ARCHEOLOGICAL INVESTIGATIONS FOR QUAKER RIDGE HOUSING (44AX195) ALEXANDRIA, VIRGINIA

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Prepared for

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October 2005

ACKNOWLEDGEMENTS

JMA wishes to thank Carr Homes for their support of the project and assistance in its completion. Wally Owen from Fort Ward Park graciously shared his research and extensive knowledge of the Civil War. Alexandria Archeology staff, Steve Shepherd and Fran Bromberg, provided needed support, oversight, and enthusiasm. Finally, a great deal of credit for the success of this project goes to Mike O'Donnell, local historian, relic hunter, publisher, and author, for his patience and mentoring on all aspects of the Civil War.

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PUBLIC SUMMARY

"... The watch-fires of a hundred circling camps" Archaeological Investigations For Quaker Ridge Housing (44AX195) Alexandria, Virginia

At dawn on the morning of 19 November 1861, Julia Ward Howe in her room at Willard's Hotel, Washington, D.C., penned the above verse to the *Battle Hymn of the Republic*. At the same time some eight miles away, in one of those "hundred circling camps," New York militia soldiers viewed the same daybreak. In a camp just west of the intersection of Quaker Lane and the Little River Turnpike they started to go about their daily duties. Soon they moved on, leaving nothing but the detritus of military life and spent embers in their cooking hearths. For nearly 143 years their passing lay forgotten. This is the story of this camp, and how, through archeological investigation, we in the present commemorate the heritage of those who walked before us.

In the fall of 2004, archeologists from John Milner Associates, Inc. investigated a 2.5-acre project area on which Carr Homes is redeveloping. At present, it contains five residential lots (3517, 3525, 3535, 3541, and 3543) on Duke St., near the northwest intersection of Duke Street and Arene Court.

The project area is located on the north side of Duke Street just west of its intersection with Quaker Lane. In the past, Duke St. was the eastern end of the Little River Turnpike. During the Civil War, this road was one of the main east-to-west routes the Federal Army used in Northern Virginia.

Archeological investigations consisted of a Phase I identification survey. The goal of this survey was to determine the presence or absence of archeological resources within the project area. Phase I fieldwork entailed pedestrian survey, shovel testing and metal detection. One archeological site (44AX195) was identified. This site extended across the rear yards of 3517, 3525, 3535, 3541, and 3543 Duke Street and was present in the front yard of 3535 Duke Street. Additional archeological investigations were recommended because the site was considered potentially eligible to the National Register of Historic Places and had local significance to Alexandria, Virginia.

A present-day view of the project area.

Additional, supplemental archeological investigations were designed to maximize field recovery of information. Partially, this was due to a monetary cap placed on archeological expenditure for the project. The budgetary restraints reflect an agreement between the owner and the City of Alexandria.

The project area is west of the urban center of eighteenth-and early nineteenth-century Alexandria. It is located on a 68-acre parcel that was owned by Daniel French in 1743. North and east of the project area was the Carr/Simpson tract, part of which was sold in 1798 to offset debts of the owner, Josiah Watson, who had declared bankruptcy. The

property, known as Stump Hill, was subdivided into small lots sold at public auction. Two roads, one of them Quaker Lane, were put through the property. No evidence for a pre-Civil War occupation of the project area was found. In fact, examination of soils indicates that it was never plowed. Presumably, the project area was meadow or pasturage.

The Civil War years marked a change in the economic and social landscape of Alexandria. In addition to changes in urban character of the city, the Federal Army, vying for control of the region, left its mark.

In the wake of Abraham Lincoln's election, South Carolina seceded, thereby laying the foundation for armed conflict. After the fall of Fort Sumter and President Lincoln's call for Federal troops, a state convention was held in Richmond to decide what course Virginia would take. The secessionist faction won the debate, but a statewide referendum was scheduled for 23 May 1861. The state's citizens would vote to stay in the Union or ratify the convention's resolution for secession. Statewide, Virginians voted four to one in favor of secession. Virginia's choice was clear to the Federal government, and early on 24 May 1861, Federal troops crossed the Potomac River, secured the bridges, occupied Alexandria, and began fortifying the Arlington and Alexandria heights, which overlooked the capital.

Metal detecting.

After Bull Run the main elements of Federal Army were encamped in three separate locations, in the shadow of the defenses of Washington, to protect the main thoroughfares and railways leading to Alexandria and the Potomac River bridges. From these positions pickets, vedettes, foraging parties, and scouts periodically engaged the Confederates. The Confederate forces established their headquarters at Fairfax Courthouse, 15 miles (24.1 km) outside of Washington, D.C. From the White House, Confederate flags could be seen above the advance positions on Munson's and Miner's Hills, located just a few miles northwest of Alexandria.

Lincoln's call for 75,000 volunteers to suppress the rebellion had resulted in military units reinforcing the vulnerable capital. Most of these units were state militias.

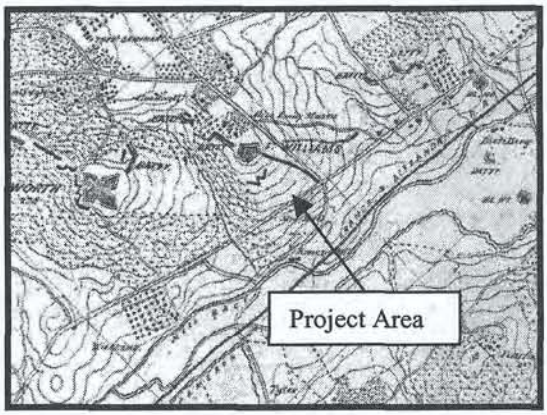
Prior to the Civil War the United States had a small Federal Army supplemented by a militia system. This army was primarily assigned to coastal defenses and the frontier, fighting Native Americans. The militia system was based on the concept of citizen-soldiers; volunteers who would come to the countries defense in time of war. It enjoyed a modicum of success, mainly because cash and land incentives attracted volunteers. President Lincoln's call for loyal governors to raise state troops resulted in many locally and privately formed militias becoming state recognized militias. The militia call up was derived from the 1792 Militia Act where each State was assigned a quota and men between 18 and 45 were perceived as having militia obligations (Weigley 1984:199). Usually, States recruited whole organizations such as political clubs, local groups, or ethnic organizations. The militia system was strong prior to the War and the Federal government was able to raise a large fighting force because organized volunteer

companies were already in existence. As early as December 1861, the Federal government was taking control of the militia system by replacing state officials and assuming responsibility for recruiting. As the war dragged on the number of volunteers declined reducing the viability of the militia system. Additionally, the officer corps changed from one in which officers were appointees to a system that emphasized success in battle. By the summer of 1862, not enough troops could be raised through the militia system and the Federal government instituted a partial military draft on states not meeting their enlistment quota. A nation wide draft was instituted in 1863.

The camp of one of the New York Militia regiments guarding the Little River Turnpike approach to Alexandria was found in the project area.

Now known as archeological site 44AX195, the camp was probably laid following the official manner in which regimental camps should be laid out as presented in the 1861 *Revised Regulations for the Army of the United States*. However, since only a portion of the camp survives the layout is not clear. No specific camp layout could be discerned from the artifact distribution or the features.

The camp consisted of a hospital and camp areas. The hospital tent, containing a Crimean Oven, was located on the east side of the camp approximately 500 ft. west of Quaker Lane and 200 ft. north of Little River Turnpike.



Two hundred and fifty ft. west of the hospital tent was a row of five hearths. These hearths were probably a kitchen area. The location of these hearths may reflect adherence to military regulations. The five hearths are not evenly spaced, but if the hearths are located at the end of where the soldiers camped, then they may represent the end of company streets. Alternatively, the hearth locations may reflect non-adherence to the formal regulations by early-war militia troops. If the hearths are on the ends of company streets, the streets probably extended to the west.

The area west of the hearths contains an artifact scatter that hints of organization, but what this organization signifies is not apparent. This area was almost certainly the camp of the enlisted men. While the distribution of ammunition types and melted lead could reflect company organization within a regimental camp, this is in no way certain. Two small hearths in this area may be individual fireplaces used mainly for heating of tents within the enlisted men's camp area.


Hearth excavation.

Three types of hearths were encountered. Two were small fires built in shallow pits and were used for heating or with cooking methods that required direct heat. These are located in an area that the soldiers occupied. In the possible kitchen area, the five hearths displayed two distinct styles. Three hearths contain shallow fire pits and associated concentrations of charcoal which may reflect different cooking methods within the hearths. The third type of hearth was a more complex variation of the second type. These hearths contained fire pits with an adjacent linear depression which held coals. Evidence for diversified cooking techniques (direct heat and coals) showed that cooks used different methods in preparing food and that the soldiers had some variety in their meals. The soldiers may have used boiling, broiling, frying, baking, and roasting techniques in the preparation of their meals.

The hospital area included a remnant of a Crimean Oven. This Oven is a radiant heat system used to heat tents. The radiant system was simple: a heating source was located on one side of the tent, the flue for the heating source was buried just below ground level and a tent placed over it. As the hot air flowed through the flue, the adjacent ground was heated. Variations of this system, sometimes referred to as "California stoves" were used for hospitals and even within soldier's winter huts.


Excavation of the Crimean Oven.

The feature is similar to a Crimean Oven encountered at 44AX193, located approximately 600 ft. north of 44AX195. The Crimean Oven at 44AX193 consisted of a 50-ft.-long brick-lined trench (flue) attached to a 4-by-11-ft. brick box that held the heating source and, presumably fuel. Both features follow the north/south slope of the hill side on which they are situated, with the heat source on the down slope side of the feature.

At 44AX195 the surviving section of the oven included an approximately 29 ft. long section of flue and 2-by-2.5-ft. brick

chimney base. The remainder of the flue and the heating source was destroyed when the residence at 3517 Duke St. was built.

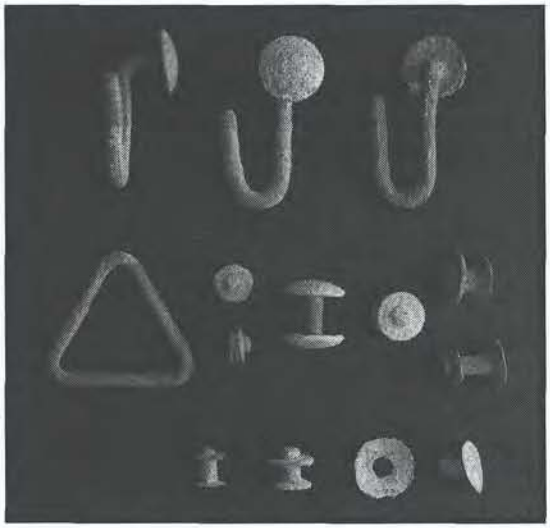
Chimney base of the Crimean Oven.

A large number of military artifacts were collected. Ammunition from the site includes buck and ball, minié balls, and assorted pistol bullets. This indicates that the most common small arms were smooth bore musket(s), and model 1855/1861 rifle-muskets, Enfield rifle-muskets, or more likely a combination of the three. Additionally, ammunition for at least two types of revolvers (possible Army Colts and Smith and Wesson) can be inferred from the artifacts.

Clothing artifacts included buttons, shoulder scale fragments, Kepi buckles, cap insignia, a gaiter button, suspender clip fragments, hem weights, and shoe nails.

Initially, states assumed the responsibility of outfitting militia troops. Consequently, early in the war there was variation in uniforms. One manifestation of the militia system was the use of specific state insignia on uniforms and accoutrements. New York buttons have an Eagle sitting on a New York Military shield surrounded by an arc of 13 stars above the word "Excelsior." The New York military shield shows the state coat of arms (a river and mountains in front of a rising sun) on the left and the United States flag on the right hand side. This shield design symbolically shows the dual allegiance of the states militia (Tice 1997:371). Some New York regiments had their regimental number included on the face of their buttons. Unfortunately, we were not lucky enough to find any such buttons.

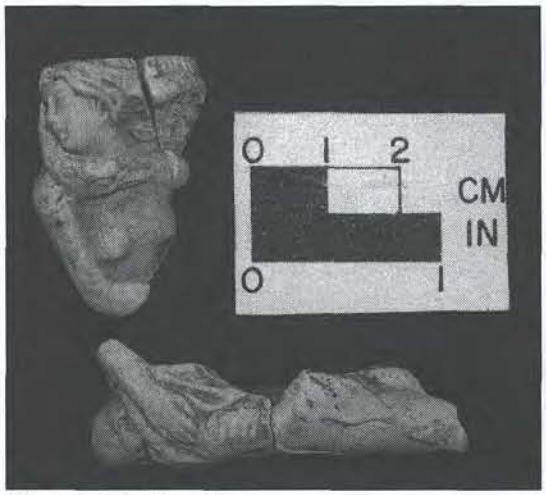
The Civil War soldier carried a variety of accouterments as part of their general gear. Accoutrements are items of a soldier's gear which are not clothing or weapons (e.g., packs, rifle belts, cartridge boxes, etc.). Investigations recovered numerous knapsack parts, a canteen spout fragment, bayonet scabbard tips, and a cap/cartridge box finial.



The knapsack parts belong to a standard issue canvas pack used between 1853 and 1872. This knapsack included metal buckles, studs, hooks, and triangular fittings. Enlisted men found the knapsacks of limited use and often discarded them preferring to store items in blanket rolls.

The model 1853 knapsack was a 13.5-inch (in.) tall-by-14-in. wide frameless bag made from heavy fabric covered in gutta percha. The shoulder straps were made of leather. The most abundent knapsack related artifacts are hooks. These hooks were movable pieces that were on the shoulder straps, and were designed to fasten the straps to a belt allowing for a more comfortable fit. Since these hooks were merely pushed through a hole in the leather and not permanently attached they were easily lost. The buckles and triangular fittings were used to adjust and secure the shoulder straps. Other types of accoutrement hooks were attached to the base of the knapsack and allowed other items to be hung from the bag. The rivets found at 44AX195 most likely are from the leather portions of the knapsack, possibly where the straps attached to each other.

An interesting decorated pipe bowl was found in a small hearth. The decoration on the pipe bowl is a bare-breasted woman with a bird wrapped around her. The pipe depicts Leda and the swan, a story from Greek mythology. However, to the soldiers it may have had a different symbolic meaning. To them the pipe may have represented Lady Liberty carrying an eagle. It was common for soldiers to carry and display these types of symbols as expressions of their patriotism, as part of their group identity, and to reinforce the ideals they were fighting for. At 44AX195, this pipe may reflect the feeling of patriotism that pervaded the early war militia units.



Figural pipe bowl

In summary, who were the New York militia troops who left traces of their time encamped in Alexandria? It is likely that the camp, because of the adjacent Crimean Oven was occupied by troops from Eight

Brigade commanded by General Sedgwick which was part of General Heintzelman's Division. The recovery of New York insignia indicates that the camp was occupied by New York Militia regiments. The only two possibilities within the Eighth Brigade are the 38th or 40th New York Regiments; but it is known that the 40th New York was camped elsewhere. The 38th New York Regiment Infantry, also known as the 2nd Regiment Scott Life Guard, probably occupied the camp.

For all that was learned of their camp, what they had, how they were organized, and of their patriotism, what they were thinking as the sun rose on that November morning in 1861, remains an enduring mystery.

JMA staff who worked on the project included Bryan Corle, Kerri Holland, Charles Goode, Lynn Jones, and Joseph Balicki. JMA wishes to thank Carr Homes for their support of the project and assistance in its completion. Wally Owen from Fort Ward Park graciously shared his research and extensive knowledge of the Civil War. Alexandria Archeology staff, Steve Shepherd and Fran Bromberg, provided needed support, oversight, and enthusiasm. Finally, a great deal of credit for the success of this project goes to Mike O'Donnell, local historian, relic hunter, author, and publisher, for his patience and mentoring on all aspects of the Civil War.

1.0 INTRODUCTION

1.1 Purpose of the Investigation

Carr Homes retained John Milner Associates, Inc. (JMA), to conduct archeological investigations on a project area within Alexandria, Virginia, in preparation for the redevelopment of the area (Figures 1-3). The approximately 2.5-acre Quaker Ridge project area is located near the northwest intersection of Duke Street and Arene Court. The project area contained five residential lots (3517, 3525, 3535, 3541, and 3543) that will be redeveloped into a townhouse community. The land slopes gently from north to south, and a stream drainage flanks the east side of the project area. The front yards are maintained lawn and the rear yards are a mix of grass, trees, and shrubs.

The project area is located on the north side of Duke Street just west of its intersection with Quaker Lane. In the past, Duke St. was the eastern end of the Little River Turnpike. During the Civil War, this road was one of the main east-to-west routes the Federal Army used in Northern Virginia.

The project area is considered to have a high potential for cultural resources associated with the Civil War. It is located approximately 0.25 miles south of Fort Williams, 0.5 miles southeast of Fort Worth, and 1.5 miles southeast of Fort Ward. Previous investigations and conversations with relic hunters indicate that, at various times, the Federal Army used the project vicinity as a camp.

Investigations were consistent with the *City of Alexandria Archeological Standards* (Alexandria Archaeology 1996) and the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation*. The Alexandria Archeology staff reviewed the design of the fieldwork and the scope of work. Investigations were conducted in accordance with the National Historic Properties Act of 1966, Federal Regulations for the Protection of Historic Properties 36CFR Part 800, and the Virginia Department of Historic resources (VDHR) *Guidelines for Conducting Cultural Resource Survey in Virginia* (2001).

Phase I investigations were undertaken in order to determine the presence or absence of archeological resources within the project area. Phase I fieldwork entailed pedestrian survey, shovel testing and metal detection. One archeological site (44AX195) was identified. This site extended across the rear yards of 3517, 3525, 3535, 3541, and 3543 Duke Street and was present in the front yard of 3535 Duke Street. Additional archeological investigations were recommended because the site was considered potentially eligible to the National Register of Historic Places and had local significance to Alexandria, Virginia.

Supplemental archeological investigations were designed to maximize field recovery of information. Partially, this was due to a monetary cap placed on archeological expenditure for the project. The budgetary restraints reflect an agreement between the

owner and the City of Alexandria. The results of the Phase I and the supplemental investigations are reported within this report.

1.2 PROJECT SCHEDULE AND TEAM

Phase I fieldwork was conducted from 26 July 2004 until 30 July 2004 and the supplemental archeological investigation was conducted from 4 October 2004 until 19 November 2004. Bryan Corle, Charles Goode, and Kerri Holland conducted the field excavations under the direction of Joseph Balicki. Lynn Jones conducted the documentary research. Kerri Holland conducted the laboratory processing and prepared the artifact catalog. Joseph Balicki served as project manager and principal investigator. Sarah Ruch and Rob Schultz prepared the graphics; V. Casey Gonzalez prepared the document with the assistance of Marcia Gibbs; and Dr. Charles Cheek reviewed and edited the document for quality control. The resumes of selected team members are included in Appendix III.

Following this introduction, the report includes sections addressing the research design for the Phase I and supplemental investigations; results of the background research; results of the Phase I fieldwork; results of the supplemental fieldwork; analysis and interpretations; and summary and conclusions. Photographs and maps illustrate the report. The site form, artifact catalog and qualifications of the investigators are appended.

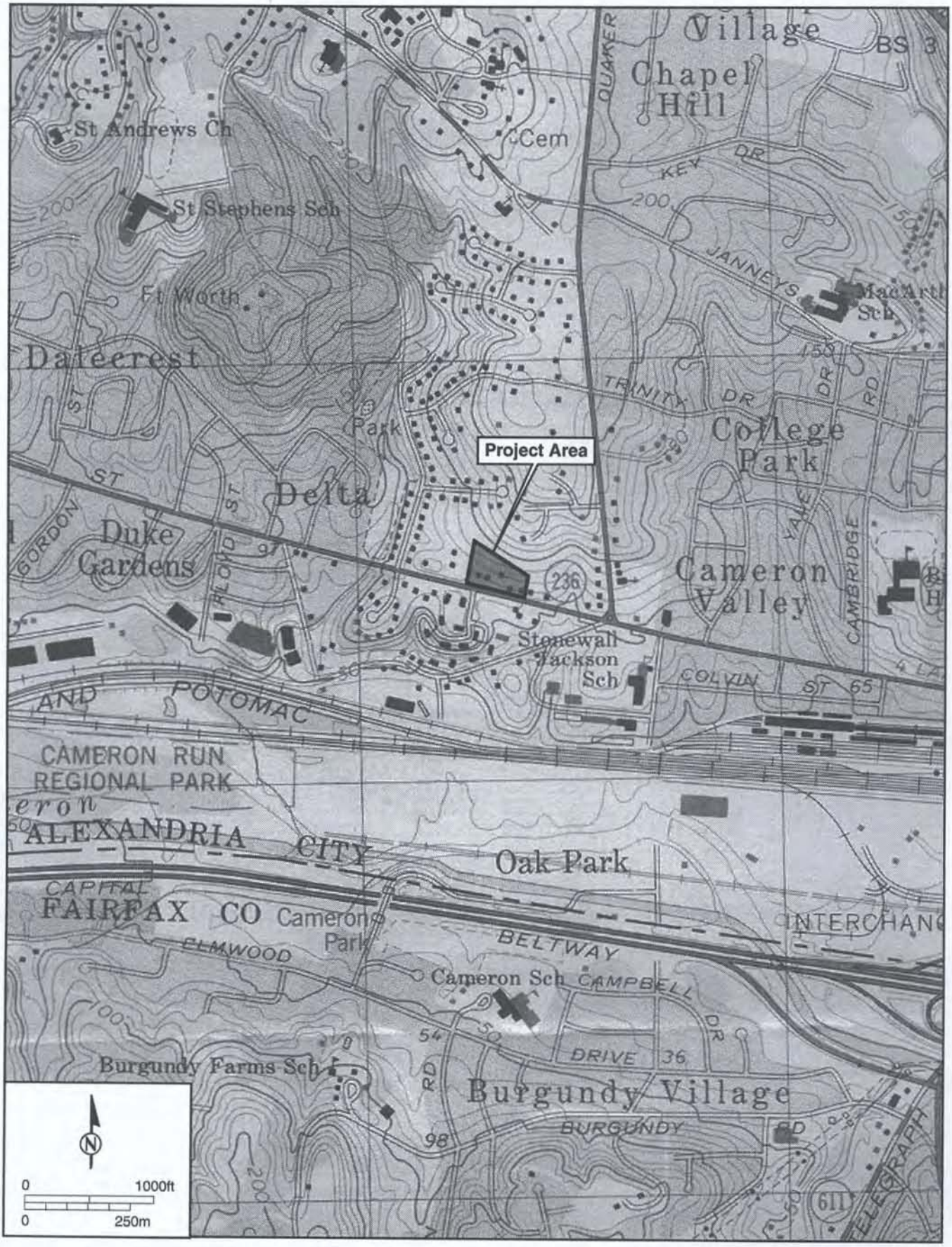


Figure 1. Detail, *Alexandria, VA.-D.C.-MD.* 7.5-minute series quadrangle (USGS 1965, photorevised 1983) showing Project Area.

Figure 2. Overview of project area showing front yards, facing west.

Figure 3. Overview of project area showing backyards, facing east.

2.0 RESEARCH DESIGN

2.1 PURPOSE AND OBJECTIVES OF THE INVESTIGATIONS

2.1.1 PHASE I INVESTIGATIONS

The purpose of the Phase I archeological investigations were to identify the presence or absence of archeological resources within the approximate 2.5 acres targeted for redevelopment (Figure 1). The following questions guided the development of the Phase I methods. These methods included a shovel test survey and metal detection.

- Was the project area occupied in the past?
- Do historic maps depict possible resources in the project area?
- Are known archeological sites present?
- What is the potential for archeological sites?
- Is there archeological evidence of Civil War occupation?

2.1.2 SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATIONS

Phase I investigations identified a Civil War camp site (44AX195). This site extended across the rear yards of 3517, 3525, 3535, 3541, and 3543 Duke Street and was present in the front yard of 3535 Duke Street. The goal of the supplemental archeological investigations were to recover as much archeological information on the Civil War site as possible under the budgetary restraints imposed by an agreement between the owner and the City of Alexandria. The purpose of these investigations was to recover additional artifacts that might let us identify the units occupying the site, and to examine the subsoil for features. Expected features included refuse pits, hearths, drainage features, and postholes (evidence of tents). If features were present, it may be possible to determine the layout of the camp, what type of occupation was present, if military rules of organization were being followed, and where additional features may be present. The following questions guided the development of the supplemental field methods. These methods included mechanical stripping, metal detection, and feature excavation.

- How extensive were the Civil War deposits?
- Did the site retain integrity?
- Can the units that occupied the camp be identified?
- Where Civil War features present?
- What type of Civil War camp was present?
- Could Civil War artifacts be separated from the overlying modern artifact scatter?
- Is the camp layout identifiable?
- Are intra-site activity areas identifiable?
- Was the camp landscape maintained (policed)?
- Were military rules of organization followed?
- What constitutes the material culture remains?

2.2 DOCUMENTARY RESEARCH METHODS

The Phase I investigation included background research to develop an appropriate historic context for the project area. Background research was limited to review of existing documentary information held by the Alexandria Archaeology Museum and the Fort Ward Museum. Copies of Civil War era maps, on file at JMA, were examined. In general, although some show fortifications, the project area is not shown in detail. The *Official Records of the War of the Rebellion* (OR) and the Atlas to the OR were consulted to determine if the project area or vicinity appear in any correspondence or maps within these reference materials. No additional documentary research was undertaken during the supplemental archeological investigation. However, Wally Owen (Fort Ward Museum) provided additional information on the occupation of this area and on some of the features identified.

2.3 FIELD METHODS

2.3.1 PHASE I METHODS

The Phase I field methods utilized a combination of pedestrian survey, shovel testing, and metal detection. The pedestrian survey consisted of a preliminary walkover of the project area to assess what areas were likely to contain archeological resources. Areas of high and low probability, areas of disturbance, and areas that appeared to contain intact soils were identified. Shovel testing was conducted to identify both prehistoric and historic sites. Metal detection was conducted to assess the project area's potential for containing sites associated with the Civil War. Both metal detection and shovel testing were conducted throughout the entire project area.

Shovel tests (STs) were excavated at 30-ft. intervals across the approximate 2.5-acre project area (Figure 4). Shovel tests were excavated at least 0.1 ft. into subsoil, and each shovel test was 1 ft. in diameter. Shovel tests were recorded on a standardized form recording the transect and test pit number and location, depth measurements, soil type including Munsell description, and a list of recovered artifacts. Shovel tests were numbered using a binomial system. The first number designates the transect and the second number designates the shovel test excavated on the transect. All soils excavated from shovel tests were screened through ¼-in. hardware cloth, and recovered artifacts were placed in labeled plastic bags for delivery to the laboratory.

The project area was also surveyed using metal detectors (Figure 5). Systematic metal detection was performed along transects set at 5 ft. intervals across the entire project area. The field team investigated all positive signals. The location of non-significant twentieth-century metal artifacts was recorded and then the artifacts were discarded. The remainder of the metal artifacts were collected and placed in bags labeled with provenience information. All shovel tests and metal detector strikes were plotted on a map of the project area. Color slides and black-and-white photographs and digital images of the project area were taken.

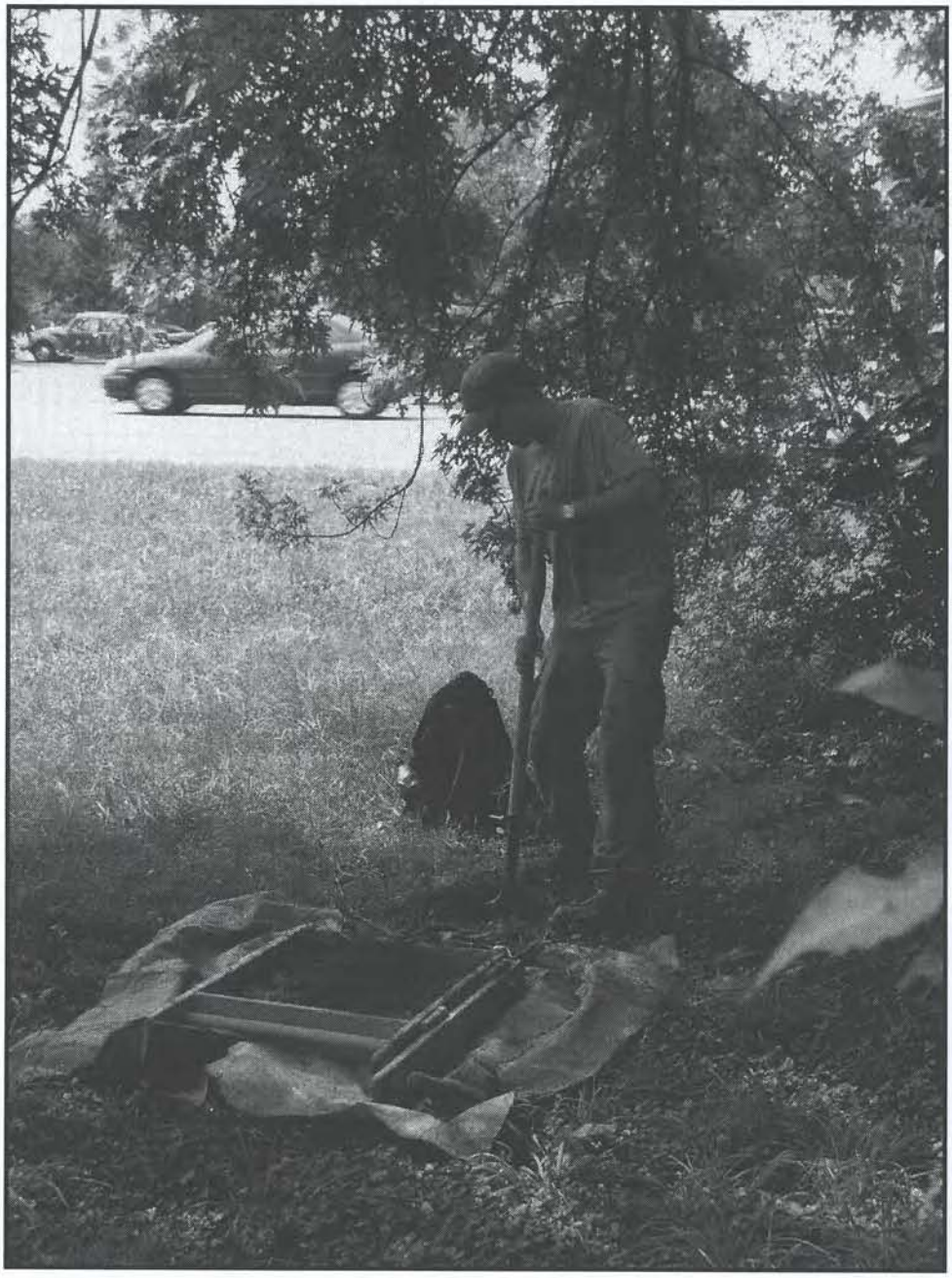


Figure 4. Shovel test excavation, facing south.

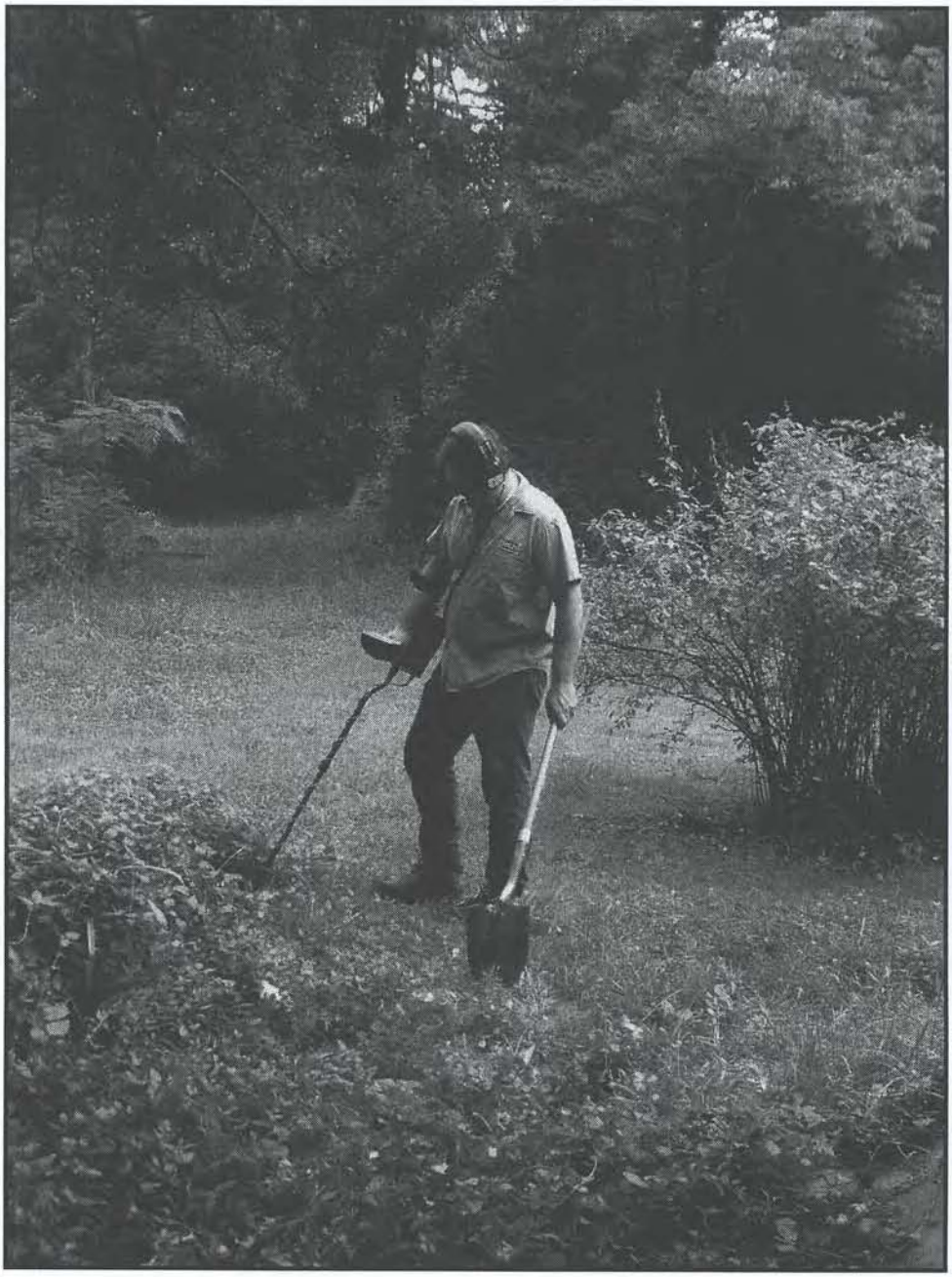


Figure 5. Metal detection, facing west.

2.3.2 SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATION METHODS

The Phase I survey identified two loci of interest. Locus 1 was in the front yard and Locus 2 was in the rear yards. Supplemental archeological fieldwork consisted of mechanical stripping at selected areas adjacent to Locus 1, within Locus 2, and in locations where the Ab-horizon was identified in Phase I shovel tests (Figure 6). For the purposes of the scope, JMA proposed stripping up to 5,000 sq. ft. The exact location and size of each area stripped was to be determined by conditions encountered in the field. Factors such as proximity to tree protection areas, proximity to modern disturbance, results of the initial stripping, and machine access were taken into account. However, as fieldwork progressed JMA and Alexandria staff modified field techniques to respond to the characteristics of the archeological site. This flexibility allowed for the field archeologists to maximize information recovery and a more thorough examination of the project area. As a result of these modifications less time was devoted to the areas adjacent to Locus 1, but the area stripped in the rear yards reached approximately 18,000 sq. ft.

A backhoe was used to clear the modern vegetation, debris, and the A-horizon from select areas across the five backyards. Metal detection was then undertaken on each cleared area. When Civil War artifacts or features were encountered, they were recorded. Artifacts were collected and placed in bags labeled with provenience information. Artifact locations were placed on a project area map.

Features were drawn in plan and bisected. All soil matrix excavated from features was screened through ¼-inch mesh screen. The field team recorded feature information on standardized forms that include provenience, the soil profile, the artifacts found in distinct strata, the setting, soil texture, and color (Munsell 1992). Recovered artifacts from the features were placed in bags labeled with provenience information.

A map was made of the project area showing the location of the excavations, aboveground features, and significant landmarks. The excavations were also documented in black-and-white print film, color slides, and by digital photography.

2.4 LABORATORY METHODS

Artifacts recovered during field investigations were returned to JMA's Alexandria laboratory for cleaning and cataloguing. Artifacts were processed in accordance with the guidelines set forth in the *City of Alexandria Archeological Standards*. Artifacts with stable surfaces (such as ceramics and glass) were washed. Other artifacts (such as metal and bone) were brushed to remove the dirt. The cleaned artifacts were placed in resealable polyethylene bags labeled with provenience information. The bags were stored sequentially in acid-free boxes labeled with provenience information. To the extent possible, JMA identified recovered artifacts by type, material, function, and cultural and chronological association. Appendix I contains the 2,371-item artifact

inventory at the completion of the project, Carr Homes donated all artifacts to the City of Alexandria for permanent curation.

The research team analyzed the artifacts to generate data to address site research potential. The content of individual artifact classes was also examined. Particularly important for the research questions was the analysis of the military artifact assemblage.

Figure 6. Mechanical stripping and metal detection, facing west.

3.0 BACKGROUND RESEARCH

3.1 PREHISTORIC CONTEXT

The prehistoric cultural sequence for the Coastal Plain of Maryland and Virginia parallels that identified for other areas of the Middle Atlantic region. It consists of seven time periods divided as follows: Paleo-Indian (11,000 to 8000 BC), Early Archaic (8000 to 6500 BC), Middle Archaic (6500 to 3000 BC), Late Archaic (3000 to 1000 BC), Early Woodland (1000 to 500 BC), Middle Woodland (500 BC to AD 900), and Late Woodland (AD 900 to 1600) (Griffin 1967). Paleo-Indian and Early and Middle Archaic sites in the area are very rare and poorly documented. More intensive occupation began in the Late Archaic period when people associated with the Savannah River culture moved into the area. The exploitation of anadromous fish during the spring and early summer was the focal point of the subsistence and settlement rounds of these people.

Technological innovations, such as the invention or adoption of pottery and the bow and arrow, mark the Early and Middle Woodland periods. Intensive exploitation of floral resources in floodplain environments led to increased sedentism during these periods. The Late Woodland period is characterized by the introduction of agriculture and a shift in settlement locations. Hunting, fishing, and the gathering of plant foods still contributed much to the diet.

Native Americans first encountered Europeans in the very early 1600s. By the late seventeenth century, European settlement had reached well into the Tidewater area of the Potomac and its influence had reached further into the interior. Introduced European diseases and the increased hostilities between groups led to the disruption of the Native American populations and the abandonment of many areas. By the early 1700s, the native populations were little barrier to European settlement (Feest 1978).

3.2 HISTORIC CONTEXT

The first permanent English settlement in North America was established by the Virginia Company of London at Jamestown, Virginia, in 1607 (Salmon 1983). By 1625, the Virginia Company charter was revoked by the King and the land became a royal colony. Increasing population made the creation of counties and county governments necessary. In 1645, Northumberland County was established between the Rappahannock River and the Potomac River, enabling settlement in Northern Virginia (Jirikowic et al. 2004).

Land in the colony was granted to individuals by the governor on the authority of the king. Much of the land became farms and larger plantations growing tobacco as the main crop. By 1730, Fairfax County was formed from the part of Prince William County north of the Occoquan River (Jirikowic et al. 2004).

In 1749, the town of Alexandria was formed on the west bank of the Potomac River on land that had been granted to Margaret Brent and to Richard Howson who sold his land to a Scotsman named John Alexander (Voges 1975). There had been sheds and a wharf near the mouth of Great Hunting Creek for some time; this small community was called Belhaven (Figure 7). Plantation owners, import-export agents, and owners of ships petitioned for a public warehouse at that location. The General Assembly directed that a town be established, with a public warehouse for the inspection, storage, and shipping of tobacco, on the north bank of Great Hunting Creek. In 1749, by official act, a 60-acre tract of land belonging to Phillip Alexander, John Alexander, and Hugh West was appropriated to form the town named Alexandria (Voges 1975). The town was surveyed and marked off into lots that were sold at public auction. The town grew so rapidly that the trustees asked permission of the General Assembly to enlarge the town area and 46 additional lots were surveyed and sold at auction (Voges 1975). In 1779, Alexandria was incorporated as a town, thus able to exercise some self-government; its area extended west to include Washington Street.

This was a period of economic growth and development for the town. There was extensive shipping and the attendant maritime trades, and manufacturing and retail operations expanded. In 1795 the Fairfax and Loudoun Turnpike Company was established to build a better road between Alexandria and the farms of western Fairfax County. This road, Little River Turnpike, was finished in 1806 and ran from the waterfront in Alexandria to the Little River in Aldie, Virginia, a distance of thirty-four miles (Daugherty et al. 1989). Within the boundary of Alexandria the road kept its eighteenth-century name, Duke Street. It became the main transportation artery into Alexandria and was vital to development on the west side of town (Figure 8).

In 1789 Virginia ceded ten square miles of land to the Federal Government to be used as the permanent seat of the government (Mitchell 1977). Boundaries for the new District of Columbia were set by President Washington. Alexandria became part of the District in 1801 and the boundary crossed Duke Street at Hooff Run (Figure 8) (Cheek and Zatz 1986). Alexandria was returned to Virginia in 1846 as Alexandria County, no longer part of Fairfax County. Alexandria was chartered as a city in 1852, making it politically and administratively independent of the county in which it was located, and the boundaries were extended again to the north and west (Salmon 1983; Cheek and Zatz 1986).

At the beginning of the Civil War, Virginia voted to secede from the Union. Confederate troops were posted to guard Alexandria but abandoned their posts and retreated toward Manassas after eight Federal regiments took Alexandria on the morning of May 24, 1861. Confederate leaders thought that Alexandria was not defendable (Daugherty et al. 1989). Union troops crossed the Potomac River, entered Virginia and occupied Alexandria without resistance.

Figure 7. Before the town of Alexandria was officially formed, the area where it would be located, at the mouth of Great Hunting Creek, was known as Belhaven. On this map, Belhaven is mistakenly shown on Difficult Run (Detail, *Map of Virginia*, Henry 1770).

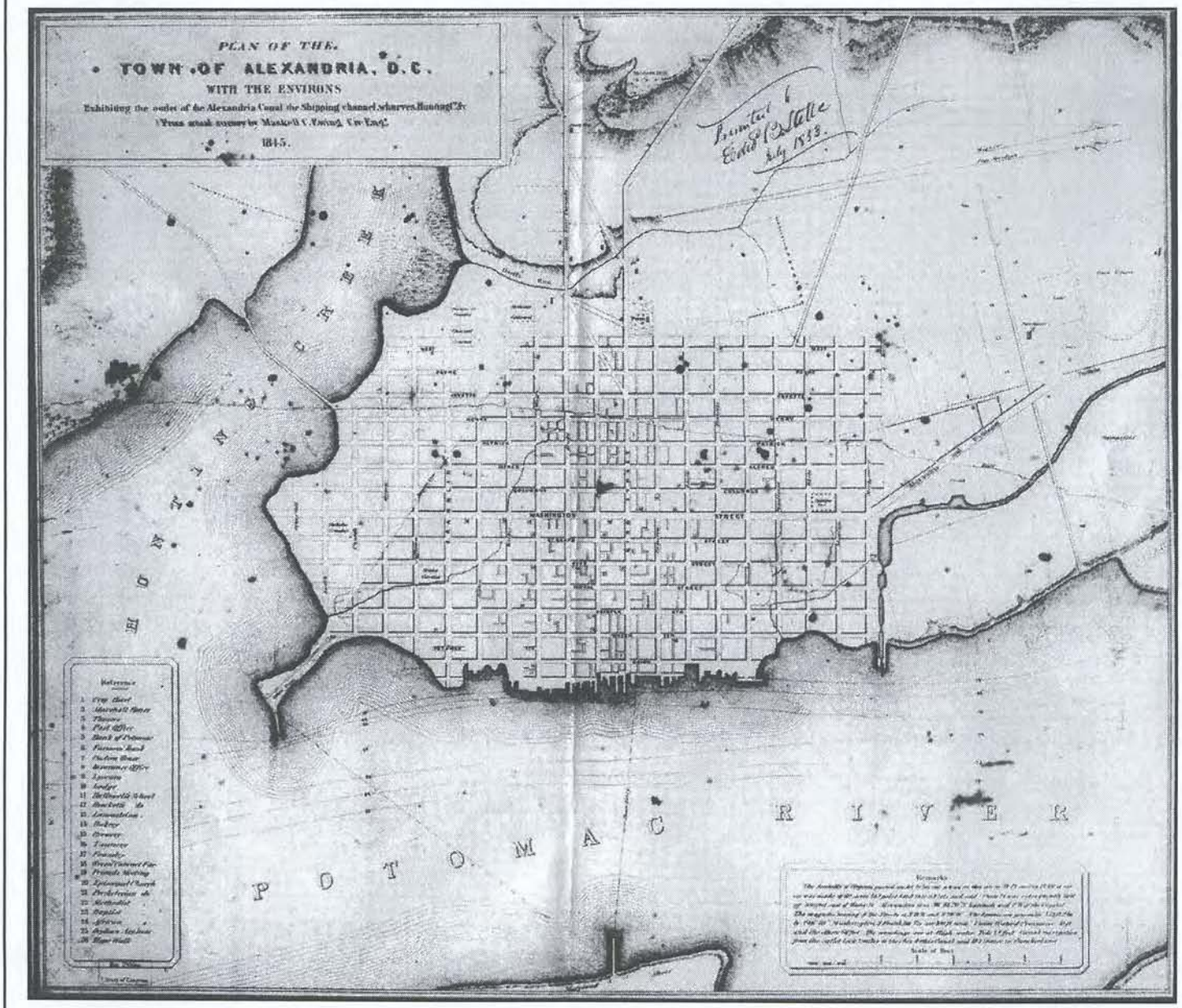


Figure 8. Little River Turnpike and the District of Columbia boundary line are shown on this nineteenth century map (Detail, *Plan of the Town of Alexandria, D.C.*, Ewing 1845).

The Union Army built a circle of forts around Washington, D.C., to protect the capital city. Three forts, Ft. Williams, Ft. Worth, and Ft. Ward, and a number of batteries were constructed around the outskirts west of the city of Alexandria. The extent of the batteries associated with some of these forts is shown on Figure 9. West of the city and north along Quaker Lane near its junction with Seminary Road, north of the project area, was Fort Williams, constructed in 1863 by detachments of the 2nd Connecticut Heavy Artillery (Figure 9). The fort was built on land owned by General Samuel Cooper who resigned his commission in the United States Army and joined Confederate forces at the beginning of the Civil War. Union forces referred to his home and land as "Traitor's Hill" and destroyed his house to build Fort Williams (Cooling and Owen 1988:64).

Fort Worth was constructed in 1861 northwest of land that is now the project area. This fort is approximately 2,500 ft. directly west of the project area (Figure 9). After the war, a member of the 2nd Connecticut Heavy Artillery wrote a history of his unit's service saying, "Fort Worth . . . was situated above a quarter of a mile in the rear of Fairfax Seminary, overlooking the broad valley of Hunting Creek, and the Orange and Alexandria Railroad and mounting some twenty-four guns of all kinds . . ." (Cooling and Owen 1988:70, 73).

An important fort located along Braddock Road, northwest of the project area, was Fort Ward. Constructed hastily after the first battle of Bull Run in 1861, it was improved over time technologically with knowledge gained during the war (Cooling and Owen 1988:31). It was claimed to be one of the most important defenses of Alexandria. A long series of trenches were constructed between Fort Worth and Fort Ward (Figure 9) and to other forts further north to protect the city of Alexandria.

By 1915, the city annexed 866 acres from Alexandria County and 450 acres from Fairfax County as development and the need for land grew. The city continued to expand in the early to mid twentieth century through further annexations (Cheek and Zatz 1986).

3.3 HISTORY OF THE PROJECT AREA

The project area is located on a 68-acre parcel that was owned by Daniel French in 1743 (Mitchell 1977:176). North and east of the project area was the Carr/Simpson tract, part of which was sold in 1798 to offset debts of the owner, Josiah Watson, who had declared bankruptcy. The property, known as Stump Hill, was subdivided into small lots sold at public auction (Jirikowic et al. 2004:7). Two roads, one of them Quaker Lane, were put through the property.

Several Civil War sites are located in the vicinity of the project. The Virginia Theological Seminary, located north of the project at the junction of Quaker Lane and Seminary Road, was used as a hospital by the Union Army during the Civil War (Embrey et al. 2004).

Fort Worth was constructed in 1861 as part of the defenses of Washington and was located northwest of the project area. It had 14 guns and over 200 troops were stationed at the fort to man the guns (Jirikowic et al. 2004:16).

Fort Williams was constructed in 1863 on the Samuel Cooper property north of the project. In 1862, during the Second Battle of Bull Run, about 400 troops of the 2nd New York Heavy Artillery camped on Cooper's Hill and used Cooper's house as a headquarters (Jirikowic et al. 2004:16). The Union Army realized that it was necessary to build a fort on Cooper's Hill to guard Little River Turnpike. Fort Worth was located on too high ground to be able to command the road by artillery fire (Jirikowic et al. 2004:16). Fort Williams was completed in October 1863 and had an extensive battery south and east overlooking Little River Turnpike.

The earliest map that shows a building in or near the project area is the 1895 USGS map (Figure 10). On this map there appears to be a house at the intersection of Little River Turnpike and Quaker Lane, and a building on the hill north of the project area. By 1909, there were two houses along Little River Turnpike in the immediate project vicinity (Figure 11) and by 1945, there were several more (Figure 12). The houses and buildings on the 1965 map are in a slightly different configuration than on the 1945 map (Figure 13), as though some outbuildings may have been knocked down and others put up in slightly different places. The buildings on the 1965 map are probably the ones that were removed to make way for the more modern construction that will take place.

3.4 CULTURAL RESOURCES IN THE PROJECT VICINITY

There are six archeological sites within one-half mile of the project area (Figure 14; Table 1), one prehistoric, four historic, and one multi-component site. The prehistoric site was a small temporary camp represented by a lithic scatter. The historic sites consist of a dwelling, a cemetery, Civil War earthworks, and a Civil War encampment with a brick feature used to heat a tent. The multi-component site was a prehistoric camp represented by debitage and fire cracked rock, overlain by a mid-nineteenth to twentieth century domestic site.

The Civil War earthworks, site 44AX186, consisted of a battery and rifle trench associated with Fort Williams (Fiedel and Corle 2001). The Civil War encampment, 44AX193, occupied an area approximately 150 by 250 ft. along Quaker Lane where Union soldiers had camped during the winter of 1861-1862. A feature found during archeological investigation at this site was the remains of a large brick heating device probably used to heat a hospital tent during the winter (Jirikowic et al. 2004). The feature, a` Crimean Oven consisted of an external firebox and an underground brick-lined flue; there may have been a chimney but no evidence of one was found.

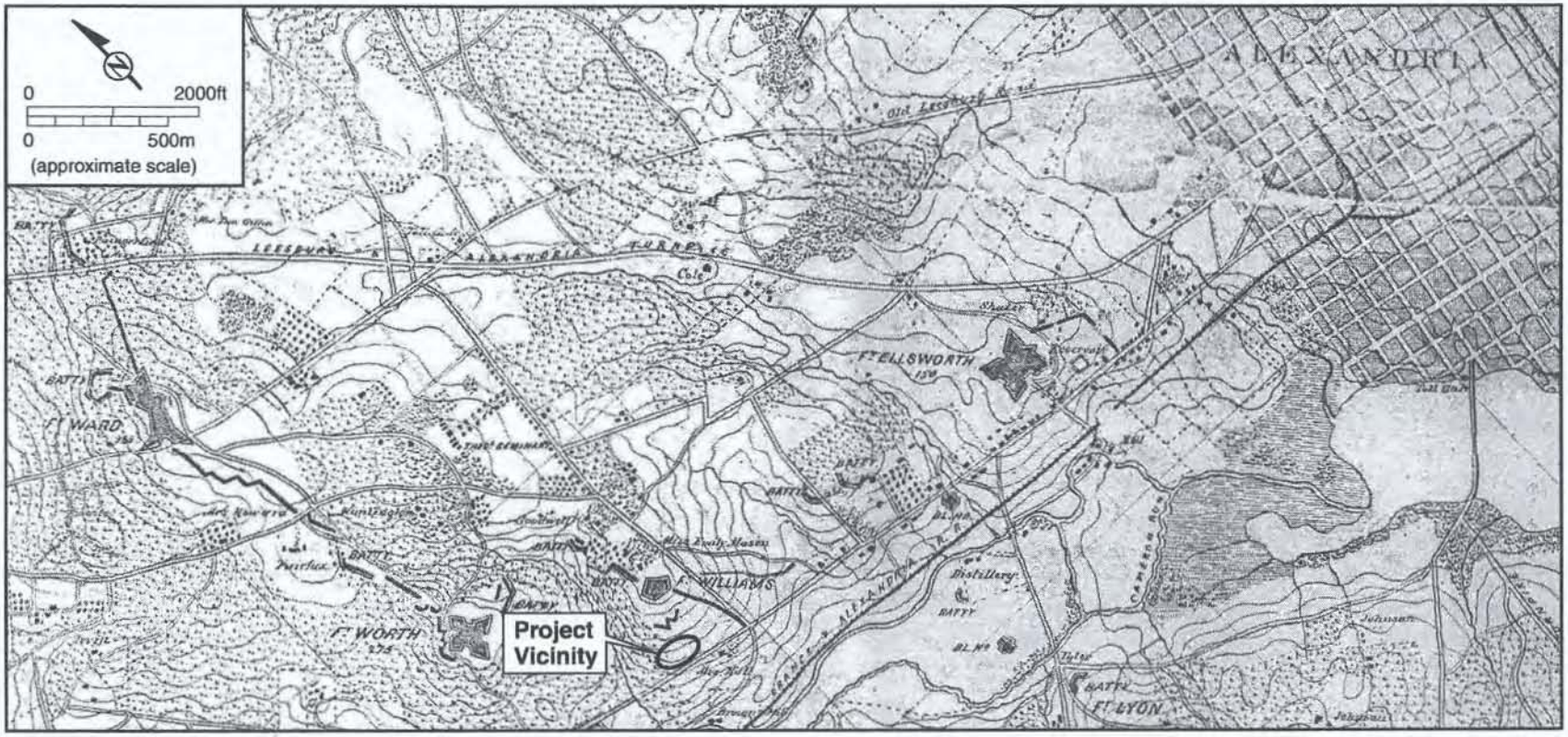


Figure 9. The extent of the batteries and trenches associated with forts south and west of the project vicinity are shown on this map (Detail, *Defenses of Washington*, U.S. Engineers Bureau, 1865).

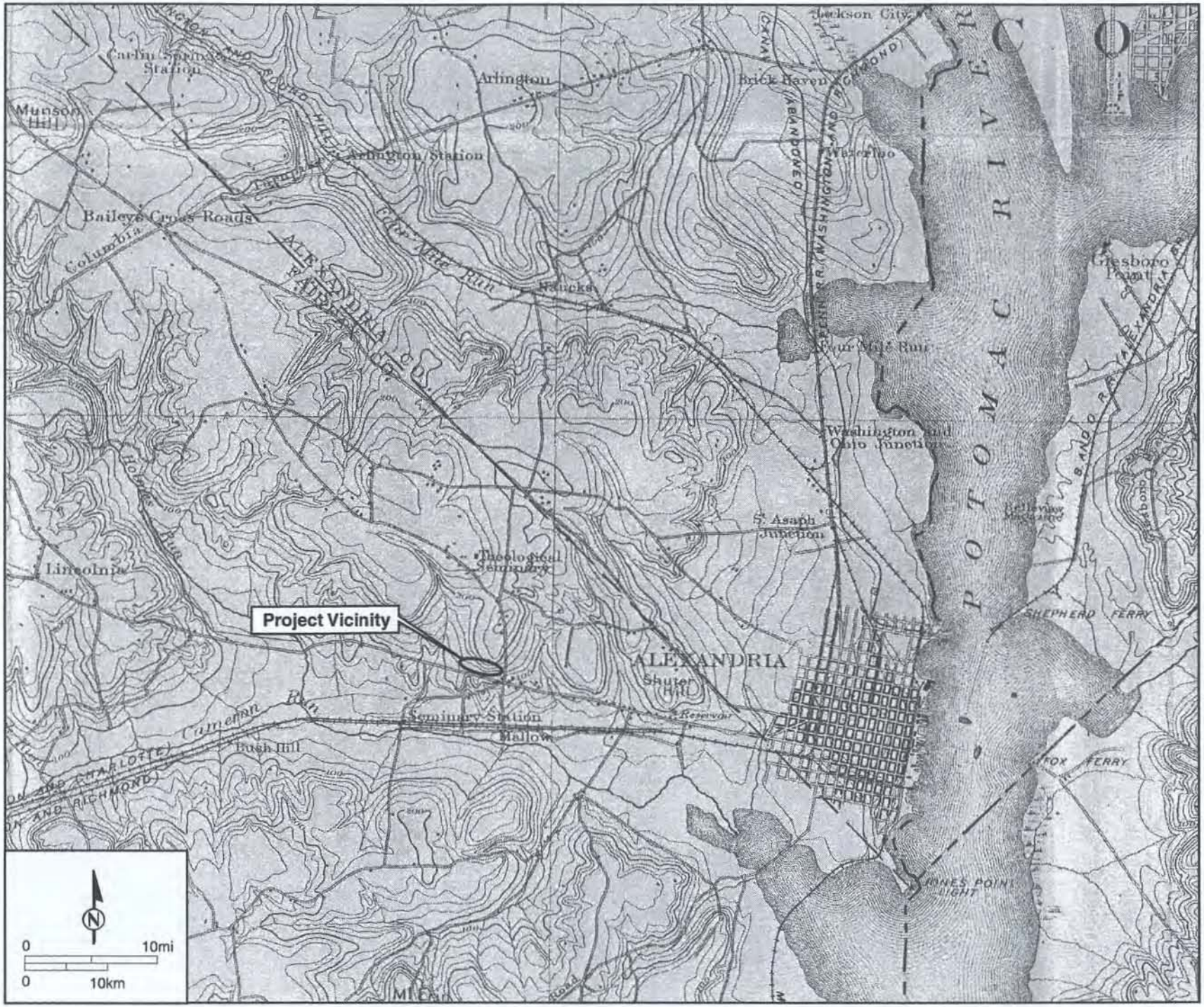


Figure 10. This map shows very little development in the project area before the turn of the century (Detail, USGS 1895).

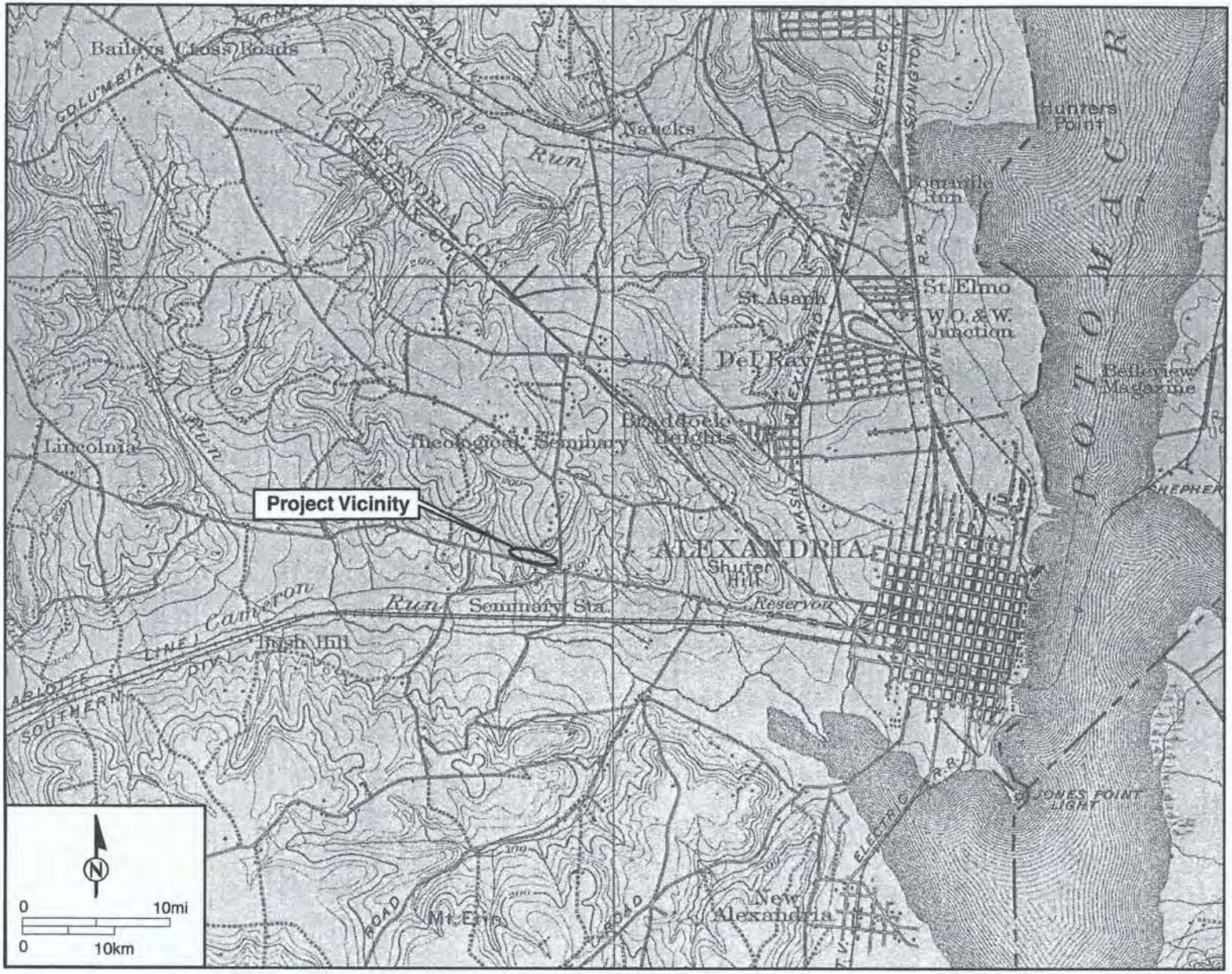


Figure 11. By 1909, there were two houses in the project area (Detail, USGS 1909)

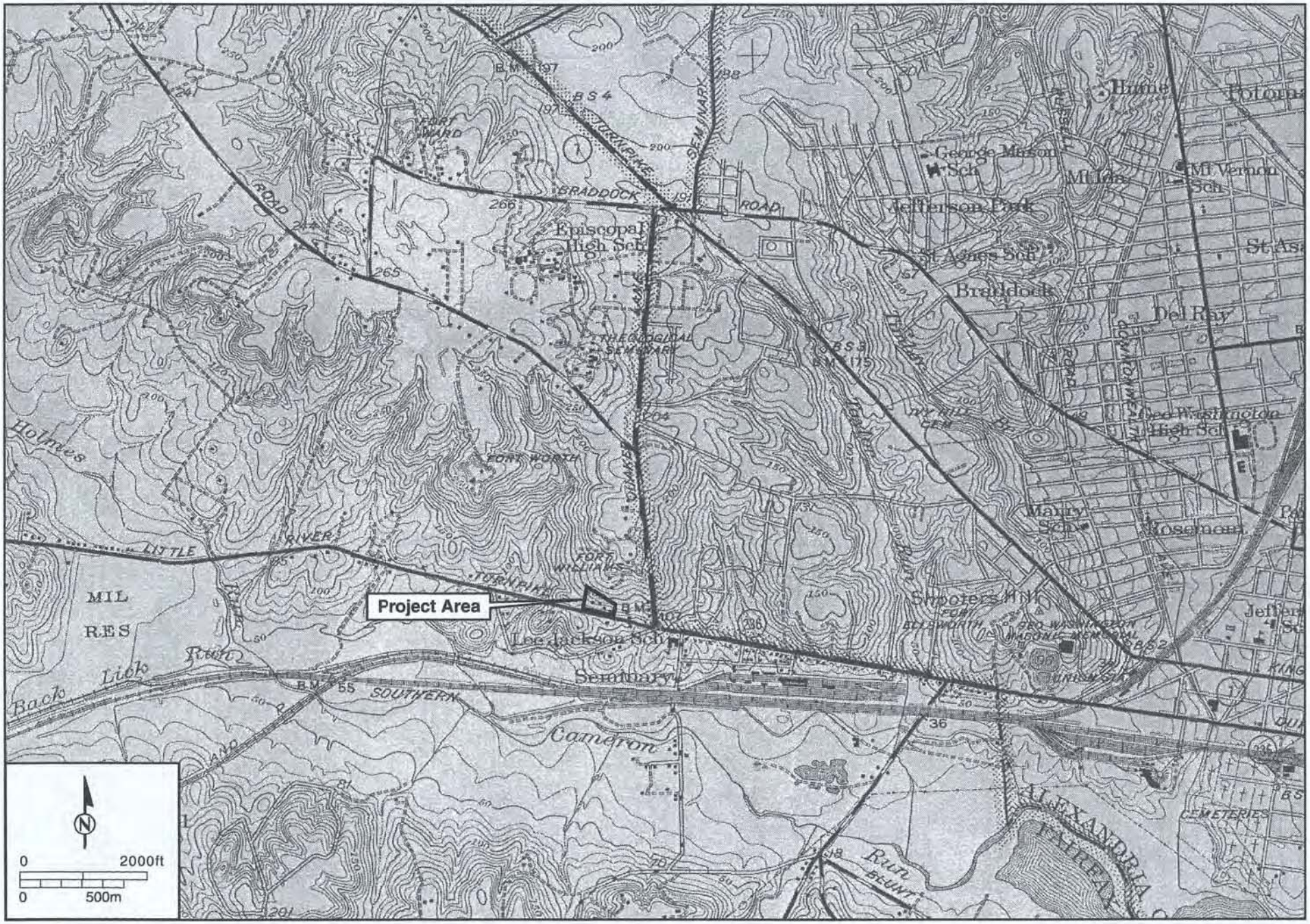


Figure 12. In 1945, more construction appears in and near the project area (Detail, USGS 1945).

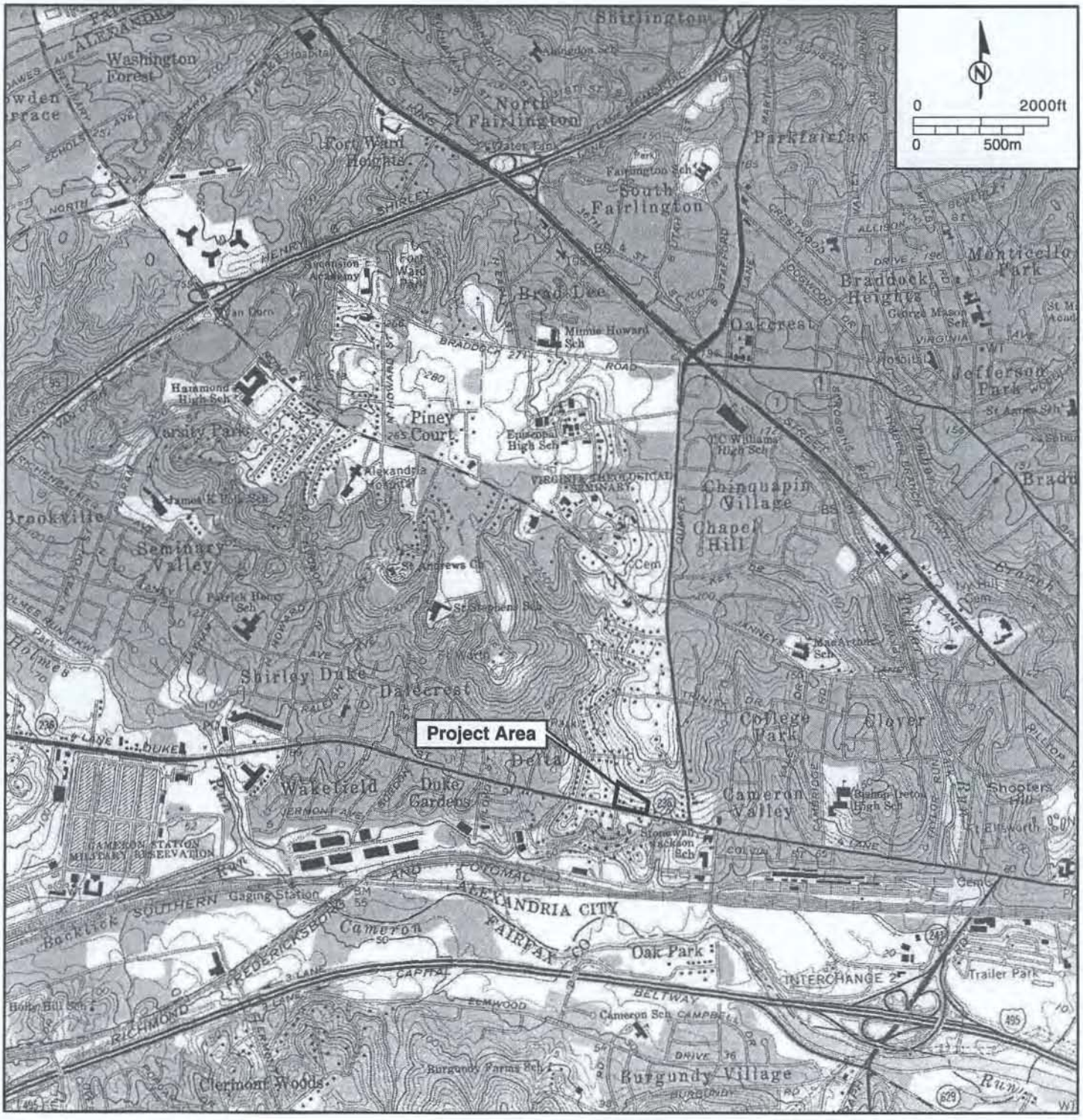


Figure 13. The 1965 map shows buildings in somewhat different positions than in 1945 (Detail, USGS 1965).

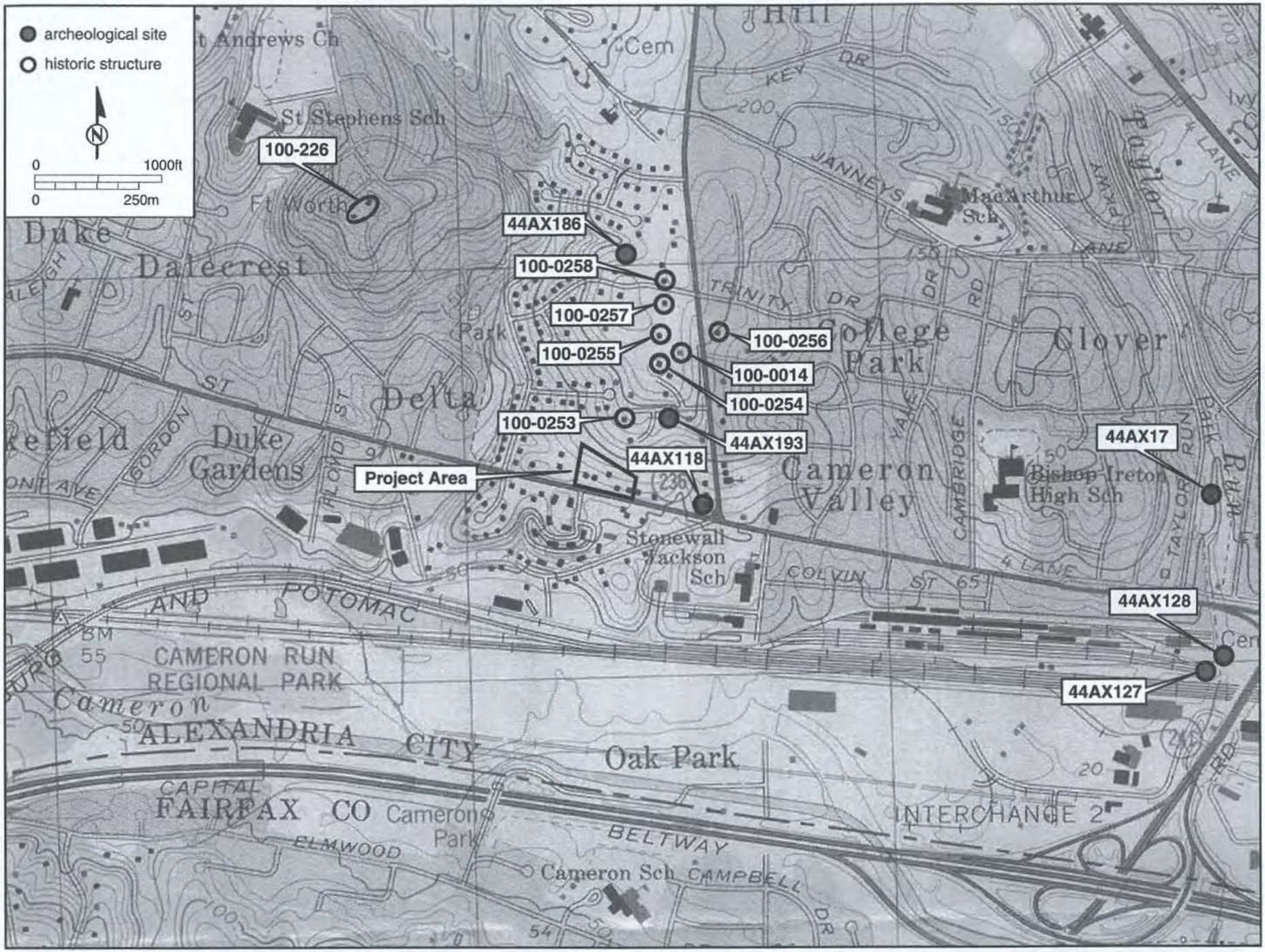


Figure 14. Cultural resources in the vicinity of the project area are shown on this map (Detail, *Alexandria, VA-D.C.-MD. Quadrangle,* USGS 1983).

Table 1. Archeological Sites within One Mile of Project Area

Site Number	Type	Period	Function	Artifacts
44AX17	Prehistoric	Prehistoric	Temporary camp, lithic scatter	Quartz point, flakes, cores
44AX118	Historic	19th century	Dwelling	19th C. ceramics
44AX127	Prehistoric/ Historic	Prehistoric; 19th to 20th C.	Camp; domestic	Debitage, FCR; pearlware, whiteware
44AX128	Historic	19th C.	Cemetery	
44AX186	Historic, near Ft. Williams	19th century	Civil War battery & rifle trench	Earthworks
44AX193	Historic	19th C.	Civil War encampment; Crimean Oven	Brick oven, glass, ceramics, bullets

Historic structures near the project area include seven houses and the remnants of Ft. William (Figure 14; Table 2).

Table 2. Historic Structures near the Project Area

Structure Number	Name	Date	Style/Function
100-0014	Ft. Williams	1863	fortification
100-0226	Muckross	1830	Classical Revival; domestic
100-0253	House	1924	Vernacular; domestic
100-0254	House	1909	Dutch Colonial; domestic
100-0255	Clarens	1814	
100-0256	House	1898-1906	Queen Anne; domestic
100-0257	The Cottage	1793	Italianate; domestic
100-0258	House	1900	Late Victorian; domestic

Ft. Williams was constructed in 1863 by detachments of the 2nd Connecticut Heavy Artillery (Figure 9). It was named in honor of Brig. General Thomas Williams who was killed at Baton Rouge, Louisiana in 1862 (Cooling and Owen 1988:64). The fort was built on land owned by General Samuel Cooper who resigned his commission in the United States Army and joined Confederate forces at the beginning of the Civil War. Union forces referred to his home and land as "Traitor's Hill" and destroyed his house to build Fort Williams (Cooling and Owen 1988:64). Ft. Williams overlooked a deep ravine at the rear of Ft. Worth, the heights south of Hunting Creek, and Little River Turnpike. It included a magazine and quartermaster buildings consisting of barracks, mess halls, and officers' quarters (Cooling and Owen 1988:64).

Muckross, a residence belonging to Col. Arthur Herbert, C.S.A., was built around 1830 and is located northwest of the project area. According to one source, Muckross was demolished during the Civil War, along with all the outbuildings, fences, and trees, and Ft. Worth was constructed on the hilltop where the house had stood in 1861 (Cooling and Owen 1988). When Col. Herbert returned after the war, he built a new house on the masonry walls of the south powder magazine of Ft. Worth (Cooling and Owen 1988). Another source states that Muckross was seized by the Union Army early in the Civil War and Fort Worth was constructed on the grounds. The house was used by Union staff and officers. Col. Herbert regained possession of the property after the war and lived there until his death in 1923 (Templeman and Netherton 1966:49). The VDHR form (100-0226) seems to indicate that the core of the house is much smaller that what exists today and dates to ca. 1830, but that "further onsite survey and building permit research is necessary to determine the original parts of the house."

Clarens, located on top of Stump Hill, was built ca. 1814 to 1816 by James McKenna. In 1821, the property was transferred to the Reverend George A. Smith who used part of the house as a school in 1850 (VDHR Form 100-0255). The part used as a schoolroom accidentally caught fire and burned down in 1851. In 1861, Union troops built Ft. William at the home of Samuel Cooper located just south of Clarens. It is said that Clarens was used as a hospital for Union soldiers during the Civil War (VDHR Form 100-0255).

The Cottage is a rare example of an Italianate house in Alexandria built ca. 1793 by Edward Stabler (VDHR Form 100-0257). A front room was added in 1871 and a dining room at the rear was added in 1874.
The four other houses date to around the turn of the nineteenth century or the early twentieth century. House 100-0256 was a Queen Anne style house built ca. 1898 with additions that date to 1906. House 100-0258 was a Late Victorian style house built in 1900. House 100-0254 was a Dutch Colonial built in 1909, and House 100-0253 was vernacular style building constructed ca. 1924.

4.0 PHASE I RESULTS AND INTERPRETATIONS

The archeological investigation of the five house lots (3517, 3525, 3535, 3541, and 3543) resulted in the identification of one archeological site (44AX195). The site was identified using a combination of pedestrian survey, shovel testing, and metal detection. The site is primarily a scatter of Civil War artifacts that reflect a Federal encampment. The site is mainly isolated to the rear yards of the house lots, although it is present in one isolated portion of the front yard of 3535 Duke Street (Figure 15).

In addition to the Civil War occupation a small number of prehistoric artifacts were also recovered. The six prehistoric artifacts (two quartzite flakes, a quartz flake, and one fragment of quartz shatter) were found in two shovel tests (2.13 and 8.7). These artifacts indicate that prehistoric populations included the project area within their settlement/subsistence rounds. However, the use of the project area appears to have been limited to short term resource extraction

4.1 PEDESTRIAN SURVEY

Phase I archeological investigations began with a pedestrian survey of the project area. The project area contained a large amount of modern disturbance associated with five extant twentieth-century residences present on the five lots under investigation. Disturbance included the five extant structures, five driveways, three detached garages, a brick retaining wall that is present along the side yard and in the rear yard of 3517 Duke Street, and an unfinished outbuilding that consisted of a poured square concrete slab surrounded by a partial cinderblock foundation present behind 3535 Duke Street (Figure 15). In addition to the structural features identified there were also definite indications of modern landscaping associated with the twentieth-century residences. The front yards of 3517, 3525, and 3541 Duke Street had clearly been landscaped to accommodate the structural features of the residences on these lots including steeply sloping front yards and low-lying drainage areas between neighboring lots and driveways. Generally, the rear yards of the five house lots appeared to have avoided large-scale disturbance when the twentieth-century structures were constructed. The rear yards immediately behind the residences did contain some amount of disturbance including driveways, detached garages, exterior decks, and a patio and retaining wall (Figure 15). On the other hand, the far rear yards of the lots closer to the northern border of the project area contained trees approximately 60-80 years old, and therefore demonstrated a greater probability of retaining intact soils that would contain artifacts.

Based on the pedestrian survey it was concluded that the front yards of the house lots had a low probability of containing archeological resources because of the large amount of disturbance that occurred when the twentieth-century residences were constructed. The rear yards, especially the far rear yards along the northern border of the project area, were considered high probability because the older vegetation suggested they avoided construction related disturbance and may contain intact soils.

4.2 SHOVEL TESTING

One hundred and one shovel tests were excavated within the project area (Figure 15). Shovel tests were excavated on a systematic grid at 30-foot (ft.) intervals across the project area.

4.2.1 FRONT YARDS

Shovel testing in the front yards of the house lots revealed that they had undergone episodes of cutting and filling when the twentieth-century residences were constructed. Organized from west to east, STs 6.9, 4.8, 6.5, 6.1, and 6.11 presents a representative soil profile from the front yard of each house lot within the project area (Figure 16). The typical soil profiles encountered from shovel tests in the front yards consisted of a thin, modern A-horizon that either directly overlaid the subsoil, or overlaid one or more fill horizons that were directly above subsoil. In the case of ST 6.1, the modern A-horizon was absent and the profile consisted of a fill horizon above subsoil. The majority of artifacts recovered from the front yards of the house lots consisted of modern artifacts associated with the twentieth-century residences, such as window glass and machine-made bottle glass. Only STs 4.3, 4.4, 5.4, and 7.1 contained artifacts such as olive green bottle glass, cut nail fragments, and whiteware, that are associated with the mid nineteenth-century occupation of 44AX195.

4.2.2 REAR YARDS AND INTACT SURFACE

Shovel testing in the rear yards of the house lots resulted in the identification of an intact, buried surface that contained prehistoric and mid nineteenth-century artifacts. This surface was identified in shovel tests in the rear yards of 3517, 3535, 3541, and 3543 Duke Street (Figure 15). The surface was identified in 23 shovel tests, although only 16 shovel tests contained artifacts (Table 3).

Table 3. Shovel Tests Containing Buried Surface within Site 44AX195

Street Address	Shovel Test
3517 Duke St.	1.10[1], 2.11[1], 2.12[1], 2.13[1], 3.9[1], 3.10,
3525 Duke St.	
3535 Duke St.	8.2, 8.3[1], 8.4[1], 9.7[1],
3541 Duke St.	1.5[1], 1.6, 3.7[1], 8.5, 8.7[1], 9.2, 10.1[1], 10.2[1], 10.3[1], 11.1[1]
3543 Duke St.	8.8[1], 9.6, 11.3

[1] Shovel test in which buried surface contained artifacts.

ST 1.5, 2.13, and 8.8 present a representative soil profile from shovel tests that contained the buried surface (Figure 17). The soil profile encountered within these shovel tests consisted of a thin, modern A-horizon overlaying the buried surface, which overlays subsoil. Prehistoric artifacts were only recovered from STs 8.7 and 2.13, and consisted of two quartzite flakes, a quartz flake, and one fragment of quartz shatter. Historic artifacts recovered from the buried surface include whiteware, a clay pipe stem and bowl fragments, cut nails, and a .64 caliber round ball, along with amber, amethyst, aqua, olive

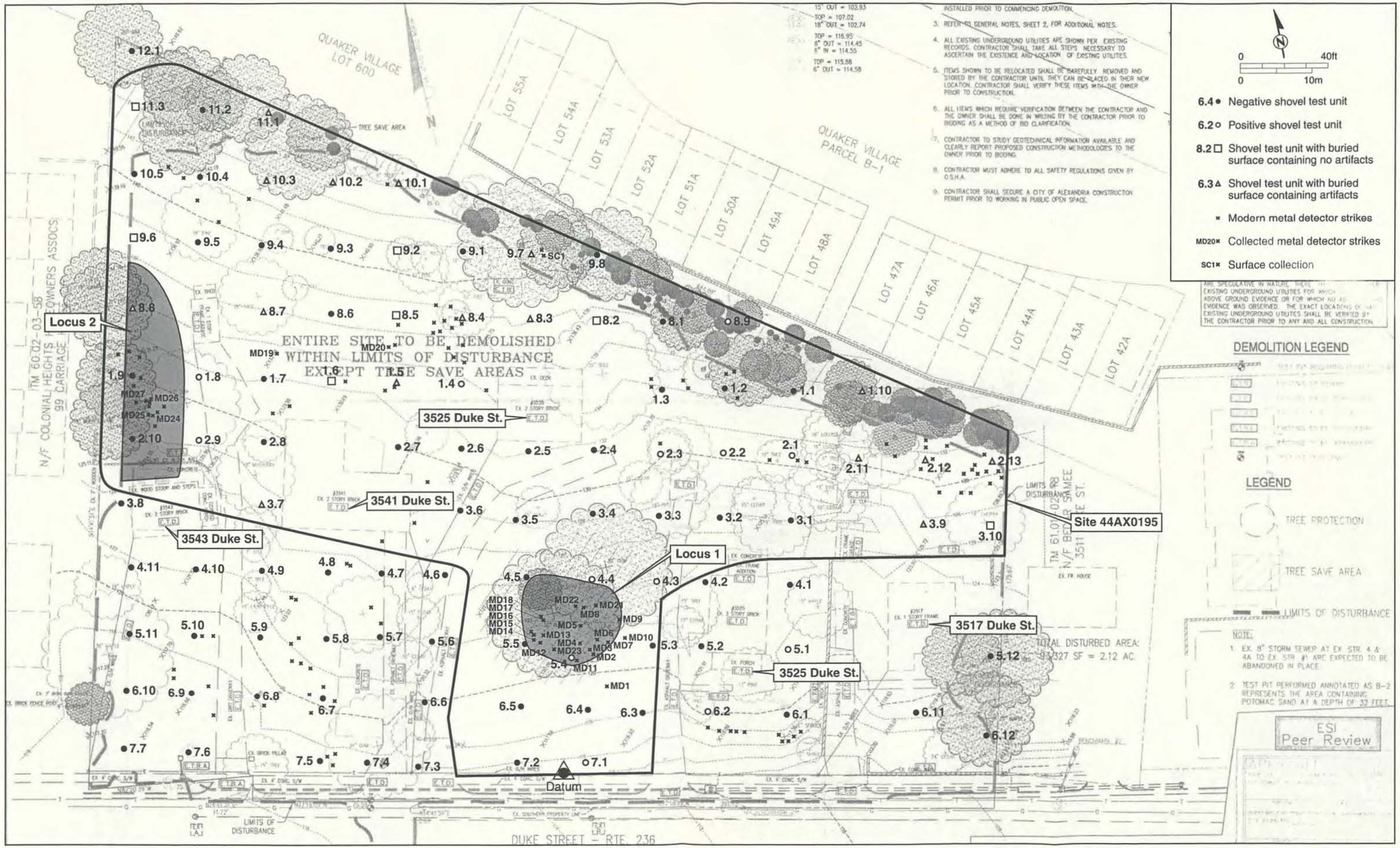
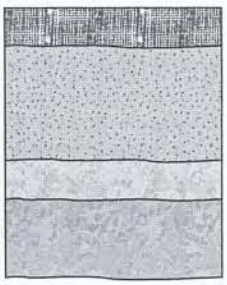


Figure 15. Phase 1 results.

ST6.9



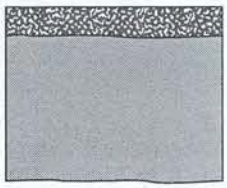
10YR 3/3 dark brown silt loam; abrupt transition (A-horizon)

10YR 5/3 brown with 10YR 6/8 brownish yellow sand; abrupt transition (fill)

5YR 4/6 yellowish red with 2.5Y 7/2 light gray silty clay loam; abrupt transition (fill)

10YR 5/6 yellowish red with 2.5Y 6/3 light yellowish brown silty clay loam with cobbles (B-horizon)

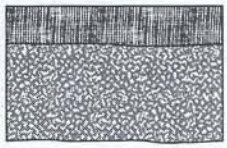
ST4.8



10YR 3/1 very dark gray silty clay loam; abrupt transition (A-horizon)

10YR 5/8 yellowish brown clay loam with 20% gravel (B-horizon)

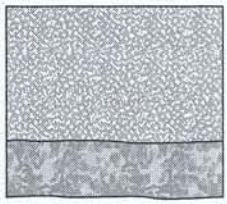
ST6.5



10YR 3/2 very dark grayish brown silt loam; abrupt transition (A-horizon)

7.5YR 5/6 strong brown silty clay loam (B-horizon)

ST6.1



10YR 5/6 yellowish brown silty clay loam; abrupt transition (fill)

7.5YR 5/6 strong brown with 5Y 6/2 light olive gray silty clay (B-horizon)

ST6.11

10YR 3/3 dark brown sandy loam; abrupt transition (A-horizon)

7.5YR 5/8 strong brown silt loam; abrupt transition (fill)

5Y 6/2 light olive gray with 7.5YR 5/6 strong brown silty clay (B-horizon)

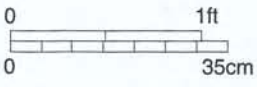


Figure 16. Representative soil profiles from the front yards of the house lots.

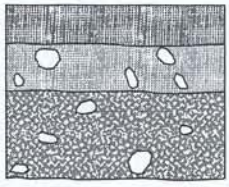
ST8.8

10YR 3/2 very dark grayish brown silt loam; abrupt transition (A-horizon)

10YR 4/4 dark yellowish brown silty clay loam; clear transition; 1.69 caliber round shot (Ab-horizon)

7.5YR 5/6 strong brown silty clay (B-horizon)

ST1.5

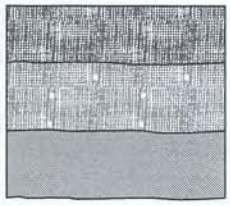


10YR 3/3 dark brown silt loam; abrupt transition (A-horizon)

10YR 4/3 brown silt loam with cobbles; clear transition; 1 cut nail fragment, 1 whiteware fragment, and 1 clay pipe stem fragment (Ab-horizon)

7.5YR 5/8 strong brown silty clay loam with cobbles (B-horizon)

ST2.13



10YR 3/3 dark brown silt loam; clear transition (A-horizon)

10YR 6/6 brownish yellow silt loam; clear transition; 1 quartz flake, 1 quartzite flake, 1 whiteware fragment, and 1 olive green bottle fragment (Ab-horizon)

10YR 5/8 yellowish brown clay loam (B-horizon)

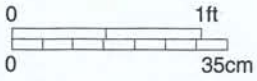


Figure 17. Representative soil profiles from shovel tests that contained the buried surface.

green, and clear bottle fragments. The location of the buried surface is sporadic and only fragments/scraps/portions are present/remain. The reason for the absence of the surface in some locations is fairly obvious, such as the rear yard of 3543 Duke Street, where the impact from the construction of a modern driveway has removed the surface. In other locations the absence of the buried surface is not so easily explained, such as the rear yard of 3525 Duke Street and in portions of the rear yard of 3541 Duke Street. In these instances it can only be postulated that some activity related to the construction of the twentieth-century residences is the cause. Organized from west to east, STs 9.5, 8.6, 9.1, 1.2, and 3.1 are representative soil profiles of shovel tests from the rear yards of the house lots in which the buried surface was absent (Figure 18). Generally, these shovel tests consisted of a thin, modern A-horizon directly overlaying subsoil. Shovel tests 1.2 and 3.1 profiles vary slightly and do not contain the typically dark brown, modern A-horizon but instead a dark yellowish brown, A-horizon. This difference may be attributed to cutting and filling that removed the original soils from the rear yard of 3525 Duke Street. Modern artifacts recovered from shovel tests in which the buried surface was absent include a modern, metal screw and fragments from a terra-cotta flower pot.

4.3 PHASE I METAL DETECTION

The metal detection of the entire project area resulted in the recovery of non-significant twentieth-century metal artifacts throughout the project area and the identification of Civil War period campsite within the project area. Artifacts associated with the Civil War were recovered from two loci (1 and 2), but it is likely the entire project area was used as a campsite based on shovel tests that identified a buried Ab-horizon (that is a former surface that has become buried beneath soils that are more modern) in the rear yards. In general, with the exception of a small portion of 3535 Duke St. the front yards have been landscaped and extensively disturbed.

The project area was surveyed using metal detectors in a systematic manner with transects spaced 5 ft. apart. Initially, the field team investigated all positive signals and made an inventory of all artifacts found. This strategy was changed when it became apparent that a large amount of modern metallic trash covered the project area. The non-significant twentieth-century metal artifacts are associated with the twentieth-century residences and included such items as modern screws, bolts, coins, pull-tabs, and a Cub Scout Neckerchief Slide. The location of non-significant twentieth-century metal artifacts was recorded, and then the artifacts were discarded.

Several of the houses had been re-roofed and this resulted in a halo of discarded roofing nails radiating out from the buildings. Further, recent lawn care appears to have been done by grass-cutters who enjoyed mowing aluminum cans. After a large number of targets were examined, the electronic signature trash targets emitted became identifiable and the metal-detectorists concentrated on signals interpreted as possibly non-modern trash or nails.

In general, when an area contains a large amount modern trash, metal detection is very time consuming and a large amount of effort is expended investigating metallic items of no interest, such as bits of wire, aluminum, and nails. In cases such as this, it is more effective to discriminate against ferrous items and target less common metals such as lead, brass, copper, silver, and gold because finding these items may provide a faster way to gain an understanding of the types of archeological deposits present. It should be noted that the success of this type of discrimination is dependent on the experience of the metal detectorists and the quality of the metal detectors.

The front yards were maintained in lawn and the metal detector survey is felt to have been adequate in terms of coverage. The metal detection survey of the rear yards was not as thorough as that of the front yards. The dense vegetation in the rear yards reduced the effectiveness of the detectors because the detectors were further from the ground surface. In one rear yard, the field team cleared the vegetation in an attempt to increase the potential of the metal detection. In other rear yard areas this was not practical, and the metal detection survey was not effective in precisely evaluating presence or absence of artifacts.

The metal detection identified two locations (Locus 1 and 2) that contained Civil War artifacts. Both loci were areas of maintained lawn; no Civil War artifacts were found where lawns were overgrown, the ground surface was covered with English Ivy, or there was thick underbrush. Based on the presence of the buried ground surface, the investigators concluded that there was a high potential for Civil War deposits in these areas. The absence of Civil War artifacts from these areas reflected the limitations of the metal detector survey in effectively checking densely vegetated areas.

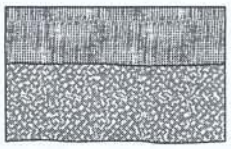
4.3.1 LOCUS 1

Locus 1 within Site 44AX195 is located in the front yard of 3535 Duke Street, situated at the base of two large gum trees and a cedar tree (Figures 15 and 19). The gum trees are approximately 60-80 years old and predate the construction of the twentieth-century residences. Table 4 presents the artifacts recovered from Locus 1 by metal detection.

Table 4. Artifacts Recovered from Locus 1 by Metal Detection within 44AX195

Provenience	Artifact
MD 1	Unidentified melted lead object.
MD 2	Carved lead sinker or weight.
MD 3	Military uniform button; eagle with plain shield.
MD 4	.64 caliber round shot.
MD 5	.64 caliber round shot.
MD 6	Cut or wrought nail, olive green bottle glass.
MD 7	Unidentified melted lead object.
MD 8	Two unidentified melted lead objects.

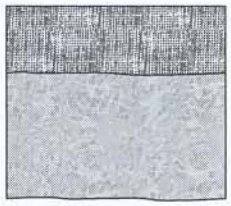
ST9.5



10YR 3/3 dark brown silt loam; abrupt transition (A-horizon)

7.5YR 5/8 strong brown silty clay loam with cobbles (B-horizon)

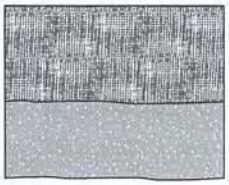
ST8.6



10YR 3/3 dark brown silt loam; abrupt transition (A-horizon)

5Y 6/2 light olive gray with 7.5YR 5/8 strong brown silty clay (B-horizon)

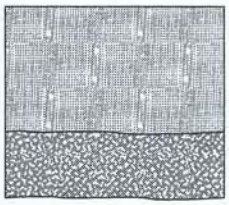
ST9.1



10YR 3/3 dark brown silt loam; clear transition (A-horizon)

10YR 5/6 yellowish brown sandy clay (B-horizon)

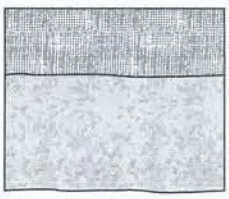
ST1.2



10YR 4/4 dark yellowish brown silt loam; abrupt transition (A-horizon)

7.5YR 5/8 strong brown silty clay loam (B-horizon)

ST3.1



10YR 4/4 dark yellowish brown silt loam; abrupt transition (A-horizon)

2.5Y 7/2 light gray with 7.5YR 5/8 strong brown silty clay (B-horizon)

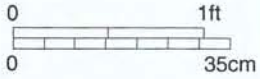


Figure 18. Representative soil profiles from the rear yards of the house lots.

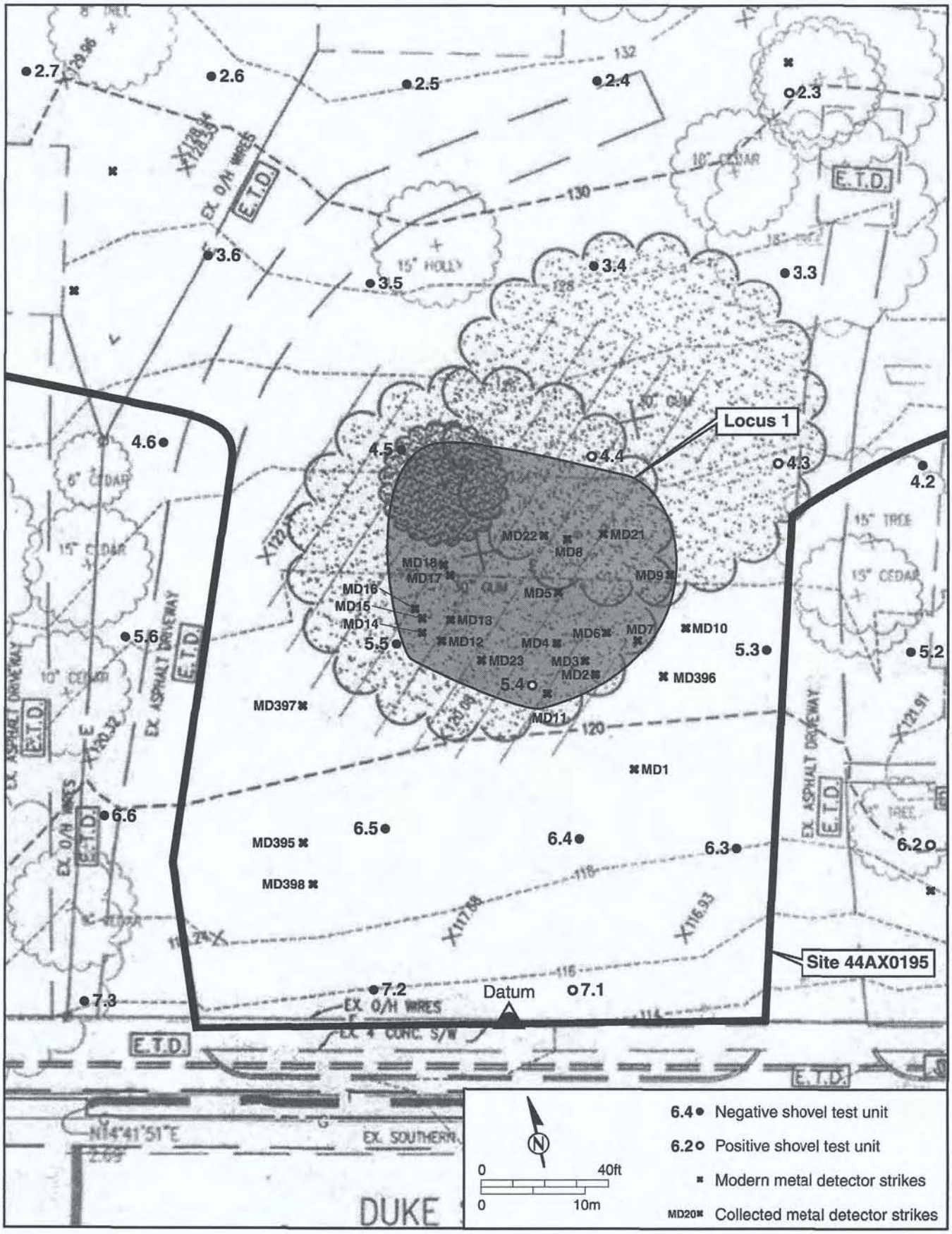


Figure 19. Detail of Locus 1.

Table 4. (Cont'd) Artifacts Recovered from Locus 1 by Metal Detection within 44AX195

Provenience	Artifact
MD 9	Door handle or latch.
MD 10	Thin lead band.
MD 11	Unidentified iron/steel object.
MD 12	.64 caliber round ball, olive green bottle glass.
MD 13	Brass tack, cut nail fragment.
MD 14	Military uniform button; backing only.
MD 15	.64 caliber round ball.
MD 16	Brass rivet.
MD 17	Smashed and/or melted lead projectile.
MD 18	Unidentified melted lead object, brass rivet.
MD 21	.64 caliber round shot.
MD 22	Brass knapsack hook, olive green bottle glass.

Based on the shovel testing within Locus 1 the buried surface was not present in this area. When excavating the metal detector hits within Locus 1, we observed that the artifacts were mainly coming from within or at the interface of the subsoil. This suggests that the area may have been impacted when the twentieth-century residences were constructed but in order to spare the older gum trees only the A-horizon (i.e., the buried surface) was removed. The artifacts recovered from Locus 1 were therefore the artifacts that were more deeply deposited.

4.3.2 LOCUS 2

Locus 2 within 44AX195 is located in the rear yard of 3543 Duke Street directly west of a cobbled driveway and along the western boundary of the project area (Figure 15). Like Locus 1, Locus 2 is also situated at the base of approximately 60 - 80-year-old trees that predate the twentieth-century residences. Table 5 presents the artifacts recovered from Locus 2 by metal detection.

Based on the shovel testing within Locus 2, the buried surface was only present in the northern portion of the locus where a .64 caliber round ball was recovered from ST 8.8 (Figure 15). The buried surface appears to continue, although sporadically, to the north and northeast, as well as to the east, on the opposite side of the driveway.

Table 5. Artifacts Recovered from Locus 2 by Metal Detection within 44AX195

Provenience	Artifact
MD 24	.577/.58 caliber Minié Ball, military uniform button; backing only, aqua free-blown bottle fragment
MD 25	Bayonet scabbard tip
MD 26	.577/.58 Minié Ball; smashed

Provenience	Artifact
MD 27	.577/.58 caliber Minié Ball
ST 8.8	.64 caliber round ball

Metal detecting across the driveway from Locus 2 resulted in the recovery of only one metal artifact that dates to the mid nineteenth-century occupation (Figure 15). MD 19 contained a wrought metal spike. MD 20 contained a non-significant twentieth-century metal artifact that was not retained, but an olive green bottle glass fragment was recovered while excavating the strike and was collected.

4.4 SUMMARY

Phase I investigations identified one archeological site (44AX195) within the project area. This site is a Federal Army camp dating to the Civil War period. The modern construction of five dwellings within the project area and their associated outbuildings, driveways, and landscaping have destroyed the Civil War occupation in the majority of the project area. Artifacts were concentrated in two loci, but we determined that the entire rear yards had potential for preserved deposits. In the front yards, a small cluster (Locus 1) of Civil War artifacts was identified. Current construction plans place all of Locus 1 within a tree protection area. Consequently, the locus will not be impacted during construction and no further investigation was undertaken within the locus.

The rear yards, including Locus 2, contain a remnant Ab-horizon. The recovery of Civil War artifacts from the buried horizon within Locus 2 and the recovery of non-military nineteenth-century artifacts from other proveniences containing the buried horizon indicate that the Civil War deposits in this area have retained stratigraphic integrity. Additional investigations were recommended at Locus 2 and in the rear yards where the Ab-horizon has survived. These supplemental archeological investigations are reported in the following chapter.

5.0 SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATIONS

5.1 SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATIONS

The Phase I investigation recommended that additional archeological investigations be undertaken at the site. At several locations no further investigations were undertaken because the areas were set aside as tree-protection areas. A large area along the project area north boundary (the rear yards) is tree-protection area and consequently was not investigated. Locus 1, located in the front yard of 3535 Duke Street, is entirely within a tree-protection area so mechanical stripping was not undertaken within it, but stripping was planned in the vicinity of this locus. As fieldwork progressed, the efforts scheduled in the vicinity of Locus 1 was shifted to other areas of the site. Approximately 18,000 sq. ft. in the back yards was stripped and investigated (Figure 20).

Mechanical stripping has been found to be one of the most effective ways to identify and assess Civil War military sites (Corle and Balicki 2005; Espenshade et al. 2002:44). Civil War campsites contain attributes that make traditional testing procedures ineffective. Civil War campsites were often policed, an activity that involved a daily inspection of the camp environs and the removal of trash. Policing results in a majority of the artifacts associated with the camp being re-deposited in discreet locations (Balicki 2000:136-137). Since artifacts from the camp were collected and placed in concentrated locations, shovel testing, which relies upon an adequate distribution of artifacts across an area, will often not identify a Civil War campsite. Mechanical stripping can expose areas where trash was deposited and where features are present.

The amount of modern non-significant metallic objects and the ground cover also were factors in the decision to strip large areas of the site. Removal of the dense vegetation dramatically improved the effectiveness of the metal detection. Stripping off of the modern A-horizon removed the majority of modern trash. Although an unknown amount of Civil War material was undoubtedly also removed, the investigators considered the loss of this information an expectable trade off because once the modern refuse was removed it was possible to determine the characteristics of the Civil War site and more accurately obtain a sample of the artifacts from the site.

Mechanical stripping used a backhoe equipped with a 4 ft. wide smooth-edged bucket. The goal of the stripping was two-fold. First, the removal of overlying vegetation and the top 0.2 to 0.3 ft. of soil increased the effective depth of the metal detectors and removed the modern metallic trash that masked the metallic Civil War artifacts. Secondly, the stripped surface could be examined for the presence of buried features.

The depth of the mechanical stripping varied among the yards and locations within the yards. In several places only a thin modern A horizon overlay subsoil. In other locations sheet wash and erosion resulted in over .5 ft. of modern A horizon.

The majority of the locations where the Ab horizon was identified are within tree protection areas, specifically on the north side of 3543 Duke Street. Consequently, mechanical stripping concentrated on exposing the interface between subsoil and the overlying deposits. With few exceptions no buried surface was present or the deposits overlaying subsoil were so thin that they could not be separated. The buried surface identified at the rear of 3517 Duke Street reflects modern redeposition of material excavated from around the house.

The Ab horizon was identified in the vicinity of STs 8.4 and 8.3. The horizon contained a mix of modern and Civil War artifacts. A further careful stripping in this area revealed preserved Civil War features.

Once an area was stripped, the exposed ground surface was intensively metal detected. The metal detection was not systematic in the sense that each area was covered in pre-determined sweeps spaced at pre-determined intervals. Rather, the metal detection was intensive in terms of coverage both in area and in the amount of times places were checked. Metal detectors are unreliable machines that easily miss objects. Environmental conditions such as soil moisture, temperature, humidity, soil composition, and how objects lay in the soil cause variations that affect performance of metal detectors. Further, operator error must also be considered, because success with a metal detector is an acquired skill. Consequently, repeated passes over an area, at different times, by different detectorists, and with different machines will greatly increase the rate of recovery and accuracy of the metal detector survey. This was the strategy employed at the project area. The stripped areas were repeatedly rechecked until there was a significant decrease in the amount of materials recovered. It should also be noted that large signals and ferrous signals tend to mask smaller non-ferrous signals and that once the larger items are removed the other signals will register with the metal detector and the detectorists ears.

Using these metal detection methods, 644 items were found in 398 metal detector hits during the metal detector survey (Figures 21 and 22). Each item was mapped on the site plan map. The distribution of these artifacts reflects both camp activities and post-Civil War site formation processes.

Stripping resulted in the identification of one modern planting feature (Feature 1), seven Civil War era hearths (2-4 and 6-9), and a Crimean Oven (Feature 5). Five of the hearths (Featues 3, 4, 6, 7, and 9) are located along the boundary between 3535 and 3541 Duke St. The other hearths were identified in 3541 Duke St. (Feature 2) and 3543 Duke St. (Feature 8). The Crimean Oven (Feature 5) was found in the rear yard of 3517 Duke St.

5.2 Site Formation Processes

The construction of the twentieth-century residences, outbuildings, and associated landscaping affected the Civil War deposits. In general, it does not appear that the landform on which the project area is situated was plowed prior to or after the Civil War.

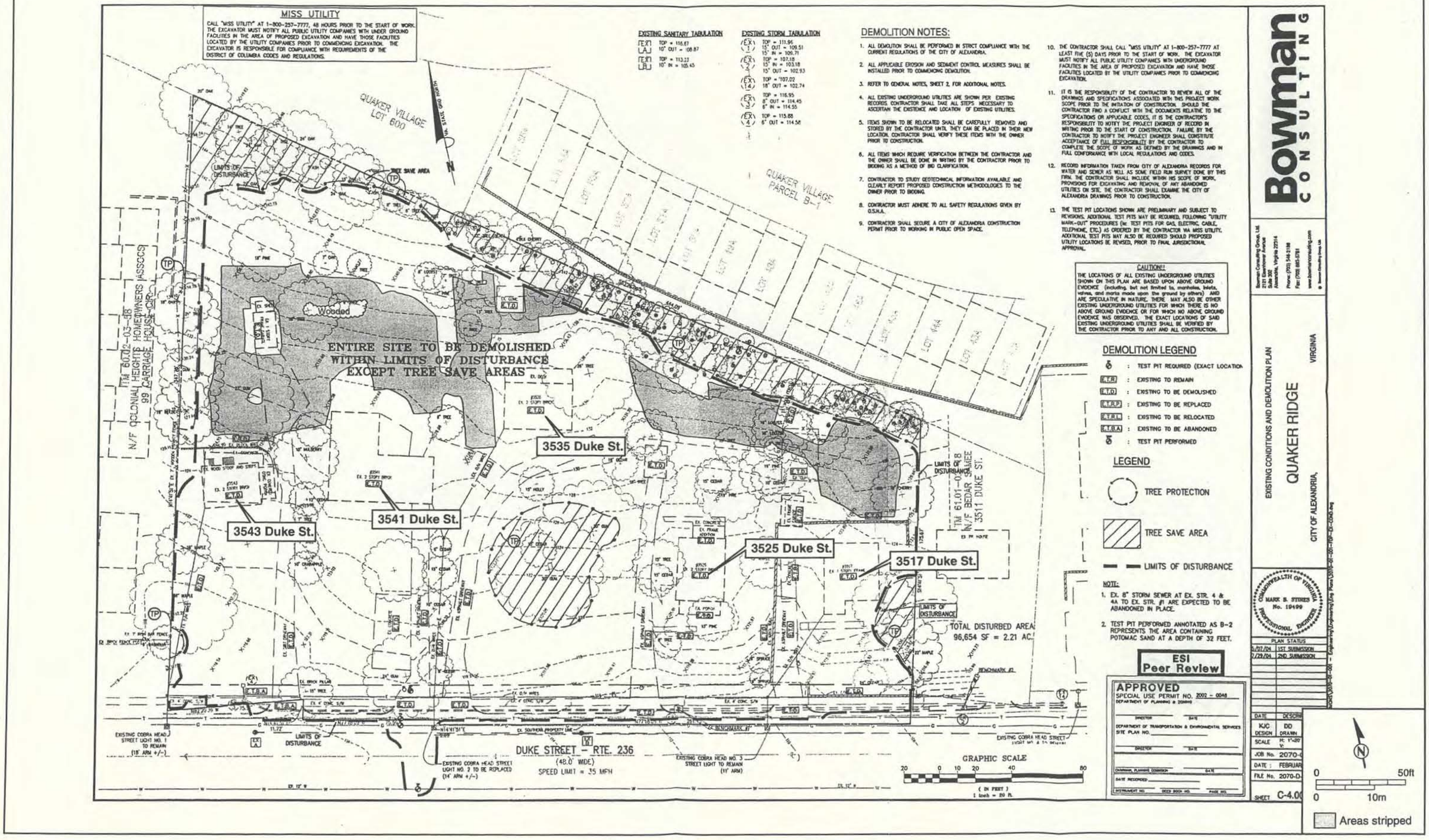


Figure 20. Plan map showing locations of stripped areas

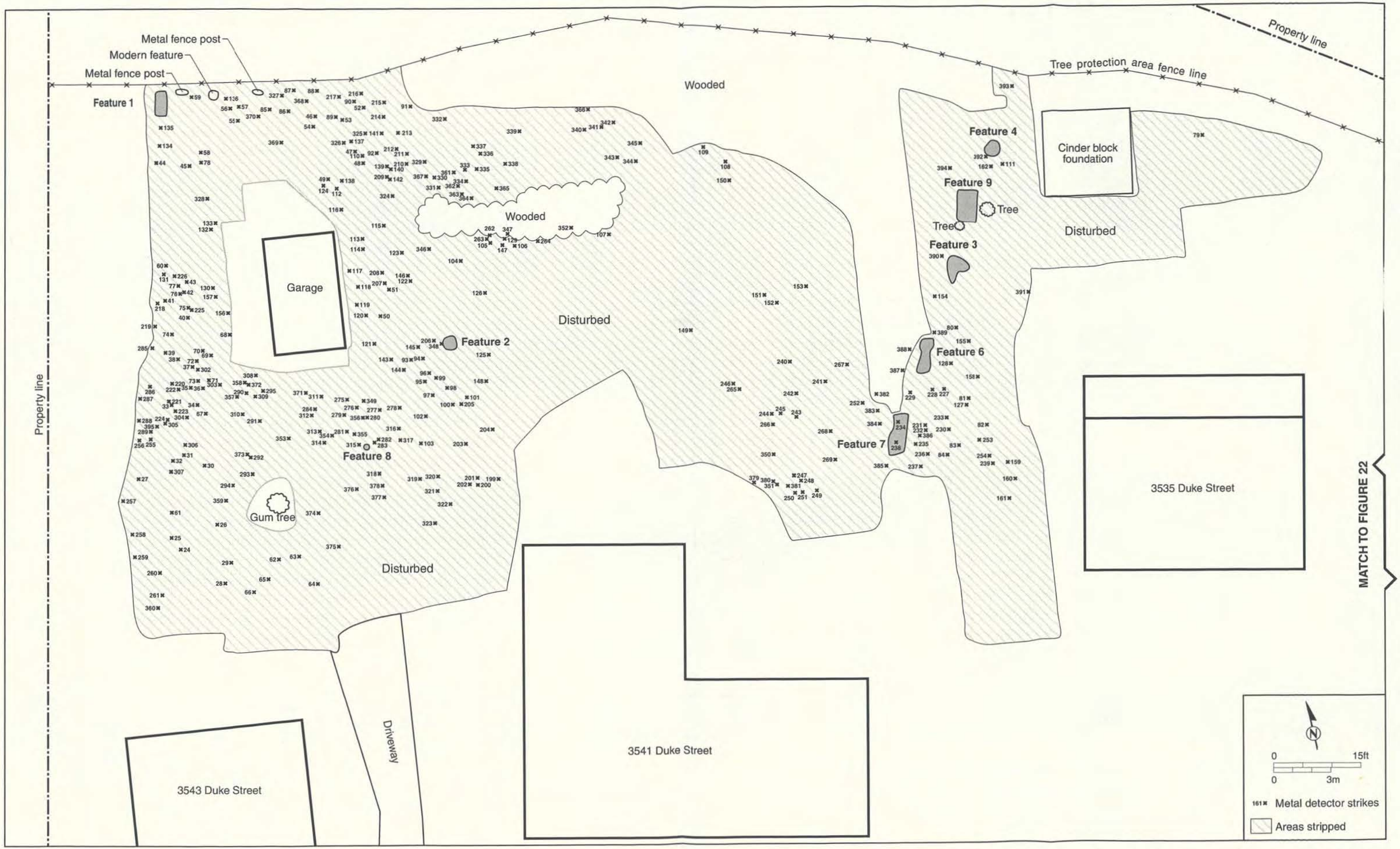


Figure 21. Plan map showing locations of metal detector strikes, mechanical stripping, and features.

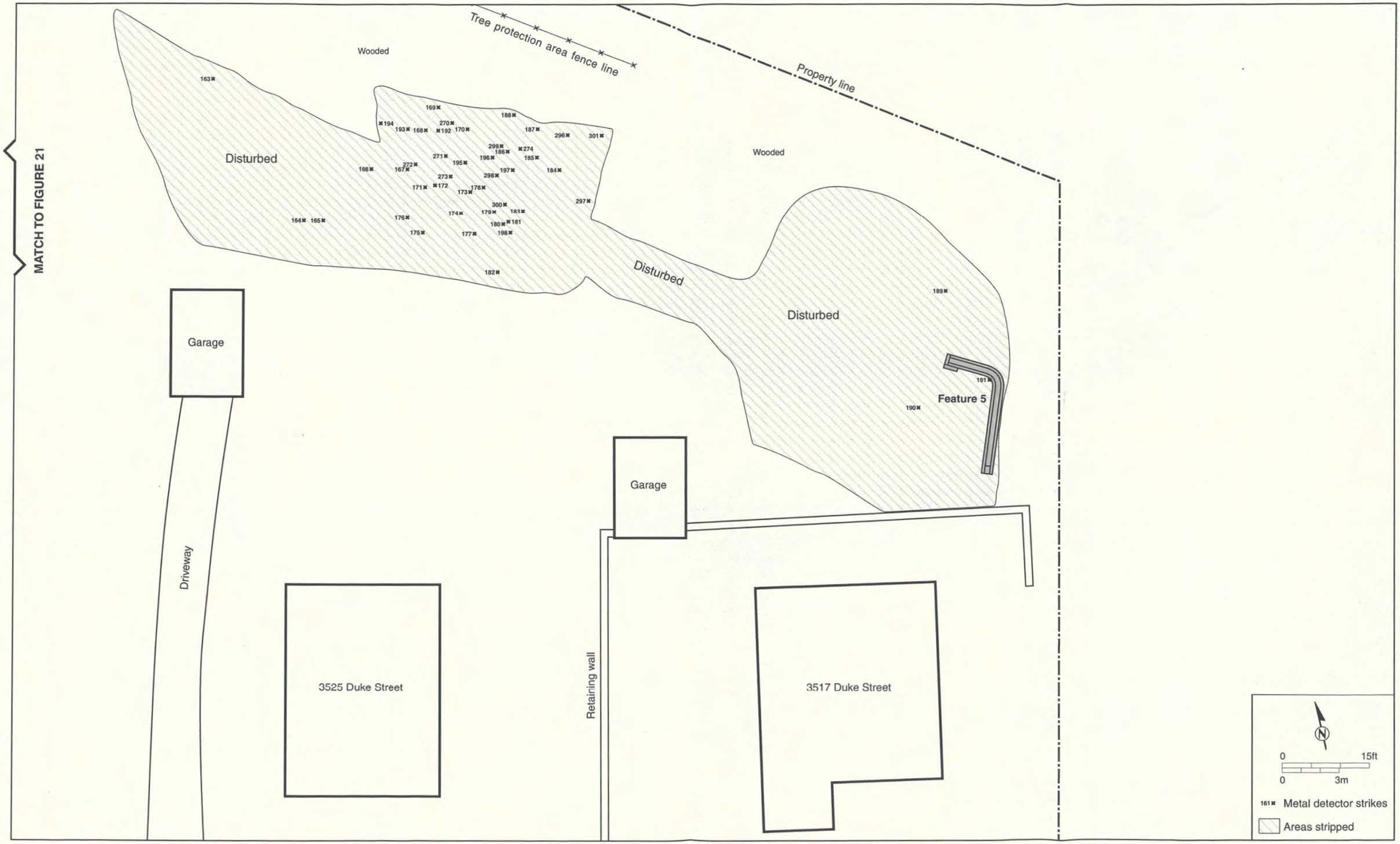


Figure 22. Plan map showing locations of metal detector strikes, mechanical stripping, and features.

Phase I investigations demonstrated that the majority of the front yards was disturbed by grading and filling associated with landscaping and construction. The exception is Locus 1, the front yard of 3535 Duke Street, which retains integrity in the area surrounding the trees. The rear yards of the five properties were subjected to differing levels of disturbance, which had affects on the archeological assemblage (Figures 21 and 22).

The Crimean Oven is located in the rear of 3517 Duke Street (Figure 22) Here the rear yard is higher than the house and a retaining wall separates the rear yard from the house. During construction earth was excavated from the house location and re-deposited in the rear yard. This resulted in the creation of a buried modern surface. This buried surface was identified during the Phase I. No surface was found in association with the Crimean Oven. It is not clear why this is the case. It is possible that landscaping associated with the construction of the oven included grading and preparation of the adjacent ground surface. If this were the case the topsoil may have been removed during construction, possibly to create a clean floor that could have been more easily maintained and policed. However, the most plausible explanation is that is that the disturbance occurred after the oven was abandoned because the top of the feature was not intact. It is likely that the area was graded after the Crimean Oven was abandoned, but it is not clear why this activity would have occurred, as the location does not appear to have been reoccupied until the twentieth century. Additional disturbance to the rear of this property was caused by the construction of sheds and animal pens along the west property line.

Disturbance to the Civil War deposits in 3525 Duke Street was caused by landscaping along the west half of the rear yard, and by use of the rear yard as a location for refuse incineration. Landscaping disturbs the northwest portion of the rear yard, behind the garage. The natural soil sequence in this location is truncated and intact soils were observed in only a few remnant locations. It is possible that this area of disturbed ground is associated with the large area of disturbance at the rear of 3535 Duke Street.

The portion of the rear yard of 3525 northeast of the garage contained an intact soil profile. However, the area was receiving artifacts during the Civil War and, again, in the twentieth century when this location was used for the incineration of trash and the disposal of ashes and refuse. The Civil War occupation has survived but it is mixed with the twentieth-century occupation.

The rear yard of 3535 Duke Street has been extensively disturbed. An intact stratigraphic sequence was encountered only between the house and the west property line. Off the back of the house and along its east side, the ground surface has been disturbed by grading associated with house construction. The ground surface pre-dating house construction has not survived in this area.

Mechanical stripping in the back yard of 3541 Duke Street removed a thick overgrown lawn and an area covered in thick underbrush. A possible buried Ab horizon was encountered in this yard during the Phase I, but it was not identified during the

supplemental investigations. The soil sequence was examined during the mechanical stripping and it was determined that the rear yard was disturbed. The interface between the modern A horizon and the subsoil was abrupt resembling a cut and fill sequence opposed to a natural developing soil column. The disturbed area roughly corresponds to the portion of the rear yard maintained as lawn. Metal detection encountered only a sparse scatter of artifacts in this rear yard. The area within 10-to-15-ft. of the house was disturbed by landscaping associated with house construction.

The rear yard of 3543 Duke St. contains a gravel driveway, garage, and open space. The construction of the garage did not disturb the surrounding yard area. Further, the driveway in the vicinity of the garage was laid over the ground surface. To the east of the house use of the driveway resulted in erosion and the disturbance to the natural ground surface. Disturbance associated with the construction of 3543 Duke St. extends approximately 20 ft. into the rear yard. Metal detection encountered a dense scatter of artifacts in this rear yard. The artifact scatter continues into the tree protection areas to the north and west.

In summary, the Civil War deposits were disturbed in several places by construction of the residences, associated outbuildings, and by landscaping. Where the Civil War deposits have survived they have retained integrity and the soil sequence does not appear to have been plowed either before or after the war.

5.3 FEATURES

Nine features were identified during the stripping (Figures 21 and 22). Seven of the features are hearths that date to the Civil War occupation, one is a remnant of a Crimean Oven, and one is a modern planting feature.

The modern feature is located on the northwest edge of the site stripped area in the rear yard of 3543 Duke St. Civil War artifacts were found in vicinity of the feature. Upon excavation it was determined that this approximately 2-by-4-ft. and 1.5-ft. deep hole was a modern planting feature that contained modern nails and glass.

Two small hearths (Features 2 and 8) are located near the property boundary of 3541 and 3543 Duke Street (Figure 21). Feature 2 is an approximately 2-ft.-diameter shallow hearth filled with sandstone cobbles (Figure 23). The heat from the fire thermally altered the surrounding subsoil to a distance of about 0.5 ft. from the hearth. The hearth was only 0.4-ft. deep and was excavated into subsoil. The matrix within the hearth contained ash, charcoal, bone, bottle glass, and a smoking-pipe bowl fragment containing tobacco residue. Feature 2 may represent a small hearth used exclusively for heating or direct heat cooking and boiling. The sandstone cobbles are not burned. Rather, it appears that after the hearth was used, the cobbles were placed in the hearth. It is likely that this activity reflects policing of the camp by the soldiers. It should be noted that Feature 2 is located

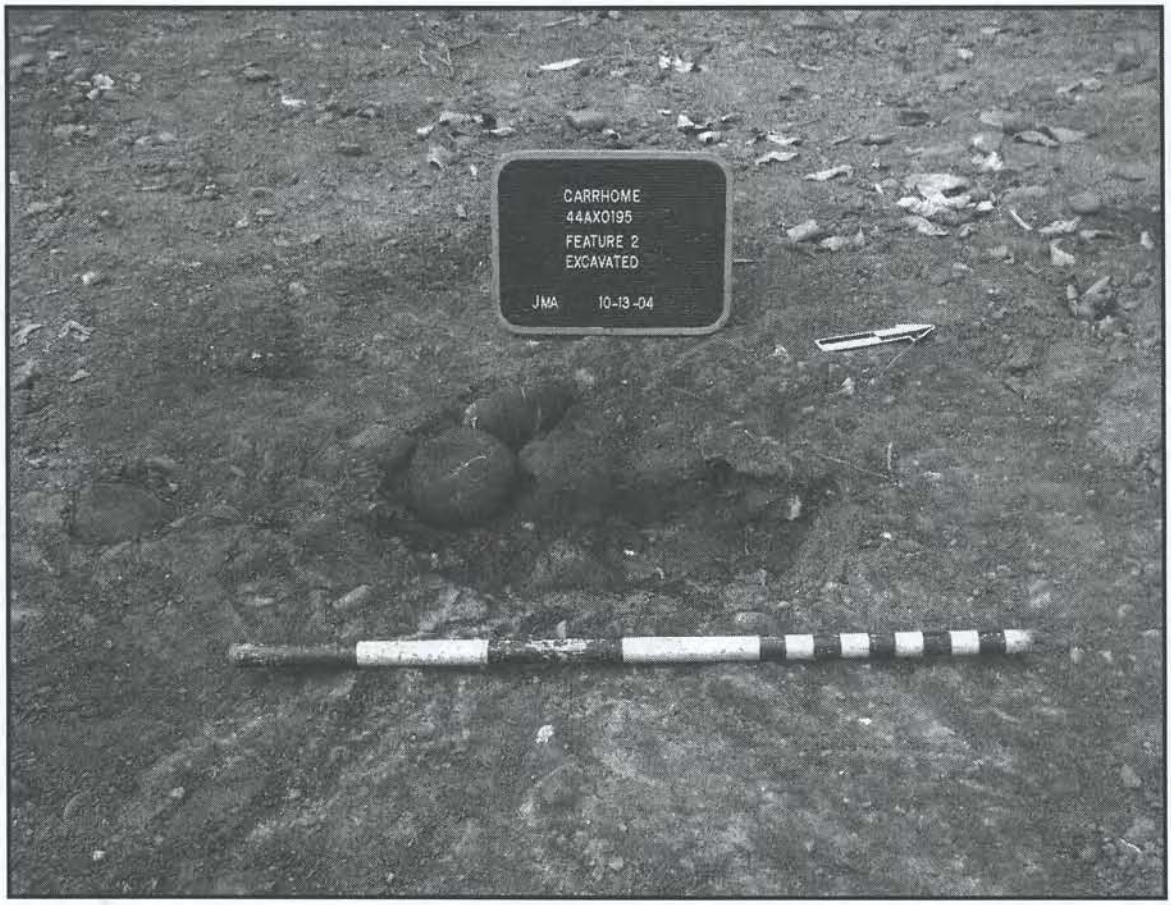


Figure 23. Feature 2, hearth, facing west.

approximately 85 ft. west of the row of hearths and along the lot lines for 3543 and 3541 Duke Street.

Feature 8 is similar to Feature 2, but it has been disturbed by use of its location as a driveway for the garage at the rear of 3543 Duke St. (Figure 21). The surviving remnant was a shallow cobble and charcoal filled depression. A large number of Civil War artifacts were recovered in the vicinity of this feature including melted lead.

Five hearths (Features 3, 4, 6, 7, and 9) were identified along the lot line between 3541 and 3535 (Figure 21). The line of hearths extends for approximately 60 ft. and runs northeast to southwest following the gentle contour of the hill slope. The hearths were used as cooking fires, and were most likely represent the camp kitchen area, but this is not clear. The distance between the features is approximately 10-15 ft. (on center).

The features displayed various levels of preservation with features 6, 7, and 9 being the most intact. All of the hearths were contained in shallow holes. Past landscaping and construction activities truncated the top portions of features 3 and 4. It is likely that the line of hearths continues to the northeast and undiscovered hearths may survive between Feature 4 and the north property boundary. The property north of the project area has modern townhomes on it and if the line of hearths extended onto that property, they were destroyed when the modern residences were constructed. The line of hearths may have origionally continued to the southwest also, but the location south of Feature 9 was disturbed by construction activities and landscaping associated with the residence at 3541 Duke St.

The row of hearths included two types of features. One type (Features 6 and 7) contains a shallow fire pit where wood was burned and an adjacent location where coals were raked and cooking took place. The second type of hearth (Features 3, 4, and 9) consisted of two adjacent fire pits.

Features 6 and 7 were constructed in a similar fashion. These features are complex hearths that contain locations were specific types of cooking occurred. Although simply constructed these features show that the soldiers were undertaking diversified cooking techniques.

Feature 7 consisted of a 2-ft. diameter fire pit on the southern side (Figure 24). The fire pit was filled with a matrix of charcoal and calcined bone and contained a well-defined fire- reddened thermal signature. Extending northward from the fire pit was a 4-ft.-long-by-1-ft.-wide and 0.5-ft.-deep linear depression. The subsoil adjacent to the fire pit was thermally altered. This thermal alteration extended approximately 2 ft. from the fire pit along the linear depression. Although the north side of the feature contained a large amount of charcoal, the thermal alteration to the subsoil was less that around the fire pit. Artifacts recovered from Feature 7 included bottle glass, melted lead, and calcined bone.

Feature 6 was approximately 15 ft. northeast of Feature 7 (Figure 21). The feature was 5.5 ft. long a 2.5 ft wide and 0.4 ft. deep. The feature shares similarities to Feature 7. The south half of the feature consisted of a 2.5-ft.-by-3.5-ft. fire pit that was 0.4 ft. deep. The pit was filled with a matrix consisting primarily of charcoal with fragments of calcined bone. The base of the feature contained a thermal signature consisting of fire-reddened earth. The trough portion of the feature in plan consisted of a 2-by-2-ft. and 0.35-ft.-deep circular area located adjacent to (north) of the fire pit. Bisection revealed that the trough was covered with a thin layer of feature matrix spreading out from the trough. The trough was filled with a matrix consisting of charcoal and calcined bone flecking.

Unexcavated, features 6 and 7 were approximately 3-by-7 ft. Each consists of a shallow depression in which cooking fires were made. On the southern side of each feature was a shallow pit where wood was burned; the subsoil around this pit is thermally altered. Extending off the north edge was a narrow linear depression that led to a concentration of charcoal at the side of the feature opposite the fire pit. The linear depression is interpreted as a location where coals were raked and gathered for cooking. The use of a combination of direct fire and coals allowed for diversified cooking methods. The fire in the fire pit would have been kept burning and fueled with wood. The fire could be used where a high heat was required, such as boiling, broiling, and frying. For other types of cooking, such as baking and roasting, coals were raked from the fire into the linear depression. Cast Iron cooking vessels fragments were found including cooking skillet and spider-pan fragments. These vessel types were commonly used for cooking over coals.

Features 3, 4, and 9 are located northeast of features 6 and 7 (Figure 21). In general, these features also are examples of hearths where diversified cooking techniques were undertaken. These hearth features differ from Features 6 and 7 as, instead of a pit and linear depression, they consist of a fire pit and an adjacent shallow depression containing a concentration of charcoal. The fire pit was used for direct fuel burning and cooking, and the concentration of charcoal used for other cooking activities. The different functions of the adjacent locations within the hearths can be inferred from examination of the thermal signatures left in the subsoil. Within each feature each of the pits on the south side has a halo of thermally altered soil surrounding it, but the thermally altered soil associated with the pits on north sides were less pronounced. This suggests different functions for these areas of each hearth. The pits within the hearths are not evidence for sequential hearths because the thermal alteration of the soil surrounding the pits is so different.

Feature 3 is located approximately 15 ft. northeast of Feature 6 and 13 ft. south of Feature 9 (Figure 21). The feature was roughly circular and measured 3.5-by-4.5 ft. and was 0.35 ft. deep (Figure 25). It consisted of the truncated remains of a fire pit and to the north a circular ash and charcoal deposit in a shallow depression. The fire pit was approximately 2 ft. in diameter and the subsoil around it was thermally altered. North of the fire pit was a circular 2.5-by-3-ft. concentration of charcoal in a shallow depression. Artifacts recovered from the feature included calcined bone, cut-nails, bottle glass, and melted lead.

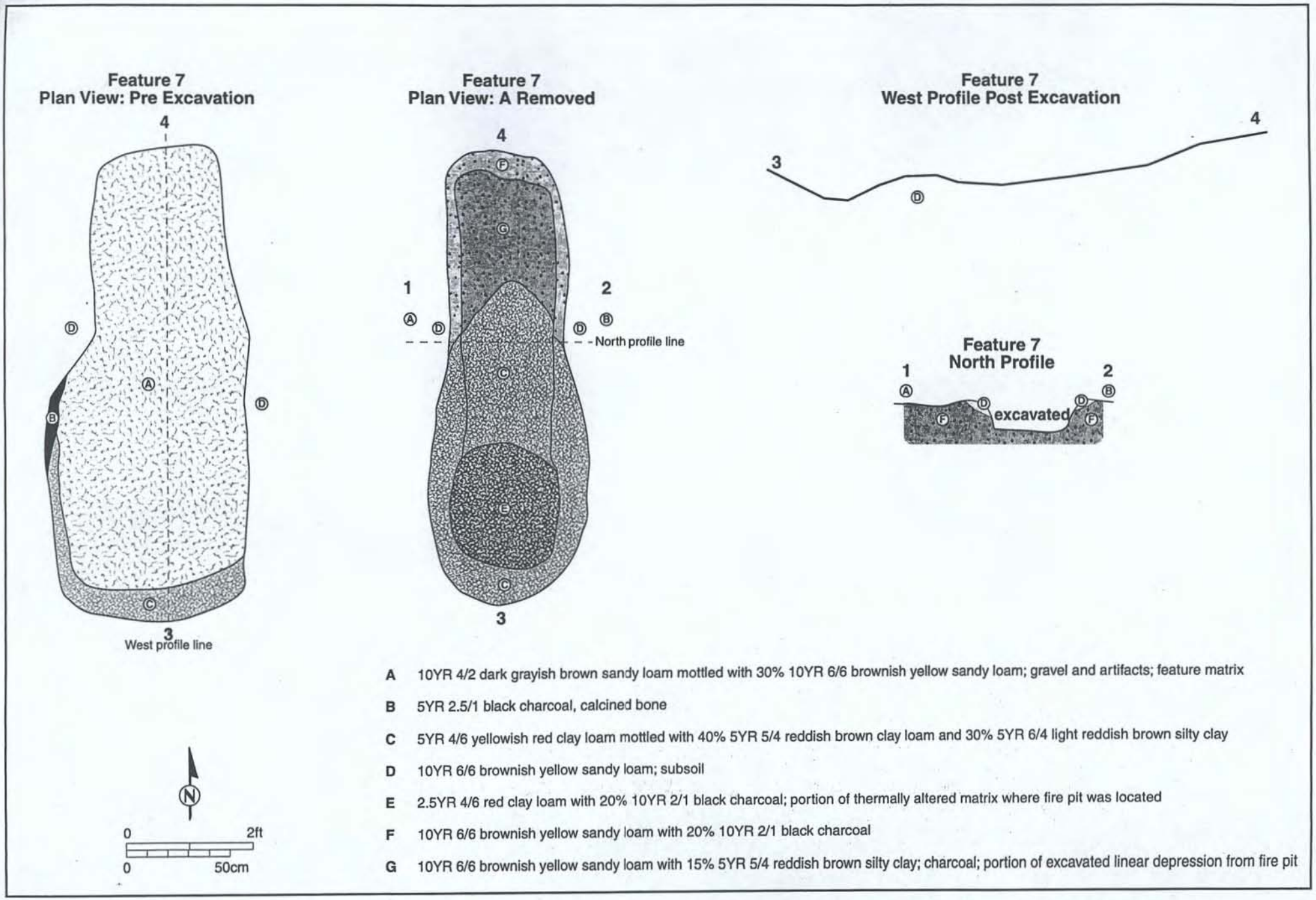


Figure 24. Plan views and profiles of Feature 7 showing pre-excavation plan view, west profile after bisection, post-excavation plan view, and north profile.

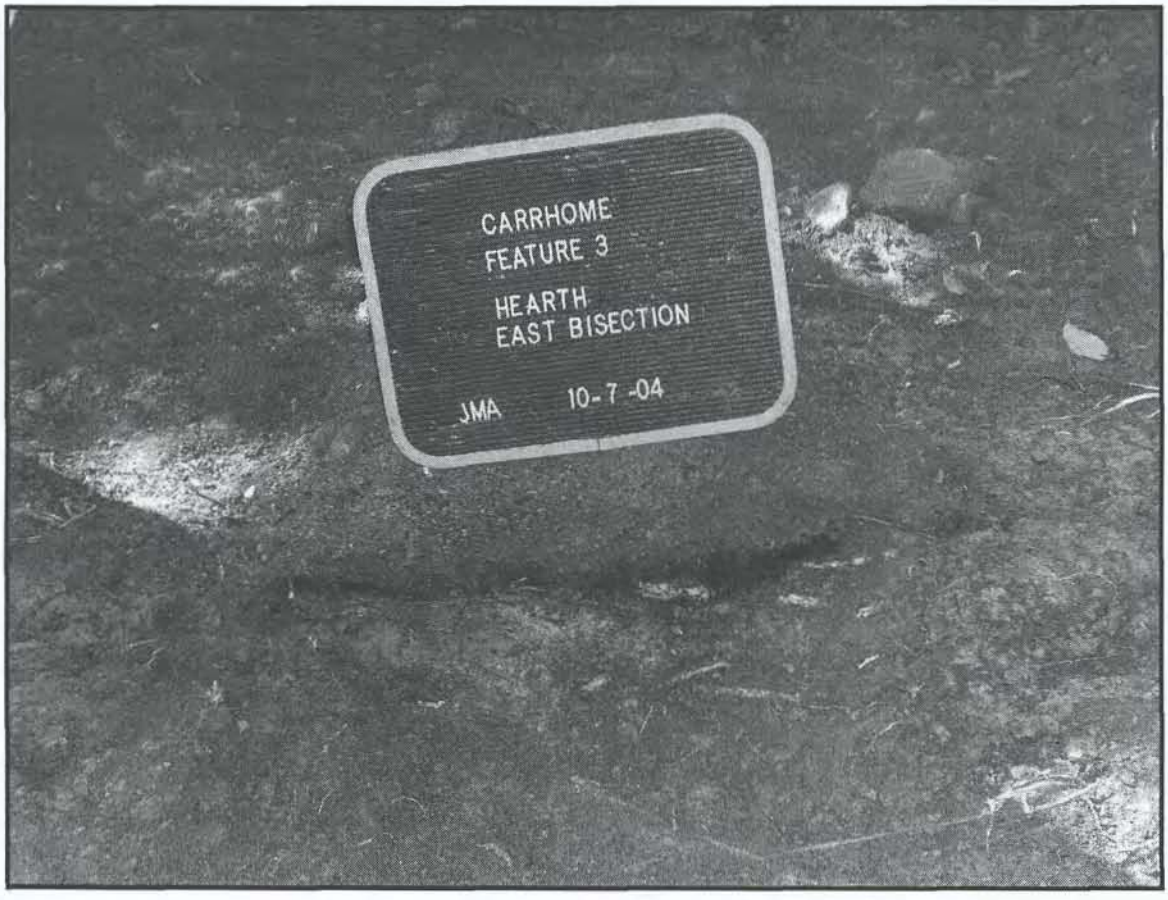


Figure 25. Feature 3, shallow hearth in profile, facing south.

Feature 9 is approximately 13 ft. northeast of Feature 3 and 10 ft. southwest of Feature 4 (Figure 21). In plan, Feature 9 was 2.5 by 3.8 ft.; upon excavation two pits were identified within the hearth. A fire pit was located on south side and was defined by a 2 ft. in diameter area of fire-reddened earth surrounding a 0.35-ft. deep depression. North of the fire pit the feature consisted of an approximately 2-ft.-diameter shallow depression filled with silty clay containing charcoal and ash. Artifacts recovered from Feature 9 included calcined bone, kitchen ceramics, and ceramic tobacco pipe fragments.

Feature 4 was approximately 10 ft. northeast of Feature 9 (Figure 21). Feature 4 consisted of the truncated remains of a fire hearth. The feature was 2.5 ft. in diameter and 0.2 ft. deep. The feature matrix was composed primarily of charcoal and ash. The feature has been disturbed by landscaping and construction activities associated with a foundation located approximately 12 ft. east of the feature. Artifacts recovered from the feature consisted of calcined bone.

In summary, three types of hearth features were encountered at 44AX195. Features 2 and 8 represent small fires built in shallow pits. These hearths were used for heating or with cooking methods that required direct heat. Features 3, 4, and 9 are cooking hearths where separate activities that can be associated with different cooking methods can be identified within the hearths. These features contain shallow fire pits and associated but separate concentrations of charcoal. The third type of hearth (Features 6 and 7) were hearths in which a variety of cooking methods could be used but their form was more complex than Features 3, 4, and 9. Features 6 and 7 contained fire pits with an adjacent linear depression which held coals. Evidence for diversified cooking techniques is an indication that the soldiers had variety, at least in terms of preparation, in their meals. The soldiers may have used boiling, broiling, frying, baking, and roasting techniques in the preparation of their meals.

5.4 Crimean Oven

The remains of a Crimean Oven (Feature 5) were encountered at the rear of 3517 Duke Street(Figure 22). A Crimean Oven is a radiant heat system used to heat tents during the Civil War. The radiant system was simple: a heating source was located on one side of the tent; the flue for the heating source was buried just below ground level, and a tent placed over it. As the hot air flowed through the flue, the adjacent ground was heated. Variations of this type of radiant heat system sometimes referred to as "California stoves" were used for hospitals and even within soldier's winter huts (Whitehorne et al. 2000:151 and 161).

The feature is similar to a Crimean Oven encountered at 44AX193 (Jirikowic et al. 2004). Site 44AX193 is located approximately 600 ft. north of 44AX195. The Crimean Oven at 44AX193 consisted of a 50-ft.-long brick-lined trench (flue) attached to a 4-by-11-ft. brick box (Jirikowic et al. 2004:56). The box held the heating source and, presumably, fuel. The feature followed the north/south slope of the hillside on which it was situated, with the heat source on the down slope side of the feature. The north side of the feature

was disturbed. Historical research indicated that the Crimean Oven at 44AX193 probably dated to the winter of 1861/1862 and was built by troops from Heitzelman's Eighth Brigade (Jirikowic et al. 2004:69).

The Crimean Oven at 44AX195 was disturbed by construction activities and landscaping associated with construction of the residence at 3517 Duke St. The surviving section of the feature includes an approximately 29-ft.-long section of flue and the base of the chimney (Figures 26 and 27). Only the bottom two to three courses of the feature have survived. There is no ground surface associated with the feature. However, construction of the feature included the excavation of a builder's trench. This trench is narrow along the straight run of the flue, but the builder's trench widens to accommodate the curve of the flue. Excavation of the builder's trench recovered two artifacts; a fragment of a shoulder scale (MD 191) and the base of a gutta percha flask. The flue is approximately 1.5 ft wide to its exterior side. The interior sheet-metal lined chamber is approximately 0.8 ft. wide (Figures 26 and 28). The flue was filled with course sand that contained no artifacts. The flue ends at 2-by-2.5-ft. brick chimney base. Approximately 6 ft. from the chimney there is a ninety-degree turn in the flue. After the turn, the flue extends for approximately 20 ft. to where it is disturbed by construction associated with a retaining wall. The ground surface on the south side of this wall has been excavated to an depth approximately 1.25 ft. below the south remnant of the flue. The projected course of the oven and location of the heating source was between the northeast corner of the house and the property line. Mechanical stripping in this area encountered a modern A horizon directly over subsoil. Based on this stratigraphic sequence it is inferred that the south end of the Crimean Oven was destroyed when the residence was constructed.

Examination of the subsoil beneath and adjacent to the Crimean Oven identified a heat signature. The heat signature was present along the entire interior course of the flue indicating that interior of the flue was extremely hot. The temperature at which the project area's subsoil would have been thermally altered is not known, but must be several hundred degrees. The fact that the heat signature was present at the base of the chimney, approximately 50-to-60-ft. from the heat source indicates the heat source produced a high heat and the draft of the flue in the Crimean Oven was well maintained.

A comparison of both the Crimean Oven remnants at 44AX193 and 44AX195 allows for an understanding of how this type of Crimean Oven was configured. The Crimean Oven is **Z** shaped, but the wings off the body of the flue were curved and not acute angles. The reason for the curves in the flue is not clear. Jirikowic et al. (2004:62) suggest that the curve functioned to prevent the feature from collecting water. This does not appear to be practical, since the curves in the flue mean that two sections of it were laid parallel to the slope. These sections would have provided a larger exposure of the flue to water run off than a straight run of flue. The curves may have acted to slow the movement of air and heat through the feature. The problem with this explanation is that there is a curve where the flue meets the heating device and it does not follow that the builders would want to inhibit the flow of heat from the source. It is possible that the curves in the design are

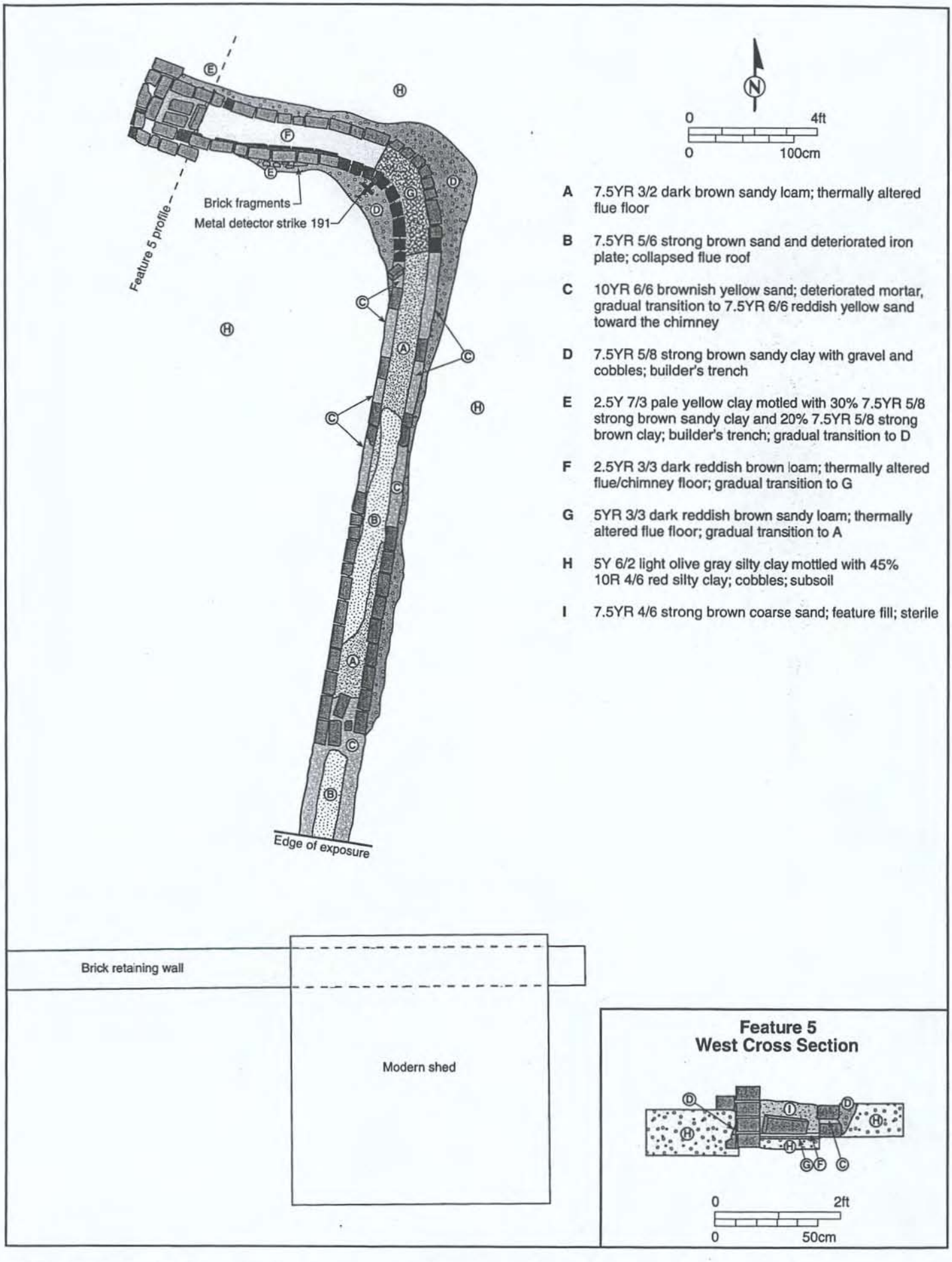


Figure 26. Plan and profile of Feature 5, Crimean Oven.

Figure 27. Overview of Crimean Oven (Feature 5), facing south.

Figure 28. Detail of Crimean Oven (Feature 5) showing sheet-metal sheathing and thermal signature, facing east.

related to camp layout or to the tents that were used. The curve in the ovens placed the chimney and the heat source away from the entrances of the tent or to adjacent tents along a company street. The positioning of the chimney and heating source on the sides of the tent would also minimize the amount of smoke and cinders blowing into the tents.

The chimney was located on the upslope side of the feature. At 44AX195, the location of the firebox was destroyed when the residence at 3517 Duke St. was built. However, at 44AX193 the heating source section, but not the chimney, of the Crimean Oven was present. Both ovens are placed on gently sloping terrain. Given the fact that heat rises, the soldiers took advantage of the terrain and placed the chimneys on the high side. This aided the creation and maintenance of a draw within flue. Using the natural lay of land eliminated the need to bury the heating source underground in order to lower it below the chimney. If there was not a slope between the heating source hot air would have had to have been forced through the flue. There is no evidence that anything, such as a bellows, was incorporated into the design of the oven. The chimneys had brick bases that were approximately 2-by-2.5-ft (Figure 26 and 29) The section of flue from the chimney to the bend in the flue was approximately 6 ft. The run of flue between the curves is approximately 50-to-60-ft. based on the oven at 44AX193 (Jirikowic et al. 2004:55, 56, and 60). Only an approximately 20 ft. section has survived at 44AX195. At 44AX193 the heating source was located within a 4-by-11-ft. brick structure. The half of the structure that contained the flue entrance also contained some type of heating device (presumably a stove), and the other half was used for storage and drainage (Jirikowic et al 2004:56).

It is unknown which type of tent would have been placed over the furnace. The regulation issue wall tent had a 14-by-14.5 rectangular footprint (Jenson 2000:52-56). The 1862 *Revised Regulations for the Army of the United States* state that tents must be constructed in a fashion to allow two or more tents to be "joined and thrown into one with a continuous covering or roof" (United States War Department 1980:290-291). If standard issue hospital tents were placed over the Crimean Ovens then up to four may have been joined to form one large connected space. Since each hospital tent could accommodate eight people, it is possible that 32 soldiers may have been sheltered over the Crimean Oven.

In the fall of 1861, Charles S. Tripler, Surgeon and Medical Director, Army of the Potomac, reported to General R. B. Marcy, U.S.A., Chief of Staff Army of the Potomac, on preparations and suggestions made to increase the livability of camps without giving the appearance that the army was going into winter quarters. In his report Tripler describes the Crimean Ovens built by Dr. McRuer, the surgeon of General Sedgwick's brigade:

> For warming the tents and drying the ground a modification of the Crimean Oven, which has been devised and put in operation by Dr. McRuer, the surgeon of General Sedgwick's brigade, appears to me to be the cheapest and most effective. Dr. McRuer has submitted to me a report on this subject.

General Heintzelman, who has inspected his arrangement, informs me that it appears to be perfect in all its details; that it is at the same time efficient and economical. Dr. McRuer thus describes his plan:

A trench 1 foot wide and 20 inches deep to be dug through the center and length of each tent, to be continued for 3 or 4 feet farther, terminating at one end in a covered oven fire-place and at the other in a chimney. By this arrangement the fire-place and chimney are both on the outside of the tent; the fire-place is made about 2 feet wide and arching; its area gradually lessening until it terminates in a throat at the commencement of the straight trench. This part is covered with brick or stone, laid in mortar or cement; the long trench to be covered with sheet-iron in the same manner. The opposite end to the fire-place terminates in a chimney 6 or 8 feet high; the front of the fire-place to be fitted with a tight movable sheet-iron cover, in which an opening is to be made, with a sliding cover to act as a blower. By this contrivance a per-feet draught may be obtained, and no more cold air admitted within the furnace than just sufficient to consume the wood and generate the amount of heat required, which not only radiates from the exposed surface of the iron plates, but is conducted throughout the ground floor of the tent so as to keep it both warm and dry, making a board floor entirely unnecessary, thereby avoiding the dampness and filth, which unavoidably accumulates in such places. All noise, smoke, and dust, attendant upon building the fires within the tent are avoided; there are no currents of cold air, and the heat is so equally diffused, that no difference can be perceived between the temperature of each end or side of-the tent. Indeed, the advantages of this mode of warming the hospital tents are so obvious, that it needs only to be seen in operation to convince any observer that it fulfills everything required as regards the warming of hospital tents, and I respectfully ask you to appoint a commissioner to examine the hospital tents of the Eighth Brigade, and ascertain by observation the justness of this report.

The whole cost to the Government of constructing the above apparatus for the four hospitals of the Eighth Brigade is the cost of 112 feet, 1 foot wide, of sheet-iron, one barrel of limo, and four sheet-iron doors, the stone and brick were picked up by the men, who likewise did all the labor.

By this plan floors to the tent are rendered unnecessary; the ground within the tent is kept perfectly dry, and the temperature can be regulated by increasing or diminishing the fires; all smoke, dust, and noise within the tent are obviated; the flues may be carried through a range of five or six tents, making one fire all that is necessary for each set. If the description of this furnace cannot be understood, and it is deemed expedient to put them in general operation, Dr. McRuer might be temporarily detached from his

Figure 29. Detail of Crimean Oven chimney base, facing south.

> brigade to construct a model in each division in the Army. (O.R. Series 1, Vol. 5:664-665).

It is likely that Dr. McRuer is describing the heating features found at 44AX193 and 44AX195. It is not known where the hospitals for the eight brigade were located. Later, Tripler ordered McRuer "to visit every division of the army, and to construct one of his furnaces for a model. This duty he performed. Some of course were found to object to it, but it was generally well received and found to contribute much to the comfort of the men. Some, however, still used the Crimean pit, and others succeeded in getting stoves (O. R. Series I, Vol. 5:84)." Since the 44AX193 and 44AX195 ovens are near each other it is likely that they were built by the eighth brigade rather than as examples for other divisions.

6.0 ANALYSIS AND INTERPRETATION

Archeological investigations included stripping 18,000 sq. ft., identified 9 features, and recovered 2,371 artifacts. The majority of artifacts are associated with a Fall 1861 encampment of Federal troops. Limited background research was undertaken, consequently the specific troops occupying the camp are not known. The troops were most likely 38th New York Infantry. However, this is not certain because numerous New York militia regiments camped in this general vicinity.

The date of the camp was ascertained by the presence of New York insignia, the Crimean Oven, and early war artifacts (model 1858 "looped" horn hat insignia and canteen spout). Although the number of buck and ball ammunition was higher than Minié Ball ammunition, this could not be used as a variable pointing to an early war occupation because smooth-bore muskets were common throughout most of the war. Notably absent from the ammunition assemblage were Williams cleaner bullets. This distinctively shaped type of ammunition was designed to remove powder from the bore of a rifle and was issued along with regular ammunition after December 1861 (Lewis 1956:124-125). Williams type bullets (there are three varieties) are common finds on post-1861 Civil War sites because many troops distrusted the bullets and simply discarded them (Balicki 1995).

Site 44AX195 contains surface hearth features and no evidence for shelters was found, but it was likely that tents were present. It is likely that this site was primarily occupied from the fall of 1861 through the first months of 1862. It is possible that the occupation may have lasted until the beginning of McClellan's Peninsula Campaign in March 1862. However, no evidence of preparing the camp for winter weather or attempts by the soldiers themselves to improve their shelter was encountered. Generally as winter approached, soldiers modified their shelters to increase warmth. It was common for a pit to be excavated and then a tent or small hut placed over it to get the occupants out of the wind. This practice may not have been allowed at the 44AX195 camp. The report of surgeon Charles S. Tripler, Medical Director of the Army of the Potomac, indicates that it

> ....was the general understanding that the army was not to go into winter quarters, and therefore I did not recommend the housing of the men until the middle of January, 1862; but in December, 1861, learning that some of the regiments were excavating pits in the ground and covering them with their tents, I hastened to object strenuously to this plan. I suggested inclosures [stet] of rails or palisades some three feet high, to be roofed over with the tents. The excavations could not be kept dry or well ventilated, and certainly would not be kept in good police; all of which objections would be obviated by the above-ground inclosure [stet]. This plan was adopted in a number of camps I visited, and they presented an air of comfort that was very gratifying (O.R. Series I, Vol. 5:84).

Supporting the period of occupation was the presence of the Crimean Oven. Correspondence indicates that this feature and a similar one located nearby were built in November of 1861 by troops from Eight Brigade commanded by General Sedgwick which was part of General Heintzelman's Division (O.R. Series I, Vol. 5:665-666; Jirikowic et al. 2004:65-70).

Another sign of an early Fall 1861 date are buttons with New York State insignia. These buttons would have adorned the uniforms of New York militia regiments formed early in the War. The recovery of New York insignia indicates that the camp was occupied by New York Militia regiments. The only two possibilities within the Eighth Brigade are the 38th or 40th New York Regiments; but it is known that the 40th New York was camped elsewhere (Jirikowic et al. 2004). It is likely that the Civil War camp at 44AX195 was occupied by troops belonging to the 38th New York Infantry Regiment, but the association is tenuous and circumstantial.

The 38th New York Regiment Infantry, also known as the 2nd Regiment Scott Life Guard, was formed in June 1861 and became part of Howard's Brigade. The regiment consisted of seven companies of men from New York City, one from Geneva, one from Horseheads, and one from Elizabethtown who enlisted for two years (Rice 2000). From June 1861 to March 1862 the regiment was assigned duties within the defenses of Washington. The 38th fought at the First Battle of Manassas. During August and September the regiment was employed in construction work at Forts Ward and Lyons (Rice 2000). In October 1861, the 38th was transferred to General Sedgwick's Brigade within General Heitzelman's Division (Dyer 1908:271 and 274). Later, in the spring of 1862 the Army was reorganized and the 38th became part of the 2nd Brigade, 3rd Division, within the 3rd Army Corps of the Army of the Potomac (Dyer 1908:276). Rice (2000) indicates that the 38th established winter quarters on the Old Fairfax Road in October 1861 and remained at that camp until March 1862.

The Old Fairfax Road is not in the vicinity of 44AX195. Further, a map places both New York regiments adjacent to Fort Lyon south of Cameron Run by November 1861 (Bryan et al. 2001:10). Thus in order for the 38th New York to have occupied the camp they would have had to have been present on the site prior to October and, certainly, no later than November 1861. It is possible that 44AX195 is the summer camp for these New York troops, because there is no evidence for winter quarters at the site. It is also possible that the camp was a temporary camp established by a portion (company or companies) of New York troops who had been detailed to the Medical Department to construct the Crimean Ovens.

No additional evidence of a prehistoric occupation was encountered by the supplemental investigations. Additionally, no evidence for habitation at the site from after the war to the construction of the extant residences was encountered. However, a hand-drawn map, on file at Alexandria Archeology, depicts the project area in the late-nineteenth century. The map shows a farmstead within the general project area vicinity. No evidence for this

occupation was encountered. It is possible that the twentieth-century development destroyed all evidence of this occupation or the informant, who drew the map, was not accurate in locating the specific features.

It should be noted that the methodology employed during the supplemental investigations focused on metal detection and feature excavation. This type of methodology was appropriate for the cultural resources at this site. However, such a methodology results in a data set of artifacts that is dominated by metallic objects. This type of sampling strategy causes some types of artifact classes, notably kitchen ceramics, and container glass to be under represented in the artifact collection. A sample of these artifact types was obtained from features, incidental finds within metal detector locations, and as a general collection. The collection bias toward metal artifacts, to the determent of collecting other artifact classes, changes the types of research questions that can be asked of the data set. The use of large hand-excavated block excavations may have obtained a sample of kitchen ceramics and container glass, but given the parameters we were working under and an understanding of how military camps are organized and maintained, such a strategy would not have allowed us to understand the camp nor would it have maximized the information potential of the site.

6.1 ARTIFACT TYPES

6.1.1 GUN PARTS

The soldiers would have been equipped with a variety of small arms. These small arms would have included pistols, muskets, and rifle-muskets. The repair and maintenance of weapons was a common activity for the solider to perform, both during active campaigning and also in time spent in camp. This activity resulted in the discard of broken equipment and the accidental loss of small gun parts and tools.

Four gun parts were found (Figure 30). Three of these gun parts (MD 89, 90, and 124) consisted of fragments of hammer mechanisms (Figure 30: A, B, and D). The hammer was a part of the gun that would undergo considerable stress during use and would often break or become damaged. Two of the hammer fragments (MD 90 and 124) could be identified by their shape and construction as belonging to a rifle or musket but could not be assigned to a specific firearm. The third hammer fragment (MD 89) is identified as belonging to a revolver. This artifact is constructed of thinner metal and consists of a portion of the hammer that is connected to the trigger mechanism.

The other gun part identified was a rear barrel band (MD 105) from a musket (Figure 30:C). Most Civil War muskets and rifled muskets contained two barrel bands. These devices consisted of a removable steel band that functioned to fasten the wooden gunstock to the barrel (Coates and Thomas 1990:6). The top of the band is crimped to fit around the barrel and the bottom of the band is wider were it fit around the stock. The front barrel band was located towards the muzzle, was smaller in diameter than the rear band, and contained a

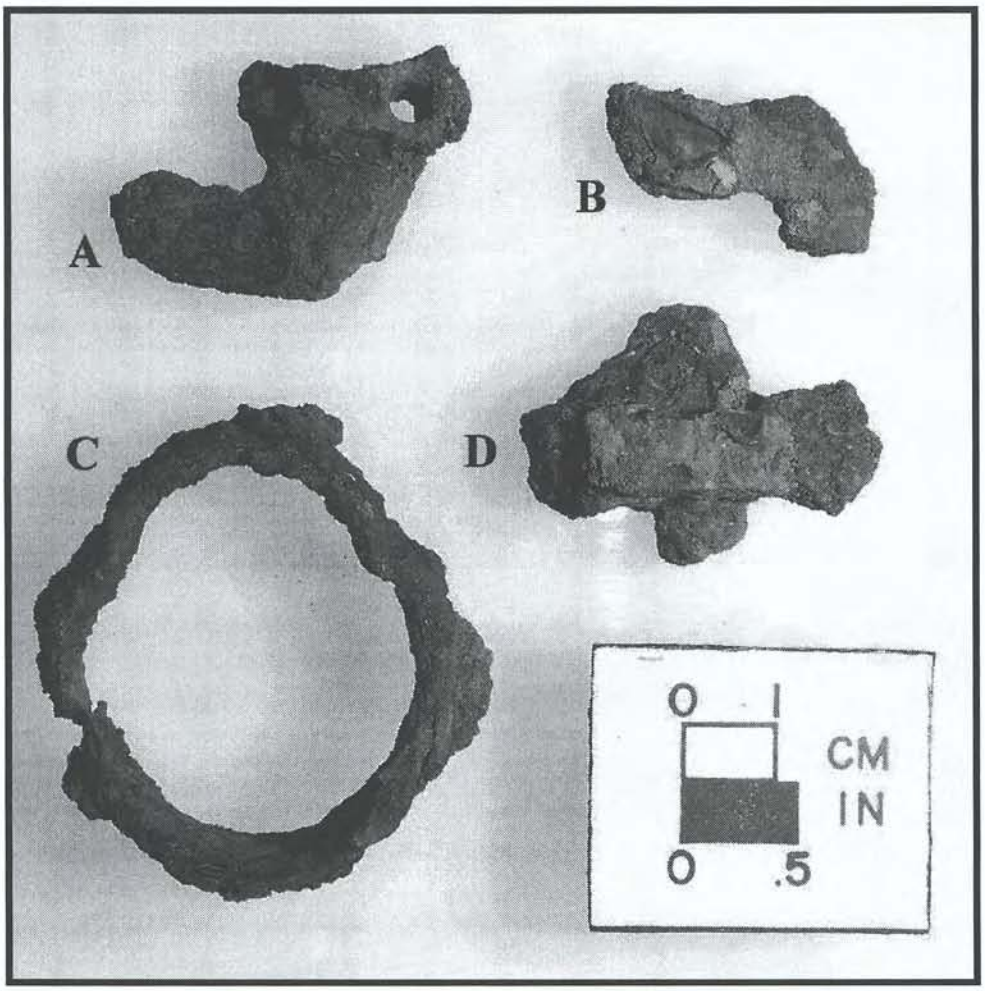


Figure 30. Gun parts. (A) rifle trigger assembly [MD 89]; (B) hammer fragment [MD 90]; (C) interior barrel band from a rifle [124]; (D) hammer fragment [MD 105].

drilled swivel attachment for the gun sling. The rear barrel band is larger in diameter and does not contain the swivel attachment.

6.1.2 GUN TOOLS

Items associated with the maintenance of weapons included three combination tools (MD 39, MD 232, and General Collection), two barrel wipers (MD 52 and 364), and three brass tompion fragments (MD 250, 335, and 338), and a small gun file (MD 111).

The combination tools were part of the standard gun-maintenance tool kit that most soldiers carried with them. Although many variations existed, the tool usually resembled a penknife with one end shaped like a box wrench (Crouch 1995:98). The tool usually contained two sizes of screwdriver blades and sometimes a small pick. The wrench end of the tool was used to remove the percussion nipple for cleaning and replacement.

The three combination tools are the standard design most commonly associated with the Springfield muskets and rifles. The tool was issued to troops beginning in 1841 and continued until after the Civil War (Crouch 1995:97). During that time many variations of the combination tool was produced; however, they all display the distinctive box wrench end (Figure 31:D).

The two barrel wipers resemble corkscrews. Wipers are devices that would attach at the end of the ramrod and were used to clean the barrel of the weapon. Cloth or cotton would be attached corkscrew portion of the wiper that would then be inserted into the barrel which would remove dirt and fouled powder from the breech, barrel, and rifling (Figure 31:A).

A tompion is a device that was inserted into the muzzle during storage and marching to protect it from foreign objects or water (Figure 31:B and C). In addition, regulations required that the tompion should be placed in the gun barrel when not in use (Ernest Bower 2005, elec. comm.). The tompion would keep rainwater and debris from getting into the barrel and fouling the charge or causing rust. There are many variations in tompion designs but they usually share the same general shape (Crouch 1995:95). The device consisted of a brass cap and a brass shaft containing rivets at both ends. A piece of wood or cork would be attached to the shaft and this helped keep the tompion secure in the barrel and also kept water from entering the barrel. Variations of tompions included types made of solid wood or wood with a brass cap but lacking the brass shaft and rivets. The US standard issue tompion was constructed of hardwood usually walnut or maple (Coates and Thomas 1990:69). The tampion for the 577. caliber Enfield rifle was constructed of brass and cork. The type of tompion found at the site resembles the brass end and attachment for the cork on an Enfield tompion. It should be noted that these tompions could be used in either the imported Enfield or in, the larger bore, .58 caliber Springfield rifle.

6.1.3 AMMUNITION

Discarded ammunition is common on Civil War campsites. The majority of the bullets from 44AX195 appear to have been either intentionally or unintentionally discarded as opposed to being fired. In fact, the only evidence for small-arms being fired are an un-typed pistol bullet (MD 253 and a possibly fired Minié ball (MD 32). The dropped ammunition provides evidence for the types of weapons the soldiers occupying the camp were armed with (Table 6; Figure 32). The ammunition recovered from the site indicates that the soldiers were armed with .69 caliber smooth-bore muskets, rifle muskets (.577 caliber Enfield or .58 caliber Springfield), .36 caliber revolver, and .44 caliber revolver (Figure 32). The specific revolver types are not known because numerous different manufactures used .36 and .44 calibers bores. Further, if 44AX195 is an early war camp then the pistols were probably personal arms carried by individual soldiers and not Government Issue weapons as during this period many of the volunteers brought personal firearms with them.

The Civil War ammunition recovered during the investigations was dominated .64 caliber round balls (27.71 percent) and buckshot (51.94 percent) (Table 6; Figure 32:E-G). These ammunition types are associated with each other. Loading a weapon with a combination of round ball and buckshot dates back to the Revolutionary War and was a common practice (Lewis 1956:108). The round balls and buck would have been packaged together in cartridges commonly known as buck-and-ball. This ammunition was used in .69 caliber smooth bore muskets. Lewis (1960:124) presents 1861 Ordnance Department information indicating that Model 1842 Muskets used .655 caliber ammunition. The use of a ball of a smaller caliber than the bore was needed because the ball was wrapped in a cloth to facilitate loading and to reduce windage when the gun was fired. Because of these factors smooth bore muskets were not accurate. To compensate for the inaccuracy of the guns and skill of the shooters, smaller "buck" was added to the cartridge and infantry tacticians incorporated mass volleys into attacks. The number of buck grouped with a ball does not appear to have been standardized, but in most instances at least two-to-three buck were put in the paper cartridge with the ball. There is no direct correlation between the number of buck and ball recovered from the site. At 44AX195 we recovered approximately 1.9 bucks for every round ball found. With the exception of one ball (from the general collection) which showed the distinctive markings of being extracted from a gun barrel, all of the round balls appear to represent discards. Once a cartridge got wet, soldiers just threw it away.

The round balls recovered from 44AX195 were all .64 caliber, smaller than the .655 size given by Lewis (1960:124). This probably reflects different manufacturing techniques and an accepted range of ball size for .69 caliber weapons.

The Model 1842 musket was produced at the Springfield, Massachusetts, and Harpers Ferry, Virginia, armories it was the standard gun used by the military between 1844 and 1855 and was the first to use a percussion cap system. A large number were kept by state militia units (Coates and Thomas 1990:10). Although these weapons were common

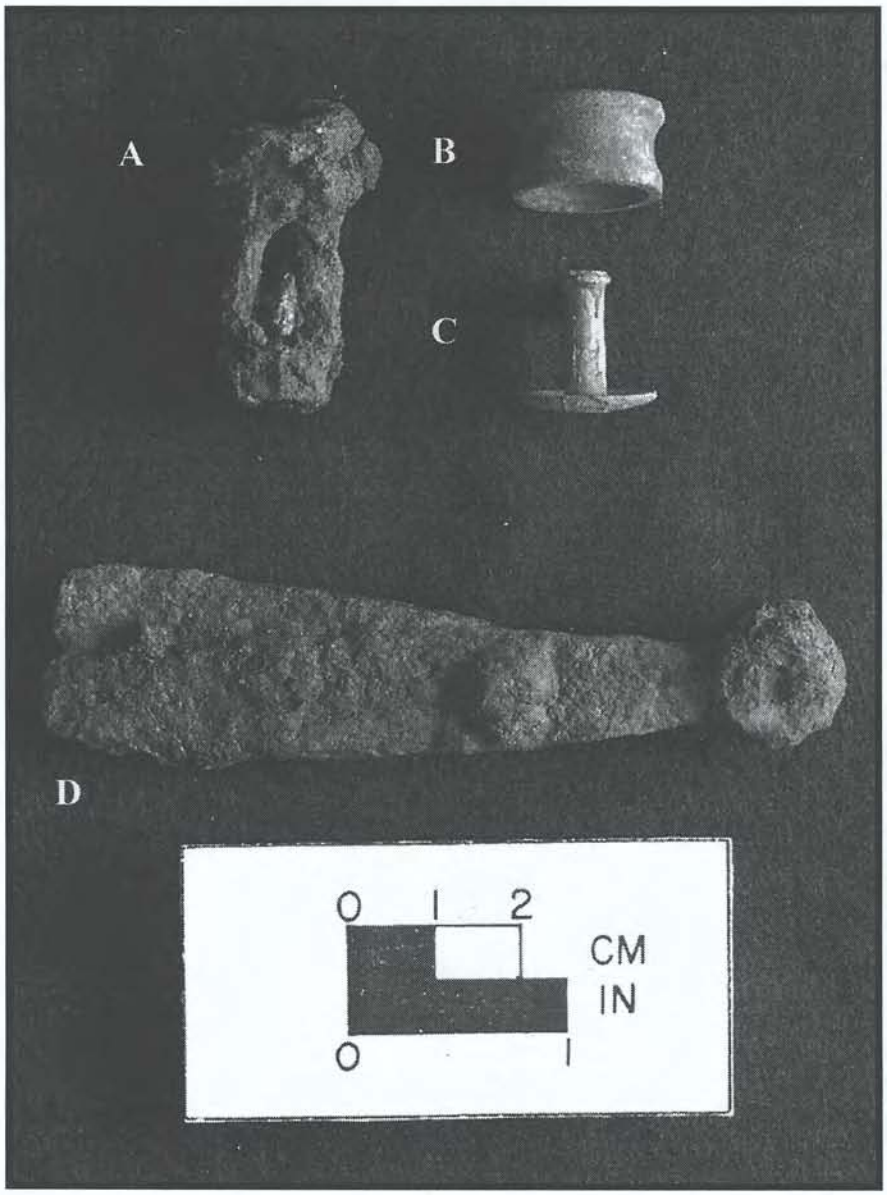


Figure 31. Gun tools. (A) wiper [MD 364]; (B) tompion distal fragment [MD 335]; (C) tompion fragment (missing cork which would have sheathed this portion and would have been inserted into the barrel of the gun) [MD 232]; (D) combination gun tool [MD 232].

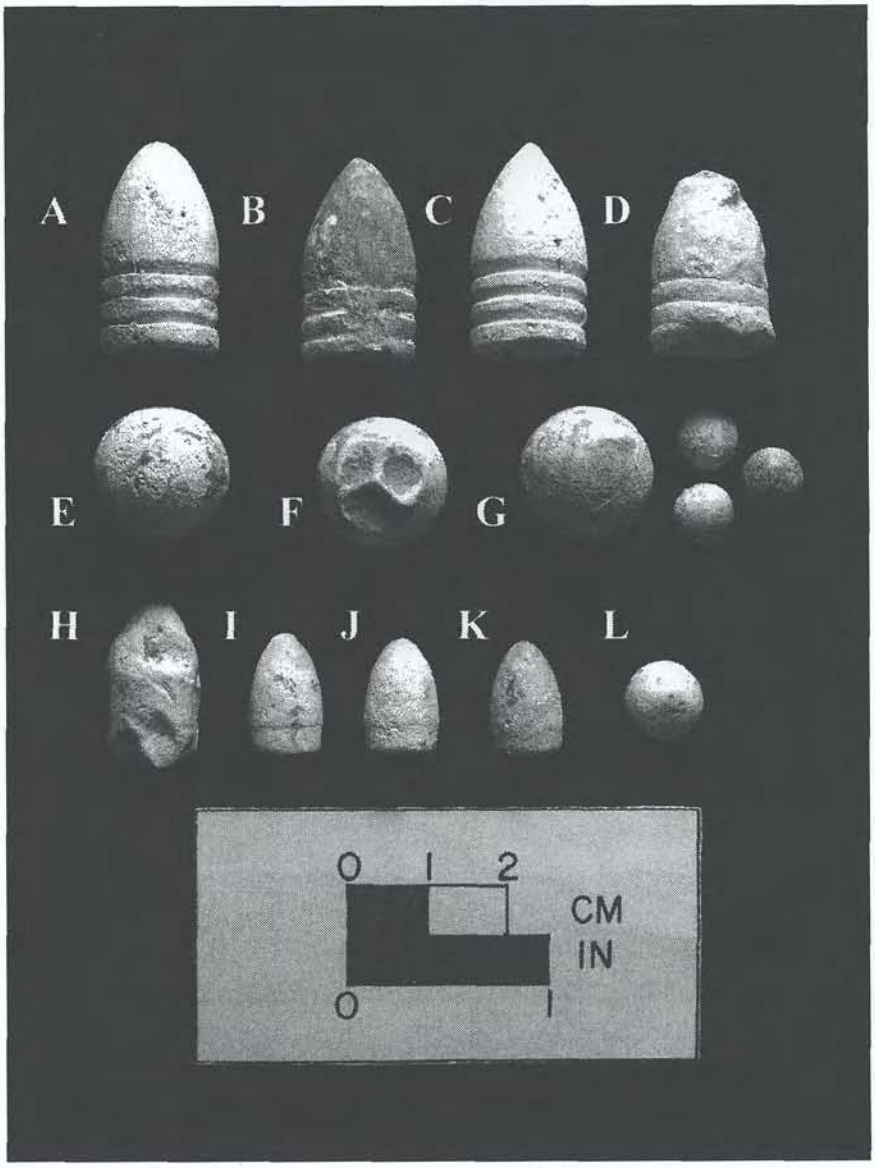


Figure 32. Ammunition. (A-D) .577/.58 caliber Minié Balls [MD 373, 375, 211, and 304]; (E) .64 caliber Round Ball [MD 165]; (F) .64 caliber Round Ball with 3 buckshot imprints on base [MD 40]; (G) .64 caliber Round Ball with 3 buckshot [MD 298]; (H) .44 caliber pistol bullet [General Collection 18]; (I-k) .36 caliber pistol bullet [MD 358, 357, and 312]; (L) .36 caliber pistol shot [MD 202].

throughout the war, they saw extensive use in 1861 and 1862 (Coates and Thomas 1990:10). At the battle of Gettysburg at least eight Federal regiments were still armed with smooth bore muskets (Thomas 1981:12).

Table 6. Civil War Ammunition

Artifact Description	Count	Percentage of Type
Buckshot: .25 caliber	1	
Buckshot: .28 caliber	9	
Buckshot: .29 caliber	79	
Buckshot: .30 caliber	5	
Buckshot: .31 caliber	24	
Buckshot: .32 caliber	2	
Total buck = 120		51.94%
Lead Bullet: .22 caliber	3	
Total .22 caliber bullet = 3		1.3%
Minié Ball: .577/.58 caliber	13	
Minié Ball: .577/.58 caliber, carved	2	
Minié Ball: .577/.58 caliber, pulled	6	
Minié Ball: .577/.58 caliber, smashed or fired	1	
Minié Ball: carved	2	
Minié Ball: carved or smashed	1	
Minié Ball: carved, possible fishing weight	1	
Minié Ball: fired	1	
Minié Ball: melted or smashed	1	
Minié Ball: smashed	1	
Minié Ball: smashed or fired	1	
Total Minié Ball = 30		12.99%
Pistol Bullet: .36 caliber	5	
Pistol Bullet: .36 caliber, round	3	
Total .36 caliber pistol = 8		3.46%
Pistol Bullet: .44 caliber, possibly fired	1	

Artifact Description	Count	Percentage of Type
Total .44 caliber pistol = 1		0.44%
Pistol Bullet: carved	1	
Total carved pistol = 1		0.44%
Round Ball: .64 caliber	64	
Round Ball: .64 caliber, 3 buckshot imprints on base	1	
Round Ball: .64 caliber, pulled	1	
Round Ball: carved	1	
Round Ball: melted or smashed	1	
Total .64 caliber round ball = 68		27.71%
Total =	231	

The second most common ammunition type is Minié Balls (12.99 %) (Figure 32:A-D). These .577/.58 caliber projectiles were used in rifle-muskets. The rifle-musket is a shoulder arm approximately 56 inches long, muzzle-loaded, and primed by a percussion-cap (Coates and Thomas 1990:83; Legg and Smith 1989:111-112). The rifle-musket was highly accurate due to a manufacturing process whereby evenly spaced spiral grooves were cut into the rifle bore. When fired, the grooves would cause the projectile to spin, resulting in a truer flight to the target. The Civil War and the decade preceding it saw the development, use, and eventual abandonment of the rifle-musket. By the end of the Civil War advances in breech-loading weapons and metallic cartridges enabled faster loading speeds and essentially rendered the use of the rifle-musket obsolete.

A large variety of shoulder arms were used during the Civil War; however, two types of rifle-muskets were issued in greater numbers than any other. The United States model 1855/1861 .58 caliber rifle-musket and the British model 1853 .577 caliber Enfield rifle-musket were the most common shoulder arms used during the war.

The model 1855 rifle musket was manufactured at the Federal armories at Harpers Ferry, West Virginia, and Springfield, Massachusetts. In 1861 the Confederates captured the Harpers Ferry armory and transported the arms making machinery to Confederate armories in the south. Meanwhile, at the Federal armory in Springfield, Massachusetts, refinements made to the model 1855 primer apparatus resulted in the model 1861. From adoption until 1865, the Springfield armory and twenty government subcontractors produced over 700,000 model 1861 rifle-muskets (Coates and Thomas 1990:14-18).

Both the North and the South were active importers of firearms during the Civil War. Arms dealers in Great Britain were principle players in the arms trade and they supplied an estimated 900,000 pattern 1853 Enfield .577 caliber rifle-muskets to the combatants

(Coates and Thomas 1990:19). The arms were copies of the standard issue English infantry weapon; however, independent arms manufacturers supplied the Enfield rifles exported to North America. The Enfield model 1853 was attractive because the gun used the same ammunition as the American made .58-caliber rifle-musket. The slight difference in bore diameters of each weapon, less than .003 caliber, was not considered a hindrance for use in either the United States model 1855/1865 or the model 1853 Enfield. Although Thomas (1981:14) indicates that ammunition boxes specifying use in Enfield rifle-muskets misled soldiers. The following correspondence illustrates the federal governments response to the confusion caused by the slight difference in caliber.

> ".....has handed me your letter of the 21st [May 1862] inst. returning ammunition issued to your address from this post because of the size of the balls being 57/00 inch Calibre.
>
> Respecting this matter I have to inform you that no cartridges are made of .58 Calibre they are all of .57 Calibre, which makes them answerable for the Enfield muskets of .57 and American muskets of .58 Calibre. The advantage of this is that one kind of ammunition answers for two kinds of arms and gives greater ease and rapidity in loading the American musket....."(Thomas 1981:72).

United States ammunition manufacturers produced .577 cartridges which were usable in either weapon. The Confederates states either imported European-made Enfield cartridges or produced copies of Enfield cartridges on their own (Thomas 1981:39).

Concomitant with the development of the rifle-musket were advances in the projectiles shot from them. In order for the projectile to fly true there could be no windage (space between the bullet and the barrel) within the gun. If the projectile does not fit into the bore tightly, the bullet when fired will move through the gun bore unevenly resulting in an inaccurate trajectory toward the target. The fundamental problem facing gun manufactures and the makers of ammunition was assuring the placement of the projectile in a muzzle-loading gun. Not only did the cartridge containing the projectile have to be inserted into the gun quickly and easily but, the placement had to be tight. Ballistic research during the first half of the nineteenth century resulted in the development of numerous different methods and projectile types to address the above problem (Lewis 1956; Thomas 1981).

In 1849 a French military officer, Captain Claude Minié developed a cylindro-conical (i.e., cylinder topped by a cone) projectile having three grease grooves around the body and an iron plug inserted into the projectile's base (Thomas 1981:4). The windage allowed the bullet to be loaded into the gun but when fired the iron plug was driven into the bullet thus expanding it to tightly fit the rifling. Refinements in the design led to the dropping of the iron plug when it was realized that a cone shaped hallow cavity in the projectile's base would create the same expansion of the projectile when fired. Upon firing, the hollow basal cavity would expand the projectile into the rifling, eliminating

windage. The resulting projectile form is the classic Minié ball, probably the most common artifact of the Civil War (Figure 32:A-D). The projectiles were rolled in paper cartridges with their powder charge and packaged for distribution (Lewis 1956:200, [plates 45 and 46]) Packages of ammunition contained ten rounds. Included within the ammunition packages were percussion caps.

At least six of the .577/.58 bullets carry markings indicating that they had been extracted from guns because either they were jammed or the weapon had to be unloaded for some reason (Figure 33) A gun tool alternatively known as a ball-screw, worm, or ball-puller was used to remove the bullet. This tool contained a screw-head, which, when attached to a ramrod, could be screwed into the bullet effecting its removal (Coates and Thomas 1990:69). The wiper, a pronged tool used to clean the barrel was also employed as a bullet extractor (War Department 1863; Coates and Thomas 1990:69). Additionally, sometimes a combination tool was made combining the screw-head of the ball-puller and prongs of the wiper (Crouch 1995:98). Extracted bullets recovered show marks indicating the use of a ball-screw, and in one case (MD192) possibly a combination ball-puller and wiper tool.

The ammunition recovered from the Civil War occupation indicates that the most common small arms were smooth bore musket(s), and model 1855/1861 rifle-muskets, Enfield rifle-muskets, or more likely a combination of both. Additionally, ammunition for at least two types of revolvers (possible Army Colts and Smith and Wesson) can be inferred from the artifacts.

6.1.4 CLOTHING

Buttons from United States and New York Militia military uniforms were found (Table 7; Figure 34). Uniform parts which have the potential to be preserved in the archeological record include buttons, shoulder scale parts, fasteners, and insignia. Buttons have been divided into military and civilian types. Buttons grouped into the civilian category are any button not issued on a uniform or displaying military or governmental insignia (for example porcelain undergarment buttons). The following discussion relies heavily on a summary of United States Army regular issue uniforms presented by Legg and Smith (1989:100-108) and Smithsonian Institution (1961).

Buttons make up the largest artifact type within the clothing group. Two general categories, standard military issue and non-military, were recovered. Military issue buttons are buttons made for and provided on United States army regular issue uniforms and state militia uniforms. Non-military buttons are buttons which were used by both the military and civilians, were not a part of the issued regulation uniform, not specifically manufactured for the military, and were widely available outside the military.

Clothing artifacts are a common find at Civil war campsites, and 44AX195 is no exception (Table 7). Fifty-four (54) clothing-related artifacts were recovered. The majority of the clothing artifacts were buttons (67%). Other clothing-related items

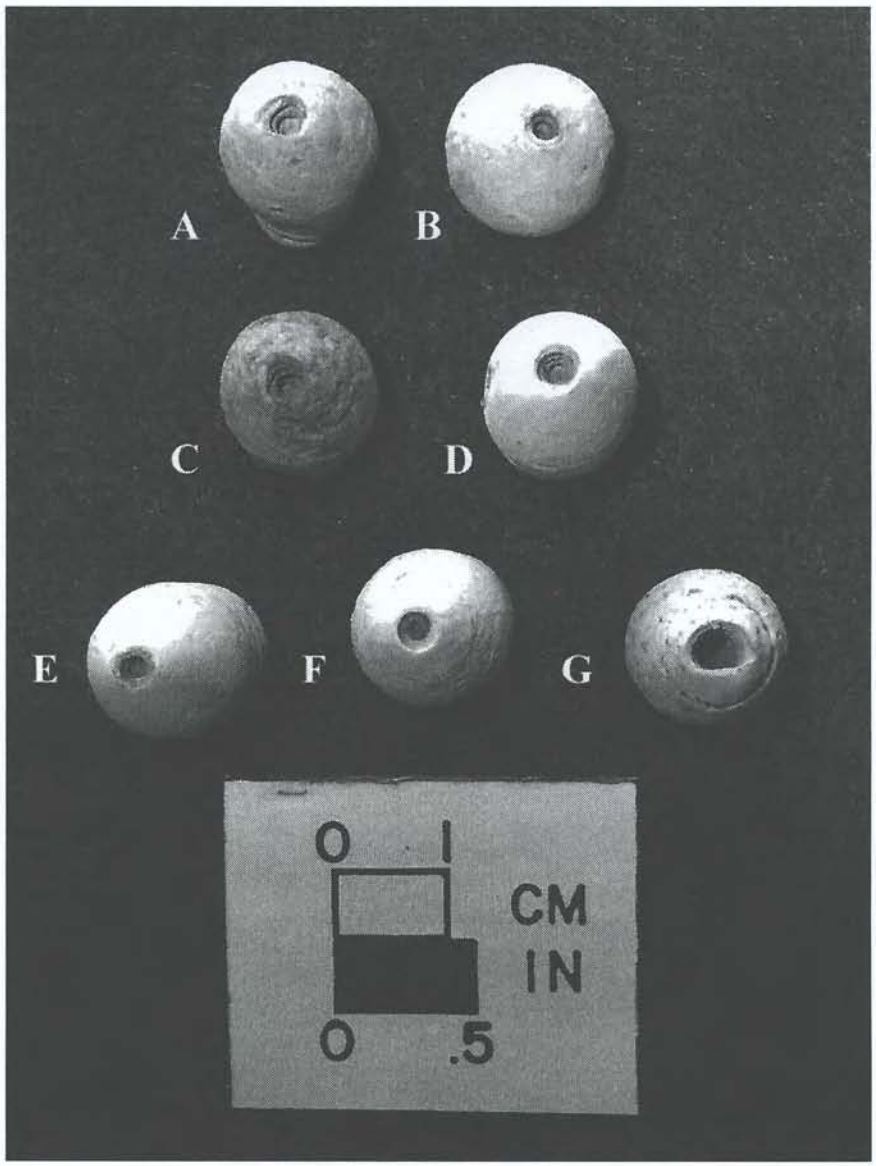


Figure 33. Extracted .577/.58 caliber Minié balls. (A) [MD 309]; (B) [General Collection]; (C-G) [MD 179, 203, 200, 319, and 192].

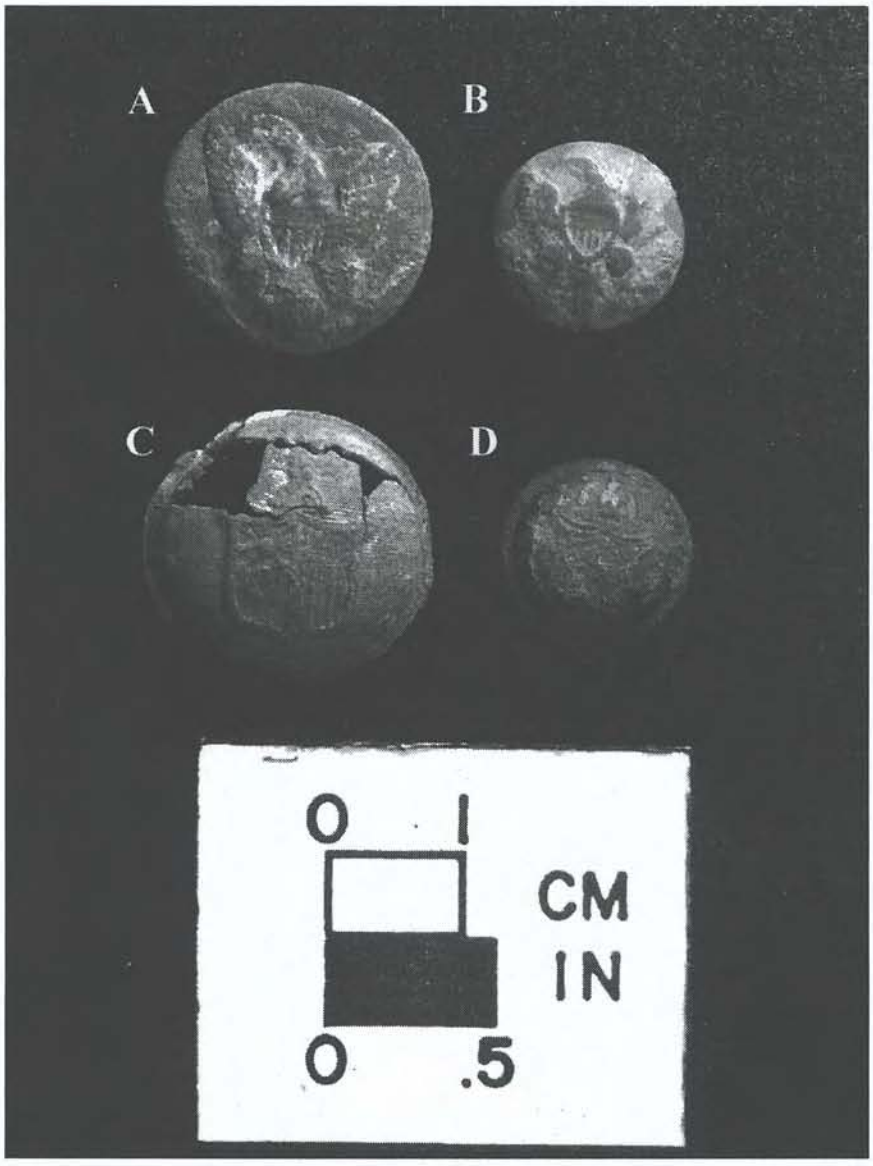


Figure 34. Military buttons. (A) Federal General Service coat button [MD 264]; (B) Federal General Service cuff button [MD 344]; (C) New York State militia coat button [MD 80]; (D) New York State militia cuff button [MD 119].

included shoulder scale fragments, Kepi buckles, cap insignia, a gaiter button, suspender clip fragments, hem weights, and shoe nails (Figure 35).

Table 7. Clothing-Related Artifacts

Artifact Description	Count
Military Uniform, Metal: Button: 3-piece back only, coat, illegible back mark	1
Military Uniform, Metal: Button: 3-piece back only, coat, stamped "H R"	1
Military Uniform, Metal: Button: 3-piece back only, coat, stamped "SCOVILLE MFG CO/WATERBURY"	2
Military Uniform, Metal: Button: 3-piece back only, stamped "EXTRA QUALITY"	1
Military Uniform, Metal: Button: 3-piece back only, stamped "SCOVILLE MFG CO/WATERBURY"	1
Military Uniform, Metal: Button: 3-piece eagle "I" coat, stamped "SCOVILLE MFG CO/WATERBURY"	1
Military Uniform, Metal: Button: 3-piece eagle with shield, coat, "SCOVILLE MFG CO/WATERBURY"	6
Military Uniform, Metal: Button: 3-piece eagle with shield, coat, illegible back mark	5
Military Uniform, Metal: Button: 3-piece eagle with shield, cuff, "SCOVILLE MFG CO/WATERBURY"	2
Military Uniform, Metal: Button: 3-piece eagle with shield, cuff, no back mark	1
Military Uniform, Metal: Button: 3-piece eagle with shield, face and back fragments only, cuff	1
Military Uniform, Metal: Button: 3-piece eagle with shield, face only, coat	1
Military Uniform, Metal: Button: 3-piece New York, cuff, illegible back mark	1
Military Uniform, Metal: Button: 3-piece New York, cuff, stamped "EXTRA QUALITY"	1
Military Uniform, Metal: Button: 3-piece New York, face and back fragment only, cuff	2
Military Uniform, Metal: Button: 3-piece New York, face only, coat	1
Military Uniform, Metal: Button: ferrous, unidentified	1
Military Uniform, Metal: Cap Buckle:	1
Military Uniform, Metal: Cap Buckle: for strap of Forger	1
Military Uniform, Metal: Cap Insignia: loop horn insignia for cap	1
Military Uniform, Metal: Shoulder scale fragment:	1
Military Uniform, Metal: Shoulder Scale Fragment:	2
Military Uniform, Metal: Suspender Clip: mend	3
Non-military clothing related artifacts	
Button, Ceramic: Porcelain, 4-Hole:	3

Artifact Description	Count
Button, Metal: Brass Loop Shank, 1-Piece Cast: plain	1
Button: Metal: burned, possible 3-piece, back only	1
Button: Metal: possible riveted trouser button, plain	2
Miscellaneous Clothing, Metal: Buckle: parts of one copper buckle	2
Miscellaneous Clothing, Metal: Lead Hem Weight:	3
Shoe Part, Metal: Tack:	1
Shoe Part, Metal: Tack: fragments	2
Shoe Part, Metal: Tack: T head hobnail	1

Both cuff and coat buttons bearing New York insignia were found at 44AX195 (Figure 34:C and D). Prior to the Civil War the United States had a small Federal Army supplemented by a militia system. This army was primarily assigned to coastal defenses and the frontier, fighting Native Americans. The militia system was based on the concept of citizen-soldiers; volunteers who would come to the countries defense in time of war. It enjoyed a modicum of success, mainly because cash and land incentives attracted volunteers. President Lincoln's call for loyal governors to raise state troops resulted in many locally and privately formed militias becoming state recognized militias. The militia call up was derived from the 1792 Militia Act where each State was assigned a quota and men between 18 and 45 were perceived as having militia obligations (Weigley 1984:199). Usually, States recruited whole organizations such as political clubs, local groups, or ethnic organizations. The militia system was strong prior to the War and the Federal government was able to raise a large fighting force because organized volunteer companies were already in existence. As early as December 1861, the Federal government was taking control of the militia system by replacing state officials and assuming responsibility for recruiting (Weigley 1984:206). As the war dragged on the number of volunteers declined reducing the viability of the militia system. Additionally, the officer corps changed from one in which officers were appointees to a system that emphasized success in battle. By the summer of 1862, not enough troops could be raised through the militia system and the Federal government instituted a partial military draft on states not meeting their enlistment quota. A nation wide draft was instituted in 1863.

Initially, states assumed the responsibility of outfitting state militia troops. Consequently, early in the war there was variation in uniforms. One manifestation of the militia system was the use of specific state insignia on uniforms and accoutrements. New York buttons have an eagle sitting on a New York military shield surrounded by an arc of 13 stars above the word "Excelsior." The New York military shield shows the state coat of arms (a river and mountains in front of a rising sun) on the left of the shield and the United States flag on the right hand side. This shield design symbolically shows the dual allegiance of the states militia (Tice 1997:371). Some New York regiments had their

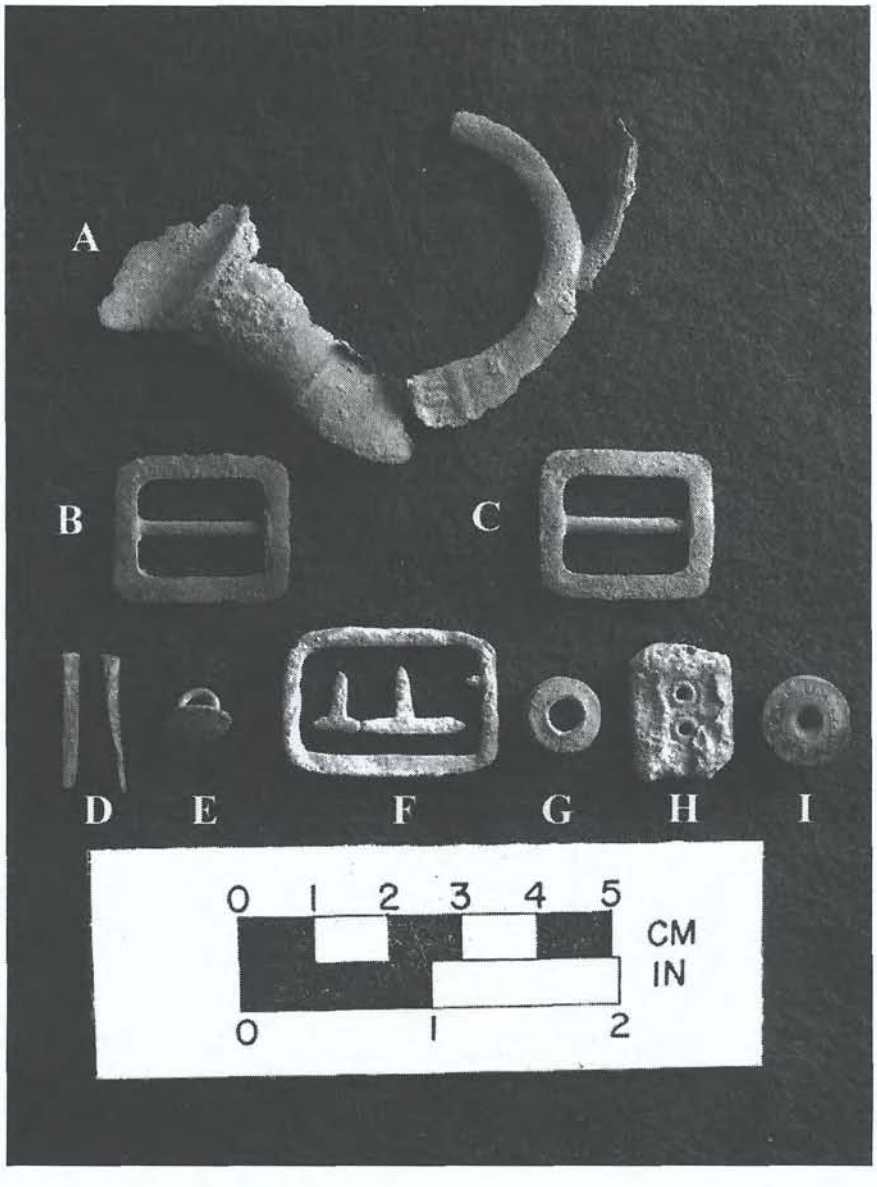


Figure 35. Military clothing related items. (A) Infantry insignia from a Kepi (forager) hat [MD90]; (B&C) Kepi (forager) hat buckles [MD 36 and 340]; (D) shoe nails [MD 254 and 11]; (E) Gaiter button [MD 326]; (F) suspender clip [MD 278]; (G) snap [MD 187]; (H) hem weight [MD 168]; (I) snap [MD 274].

regimental number included on the face of their buttons. Unfortunately, we were not lucky enough to find any such denominative artifacts.

Civil War uniforms display a wide range of styles, especially at the outset of the war when personal and state militia uniforms were used. However, during the Civil War the United States army uniform, for most enlisted men, consisted of three main components: a dark blue dress coat, flannel sack coat (fatigue coat), and sky-blue wool trousers (Legg and Smith 1989). The uniforms were fastened with government issued buttons. Legg and Smith (1989:100) indicate that an infantry dress coat, fully accessorized, has the potential of contributing 11 large buttons, six small buttons, a hook and eye set, and two sets of epaulette attachments (in actuality these were termed "shoulder scales" and unlike epaulettes are not symbols of rank (Smithsonian Institution 1961:9 and 17)) into the archeological record. The fatigue coat was fastened with four large buttons and had no other accessories (Smithsonian Institution 1961). Officer's displayed more variety in uniforms than the enlisted men. Field grade officers wore double breasted coats fastened in the front by two rows of eight or nine large buttons (Legg and Smith 1989:100). Trousers had nine buttons, four buttons for attaching suspenders and five four-hole metal buttons to close the fly (Legg and Smith 1989:100). Trouser buttons carried no insignia.

United States Army General Service buttons were also recovered. General service buttons depict an eagle with arrows and an olive branch in its talons. Across the eagle's breast is a shield, depicting a United States flag design. Two types of general service buttons were recovered (Figure 34:A and B). The larger buttons functioned to fasten the front of a coat. The smaller buttons would have adorned uniform sleeves or forager caps. Two small buttons attached the cap chin strap to the cap.

General service buttons, of the type recovered, were standard issue on federal uniforms from 1851 to ca. 1875 (Wyckoff 1984:88-91). Beginning in 1854 and continuing to 1875 general service buttons displaying service branch initials within the shield (e.g. A= artillery, I= infantry, C= cavalry, R= riflemen, etc.) were issued only to officers (Albert 1976:38-41). The majority of soldiers, enlisted men, wore general service buttons which carried no branch of service designations. The majority of the general service buttons recovered during the investigations lacked service branch designations. The exception is one coat button (MD 36) bearing an "I" within the shield.

Back marks, indicating the button manufacturer, were present on several buttons. The backmarks "SCOVILLS & CO./EXTRA" and "SCOVILL MFG CO./WATERBURY" refer to the Scovill manufacturing company of Waterbury, Connecticut, the major supplier of uniform buttons to the United States military (McGuinn and Bazelon 1988:89-92). Backmarks displaying the mark "SCOVILLS & CO" present on Civil War occupation buttons indicate that backmarks were still being used after the company name was changed in 1850 (McGuinn and Bazelon 1988:89).

Only three porcelain non-military buttons were recovered and this probably reflects collection methodology rather than actual distribution of these artifacts at the site (Table 7). These buttons would have been attached to garments, such as shirts and underwear shirts, which would have supplemented the regulation uniform. Only one of the buttons was found within a Civil War feature; the other two are a general collection find and an incidental artifact found while investigating a metal detector signal. Since these button types are common finds on historic sites, it is not known if they are associated with the Civil War occupation. The two suspender clip fragments found would have also been non-regulation clothing items.

In addition to buttons, other artifacts relating to other clothing items were recovered. Three artifacts related to army headgear were recovered: two forager (kepi) cap strap buckles and an infantry hat insignia (Figure 35:A). The strap buckles functioned to operate the chinstrap. In general, army headgear bore several insignia, for enlisted men this included army branch insignia, brass company letters, and regimental numbers (Campbell and O'Donnell 2004:150). One fragment of an infantry "looped" horn army branch insignia was found (Figure 35:A). The "looped" horn insignia fragment found at 44AX195 resembles common "looped" horn insignia design which carried two decorative bands (Campbell and O'Donnell 2004:150 [Figures 362-364]). There are many minor decorative variations on the "looped"horn insignia that reflect manufacturers (Campbell and O'Donnell 2004:147-156). It does not appear that these minor variations carry symbolic meaning. The "looped" horn insignia was common until 1863 when the display of Corps badges on forager caps was passed into regulation and the display of the horn symbol was less widespread (Campbell and O'Donnell 2004:150). However, the "looped" horn insignia continued to be issued until 1872.

Three artifacts related to shoulder applications were found. Early in the war enlisted men were issued shoulder scales which were supposed to protect them from sword blows to the shoulder; these items were commonly discarded partially because the shiny brass on each shoulder providing tempting targets for enemy sharpshooters (Crouch 1995:174). Early in the war uniforms were fitted with shoulder scales, brass strips and studs were sewn into the shoulder pads. Two cuprous shoulder scale attachment strips were recovered. Additionally, a fragment of an shoulder scale was recovered from the builder's trench of the Crimean Oven (Figure 36).

Clothing artifacts indicate that the soldiers were provided with United States Army regular issue uniforms and New York State militia uniforms. The absence of officers' buttons most likely reflects the different duties and the location within the camp associated with rank. Finally, the presence of non-military buttons and suspender clips indicates that non-issued shirts and underclothes were complementing the regulation uniform.

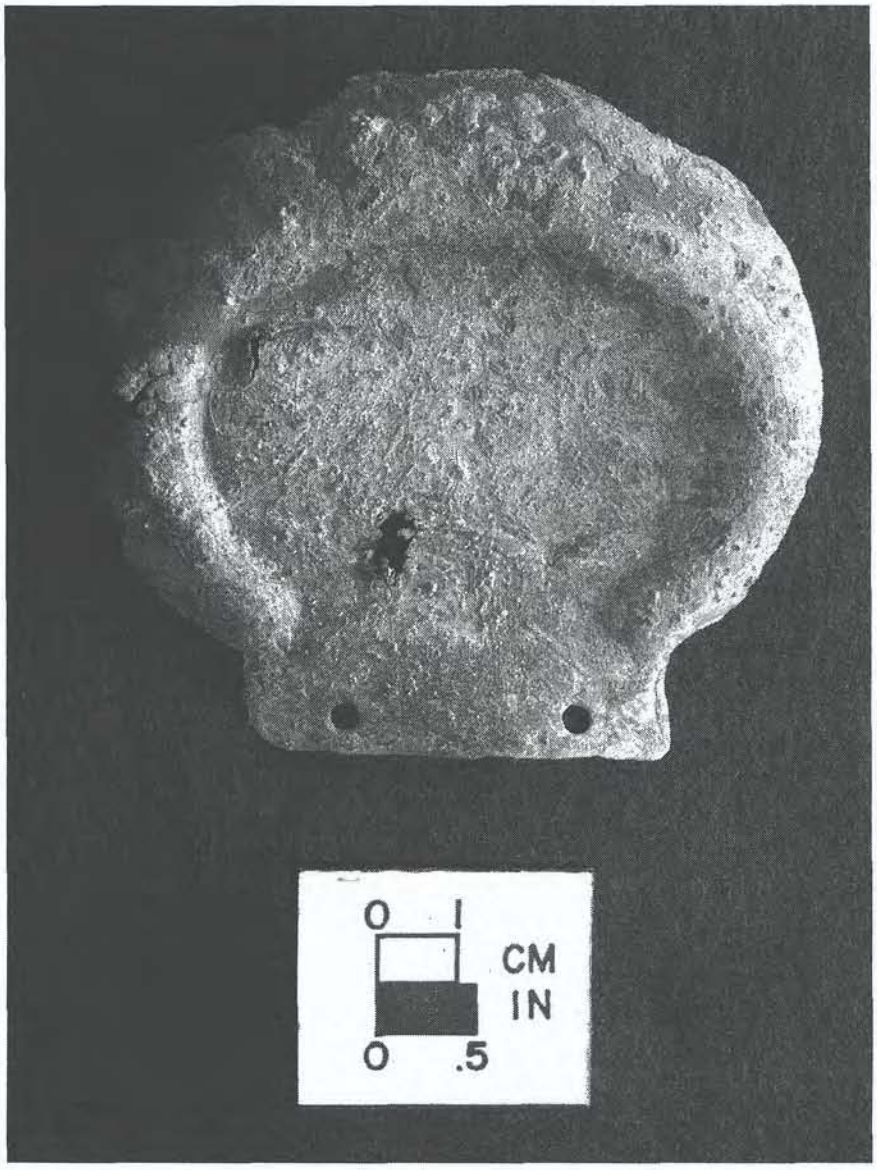


Figure 36. Shoulder scale fragment [MD 191].

6.1.5 ACCOUTREMENTS

The Civil War soldier carried a variety of accoutrements as part of their general gear. Accoutrements are items of a soldier's gear that are not clothing or weapons (e.g., packs, rifle belts, cartridge boxes, etc.). Investigations recovered numerous knapsack parts, a canteen spout fragment, bayonet scabbard tips, and a cap/cartridge box finial (Table 8).

Table 8. Accoutrements from 44AX195

Artifact Description	Count
Accoutrement Hook	3
Bayonet Scabbard: finial	1
Bayonet Scabbard: sheath	4
Bayonet Scabbard: sheath and finial	2
Belt adjusters	2
Canteen Spout	1
Cap box/pouch finial	1
Iron Buckle	1
Iron Buckle: fragments	7
Knapsack Buckle or Ring	2
Knapsack Hook	18
Possible buckle	3
Rivet	20
Snap	2
Spur: brass, fragment	1

The knapsack parts belong to a standard issue canvas pack used between 1853 and 1872 (Katcher 1989:20-23) (Figure 37). The knapsack included metal buckles, studs, hooks, and triangular fittings (Figures 37 and 38). Katcher (1989:21) indicates that enlisted men found the knapsacks of limited use and often discarded them preferring to store items in blanket rolls. The model 1853 knapsack was a 13.5-in.-tall-by-14-in.-wide frameless bag made from heavy fabric covered in gutta percha (Katcher 1989:20). The shoulder straps were made of leather. The most common knapsack-related artifacts are hooks (Figure 38:A-C). These hooks were movable pieces that were on the shoulder straps, and were designed to fasten the straps to a belt (Katcher 1989:21). This allowed the knapsack to be adjusted for a more comfortable fit. Since these hooks were merely pushed through a hole in the leather and not permanently attached, they were easily lost. The buckles and triangular fittings (Figure 38:D) were used to adjust and secure the shoulder straps. Other types of accoutrement hooks were attached to the base of the knapsack and allowed other

items to be hung from the bag. Two of these hooks were found. The rivets found at 44AX195 most likely are from the leather portions of the knapsack, possibly where the straps attached to each other (Figure 38:E-N).

Five bayonet scabbard tips were found (Figure 39). The scabbards are from the model 1855 rifled musket bayonets (Katcher 1989:35). The scabbard tips are sheet brass and have a solid brass finial at their end (Crouch 1995:78). It is possible that several of the small rivets (Figure 38:E and F) may be from the bayonet scabbard frog (leather loop which a waist belt passed through).

Other accoutrement include two brass belt extenders (Figure 39:D), a cap box finial (Figure 39:G), and a canteen spout (Figure 39:E). The cap box finial was used as part of the closure. A leather flap with a hole in it was attached to the cap-box cover and the finial was attached to the box itself. The use of the finial facilitated easy opening and closing during battle conditions. The pewter canteen spout is an early war form and does not bear a maker's mark.

The number and types of Accoutrement indicates that, except for knapsack hooks which were detachable from the knapsack, few accoutrements were being discarded or lost. This may reflect removal of larger items through policing of the camp or mundane camp activities opposed to field conditions during active campaigning.

6.1.6 PERSONAL ITEMS

Civil War soldiers brought a vast array of personal items, or "small finds," with them when they marched off to war. Many of these items were inevitably lost during the daily activities of being a soldier. At 44AX195, the 21 small finds included six pocketknives, eight coins, and three jewelry fragments (Table 9). The pocketknives would have supplemented the soldier's mess and sewing kits (Figure 40:G). The money would have been used to purchase foodstuffs to supplement the tedious army fare and non-standard items that would have eased the hardships of military life. Additionally, soldiers stationed in Alexandria would have enjoyed the City when they were on leave; using the money for entertainment such as alcohol and Dutch Girls (slang for prostitutes).

Table 9. Personal Items from 44FX195

Artifact Description	Count
Key: brass	1
Pocketknife Part:	6
Scissors: handle only	1
Spur: brass, fragment	1
Gutta Percha Flask: base fragment	1

Figure 37. Example of a standard issue canvas backpack used between 1853 and 1872 (Katcher 1989:21); note metal attachments, hooks, and buckles.

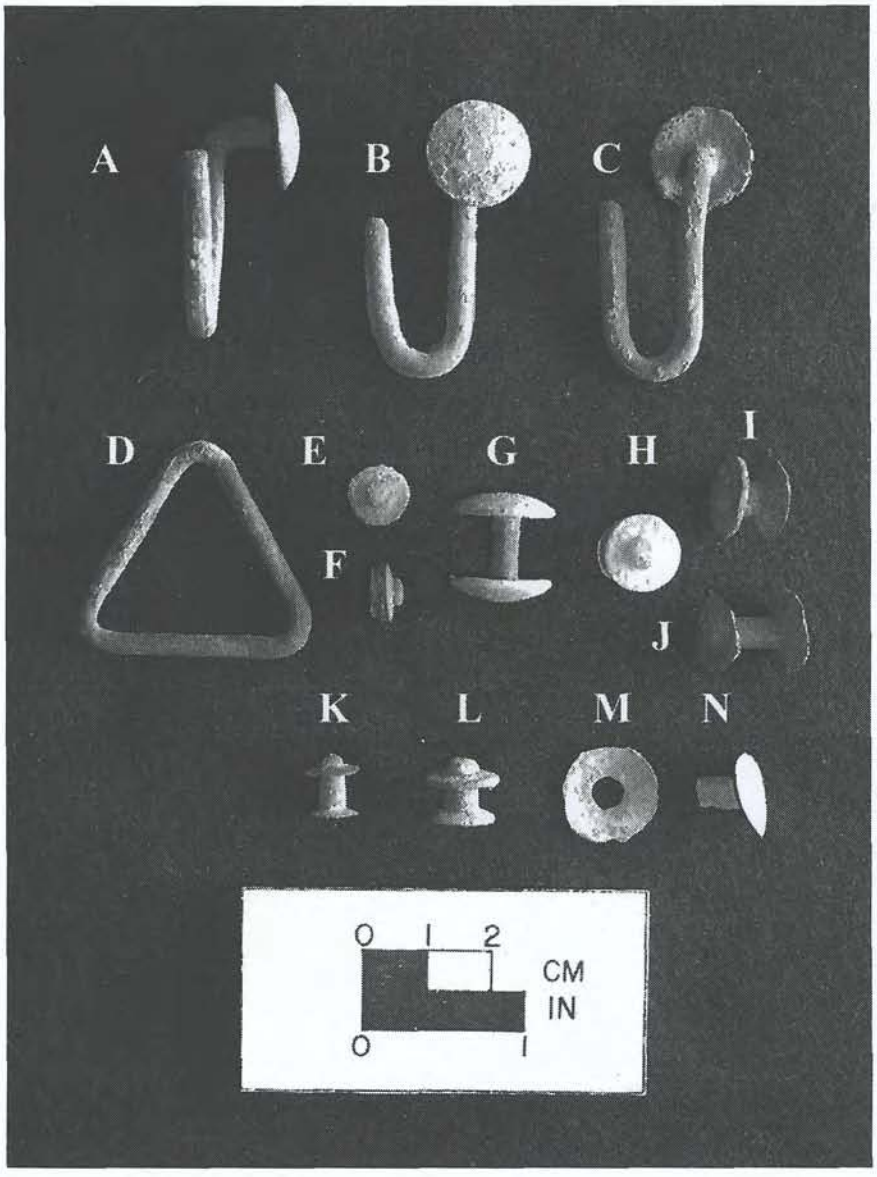


Figure 38. Metal artifacts from Civil War backpacks A-C hooks [MD 86, 212, and 397]; D triangular strap guide [MD 290]; E-N rivets used in manufacture of backpack [MD 86a, MD 86b, MD 143, MD 277, General Collection, General Collection, MD 113, MD 156, MD 278a & b.

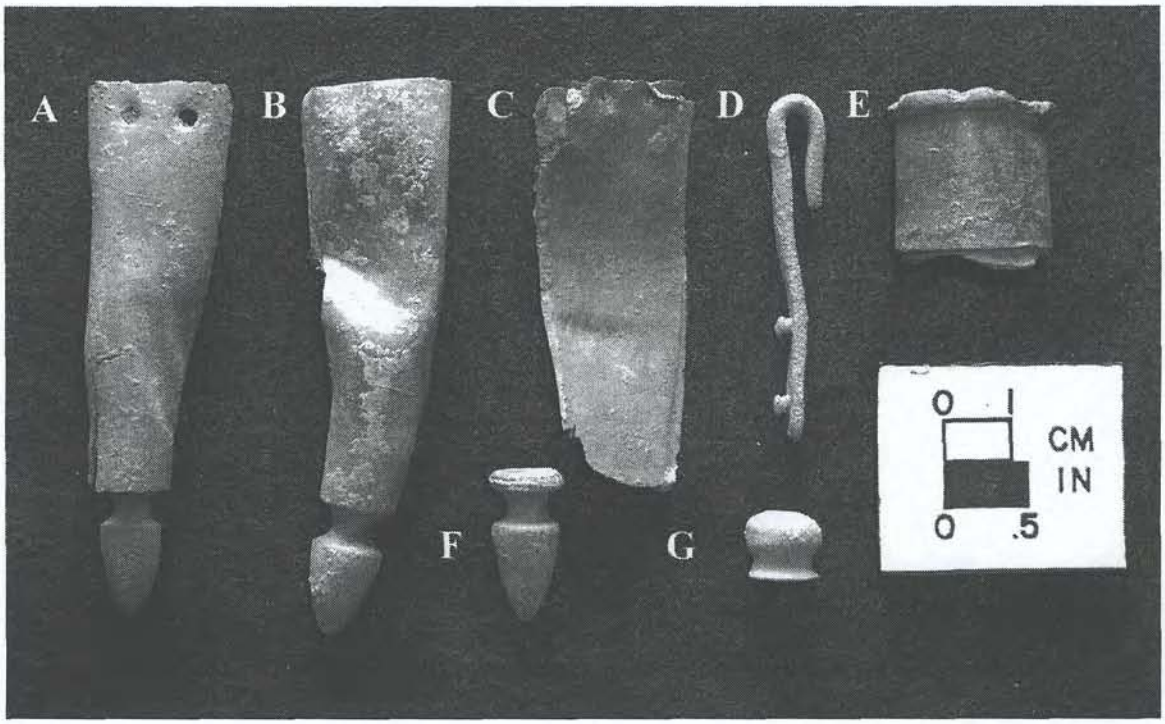


Figure 39. Accoutrements. (A&B) bayonet scabbard tips [MD 388 and 25]; (C) bayonet scabbard fragment [General Collection]; (D) belt extender [392]; (E) lead canteen spout [MD 163]; (F) bayonet scabbard finial [General Collection]; (G) cap box finial [239].

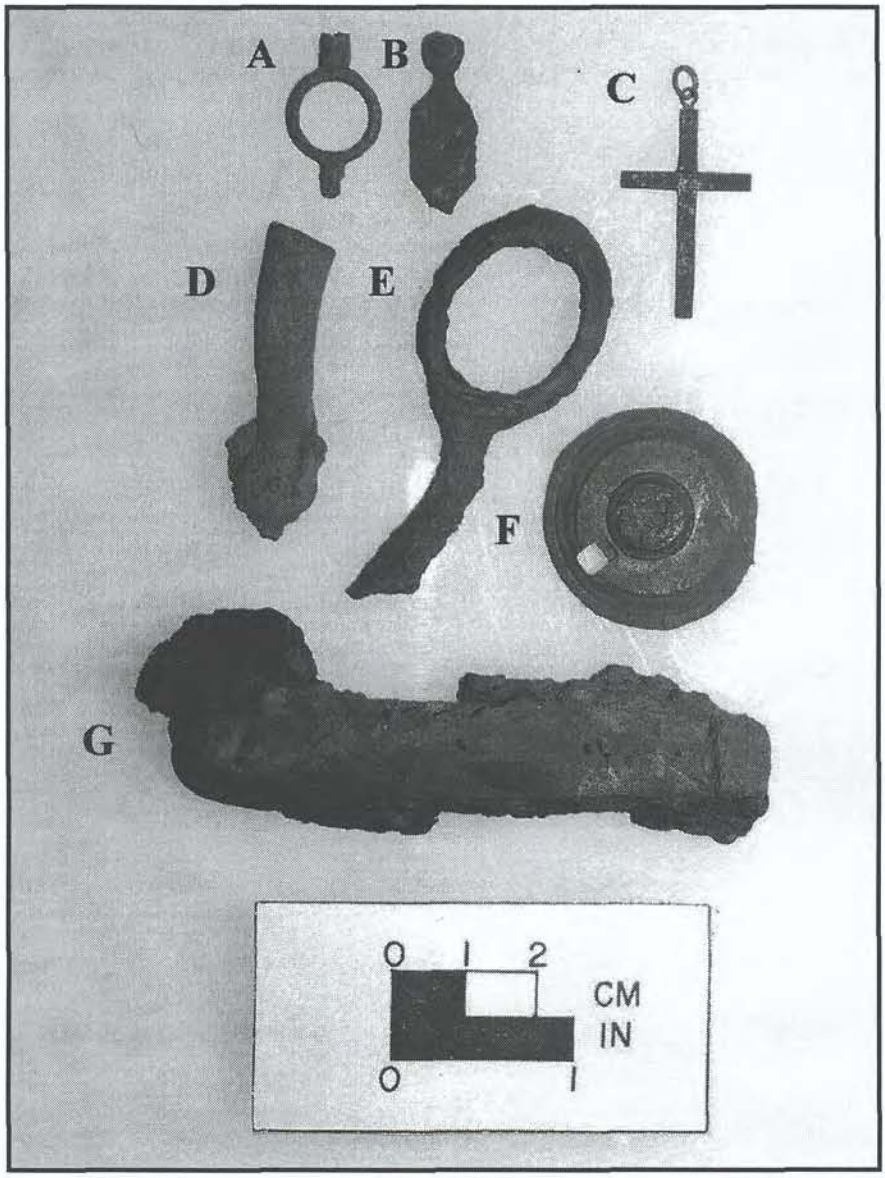


Figure 40. Miscellaneous artifacts. (A) watch fob [MD 173]; (B) keyhole cover [MD 348]; (C) crucifix [MD 271]; (D) spur fragment [MD 166]; (E) scissors fragment [MD 396]; (F) unidentified brass cover [387]; (G) pocket knife [General Collection].

Table 9. (Continued) Personal Items from 44FX195

Artifact Description	Count
Coin: 10-Cent Piece: 1861 Liberty	1
Coin: 3-Cent Piece: 1853	1
Coin: Half Dime: 1849 Liberty	1
Coin: Half Dime: 1857	1
Coin: Half Dime: 1861	1
Coin: Unidentified: copper	3
Jewelry: Religious: crucifix	1
Jewelry: Unidentified: gold plated fragment	1
Jewelry: Watch Fob fragment:	1
Total=	21

6.1.7 TOBACCO PIPES

Investigations recovered 40 clay tobacco smoking-pipe fragments (Table 10). Twenty-six of these were recovered from features, the remaining fragments were found in shovel tests and as incidental finds associated with metal detector finds.

Three pipe stems are marked. One was marked "...NOMER DEPOSE" (Figure 41:D) and the other two bore the mark "PETER//DORNI" (Figure 41:C). The "PETER//DORNI" mark on pipe stems has been shown to be merely a marketing ploy used by pipe makers who were trying to associate their pipes with Peter Dorn, a German pipe maker (Kügler 1989). The "OMER DEPOSE" mark refers to a region in France where the pipe was manufactured.

Table 10. Tobacco Items from 44AX195

Artifact Description	Count
Pipe Bowl Fragment: Ball Clay:	4
Pipe Bowl Fragment: Ball Clay: represents one pipe bowl	5
Pipe Bowl Fragment: Decorated Ball Clay:	4
Pipe Bowl Fragment: Decorated Ball Clay: Leda and Swan	5
Pipe Bowl Fragment: Decorated Ball Clay: leaf design	3
Pipe Bowl Fragment: Red Clay: contain tobacco residue	2
Pipe Stem: 5/64th-Inch Ball Clay:	7
Pipe Stem: 5/64th-Inch Decorated Ball Clay:	1
Pipe Stem: 5/64th-Inch Decorated Ball Clay: embossed " OMER DEPOSE", possibly French	1
	123

Artifact Description	Count
Pipe Stem: 5/64th-Inch Decorated Ball Clay: embossed "PETER//DORNI"	1
Pipe Stem: 5/64th-Inch Decorated Elliptical Ball Clay: embossed "PETER//DORNI"	1
Pipe Stem: 5/64th-Inch Elliptical Ball Clay:	4
Pipe Stem: 6/64th-Inch Ball Clay:	1
Pipe Stem: 6/64th-Inch Decorated Ball Clay:	1
Total =	40

Several decorative styles were displayed on pipe fragments (Figure 41). By the mid-nineteenth century tobacco pipes carried a large variety of designs, figural heads, and scenes. Pipes carrying symbolic meaning are common Civil War camp finds (Balicki 2000; Crouch 1995).

Within Feature 2 (a small hearth) fragments of a pictorial pipe were found amongst the charcoal at the base of the feature. No information on the design or manufacturer was found. The decoration on the pipe bowl is a bare-breasted woman with a bird wrapped around her (Figure 41:A). The pipe depicts Leda and the swan, a story from Greek mythology. However, to the soldiers it may have had a different symbolic meaning. To them the pipe may have represented Lady Liberty carrying an eagle. It was common for soldiers to carry and display these types of symbols as expressions of their patriotism, as part of their group identity, and to reinforce the ideals they were fighting for. At 44AX195, this pipe may reflect the feeling of patriotism that pervaded the early war militia units. At other sites, pipes displayed symbols that supported military identity (Balicki 2000).

6.1.8 Kitchen Ceramics

During the Civil War soldiers were issued standard messware consisting of tinned, sheet iron vessels for both eating and drinking; consequently kitchen ceramics and glass were non-standard items. However, represented within the Civil War artifact assemblage from Fort C.F. Smith are several kitchen ceramics and a very small number of kitchen glass artifacts (Balicki 2000). Legg and Smith (1989:113-114) in an investigation of a Union field camp on Folly Island, South Carolina found that ceramic tablewares were almost totally absent but glass tablewares were not uncommon. They attribute this artifact patterning to the type of site (field camp) and its location far from an urban center. Further, they suggest that permanent military positions near a city would contain significantly more kitchen ceramics than temporary field camps (Legg and Smith 1989:113). Balicki (2000:210) found during an analysis of ceramic and glass tablewares from Fort C.F. Smith, Arlington, Virginia, identified a variety of ceramic wares and he concludes that "Artifact assemblages from encampments located, as was Fort C.F. Smith,

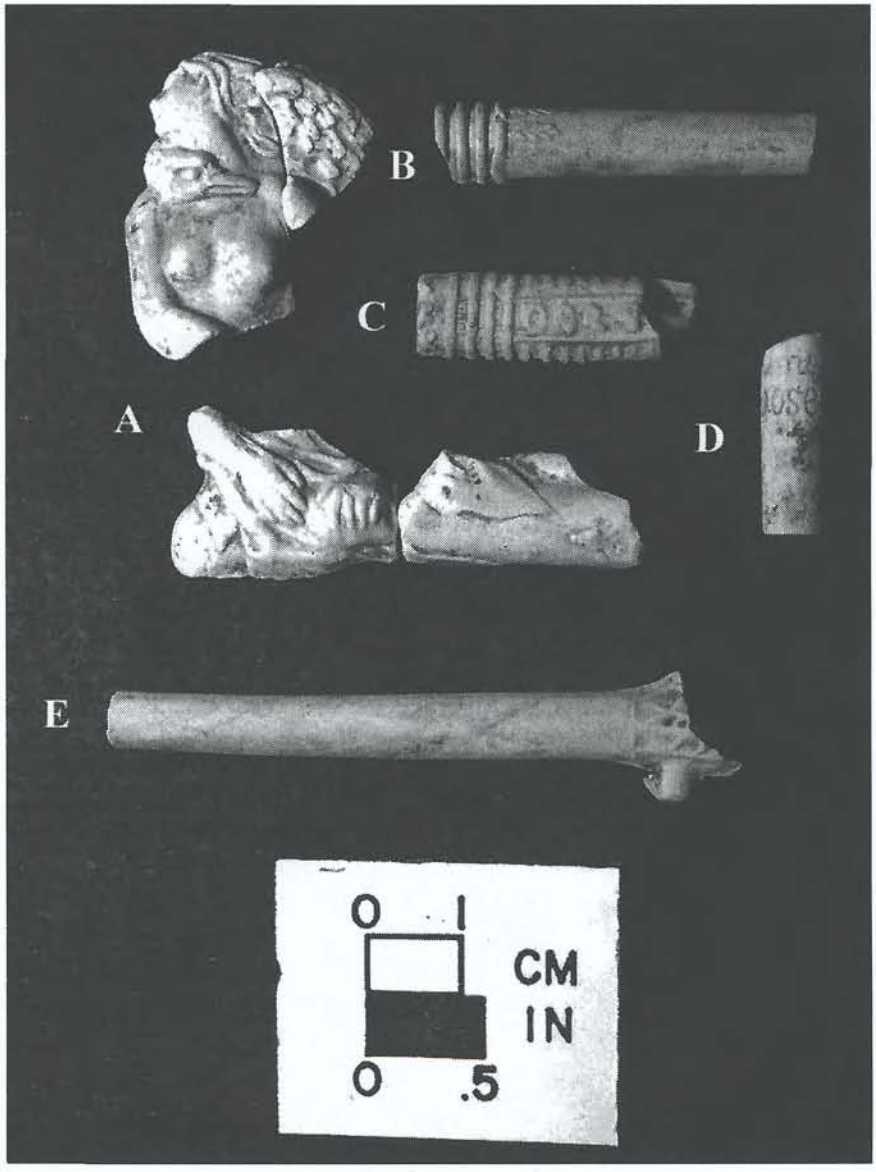


Figure 41. Tobacco smoking pipes. (A) pipe bowl and stem fragment from a figural pipe [Feature 2]; (B) pipe stem fragment [Feature 7]; (C) pipe stem fragment embossed "peter/dorni" [Feature 7]; (D) pipe stem fragment embossed "...omer depose" [Feature 7]; (E) pipe stem fragment [Feature 7]; F pipe stem fragment [Feature 7].

adjacent to urban areas will display the variety afforded by increased access to markets and interaction with civilians."

At 44AX195, although 31 ceramic tableware sherds were found only seven sherds can be directly associated with the Civil War occupation since they were in the Civil War features (Table 11). No glass tableware was found. The paucity of ceramics and the absence of glass tableware at 44AX195 appears to contradict both Legg and Smith (1989) and Balicki (2001). However, both the Folly Island and C.F. Smith sites were occupied longer and locations were investigated where officers were known to be present. At 44AX195 the period of occupation was shorter allowing for less of a chance that material was broken and would make its way into the archeological record. Further, the location of the hearths within the camp is not certain and there is little indication officers were present. The biases of the collection strategy used at 44AX195 also may have prevented finding many ceramic artifacts.

Table 11. Table Ceramics from 44AX195

Provenience	Artifact Description	Count
Feature 7, East Bisection	Ironstone: Plain White:	1
Feature 7, East Bisection	Whiteware: Blue Transfer Print:	1
Feature 9, North Bisection	Whiteware: Transfer Print:	1
Feature 6b, East Bisection	Redware: Unidentified: paste only	1
Feature 6, Clean Up	Industrial Stoneware Bottle: Ginger Beer: fragments	3

The small numbers of ceramic tablewares are interpreted as non-issue items that the soldiers brought to camp or obtained as supplemental to their issued mess ware. The one blue transfer-printed whiteware is elaborately decorated. This piece was recovered from Feature 7. Since no other sherds were found in the hearth it is likely that the sherd represents refuse tossed into the fire or into the hearth during policing of the area.

6.1.9 CONTAINER GLASS

Beverage container fragments were common and reflect the consumption of alcohol, such as beer, brandy, and whiskey. Few glass container sherds are from medicine and food storage jars.

Glass container fragments contributed 267 artifacts to the artifacts assemblage. Container glass recovered represented primarily beverage bottles rather than food and sauce bootles. Like the kitchen ceramics, container glass was found in features and during the metal detector and shovel test surveys. Table 12 presents only the glass from the Civil War features. It is likely that all the dark green bottle glass was from the Civil War occupation, but this association cannot be definitively proven.

In general, all the glass from the features and the majority of glass from the site reflect the consumption of alcohol. Consumption of alcohol by the soldiers at the camp cannot be quantified. Several factors make the examination of alcohol consumption difficult to address, primarily the return of usable containers to bottlers. Unlike field camps where large quantities of bottles were discarded (Legg and Smith 1989:118-125), the occupants of 44AX195 most likely returned empties to a bottler as glass containers were a valuable commodity (Busch 1987). A variety of alcohol bottles were recovered from the site (Figure 42). One notable closure is an internal thread whisky bottle (Figure 42:C). Similar bottles have been found on other Civil War sites (Crouch 1995:23).

The absence of glass medicine bottles and food storage containers is anomalous. Medicine bottle fragments and food storage containers are common finds at other Civil War period sites and reflect the widespread use of non-issue foods to augment rations (Legg and Smith 1989:116; Crouch 1995:26-27; Switzer 1974; Balicki 2000). It is not believed that the army shipped food rations in glass containers; consequently, these artifacts had to be procured through participation in urban markets or from sutlers. The soldiers at 44AX195 do not appear to have been augmenting their diets through locally procured items.

Table 12. Container Glass from Features

Provenience	Artifact Description	Count
Feature 2, West Bisection	Unidentified Bottle Fragment: Aqua:	1
Feature 2, West Bisection	Unidentified Bottle Fragment: Olive Green:	1
Feature 3, Clean Up	Blown-In-Mold Bottle Fragment: Olive Green: one wine finish, one base embossed "ELLENVILLE GLASS [WORKS]"	2
Feature 3, Clean Up	Unidentified Bottle Fragment: Amber:	2
Feature 3, Clean Up	Unidentified Bottle Fragment: Aqua:	1
Feature 3, Clean Up	Unidentified Bottle Fragment: Olive Green:	6
Feature 3, East Bisection	Unidentified Bottle Fragment: Olive Green:	1
Feature 4, Clean Up	Unidentified Bottle Fragment: Olive Green:	3
Feature 5	Blown-In-Mold Bottle Fragment: Olive Green:	1
Feature 5, Clean Up	Blown-In-Mold Bottle Fragment: Aqua:	18
Feature 6, Clean Up	Blown-In-Mold Bottle Fragment: Amber:	1
Feature 6, Clean Up	Blown-In-Mold Bottle Fragment: Olive Green:	10
Feature 6, Clean Up	Unidentified Bottle Fragment: Aqua:	1
Feature 6, Clean Up	Unidentified Bottle Fragment: Olive Green:	21
Feature 6a, West Bisection	Unidentified Bottle Fragment: Olive Green:	1
Feature 6b, East Bisection	Unidentified Bottle Fragment: Olive Green:	2
Feature 6b, West Bisection	Unidentified Bottle Fragment: Aqua:	1
Feature 6b, West Bisection	Unidentified Bottle Fragment: Olive Green:	2

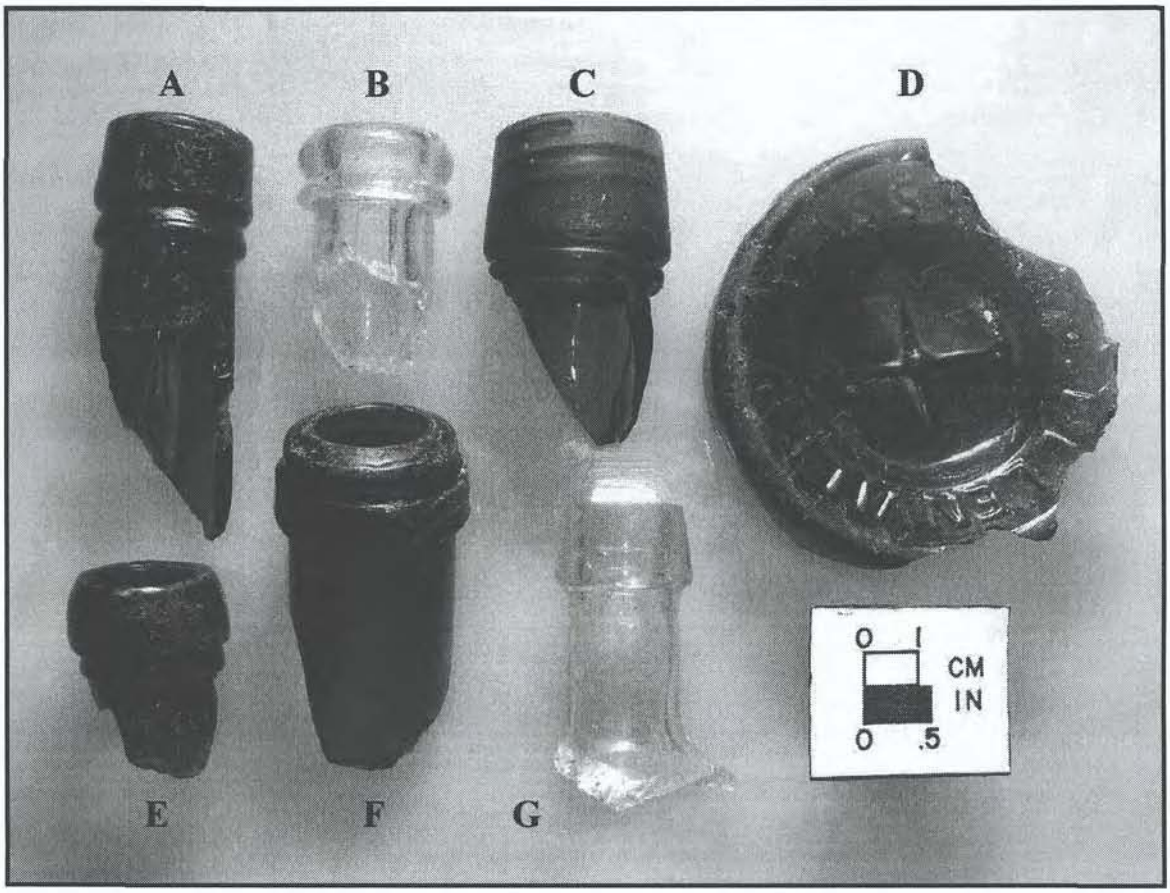


Figure 42. Bottle glass fragments. (A) wine or brandy finish [General Collection]; (B) double ring finish [General Collection]; (C) internal threaded whiskey bottle finish [Feature 7]; (D) bottle base embossed "...ellenville glassworks" [Feature 3]; (E) wine or brandy finish [General Collection]; (F) champagne finish [MD 163/2]; (G) ring or oil finish [MD 46/1].

Table 12. (Continued) Container Glass from Features

Provenience	Artifact Description	Count
Feature 7, East Bisection	Blown-In-Mold Bottle Fragment: Amber: wine finish with interior thread	1
Feature 7, East Bisection	Unidentified Bottle Fragment: Aqua:	1
Feature 7, East Bisection	Unidentified Bottle Fragment: Clear:	1
Feature 7, East Bisection	Unidentified Bottle Fragment: Dark Green:	2
Feature 7, East Bisection	Unidentified Bottle Fragment: Olive Green: 1 burned	13
Feature 7, West Bisection	Unidentified Bottle Fragment: Olive Green:	4
Feature 9, North Bisection	Blown-In-Mold Bottle Fragment: Olive Green:	1
Feature 9, North Bisection	Unidentified Bottle Fragment: Aqua: one burned	2
Feature 9, North Bisection	Unidentified Bottle Fragment: Olive Green:	2
Feature 9, South Bisection	Unidentified Bottle Fragment: Aqua:	1
	Total =	103

There is also an absence of metal cans at 44AX195. The absence of glass and metallic food containers suggests that food production waste may have been disposed of elsewhere. Alternatively, 44AX195, being an early war camp, may have been provided for differently than later war camps (Folly Island and Fort C.F. Smith).

The absence of medicine bottles is also difficult to interpret. To soldiers, the greatest enemy was disease. Within the Capital's defenses, measles, dysentery, diphtheria, malaria, typhoid, and pneumonia were common camp diseases (Cooling 1991:176, 179-180). Proprietary medicine bottle fragments were common at Fort C.F. Smith (Balicki 2000).

One reason there may have been few medicine bottle artifacts at 44AX195 is the government's policy towards alcohol. Site 44AX195 dates to late 1861 just prior to changes to the tax on alcohol. When the Revenue Act of 1862 imposed higher taxes on alcohol than proprietary medicines, bitters and other medicines were cheaper and gained in popularity (Munsey 1970:111). Bitters, an infusion of alcohol and bitter substances, were marketed basically as cure-alls as well as a substitute for alcohol (Munsey 1970:111-113; Beck 1973:66). In general, the alcohol content of bitters was more, or at least equal to, whiskeys being sold (Smith 1973:9; Munsey 1970:111-112). Further, at least one bitters manufacturer convinced the Army to substitute his product as an invigorant before battle rather than whiskey or quinine (Munsey 1970:112; Smith 1973:9). Consequently, at 44AX195 the dominance of alcohol bottles and the lack of proprietary medicine bottles reflects period of occupation.

6.1.10 FAUNAL REMAINS

From six of the hearths (2-4, 6,7, and 9) small pieces of very poorly preserved burned bone was found (Table 13). The small size of these fragments preclude positive identification of animal and meat cut. It is likely that the assemblage is predominately

beef. It is possible that the small size of the bone reflects cooking techniques. However, the fragmented condition of the burnt bone most likely reflects discard of scraps into the fire and subsequent burning.

Table 13. Faunal Remains from 44AX195

Provenience	Bone Weight in Grams	Count
Feature 2	8.2	10
Feature 3	3.31	19
Feature 4	21.84	32
Feature 6	61.33	158
Feature 7	114.89	144
Feature 9	30.16	63
Total =	239.73	426

6.1.11 MISCELLANEOUS

Several miscellaneous artifacts were found. Including fishing sinkers, ingots, carved bullets, melted lead, lock parts, and eating utensils. Five fragments of utensils (MD 98, 123, and 294) were found. These handles may have been part of the soldiers mess kit. Two brass keyhole covers (MD 348 and 387) were found. These artifacts may have been part of travel-chests used by the troops.

Melted lead is commonly found on Civil War campsites. The majority of this lead is not, as commonly, interpreted, from the manufacture of bullets. Although, the making of bullets occurred, the majority of melted lead was the result of discard or the melting of lead ammunition to make objects. Wet cartridges were discarded by soldiers and resulted in lead ammunition scattered across campsites; this is the reason there is so much ammunition found at 44AX195. During policing of camps some of this lead would have been burned and the lead melted. As a result, melted lead is ubiquitous, and 91 pieces of melted lead were found (Table 14; Figure 43). The other reason melted lead is present is that soldiers often entertained themselves by melting lead and making objects. There is evidence for this happening at 44AX195 where both melted lead conforming to the base of a pot (Figure 43:A) and possible recreational object (MD 395) were found. It is possible that troops were melting the lead to make fishing weights and, possibly, ingots Figure 43:E-G).

Table 14. Melted Lead from 44AX195

Artifact Description	Count
Projectile: Minié Ball: melted or smashed	1
Projectile: Round Ball: melted or smashed	1
Unidentified Hardware, Metal: Lead: melted	5

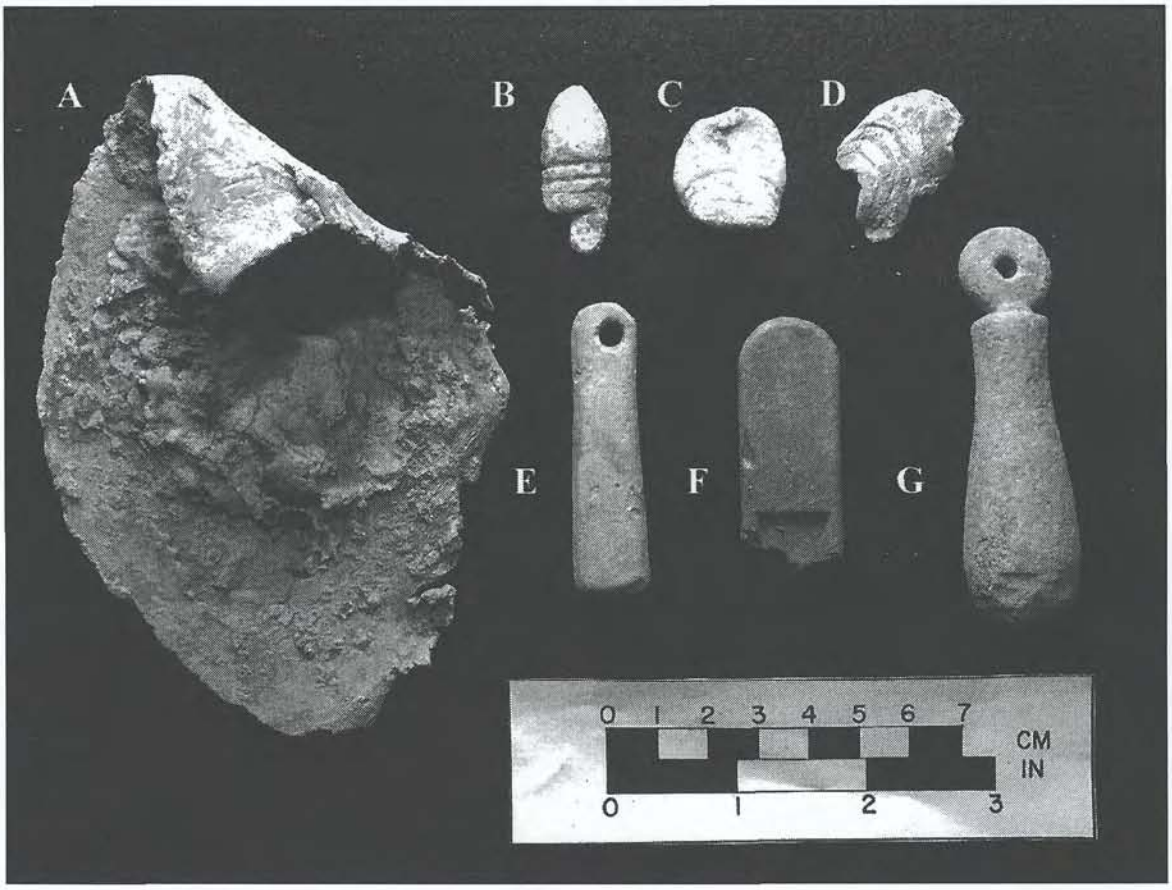


Figure 43. Melted lead. (A) lead melted in a small pot [MD 8]; (B-D) partially melted .577/.58 caliber Minié Balls [MD 280, 29, and 188]; (E) lead weight [MD 2]; (F) lead ingot fragment [MD 190]; (G) lead weight [MD 41].

Table 14. (Continued) Melted Lead from 44AX195

Artifact Description	Count
Unidentified Metal Object: Lead: melted	2
Unidentified Metal Object: Lead: larger piece was melted has the form of the interior base of a 6" round vessel in which it was melted	2
Unidentified Metal Object: Lead: melted	75
Unidentified Metal Object: Lead: melted onto quartz pebble	1
Unidentified Metal Object: Lead: melted or flattened	3
Unidentified Metal Object: Lead: smashed or melted	1
Total=	91

In camp, a popular pastime for the troops was carving lead into shapes; either for art pieces, gaming pieces, or, just, whittling to pass time. At 44AX195, ten carved pieces of lead were found (Table 15, Figure 44). Six of the carved pieces of lead are Minié balls. One of these (MD 279) may have been carved for use as a fishing weight. One round ball and a small pistol bullet appear carved. Additionally, two pieces of lead appear to be carved. None of the carved lead artifacts shows elaborate carving, and with the exception of the possible fishing weight, are probably the result of whittling to pass time while in camp.

Table 15. Carved Lead from 44AX195

Provenience	Artifact Description	Count	Comments
MD 2	Unidentified Metal Object: Lead	1	carved, sinker or weight
MD 79	Projectile: Minié Ball	1	carved or smashed
MD 113	Projectile: Round Ball	1	carved
MD 253	Projectile: Pistol Bullet	1	carved
MD 269	Projectile: Minié Ball	1	.577/.58 caliber, carved
MD 279	Projectile: Minié Ball	1	carved, possible fishing weight
MD 280	Projectile: Minié Ball	1	carved
MD 292	Projectile: Minié Ball	1	.577/.58 caliber, carved
MD 346	Projectile: Minié Ball	1	carved
MD 396	Unidentified Metal Object: Lead	1	carved
	Total=	10	

6.2 ARTIFACT DISTRIBUTION

The field methodology employed at 44AX195 was designed to collect information on artifact distributions which then could be used to examine how the camp was laid out. The use of metal detectors for investigating Civil War sites is not new. Beginning soon after World War II, when metal detectors became available to the general public, and

continuing to the present the search for Civil War "relics" has been a popular pastime for a segment of people who form a link to, and interpret the past, through the possession of material culture. Relic hunters have searched the project area in the past. What, if anything, was found is not known.

Archeologists have only recently begun to address Civil War sites and to investigate them using non-traditional archeological methodologies such as metal detecting (Geier et al. 2005; Geier and Potter 2000; and Garrow 2001). Metal detectors have been used successfully to examine artifact distributions on battlefields, and are gaining in acceptacnce on Civil War campsites (Scott et al. 1989; Balicki 1995; Laird 1998; Jones 1999; and Garrow 2001). The most extensive use of metal detectors was at Camp Lincoln, Missouri, where a short-term camp was investigated and activity areas within the camp were defined based on the artifact distribution (Garrow 2001). In most instances the artifact samples from Civil War sites have been too sparse to examine artifact distributions.

It is likely that the camp at 44AX195 was policed to some degree. By the fall of 1861, the Federal command was exerting control over the militia units that constituted the majority of the army. This control included stricter enforcement of regulations for fatigue duty and policing of camps, which not only instituted discipline but improved the health of the soldier (Stillé 1997:93-99). It is likely that the reason few artifacts were found adjacent to the Crimean Oven is because the area was kept free of debris and was not part of the soldier's camp. Alternatively, the camp area was messier with more small artifacts spread over the ground surface. Site 44AX195 was policed to a lesser degree than the camp at Fort C.F. Smith, Arlington, Virginia. At Fort C.F. Smith the barracks was a highly maintained (policed) location where few artifacts were recovered (Balicki 1995). There are several important differences between the two sites 44AX195 is a short duration camp from 1861 when regulations covering policing were just taking hold within the army. Conversely, Fort C.F. Smith was a permanent installation dating to later in the war (1863-1865) when camp cleanliness and regulations for policing were established protocols.

At 44AX195 398 metal detector artifacts were collected (Figures 21 and 22). All of these artifacts were plotted on a site map. Different artifact types (ammunition, buttons, accoutrements, knapsack parts, and melted lead) were plotted to see if artifact distribution could be used to gain an understanding of camp layout. For most artifact types (round balls, bucks, knapsack parts, and buttons) there were no discernable patterns in distribution. None of these artifact types cluster in any one area of the site. Conversely, minié balls, melted lead, and cooking vessel fragments seem to show clustering.

The majority of minié balls (72 percent) were recovered from the area between the garage and residence in the rear yard of 3543 Duke Street(Figure 21). The reason for this distribution is not clear, but it is likely that the distribution represents company organization. It was common for separate companies to be issued different types of

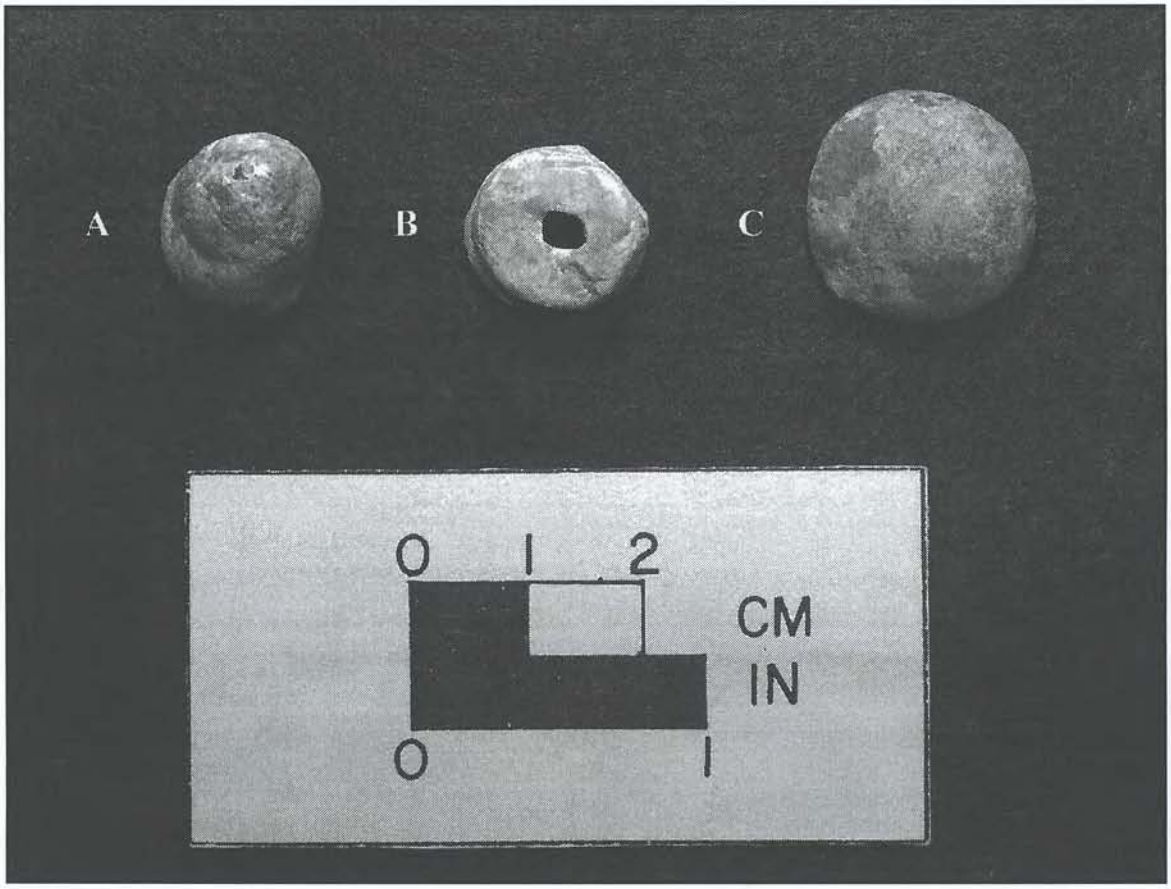


Figure 44. Carved lead. (A-C) [MD 346, 279, and 79].

weapons. If this is the case, then the distribution of minié balls reflects areas occupied by different companies within a regiment. Because only a small portion of the actual camp was investigated, it is difficult to identify locations on a company level and to definitively determine that the minié balls reflect this organization.

Melted lead clustered in two areas. As expected, one area was adjacent to the hearths (features 3, 4, 6, 7, and 9). The second area is confined to between Feature 8 and the west project area boundary-line and is bounded on the north by the garage and the south by the gum tree. In this area, 20 pieces or 37 percent of the melted lead from metal detector locations was recovered. In all 91 pieces of melted lead were found; 59 pieces were found in metal detector locations and an additional 32 in features. It is likely that this concentration of melted lead represents a "halo" of melted lead extending from hearths located just west of the project area. This location has been disturbed by construction of modern town homes. This cluster of melted lead is on the north side of the minié ball cluster and may represent a boundary between different groups of soldiers, as discussed above.

Seven fragments from cooking vessels were found with five of the seven found adjacent to Feature 7 (Figure 21). This feature is a hearth where a combination of cooking techniques were practiced.

In summary, the site was a maintained camp. The area around the Crimean Oven had few artifacts and was probably better maintained than the camp to the east. The "tidieness" of the camp reflects the period when it was occupied and the nature of the occupation. In the fall of 1961, the policing of camps was not standard operating procedure but the foundations for these practices were being implemented at this time. The camp was not a permanent or long term camp, such as a winter quarters, and was probably left messy when the soldiers moved.

Although some artifacts (minié balls and melted lead) hint at intra-site activity areas, it was not possible to show that these areas exist within the site. If the site is part, as believed, of a regimental camp then there would have been intra-site locals occupied by different parts of the regiment. Soldiers would have been separated into companies and these companies occupied distinct areas within the camp. Further, officers and ancillary personal would have had their own place within the camp.

6.3 CAMP LAYOUT

The layout of the camp provides information on military doctrine, military training, and enforcement of military regulation. The 1861 *Revised Regulations for the Army of the United States* (United States War Department 1980) was the primary set of regulations used by both the Federal and Confederate Armies. These regulations present the official manner in which regimental camps should be laid out (United States War Department 1980:76-82). Archeological research at other Civil War camps has demonstrated that the

armies from both sides followed these regulations when laying out camps (Balicki et. 2002; Balicki et al. 2004; Knepper et al. 2004; Townsend 1989; Botwick and McClane 1998). The 1861 regulations set specific criteria for the arrangement and spacing of regimental camps. The enlisted men's quarters were to be laid out in "streets" grouped by company. Each street was flanked by double rows of tents or huts. The width of the streets varied but was required to be no less than five paces. On one side of the enlisted men was a parade ground where drills and inspections took place. Officers' quarters, non-commissioned officers, kitchens, sutlers (merchants who followed the armies and set up shop in vicinity of the camps), and police guards were arranged on the other side of the enlisted men. The regulations outlined the location and position of each officers' quarters, with the most senior officers in the center of the line of officers' quarters.

The camp at 44AX195 was probably laid out in a similar fashion to the regulations; but since only a portion of the camp survives, the layout is not fully understood. It is likely that the there was a degree of order to the layout even if the camp was an early war militia camp. If the interpretation that this was the camp of the 38th New York Infantry is correct, then the time this camp was occupied was an approximately three month period between August to late October 1861. Presumably, the soldiers lived in tents. At other Civil War sites summer tent camps contain drainage and tent-platform features that assist in the determination of camp layout (Jenson 2000; Knepper et al. 2004). These types of features were not present at 44AX195. Although overall camp layout cannot be determined, some general observations can be made.

The portion of the site investigated consisted of a hospital and camp areas. The hospital tent was located on the east side of the camp approximately 500 ft. west of Quaker Lane and 200 ft. north of Little River Turnpike. It is not known if there were additional hospital tents east of the Crimean Oven. A previous archeological survey of a property at the corner of Quaker Lane and Little River Turnpike did not encounter cultural resources. However, directly east of the Crimean Oven is a residential lot that has not been investigated and additional cultural resources may have survived in this backyard. The area around the hospital tent appears to have been policed and kept relatively free of camp refuse.

The approximately 250 ft. between the Crimean Oven and the row of five hearths may have been used as camp, cook houses, non-commissioned officers quarters, or as open space. Some activity occurred in this area, as evidenced by the cluster of Civil War artifacts at the rear of 3525 Duke St. The recovery of a spur fragment (MD 166) may indicate that this area may have functioned as a reception area and transfer point for goods and invalids.

The row of hearths identified at 44AX195 is in all probability a kitchen area. The 1861 regulations for the arrangement of infantry camps includes guidelines for the placement of kitchens as well as a map showing camp configuration (United States War Department 1980:76-79). The kitchens were placed "20 paces behind the rear rank of company streets

(United States War Department 1980:76)." The use of a soldiers pace to layout a camp is inherently variable because a pace was not a set distance, consequently the actual distances will vary. At 44AX195 it is not clear where the company streets are, but it is possible that Features 2 and 8 (hearths) are small heating fires near soldiers quarters. Further a line drawn through these features is approximately parallel to the line of five hearths. The distance between Features 2 and 8 and the line of five hearths is approximately 75 ft. The senior author's pace is approximately 3.33-to-3.75 ft. Consequently, 20 paces would be approximately 67-to-75 ft. Since the 75-ft. distance was measured from the edges of the features and it is unlikely that the features were placed at the exact boundary it is reasonable to conclude that the distance between them is within the range of 20 paces.

The area west of the five hearths contains an artifact scatter that hints of organization, but what this organization signifies is not readily apparent. This area was almost certainly the camp of the enlisted men. While the distribution of ammunition types and melted lead could reflect company organization within a regimental camp, this is in no way certain. The small hearths (features 2 and 8) may be individual fireplaces used mainly for heating of tents within the enlisted men's camp area.

It is also conceivable, but less likely, that they are associated with company streets; possibly either along or at the end of a company street. The five hearths are not evenly spaced and there appears to be insufficient room between them for them to be at the ends of company streets. However, if the hearths are located at the end of a camp they may be at the end of company streets. Alternatively, the hearth locations may reflect non-adherence to formal regulation by early-war militia troops. It is plausible, if the hearths are on the ends of company streets, that the streets extended to the west.

In summary, Civil War military camps were organized landscapes even early in the war when poorly-regulated state militia regiments were common. The artifact and feature distribution hints at this organization. It is clear that there was a separate hospital area, kitchen area, and soldier's encampment. Less clear is how these intra-site locals reflect the whole and how closely this whole followed the established military order presented within the regulations.

7.0 SUMMARY AND CONCLUSIONS

Site 44AX195 contains the vestiges of the fall 1861 camp of a group of New York militia. It is likely, but not certain, that the 38th N.Y. infantry regiment occupied the camp. Although numerous New York regiments camped in the general vicinity throughout the war, it is only the 38th that has ties to the Crimean Oven at the site. Artifact and feature distribution hints at camp layout. The camp occupied a gently sloping hillside on the north side of Duke St. (Little River Turnpike). The regimental hospital (Crimean Oven) was located on the camp's east end. Presumably this location placed the infirmed furthest from possible harm. To the west of the hospital was open space and then came the camp's kitchens. The kitchens were laid out in a line running north/south. To the west of these kitchens was the camp of the enlisted men.

Within and throughout the war, the military and Federal government formed cohesive social units where military and patriotic symbols and regulation functioned to reinforce military and group identity. For the soldiers at 44AX195, during their service, military institutions became the social warp onto which the fabric of their daily existence was woven. Uniforms, buttons, and other gear gave the army identity and provided a social context within which the men were organized. The New York State militia buttons were emblems of the set of values they brought to the conflict. Prior to the war the country was small, segmented; state identity and allegiance were primary unifying forces. Adoption of federal military symbols (general service buttons) reflects the expanded role of the Federal Army, the lessened dependence on state militias and private organizations, and the changing view of the American people. At 44FX195 one compelling artifact symbolizing this national ideal is the Leda and the swan figural pipe. To the soldiers, rather than a scene from Greek mythology, this smoking pipe may have symbolically reinforced their patriotism.

In general, the findings from the shovel test survey were not conclusive. Although shovel testing provided insight into the site's potential size, this method was only marginally successful in identifying the Civil War component. It is doubtful that based solely on shovel test information that this site would have undergone additional archeological investigations. This is because a testing strategy based on shovel testing will not accurately and reliably find Civil War period sites. Even coupled with metal detection the Phase I did not conclusively demonstrate how extensive the Civil War occupation was. Phase I metal detection identified only two small portions of the site containing Civil War artifacts; ground cover and the modern metal scatter precluded identification of the rest of the site. Metal detection is not easy and good results can only be obtained when the detectorists are proficient in the use of their machines. The discrimination between good targets and refuse is an acquired skill. The requirement that all metal detector signals be investigated is not tenable on sites with a large amount of modern metal. In such cases almost all time will be spent examining modern refuse. It is recommended that only experienced metal detectorists be used on Civil War campsites, either by contracting or

sub-contracting the task to firms with skilled detectorists or by having relic-hunters assist in the task.

Investigations at 44AX195 emphasized mechanical stripping and metal detection. These methods are a somewhat unorthodox approach to the recovery of archeological information. The methods included removal of deposits containing modern artifacts, exposed primarily Civil War period deposits, and let a larger area of the site to be examined. This allowed for the examination of camp layout based on the distribution of artifacts and features, something that would not have been possible to undertake had only a small area been tested by hand or mechanical means.

The residences within the project area were built in the 1940s during a time when construction did not include extensive site grading. As a result, the Civil War occupation was preserved in various places on the properties. This situation is probably not unique. It is more than likely that sites have survived in similar situations throughout Alexandria. For example, the house lot just to the east 3517 Duke St. has a high potential for containing a continuation of 44AX195. Considering this property is east of the Crimean Oven, it is possible that the hospital continues in that direction or was the location of some other camp activity. It should be noted that Dr. McRuer built four Crimean Ovens and two have yet to be discovered.

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APPENDIX I

SITE FORM

DHR ID#: 44AX0195
Report Generated on: 3/2/05

ARCHAEOLOGICAL REPORT

City/County: Alexandria
VDHR Site Number: 44AX0195 **Other VDHR Number:**
Site Name:
Temporary Designation: 44CARRHOMES1

CULTURAL/TEMPORAL AFFILIATION

Cultural Designation
Indeterminate

Temporal Designation
19th Century: 3rd quarter

Site Class: Terrestrial, open air

THEMATIC CONTEXTS/SITE FUNCTIONS

Sequence Number: 1
Category for thematic context:
Military/Defense

Example: Camp
Comments/Remarks:
Civil War Campsite or picket post situated near Duke Street, a strategically important road. Site is located on the historic outskirts of Alexandria, VA.

Specialized Contexts:

USGS Quadrangle(s):
ALEXANDRIA

Loran: **Restrict UTM Data?**

Center UTM (for less than 10 acres): 18/4297697/318392

Boundary UTMs (for 10 acres or more):

Physiographic Province: Coastal Plain
Drainage: Potomac/Shenandoah River
Landform: other
Aspect: Facing south
Elevation: 137.00 **Slope:** 2-6%
Site Soils:
Adjacent Soils:
Nearest Water Source: tributary of Cameron Run
Distance: 1,100

INDIVIDUAL/ORGANIZATION/AGENCY INFORMATION

Individual Category Codes:
Owner of property
Honorif: Mr.
First: John

DHR ID#: 44AX0195

Last: Gasque
Suffix:
Title:
Company/Agency: Carr Homes

Address: 7535 Little River Turnpike, Suite 325
City: Annandale **State:** Virginia **Zip:** 22003
Phone/Ext: 703-852-7132
000-000-0000
Notes:

Ownership type:
Private

Gov't Agency:

SITE CHARACTERISTICS

Site Dimensions: 190 feet by 210 feet **Acreage:** 0.91
Survey Strategy:
Subsurface Testing

Site Condition:
Intact Cultural Level
Unknown Portion of Site Destroyed

Survey Description:
Site identified by a controlled metal detection survey. Survey transects were spaced at 5 foot intervals. Additional shovel tests were excavated across the site at 30 foot intervals.

CURRENT LAND USE

CURRENT LAND USE # 1

Land Use: Architecture/Landscape **Dates of Use:** 2004/07/30
Example: Lawn
Comments/Remarks:
Site is located in side and rear yards of four house lots on Duke Street. Site identified in rear yard of 3543 and 3541 Duke Street and the side yard of 3525 Duke Street. Site may also be present in rear yard of 3517 Duke Street.

SPECIMENS, FIELDNOTES, DEPOSITORIES

Specimens Obtained? Yes **Specimens Depository:** Alexandria Archeology

Assemblage Description:

Artifact assembly includes .54 cal. musket balls, military uniform buttons, container glass and knapsack parts

Specimens Reported? No
Assemblage description--reported:

Field Notes Reported? Yes **Depository:** Alexandria Archeology

CULTURAL RESOURCE MANAGEMENT EVENTS

Date: 2004/07/26
Cultural Resource Management Event: Phase I Survey
Organization or Person
First Joseph
Last Balicki
Id # Associated with Event:
CRM Event Notes or Comments:
John Milner Associates, Inc.
5250 Cherokee Ave
Suite 300
Alexandria, VA 22312

PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY

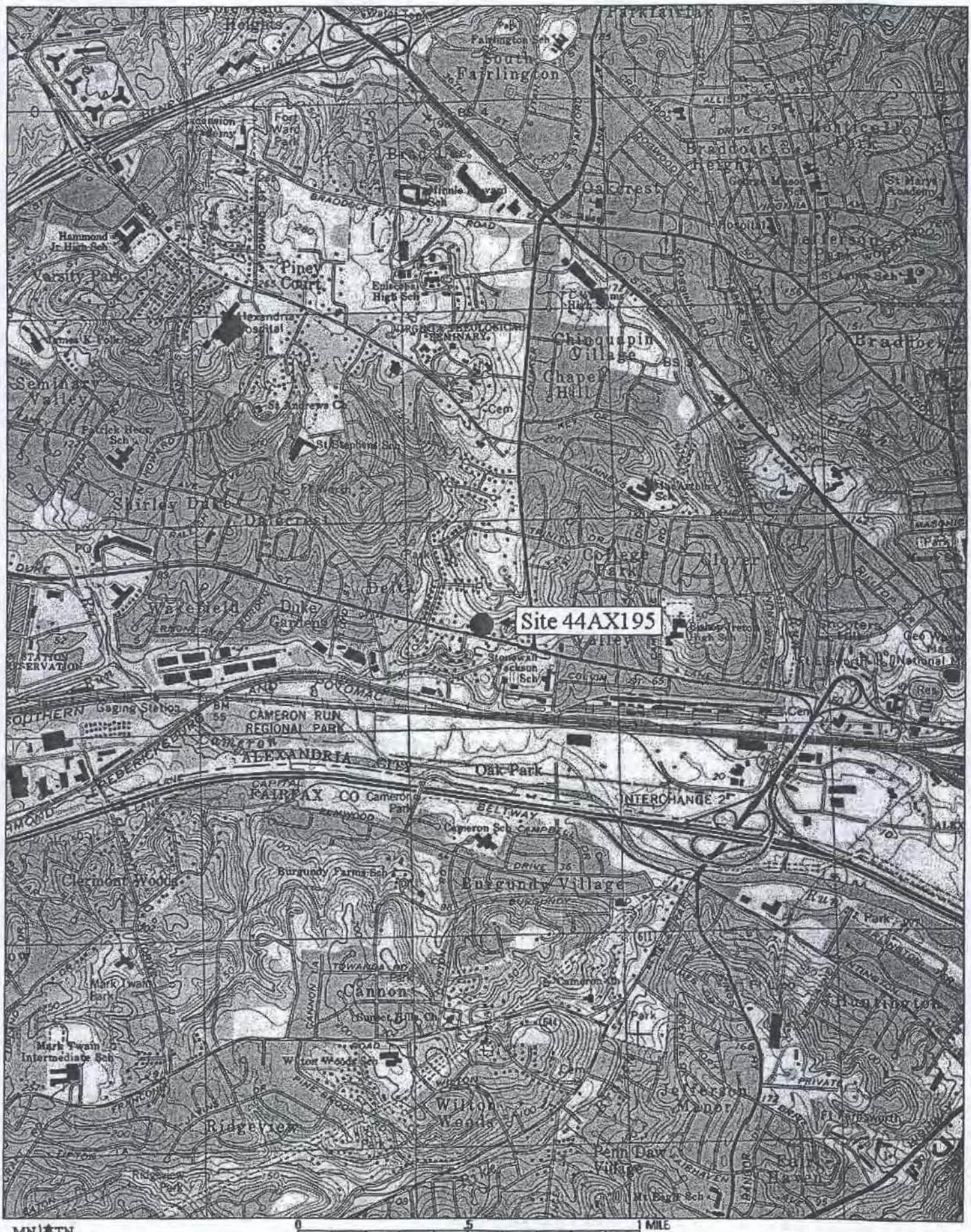
Sequence Number: 1
Photographic Documentation?
Depository: Alexandria Archeology
Type of Photos: 35 mm Black and White prints, Color slides, and digital images

REPORTS, DEPOSITORY AND REFERENCES

Sequence #: 1
Report (s) ? Yes
Depository: Alexandria Archeology
Reference for reports and publications:
Phase I Archeological Investigation of 3517, 3525, 3535, 3541, and 3551 Duke Street, Alexandria, Virginia by Joseph F. Balicki

VDHR Library Reference Number:

1 RECORD(S) IN THIS REPORT



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APPENDIX II

ARTIFACT INVENTORY

ARTIFACT INVENTORY, PHASE I
44AX195
Project code: CARRHOME
Duke Street, City of Alexandria, Virginia
August 2004

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 1	1	Unidentified Metal Object: Lead	1	melted
MD 2	1	Unidentified Metal Object: Lead	1	carved, sinker or weight
MD 3	1	Military Uniform, Metal: Button	2	3-piece eagle with shield, coat, illegible back mark
MD 4	1	Projectile: Round Ball	1	.64 caliber
MD 5	1	Projectile: Round Ball	1	.64 caliber
MD 6	1	Unidentified Bottle Fragment: Olive Green	1	
MD 6	2	Unidentified Nail: Cut Or Wrought	1	
MD 7	1	Unidentified Metal Object: Lead	1	melted
MD 8	1	Unidentified Metal Object: Lead	2	larger piece was melted has the form of the interior base of a 6" round vessel in which it was melted
MD 9	1	Hardware, Metal: Door Handle Or Latch	1	hook with two screw holes
MD 10	1	Unidentified Metal Object: Lead	1	thin lead band
MD 11	1	Unidentified Metal Object: Iron/Steel	1	
MD 12	1	Unidentified Bottle Fragment: Olive Green	1	
MD 12	2	Projectile: Round Ball	1	.64 caliber
MD 13	1	Hardware, Metal: Brass Tack	1	
MD 13	2	Cut Common Nail: Fragment	1	
MD 14	1	Military Uniform, Metal: Button	1	3-piece back only, stamped "SCOVILLE MFG CO/WATERBURY"
MD 15	1	Projectile: Round Ball	1	.64 caliber
MD 16	1	Military Object, Metal: Rivet	1	
MD 17	1	Projectile: Round Ball	1	melted or smashed
MD 18	1	Unidentified Metal Object: Lead	1	melted
MD 18	2	Military Object, Metal: Rivet	1	
MD 19	1	Fastener, Metal: Spike	1	wrought
MD 20	1	Unidentified Bottle Fragment: Olive Green	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 20	2	Unidentified Metal Object: Iron/Steel	1	possible fastener
MD 21	1	Projectile: Round Ball	1	.64 caliber
MD 22	1	Unidentified Bottle Fragment: Olive Green	1	
MD 22	2	Military Object, Metal: Knapsack Hook	1	
MD 23	1	Projectile: Round Ball	1	.64 caliber
MD 24	1	Military Uniform, Metal: Button	1	3-piece back only, stamped "EXTRA QUALITY"
MD 24	2	Free-Blown Bottle Fragment: Aqua	1	lip finish rolled outward
MD 24	3	Projectile: Minié Ball	1	.577/.58 caliber
MD 25	1	Military Object, Metal: Bayonet Scabbard	1	sheath
MD 26	1	Projectile: Minié Ball	1	smashed
MD 27	1	Projectile: Minié Ball	1	.577/.58 caliber
ST 1.4	1	Whiteware: Decal Overglaze	1	rim
ST 1.5	1	Cut Common Nail: Fragment	1	
ST 1.5	2	Whiteware: Sponged	1	blue decoration
ST 1.5	3	Pipe Stem: 6/64th-Inch Ball Clay	1	
ST 1.8	1	Wire Common Nail: Complete	1	
ST 1.8	2	Wire Common Nail: Fragment	2	
ST 1.8	3	Nail: Unidentified	3	
ST 1.10	1	Cut Common Nail: Fragment	1	
ST 1.10	2	Unidentified Bottle Fragment: Aqua	1	
ST 1.10	3	Unidentified Bottle Fragment: Amethyst	1	
ST 2.1	1	Decorated/Embossed Glass Fragment: Aqua	1	"...G..."
ST 2.2	1	Fastener, Metal: Screw	1	flat head
ST 2.2	2	Faunal: Bone	1	butchered
ST 2.3	1	Unidentified Ceramic: Blue Glaze	1	
ST 2.9	1	Buff-Bodied Earthenware: American Majolica	1	possible lettuce design
ST 2.11	1	Unidentified Bottle Fragment: Amber	1	
ST 2.11	2	Unidentified Bottle Fragment: Olive Green	2	
ST 2.12	1	Nail: Unidentified	6	
ST 2.12	2	Unidentified Bottle Fragment: Aqua	1	
ST 2.12	3	Unidentified Bottle Fragment: Amber	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
ST 2.12	4	Unidentified Bottle Fragment: Olive Green	1	
ST 2.13	1	Flake 10-15mm: Quartz	1	
ST 2.13	2	Flake 15-20mm: Quartzite	1	
ST 2.13	3	Whiteware: Unidentified	1	blue decoration
ST 2.13	4	Unidentified Bottle Fragment: Olive Green	1	
ST 3.7	1	Nail: Unidentified	2	
ST 3.7	2	Unidentified Bottle Fragment: Olive Green	1	
ST 3.9	1	Unidentified Bottle Fragment: Aqua	1	
ST 4.3	1	Whiteware: Plain	1	
ST 4.4	1	Unidentified Bottle Fragment: Olive Green	1	
ST 5.1	1	Window Glass: All Thicknesses	1	
ST 5.1	2	Machine-Made Bottle Fragment: Clear	1	ribbed interior; exterior embossed: "...AM..."
ST 5.1	3	Unidentified Bottle Fragment: Coke-Bottle Green	1	
ST 5.4	1	Window Glass: All Thicknesses	1	
ST 5.4	2	Cut Common Nail: Fragment	2	
ST 5.4	3	Machine-Made Bottle Fragment: Clear	1	
ST 6.2	1	Nail: Unidentified	1	
ST 6.2	2	Unidentified Glass Object: Fragment	2	clear cylindrical fragments
ST 7.1	1	Whiteware: Plain	1	
ST 8.3	1	Whiteware: Blue Transfer Print	1	
ST 8.3	2	Miscellaneous Kitchen, Metal: Unidentified	2	fragments of non-ferrous lid liner
ST 8.4	1	Pipe Bowl Fragment: Decorated Ball Clay	3	leaf design
ST 8.4	2	Miscellaneous, Metal: Fastener	2	unidentified; fragments mend
ST 8.7	1	Flake 15-20mm: Quartzite	1	
ST 8.7	2	Shatter: Quartz	1	
ST 8.8	1	Projectile: Round Ball	1	.64 caliber
ST 8.9	1	Unidentified Bottle Fragment: Clear	2	
ST 8.9	2	Gardening, Ceramic: Terra-Cotta Flower Pot	4	
ST 9.7	1	Whiteware: Transfer Print, Willow Pattern	1	
ST 9.7	2	Decorated/Embossed Glass Fragment: Clear	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
ST 9.7	3	Unidentified Bottle Fragment: Clear	2	
ST 9.7	4	Tool, Metal: Hammer	1	head only
SC 1; 5 ft East of ST 9.7	1	Pearlware: Plain	1	
SC 1; 5 ft East of ST 9.7	2	Unidentified Bottle Fragment: Olive Green	3	
SC 1; 5 ft East of ST 9.7	3	Miscellaneous Kitchen Glass: Canning-Lid Liner	1	milk glass fragment; "LINED MASON…"
ST 10.1	1	Blown-In-Mold Bottle Fragment: Aqua	1	base
ST 10.1	2	Unidentified Bottle Fragment: Clear	2	
ST 10.1	3	Unidentified Bottle Fragment: Olive Green	3	
ST 10.2	1	Unidentified Bottle Fragment: Aqua	1	
ST 10.2	2	Unidentified Bottle Fragment: Amethyst	3	
ST 10.3	1	Window Glass: All Thicknesses	1	
ST 10.3	2	Unidentified Bottle Fragment: Amethyst	1	
ST 10.3	3	Unidentified Bottle Fragment: Olive Green	6	
ST 11.1	1	Decorated/Embossed Glass Fragment: Clear	1	
ST 11.1	2	Unidentified Bottle Fragment: Clear	1	
		Total from Phase I:	135	
MD 28	1	Projectile: Round Ball	1	.64 caliber
MD 29	1	Projectile: Minié Ball	1	smashed or fired
MD 30	1	Unidentified Bottle Fragment: Olive Green	2	
MD 31	1	Unidentified Metal Object: Lead	1	melted
MD 32	1	Projectile: Minié Ball	1	.577/.58 caliber, smashed or fired
MD 33	1	Projectile: Buckshot	1	.29 caliber
MD 34	1	Projectile: Round Ball	1	.64 caliber
MD 35	1	Unidentified Metal Object: Lead	1	melted
MD 36	1	Military Uniform, Metal: Button	1	3-piece eagle "I" coat, stamped "SCOVILLE MFG CO/WATERBURY"
MD 36	2	Unidentified Bottle Fragment: Olive Green	1	
MD 37	1	Blown-In-Mold Bottle Fragment: Olive Green	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 37	2	Projectile: Round Ball	1	.64 caliber
MD 37	3	Pipe Stem: 5/64th-Inch Ball Clay	1	
MD 38	1	Projectile: Round Ball	1	.64 caliber
MD 39	1	Gun Tool: Combination	1	
MD 40	1	Projectile: Round Ball	1	.64 caliber, 3 buckshot imprints on base
MD 41	1	Miscellaneous, Metal: Lead Weight	1	
MD 42	1	Projectile: Round Ball	1	.64 caliber
MD 43	1	Military Object, Metal: Accoutrement Hook	1	
MD 43	2	Pipe Stem: 5/64th-Inch Ball Clay	1	
MD 44	1	Unidentified Metal Object: Lead	1	melted
MD 44	2	Unidentified Bottle Fragment: Olive Green	1	
MD 45	1	Military Object, Metal: Accoutrement Hook	1	
MD 46	1	Blown-In-Mold Bottle Fragment: Aqua	1	oil finish
MD 46	2	Military Object, Metal: Knapsack Hook	1	
MD 46	3	Unidentified Bottle Fragment: Olive Green	1	
MD 47	1	Projectile: Round Ball	1	.64 caliber
MD 48	1	Military Uniform, Metal: Button	1	3-piece back only, coat, stamped "H R"
MD 49	1	Pipe Bowl Fragment: Ball Clay	1	
MD 50	1	Blown-In-Mold Bottle Fragment: Olive Green	2	
MD 50	2	Miscellaneous, Metal: Unidentified	1	possible spike shaft
MD 51	1	Blown-In-Mold Bottle Fragment: Olive Green	3	
MD 51	2	Military Uniform, Metal: Button	1	3-piece New York, cuff, stamped "EXTRA QUALITY"
MD 52	1	Military Object, Metal: Knapsack Hook	1	
MD 53	1	Domestic Coin: Unidentified	1	copper
MD 54	1	Gun Tool: Wiper	1	
MD 55	1	Whiteware: Unidentified	1	blue decoration
MD 55	2	Blown-In-Mold Bottle Fragment: Olive Green	2	
MD 55	3	Projectile: Buckshot	1	.30 caliber
MD 55	4	Whiteware: Decal Overglaze	2	
MD 56	1	Projectile: Round Ball	1	.64 caliber

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 57	1	Projectile: Buckshot	1	.30 caliber
MD 58	1	Military Object, Metal: Knapsack Hook	1	
MD 59	1	Miscellaneous, Metal: Unidentified	1	possible spike shaft
MD 60	1	Blown-In-Mold Bottle Fragment: Aqua	1	
MD 60	2	Projectile: Buckshot	1	.28 caliber
MD 61	1	Hardware, Metal: Hinge	1	
MD 62	1	Unidentified Metal Object: Iron/Steel	1	
MD 63	1	Cut Common Nail: Fragment	1	
MD 64	1	Cut Common Nail: Fragment	1	
MD 65	1	Unidentified Metal Object: Lead	1	melted
MD 65	2	Projectile: Round Ball	1	.64 caliber
MD 66	1	Cut Common Nail: Fragment	1	
MD 67	1	Projectile: Buckshot	1	.31 caliber
MD 68	1	Unidentified Metal Object: Lead	1	melted
MD 69	1	Cut Common Nail: Fragment	1	
MD 69	2	Unidentified Metal Object: Lead	1	melted
MD 69	3	Projectile: Buckshot	1	.28 caliber
MD 70	1	Projectile: Round Ball	1	.64 caliber
MD 71	1	Projectile: Buckshot	1	.29 caliber
MD 72	1	Unidentified Metal Object: Iron/Steel	1	possible cast iron vessel fragment
MD 73	1	Projectile: Round Ball	1	.64 caliber
MD 74	1	Projectile: Buckshot	1	.29 caliber
MD 75	1	Unidentified Bottle Fragment: Olive Green	1	
MD 75	2	Military Uniform, Metal: Button	1	3-piece back only, coat, stamped "SCOVILLE MFG CO/WATERBURY"
MD 75	3	Unidentified Bottle Fragment: Aqua	1	
MD 76	1	Unidentified Metal Object: Lead	1	melted
MD 77	1	Military Uniform, Metal: Button	1	3-piece back only, coat, illegible back mark
MD 78	1	Writing, Metal: Pen Part	1	modern pen cap
MD 79	1	Projectile: Minié Ball	1	carved or smashed
MD 80	1	Military Uniform, Metal: Button	1	3-piece New York, face only, coat
MD 81	1	Domestic Coin: 10-Cent Piece	1	1861 Liberty
MD 82	1	Projectile: Pistol Bullet	1	.36 caliber

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 83	1	Unidentified Bottle Fragment: Olive Green	1	
MD 83	2	Stable, Metal: Horseshoe	1	fragment
MD 84	1	Cooking Vessel, Metal: Spider	1	fragment
MD 84	2	Brick, Fragment: Unidentified, Unglazed	1	fragment
MD 85	1	Projectile: Buckshot	1	.31 caliber
MD 86	1	Military Object, Metal: Knapsack Hook	1	
MD 86	2	Military Object, Metal: Rivet	2	
MD 87	1	Domestic Coin: Unidentified	1	copper
MD 88	1	Miscellaneous, Metal: Iron Buckle	5	fragments
MD 88	2	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, illegible back mark
MD 88	3	Unidentified Bottle Fragment: Aqua	1	
MD 88	4	Military Object, Metal: Rivet	1	
MD 89	1	Gun Part: Trigger Assembly	1	
MD 90	1	Military Uniform, Metal: Cap Insignia	1	loop horn insignia for cap
MD 90	2	Gun Part: Trigger	1	hammer fragment
MD 90	3	Projectile: Buckshot	5	.29 caliber
MD 91	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, stamped "SCOVILLE MFG CO/WATERBURY"
MD 92	1	Cut Common Nail: Fragment	4	
MD 92	2	Projectile: Buckshot	3	.28 caliber
MD 93	1	Unidentified Metal Object: Iron/Steel	1	
MD 94	1	Projectile: Round Ball	1	.64 caliber
MD 95	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 96	1	Projectile: Round Ball	1	.64 caliber
MD 97	1	Projectile: Round Ball	1	.64 caliber
MD 98	1	Utensil, Metal: Handle, Unidentified	1	ferrous
MD 99	1	Projectile: Round Ball	1	.64 caliber
MD 100	1	Projectile: Buckshot	1	.31 caliber
MD 101	1	Cut Common Nail: Fragment	1	
MD 102	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 103	1	Projectile: Buckshot	1	.29 caliber
MD 104	1	Accessory, Metal: Pocketknife Part	1	
MD 105	1	Gun Part: Other	1	barrel strap for musket or rifle
MD 106	1	Cooking Vessel, Metal: Skillet	2	fragments
MD 107	1	Unidentified Metal Object: Lead	1	melted
MD 108	1	Cut Common Nail: Fragment	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 109	1	Military Object, Metal: Bayonet Scabbard	1	sheath
MD 110	1	Shoe Part, Metal: Tack	1	T head hobnail
MD 110	2	Blown-In-Mold Bottle Fragment: Olive Green	1	
MD 111	1	Gun Tool: Other	2	triangular gun file fragments
MD 112	1	Military Object, Metal: Rivet	1	
MD 113	1	Military Uniform, Metal: Shoulder Scale	1	
MD 113	2	Domestic Gray Stoneware: Plain Alkaline Glaze	1	
MD 113	3	Unidentified Bottle Fragment: Aqua	3	
MD 113	4	Projectile: Buckshot	1	.28 caliber
MD 113	5	Projectile: Buckshot	1	.31 caliber
MD 113	6	Projectile: Round Ball	1	carved
MD 113	7	Military Object, Metal: Rivet	1	
MD 114	1	Projectile: Round Ball	1	.64 caliber
MD 115	1	Projectile: Round Ball	1	.64 caliber
MD 116	1	Projectile: Round Ball	1	.64 caliber
MD 117	1	Button: Metal	1	burned, possible 3-piece, back only
MD 118	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, cuff, "SCOVILLE MFG CO/WATERBURY"
MD 119	1	Military Uniform, Metal: Button	1	3-piece New York, face and back fragements only, cuff
MD 120	1	Military Object, Metal: Knapsack Hook	1	
MD 120	2	Unidentified Metal Object: Iron/Steel	1	
MD 121	1	Military Object, Metal: Bayonet Scabbard	1	finial
MD 122	1	Cut Common Nail: Fragment	1	
MD 123	1	Utensil, Metal: Handle, Unidentified	3	
MD 124	1	Gun Part: Trigger	1	hammer
MD 124	2	Projectile: Buckshot	1	.28 caliber
MD 125	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, face and back fragments only, cuff
MD 126	1	Projectile: Buckshot	1	.31 caliber
MD 127	1	Unidentified Metal Object: Iron/Steel	1	
MD 128	1	Unidentified Bottle Fragment: Olive Green	2	
MD 128	2	Unidentified Metal Object: Iron/Steel	1	rectangular ferrous bar

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 129	1	Unidentified Metal Object: Lead	1	smashed or melted
MD 130	1	Projectile: Round Ball	1	.64 caliber
MD 131	1	Projectile: Buckshot	1	.29 caliber
MD 132	1	Projectile: Buckshot	1	.29 caliber
MD 133	1	Projectile: Round Ball	1	.64 caliber
MD 133	2	Miscellaneous, Metal: Small Ring	1	3/16" diameter brass
MD 134	1	Pipe Bowl Fragment: Ball Clay	1	
MD 134	2	Projectile: Buckshot	1	.29 caliber
MD 135	1	Projectile: Buckshot	1	.31 caliber
MD 136	1	Blown-In-Mold Bottle Fragment: Amber	1	
MD 136	2	Unidentified Metal Object: Lead	3	melted or flattened
MD 137	1	Projectile: Buckshot	1	.29 caliber
MD 138	1	Projectile: Buckshot	1	.31 caliber
MD 139	1	Projectile: Buckshot	1	.31 caliber
MD 140	1	Projectile: Round Ball	1	.64 caliber
MD 141	1	Projectile: Buckshot	1	.31 caliber
MD 142	1	Cut Common Nail: Fragment	1	
MD 142	3	Projectile: Buckshot	1	.29 caliber
MD 142	4	Projectile: Round Ball	1	.64 caliber
MD 143	1	Military Object, Metal: Rivet	1	
MD 144	1	Projectile: Round Ball	1	.64 caliber
MD 145	1	Projectile: Buckshot	1	.31 caliber
MD 146	1	Unidentified Metal Object: Iron/Steel	1	
MD 147	1	Nail: Unidentified	3	
MD 147	2	Blown-In-Mold Bottle Fragment: Olive Green	3	
MD 148	1	Military Uniform, Metal: Button	1	3-piece New York, face and back fragement only, cuff
MD 149	1	Domestic Coin: Half Dime	1	1849 Liberty
MD 149	2	Cut Common Nail: Fragment	1	
MD 149	3	Unidentified Ceramic: Refined Earthenware	1	
MD 150	1	Projectile: Buckshot	2	.29 caliber
MD 150	2	Cut Common Nail: Fragment	1	
MD 151	1	Military Object, Metal: Rivet	1	
MD 151	2	Unidentified Metal Object: Lead	1	melted
MD 152	1	Domestic Coin: Half Dime	1	1861
MD 152	2	Accessory, Metal: Key	1	brass
MD 153	1	Projectile: Buckshot	1	.29 caliber
MD 154	1	Unidentified Metal Object: Lead	2	melted

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 154	2	Pipe Stem: 5/64th-Inch Ball Clay	1	
MD 154	3	Projectile: Buckshot	1	.29 caliber
MD 154	4	Decorated/Embossed Glass Fragment: Aqua	1	"...HIS..."
MD 155	1	Unidentified Metal Object: Lead	1	melted
MD 156	1	Military Object, Metal: Rivet	1	
MD 156	2	Unidentified Metal Object: Lead	4	melted
MD 157	1	Projectile: Buckshot	1	.29 caliber
MD 158	1	Unidentified Metal Object: Pewter	1	
MD 158	2	Projectile: Lead Bullet	1	.22 caliber
MD 159	1	Projectile: Round Ball	1	.64 caliber
MD 160	1	Projectile: Round Ball	1	.64 caliber
MD 160	2	Blown-In-Mold Bottle Fragment: Olive Green	2	
MD 161	1	Unidentified Metal Object: Iron/Steel	1	
MD 161	2	Unidentified Bottle Fragment: Olive Green	1	
MD 161	3	Blown-In-Mold Bottle Fragment: Aqua	1	
MD 162	1	Projectile: Buckshot	1	.29 caliber
MD 162	2	Faunal: Bone	2	calcined
MD 162	3	Unidentified Bottle Fragment: Olive Green	2	
MD 162	4	Pipe Bowl Fragment: Ball Clay	1	
MD 163	1	Military Object, Metal: Other	1	cap box/pouch finial
MD 163	2	Blown-In-Mold Bottle Fragment: Olive Green	2	1 champagne finish
MD 164	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 164	2	Miscellaneous, Metal: Unidentified	1	modern
MD 165	1	Projectile: Round Ball	1	.64 caliber
MD 166	1	Accessory, Metal: Spur	1	brass, fragment
MD 167	1	Unidentified Metal Object: Lead	2	melted
MD 167	2	Fastener, Metal: Screw	1	flat head
MD 167	3	Blown-In-Mold Bottle Fragment: Aqua	1	
MD 167	4	Jewelry, Glass: Pin/Brooch	1	red glass gem with metal backing, modern
MD 167	5	Fastener, Metal: Zipper	1	modern
MD 168	1	Unidentified Metal Object: Lead	1	melted

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 168	2	Miscellaneous Clothing, Metal: Lead Hem Weight	1	
MD 169	1	Projectile: Round Ball	1	.64 caliber
MD 170	1	Projectile: Buckshot	1	.31 caliber
MD 170	2	Projectile: Round Ball	1	.64 caliber
MD 171	1	Grooming/Hygiene, Metal: Lipstick Tube	1	
MD 172	1	Grooming/Hygiene, Metal: Other	1	hair curler, modern
MD 173	1	Jewelry, Metal: Watch Fob, Chain Or Key	1	
MD 173	2	Jewelry, Metal: Ring	1	modern
MD 174	1	Unidentified Metal Object: Lead	1	melted
MD 174	2	Grooming/Hygiene, Metal: Lipstick Tube	1	
MD 175	1	Unidentified Metal Object: Brass/Copper Alloy	1	unidentified
MD 176	1	Unidentified Metal Object: Lead	2	melted
MD 177	1	Grooming/Hygiene, Metal: Lipstick Tube	1	stamped "NEW YORK", modern
MD 178	1	Projectile: Round Ball	1	.64 caliber
MD 179	1	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 180	1	Grooming/Hygiene, Metal: Lipstick Tube	1	
MD 181	1	Blown-In-Mold Bottle Fragment: Aqua	1	brandy finish
MD 181	2	Jewelry, Metal: Brooch/Pin	3	modern
MD 182	1	Projectile: Round Ball	1	.64 caliber
MD 183	1	Unidentified Metal Object: Lead	1	melted
MD 184	1	Projectile: Buckshot	1	.32 caliber
MD 184	2	Unidentified Metal Object: Lead	1	melted
MD 185	1	Unidentified Metal Object: Lead	1	melted
MD 186	1	Jewelry, Metal: Charm	1	modern
MD 186	2	Button: Metal	1	possible riveted trouser button, plain
MD 187	1	Projectile: Round Ball	1	.64 caliber
MD 187	2	Military Object, Metal: Snap	1	
MD 188	1	Projectile: Minié Ball	1	melted or smashed
MD 189	1	Writing, Metal: Pen Part	1	modern
MD 190	1	Unidentified Hardware, Metal: Lead	1	ingot fragment
MD 191	1	Military Uniform, Metal: Shoulder Scale	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 191	2	Projectile: Minié Ball	1	.577/.58 caliber
MD 192	1	Miscellaneous Clothing, Metal: Lead Hem Weight	1	
MD 192	2	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 193	1	Projectile: Round Ball	1	.64 caliber
MD 194	1	Unidentified Metal Object: Iron/Steel	1	possible ferrous key
MD 195	1	Jewelry, Metal: Unidentified	1	gold plated
MD 196	1	Miscellaneous Clothing, Metal: Lead Hem Weight	1	
MD 197	1	Unidentified Metal Object: Iron/Steel	1	
MD 198	1	Grooming/Hygiene, Metal: Lipstick Tube	1	
MD 199	1	Unidentified Metal Object: Iron/Steel	1	
MD 200	1	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 200	2	Pipe Bowl Fragment: Ball Clay	1	
MD 201	1	Projectile: Buckshot	1	.29 caliber
MD 202	1	Cut Common Nail: Fragment	1	
MD 202	2	Projectile: Pistol Bullet	1	.36 caliber, round
MD 203	1	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 204	1	Unidentified Metal Object: Iron/Steel	1	rectangular ferrous bar
MD 205	1	Cut Common Nail: Fragment	1	
MD 206	1	Projectile: Buckshot	1	.29 caliber
MD 207	1	Unidentified Bottle Fragment: Olive Green	1	
MD 207	2	Military Object, Metal: Knapsack Hook	1	
MD 208	1	Cut Common Nail: Fragment	2	
MD 209	1	Projectile: Buckshot	1	.29 caliber
MD 210	1	Projectile: Buckshot	1	.31 caliber
MD 211	1	Projectile: Buckshot	1	.29 caliber
MD 211	2	Projectile: Minié Ball	1	.577/.58 caliber
MD 212	1	Projectile: Buckshot	1	.29 caliber
MD 212	2	Military Object, Metal: Knapsack Hook	1	
MD 213	1	Projectile: Buckshot	1	.29 caliber
MD 214	1	Projectile: Buckshot	1	.29 caliber
MD 215	1	Projectile: Buckshot	1	.31 caliber
MD 216	1	Miscellaneous, Metal: Iron Buckle	1	
MD 217	1	Unidentified Metal Object: Iron/Steel	1	possible gun sight fragment
MD 218	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, face only, coat

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 219	1	Unidentified Metal Object: Iron/Steel	1	
MD 220	1	Unidentified Metal Object: Iron/Steel	1	
MD 221	1	Projectile: Buckshot	1	.29 caliber
MD 222	1	Projectile: Buckshot	1	.29 caliber
MD 223	1	Projectile: Buckshot	1	.31 caliber
MD 224	1	Projectile: Buckshot	1	.29 caliber
MD 225	1	Military Object, Metal: Rivet	1	fragment
MD 226	1	Unidentified Metal Object: Lead	1	melted
MD 227	1	Unidentified Bottle Fragment: Olive Green	1	
MD 227	2	Projectile: Buckshot	1	.29 caliber
MD 228	1	Blown-In-Mold Bottle Fragment: Olive Green	1	
MD 228	2	Cooking Vessel, Metal: Skillet	1	fragment
MD 229	1	Unidentified Bottle Fragment: Olive Green	1	
MD 229	2	Cooking Vessel, Metal: Skillet	1	fragment
MD 230	1	Jewelry, Glass: Bead	1	white
MD 231	1	Blown-In-Mold Bottle Fragment: Olive Green	1	
MD 231	2	Projectile: Minié Ball	1	fired
MD 232	1	Gun Tool: Combination	1	
MD 233	1	Unidentified Metal Object: Lead	1	melted
MD 233	2	Unidentified Metal Object: Iron/Steel	1	
MD 234	1	Unidentified Metal Object: Lead	1	melted
MD 235	1	Fastener, Metal: Spike	1	fragment
MD 236	1	Cooking Vessel, Metal: Skillet	1	fragment
MD 237	1	Void: Void	1	
MD 238	1	Projectile: Buckshot	1	.29 caliber
MD 239	1	Unidentified Bottle Fragment: Olive Green	3	
MD 239	2	Military Object, Metal: Canteen Spout	1	
MD 240	1	Military Object, Metal: Rivet	1	
MD 240	2	Miscellaneous, Metal: Chain Link	1	
MD 241	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, illegible back mark
MD 242	1	Cut Common Nail: Fragment	1	
MD 242	2	Unidentified Bottle Fragment: Amber	3	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 242	3	Unidentified Bottle Fragment: Clear	1	
MD 243	1	Military Object, Metal: Accoutrement Hook	1	
MD 243	2	Projectile: Buckshot	1	.29 caliber
MD 244	1	Projectile: Buckshot	1	.29 caliber
MD 245	1	Unidentified Metal Object: Lead	1	melted
MD 246	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, illegible back mark
MD 246	2	Unidentified Bottle Fragment: Olive Green	1	
MD 246	3	Projectile: Lead Bullet	1	.22 caliber
MD 246	4	Decorated/Embossed Glass Fragment: Aqua	1	flask fragment
MD 247	1	Projectile: Round Ball	1	.64 caliber
MD 248	1	Projectile: Round Ball	1	.64 caliber
MD 249	1	Projectile: Buckshot	1	.29 caliber
MD 249	2	Projectile: Round Ball	1	.64 caliber
MD 250	1	Gun Part: Other	1	tompion part
MD 251	1	Cut Common Nail: Fragment	1	
MD 251	2	Projectile: Round Ball	1	.64 caliber
MD 252	1	Unidentified Metal Object: Lead	1	melted
MD 253	1	Projectile: Pistol Bullet	1	carved
MD 254	1	Shoe Part, Metal: Tack	2	fragments
MD 255	1	Hardware, Metal: Hinge	1	ferrous
MD 256	1	Cut Common Nail: Fragment	1	
MD 256	2	Unidentified Bottle Fragment: Olive Green	1	
MD 256	3	Unidentified Metal Object: Lead	1	melted
MD 257	1	Button: Metal	1	possible riveted trouser button, plain
MD 257	2	Miscellaneous, Metal: Small Ring	1	brass
MD 258	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 259	1	Projectile: Round Ball	1	.64 caliber
MD 260	1	Cut Common Nail: Fragment	1	
MD 261	1	Hardware, Metal: Iron Tack	1	
MD 262	1	Military Object, Metal: Knapsack Hook	1	
MD 395	1	Projectile: Round Ball	1	.64 caliber
MD 263	1	Projectile: Round Ball	1	.64 caliber
MD 263	2	Pipe Stem: 5/64th-Inch Ball Clay	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 264	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, "SCOVILLE MFG CO/WATERBURY"
MD 265	1	Unidentified Metal Object: Lead	1	melted
MD 265	2	Projectile: Buckshot	1	.31 caliber
MD 266	1	Projectile: Buckshot	1	.29 caliber
MD 267	1	Unidentified Metal Object: Iron/Steel	3	modern
MD 268	1	Cut Common Nail: Fragment	1	burned
MD 269	1	Cut Common Nail: Fragment	3	
MD 269	2	Unidentified Bottle Fragment: Olive Green	1	
MD 269	3	Projectile: Minié Ball	1	.577/.58 caliber, carved
MD 269	4	Projectile: Buckshot	1	.29 caliber
MD 270	1	Military Object, Metal: Unidentified	3	possible buckle
MD 271	1	Jewelry, Metal: Religious	1	crucifix
MD 272	1	Unidentified Metal Object: Iron/Steel	1	unidentified cast iron
MD 273	1	Unidentified Metal Object: Lead	1	melted
MD 274	1	Military Object, Metal: Snap	1	
MD 275	1	Unidentified Metal Object: Lead	1	melted
MD 276	1	Blown-In-Mold Bottle Fragment: Olive Green	1	
MD 276	2	Projectile: Round Ball	1	.64 caliber
MD 277	1	Domestic Coin: Half Dime	1	1857
MD 277	2	Military Object, Metal: Rivet	1	
MD 278	1	Domestic Coin: Unidentified	1	copper
MD 278	2	Military Uniform, Metal: Suspender Clip	1	mend
MD 278	3	Military Object, Metal: Rivet	1	
MD 279	1	Projectile: Buckshot	1	.29 caliber
MD 279	2	Projectile: Minié Ball	1	carved, possible fishing weight
MD 280	1	Projectile: Minié Ball	1	carved
MD 281	1	Whiteware: Plain	1	
MD 281	2	Unidentified Metal Object: Lead	1	melted
MD 282	1	Accessory, Metal: Pocketknife Part	2	
MD 283	1	Unidentified Bottle Fragment: Olive Green	1	
MD 283	2	Unidentified Metal Object: Lead	1	melted
MD 284	1	Military Uniform, Metal: Suspender Clip	2	mend

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 285	1	Unidentified Metal Object: Aluminum	1	modern
MD 286	1	Unidentified Metal Object: Lead	2	melted
MD 287	1	Unidentified Metal Object: Lead	1	melted
MD 288	1	Unidentified Bottle Fragment: Olive Green	2	
MD 288	2	Military Object, Metal: Bayonet Scabbard	1	sheath
MD 289	1	Projectile: Buckshot	1	.29 caliber
MD 290	1	Military Object, Metal: Knapsack Buckle Or Ring	1	
MD 291	1	Unidentified Metal Object: Aluminum	2	modern
MD 291	2	Projectile: Buckshot	1	.29 caliber
MD 292	1	Projectile: Minié Ball	1	.577/.58 caliber, carved
MD 293	1	Projectile: Buckshot	1	.29 caliber
MD 294	1	Utensil, Metal: Handle, Unidentified	1	
MD 295	1	Miscellaneous, Metal: Clasp/Paper Clip/Staple	1	modern fencing
MD 296	1	Unidentified Metal Object: Lead	1	melted
MD 296	2	Unidentified Metal Object: Aluminum	1	modern
MD 297	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, "SCOVILLE MFG CO/WATERBURY"
MD 297	2	Unidentified Bottle Fragment: Olive Green	2	
MD 297	3	Projectile: Buckshot	1	.32 caliber
MD 298	1	Whiteware: Plain	1	
MD 298	2	Projectile: Buckshot	3	.29 caliber
MD 298	2	Projectile: Round Ball	1	.64 caliber
MD 298	3	Unidentified Metal Object: Iron/Steel	1	possible spike fragment
MD 298	4	Domestic Brown Stoneware: Salt Glaze/Albany Slip On Brown	1	
MD 298	5	Miscellaneous, Ceramic: Porcelain Figurine	1	fragment
MD 299	1	Cut Common Nail: Fragment	1	
MD 299	2	Pipe Stem: 5/64th-Inch Elliptical Ball Clay	2	
MD 300	1	Unidentified Metal Object: Lead	4	melted
MD 301	1	Cut Common Nail: Fragment	2	

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 302	1	Unidentified Metal Object: Lead	4	melted
MD 302	2	Projectile: Buckshot	1	.29 caliber
MD 303	1	Projectile: Buckshot	1	.29 caliber
MD 304	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 305	1	Unidentified Metal Object: Lead	1	melted
MD 305	2	Projectile: Buckshot	1	.25 caliber
MD 305	3	Projectile: Buckshot	1	.29 caliber
MD 306	1	Unidentified Metal Object: Brass/Copper Alloy	1	
MD 306	2	Projectile: Buckshot	1	.29 caliber
MD 307	1	Hardware, Metal: Hinge	1	ferrous
MD 307	2	Redware: Thick Black Glaze	1	
MD 307	3	Unidentified Bottle Fragment: Olive Green	1	
MD 307	4	Unidentified Metal Object: Lead	1	melted
MD 308	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, coat, "SCOVILLE MFG CO/WATERBURY"
MD 309	1	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 310	1	Unidentified Metal Object: Lead	1	melted
MD 310	2	Projectile: Round Ball	1	.64 caliber
MD 311	1	Unidentified Metal Object: Lead	1	melted
MD 312	1	Projectile: Pistol Bullet	1	.36 caliber
MD 313	1	Projectile: Pistol Bullet	1	.36 caliber
MD 314	1	Cut Common Nail: Fragment	1	
MD 315	1	Military Uniform, Metal: Button	1	ferrous, unidentified
MD 315	2	Projectile: Round Ball	1	.64 caliber
MD 316	1	Military Uniform, Metal: Cap Buckle	1	
MD 317	1	Military Object, Metal: Rivet	1	
MD 318	1	Miscellaneous, Metal: Chain Link	1	fragment
MD 319	1	Projectile: Minié Ball	1	.577/.58 caliber, pulled
MD 320	1	Projectile: Buckshot	1	.29 caliber
MD 321	1	Miscellaneous, Metal: Iron Buckle	2	fragments
MD 322	1	Projectile: Round Ball	1	.64 caliber
MD 323	1	Projectile: Round Ball	1	.64 caliber
MD 324	1	Projectile: Buckshot	2	.29 caliber
MD 325	1	Projectile: Buckshot	2	.29 caliber
MD 326	1	Button, Metal: Brass Loop Shank, 1-Piece Cast	1	plain

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 327	1	Unidentified Metal Object: Lead	1	melted
MD 328	1	Projectile: Buckshot	1	.29 caliber
MD 329	1	Projectile: Buckshot	1	.29 caliber
MD 329	2	Projectile: Round Ball	1	.64 caliber
MD 330	1	Military Object, Metal: Knapsack Hook	1	
MD 331	1	Military Object, Metal: Knapsack Buckle Or Ring	1	
MD 332	1	Projectile: Buckshot	2	.29 caliber
MD 332	2	Projectile: Pistol Bullet	1	.36 caliber, round
MD 333	1	Projectile: Buckshot	1	.29 caliber
MD 333	2	Projectile: Round Ball	1	.64 caliber
MD 334	1	Projectile: Round Ball	1	.64 caliber
MD 335	1	Gun Part: Other	1	tompion part
MD 335	2	Military Object, Metal: Knapsack Hook	1	
MD 336	1	Projectile: Buckshot	2	.29 caliber
MD 337	1	Projectile: Buckshot	1	.29 caliber
MD 337	2	Projectile: Pistol Bullet	1	.36 caliber, round
MD 338	1	Gun Part: Other	1	tompion part
MD 339	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, cuff, no back mark
MD 340	1	Military Uniform, Metal: Cap Buckle	1	for strap of Forger
MD 341	1	Military Object, Metal: Knapsack Hook	1	
MD 342	1	Projectile: Round Ball	1	.64 caliber
MD 343	1	Accessory, Metal: Pocketknife Part	1	
MD 344	1	Military Uniform, Metal: Button	1	3-piece eagle with shield, cuff, "SCOVILLE MFG CO/WATERBURY"
MD 345	1	Military Object, Metal: Accoutrement Hook	1	
MD 346	1	Projectile: Minié Ball	1	carved
MD 347	1	Projectile: Buckshot	2	.29 caliber
MD 347	2	Projectile: Round Ball	1	.64 caliber
MD 348	1	Unidentified Metal Object: Lead	1	melted
MD 348	2	Hardware, Metal: Brass Lock Part	1	keyhole cover
MD 349	1	Unidentified Metal Object: Lead	1	melted
MD 350	1	Unidentified Metal Object: Lead	1	melted
MD 351	1	Projectile: Buckshot	1	.30 caliber

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 352	1	Military Object, Metal: Knapsack Hook	1	
MD 353	1	Button, Ceramic: Porcelain, 4-Hole	1	
MD 353	2	Hardware, Metal: Hinge	1	fragment
MD 354	1	Projectile: Buckshot	2	.29 caliber
MD 355	1	Projectile: Lead Bullet	1	.22 caliber
MD 356	1	Projectile: Buckshot	1	.29 caliber
MD 357	1	Projectile: Pistol Bullet	1	.36 caliber
MD 358	1	Projectile: Pistol Bullet	1	.36 caliber
MD 359	1	Projectile: Buckshot	1	.29 caliber
MD 360	1	Military Uniform, Metal: Button	1	3-piece New York, cuff, illegible back mark
MD 361	1	Projectile: Buckshot	1	.29 caliber
MD 362	1	Projectile: Buckshot	1	.29 caliber
MD 363	1	Unidentified Metal Object: Iron/Steel	1	possible knife blade fragment
MD 364	1	Gun Tool: Wiper	1	
MD 365	1	Cut Common Nail: Fragment	1	
MD 366	1	Hardware, Metal: Iron Tack	1	
MD 366	2	Unidentified Metal Object: Brass/Copper Alloy	1	sheet brass inlay with rivets
MD 366	3	Projectile: Buckshot	1	.29 caliber
MD 366	4	Accessory, Metal: Pocketknife Part	1	
MD 367	1	Projectile: Buckshot	1	.29 caliber
MD 368	1	Military Uniform, Metal: Shoulder Scale	1	
MD 369	1	Military Object, Metal: Rivet	2	
MD 370	1	Projectile: Buckshot	1	.31 caliber
MD 371	1	Unidentified Metal Object: Lead	1	melted
MD 372	1	Projectile: Buckshot	1	.31 caliber
MD 373	1	Unidentified Bottle Fragment: Olive Green	2	
MD 373	2	Projectile: Minié Ball	1	.577/.58 caliber
MD 374	1	Projectile: Buckshot	1	.29 caliber
MD 375	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 376	1	Projectile: Buckshot	1	.29 caliber
MD 377	1	Projectile: Minié Ball	1	.577/.58 caliber
MD 378	1	Toy, Metal: Other	1	shovel, modern
MD 379	1	Unidentified Metal Object: Lead	1	melted
MD 379	2	Projectile: Buckshot	1	.29 caliber
MD 380	1	Projectile: Buckshot	1	.30 caliber
MD 380	2	Projectile: Buckshot	1	.29 caliber
MD 381	1	Projectile: Buckshot	2	.29 caliber

Provenience	Artifact Number	Artifact Description	Count	Comments
MD 381	2	Unidentified Metal Object: Iron/Steel	1	flat iron with four "teeth" on one side
MD 382	1	Grooming/Hygiene, Metal: Lipstick Tube	1	modern
MD 383	1	Cooking Vessel, Metal: Skillet	1	fragment
MD 384	1	Unidentified Metal Object: Lead	1	melted
MD 385	1	Military Uniform, Metal: Button	1	3-piece back only, coat, stamped "SCOVILLE MFG CO/WATERBURY"
MD 385	2	Unidentified Bottle Fragment: Olive Green	1	
MD 385	3	Projectile: Buckshot	1	.30 caliber
MD 385	4	Miscellaneous, Metal: Bolt	1	
MD 386	1	Unidentified Metal Object: Lead	1	melted onto quartz pebble
MD 387	1	Unidentified Metal Object: Brass/Copper Alloy	1	possible key hole cover
MD 388	1	Military Object, Metal: Bayonet Scabbard	1	sheath
MD 389	1	Projectile: Buckshot	1	.31 caliber
MD 390	1	Unidentified Metal Object: Lead	1	melted
MD 391	1	Unidentified Metal Object: Lead	1	melted
MD 392	1	Military Object, Metal: Accoutrement Hook	1	
MD 393	1	Projectile: Buckshot	1	.29 caliber
MD 394	1	Unidentified Metal Object: Brass/Copper Alloy	2	melted
MD 395	1	Unidentified Metal Object: Lead	1	unidentified half cylindrical object
MD 395	2	Projectile: Round Ball	1	.64 caliber
MD 396	1	Unidentified Metal Object: Lead	1	carved
MD 396	2	Accessory, Metal: Scissors	1	handle only
MD 397	1	Military Object, Metal: Knapsack Hook	1	
MD 398	1	Projectile: Round Ball	1	.64 caliber
Feature 2, East Bisection	1	Faunal: Bone	10	8.20 g, burned
Feature 2, East Bisection	2	Pipe Bowl Fragment: Red Clay	2	contain tobacco residue
Feature 2, West Bisection	2	Faunal: Bone	10	3.98 g, burned
Feature 2, West Bisection	3	Unidentified Bottle Fragment: Aqua	1	
Feature 2, West Bisection	4	Unidentified Bottle Fragment: Olive Green	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
Feature 2, West Bisection	5	Pipe Bowl Fragment: Decorated Ball Clay	5	eagle around Lady Liberty
Feature 3, Clean Up	1	Blown-In-Mold Bottle Fragment: Olive Green	2	one wine finish, one base embossed "ELLENVILLE GLASS [WORKS]"
Feature 3, Clean Up	2	Unidentified Bottle Fragment: Aqua	1	
Feature 3, Clean Up	3	Unidentified Bottle Fragment: Amber	2	
Feature 3, Clean Up	4	Unidentified Bottle Fragment: Olive Green	6	
Feature 3, Clean Up	5	Unidentified Metal Object: Lead	1	melted
Feature 3, Clean Up	6	Pipe Stem: 5/64th-Inch Ball Clay	1	
Feature 3, Clean Up	7	Pipe Stem: 5/64th-Inch Decorated Ball Clay	1	embossed "PETER//DORNI", Holland
Feature 3, East Bisection	1	Faunal: Bone	9	12.02 g, burned
Feature 3, East Bisection	2	Unidentified Bottle Fragment: Olive Green	1	
Feature 3, West Bisection	1	Cut Common Nail: Fragment	1	
Feature 3, West Bisection	2	Faunal: Bone	10	3.31g
Feature 3, West Bisection	3	Coal, Wood: Charcoal	9	25.77 g, sample
Feature 4, Clean Up	1	Faunal: Bone	51	42.70 g, burned
Feature 4, Clean Up	2	Unidentified Bottle Fragment: Olive Green	3	
Feature 4, East Bisection	1	Faunal: Bone	19	7.05 g, burned
Feature 4, West Bisection	1	Faunal: Bone	32	21.84 g, burned
Feature 5, Clean Up	1	Blown-In-Mold Bottle Fragment: Aqua	18	
Feature 5, Clean Up	2	Accessory: Gutta Percha Flask	1	base fragment
Feature 5	1	Blown-In-Mold Bottle Fragment: Olive Green	1	
Feature 6, Clean Up	1	Cut Common Nail: Fragment	1	
Feature 6, Clean Up	2	Faunal: Bone	13	17.30 g, burned
Feature 6, Clean Up	3	Industrial Stoneware Bottle: Ginger Beer	3	fragments
Feature 6, Clean Up	4	Blown-In-Mold Bottle Fragment: Amber	1	
Feature 6, Clean Up	5	Blown-In-Mold Bottle Fragment: Olive Green	10	
Feature 6, Clean Up	6	Unidentified Bottle Fragment: Aqua	1	
Feature 6, Clean Up	7	Unidentified Bottle Fragment: Olive Green	21	

Provenience	Artifact Number	Artifact Description	Count	Comments
Feature 6, Clean Up	8	Projectile: Buckshot	1	.29 caliber
Feature 6a, East Bisection	1	Nail: Unidentified	2	
Feature 6a, East Bisection	2	Faunal: Bone	258	165.65 g, burned
Feature 6a, East Bisection	3	Coal, Wood: Charcoal	38	13.43 g
Feature 6a, East Bisection	4	Unidentified Metal Object: Brass/Copper Alloy	10	flat fragments
Feature 6a, West Bisection	1	Faunal: Bone	11	5.56 g, burned
Feature 6a, West Bisection	2	Unidentified Bottle Fragment: Olive Green	1	
Feature 6a, West Bisection	3	Coal, Wood: Charcoal	10	3.43 g
Feature 6b, East Bisection	1	Nail: Unidentified	1	
Feature 6b, East Bisection	2	Flake 20-30mm: Quartzite	1	
Feature 6b, East Bisection	3	Faunal: Bone	63	28.53 g, burned
Feature 6b, East Bisection	4	Redware: Unidentified	1	paste only
Feature 6b, East Bisection	5	Unidentified Bottle Fragment: Olive Green	2	
Feature 6b, West Bisection	1	Cut Common Nail: Fragment	1	
Feature 6b, West Bisection	2	Flake 15-20mm: Quartz	1	with cortex
Feature 6b, West Bisection	3	Faunal: Bone	158	61.33 g, burned
Feature 6b, West Bisection	4	Unidentified Bottle Fragment: Aqua	1	
Feature 6b, West Bisection	5	Unidentified Bottle Fragment: Olive Green	2	
Feature 6b, West Bisection	6	Coal, Wood: Charcoal	29	13.32 g
Feature 6b, West Bisection	7	Military Object, Metal: Rivet	1	leather attached
Feature 7, East Bisection	1	Cut Common Nail: Fragment	5	one burned
Feature 7, East Bisection	2	Nail: Unidentified	2	
Feature 7, East Bisection	4	Flake 20-30mm: Quartzite	1	
Feature 7, East Bisection	5	Faunal: Bone	131	55.24 g, burned
Feature 7, East Bisection	6	Whiteware: Blue Transfer Print	1	
Feature 7, East Bisection	7	Ironstone: Plain White	1	
Feature 7, East Bisection	8	Blown-In-Mold Bottle Fragment: Amber	1	wine finish with interior thread
Feature 7, East Bisection	9	Unidentified Bottle Fragment: Aqua	1	
Feature 7, East Bisection	10	Unidentified Bottle Fragment: Clear	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
Feature 7, East Bisection	11	Unidentified Bottle Fragment: Olive Green	13	1 burned
Feature 7, East Bisection	12	Unidentified Bottle Fragment: Dark Green	2	
Feature 7, East Bisection	13	Coal, Wood: Charcoal	53	5.13 g
Feature 7, East Bisection	14	Unidentified Metal Object: Lead	4	melted
Feature 7, East Bisection	15	Pipe Bowl Fragment: Decorated Ball Clay	2	
Feature 7, East Bisection	16	Pipe Stem: 5/64th-Inch Decorated Ball Clay	1	embossed " OMER DEPOSE", possibly French
Feature 7, East Bisection	17	Pipe Stem: 6/64th-Inch Decorated Ball Clay	1	
Feature 7, East Bisection	18	Pipe Stem: 5/64th-Inch Elliptical Ball Clay	1	
Feature 7, East Bisection	19	Pipe Stem: 5/64th-Inch Decorated Elliptical Ball Cla	1	embossed "PETER//DORNI", Holland
Feature 7, West Bisection	1	Cut Common Nail: Fragment	8	
Feature 7, West Bisection	2	Nail: Unidentified	6	
Feature 7, West Bisection	3	Button, Ceramic: Porcelain, 4-Hole	1	
Feature 7, West Bisection	4	Faunal: Bone	144	114.89 g, burned
Feature 7, West Bisection	5	Unidentified Bottle Fragment: Olive Green	4	
Feature 7, West Bisection	6	Coal, Wood: Charcoal	39	59.47 g
Feature 7, West Bisection	7	Unidentified Metal Object: Lead	4	melted
Feature 7, West Bisection	8	Pipe Bowl Fragment: Decorated Ball Clay	2	
Feature 7, West Bisection	9	Pipe Stem: 5/64th-Inch Ball Clay	2	
Feature 7, West Bisection	10	Pipe Stem: 5/64th-Inch Decorated Ball Clay	1	
Feature 9, North Bisection	1	Cut Common Nail: Fragment	2	
Feature 9, North Bisection	1	Military Uniform, Metal: Button	2	3-piece eagle with shield, coat, "SCOVILLE MFG CO/WATERBURY"
Feature 9, North Bisection	2	Shoe Part, Metal: Tack	1	
Feature 9, North Bisection	4	Faunal: Bone	166	91.29 g, burned
Feature 9, North Bisection	5	Whiteware: Transfer Print	1	
Feature 9, North Bisection	6	Blown-In-Mold Bottle Fragment: Olive Green	1	

Provenience	Artifact Number	Artifact Description	Count	Comments
Feature 9, North Bisection	7	Unidentified Bottle Fragment: Aqua	2	one burned
Feature 9, North Bisection	8	Unidentified Bottle Fragment: Olive Green	2	
Feature 9, North Bisection	9	Coal, Wood: Charcoal	2	0.65 g
Feature 9, North Bisection	10	Unidentified Metal Object: Lead	4	melted
Feature 9, North Bisection	11	Projectile: Buckshot	5	.31 caliber
Feature 9, North Bisection	12	Pipe Bowl Fragment: Ball Clay	5	represents one pipe bowl
Feature 9, South Bisection	1	Nail: Unidentified	3	
Feature 9, South Bisection	3	Faunal: Bone	63	30.16 g, burned
Feature 9, South Bisection	4	Unidentified Bottle Fragment: Aqua	1	
Feature 9, South Bisection	5	Coal, Wood: Charcoal	4	1.49 g
General Collection	1	Button, Ceramic: Porcelain, 4-Hole	1	
General Collection	2	Miscellaneous Clothing, Metal: Buckle	2	parts of one copper buckle
General Collection	3	Core: Quartz	2	with cortex
General Collection	4	Biface Fragment: Quartz	1	
General Collection	5	Domestic Brown Stoneware: Salt Glaze/Albany Slip On Buff	2	mend
General Collection	6	Domestic Brown Stoneware: Albany Slip-Both Sides	1	
General Collection	7	Ironstone: Molded	1	
General Collection	8	20th-Cent Refined Earthenware: Fiesta	1	cream-colored glaze
General Collection	9	Blown-In-Mold Bottle Fragment: Aqua	9	two wine finishes; one double ring finish; one burned
General Collection	10	Blown-In-Mold Bottle Fragment: Olive Green	36	three wine finishes; one stove pipe finish; one illegible embossed fragment; one burned
General Collection	11	Blown-In-Mold Bottle Fragment: Olive Green	4	two wine finishes
General Collection	12	Unidentified Hardware, Metal: Lead	5	melted
General Collection	12	Unidentified Hardware, Metal: Lead	2	possible ingots
General Collection	13	Accessory, Metal: Pocketknife Part	1	
General Collection	14	Domestic Coin: 3-Cent Piece	1	1853
General Collection	15	Projectile: Buckshot	1	.28 caliber

Provenience	Artifact Number	Artifact Description	Count	Comments
General Collection	15	Projectile: Buckshot	1	.31 caliber
General Collection	16	Projectile: Round Ball	6	.64 caliber
General Collection	16	Projectile: Round Ball	1	.64 caliber, pulled
General Collection	17	Projectile: Minié Ball	2	.577/.58 caliber
General Collection	18	Projectile: Pistol Bullet	1	.44 caliber, possibly fired
General Collection	19	Gun Tool: Combination	1	
General Collection	20	Pipe Stem: 5/64th-Inch Elliptical Ball Clay	1	
General Collection	21	Military Object, Metal: Knapsack Hook	4	two complete, two fragments
General Collection	22	Military Object, Metal: Bayonet Scabbard	2	sheath and finial
General Collection	23	Miscellaneous, Metal: Flat Iron	1	brass/copper alloy
General Collection	24	Military Object, Metal: Rivet	2	
		Total from Phase II:	2236	
		Total artifacts from 44AX195:	2371	

APPENDIX III

QUALIFICATIONS OF THE INVESTIGATORS

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EDUCATION

M.A.	The Catholic University of America	Anthropology	1987
B.A.	The George Washington University	Anthropology	1981

PROFESSIONAL CERTIFICATION

1999 Registered Professional Archeologist (RPA)
1992-2004 OSHA-certified 40-hour hazardous waste field training

EXPERIENCE PROFILE

Joseph Balicki is a graduate of The George Washington University and holds a Master's degree in anthropology from The Catholic University of America. Mr. Balicki has over 25 years of experience in North American archeology and has been involved in investigations of sites ranging from the Paleo-Indian through Historic periods. Since joining John Milner Associates, Mr. Balicki has supervised or assisted various archeological survey and testing programs in Virginia, Maryland, Massachusetts, Pennsylvania, New Hampshire and Washington, D.C. He has directed several Civil War archeological projects including a survey of over 850 Civil War sites in Fairfax County; documentation of eight earthworks in Leesburg; investigations at Fort C.F. Smith, Arlington County, and investigations at a Confederate cantonment at Marine Base Quantico. Mr. Balicki has presented five papers at professional conferences covering military camp layout and Civil War sites archeology, and contributed a chapter to *Archaeological Perspectives on the American Civil War.*

KEY PROJECTS

2005 Principal Archeologist. Phase II Archeological Evaluation of Prehistoric Site 44FX1921, Colyer Village, Fort Belvoir, VA.

2005 Principal Archeologist. Phase I Archeological Identification MD 31: High St Extended to MD 75, New Windsor Carroll County, MD. Maryland Department of Transportation, State Highway Administration, Baltimore, MD.

2003-2005 Principal Archeologist. Archeological Investigations of the Proposed Rewatered Turning Basin, Crescent Lawn Archeological District (18AG227), Cumberland, Allegany County, Maryland. United States Corps of Engineers Baltimore District Baltimore, Maryland.

2002 Principal Archeologist. Documentation of Eight Civil War Forts and Earthworks in the Vicinity of Leesburg, Virginia. Town of Leesburg, Department of Planning, Zoning, & Development.

2001-2002 Principal Archeologist. Phase I and Phase II Archeological Investigations for Multiple Cultural Resources at Marine Base Quantico, Virginia. EDAW, Inc.

2000-2002 Fairfax County Civil War Sites Inventory. Fairfax County Park Authority.

2000 Principal Archeologist. Phase I Archeological Investigations of the Proposed Rewatered Turning Basin, Crescent Lawn Archeological District (18AG227), Cumberland, Allegany County, Maryland. United States Corps of Engineers Baltimore District Baltimore, Maryland.

1999 Phase I and II Archeological Investigation in Crescent Lawn, City of Cumberland, Allegany County, Maryland. Maryland State Highway Administration.

1998 Archeological Investigations at Stratford Hall, Westmoreland County, Virginia. The Robert E. Lee Memorial Association, Inc.

1996-1997 Phase I Archeological Survey of Fort Monroe, York County, Virginia. Directorate of Peninsula contracting, Fort Eustis.

1996 Data Recovery at 44HE713 and 44HE714, James River Water Supply project, Henrico County, Virginia. Camp Dresser & McKee, Inc.

1995 Historical and archeological survey of Fort C.F. Smith, 2411 24th Street North, Arlington, Virginia. Arlington County Department of Community Planning.

1992-1996 Data recovery archeological investigations at Paddy's Alley, Cross Street Backlot, and Mill Pond, sites Boston, Massachusetts. The Central Artery/Tunnel Project and Bechtel/Parsons Brinkerhoff.

1992 Review and synthesis of archeological documentation Fort McHenry National Monument and Historic Shrine, Baltimore, Maryland. National Park Service, Denver Service Center.

1991 Phase I archeological investigations at the Studio of the Caryatids, Saint-Gaudens National Historic Site, Cornish, New Hampshire. National Park Service, Denver Service Center.

1988-1991 Phase II & III archeological investigations of the site of the International Cultural and Trade Center/Federal Office Building Complex, Federal Triangle, Washington, D.C. TAMS Consultants, Inc.

1989-1990 Phase III archeological investigations at the Thomas Stone (18CH331) National Historic Site, Port Tobacco, Maryland. National Park Service, Mid-Atlantic Regional Office.

1988-1989 Archeological investigations at Fort McHenry National Monument and Historic Shrine, Baltimore, Maryland. National Park Service, Mid-Atlantic Regional Office.

1987-1988 Excavation at Waihée Midden Site, Maui, Hawaii. Maui Archeological Project, The Catholic University of America.

SELECTED PUBLICATIONS AND PAPERS

2005 Mary Ann Hall's House. In Sin City, edited by Donna J. Seifert. Historical Archaeology 39(1). (with Donna J. Seifert).

2003 Camp French: Confederate Winter Quarters Supporting the Potomac River Blockade. The 2003 Society for Historical Archaeology Conference on Historical and Underwater Archaeology, Providence, Rode Island.

2002 "Spanning the Great Divide: The Relevance of Relic Hunters to an Understanding of the Civil War in Northern Virginia." The Council for Northeast Historical Archaeology Conference and Meeting, Wilmington, Delaware.

2001 Defending the Capital: The Civil War Garrison at Fort C.F. Smith. In *To Peel The Earth: Historical Archaeology and the War Between the States*, edited by Clarence Geier and Stephan Potter.

2000 Mary Hall's First-Class Bawdy House: The Material Culture of a Washington, D.C. Brothel. In *Archaeologies of Sexuality*, edited by Robert Schmidt and Barbara Voss. (with Donna Seifert and Elizabeth Barthold O'Brien)

1998 Wharves, Privies, and the Pewterer: Two Colonial Period Sites on the Shawmut Peninsula, Boston. *In* Perspectives on the Archeology of Colonial Boston: The Archeology of the Central Artery/Tunnel Project, Boston, Massachusetts, edited by Charles D. Cheek. *Historical Archaeology* 33(3).

1998 Katherine Naylor's "House of Office": A Seventeenth-Century Privy. *In* Perspectives on the Archeology of Colonial Boston: The Archeology of the Central Artery/Tunnel Project, Boston, Massachusetts, edited by Charles D. Cheek. *Historical Archaeology* 33(3). (with Dana B. Heck).

1991 "Technological Strategies and Interaction Spheres: Results of a Phase I Survey at the Verdon Quarry Site (44HN180) Hanover, County, Virginia." Annual Meeting of the Archeological Society of Virginia, Richmond, Virginia. (with J. Sanderson Stevens).

1991 "Bottles, Bottles Everywhere and Not A Drop to Drink: Examining Washington, D.C. Bottles for Chronology and Function." The 1991 Middle Atlantic Archeologist Conference, Ocean City, Maryland.

SUMMARY OF PROFESSIONAL ACTIVITIES

Mr. Balicki is author or co-author of ninety-eight (98) cultural resources reports, eight (8) scholarly articles, and sixteen (16) papers presented at professional meetings.

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BRYAN CORLE
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EDUCATION

B.A.	George Mason University	Anthropology	Expected 2005

EXPERIENCE PROFILE

Bryan Corle has 13 years experience in North American Archeology and has been involved in investigations ranging from early prehistoric through urban historic. Since joining John Milner Associates, Mr. Corle has assisted archeological survey, testing, and data recoveries in Virginia, Maryland, Pennsylvania, West Virginia, and Washington, D.C.

KEY PROJECTS

2003-2005	Assistant Archeologist. Archeological Investigations of the Proposed Rewatered Turning Basic, Crescent Lawn Archeological District (18AG227), Cumberland, Allegany County, Maryland. United States Corps of Engineers Baltimore District, Baltimore, Maryland.
2002-2003	Assistant Archeologist. Phase I and Phase II Archeological Investigations for Multiple Cultural Resources at Marine Base Quantico, Virginia. EDAW, INC.
2002	Assistant Archeologist. Phase II Archeological Investigations at Sites 18PR548, 18PR549, and 18PR551, NASA Goddard Space Flight Center, Greenbelt, Maryland. NASA Goddard Space Flight Center.
2002	Assistant Archeologist. Data Recovery Investigations at Buildings A, B, C within the Crescent Lawn Archeological District (18AG227), Cumberland, Allegany County, Maryland. Canal Place Preservation and Development Authority.
2001	Assistant Archeologist. Phase I and Phase II Archeological Investigations for Multiple Cultural Resources at Marine Base Quantico, Virginia. EDAW, Inc.
2001	Assistant Archeologist. Phase I Archeological Investigations of Battery Heights (44AX186), City of Alexandria, Virginia, Carr Homes, Inc.
2000	Assistant Archeologist. Data Recovery, Bailey's Farm (44SP228), Chancellorsville, Spotsylvania County, Virginia, County of Spotsylvania.

2000 Assistant Archeologist. Phase I Archeological Investigations of the Proposed Rewatered Turning Basin, Crescent Lawn Archeological District (18AG227), Cumberland, Allegany County, Maryland. United States Corps of Engineers Baltimore, Baltimore District, Baltimore, Maryland.

2000 Assistant Archeologist. Phase I Archeological Investigation NAN-3 and PTB-2 Wetland Mitigation Areas Charles County, Maryland. Maryland Department of Transportation, State Highway Administration.

1999 Assistant Archeologist. Data Recovery, Lot 12, Square 406, Washington, DC. General Services Administration and Architrave.

1999 Assistant Archeologist. Phase II Archeological Investigations Crescent Lawn Park, in Cumberland, Allegany County, Maryland. Maryland Department of Transportation, State Highway Administration.

1998 Archeological Technician. Data Recovery Maryland Route 36 in Lonaconing, Allegany County, Maryland. Maryland Department of Transportation, State Highway Administration.

1997 Assistant Field Supervisor. Data Recovery Investigations at South Strabane Site, Washington County, Pennsylvania. Indiana University of Pennsylvania, Archeological Services.

1996 Archeological Technician. Data Recovery at the National Museum of the American Indian Mall Museum Site, Washington, D.C. Venturi, Scott Brown and Associates, Inc., and the Smithsonian Institution, Office of Design and Construction.

1995 Crew Chief, Field Technician. Data Recovery Archeological Investigations, Route 219 Bypass, Somerset County, Pennsylvania. Greenhorne and O'Mara, Inc.

1994 Archeological Technician. Archeological Investigations at Fort McHenry National Monument and Historic Shrine, Baltimore, Maryland. National Park Service, Mid-Atlantic Regional Office.

1993 Archeological Technician. Phase II Archeological Iinvestigations in Selinsgrove, Snyder County, Pennsylvania. Pennsylvania Department of Transportation, State Highway Administration.

1992 Archeological Technician. Data Recovery Investigations in Simpsonville, Howard County, Maryland. Maryland Department of Transportation, State Highway Administration.

1991 Crew Member. Crooked Creek Drainage Research Project, Armstrong County, Pennsylvania. Indiana University of Pennsylvania, Archeological Services.

1990 Crew Member. Data Recovery Investigations, Bedford County Airport, Bedford, Pennsylvania. Indiana University of Pennsylvania, Archeological Services.

CULTURAL RESOURCES REPORTS

Co-author of ten (10) cultural resources reports.

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EDUCATION

M.A.	The Catholic University of America	Anthropology	2003
B.A.	The American University	Anthropology	1995

EXPERIENCE PROFILE

Charles Goode holds a Master of Arts degree in Anthropology with specializations in Middle Atlantic prehistoric archeology, landscape and settlement, human-land relations and soils/pedology. He has eight years experience in cultural resource management. He has experience in directing fieldwork and has been involved in investigating prehistoric Native American sites as well as historic-period sites dating from the mid-eighteenth century to the mid-twentieth century. He has also supervised many large Phase I surveys of project areas greater than 500 acres. He has experience in analyzing both prehistoric lithic and ceramic assemblages. Since joining John Milner Associates, Inc., Mr. Goode has supervised fieldwork and has participated in report preparation for projects in Maryland and Virginia.

KEY PROJECTS

2005 Project Archeologist. Supervised fieldwork and co-authored report. Phase II Archeological Investigations for the Crosswind Runway, Washington Dulles International Airport, Fairfax and Loudoun Counties, Virginia. Parsons Management Corporation and the Metropolitan Washington Airports Authority.

2004 Project Archeologist. Supervised fieldwork and co-authored report. Phase I archeological investigations for Runway 4, Washington Dulles International Airport, Fairfax and Loudoun Counties, Virginia. Parsons Management Corporation and the Metropolitan Washington Airports Authority.

2003 Project Archeologist. Supervised fieldwork and co-authored report for Phase I archeological investigations for the Asia Trail Project, Smithsonian National Zoological Park, Washington, D.C. EDAW, Inc. of Alexandria, Virginia.

2003 Project Archeologist. Supervised Phase II fieldwork and co-authored report for Phase I and Phase II archeological investigations at Bridge No. 10043 over Bens Branch at MD 874 in Frederick County, Maryland. Maryland Department of Transportation.

2003 Project Archeologist. Assisted in supervising fieldwork of Phase I archeological investigations for Crosswind Runway, Washington Dulles International Airport in Fairfax and Loudoun Counties, Virginia. Metropolitan Washington Airports Authority.

2003 Project Archeologist. Co-authored report of Phase II and III archeological investigations in a portion of Site 18PR131 in Prince George's County, Maryland. Land and Commercial, Inc. of Upper Marlboro, Maryland.

2003 Project Archeologist. Co-authored report for Phase I archeological investigations for Runway 4, Washington Dulles International Airport in Fairfax and Loudoun Counties, Virginia. Metropolitan Washington Airports Authority.

2003 Project Archeologist. Co-authored report for Phase I archeological survey of MD 28/198 between MD 97 and I-95 in Montgomery and Prince George's Counties, Maryland. Maryland Department of Transportation.

2003 Field Supervisor. Phase III data recovery excavations at 44LD834, an African-American slave site in Loudoun County, Virginia, dating to late eighteenth century for Thunderbird Archeological Associates, Inc., and Pulte Homes Corporation of Fairfax, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I investigation of forty acres along Belmont Ridge Road, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Van Metre Companies of Burke, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I investigation of thirty-eight acres along Belmont Ridge Road, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Van Metre Companies of Burke, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigation of the 9.72 acre Loudoun County Jewish Congregation Property, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and the Loudoun County Jewish Congregation of Leesburg, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigation of the Potomac Hospital Property, Prince William County, Virginia, for Thunderbird Archeological Associates, Inc., and the Potomac Hospital Corporation of Prince William in Woodbridge, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigation of 37.8 acre portion of Belmont Greene, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Belmont Greene of Reston, Virginia.

2003 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigation of the circa 346 acre Dulles Trade Center III, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Buchanan Partners of Gaithersburg, Maryland.

2002 Field Supervisor. Phase II archeological investigations of 44LD834, an African-American slave site in Loudoun County, Virginia, dating to the late eighteenth century

for Thunderbird Archeological Associates, Inc., and Pulte Homes Corporation of Fairfax, Virginia.

2002 Field Supervisor. Supervised fieldwork and co-authored report for Phase III archeological data recovery investigations of 44FX2485 and 44FX2487, two unplowed, upland prehistoric lithic workshops in Lorton, Virginia, for Thunderbird Archeological Associates, Inc., and Pulte Home Corporation of Fairfax, Virginia.

2002 Field Supervisor. Phase I archeological investigation of the circa 255 acre Riding Property, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Pulte Home Corporation of Fairfax, Virginia.

2001 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigations of the 5.48 acre Village at Mt. Gilead, Centreville, Virginia, for Thunderbird Archeological Associates, Inc., and Stanley Martin Companies, Inc. of Reston, Virginia.

2001 Field Supervisor. Phase II archeological investigations of Sites 44PW1235, 44PW1241, and 44PW1244, Prince William County, Virginia, for Thunderbird Archeological Associates, Inc., and Wetland Studies and Solutions, Inc. of Chantilly, Virginia.

2001 Field Supervisor. Phase I archeological investigations of the circa 450 acre Loudoun County Reserve Property, Loudoun County, Virginia including the delineation of the nineteenth-century Creighton Family Cemetery, for Thunderbird Archeological Associates, Inc., and Toll Brothers of Dulles, Virginia.

2001 Field Supervisor. Supervised fieldwork and co-authored report for a Phase I archeological investigation of a 116 acre property on Poland Road, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Wetlands Studies and Solutions, Inc. of Chantilly, Virginia.

2001 Field Supervisor. Phase II archeological investigations of 44FX2485 and 44FX2587, two unplowed, upland prehistoric lithic workshops in Lorton, Virginia, for Thunderbird Archeological Associates, Inc., and Pulte Home Corporation of Fairfax, Virginia.

2000 Field Supervisor. Phase I archeological study of circa 1300 acres proposed for development as part of the Brambleton Planned Community, Loudoun County, Virginia, for Thunderbird Archeological Associates, Inc., and Brambleton Group, L.L.C. of Dulles, Virginia.

1999 Project Archeologist. Supervised fieldwork and co-authored report for Phase I survey along Rt. 15 and Interstate 270 from Frederick to Gaithersburg, Maryland, proposed widening for John Milner Associates, Inc., and the Maryland State Highway Administration.

SUMMARY OF PROFESSIONAL ACTIVITIES

Mr. Goode is co-author of fifteen (15) cultural resources reports, and has presented two (2) papers presented at professional meetings.

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EDUCATION

M.A.A.	University of Maryland	Anthropology	1993
B.A.	University of Maryland	Anthropology	1990

EXPERIENCE PROFILE

Lynn Jones holds a Master of Applied Anthropology degree from the University of Maryland and has had fifteen years experience in archaeology of the Mid-Atlantic region. She has been involved in investigating prehistoric Native American sites as well as historic period sites dating from the early eighteenth century to the mid-twentieth century. Ms. Jones has experience in directing fieldwork, supervising laboratory processing, and doing documentary research. Ms. Jones is well acquainted with the curation standards and guidelines recommended by various states, the federal government, and the National Park Service. Since joining John Milner Associates, Inc., Ms. Jones has conducted documentary research, supervised fieldwork and overseen the laboratory processing and preparation for curation of a number of projects in Maryland and Virginia.

KEY PROJECTS

2005 Documentary research and report contributions, Phase II Archeological Investigations for the Crosswind Runway, Washington Dulles International Airport, Fairfax and Loudoun Counties, Virginia. Parsons Management Corporation and the Metropolitan Washington Airports Authority.

2004 Documentary research and report contributions, Phase I archeological investigations for Runway 4, Washington Dulles International Airport, Fairfax and Loudoun Counties, Virginia. Parsons Management Corporation and the Metropolitan Washington Airports Authority.

2003 Documentary research and contributed to report for Dulles International Airport, CASP, Task 2, and Task 3 projects. Metropolitan Washington Airports Authority, Washington, D.C.

2003 Documentary research and contributed to report for Bens Branch project. Maryland Department of Transportation, State Highway Administration, Baltimore, MD.

2003 Directed fieldwork and authored report for St. Mary's College Athletic Fields project. St. Mary's College of Maryland, St. Mary's City, MD.

2003 Documentary research and contributed to report for the MAGLEV project. Maryland Department of Transportation, State Highway Administration, Baltimore, MD.

2003 Documentary research and contributed to report for Gapland Road bridge replacement project. Maryland Department of Transportation, State Highway Administration, Baltimore, MD.

2003 Monitoring and report on the Boonsboro Streetscape Project, US40 Alt. Boonsboro. Maryland Department of Transportation, State Highway Administration, Baltimore, MD.

2002 Documentary research, fieldwork, and contributed to report for Andrews Air Force Base, Prince George's County, MD.

2002 Documentary research and contributed to report for the old Patent Office Building project, Smithsonian Institution, Washington, D.C.

2002 Documentary research and co-authored report for the Chase's Wharf site in Fell's Point, Baltimore, MD, for Living Classrooms Foundation, Inc.

2002 Documentary research and co-authored report on nine properties in Fell's Point, Baltimore, MD, for the Society for the Preservation of Federal Hill and Fell's Point.

2001 Fieldwork and authored report for Pohick Road Stormwater Repair Project, Ft. Belvoir, Fairfax County, VA.

2001 Fieldwork and authored report for archeological monitoring US Alternate 40, Frostburg Streetscape Project, Part 2, Frostburg, MD.

2001 Fieldwork and authored report for monitoring at St. Anne's Church, Annapolis, MD.

2000 Field Supervisor/Laboratory Supervisor. Supervised fieldwork, laboratory processing and co-authored report for Phase I survey at Todd's Inheritance, Baltimore County, MD.

2000 Field Supervisor/Laboratory Supervisor at JMA. Supervised fieldwork and laboratory processing for survey of Maryland Rt. 99 at Mt. Hebron Drive. Maryland State Highway Administration.

2000 Laboratory Assistant. Supervised cataloguing of archeological materials and preparation for permanent storage at the laboratory and curation facility of the National Park Service, National Capital Region, Landover, MD.

1999 Field Supervisor/Laboratory Supervisor. Supervised the excavation and processing of artifacts for the Northampton Slave Quarters Site. Maryland-National Capital Park and Planning Commission, Prince George's County, MD.

1996 Supervised fieldwork and authored report. Slayton House site, an eighteenth-century townhouse in Annapolis, Maryland. Historic Annapolis Foundation.

1995 Laboratory Supervisor. Supervised processing and preparation for curation of artifacts recovered from excavations at various sites in Annapolis, Maryland, for the University of Maryland Archaeology in Annapolis Project.

1994 Assistant Site Director. Supervised excavation at the Bordley-Randall House site, an eighteenth-century house in Annapolis, Maryland, for Historic Annapolis Foundation and the University of Maryland Field School in Urban Archaeology.

1992 Assistant Architectural Historian. Historical background and Phase I survey of historic properties along U.S. Rt. 27 project in Georgia. Report to Georgia Department of Transportation, Atlanta, Georgia. Dames & Moore, Inc., Bethesda, MD.

1991 Assistant Site Director and contributed to site report. Supervised excavation of ground-floor slave quarters of the Charles Carroll of Carrollton. Archaeology in Annapolis Project for the Charles Carroll of Carrollton, Inc., restoration organization.

SUMMARY OF PROFESSIONAL ACTIVITIES

Author or co-author of 21 cultural resource reports, three scholarly publications, and several papers presented at professional meetings and conferences.

John Milner Associates

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