EXAMINATION, ASSESSMENT, AND RECOMMENATIONS FOR A CEMETERY ON THE PROPOSED H-6 SCHOOL SITE, WAKE COUNTY, NORTH CAROLINA

Chicora Research Contribution 504

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CHICORA RESEARCH CONTRIBUTION 504

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MANAGEMENT SUMMARY

This report examines a small cemetery identified on the proposed H-6 Wake County, North Carolina school site. The tract consists of approximately 80.802 acres and is situated in northeast Wake County north of US 401 (locally known as the Louisburg Road). The property is found between Forestville Road (SR-2049) to the east and Taylors Ridge Road to the west. The area, once rural, is facing multiple development pressures. To the south is Highland Creek, a Centex development, while to the west is Chesterfield Village. Stonegate at St. Andrews is situated to the north.

The cemetery is found in the central portion of the H-6 tract. Initially it was identified as measuring about 100 feet north-south by 50 feet east-west. Recognized by school officials were alignments of sunken depressions, as well as crudely shaped stone markers.

Chicora Foundation was requested by the Wake County Board of Education to conduct a survey and assessment of the cemetery, seeking to identify any historical documents associated with the cemetery, as well as to identify, mark, and map graves. A significant portion of the study involved mapping the cemetery, providing detailed boundary information suitable for use by the school planners. We were also requested to provide professional recommendations regarding the preservation of the cemetery.

This study involved historical research using the resources of the North Carolina Department of Archives and History; The Olivia Raney Library; the North Carolina Collection at the Wilson Library, University of North Carolina; the Wake County Register of Deeds; the Wake County Superior Court, Probate Division; and the Archaeology Branch, North Carolina Department of Cultural Resources.

These investigations were able to securely trace the ownership of the cemetery through 1885 when it was in the hands of Alsey Ranes. Circumstantial evidence suggests that Ranes held the cemetery property at least as early as 1840. A small, yeoman farmer, Ranes was not a major slave holder. The property passed from Ranes to W.T. Shearin and was eventually divided among heirs. In none of the deeds was there a mention of the cemetery or any reservation of the cemetery property. Oral history suggests that the cemetery was no longer being used by the 1920s and that there was no local memory of its use by either whites or blacks.

In addition, on-site investigations included a penetrometer survey to identify additional graves, a stone-by-stone conditions assessment, and mapping of the cemetery.

The cemetery study identified 42 graves arranged neatly in six rows. The cemetery dimensions were found to be 77 feet north-south by 44 feet east-west. There was no evidence of grave goods, although many of the graves were marked by granitoid rocks, some shaped, and others in rough form. Most of the marked graves have both head and footstones. A buffer is recommended for planning and preservation purposes, extending the boundaries to 127 by 94 feet.

The only way to determine with certainty that all graves have been found is to strip the upper foot of soil from the site. This is

an intrusive method and we do not recommend its use unless the cemetery is to be moved. Consequently, it is possible that outlying burials may be present and the construction crews must be diligent for evidence of additional graves.

In spite of these detailed studies, it is not possible, based on the outward manifestations of the graves, to conclusively identify the ethnic affiliation of the cemetery. While African American roots have been ascribed to the cemetery, its layout and extensive use of local stone could just as easily reflect Euro-American origins.

Regardless of the ethnic affiliation of the cemetery, it deserves special care. Recommendations regarding the long-term preservation needs of the cemetery are included in this study. Should those preservation needs be in conflict with the proposed use of the site; this report also provides recommendations regarding investigation and relocation of the cemetery.

Preservation recommendations include landscape issues, such as the removal of trees on the cemetery with diameters of less than 5-inches dbh. The remaining trees should be inspected by a certified arborist and removed or pruned per those recommendations. Removed trees should be mulched on site and used as a ground cover. Preservation issues also include treatment of the stones themselves, many of which are lichen covered and deteriorating. Now mapped, sunken graves should be infilled with clean sand for public safety. Finally, preservation recommendations also involve the protection of the cemetery from vandalism or other damage. In a school setting this will likely require appropriate fencing.

Should removal of the cemetery be required, we recommend that the procedures of NC General Statute 70, Article 3 be implemented. These will ensure that the graves are professionally excavated and the recovered remains studied, prior to appropriate reburial.

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INTRODUCTION

Project Background

Chicora Foundation was contacted in mid November 2008 by the Wake County Board of Education, soliciting a proposal for the investigation of a cemetery on what is known as tract H-6. This cemetery was identified by the local community and quickly became an issue in the media (see, for example, [Raleigh, NC] *News and Observer*, October 14, 2008).

From a careful review of the media reports, it appears that the identification of a cemetery may have been secondary to the controversy over the school's location. In fact, North Carolina law has adequate provisions for the protection of human remains. General Statutes 14-148 and 14-149 outline the penalties for defacing and desecrating gravesites and for plowing over or covering up graves. Violation is a misdemeanor and a Class I felony respectively. The fine is up to $500, and imprisonment is between sixty days and a year. Both penalties may result.

North Carolina law also has provisions for the removal of cemeteries. General Statute 65-13 details the procedures for the removal of graves. General Statue 70-3 provides provisions for archaeological recovery and investigation of graves – a procedure that offers far greater promise for sensitive, careful removal.

Chicora submitted a proposal on November 18, 2008 outlining work consisting of historical research, delineation of cemetery boundaries focusing on the cemetery area identified by the land surveyors, mapping, and a report that would include preservation recommendations for the cemetery. This proposal was accepted and an agreement was signed on November 20, 2008. Because of design schedules, the work was placed on an accelerated schedule, with a final report due by January 2, 2009. This very tight schedule was mandated by the school board's design and planning requirements.

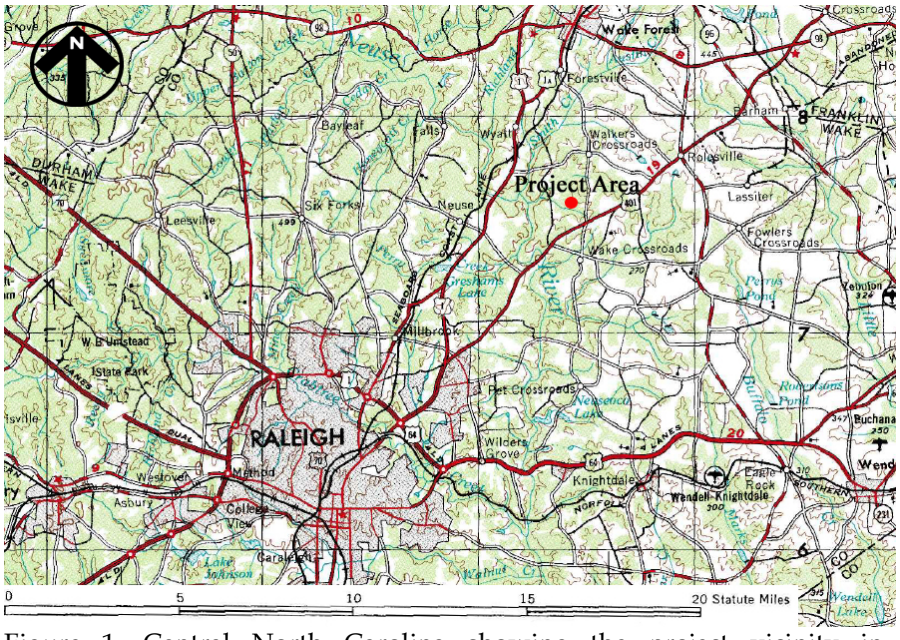


Figure 1. Central North Carolina showing the project vicinity in northeastern Wake County.

The historical research for this project was conducted primarily by Michael Trinkley and Debi Hacker, with additional investigations by Nicole Southerland and Ashley Guba. This

work was conducted between December 5 and December 11, 2008. A total of 76 person hours were spent involved in historical research. Field investigations were conducted by Nicole Southerland, Ashley Guba, and Debi Hacker, under the direction of Michael Trinkley. A total of 40 person hours were spent on the field investigations.

Figure 2. Portion of the Wake Forest USGS topographic map showing the location of the cemetery on the H-6 School tract.

The cemetery is situated in northeast Wake County east of the Neuse River and between Forestville Road (SR-2049) to the east and Taylors Ridge Road to the west. To the south is Louisburg Road (US 401). During the early nineteenth century the property was cultivated and since the mid-1950s second growth hardwoods have begun to grow up over much of the property. Although the cemetery does not stand out, it is clearly recognizable with careful scrutiny.

Environmental Background

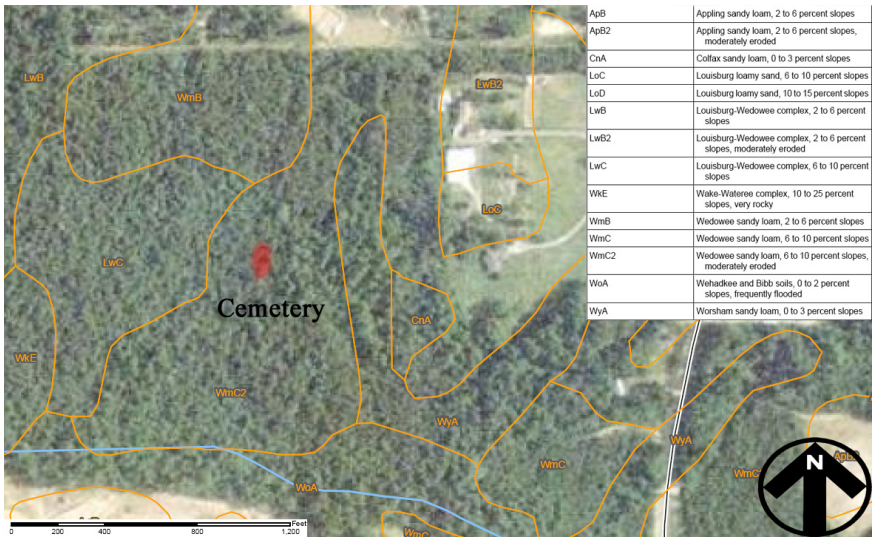
Wake County is located at the transition between the Piedmont and Coastal Plain physiographic provinces. Although affected by erosion, the terrain is predominantly gently rolling, with broad flat areas between stream drainages. About 80% of the county is drained by the Neuse. Elevations in the county range from about 160 feet to 540 feet, although the project area has an elevation of about 270 feet above mean sea level (AMSL).

Although not clearly distinguished by the available USGS topographic map, the cemetery on the H-6 school site is situated on a ridge top at an elevation of about 286 feet AMSL. The area falls away to the east toward a small tributary of Big Branch Creek. The topography also drops to about 250 feet AMSL to the run of Big Branch Creek in the south. Elevations tend to increase to the north, with the highest ridge off the school property to the north and north-northwest.

The project area is dominated by the Appling-Louisburg-Wedowee soil association, which has gently sloping to steep, well drained to somewhat excessively drained soils with a subsoil of friable coarse sandy loam to firm clay. The soils are derived from granite, gneiss, and schist. The cemetery is situated on Wedowee sandy loams with slopes from 6-10% that are identified as moderately eroded. These are acidic, deep soils that form under forests and are currently important for agriculture.

The modern climate of the Wake County area is characterized by warm summers

and mild, but occasionally cold, winters. The average daily maximum temperature in Raleigh during July is 89°F, with an average minimum temperature of 69°F. During the winter the January average daily maximum temperature is 50°F, with an average daily minimum temperature of 30°F. The county averages about 220 frost-free days each year. There are no distinct wet or dry seasons. The driest month on average is November, with about 3.2 inches of precipitation. The wettest month is July, with 4.4 inches of rain. Snow is a common occurrence, with a yearly average of about 2 inches (Epperson 1971).



ApB	Appling sandy loam, 2 to 6 percent slopes
ApB2	Appling sandy loam, 2 to 6 percent slopes, moderately eroded
CnA	Colfax sandy loam, 0 to 3 percent slopes
LoC	Louisburg loamy sand, 6 to 10 percent slopes
LoD	Louisburg loamy sand, 10 to 15 percent slopes
LwB	Louisburg-Wedowee complex, 2 to 6 percent slopes
LwB2	Louisburg-Wedowee complex, 2 to 6 percent slopes, moderately eroded
LwC	Louisburg-Wedowee complex, 6 to 10 percent slopes
WkE	Wake-Wateree complex, 10 to 25 percent slopes, very rocky
WmB	Wedowee sandy loam, 2 to 6 percent slopes
WmC	Wedowee sandy loam, 6 to 10 percent slopes
WmC2	Wedowee sandy loam, 6 to 10 percent slopes, moderately eroded
WoA	Wehadkee and Bibb soils, 0 to 2 percent slopes, frequently flooded
WyA	Worsham sandy loam, 0 to 3 percent slopes

Figure 3. Soils in the project area.

Prior to the extensive European occupation of the area, Wake County supported dense stands of hardwood forest. In the uplands and higher stream terraces were red, white, black, chestnut, southern red, scarlet, and post oaks; pignut and mockernut hickories; tulip poplar; American chestnut; sweetgum; and black gum. Shortleaf, Virginia, and white pine were present in some areas, along with red cedar. Dogwood, holly, sourwood, and other species were common in the understory.

The floodplains along the Neuse and its major tributaries supported stands of oaks, hickories, American beech, tulip poplar, black walnut, American and slippery elms, white and green ashes, red, silver, and southern sugar maples, sweet gum, black gum, sycamore, and other species. Black willow, red maple, sycamore, green ash, sweetgum river birch, and water oak were present on the more poorly drained soils.

A Context

In 1969 Gregory Jeane, a Southern folklorist, first outlined the concept of the Upland South Folk Cemetery, a topic which he continued to refine for 20 years (Jeane 1969, 1978, 1984, 1989). The upland southern folk cemetery as defined consists of a series of attributes, including hilltop location, scraped ground, mounded graves, east-west grave orientation, creative grave markers using readily available materials, certain species of vegetation (largely evergreens), the use of grave shelters, and an obvious devotion to God and/or family.

Jeane suggests the complex was introduced in the late eighteenth or early nineteenth century and developed through three distinct phases or models: pioneer, transitional, and modern.

Of special interest to us in this study is the pioneer phase or model and is typically found in remote, rural burial grounds. While perhaps beginning as early as the 1700s, it was well established by the 1830s (in Georgia, where Jeane conducted much of his studies, the date may be as early as 1810).

In lieu of a churchyard cemetery, the early settlers established pioneer folk cemeteries that, while small, included extended family ties. Jeane suggests that the most distinctive trait

during this early period was the ground scraped clean of grass. Otherwise, many of the features previously mentioned would be found in this early phase: uniform east-west orientations, neat alignments, mounded earth, and a hilltop location. Such cemeteries presented a very stark appearance (see, for example, Jordan 1982).

In 1994 John Clauser, Jr. wrote about the Southern folk cemetery in the North Carolina piedmont (Clauser 1994). The discussion is clearly based on Jeane's work, with continued use of the pioneer, transitional, and modern phases; emphasis on high ground, limited use of plantings, grave scraping and mounding, and other features.

Clauser notes that this mortuary practice may have served as a focus for ritual renewal of kinship ties, stressing family unification and bonding. He also notes that the cemeteries were typically rectilinear with clearly discernable rows. The use of field stones was an important characteristic. Sometimes these stones would be unworked; at times the stone would be crudely shaped into Gothic profiles. He observes that these field stones, typically at the head and foot of the grave, were the most common folk marker for North Carolina graves.

Curiously, Clauser appears to make no distinction between African American and Euro-American traditions, lumping the two together in his discussions. He also suggests that "abandonment seems to be a natural conclusion and not the result of uncaring neglect." He suggests that there is a "natural half-life" for these cemeteries with a gradual decline. Unfortunately, this interesting assertion is not fully developed

In 1998 Ruth Little compiled her years of observation into a synthesis of graveyards across North Carolina (Little 1998). Her piedmont chapter was entiled, "Fieldstones and Fancy Stones," with the latter receiving the bulk of her attention. Either unaware of the Southern folk cemetery discussions by Jeane and Clauser, or more likely dismissing them, Little noted that by the second generation Piedmont farmers ceased using family graveyards and turned instead to churchyards.

She suggests that the earliest settlers of the eastern Piedmont used small head and footstones of native stone formed by amateur stone cutters. The small populations and dispersed communities discouraged the development of full-time craftsmen, as well as the importation of commercial products. "The British-dominated eastern Piedmont, Caswell, Durham, Orange, and Wake Counties, used headstones of unshaped or partially shaped field rocks until marble stones became available" (Little 1998:73). While granite was certainly available in Wake County, Little suggests that it was little used "because stonecutters lacked tools and skill to polish and inscribe it" (Little 1998:78).

Little had far less to say about African American graveyards and memorials, probably because much less was known at the time of her study. Much of her discussion, in fact, focuses on African American burials in urban contexts or African American use of concrete markers in the late nineteenth and early twentieth centuries. She does, however, briefly comment on rural black burial grounds, noting that while graves are typically oriented east-west, they were not placed in even rows. She goes on to explain, "families are loosely grouped, and the placement of individual graves within the family grouping has no established order, so that the rhythm of the overall design is irregular and strongly individualistic" (Little 1998:237). She notes that the typical unit of enclosure is the individual grave, not the family plot.

Little mentioned the unique African American enclosures and grave sculptures, as well as the use of various items as grave decorations. She also warns that many grave attributes, such as the use of shell decorations, can be found on both Euro-American and African American burials.

If we expand our view southward, we do obtain a range of additional observations, especially for African American burial grounds (see, for example, Trinkley 1996 and Connor 1989). Most of this work, however, has focused on coastal plain cemeteries. Turning to the upland there has been far less investigation – not only have fewer opportunities presented themselves through cultural resource management projects, but the African American population declines as one moves inland.

Nevertheless, at least one source suggests that Piedmont burial grounds may not prove to be too different from those better known along the coast. An African American cemetery in the South Carolina upcountry was described by John William DeForest shortly after the Civil War. He commented that while a few marble and brick monuments were present, most were, "wooded slabs, all grimed and mouldering with the dampness of the forest . . ." (DeForest 1997). At the time, some of the wooded slabs had painted names and dates. The paint likely flakes off only shortly before the wood itself rotted away.

Although not as carefully – or as extensively – studied, the upland African American cemeteries are presumed to have strong similarities to their better known low country counterparts.

HISTORIC SYNOPSIS

Property Ownership

Ownership of the study tract can be traced back securely to October 1885 when the Wake County courts ordered the division of the estate of Alsey Ranes (also spelled Raines and Rains; Wake County Register of Deeds, Book 89, paged 679). The case, G.A. Ranes vs. Charlotte Ranes and others identified two tracts. Parcel No. 1 consisted of 67 acres and was allotted to Charlotte Ranes as her dower (life estate; her husband, Alsey Ranes, died intestate). Parcel No. 2, situated to the north, consisted of 158 acres and was divided into seven lots and distributed to the Ranes' children as Lots 8 through 14 (Figure 4). The document also divided Parcel No. 1 into seven tracts, with four of these (identified as Lots 1-4) being of special interest to this investigation.

Lots 2 and 3 of the dower estate were deeded by L.N. Ranes and his wife, A.B. Raines,

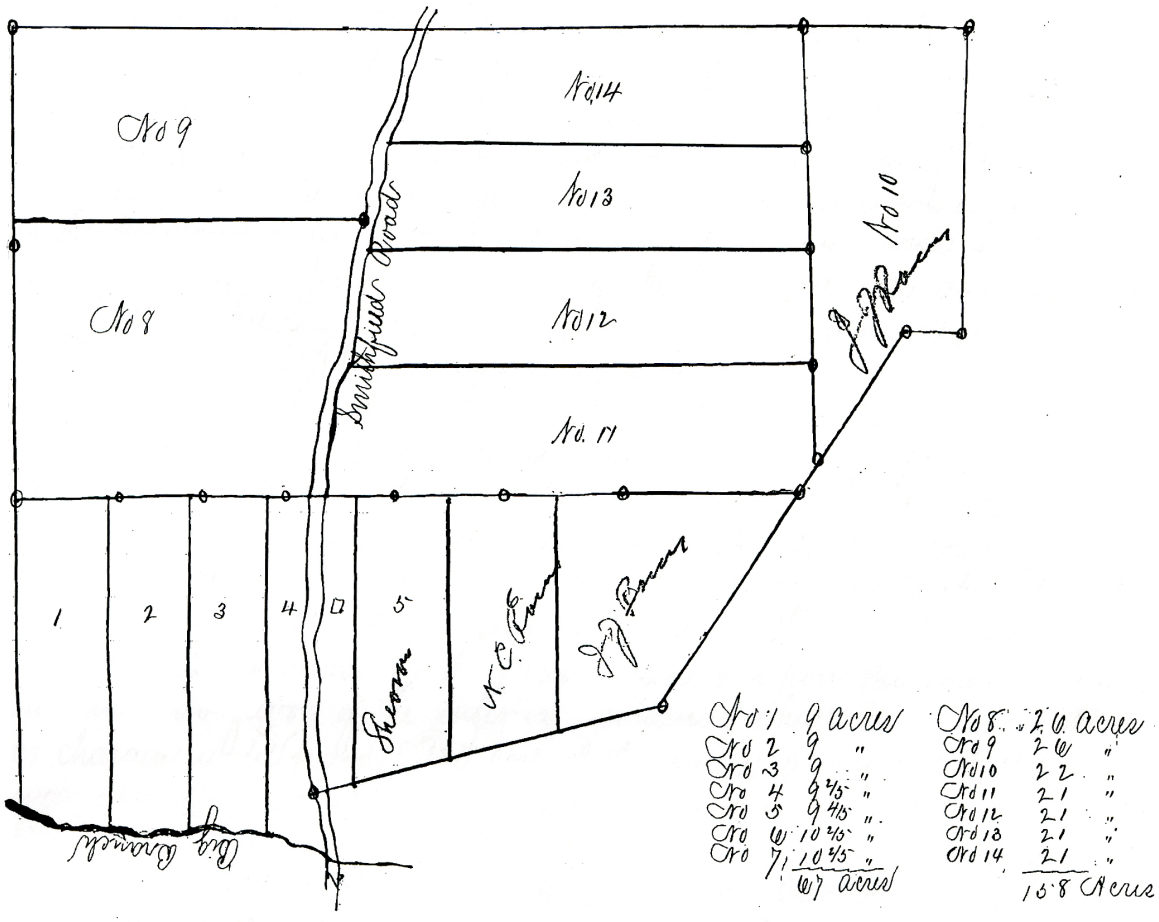


Figure 4. Division of the estate of Alsey Ranes in 1885 (Wake County Register of Deeds, Map Book 89, page 682).

to G.A. Ranes in 1897 (Wake County Register of Deeds, Book 495, page 539). Lot 4 was also acquired by G.A. Ranes and, in 1926, G.A. Ranes and his wife, Louie T. Ranes, sold the four lots (identified as the dower of Mrs. Charlotte Rains) to Walter T. Shearin (Wake County Register of Deeds, Book 495, page 544).

This transfer may have been designed to keep the property in the family, since Delia Ranes married into the Shearin family (see also Belvin and Riggs 1983 for additional connections between the two families).

With the death of Walter T. Shearin, what was identified as Tract 3 was inherited by his wife, Sadie Bess Shearin (Wake County Register of Deeds, Book 2788, page 873) in 1979 (Figure 5). Upon her death the property was acquired by her executor, Jonathan A. Shearin, who purchased the property from the estate in 2007 (Wake County Register of Deeds, Book

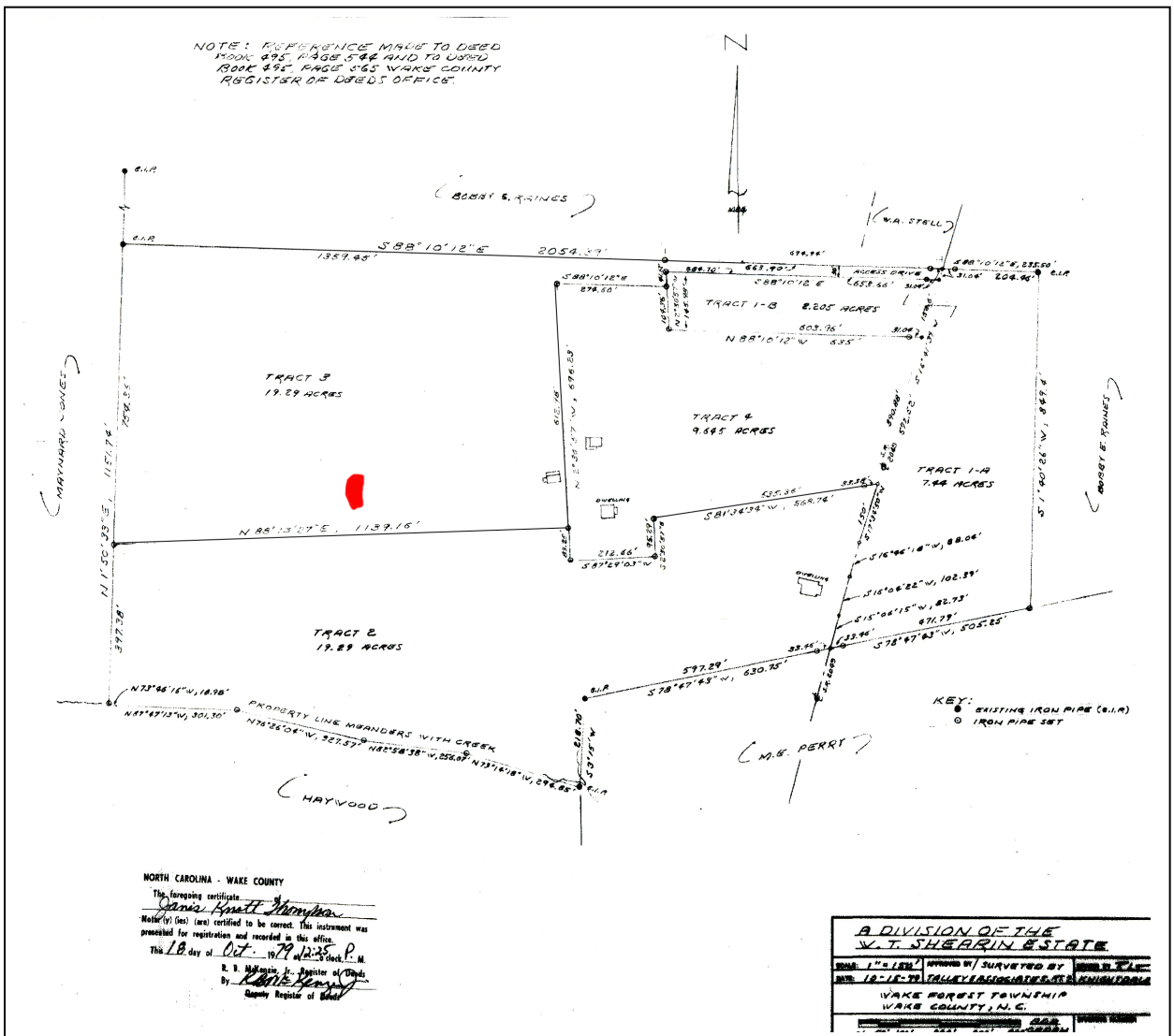


Figure 5. Division of the estate of W.T. Shearin (Wake County Register of Deeds, Map Book 79, page 872). The cemetery (shown in red) was not included in the original plat.

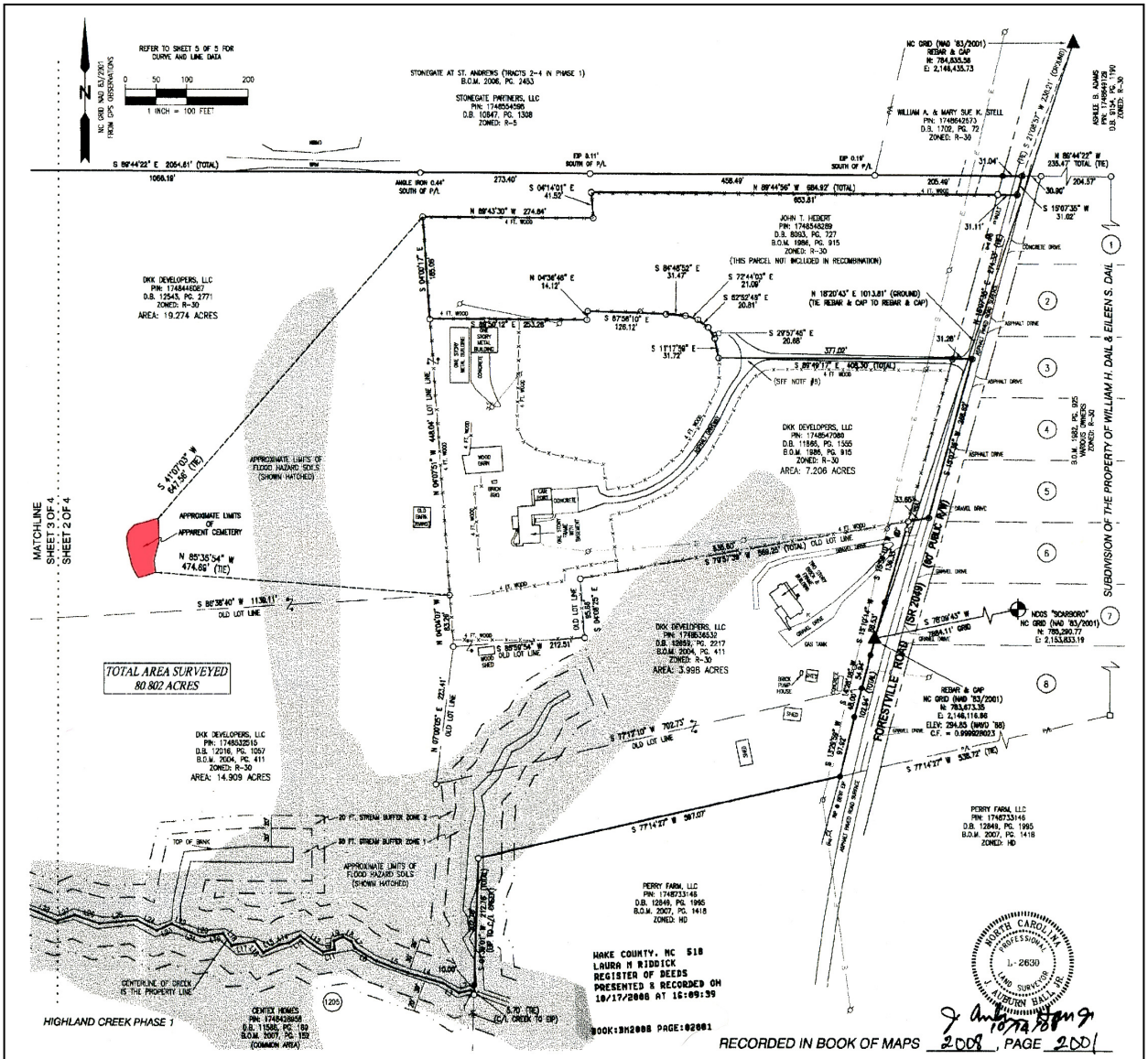


Figure 6. Portion of the H-6 school tract, sold to the Wake County Board of Education by DKK Developers, LLC (Wake County Register of Deeds, Map Book 2008, page 2001).

12414, page 214).

Jonathan Shearin in turn sold Tract 3, containing 19.29 acres, to DKK Developers (Wake County Register of Deeds, Book 12543, page 2771) on May 11, 2007. DKK held the property for 17 months before selling it to the Wake County Board of Education (Wake County Register of Deeds, Book 13277, page 2503) (Figure 6).

We have been unable to identify the tract come into the ownership of Alsey Ranes through either purchase (Alsey Ranes is not found as a grantee in the Wake County deeds) or inheritance (Ranes has not been found in the will books in the Wake County Probate office or in the will abstracts from 1771 through 1824). It is possible that the property came through his marriage to Charlotte, but we have thus far been

Table 1.
Agricultural Schedule for Alsey Rains, 1850-1880

Year	Improved (acres)	Unimproved (acres)	Value of Farm ($)	Value of Implements ($)	Wages Paid ($: 1870-)	Horses	Asses & Mules	Milch Cows	Oxen	Other Cattle	Swine	Value of Livestock ($)
1850	90	113	500	25		3		3	1	3	27	185
1860	100	103	1,200	15		4		3	7	6	26	550
1870	60	145	500	25	130	3		2	1	1	13	350
1880	40	100	10	10	100			7	1	9	10	500

Year	Wheat (bu)	Corn (bu)	Oats (bu)	Cotton (bales)	Barley (b)	Peaes & Beans (bu)	Sweet Potatoes (bu)	Butter (lbs.)	Hay (tons)	Home Manufactured Products ($)	Value Animals Slaughtered ($)
1850	16	475	40	1		20	60	75	3	25	145
1860	38	250	5	4	50			40	5	12.5	164
1870	33	300	60	4		6	50	100		30	250
1880	8	300	40	9		25	100	100			

unable to ascertain her maiden name or other supporting information.

Alsey Raines is first found in the 1840 census, having a family of seven, with two employed in agriculture, likely Alsey (in the 30 to under 40 year old category) and his one identified son (15 to less than 20 years). He owned no slaves. The 1840 tax list for Wake County indicates that Alsey Rains, living in the Cross Roads district, owned 220 acres, valued at $550. The record confirms that he had no slaves and paid only the poll tax for himself – resulting in the tax of $1.80.

By 1850 Ranes (identified as Raines) was enumerated in the Cross Roads District. Charlotte was listed as his wife and Alsey was estimated to have been born in 1803. Six children are also listed. The census identified property worth $450. The 1850 slave census reveals that he owned one 17-year old female slave.

Alsey's fortune improved by 1860, at which time he was listed as owning $1,200 in real estate and $600 in personal property. He, however, no longer owned any African American slaves.

The 1850 and 1860 agricultural schedules provide significant clues concerning Alsey and his property in Wake County. The 1850 and 1860 schedules reveal that Alsey Raines owned 203 acres – the 1885 plat indicates the Raines property was 225 acres by survey – suggesting that the agricultural census from 1850 is the same property identified in the postbellum. Thus, it appears very likely that although the source of the property cannot be identified at present, the Ranes ownership extends to at least 1840 (at which time Alsey would have been about 37 years old).

The agricultural data reveal that Alsey was a successful small or yeoman farmer, with his cotton production increasing steadily, while his farm continued to produce moderate amounts of subsistence crops such as corn, sweet potatoes, hay, and other grains – even into the postbellum.

Alsey Rains, even living in one of the five counties with the largest slave populations, managed to establish a successful small farm. It was farms such as this that the editor of the *Arator*, an agricultural magazine published in Raleigh, had in mind:

> We had the pleasure, on the 25th ult., to visit Mr. Gully . . . . and were highly gratified to witness the evidence of industry, good management, abundance, and contentment, which his snug little farm, neat dwelling, thrifty looking stock, &c., presented . . . . He has only about fifty acres of land, located on a stony pine ridge, originally thin and poor; about twenty acres of which are now in corn and peas well cultivated, ... good garden, and a promising young orchards . . . . His cart and tools are kept in place and good order under shelter . . . . (quoted in Johnson 1937:66)

Johnson went on to note that the largest single class of whites in North Carolina were yeoman farmers – such as Alsey Rains – cultivating their own lands using family members or occasional hired hands (Johnson 1937:65). This was the case with Rains in the postbellum, when the 1870 and 1880 agricultural census report Rains paid wage labor of $100 to $130.

Reputed Ownership by Peterson Dunn

It has been alleged that the study tract is part of lands owned by Peterson Dunn during the antebellum (e.g., letter from Darian J, Waters, The Institute for Historic Research and Education, to the Wake County Board of Commissioners, dated October 9, 2008). Since we have been unsuccessful in tracing the title past 1885, we cannot dismiss this claim. However, we have identified plausible data indicating ownership by Ranes through at least 1840. In addition, we have been unable to place the tract securely in Peterson Dunn's holdings. Somewhat nearby Dunn parcels have been identified, such as the 51 acres passed by Dunn to his wife, Elizabeth Dunn in 1868 in the vicinity of Dunnsville (Wake County Register of Deeds, Book 29, page 261). We cannot, however, identify the study tract coming into Dunn's ownership, nor can we identify the tract passing from Dunn to Alsey Ranes.

We also closely examined Peterson Dunn's estate records (North Carolina Department of Archives and History, Estate of Peterson Dunn, 1880). Dunn died on October 8, 1880. At that time his administrators reported that he was the owner of:

> The Home tract adjoining the lands of T.C. Robertson, J.T. Hunter, and others and said to contain 400 acres which has been conveyed to Elizabeth Dunn – widow of Peterson Dunn for life by the children of said Dunn which she accepts as her dower in his lands and has released all her interest in other real estate of said Dunn. . . . also a plantation known as the Brick House Tract containing 498¾ acres, A plantation known as the Rivers place adjoining lands of J.T. Hunter, W.G. Allen and others and said to contain 192½ acres. Another tract adjoining lands of David Justice, decd., A Carter and others and said to contain 263 acres known as the H.C. Ray tract. One other tract adjoining lands of Alf Jones and J.M. Hick and said to contain 24½ acres. Also one half interest in about 330 acres known as Martha Rossiter land which is subject to her life estate and is the land where she now lives and adjoins lands of J.T. Hunter, J.C. Robertson and others.

We were able to identify a plat of the Brick House tract (which was located on the south bank of the Neuse, between Smith and Thom's creeks), but no good description could be found for any of the remaining parcels. While their

precise location was not determined by this research, none appear to be in the study area.

Dunn was certainly a wealthy planter during his life. His 1850 agricultural schedule, for example, identifies 1100 acres with a value of $4,000, although only 400 acres were improved. With 34 slaves he produced 35 bales of cotton. While not the largest producer, the average for Wake County was only 2.5 bales. By 1860 Dunn owned 52 slaves, housed in 10 dwellings. He reported 1,672 acres of land with 800 acres in improved. By this time he produced 90 bales of cotton.

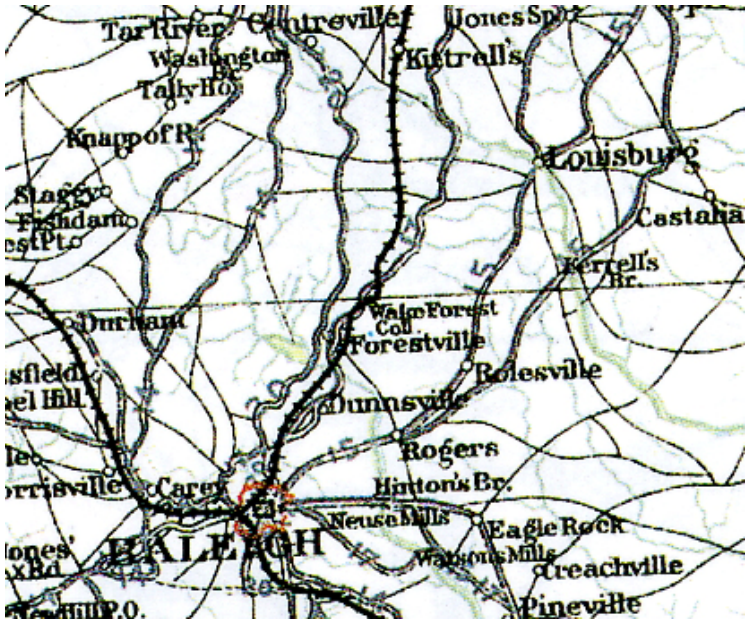


Figure 7. Marches of Sherman's Corps through the project area (*Official Military Atlas of the Civil War*, Plate 117).

Although the *Official Records* (OR) makes no mention of Peterson Dunn or his plantations, we do know that Sherman's Fifteenth Corps marched from Raleigh, crossed the Neuse, and camped at Roger's Crossroads. From there the Fifteenth Corps split, with one brigade taking the route through Rolesville to Louisburg. The other took a parallel route to the east. Both joined together again at Shady Springs. The Seventeenth Corps left Raleigh, marching through Dunnsville and Forestville. The Twentieth Corps marched north by way of Centreville (Figure 7). These routes are the likely source of Civil War munitions identified by local collectors in the area.

Dunn is identified in a number of the Branson Business Directories in the postbellum; for examine in 1872 he was reported as owning 1,722 acres valued at $14,722 (Branson 1872:231). He was even reported to be a store owner, possibly associated with his plantation activities in the Dunnsville area. We also know that Dunn took out a number of mortgages on his land and property – probably to finance his continued agricultural activities (see, for example, Wake County Register of Deeds, Deed Book 91, page 568).

By the time of his death Peterson Dunn was deeply in debt, with his administrators estimating bills of over $9,400. Even the sale of his property failed to raise the necessary funds.

Thus, while Dunn certainly owned lands in the vicinity of the study tract, we have been unable to clearly associated him with the H-6 school site and believe that the association with Alsey Ranes is much stronger and more likely.

Oral History

The one knowledgeable informant identified is Jonathan Shearin. Shearin owned the property for a relatively brief period, but his great-grandfather, W.T. Shearin, acquired the tract in 1926. Jonathan recalls that his great-grandmother was teased by locals who asked if she would be able to sleep knowing there was a cemetery on the property. With no obvious reference to slave, black, "colored," white, church, or extinct community, it appears that the cemetery was common knowledge in the 1920s, although its origins were already lost by that time.

Jonathan Shearin reports that the cemetery was on the portion of the property that was subsequently passed to his great aunt, Sadie Bess Shearin. The property was logged, although the area around the cemetery was excluded – not specifically because of the cemetery, but rather because the timber was not marketable. At the time of the logging Jonathan Shearin remembers perhaps 10-12 distinct graves, commenting that, "if you were standing in it [the cemetery], you'd recognize it, but there wasn't much there" (Jonathan Shearin, personal communication 2008).

Shearin also reports that most of the property was cultivated using day labor, but no tenants that he recalls.

Cartographic Information

Included in our review were plats associated with the property, published county maps, and aerials. Each has the potential to provide clues on property ownership, land use, and the presence of a cemetery.

Plats

The plats (illustrated as Figures 4 through 6), except for the most modern survey prepared as planning for the Wake County Board of Education, show no evidence of the cemetery. The property went through a variety of transfers with no reservations or documentation on surveys.

Published Maps

One of the earliest published maps of the area is Bevers' *Map of Wake County* from 1878. This map shows the study area in Wake Forest Township, west of River Road which parallels the Neuse River and northwest of the Wake Cross Roads Church. To the west, close to the Neuse, is Dunn's Mill. To the south, Louisburg Road crosses the Neuse and crosses River Road at Rogers Cross Roads. There is, however, no mention of any nearby owners or a cemetery (Figure 8).

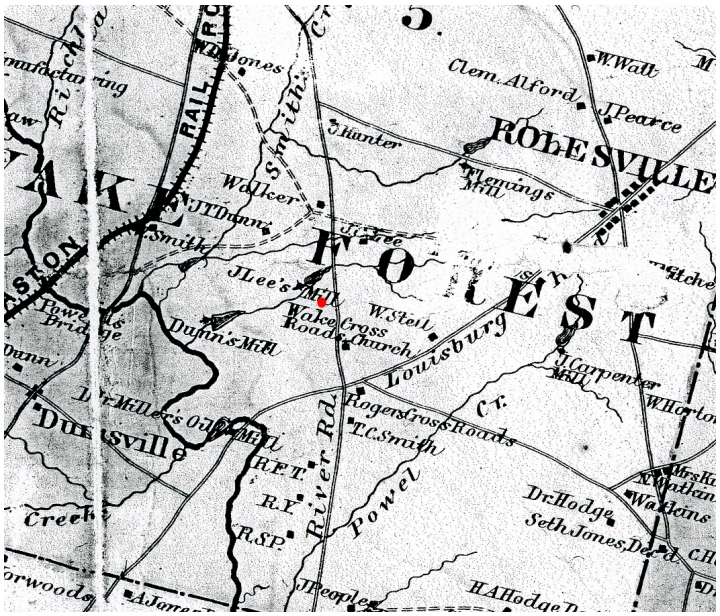


Figure 8. Portion of Bevers' *Map of Wake County*, 1878. The approximate cemetery location is shown as a red dot.

The W.J. Scholar *Map of Wake County* dates from 1885 is similar to, but less detailed than, Bevers' map. Again, there is no indication of ownership or a cemetery.

The 1887 Shaffer *Map of Wake County* suggests origins in Bevers' map (Figure 9), although the major drainage south of Smith's and Thom's creeks is shown as Whitakers Run. The Wake Cross Roads Church is identified only as Wake Church.

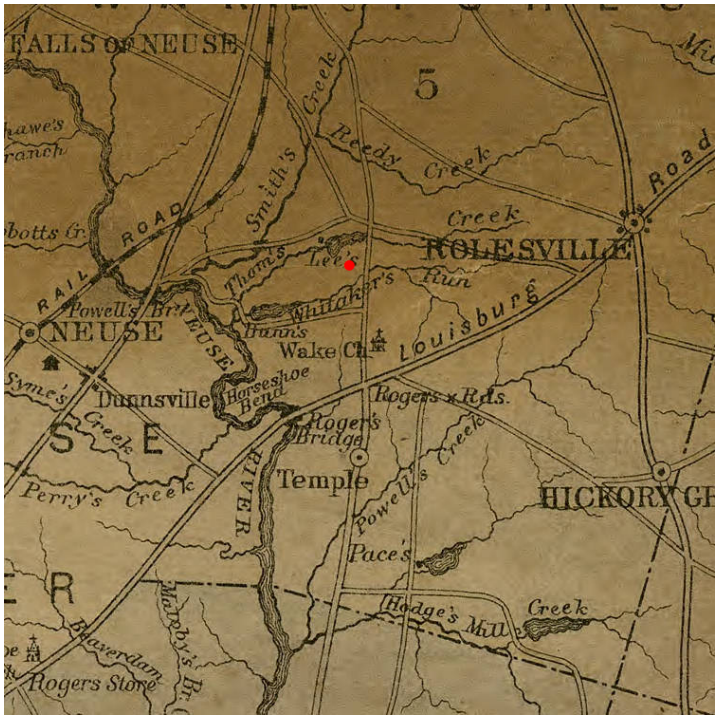


Figure 9. Portion of Shaffer's 1887 *Map of Wake County, North Carolina* with the cemetery shown in red.

The 1904 *School Map of Wake County, North Carolina* (Figure 10) drops all of the creeks except Smith's Creek. What was known as River Road is now identified as Milburnie and Forestville Road, splitting at its crossing of Louisburg Road into Wyatt Road (hugging the Neuse River) and Forestville Road (continuing on to the community of Forestville to the north). Still there is no indication of owners or a cemetery in the study area.

The *Soil Map, Wake County Sheet, North Carolina*, dated 1914, provides far better detail than any of the preceeding maps, especially in terms of both roads and dwellings. The creek south of the cemetery is shown. There are no structures on the west side of the road, although there are two shown on the east side, nearly opposite the cemetery location. To the south of the cemetery about 0.8 miles this map shows a church on the west side of the road. This is likely the African American church that broke off of the Wake Crossroads Baptist Church. If there was a cemetery associated with this church, it is no longer shown on the modern USGS topographic map.

A 1920 map of townships in Wake County (Figure 11) provides additional details concerning the area. J.P. Haywoods is shown as a property owner southeast of the cemetery. Although Big Branch is not labeled, it is clearly shown on the map. The church shown on the 1914 map now appears as a school.

The 1938 highway map for Wake County was also examined (Figure 12). This map does not show Big Branch Creek, although Tom's Creek to the north is included. Several new churches are shown north of Tom's

Figure 10. Portion of the 1904 *School Map of Wake County, North Carolina*. The approximate location of the cemetery is shown as a red dot.

Figure 11. Portion of the ca. 1920 Township Map of Wake County showing the cemetery as a red dot.

Creek, but the church south of the cemetery is no longer included. Three structures are shown in the vicinity of the cemetery and these likely represent some of the Shearin dwellings known to have been in the area.

The 1940 Wake County highway map identifies Tom's Creek as Tomb Creek, and there are a number of new roads in the area. Nevertheless, the cemetery is not identified on this map.

Thus, none of the examined maps provide any indication of the cemetery, its owner, or those who are buried there. In fact, the only ownership information indicated is that for Haywoods, shown on the ca. 1920 map.

Aerial Photography

Two historic aerial photographs were identified for the cemetery vicinity – one from 1938 and the other from 1949. There are, of course, additional images, but the time allotted for this study did not allow ordering high resolution copies.

The 1938 image is particularly useful since we also have a highway map from that year (Figure 13). The cemetery is shown just south of cultivated fields in an area which appears to be in second growth, or a mixture of weeds (or pasture) and sparse trees. While the area was not being cultivated, there is no indication that the cemetery was being maintained – consistent with the oral history accounts.

By 1949 the cemetery area is in heavier growth. Indications of pasture have

Figure 12. Portion of the 1938 Wake County highway map showing the vicinity of the cemetery (indicated by a red dot).

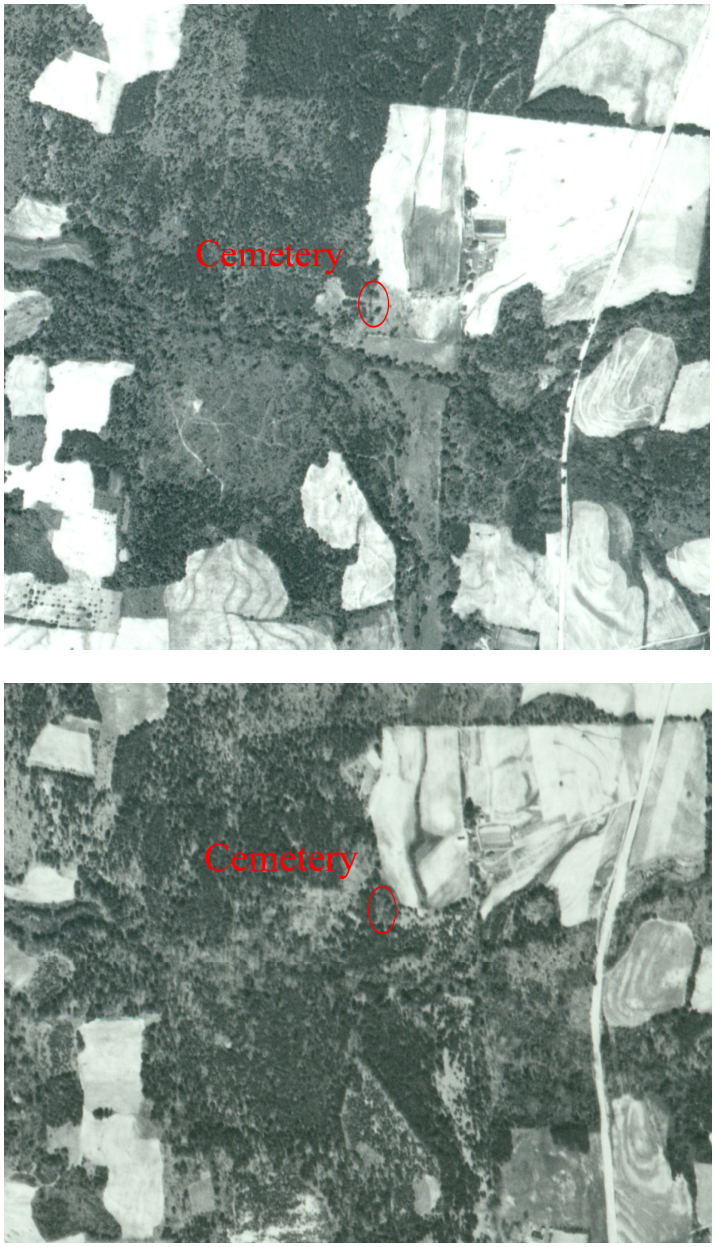


Figure 13. Aerial photographs of the cemetery area (1938 at top; 1949 at bottom).

largely disappeared and tree cover is more continuous.

METHODS

Background Research

The files at the N.C. Office of State Archaeology were reviewed to see if any previously identified sites had been recorded in the vicinity of the cemetery. Nearby sites might provide information on soil profiles and soil preservation characteristics. Identified historic sites might be associated with structures known to exist in the area and help better understand the origin and development of the cemetery. This research would also identify any archaeological or environmental surveys performed in or around the current project area. Such studies might contain historical data that would assist in our title search for the cemetery.

As previously described, this study also used resources at a variety of institutions. The Wake County Register of Deeds was visited in order to perform a title search for the property. This work was able to take the title back to 1885, with the ownership of Alsey Ranes. Titles and plats were also examined for any reference to a cemetery.

The Wake County Superior Court, Probate Division, was also visited in an effort to identify any Ranes wills that might have brought the property into the hands of Alsey Ranes. Work at the N.C. Division of Archives and History; the Olivia Raney Library; and the North Carolina Collection, Wilson Library in Chapel Hill attempted to locate maps, aerial photographs, or written documentation associated with the cemetery. Since no inscriptions were found at the cemetery to denote names of the interred, documents such as period maps, family histories, and county histories were scanned for names of former land owners or locations that may be in the vicinity of the cemetery.

Aerial photographs as far back as 1938 were examined to better understand the land use history, as well as to obtain data on conditions at the cemetery. Historic maps, examined into the 1870s, were inspected for evidence of the cemetery. Some maps, for example the early twentieth century soil surveys, occasionally show known cemeteries. A sample of these maps (over 20 maps were examined) has been presented in the previous section of this report.

Visual Inspection

Perhaps the simplest of all techniques in the exploration of a cemetery is visual inspection of the ground surface. Under oblique or raking light, it is often possible to observe depressions representing sunken grave shafts. As the coffin and human remains decompose, the ground sinks. In older cemeteries, where there isn't a constant maintenance program to fill these depressions, they provide clear evidence of previous burials. These depressions can usually be confirmed as graves through an examination of the consistency of their placement, as well as of their magnetic orientation (with graves usually oriented roughly east-west). This visual inspection may be aided by other graveyard features, such as seemingly insignificant rocks, plantings, or even grave goods.

Penetrometer Study

A penetrometer is a device for measuring the compaction of soil. Soil compaction is well understood in construction, where its primary objective is to achieve a soil density that will carry specified loads without undue settlement and in agronomy, where compaction is recognized as an unfavorable by-

product of tillage. Compaction is less well understood in archaeology, although some work has been conducted in exploring the effects of compaction on archaeological materials (see, for example, Ebeid 1992).

In the most general sense, the compaction of soil requires movement and rearrangement of individual soil particles. This fits them together and fills the voids that may be present, especially in fill materials. For the necessary movement to occur, friction must be reduced, typically by ensuring that the soil has the proper amount of moisture. If too much is present, some will be expelled and in the extreme, the soils become soupy or like quicksand and compaction is not possible. If too little moisture is present, there will not be adequate lubrication of the soil particles and, again, compaction is impossible. For each soil type and condition, there is an optimum level to allow compaction.

When natural soil strata are disturbed – whether by large scale construction or by the excavation of a small hole in the ground – the resulting spoil contains a large volume of voids and the compaction of the soil is very low. When this spoil is used as fill, either in the original hole or at another location, it likewise has a large volume of voids and a very low compaction.

In construction, such fill is artificially compacted, settling under a load as air and water are expelled. For example, compaction by heavy rubber-tired vehicles will produce a change in density or compaction as deep as 4.0 feet. In agriculture, tillage is normally confined to dry weather or the end of the growing season – when the lubricating effects of water are minimized.

In the case of a pit, or a burial, the excavated fill is typically thrown back in the hole not as thin layers that are compacted before the next layer is added, but in one, relatively quick episode. This prevents the fill from being compacted, or at least as compacted as the surrounding soil.

Penetrometers come in a variety of styles, but all measure compaction as a numerical reading, typically as pounds per square inch (psi). The Dickey-john penetrometer consists of a stainless steel rod about 3-feet in length, connected to a T-handle. As the rod is inserted in the soil, the compaction needle rotates within an oil filled (for damping) stainless steel housing, indicating the compaction levels. The rod is also engraved at 3-inch levels, allowing more precise collection of compaction measurements through various soil horizons. Two tips (½-inch and ¾-inch) are provided for different soil types.

Of course, a penetrometer is simply a measuring device. It cannot distinguish soil compacted by natural events from soil artificially compacted. The penetrometer cannot distinguish an artificially excavated pit from a tree throw that has been filled in. Nor can it, per se, distinguish between a hole dug as a hearth and a hole dug as a burial pit. What it does, is convert each of these events to psi readings. It is then up to the operator to determine through various techniques the cause of the increased or lowered soil compaction.

Curiously, penetrometers are rarely used by archaeologists in routine studies, although they are used by forensic anthropologists (such as Drs. Dennis Dirkmaat and Steve Nawrocki) and by the Federal Bureau of Investigation (Special Agent Michael Hockrein) in searches for clandestine graves. While a penetrometer may be only marginally better than a probe in the hands of an exceedingly skilled individual with years of experience, such ideal circumstances are rare. In addition, a penetrometer provides quantitative readings that are replicable and that allow much more accurate documentation of cemeteries. In fact, our research in both sandy and clayey soils in Virginia, North Carolina, South Carolina, and

Georgia suggests very consistent graveyard readings.

Like probing, the penetrometer is used at set intervals along grid lines established perpendicular to the suspected grave orientations. The readings are recorded and used to develop a map of probable grave locations. In addition, it is important to "calibrate" the penetrometer to the specific site where it is being used. Since readings are affected by soil moisture and even to some degree by soil texture, it is important to compare readings taken during a single investigation and ensure that soils are generally similar in composition.

Figure 14. "Calibrating" the penetrometer by examining the compaction in a suspected grave.

It is also important to compare suspect readings to those from known areas. For example, when searching for graves in a cemetery where both marked and unmarked graves are present, it is usually appropriate to begin by examining known graves to identify the range of compaction present. From work at several graveyards, including the Kings Cemetery (Charleston County, South Carolina) where 28 additional graves were identified, Maple Grove Cemetery (Haywood County, North Carolina) where 319 unmarked graves were identified, and the Walker Family Cemetery (Greenville County, South Carolina) where 78 unmarked graves were identified, we have found that the compaction of graves is typically under 150 psi, usually in the range of 50 to 100 psi, while non-grave areas exhibit compaction that is almost always over 150 psi, typically 160 to 180 psi (Trinkley and Hacker 1997a, 1997b, 1998).

For example, at Kings Cemetery it was possible to produce several compaction cross sections through cultivated fields, old (fallow) fields, woods, roads, bulldozed areas, and cemetery areas (Trinkley and Hacker 1997a:Figure 10). Particularly important were the location of graves made obvious by either monuments or sunken grave shafts.

Cultivated areas and burials both revealed compaction readings under 100 psi. Of course the two areas could be distinguished from each other by the depth of the various compaction readings. The cultivated fields were underlain by soils with compaction readings between 200 and 300 PSI, usually within 0.8 foot of the surface. Burials, on the other hand, revealed the lower compaction readings to depth of 3.0 feet.

The roads and other disturbed areas, such as where bulldozers had recently been operated, exhibited compaction levels of over 300 psi. In such areas it is usually impossible to distinguish burials – they are effectively "masked" by the increased soil density.

After the examination of over 30 cemeteries using a penetrometer, we are relatively confident that the same ranges will be found throughout the Carolinas and Georgia. It

is likely these ranges are far more dependent on general soil characteristics (such as texture and moisture) than on cultural aspects of the burial process.

The process works best when there are clear and distinct non-grave areas, i.e., when the graves are not overlapping. In such cases taking penetrometer readings at 2-foot intervals perpendicular to the supposed orientation (assuming east-west orientations, the survey lines would be established north-south) will typically allow the quick identification of something approaching the mid-point of the grave. Working along the survey line forward and backward (i.e. north and south) will allow the north and south edges of the grave to be identified. From there, the grave is tested perpendicular to the survey line, along the grave's centerline, in order to identify the head and foot.

Typically the head and foot are both marked using surveyor's pen flags. We have also found that it is helpful to run a ribbon of flagging from the head flag to the foot flag, since the heads and feet in tightly packed cemeteries begin to blur together. Each burial is typically numbered with the "head" labeled as A and the "foot" as B.

However, the penetrometer is simply a tool. The only way, with certainty, to know that all graves have been identified is through archaeological excavation. This, however, is very intrusive and is rarely an appropriate investigative technique unless the cemetery is slated for removal. Otherwise, limitations of tools such as the penetrometer or ground penetrating radar must be accepted.

Stone Assessment

As part of the cemetery inspection, we conducted a stone-by-stone assessment for conservation needs. Every monument (i.e., fieldstone associated with an identified grave) was photographed and the condition noted. The resulting photographs and assessments are included as Appendix A in this report.

Mapping

Finally, the cemetery, including large oak trees, the adjacent trail, and a previous survey point, was mapped. This mapping was prepared using a Sokkia SET530R3 total station.

RESULTS

Results of Background Research

The findings from the background research are discussed in the Historic Synopsis of this report. In summary, clear title to 1885 places the property in ownership of Alsey Ranes. Good circumstantial evidence extends his ownership to at least 1840. While we were promised plats or other documents showing this cemetery to be on the property of Peterson Dunn (Darian Waters, personal communication 2008), no such information was forthcoming during this study. In spite of considerable effort to track down information, we found no evidence that the property was owned by Peterson Dunn.

None of the deeds or associated plats mentions the cemetery or shows its location. The oral history indicates that the cemetery was still widely known by the local community as late as the 1920s, although by that time the cemetery was no longer associated with any ethnic group or family. None of the maps show the cemetery. The aerial photographs, while not distinctly showing the cemetery (fieldstones are very unlikely to be observable in these aerials), do show vegetation that was much less dense than seen today.

Results of the Visual Inspection

When we were first shown the cemetery (located at 724632E 3975820N – NAD27 datum) by Ms. Betty Parker of the Wake County Board of Education, the area had been raked of leaves in most areas exposing bare soil. Any humic material, which could be a key to the approximate age of the cemetery, had been removed from sunken depressions. The leaves had been piled at what was thought to be the edge of the cemetery. Some of the fieldstones appeared to have been raised given a dark stain at the bottom. We are told that these activities have been conducted by local residents. Figure 15 shows the cemetery prior to any cleanup and afterwards.

Further confusing the picture, local individuals had come into the cemetery marking a variety of features using different colored flagging tape and pin flags. Some of the features marked were clearly graves, others, however, were equally clearly not graves. Yellow "caution" flagging was placed around two areas – one being the posited cemetery and other, we are informed, an area where these local individuals thought there might be additional graves. For consistency – and clarity – in discussions, where not otherwise specified, our report deals with the primary cemetery area.

Distinct depressions were observed, consistently oriented east to west. Most of the depressions are associated with at least one fieldstone (presumed to be the headstone for the grave). A few were associated with stones at both the head and foot. About half of the graves had no visible head or footstone.

All of the stones in the cemetery are a local material, with most best described as granitoid. This material makes up the bedrock across most of Wake County and there are several outcroppings of this stone on the school tract. Most of the stone in the cemetery was highly friable -- crumbling to the touch. Much of the stone was found to exhibit moderate colonies of lichen.

Lichens are symbioses of fungi and algae. Both contribute to the relationship – the fungi provide structural support, mineral

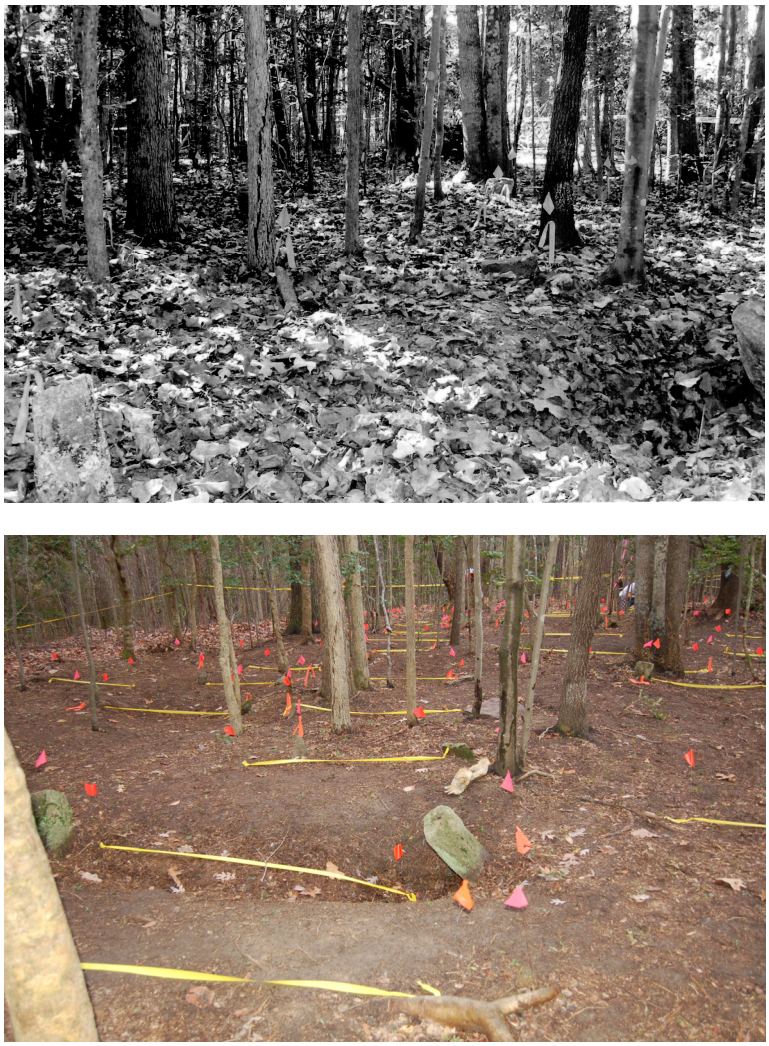


Figure 15. The cemetery prior to raking (top photograph courtesy of Dr. Kevin Donald, NC Department of Cultural Resources) and at the time of our study (bottom photograph). Note the distinct depressions marking a number of the graves. Orange pin flags connected by yellow tape identify graves identified as a result of this investigation.

nutrients, and a growth medium for the algae. The algae chemically fix atmospheric carbon and synthesize organics such as carbohydrates, amino acids, and vitamins. The presence of moisture, light, appropriate pH levels, pollution, decay, and aging stone all combine to encourage lichen growth on monuments. Growth is typically millimeters per year, although when conditions are optimal, growth may be as much as 0.5 centimeter per year.

All of the studies on lichen and masonry agree that lichen degrade stone both chemically and mechanically. The metabolic processes produce a range of organic acids including oxalic and carbolic acids. The introduction of these chemicals can affect phase changes in the minerals – changing them from a relatively stable state to more easily erodible products. This occurs even in granite where the feldspars and micas are changed to illite, kaolinite, and smectite – erodible clays. These geochemical reactions combine with the mechanical action of "root" growth to erode the surface. On granites lichen hyphae can grow several millimeters into the rock.

The graves appeared to be set up into distinct lines oriented north to south with no evidence of clustering of graves. Up to six distinct rows were observed with larger oak trees seemingly at the periphery.

Graves and grave depressions were carefully examined, but we found no evidence of grave goods. The raking of the lot might have removed grave goods if they existed, but even our examination of the leaf piles failed to reveal evidence of ceramics, bottle glass, or other materials.

No plantings typically associated with cemeteries were observed. Trilliums were noted, but these are natural. The area was lightly wooded with the older (and larger) oaks about

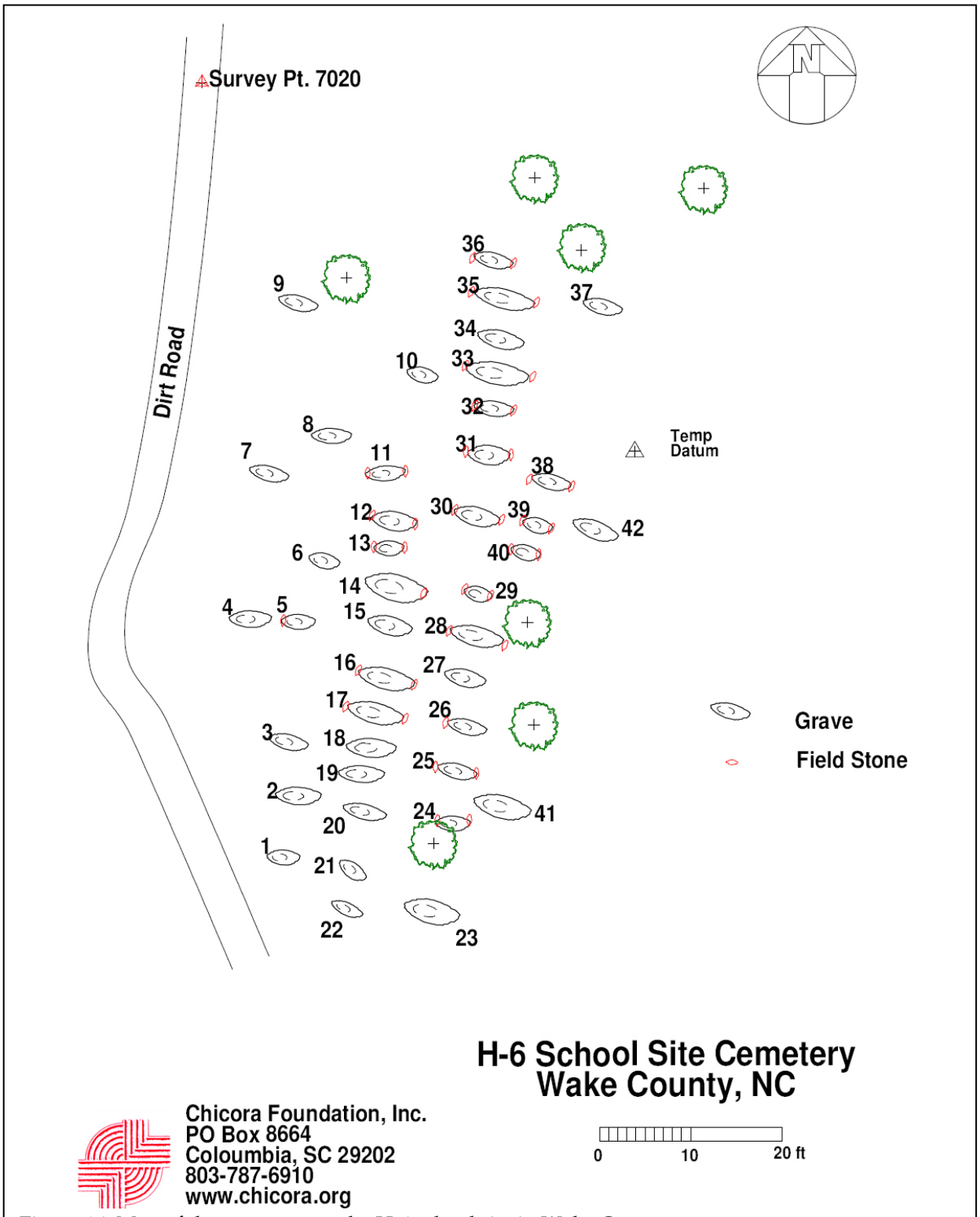


Figure 16. Map of the cemetery on the H-6 school site in Wake County.

Figure 17. Examples of graves verified through the penetrometer study.

50 to perhaps 80 years in age, while the scrub trees are of a much younger age. Small holly trees were scattered around the cemetery as well as in the woods surrounding the cemetery, which is located on a ridge top.

Results of the Penetrometer Survey

Initially we "calibrated" the penetrometer by examining what were thought to be marked graves – depressions with both head and footstones. We found that the soil compaction varied from about 75 psi to about 150 psi.

Outside the known grave areas, the psi increased significantly from 175 psi to over 200 psi. We examined areas at least 20 feet beyond known graves. These areas exhibited readings in excess of 200 psi.

As described in the Methods section, all graves identified were marked by pin flags, with the two flags connected by yellow flagging tape (see, for example, the lower photograph of Figure 17). Each grave (whether stones were present or not) was assigned a number. Where stones were present, the posited head stone was given an "a" designation and the posted footstone was given a "b" designation.

As a result of the penetrometer study, the cemetery appears to be somewhat well defined by existing stone markers and evident grave depressions. While other, unmarked burials were identified by the penetrometer, these graves were near other well defined graves – no outliers were identified.

The individual grave sites were well defined with the area

between known graves giving a psi reading of 175 and higher. Several small depressions were noted along the outside edge of the cemetery, but these appeared to be either tree roots or possibly bore holes from a March 2008 site investigation.

A total of 42 graves were identified by the penetrometer. Out of these, 22 graves evidence at least one fieldstone in association with the grave. Several graves were identified in the areas where the raked leaf litter was piled. The cemetery measures about 77 by 44 feet. Adding a 25 foot buffer would expand the dimensions to 127 by 94 feet.

It is important to stress that no investigative technique short of complete stripping can reliably identify all burials. It is always possible that some will be missed – this is the primary reason that some buffer is typically added to any cemetery.

A similar effort was undertaken in the secondary area flagged by local citizens. No graves were identified in this secondary area and bedrock was found in some areas only a few feet (or less) below the surface. Depressions – common in the primary study area – are also lacking in this secondary area.

Ethnic Association

Much has been said, both among some professionals and also by the media, that this cemetery represents a "slave graveyard." For such a statement to be made requires either convincing African American features (i.e., grave goods, kin-group alignments, and so forth) or irrefutable documentary evidence (i.e., identification on a period plat or markers clearly taking the cemetery into the antebellum).

The cemetery at the H-6 school site has neither and it is worth discussing these issues in more depth.

There is no indication that grave goods existed at this cemetery. Given that the cemetery was "forgotten" by the mid-1920s makes it very likely that had grave goods been present, some indication of their existence – in spite of the raking and clearing – would have been found. We also do not see any variation in grave marking – little individualism.

In addition, the very linear arrangement of graves gives the cemetery a formality that is uncommon in African American graveyards. We also see no indication of kin groupings – usually evidenced by clustering of graves.

On the other hand, the cemetery exhibits some of the attributes assigned to graveyards of the upland south tradition. These include the linear, neat arrangement; the location of the graveyard on a slight rise; and the uniformity of markers.

Consequently, we believe that the cemetery reflects the burial of Euro-American individuals. Naturally, the only means of resolving this with certainty would be to excavate graves and examine the remains for metric and nonmetric identifiers of ethnic association.

Eligibility Assessment

We are informed that the H-6 school construction is not using federal funding, licensing, or permitting and therefore is not required to make evaluations using the Section 106 consultation process (Dolores Hall, personal communication 2008). Nevertheless, the National Register of Historic Places eligibility criteria do offer a convenient means of gauging significance.

The National Register staff long ago realized that cemeteries could be difficult to evaluate. Potter and Bolland noted, "for profoundly personal reasons, familial and cultural descendants of the interred often view graves and cemeteries with a sense of reverence

and devout sentiment that can overshadow objective evaluation" (Potter and Bolland 1992:1). As a result, special criteria conditions were developed to ensure that burial grounds received careful evaluation.

We do not believe that the cemetery meets the criteria for eligibility for the National Register of Historic Places under criteria A, B, or C.

The cemetery does not appear to be associated with events that have made a significant contribution to the broad patterns of history (Criterion A). The cemetery, for example, is not clearly associated with any historic event, nor does it clearly document any evolutionary change in memorialization.

The cemetery also does not appear eligible through the association with the lives of persons significant in the past (Criterion B). In fact, in spite of detailed research, we remain uncertain who is buried at this location.

Finally, the cemetery does not appear to embody any distinctive characteristics; it does not represent the work of a master; nor does it exhibit high artistic values (Criterion C). It appears to characterize a type of cemetery which Jeane and Clauser both identified as occurring across the piedmont of multiple states.

Cemeteries nominated under Critieria A, B, or C must also meet Criteria Consideration D. A cemetery can be eligible only 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. It seems unlikely that the H-6 cemetery could meet these requirements.

We do believe, however, that the cemetery may be eligible under Criterion D. This applies to properties that may be likely to yield important information. In this particular case it would not matter if the cemetery represented the burial place of African American slaves or Euro-American yeomen farmers. In either event, the physical remains could make very significant contributions to a variety of bioanthropological issues, ranging from diet and health to disease and death. Through the use of ancient DNA analysis it might be possible to ascertain (if the individuals were enslaved Africans) their origin on the African continent or (if the individuals were members of one or two interconnected families) the proximity of their kinship.

Even if the physical remains are in poor condition, the careful excavation using archaeological techniques would allow some metric analysis to be undertaken in situ. In addition, there would still be a strong possibility of recovering mortuary clothing or coffin hardware – both of which can address broad questions in nineteenth century mortuary behavior.

We acknowledge that the preservation of remains is rarely known until excavation takes place; however, there have been a large number of Native American burials excavated in North Carolina under nearly identical soil conditions. If remains from 1500 A.D. are preserved adequately for study, it seems likely that remains from the 1800s will be similarly suitable for bioanthropological research.

Summary

Our research identified a cemetery of probable Euro-American ancestry that may date to the early nineteenth century. We are relatively certain that by the mid-1920s the origins of the cemetery had been lost, even by the local community.

The cemetery includes 42 identified graves, 20 of which are unmarked. The dimensions with a 25 foot buffer are about 127 feet north-south by 94 feet east-west.

RECOMMENDATIONS

There are two options for the cemetery. The first is to plan around the cemetery, taking steps necessary to ensure its long-term protection. This is the preferred option since it allows those interred in cemetery to remain undisturbed. This option will, however, require the property owner to secure the cemetery and establish a grounds maintenance program that is different from that used at schools. The second option is to remove the cemetery using archaeological methods and techniques. We cannot recommend removal using funeral homes or commercial removal firms since such an approach will sacrifice virtually all of the significant data continued in the burial grounds, often including even the human remains themselves. Appropriate removal involves a variety of costs, including removal, study, and reburial.

Option 1: Leave the Cemetery in Place

As mentioned above, this is the preferred alternative since it allows those interred in the cemetery to remain at rest. It does, however, place a significant long-term burden on the School Board. A cemetery located on school grounds is likely at risk of vandalism. The stones identified at this cemetery are fragile and it would take little abuse to cause irreparable damage. These, and other, issues will be briefly outlined below.

1. Although the limits of the cemetery have been identified in this study, we typically recommend the addition of a buffer. This not only allows for the possibility of outlying graves, but it also provides a visual buffer. Typically a buffer of 25 feet around the cemetery is adequate. With this buffer the cemetery dimensions are about 127 feet north-south by 94 feet east-west.

2. The sunken graves should be infilled with clean sand. Stones should be cleaned and reset by a stone conservator.

3. The cemetery includes a large number of saplings under 4-inches in diameter. These trees should be removed by hand using only ISA Certified Tree Workers. The crew must be sufficiently experienced to avoid any damage to the stones in the cemetery. All downed wood should be mulched on site and used to restore the landscape.

4. Mulch should be laid over the cemetery to a depth no greater than 3-inches

5. A high security fence should be erected just beyond the buffer boundaries. This fence will have 2½-inch square posts; the fabric will be held with clips, not bands; drive anchors for posts; and 1-inch 9 or 11-ga. mesh that is thermally fused vinyl coated. Fence should be a minimum of 8-feet in height. Fencing will be carried to ground level. A 7-gauge coil spring wire can be installed in place of the top rail to make climbing more difficult. The fence should have 3 strands of stainless steel barbed wire added to the top using 45-degree arms angled out from the cemetery. These barbed wire arms should be bolted or riveted to the posts. All bolts should be peened. The fence should have, at a minimum, one pedestrian/personnel swing gate with a 4 foot opening by 8 feet in height, plus 3 strands of barbed wire on top. The gate should be locked with a commercial grade security padlock (Grade 6 preferred).

6. Maintenance of the cemetery should include yearly adding of mulch to maintain a depth no greater than 3-inches. All new growth should be removed using nylon weed trimmers with line no greater than 0.065-inch. Operators must be trained to prevent line contact with the stones, which can be easily damaged through negligent care.

7. We are not recommending any "landscaping" in the cemetery since there is no evidence that any plantings were originally used.

Option 2: Remove the Cemetery Using Bioanthropological Techniques

We are not attorneys and this information is not offered as legal advice. We are only outlining the process in the context of forensic anthropology.

North Carolina outlines the requirements for the removal of marked graves in Chapter 5, Section 65-13. The requirements specify that "any person, firm, or corporation" may remove an abandoned cemetery by "securing the consent of the governing body of the town, city or county in which such abandoned cemeteries or burying grounds are situated" – in this case Wake County.

The process involves oversight by both the Wake County Board of Commissioners and the Wake County Health Department. If the remains are to be reinterred in a different county then the Health Department of that county will also be involved in the process.

It will be necessary to advertise the removal for at least 30 days in a Wake County paper. The intent is to make a reasonable effort to identify next of kin prior to the removal.

Costs of the removal and reburial are the responsibility of the party initiating the removal, including coffins, burial plots, and replacement of the original monuments. Access must also be provided to any descendants. While the North Carolina law allows for a common grave with the permission of the descendents, we do not recommend this practice. A "mass grave" has many undesirable connotations and detracts from the dignity of death. Individual plots, laid out and arranged as found in the original cemetery are the most appropriate and dignified manner of reburial.

The North Carolina law requires that once the remains have been reinterred a certificate be provided to the clerk of court for the county of disinterment and reinterment, providing specific information concerning the process. This is to help ensure that if descendants eventually seek their family grave yard, information concerning its original – and new – location will be readily available.

The process of removal should be conducted only by forensic anthropologists that are trained to identify and remove human skeletal remains, ensuring that all materials present, including coffin hardware and fragments, burial goods, and clothing articles, are collected, respectfully handled, and reinterred. Especially in the case of those graves where there is no name or other identification, forensic study can help establish the sex, age, stature, and other pertinent information concerning the remains. The forensic anthropologists, however, should be allowed 90 days to examine the recovered materials and develop a report that outlines what was learned by the activity.

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APPENDIX 1. STONE-BY-STONE ASSESSMENT

Stone No.: 5a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 11a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 11b

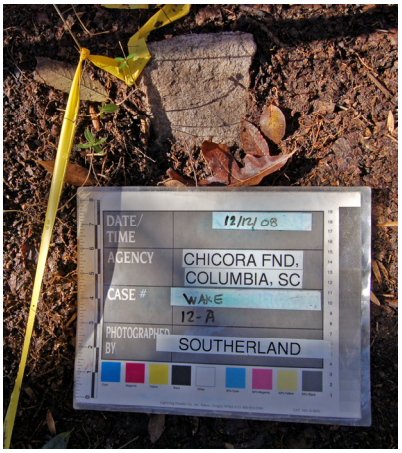
Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water



Stone No.: 12a

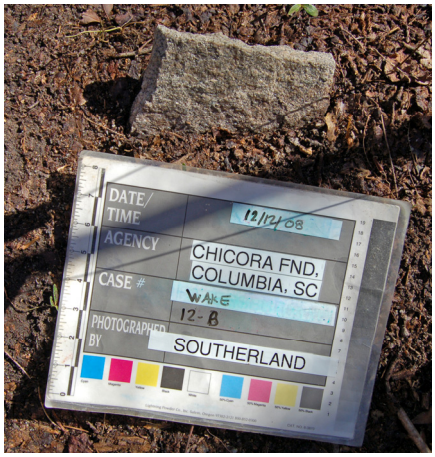
Material: ☐ granite/granitoid ☒ other: local

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☐ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset



Stone No.: 12b

Material: ☐ granite/granitoid ☒ other: local

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reinspect in 5 years

Stone No.: 13a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 13b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 14b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☒ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 16a

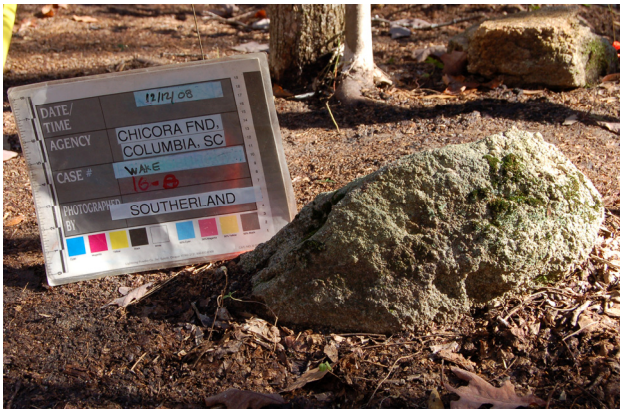
Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water



Stone No.: 16b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 17a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 17b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 24a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 24b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 25a

Material: ☐ granite/granitoid ☒ other: local

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 25b

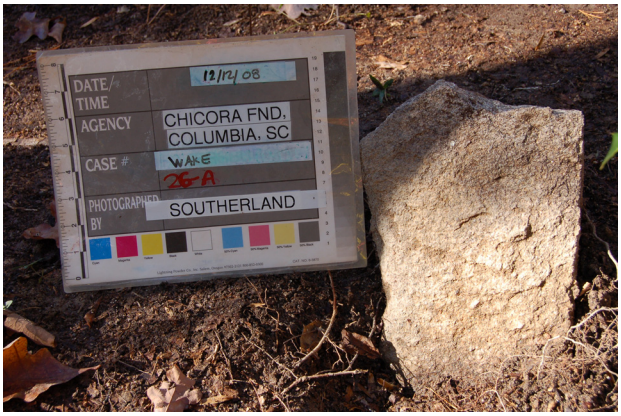
Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☒ spalling ☐ missing fragments ☒ other: 3 frags

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset; evaluate simple epoxy repair



Stone No.: 26a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 28a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reinspect in 5 years

Stone No.: 28b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 29a

Material: ☒ granite/granitoid ☐ other:

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 29b

Material: ☒ granite/granitoid ☐ other:

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 30a

Material: ☒ granite/granitoid ☐ other:

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☐ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 31a

Material: ☒ granite/granitoid ☐ other:

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 31b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 32a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 32b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 33a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☒ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 33b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 35a

Material: ☒ granite/granitoid ☐ other:

Position: ☒ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 35b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 36a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☒ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 36b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☐ biological ☐ staining ☐ other:

Treatment: reset

Stone No.: 38a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☒ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water; reset

Stone No.: 38b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 39a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 39b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 40a

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☐ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Stone No.: 40b

Material: ☒ granite/granitoid ☐ other:

Position: ☐ fallen ☐ tilted ☐ unstable

Deterioration: ☒ flaking/sugaring ☐ spalling ☐ missing fragments ☐ other:

Soiling: ☒ biological ☐ staining ☐ other:

Treatment: Clean with D/2 and flush with potable water

Cemetery Preservation Plans

Historical Research

Identification of Grave Locations and Mapping

Condition Assessments

Treatment of Stone and Ironwork

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