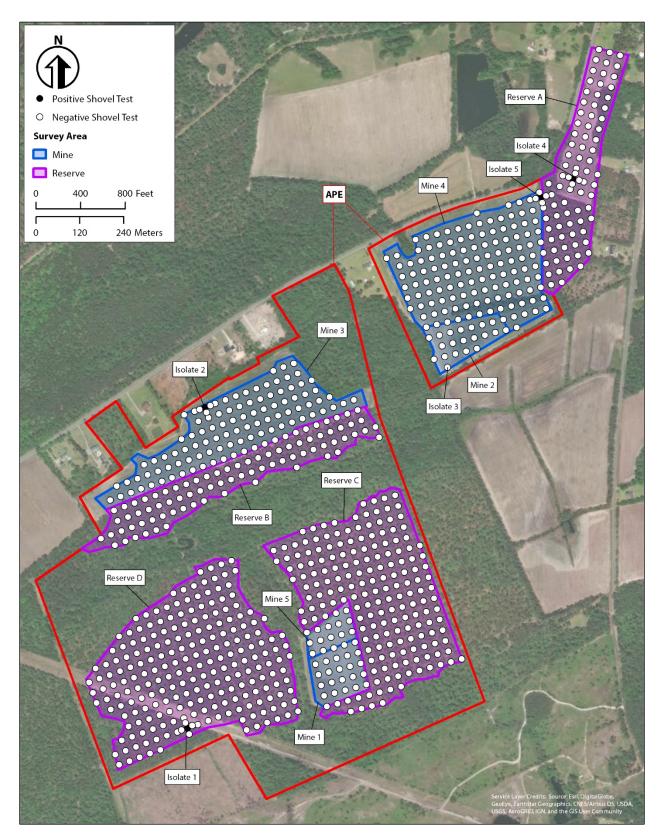


Figure 3 A plan of the survey investigations across the Pineland Mine Tract APE.

### 3.0 Previous Investigations

There are several previously recorded cultural resources near the project tract (see Figure 1.1 above). These resources are summarized in Table 1. In 1997, Fick and Davis (1997) conducted a survey of historic architectural resources in Dorchester County. They identified several early twentieth-century resources in the community of Dorchester, situated immediately north of the project tract (see Figure 1.1). In 2007, Salo and Ellerbee (2007) conducted a survey of US Highway 78 between Summerville and St. George for the Department of Transportation prior to improvements to the highway. They identified several more resources from the same community, primarily along Highway 78. Of the 18 documented historic resources, only Resource 1156, the Dorchester County Store, was determined eligible (Salo and Ellerbee 2007). Resource 1156 is located 0.5 mile east of the project APE and is buffered by Highway 78 commercial and residential district. The proposed mine undertaking will have no effect on Resource 1156.

A total of three archaeological resource were previously recorded within the 0.5-mile radius study area (38DR80, 38DR345 and 38DR435). Site 38DR80 was recorded in 1982 by South Carolina Institute of Anthropology and Archaeology archaeologist, Tommy Charles, during documentation of private collections (Cassedy 1990). Site 38DR80 consists of a surface scatter of several Woodland period lithic artifacts found in an agricultural field 0.45 mile south of the APE. Site 38DR345 was recorded during the 2007 US Highway 78 survey and consists of a light surface scatter of post-contact artifacts associated with a former twentieth-century home situated 300 m north of APE (Salo and Ellerbee 2007). Site 38DR435 was recorded in 2014 during a cultural resources survey of the St. George to Summerville 230 KV transmission line corridor (O'Neal and Hanbury 2014). Site 38DR435 consists of a light scatter of pre-contact and post-contact artifacts associated with the Woodland through Mississippian periods and the eighteenth through twentieth centuries. Sites 38DR80, 38DR345, and 38DR435 were all determined not eligible for the NRHP.

Resource	Description	Date	NRHP Status	Reference
Historic Archite	ctural Resource			
23	Moore's Store	1938	Not Eligible	Fick and Davis 1997
72	house	1915	Not Eligible	Fick and Davis 1997
73	house	1910	Not Eligible	Fick and Davis 1997
76	house	1910	Not Eligible	Fick and Davis 1997
77	house	1905	Not Eligible	Fick and Davis 1997
88	Dorchester Cemetery	1870	Not Eligible	Fick and Davis 1997
89	Pendarvis House	1925	Not Eligible	Fick and Davis 1997
700	Way Store/Dorchester Post Office	1915	Not Eligible	Fick and Davis 1997
701	Way-Clayton House	1905	Not Eligible	Fick and Davis 1997
702	house	1910	Not Eligible	Fick and Davis 1997
703	house	1915	Not Eligible	Fick and Davis 1997
705	house	1925	Not Eligible	Fick and Davis 1997
1155	house	1915	Not Eligible	Salo and Ellerbee 2007
1156	Dorchester County Sore	1915	Eligible	Salo and Ellerbee 2007
1162	house	1950	Not Eligible	Salo and Ellerbee 2007
1163	house	1940	Not Eligible	Salo and Ellerbee 2007
1164	house	1950/1970	Not Eligible	Salo and Ellerbee 2007
1165	house	1940	Not Eligible	Salo and Ellerbee 2007
Archaeological I	Resource	1	-	I
38DR80	Artifact Scatter	Woodland Period	Not Eligible	Cassedy 1990
38DR345	Artifact Scatter	Twentieth Century	Not Eligible	Salo and Ellerbee 2007
38DR435	Artifact Scatter	Woodlland/Miss Period; Eighteenth- Twentieth Century	Not Eligible	Salo and Ellerbee 2007

 Table 1 Previously recorded cultural resources with a half-mile of the Pineland Mine APE.

### 4.0 Results of the investigations

Brockington designed the intensive cultural resources survey to identify and assess all cultural resources within the 192-acre APE. The archaeological field and architectural survey investigations were conducted between March 23, and April 11, 2020. During the archaeological survey, we identified five isolated artifact finds (Isolates 1 through 5) in five separate areas of the APE (see Figure 2). Our architectural survey revisited one resource (Resource 219 0072) and recorded four historic resources (Resources 01273 through 01276) within a .25-mile radius of the project area. Detailed below is a description of the soil conditions and all cultural material found during the survey

### 4.1 Archaeological Survey Results

Archaeologists encountered uniform field conditions while conducting the archaeological survey (see Figures 2). The survey transects were positioned in an east-west or north-south direction traversing each separate mine segment (Segments 1 through 5) and future reserves parcels. Shovel tests were excavated at 100-foot intervals along each transect (see Figure 3). The majority of the survey occurred within open agriculture fields.

Soils in the project area consist of primarily of Echaw fine sand sands and are described as moderately well-drained, occuring on marine terraces (USDA Web Survey 2020). Investigators recorded a general munsell designation of 10YR 5/2 gray-brown sand 0-20 cmbs underlain by 10YR 5/6 yellowish-brown sand 20-80 cmbs. Soil variation occurred when investigators encountered saturated conditions along the edge of wetland boundaries. Soils described include 10YR 2/1 black loamy sand (0-25 cmbs) over 10YR 5/2 gray-brown sands (20-40 cmbs).

Investigators found a total of five isolated finds across the APE. The isolated finds consist of one undiagnostic pre-contact plain sand-tempered pottery sherd (Isolate 1), one pre-contact residual sherd (Isolate 2), two cobalt-blue container glass shards (Isolate 3), one Eared Yadkin-type translucent quartz projectile point tool (Isolate 4) diagnostic to the Early Woodland period (450 BC to AD 250), and one unidentifiable iron object (Isolate 5). Isolates 1 through 5 were all recovered from a single shovel test. Archaeologists defined the boundaries of all isolated finds by excavating additional shovel tests at reduced 7.5 and 15-m intervals around the positive tests. No additional positive shovel tests were recorded.

### 4.2 Architectural Resources Survey

For this survey, investigators identified one previously surveyed architectural resource (Resource 219 0072 on Sandridge Road) adjacent to the northern project boundary and four additional historic resources within 0.25 mile east of the project's APE. A revisit SC SSHP Survey Form was completed for the previously surveyed resource and new SC SSHP Survey Forms were completed for each newly identified resource.

Resource 219 0072 was recorded in 1996 in *Dorchester County Cultural Resources Survey* (Fick and Davis 1997). The historic resource (Dorchester County TMS# 084-00-00-087.000) is a ca. 1915 wood-frame, single pen tenant house on Sandridge Road. Fick and Davis recommended the resource not eligible for the NRHP when it was surveyed in 1996, and SHPO concurred with the finding. Brockington revisited 219 0072 and found that the resource remains extant with no significant changes since it was previously recorded, and therefore recommends no change for the NRHP status.

Four additional historic resources, Resources 01273 through 01276, were identified on Salem Road between 400 feet to 700 feet east of the project boundary, outside of the project APE. These early twentiethcentury resources, including tenant houses and a ruin of a possible agricultural-related structure, are vestiges of Dorchester's farming past. Resource 01273, 01274, and 01275 are wood-frame, single family dwellings clad in weatherboard siding with gabled roofs clad in V-crimp metal. Resources 01273 and 01275 are side-gabled structures with brick pier foundations that could date to the early twentieth century. Resource 01274 is a front-gabled, wood-frame dwelling that is dated later than Resources 01273 and 01275. Each dwelling is currently vacant and in a state of disrepair. Resource 01276 is currently in a ruinous state. According to historic maps and aerial images, this was a barn fronting Salem Road with a front-gabled structure and a shed roof extension on the north, west, and south elevations. Brockington recommends Resources 01273 through 01276 not eligible for the NRHP because they are not significant examples of a type, style, or method of construction; associated with significant events or people from the past; nor are they likely to yield information important in history or prehistory. Each of these resources exhibit poor integrity due to neglect and deterioration.

### 5.0 Summary and Recommendations

Brockington conducted an intensive cultural resources survey of the Pineland Mine Tract in Dorchester County, South Carolina. Investigators identified five isolated finds during the survey. These resources lack the potential to contribute meaningful information concerning the history or prehistory of the project tract or region. We recommend Isolates 1 through 5 *not eligible* for the NRHP. All recently documented or revisited historic resources within a 0.25-mile radius were also found not eligible for the NRHP. The proposed mining activities within the APE will have no effect on historic properties. The Pineland Mine Tract warrants no further consideration with respect to cultural resources.

### **References Cited**

#### Cassedy, Daniel F.

1990 Cultural Resources Survey and Testing for the proposed Expansion of the Oakridge Landfill, Dorchester County, South Carolina. Report prepared by Garrow and Associates, Raleigh, North Carolina.

#### Fick, Sarah and Steven Davis

1997 *Dorchester County, South Carolina, Historic Resources Survey.* Report prepared by Preservation Consultants, Inc., Charleston, South Carolina

#### O'Neal, Micheal and Mary Hanbury

2014 Phase I Cultural Resources Survey of the St. George-Summerville Transmission Line, Dorchester County, South Carolina. Report prepared by Archaeology Consultants of the Carolinas, Clayton, North Carolina.

#### Salo, Edward and Jason Ellerbee

2007 *Cultural Resources Survey of the Proposed US Highway 78 Improvement Project, Dorchester County, South Carolina.* Report prepared for Davis & Floyd, Inc., Columbia, South Carolina and Dorchester County Sales Tax Authority.

#### South Carolina Department of Archives and History (SCDAH)

2013 *Guidelines and Standards for Archaeological Investigations*. South Carolina State Historic Preservation Office, Review and Compliance Branch, Columbia, South Carolina.

#### United States Department of Agriculture (USDA)

2020 Web Soil Survey. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. Accessed July 2018.

#### United States Geological Survey (USGS)

- 1979 Maple Cane Swamp, SC quadrangle, 7.5-minute series.
- 1980 *Cottageville, SC* quadrangle, 7.5-minute series.

# **Appendix A** Artifact Catalog

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Brockington and Associates, Inc. uses the following proveniencing system. Provenience 1 designates general surface collections. Numbers after the decimal point designate subsequent surface collections, or trenches. Proveniences 2 to 200 designate shovel tests. Controlled surface collections and 50 by 50 cm units are also designated by this provenience range. For all provenience numbers except 1, the numbers after the decimal point designate levels. Provenience X.0 is a surface collection at a shovel test or unit. X.1 designates level one, and X.2 designates level two.

Site Number:	Isolate 1					
Catalog # Count	Weight (in g)	Count Weight (in g) Artifact Description	Lithic Type	Ceramic Type	Temporal Range	Comments
SITE NUMBER:	Isolate 1					
Provenience Number:	2.1	Transect 13, Shovel Test 6, 0-30 cmbs				
1 1	9.1	Plain Body Sherd, Fine/Medium Sand Tempered				
SITE NUMBER:	Isolate 2					
Provenience Number:	2.1	Transect 10N, Shovel Test 6, 0-30 cmbs				
1 1	2.3	Residual Sherd				
SITE NUMBER:	Isolate 3					
Provenience Number:	2.1	Transect 1, Shovel Test 14, 0-35 cmbs				
1 2	2.5	Cobalt Blue Glass Container Body				
SITE NUMBER:	Isolate 4					
Provenience Number:	2.0	Transect 3, Shovel Test 3, Surface				
1 1	1.8	Translucent Quartz Projectile Point Tool	Eared Yadkin		Early Woodland (450 BC - AD 250)	Impact Fracture
SITE NUMBER:	Isolate 5					
Provenience Number:	2.1	Transect 19, Shovel Test 1, 0-20 cmbs				
1 1	430	Iron Unidentifiable Fragment				Discarded

Page 1 of 1