

# APPENDIX F

## Phase I Cultural Resources Survey Report



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**PHASE I CULTURAL RESOURCES SURVEY  
ENVIRONMENTAL ASSESSMENT  
CHESTERFIELD COUNTY AIRPORT  
RICHMOND, VIRGINIA**

(AIP Project #3-51-0007-023; DOAV Project #CF-0007-23;  
Delta Project #VA 10086; VDHR File #2012-1591)

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## ABSTRACT

In January 2013, Coastal Carolina Research (CCR), a wholly owned subsidiary of Commonwealth Cultural Resources Group, Inc., conducted a Phase I cultural resources survey for proposed improvement to the Chesterfield County Airport in Chesterfield, Virginia. The survey was conducted for Delta Airport Consultants, Inc., in accordance with Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation's regulations for compliance with Section 106, codified as 36 CFR Part 800.

The purpose of the cultural resources survey was to determine if above-ground architectural resources or archaeological sites that are listed on, eligible for, or potentially eligible for the National Register of Historic Places (NRHP) are located within the project's Area of Potential Effects (APE). The proposed improvements to the Chesterfield County Airport involve runway extension(s), hangar construction, fuel farm improvement, power line relocation, road relocation, changes to proposed runway protection zones, obstruction removal, land acquisition, and other minor facility improvements for aviation safety. The APE for the archaeological investigation was defined as the limits of potential ground disturbance. This project area includes approximately 760 acres, roughly 460 of which are disturbed due to the existing airport and nearby roadways, and approximately 40 acres of which have been previously defined as wetlands. The APE for above-ground architectural resources reflects coordination with the Virginia Department of Historic Resources (VDHR) and includes the project area and additional areas to address potential indirect effects.

Two previously recorded architectural resources are mapped within the APE, one of which (VDHR #020-0641) is no longer extant and the other of which (VDHR #020-5565) was previously determined not eligible for the NRHP. The architectural survey also identified five previously unrecorded resources in the architectural APE. These new resources include four dwellings that date to the first half of the twentieth century (VDHR #020-5607 through 020-5610) and a cemetery that dates from the late nineteenth- to the mid-twentieth century (VDHR #020-5611). All four of the historic dwellings recorded during this survey lack significance and are recommended as not eligible for listing on the NRHP. The cemetery is also recommended not eligible for the NRHP; however, all relevant statutes regarding the protection and relocation of cemeteries must be followed.

No previously recorded archaeological resources are located within the archaeological APE. A total of 1,223 shovel tests was excavated as part of the archaeological survey. Four newly recorded archaeological sites and one artifact location were documented (44CF0781 through 44CF0784). 44CF0781 is a Late Archaic Native American lithic scatter. 44CF0782 is a multicomponent site that includes a late eighteenth- to mid-twentieth-century domestic scatter with structural ruins as well as an indeterminate Native American lithic scatter. Sites 44CF0783 and 44CF0784 are both documented as indeterminate Native American lithic scatters. All of these newly recorded sites are recommended not eligible for the NRHP, and CCR further recommends that no historic properties will be affected by the current undertaking.

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## 1.0 INTRODUCTION

### 1.1 PROJECT OVERVIEW AND COMPLIANCE

In January 2013, Coastal Carolina Research (CCR), a wholly owned subsidiary of Commonwealth Cultural Resources Group, Inc., conducted a Phase I cultural resources survey for proposed improvements to the Chesterfield County Airport in Chesterfield, Virginia (Figure 1.1-1). The survey was conducted for Delta Airport Consultants, Inc., in accordance with Section 106 of the National Historic Preservation Act of 1966 and the Advisory Council on Historic Preservation's regulations for compliance with Section 106, codified as 36 CFR Part 800. The investigations were conducted according to the Secretary of the Interior's *Standards and Guidelines for Historic Preservation Projects* (Federal Register, Vol. 48, No. 190, September 1983, P. 44716-44742, et seq.) and Virginia Department of Historic Resources' (VDHR's) *Guidelines for Conducting Historic Resources Survey in Virginia* (VDHR 2011) including the *Guidelines for Conducting Archaeological Investigations*. The report was prepared in accordance with the "Preparing Identification and Evaluation Reports Pursuant to Local, State, or Federal Laws and Regulations" (found in VDHR 2011).

The purpose of the cultural resources survey was to determine if there are any architectural resources or archaeological sites that are listed on, eligible for, or potentially eligible for the National Register of Historic Places (NRHP) within the project's Area of Potential Effects (APE). The proposed improvements to the Chesterfield County Airport involve runway extension(s), hangar construction, fuel farm improvement, power line relocation, road relocation, changes to proposed runway protection zones, obstruction removal, land acquisition, and other minor facility improvements for aviation safety. The APE for direct and indirect effects on above-ground architectural resources was defined in consultation with VDHR (Figure 1.1-2; Appendix A). Since that time, a small area of potential direct effects was added to the project area. This area is along existing State Route (SR) 288 in the southern portion of the project area and covers extensively disturbed areas that have been previously surveyed for archaeological resources. The resulting APE for the archaeological investigation is defined as the limits of

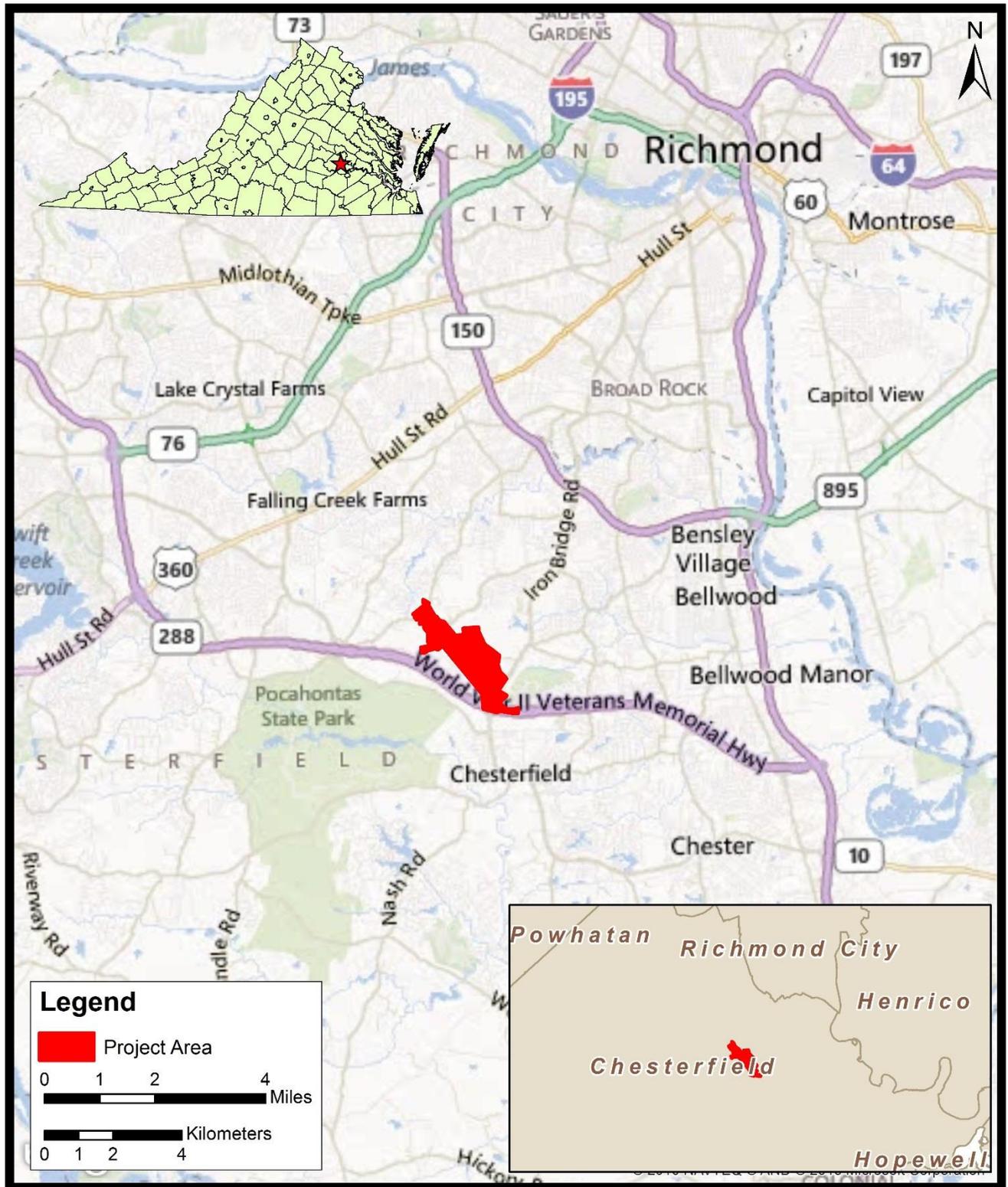


Figure 1.1-1: General Location of Project Area at the Chesterfield County Airport, Virginia.

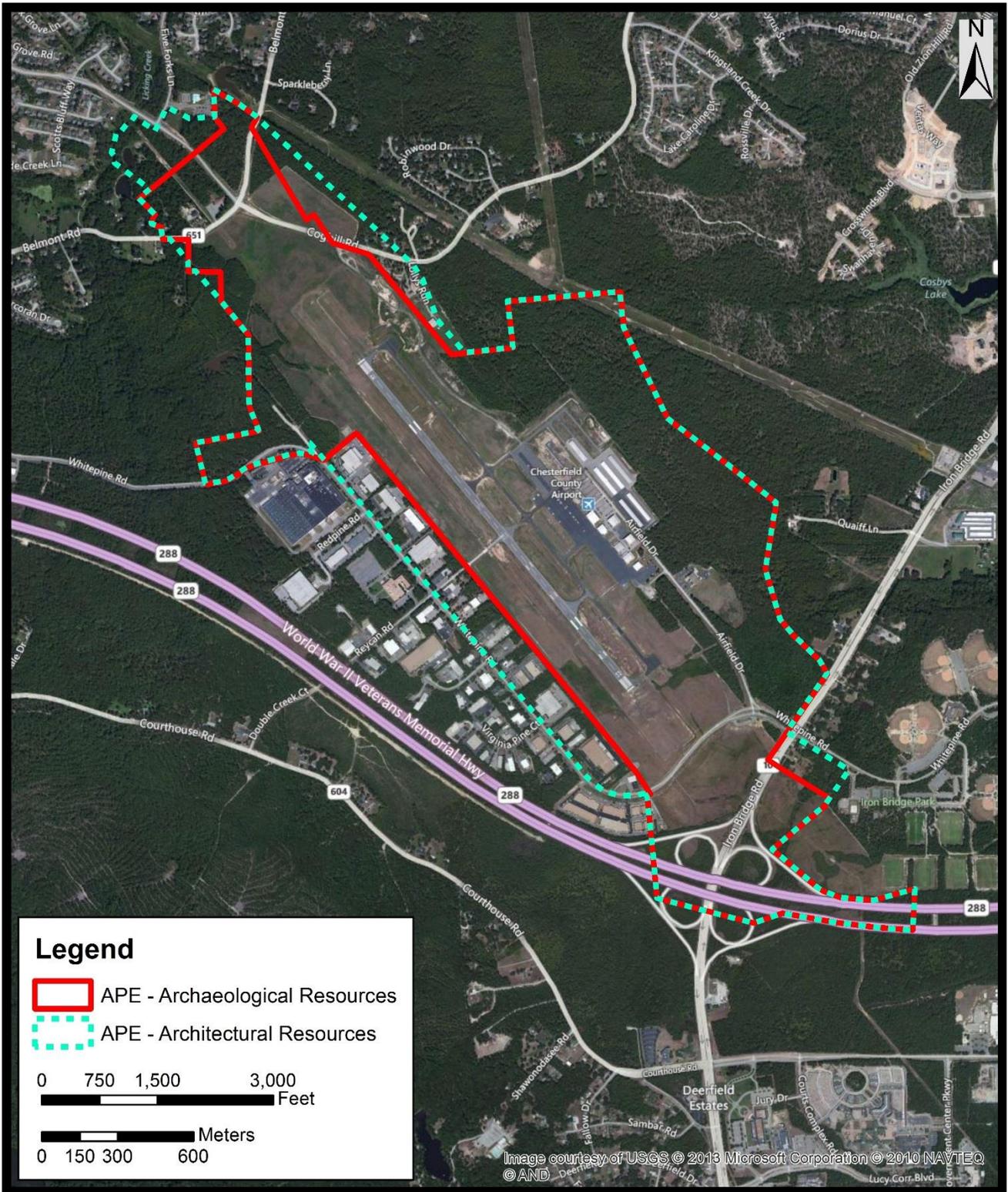


Figure 1.1-2: View of the Project Area Showing Both the Architectural APE and Archaeological APE.

proposed ground disturbance or project area (see Figure 1.1-2), which includes approximately 760 acres, roughly 460 of which are disturbed due to the existing airport and nearby roadways, and approximately 40 acres of which have been previously delineated as wetland. No changes to the APE for indirect effects appeared warranted based on the additional areas along SR 288; no additional structures are directly visible, and the nearest potentially visible resource (included in the APE in the architectural survey discussion) was previously surveyed and determined not eligible for the NRHP. Portions of the APE for the archaeological survey area also involve larger rural tracts with wooded areas and smaller residential or commercial parcels.

## **1.2 PROJECT TIMELINE AND STAFF**

Fieldwork for the project was conducted from January 14-30, 2013. Susan E. Bamann, Ph.D., RPA, was the project manager and principal investigator, and Jeroen van den Hurk, Ph.D., conducted the architectural survey. Lindsay Flood, M.A., RPA, was the archaeology field director. Amanda Keeny Stamper was the archaeology crew chief and H. Jason Krim, Alex Anthony, Rachel Davies, Jessica Edwards, and Nathanael Fossaaen were the archaeology field technicians. Lindsay Flood, Amanda Keeny Stamper, and J. Eric Deetz conducted background research. Susan Bamann and Lindsay Flood analyzed the artifacts. D. Allen Poyner was the GIS coordinator, and he, along with Lindsay Flood and Amanda Keeny Stamper, prepared the report graphics.

## **1.3 REPORT CONTENTS**

This report contains the background, methods, and results for the architectural and archaeological resources survey. Following this introduction, Sections 2 and 3, respectively, present the environmental and historic backgrounds for the project area. Section 4 includes the results of the architectural resources survey, and the results of the archaeological survey are presented in Section 5. The conclusions and recommendations for the architectural and archaeological surveys are presented in Section 6. Section 7 contains the list of references cited throughout the report. Appendix A includes a record of consultation on the APE of direct and indirect effects. Appendices B and C contain the DSS forms for the newly recorded architectural

resources and archaeological sites. Appendix D lists artifacts recovered from the shovel tests while Appendix E provides representative shovel test profiles.

### **1.3.1 Mapping Disclaimer**

The mapped data contained within this report is to be used solely for locating the cultural resource component and cannot be substituted for data provided by registered land surveyors or any licensed architect or engineer.

## **1.4 ACKNOWLEDGEMENTS**

CCR would like to thank Thomas Trudeau and Jeremy Wilkinson with Chesterfield County Airport for assisting with coordination and access to the airport property. CCR would also like to thank nearby residents and property owners who granted permission to access privately owned properties, including Robert and Beverly Almond, Annette Jefferson, Edsel Clayton, Lance Campbell, Robert McEachern and Sharon Womack with Fair Havens Church, Gale LeGrande Williams with New Jerusalem International Christian Ministries, and David Rudiger with Five Forks Village Community Association and Cascade Creek Homes.

## **2.0 NATURAL SETTING**

### **2.1 PHYSIOGRAPHY**

The current project area is located within the Atlantic Coastal Plain physiographic province. This province is generally described as an area of low elevation consisting of relatively unconsolidated beds of terrestrially and marine-deposited sand, gravel, and clay sediments (Fenneman 1938; Thornbury 1965). The boundaries of the Coastal Plain are commonly defined as sea level to the east and the Fall Line to the west. The Fall Line, which roughly corresponds to the location of I-95, is the transition zone approximately 5 to 10 miles wide between the Piedmont and the Coastal Plain and characterized by the Coastal Plain sediments dipping below the Piedmont formations (Fenneman 1938). Within this transition zone, as rivers and streams pass over the crystalline rocks, they are sometimes marked by falls and rapids (Fenneman 1938; Thornbury 1965). In some cases, the Fall Line formed an obstruction to river travel between the Piedmont and the Coastal Plain. The transition zone between the two regions was an important area for the development of settlements, trade, and other forms of cultural interaction (Thornbury 1965). Significant lithic resources that are not available in Coastal Plain formations, such as quartz and quartzite, are available at or near the Fall Line (Egloff 1989).

The project area lies near the eastern border of the Piedmont physiographic region. The Piedmont, considered a nonmountainous part of the Appalachian Highlands, is characterized by gently rolling topography and deeply weathered bedrock of igneous and metamorphic rock (Thornbury 1965; Fenneman 1938).

### **2.2 GEOLOGY AND SOILS**

The large portion of current project area at the Chesterfield County Airport is underlain by the Yorktown Formation, specifically the coarse-grained sand and gravel facies of this formation (Berquist 1993). This specific unit of the Yorktown Formation is described as including sandy gravel, gravelly sand, poorly to well-drained sands, and thin to medium beds of clay and silt. This facies of the Yorktown Formation is typically found at elevations ranging from 170 to 320

ft amsl, and formation in general ranges in thickness from 0 to 150 ft (Berquist 1993). A small portion of the project area northwest of the northern end of the runway is underlain by igneous intrusive rocks such as layered granite gneiss and subidiomorphic granite (Carter et al. 2010). Much of the current project area, specifically where the runway is located, is mapped as modified land. The southeastern portion of the current project area along Reedy Creek is mapped as alluvium, and includes floodplain deposits ranging from clay to gravel (Carter et al. 2010). The area immediately west of the Chesterfield County Airport is underlain by metatonalite, which is rock of the Carolina Slate Belt that is described as white to light-gray in color and is medium- to coarse-grained (Berquist et al. 1993).

The soils within the current project area are generally from the Bourne-Aquults-Tetotum association (Hodges 1978). The soils from this association are typically found on uplands and upland flats. These soils are deep and include moderately well-drained and poorly drained soils that have a fragipan or have a loamy or clayey subsoil. A small portion of the soils within the current project area also belong to the Faceville-Gritney-Kempsville soil association. These soils are generally found on uplands within the Coastal Plain and are typically deep, well-drained soils that have a dominantly clayey or loamy subsoil (Hodges 1978).

According to the Chesterfield County soil survey (Hodges 1978) and the USDA Web Soil Survey online (USDA/NRCS 2012), specific soils of the Appling, Bourne, Colfax, Coxville, Dunbar, Gritney, Kempsville, Spotsylvania, and Tetotum soil series are present within the current project area. The individual soil mapping units within these series that are located in the current project area are summarized in Table 2.2-1. General information regarding these nine soil series is presented below:

*Appling series:* This soil series is found mostly on Piedmont Uplands. These soils are formed in material weathered from granite and granite gneiss and have a dominantly clayey subsoil. They are deep, well-drained, and gently sloping to moderately steep soils.

*Bourne series:* This type of soil is formed in loamy Coastal Plain sediment. Soils of this series

Table 2.2-1: Detailed List of Soils Within the Proposed Survey Area (Hodges 1978; USDA/NRCS 2012).

Soil Name	Water Drainage	General Soil Types	Associated Landform	Average Depth to Subsoil
Appling sandy loam, 2 to 6 percent slopes	well-drained	sandy loam, clay	hillslopes	10 in (25 cm)
Appling sandy loam, 12 to 20 percent slopes	well-drained	sandy loam, clay	hillslopes	10 in (25 cm)
Appling-Wedowee fine sandy loams, 6 to 12 percent slopes	well-drained	fine sandy loam, clay	hillslopes	10 in (25 cm)
Aquults	poorly drained	fine sandy loam, clay loam	depressions	12 in (30 cm)
Bourne fine sandy loam, 2 to 6 percent slopes	moderately well-drained	fine sandy loam, sandy clay loam	marine terraces	11 in (28 cm)
Colfax fine sandy loam, variant, 0 to 4 percent slopes	somewhat poorly drained	fine sandy loam, sandy clay loam	marine terraces	10 in (25 cm)
Coxville loam, 2 to 6 percent slopes	poorly drained	loam, clay	marine terraces	10 in (25 cm)
Dunbar fine sandy loam, 0 to 4 percent slopes	somewhat poorly drained	fine sandy loam, sandy clay loam	marine terraces	12 in (30 cm)
Faceville-Gritney fine sandy loam, 2 to 6 percent slopes	moderately well-drained	fine sandy loam, sandy clay loam	marine terraces	12 in (30 cm)
Fluvaquents	poorly drained	silt loam, silty clay loam	flood plains	8 in (20 cm)
Gritney fine sandy loam, 2 to 6 percent slopes	moderately well-drained	fine sandy loam, clay	marine terraces	9 in (23 cm)
Gritney fine sandy loam, 6 to 12 percent slopes	moderately well-drained	fine sandy loam, clay	marine terraces	9 in (23 cm)
Kempsville-Bourne complex, 2 to 6 percent slopes	well-drained	sandy loam, sandy clay loam	marine terraces	19 in (48 cm)
Ochrepts and Udults, sloping	well-drained	sandy loam	ridgetops and side slopes	10 in (25 cm)
Spotsylvania fine sandy loam, 6 to 12 percent slopes	well-drained	fine sandy loam, loam	hillslopes	10 in (25 cm)
Tetotum loam, clayey substratum, 2 to 6 percent slopes	moderately well-drained	loam, clay loam	marine terraces	11 in (28 cm)

consist of moderately well-drained, gently sloping and sloping soils. These soils generally have a fragipan present at a depth of approximately 18 to 34 inches.

*Colfax series:* Soils of this series are generally somewhat poorly drained to moderately well-drained, gently sloping, and sloping. These soils formed in material weathered from granite and granite gneiss. There is a fragipan at a depth of 24 to 40 inches within these soils.

*Coxville series:* Soils of this series are deep, poorly drained, gently sloping soils. These soils form in Coastal Plain sediment and have a thick, dominantly clayey subsoil.

*Dunbar series:* Soils of the Dunbar series formed in Coastal Plain sediment and have a dominantly clayey subsoil. They are deep, somewhat poorly drained, nearly level to very gently sloping soils.

*Gritney series:* Soils of the Gritney series consist of deep, well-drained, gently sloping and sloping soils with a dominantly clayey subsoil. These soils formed in Coastal Plain sediments and are found on uplands in the Coastal Plain.

*Kempsville series:* The soils of this series are generally found on Coastal Plain uplands. Kempsville series soils are deep, well-drained, gently sloping and sloping soils with a dominantly loamy subsoil, and formed in Coastal Plain sediment.

*Spotsylvania series:* Soils of this series formed in a thin fluvial mantle and the underlying material weathered from granite and granite gneiss. These soils are deep, well-drained, gently sloping and sloping soils. They are typically found on Piedmont uplands and have a dominantly clayey subsoil.

*Tetotum series:* This series consists of deep, moderately well-drained, nearly level and gently sloping soils typically found on Coastal Plain uplands. Tetotum series soils are formed in Coastal Plain sediments and have a dominantly loamy subsoil.

Other general soil types that are present within the current project area but are not attributed to a specific regional soil series include Aquults, Fluvaquents, and Ochrepts and Udults. Aquults soils are deep, poorly drained soils that are generally found in level to gently sloping, low-lying, wet areas. Fluvaquents soils are found along streams, branches, and drainageways in low-lying areas of mixed alluvium that ranges from sand to clay. These areas are often ponded or flooded for prolonged periods. Ochrepts and Udults are sloping to steep soils that are formed in interbedded layers of sandy, loamy, clayey, and gravelly Coastal Plain sediment. These soils are found along larger drainageways that are more deeply incised and along larger streams between uplands and flood plains.

### **2.3 HYDROLOGY AND VEGETATION**

The current project area is located within the James River drainage basin. Several creeks are located on or near the Chesterfield County Airport property, and the current project area is drained by three of these. A majority of the project area drains into Reedy Creek, while the northern portion of the project area drains into Licking Creek and an unnamed tributary. Also, a small area within the northeast portion of the project area drains into an unnamed tributary of Kingsland Creek. Reedy Creek drains into Kingsland Creek, which in turn flows into the James River, while Licking Creek drains into Falling Creek, which also eventually drains into the James River.

The Coastal Plain generally supports coniferous, mixed coniferous/deciduous, deciduous hardwood, and mixed deciduous/broad-leafed evergreen forest communities (Braun 1950). A pollen-based reconstruction of forest types suggests that the mid-Atlantic coastal region featured an Oak-Hickory-Southern Pine forest up to 5,000 years ago (Delcourt and Delcourt 1981). The adjacent Piedmont and the region around the Fall Line feature the Oak-Hickory-Pine forest described by Braun (1950). However, approximately 10,000 years ago the entire area was covered by a Mixed Conifer-Northern Hardwoods forest type (Delcourt and Delcourt 1981).

Modern land use in and around the Chesterfield County Airport includes industrial and some residential. In addition to these modified land uses, a large portion of the project area around the

airport is forested in secondary deciduous growth. Large tracts of this forested land, particularly to the east of the airport, are low-lying and poorly drained, and have been previously delineated as wetland. Several utility corridors also bisect the APE, including a natural gas pipeline and a cleared power line corridor.

## **3.0 CULTURAL OVERVIEW**

### **3.1 INTRODUCTION**

The project area falls within the Southern Coastal Plain cultural/geographic region as defined by VDHR (2011:115). This area is defined as extending from the Fall Line to the Blackwater River along the boundaries of Sussex and Southampton counties. This region is culturally similar to the Upper Coastal Plain cultural/geographic region, although it has a notably stronger tie to North Carolina inhabitants due to proximity (VDHR 2011).

Before Europeans ventured into the current project area, Native American inhabited the region. Written documents suggest that the first Europeans to explore the project area were the English settlers that settled at Jamestown in 1607. The English soon migrated upriver, and settlement began in the region that would become Chesterfield County in 1611. The county grew and developed over the next four centuries, but the project area remained largely agrarian until the construction of the Chesterfield County Airport in 1973.

### **3.2 PRECONTACT BACKGROUND**

#### **3.2.1 Paleoindian Period (11,500-8000 B.C.)**

Native American occupation of eastern North America dates to at least 12.8 to 13.1 thousand years ago, the conventional temporal boundary associated with the Clovis tradition (Anderson et al. 2007; Waters et al. 2011). The evidence for occupations at this time includes fluted projectile points (i.e., the Clovis type) (Griffin 1967; Justice 1987). These points are generally scarce and often occur as isolated finds in disturbed surface contexts. Geographic concentrations of fluted points, including the Clovis type and related types such as Cumberland, occur in the eastern half of the United States. Nearly 1,000 fluted projectile points have been reported from Virginia (Anderson and Faught 1998). Other Paleoindian projectile point types found in Virginia are Mid-Paleo, Dalton, Hardaway-Dalton, and a type with affinities to Folsom (Barber and Barfield 1989; McAvoy and McAvoy 1997; McCary 1996). In Virginia, the majority of these points

were manufactured from cryptocrystalline lithic material. Tools associated with the Paleoindian period include scrapers, graters, wedges, unifacial tools, hammerstones, abraders, and a variety of “banging, smashing, chopping, and hacking tools” (Gardner 1989:18). The points and tools were used in the context of a mobile subsistence pattern based upon hunting and gathering in a boreal forest environment.

Evidence for much earlier New World lithic industries suggests that the makers of fluted points may represent relatively late migrations to the New World. Alternatively, the distinct fluted point technology may have developed within the New World in the context of Late Pleistocene populations established prior to the Clovis temporal boundary (Anderson and Faught 1998; Goebel et al. 2008; Meltzer 1989; Waters et al. 2011). The Cactus Hill site in southeastern Virginia has produced lithic artifacts (prismatic blades, polyhedral cores, and bifaces) from sandy deposits below intact Clovis horizons (McAvoy and McAvoy 1997:179-180).

Radiocarbon dating suggests that the sub-Clovis material may date to as early as 17,000 radiocarbon years before present (RCYBP), which is significantly earlier than the Clovis temporal boundary (Goodyear 2006; McAvoy and McAvoy 1997:179-180). This stratified site is situated on a sand dune along the Nottoway River. Stratification was the result of relatively steady aeolian sand deposition throughout the occupation of the site (McAvoy and McAvoy 1997:8-10; Wagner and McAvoy 2004). The Topper site, located in the Piedmont of South Carolina, has also been discussed as a possible site of pre-Clovis occupations (Goodyear 1999, 2000, 2006), but the potential evidence including concentrations of unusual microlithic artifacts reflecting a “smash-core” technology is less well understood. The SV-2 site, located in the Saltville Valley (Ridge and Valley province) of southwestern Virginia, has yielded a distinctive concentration of proboscidean bone in association with a possible bone tool yielding a collagen date of  $14,510 \pm 80$  RCYBP (Goodyear 2006; McDonald 2000). In the western United States, recent work at the Debra L. Friedkin site, Texas, is providing conclusive evidence for human occupation dating to at least 15.5 thousand years ago. The site has yielded over 15,000 artifacts defining the pre-Clovis Buttermilk Creek Complex; this assemblage includes bifaces, blades, bladelets, and edge-modified tools and could be ancestral to the recognized Clovis tool kit (Waters et al. 2011:1602). Programs for the identification and testing for appropriate landforms

with Pleistocene-aged deposits are now considered key in developing a better understanding of when, how, and why the New World was populated.

Stratified sites in Virginia containing Paleoindian occupations include the Williamson site and the Thunderbird and Fifty sites of the Flint Run Complex in the Shenandoah Valley (Barber and Barfield 1989; Carr 1975; Gardner 1974; Johnson 1996; McAvoy and McAvoy 2003). Evidence from these sites has been used to construct what has been referred to as the “Flint Run Lithic Deterministic Model” of Paleoindian settlement strategies (Anderson and Sassaman 1996:23). In this model, Paleoindian and Early Archaic settlement patterns were driven by the locations of the high-quality lithic material. Five functionally distinct site types have been identified in the Flint Run Complex: quarries, reduction sites, quarry-related base camps, maintenance camps, and non-quarry associated base camps (Gardner 1989). The small, highly mobile bands characteristic of Paleoindian times were also focused on food collection and the hunting of animals such as caribou, deer, elk, and moose (Boyd 1989; Turner 1989). Therefore, hunting and gathering, as well as lithic procurement played a significant role in settlement patterns. Sites such as base camps are often found on resource-rich floodplains and adjacent alluvial fans (Turner 1989). Additionally, at the Williamson site (44DW1), an association has been made between site activity areas and topography (McAvoy and McAvoy 2003).

### **3.2.2 Archaic Period (8000-1200 B.C.)**

The Archaic period is divided into three phases: Early, Middle, and Late. A shift from boreal forests to northern hardwoods occurred at the onset of the Early Archaic period (8000-6500 B.C.). The Early Archaic is typified by small corner-notched projectile points, such as Palmer Corner Notched and Kirk Corner Notched, and an increase in the use of hafted endscrapers (Coe 1964). The tool kits from the Early Archaic, however, are similar to those from the end of the Paleoindian tradition, as are the settlement and subsistence patterns (Claggett and Cable 1982).

The Middle Archaic period (6500-3000 B.C.) coincides with a shift in climatic conditions to the warmer and drier climates that are prevalent today. Settlement and subsistence patterns show a high degree of continuity with those of the Early Archaic period, but Middle Archaic bands may

have expanded their territories to make use of new environmental settings created by the change in climatic conditions (Custer 1990). Projectile point types characteristic of this period include Stanly Stemmed, Morrow Mountain I and II Stemmed, Guilford Lanceolate, Halifax Side-Notched, St. Albans, LeCroy Bifurcated Stem, and Kanawha Stemmed (Custer 1990).

Relatively few Early and Middle Archaic sites have been recorded on Virginia's Coastal Plain. Because of the rise in sea level that occurred during the Holocene, many Early and Middle Archaic sites may have been inundated. However, the scarcity of recorded sites may instead be evidence of low population levels as Gardner (1989) maintains, or may be the result of poor survey coverage, as Custer (1990) suggests. Existing data suggests that Early and Middle Archaic settlement is associated with freshwater wetlands, swamps, and bogs (Custer 1990). Custer (1990) hypothesizes that coastal resources were not as rich during the Early and Middle Archaic periods as they were at later times because the rise in sea level may have been too rapid to allow for the formation of large shellfish beds.

The Late Archaic period (3000-1200 B.C.) is poorly understood in the Coastal Plain of Virginia. Although it is marked by distinctive projectile point types, adaptations of this time differ little from those of the Middle Archaic period. According to Mauer (1991:10), the primary attributes of Late Archaic culture are "small-group band organization, impermanent settlement systems, infrequent aggregation phases, and low levels of regional or areal integration and interaction." Coastal Plain sites of this period are divided fairly evenly between upland and riverine settings, and may be indicative of a more generalized adaptation than that of inland peoples (Mauer 1991). Characteristic projectile points of the Late Archaic include the Halifax Side-Notched, Lamoka, Merom Expanding Stemmed, Lackawaxen, and Brewerton Side- and Corner-Notched types.

By 2500 B.C., the rise in sea level had dramatically altered the Atlantic coast, creating large estuaries and tidal wetlands that, in turn, vastly increased coastal resources such as fish and shellfish. Anadromous fish runs extended up the rivers to the foothills of the Blue Ridge. With this environmental change came a marked change in adaptation. Populations living in this Transitional period (2500-1200 B.C.) developed estuarine and riverine adaptations, and sites of

this period are located primarily in river valleys, at the lower reaches of inner Coastal Plain tributaries of major rivers, and near swamps. It is assumed that fish began to play a significantly larger role in the subsistence system. Although population increased and sites tend to be larger than those of previous periods, there is no evidence of year-round sedentism (Mouer 1991). Broad-blade or “broadspear” types such as Savannah River Stemmed are frequently associated with soapstone vessels and other soapstone objects. Fire-cracked rock concentrations and platform hearths are also common on Transitional period sites (Mouer 1991; Dent 1995). The intrusive Perkiomen Complex is found during the Transitional period in southeastern Virginia along the western margins of the Great Dismal Swamp (McLearen 1991). Perkiomen Broad points are found at sites located around large swamps and are typically associated with soapstone bowls, net sinkers, slate bar gorgets, and cremation burials (Mouer 1991).

### **3.2.3 Woodland Period (1200 B.C.-A.D. 1600)**

The Early Woodland period is marked by the emergence of sedentary lifeways and the use of ceramics. The population growth that began in the Middle Archaic period appears to have continued into the Early Woodland, as does the trend toward greater utilization of estuarine habitats of the outer Coastal Plain (Klein and Klatka 1991). Large, broad projectile points were replaced by smaller notched, stemmed, and lanceolate points; ceramics were introduced ca. 1200 B.C. (McLearen 1991).

While Marcey Creek ware is thought to be the earliest ceramic ware in the Coastal Plain north of the James River, the contemporaneous clay-tempered Croaker Landing ware was the earliest in the southern Coastal Plain (Egloff and Potter 1982). Stony Creek ware is found in the Coastal Plain south of the James River from ca. 800 B.C. and into the Middle Woodland period. Ceramics of this ware are sand- or small-particle-tempered with conoidal bases and fabric-impressed, cord-marked, or net impressed surfaces. Prince George ware, a pebble-tempered ware with fabric-impressed, cord-marked, or net-impressed surfaces, develops on the interior Coastal Plain during the Early Woodland and also extends into the Middle Woodland (Egloff 1985; Egloff and Potter 1982).

During the Middle Woodland period (300 B.C.-A.D. 900), the largest sites appear to be located in the transition zones between fresh and salt water, where the greatest diversity of resources could be obtained. Smaller exploitive sites along streams in the interior and along the coast seem to have been occupied sporadically (Stewart 1992). In the area south of the James River, relationships appear to have been oriented to the south rather than towards the Chesapeake area (McLearen 1992).

Shell-tempered Mockley ware is commonly found in most of the Coastal Plain of Virginia during the Middle Woodland period, although is not often found south of the James River (Egloff and Potter 1982). In addition to the Stony Creek and Prince George wares, Middle Woodland ceramics found south of the James include Hercules ware. This ware, found mostly on the interior Coastal Plain, features crushed granite and gneiss temper along with cord-marked and fabric-impressed surfaces (Egloff 1985).

The Late Woodland period (A.D. 900-1600) of the Virginia Coastal Plain is characterized by an increased reliance on agriculture and by population growth, larger villages, and increased sociocultural complexity (Turner 1992). Ceramics of this period include Townsend ware, which is shell-tempered and features fabric-impressed, incised, and/or punctated surfaces. This ware is recovered from sites all along the Virginia coast, much like the earlier Mockley ware. By the latter part of the Late Woodland, however, there is increased evidence of territoriality, and ceramic types become more localized. Ceramics found south of the James River include the Gaston, Cashie, and Roanoke wares (Turner 1992). The Gaston and Cashie wares, which are granule-tempered and include simple-stamped surfaces, are found along the fall line transition and in the interior Coastal Plain, respectively (Egloff 1985). Roanoke ware is characterized by shell tempering and simple-stamped exteriors. The Townsend and Roanoke wares are comparable to the Colington series defined for the northern Coastal Plain of North Carolina (Egloff and Potter 1982; Green 1986).

At the time of European contact, the southern Coastal Plain of Virginia was occupied by Algonquian groups living in relatively dispersed, seasonal camps and semipermanent villages located near sounds, estuaries, rivers, and streams (Phelps 1983). The Algonquians lived in

societies featuring “rank-differentiated roles and functions, dress, and burial customs; polygyny; matrilineal descent of chieftains; tribute systems; and trade monopolies” (Potter 1989:152). Archaeologically, the southeastern coastal area of Virginia is more similar to the northern North Carolina Coastal Plain than to areas to the north of the James River. After the arrival of Englishmen at Jamestown in 1607, traditional traits of aboriginal pottery were gradually replaced by traits patterned after European and African ceramics (Egloff 1985).

At the time of the first English settlement in Virginia, the Lower Tidewater region was politically dominated by the Powhatan chiefdom. By 1608, Powhatan controlled all the coastal groups with the exception of the Chickahominies. The Chesapeake, who occupied the region now known as the Tidewater of Virginia, were conquered between the late 1500s and 1608 (Potter 1993).

### **3.3 HISTORIC BACKGROUND**

#### **3.3.1 Settlement to Society (1607-1750)**

The first recorded European exploration of the area that would become Chesterfield County occurred on May 8, 1607 when Captain Christopher Newport led twenty-one English adventurers into the area in search of a suitable place to establish a settlement. Though it is possible that Spanish explorers under Lucas de Allyon viewed or visited the area in 1526, there is no documentary evidence to prove that their travels led them that far up the James River (Lutz 1954). The honor of being the first Europeans to visit present-day Chesterfield County, therefore, goes to the English. Jamestown was chosen as the site of the first English permanent settlement in the New World, but soon after, the settlers began to explore the Chesterfield region once again. Iron ore was extracted from the area and sent back to England in 1608, resulting in the construction of the New World’s first iron furnace on Falling Creek eleven years later (Cox 1907).

In 1611, Sir Thomas Dale, newly appointed Deputy Governor of Virginia, arrived at Jamestown and found the settlement to be inadequate. He established a new town further upriver at Farrar’s Island and named it Henrico. Dale proceeded to seize land from the Appomattox Indians to

further develop the Chesterfield area. Around December of 1611, he seized the cleared farmlands between the Appomattox and James Rivers. He named the fertile area New Bermudas and divided it into several tracts, or hundreds, including Bermuda Hundred. In 1616, Bermuda Hundred was the largest settlement in Virginia with 119 persons (Weaver 1970).

The region that would become Chesterfield County continued to prosper until the Indian Uprising of 1622. On the morning of March 22, Chief Powhatan's successor, Opechancanough, led a raid along the James River that resulted in the deaths of 350 colonists. The uprising proved most devastating on the outlying plantations, including Sheffield's Plantation on the south side of Falling Creek, Kingsland Planation along Kingsland Creek, and Proctors Plantation on the north side of Proctors Creek. Gatesville, a newly established, undeveloped town at the mouth of Proctors Creek, and a settlement of twenty-four iron workers on Falling Creek, were also destroyed (O'Dell 1983). The colonists successfully retaliated the following summer, and settlers who had fled the area returned within a few months (Lutz 1954).

By 1634, the Virginia colony was populous enough to be divided into eight shires, or counties. Present-day Chesterfield County and other future counties further west were then part of the newly formed Henrico County. The area remained mostly agricultural, and in 1635, the first African slaves were brought to the Chesterfield region by large plantation owners. Chesterfield's primary crop was tobacco, followed by corn and wheat. The area continued to grow throughout the seventeenth century despite another Indian uprising in 1644 (Lutz 1954). Bermuda Hundred served as the only significant town in the Chesterfield region until the town of Warwick was incorporated in 1748. A year later, Chesterfield County was created from the portion of Henrico County south of the James River (O'Dell 1983).

### **3.3.2 Colony to Nation (1750-1789)**

The county seat of Chesterfield County was established near the sparsely-settled center of the county, and a courthouse was built there around 1750 (Cox 1907). A map drawn by Joshua Fry in 1751 shows the location of the courthouse and the surrounding towns and waterways (Figure 3.3-1). By the start of the American Revolution, the beginnings of a village could be found



Figure 3.3-1: Detail of a 1751 Map of the Region, Showing the Approximate Location of the Chesterfield County Airport and Other Key Locations Within Present-Day Chesterfield County (Fry 1755).

around the courthouse. In 1779, British and Hessian prisoners were sent to the courthouse for safekeeping. Barracks were constructed at the courthouse, and the area soon became a center for recruitment and training. By the end of 1780, the barracks were overflowing with Continental troops and additions were added to the structures to house new recruits. The courthouse was converted into a hospital, and the two nearby jails were used as magazines to store food and supplies (Lutz 1954).

In January of 1781, the war came to Chesterfield County. Benedict Arnold led the British in a land-water engagement fought from the Chesterfield side of the James River above Dutch Gap. British General Phillips led troops across the county on his way from Petersburg to Manchester in April. The Chesterfield courthouse, the jails, and the barracks were all burned. While Phillips caused destruction in the interior of the county, Benedict Arnold led troops north along the James River, destroying large stores of crops and supplies at Manchester, Warwick, and Osbornes (Figure 3.3-2). On May 23rd of that year, Sir Banastre Tarleton led 300 cavalymen into Chesterfield County from Petersburg. They engaged with a party of militia about two miles from Cary's Mill near Falling Creek, killing six Americans and capturing forty. That was the last fighting to occur in Chesterfield County, but soldiers continued to pass through the area. In July of 1781, American Captain John Davies led Pennsylvania soldiers through Chesterfield County and reported positively about the area surrounding the Chesterfield Courthouse (Lutz 1954).

### **3.3.3 Early National Period (1789-1830)**

The first U. S. Federal Census was taken in 1790 and provides details of Chesterfield County's demographic makeup during the period. The total population given for that year was 14,514 people (Lutz 1954:142). White males numbered 3,209, with 1,652 of these men being over the age of 16. The total number of white females was 3,149. The county listed 7,787 enslaved persons, over half of the total county population. Another 369 African-Americans resided in the county as free individuals. The census also reveals that 45 people in Chesterfield County owned twenty-five or more slaves, while 119 owned one or two slaves, and 253 owned none. By 1800, the population of Chesterfield County was similar to what it was a decade before, with a total number of 14,489 people recorded by the census (Lutz 1954:149).

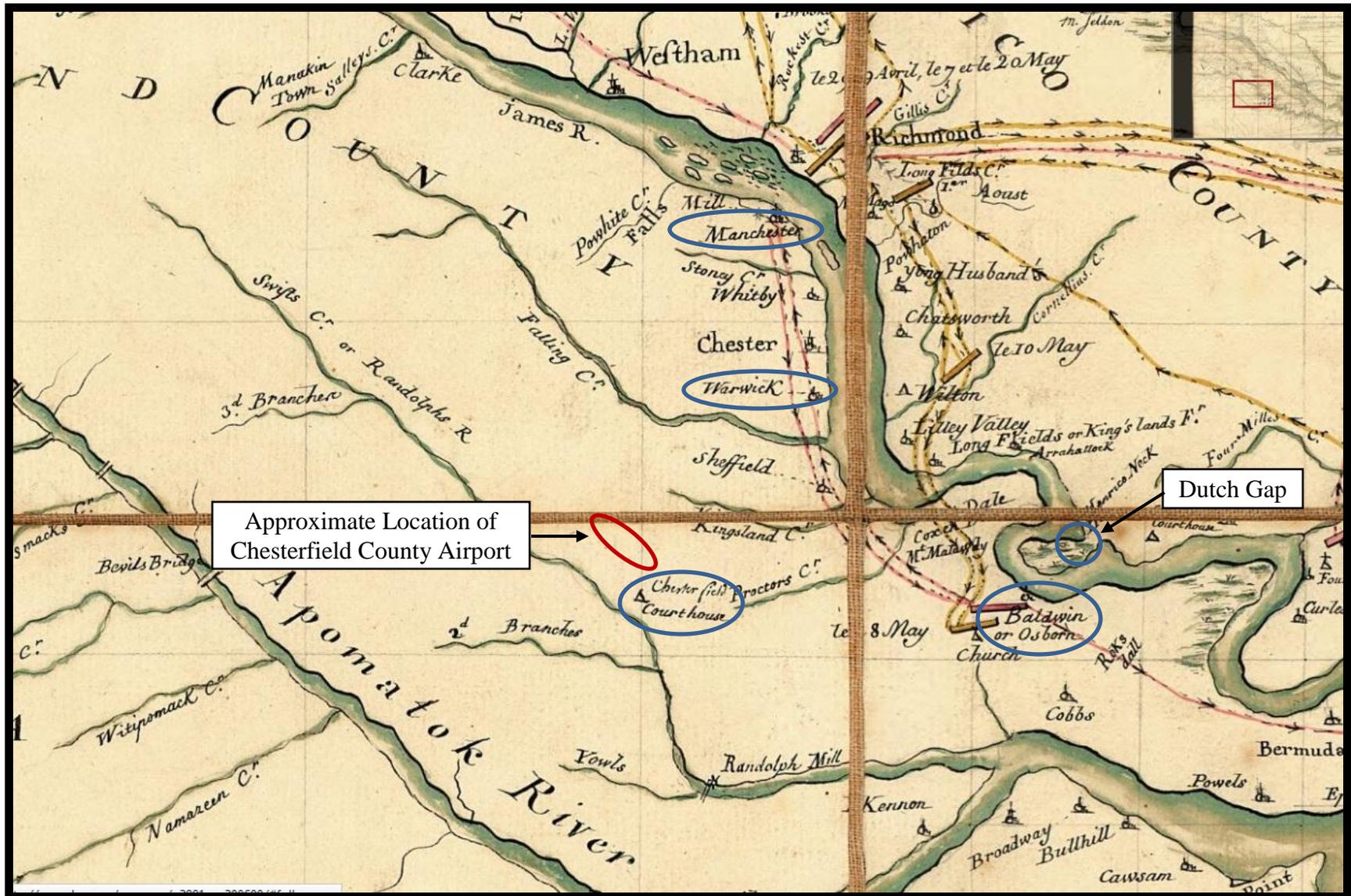


Figure 3.3-2: Detail of a 1781 Map of the Region, Showing the Approximate Location of the Chesterfield County Airport and Other Key Locations Within Present-Day Chesterfield County (du Chesnoy 1781).

After the Revolution, Chesterfield County continued to develop. The mills in the county rebounded. In addition to the gristmills, the mills on Chesterfield's rivers and major creeks were producing half the state's annual output of cotton, cloth, and paper in the early nineteenth century (O'Dell 1983). During the Revolution, coal had been in high demand, and after the war, growing cities such as Washington, Philadelphia, and New York began sending orders for coal. The long lines of coal carts rumbled daily over the Buckingham Road to Richmond. The local residents complained so much about the damage done to the road by the heavy carts that a toll road was constructed in 1802 linking Manchester and the Falling Creek bridge. The Manchester and Petersburg Turnpike was chartered in 1816 to improve overland travel between Manchester and Petersburg. Other than these two turnpikes, few roads existed in Chesterfield County at this time. There was, however, a road linking Manchester to the Chesterfield Courthouse (Lutz 1954).

By the 1820s, Chesterfield County was on the verge of the railroad age. Agriculture still dominated the region with tobacco as the primary crop, but industrialism was beginning to flourish because of a need for better ways to transport these crops and other goods to market. In 1828, a charter for a railroad was granted, but the backers did not follow through. On February 28, 1829, a charter was granted for a railroad extending from Midlothian to Manchester, and this railroad, called the Chesterfield Railroad, became the first in Virginia.

### **3.3.4 Antebellum Period (1830-1860)**

The antebellum period was a time of growth for the county. The coal mines not only brought the county a lucrative income, but they also spurred transportation improvements. The improved roads and newly built railroads caused industries other than coal mining to take hold in the county. The Richmond and Petersburg Railroad was chartered in 1836. Within two years, the railroad had begun operating between Manchester along the James River, and Pocahontas along the Appomattox River. Unfortunately for the county, local industry did not immediately see the advantages of the railroad and was slow to develop areas adjacent to the railroad (Lutz 1954). In 1844, the Clover Hill Railroad began hauling coal from the mines in Winterpock in the county's

western section, and in 1851, the steam-powered Richmond and Danville Railroad replaced the mule-drawn Chesterfield railroad (Weaver 1970).

The 1850 U. S. Federal Census reflects the growth taking place in the county during the antebellum period. The census results showed that the county had a population of 17,498 people, of whom 8,616 were slaves (Lutz 1954:211). The county remained mostly agricultural with 564 farms in operation and 30 manufacturing plants. Most of Chesterfield's population consisted of middle class individuals working on small- or medium-sized farms, or in factories, mills, lumbering, and mines (Lutz 1954).

Leading up to the Civil War, there were still few large slaveholders in Chesterfield County. Only 27 persons owned more than fifty slaves each, and around 76 percent of slaveholders in the county owned from one to five slaves. According to the 1860 U. S. Federal Census, there were 10,019 white persons, 8,354 slaves, and 643 free black persons living in Chesterfield County (Lutz 1954:225).

### **3.3.5 Civil War (1861-1865)**

On April 17, 1861, Virginia voted to secede from the Union. Soon after, the Capital of the Confederacy was moved to Richmond from Montgomery, Alabama, partly because of the presence of cheap coal in the Chesterfield area and ironworks in Richmond. This caused a great deal of military preparation to take place in the area of Chesterfield County closest to Richmond. Most notable was the construction of fortifications at Drewry's Bluff, designed to protect Richmond from enemy approach via the James River (Weaver 1970). Drewry's Bluff successfully defended the capital from a Union naval attack on May 15, 1862 (Lutz 1954).

Chesterfield County contributed to the war effort in more ways than just military defense. The Richmond and Petersburg Railroad and the Richmond Danville Railroad proved important during the war for shipping supplies to the capital. An 1864 map of the region shows the location of railroad lines in the Chesterfield area, as well as other areas of importance during the war (Figure 3.3-3). Farms throughout Chesterfield County supplied food for the Army,

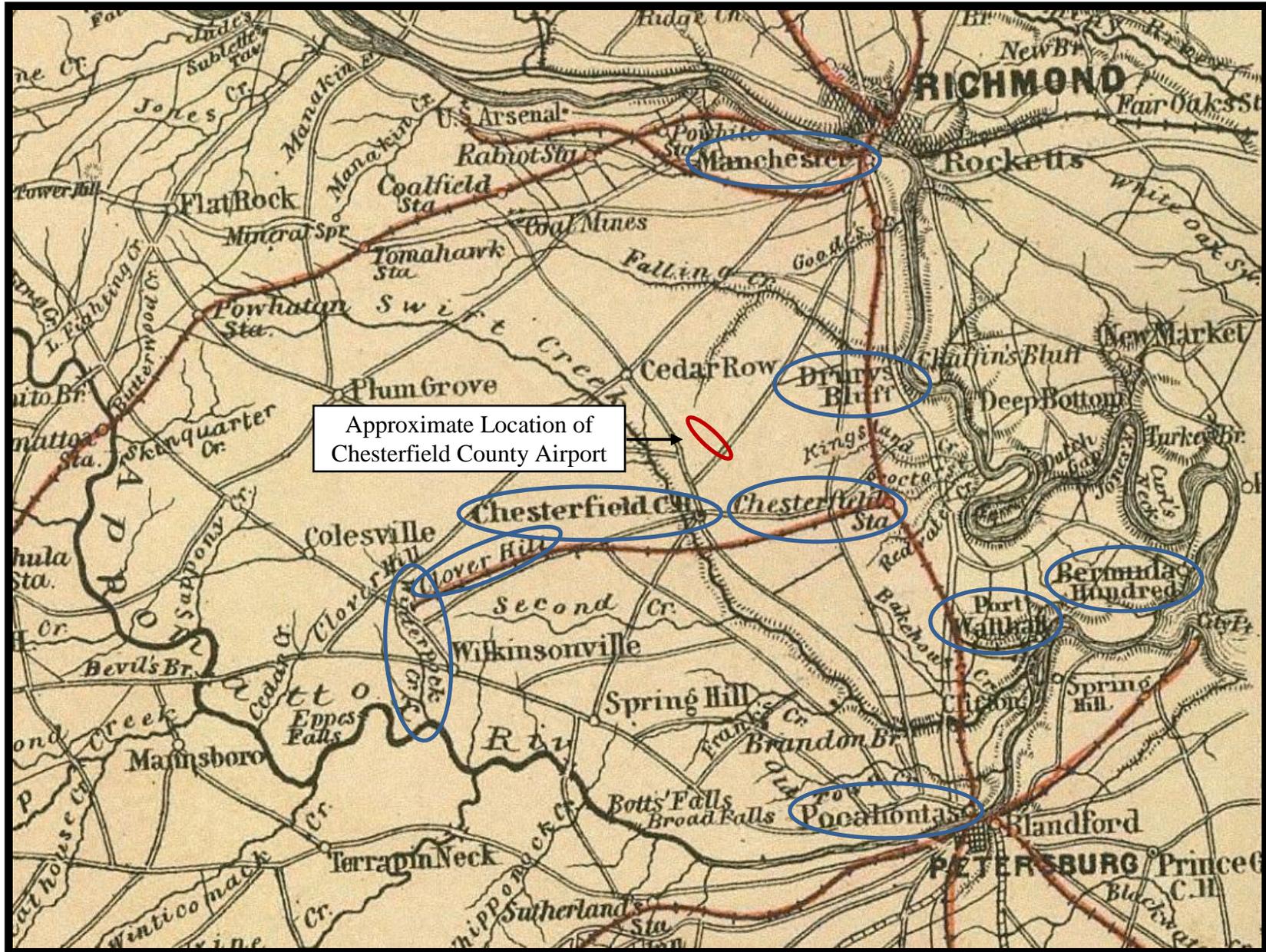


Figure 3.3-3: Detail of an 1864 Map of the Region, Showing the Approximate Location of the Chesterfield County Airport and Other Key Locations Within Present-Day Chesterfield County (Lindenkuhl 1864).

military animals, and civilians. Grist mills in the county produced large quantities of meal and flour for the Confederacy. As the war progressed and casualties began to increase, families throughout the county opened their homes to the wounded to relieve the crowded city hospital (Lutz 1954).

In May of 1864, the war came directly into Chesterfield County when Union General Benjamin F. Butler and his army landed at Bermuda Hundred. After securing the peninsula, he sent a brigade towards Walthall to inspect the Confederate forces there. The Federals caused much damage to the railroad during this raid, but were ultimately forced to retreat after a skirmish with Confederate forces. The following day, five brigades successfully destroyed a large portion of the railroad line between Walthall Junction and Chesterfield Station despite Confederate resistance. Later in May, General Butler and his army stopped just south of Proctor's Creek on their way to Richmond. General A. W. Krautz was then sent on a cavalry raid into Chesterfield. On May 12, they reached Chesterfield Courthouse where they released prisoners from the jail and then continued towards Midlothian (Lutz 1954).

Confederate forces under the command of General P. G. T. Beauregard attacked Butler's forces south of Proctor's Creek on May 15, forcing the Federals to withdrawal back to Bermuda Hundred. This engagement enabled Beauregard to establish a defensive line blocking the Bermuda Hundred peninsula and resulted in nearly 7,000 casualties. By mid-June, Union forces were threatening Petersburg and General Beauregard made the decision to take his troops away from his defensive line at Bermuda Hundred. General Butler then sent troops over the countryside to destroy railroad lines. They were eventually forced back to Bermuda Hundred by Confederate forces marching towards Petersburg, but not before the lines were severely damaged (Lutz 1954).

Petersburg and Richmond were abandoned by the Confederates in the Spring of 1865. General Mahone and his troops were sent towards Chesterfield Courthouse, and they spent the night in the vicinity of the courthouse. Some of the Confederate troops retreating from Richmond followed the railroad for a few miles before striking out across the county on foot. They passed Chesterfield Courthouse on their way to Tomahawk Church in Midlothian (Lutz 1954).

During the war, the Confederate army made a map of Chesterfield County (Figure 3.3-4). According to this map, the area around what is now the Chesterfield County airport was mostly forested in 1862. There are two cleared areas with structures on them potentially within the current project boundary. One of these areas is labeled “Dunnavant”, while the other is labeled “Susan Nunley”. A portion of a cleared area with a structure labeled “Lizzy Cogbill” could possibly be within the project area. Also, a mill is shown just west of the project area.

### **3.3.6 Reconstruction and Growth (1865-1917)**

After the Civil War, Chesterfield soldiers returned home to find farms neglected, buildings demolished, and food scarce. Railroads and bridges were damaged or destroyed, and industry was almost at a standstill. The emancipation of the slaves meant that the county’s economic system would need to change. Without slaves, many farmers, mill owners, and mine owners were forced to look for a new labor source, and cash to pay workers was scarce (Lutz 1954).

Despite these challenges, Chesterfield County soon began recovering from the war. New industries opened in the county, and the railroads that served those industries improved. In 1898, the Richmond and Petersburg Electric Railway Company was chartered. The company planned to route an electric rail line through Chesterfield County and connect Richmond and Petersburg. The Virginia Railway and Power Company took over operations in 1909, but by 1945 the line had fallen victim to bus transportation (Lutz 1954).

According to an 1888 map of the county, the project area continued to be located in a rural setting (Figure 3.3-5). This map shows that the project area lies between Proctors Creek and Licking Creek. State Route (SR) 10 (Iron Bridge Road) is labeled as Court-house Road, and SR 651 (Cogbill Road) did not exist in its current form, but seems to have originated from portions of the road labeled as Cogbills Road. This map shows dwellings labeled “Estis,” “Dunnavant,” “Kloebers,” “Cogbills,” “Rudd,” and “Brown” as being potentially within the project area.

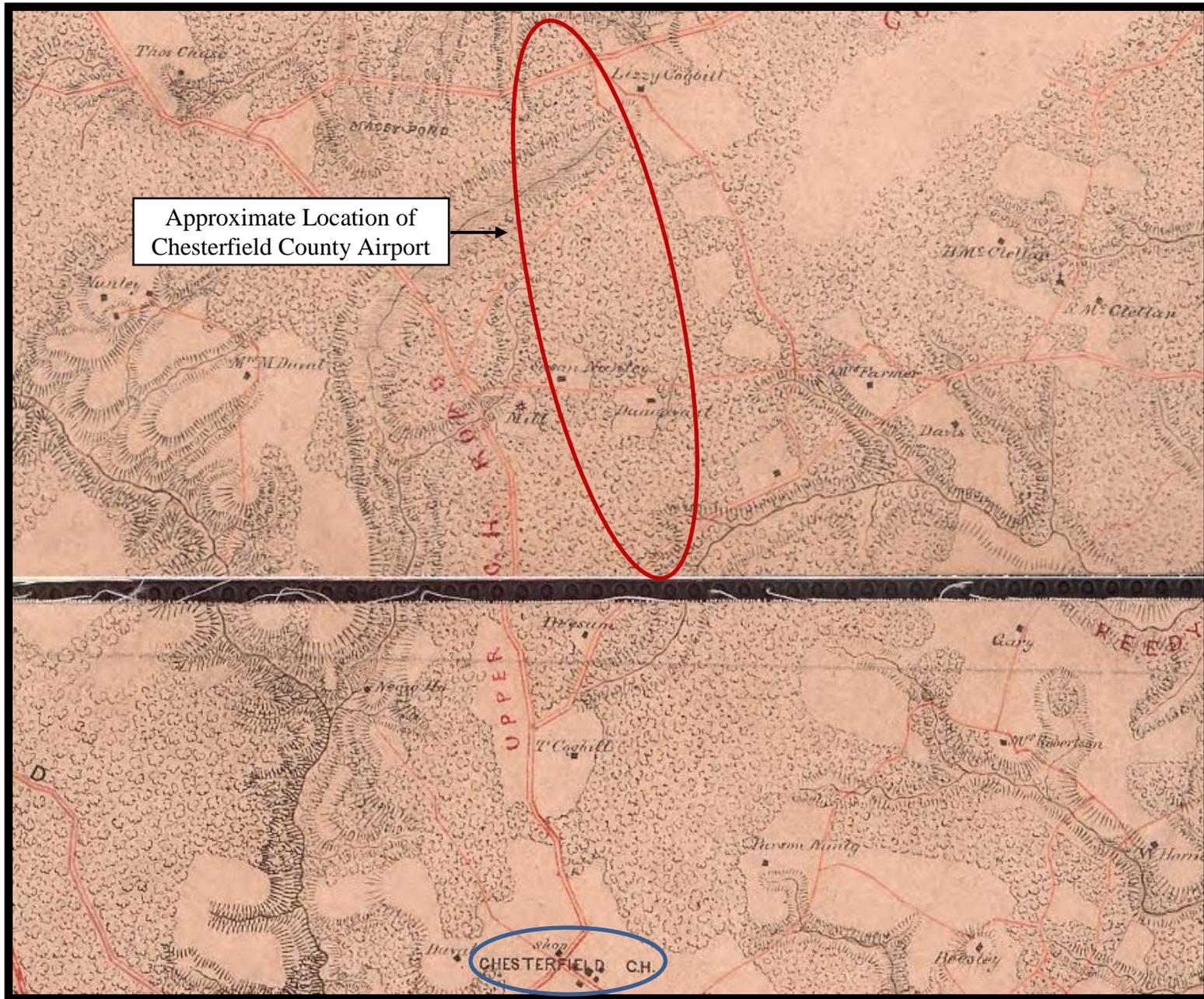


Figure 3.3-4: Detail of an 1862-3 Map of the Region, Showing the Approximate Location of the Chesterfield County Airport and Other Key Locations Within Present-Day Chesterfield County (Gilmer 1863).

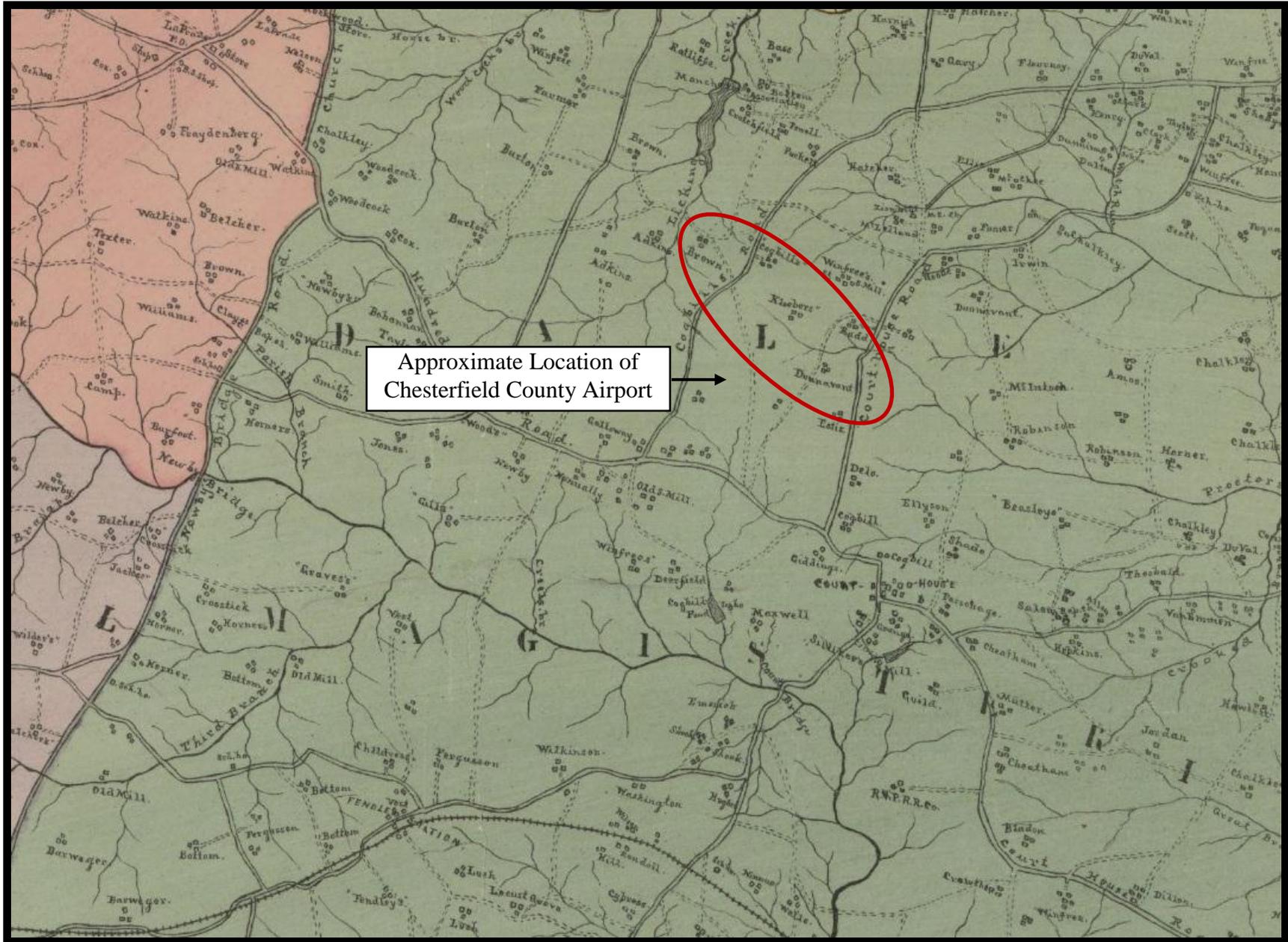


Figure 3.3-5: Detail of an 1888 Map of the Region, Showing the Approximate Location of the Chesterfield County Airport (LaPrade 1888).

### **3.3.7 World War I to World War II (1917 to 1945)**

Industrial expansion was accelerated in Chesterfield County after World War I. More of the county's residences and businesses received electrical and telephone service. Road improvements moved ahead as automobiles became more common, and farmers in remote parts of the county now found it easier to transport their goods to market. In 1928, E. I. du Pont de Nemours & Company purchased the Amphill estate that was established along the James River in 1732. The historic home on the property was dismantled and reassembled in Richmond. The plant built in 1928, and other plants that were added in later years, helped support the local economy during the very difficult Depression period. By the end of 1935, the local DuPont plants employed 2,750 people. The number of employed had grown to 4,100 people by the onset of World War II (Weaver 1970). Also during the Great Depression, the Civilian Conservation Corps developed a recreation area around Swift Creek and named it Pocahontas State Park. The park was dedicated on August 10, 1938 and turned over to the State on June 6, 1946 (Lutz 1954).

During World War II, Chesterfield County contributed its share of soldiers to the war effort, while those who remained at home did what they could to help. The site of Bellwood was used as a prisoner of war camp during the war, with many of the prisoners interred there being used as laborers on local farms (Weaver 1970). During the Summer and Fall of 1941, Chesterfield County's roads were often filled with soldiers traveling to and from maneuver areas. The 28th, 29th, and 44th Infantry Divisions passed through the county on their way to the Carolinas for maneuvers in the late summer of 1941 (Lutz 1954).

A 1943 quadrangle map shows that the project area continued to be rural during this period (Figure 3.3-6). The area was largely forested, with a small area of development at Route 651, and Routes 651 and 10 both existed by this time. The four groups of structures shown to be potentially within the project area on the 1888 map are not depicted on the 1934 map; however, there are two structures present near Route 651 and three structures on Route 10 that are potentially within the project area.

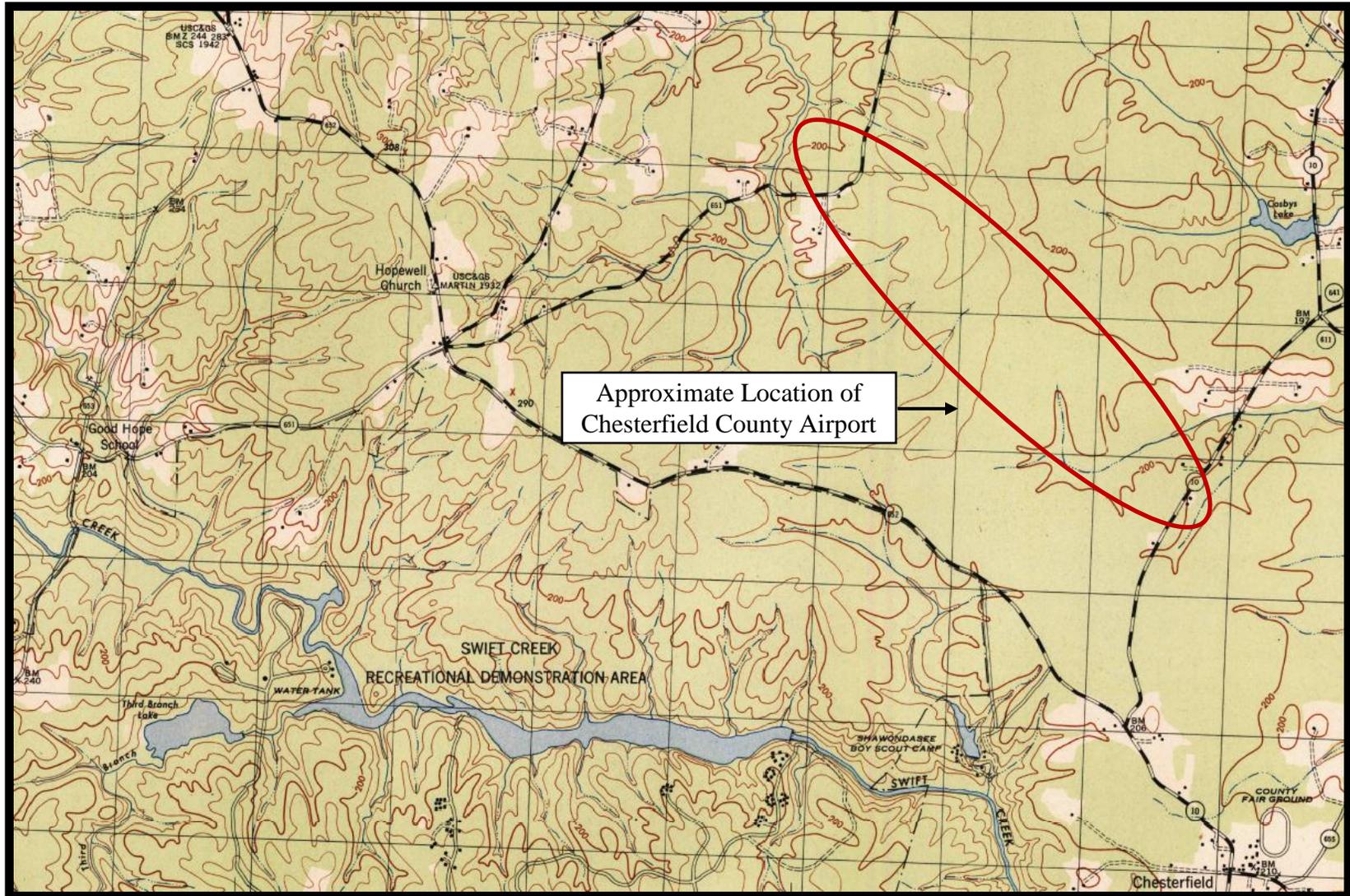


Figure 3.3-6: Detail of a 1943 7.5' USGS Chesterfield, Virginia, Topographic Quadrangle, Showing the Approximate Location of the Chesterfield County Airport.

### **3.3.8 The New Dominion (1945 to Present)**

Suburban growth in Chesterfield County dates to the first few decades of the twentieth century with commuter rails and increased automobile ownership. Since World War II, this trend towards suburbanization has gathered momentum with many of the emerging suburbs being planned communities. Chesterfield County, sandwiched between Richmond and Petersburg, has been the scene of rapid residential growth that centers on those two cities (O'Dell 1983).

The construction of I-95 during the second half of the twentieth century has served to make Chesterfield County even more accessible to business. The Allied Chemical Company constructed a nylon manufacture plant near Bermuda Hundred in 1954. This was in addition to the DuPont nylon plant previously established in the county, allowing Chesterfield County to style itself the “Nylon Capital of the World.” The Allied Chemical Company established a large research center along I-95 that brought scientists and technicians to the area. During the 1960s, the American Tobacco Company also built a plant and research facility in the Bermuda Hundred area (Weaver 1970).

The area around the Chesterfield County Airport remained largely rural prior to the airport construction. Built in 1973, the Chesterfield County Airport initially consisted of a 15,000-square-foot hangar, a 4,400-foot runway, a terminal building, and a restaurant. The Chesterfield Airport Industrial Park was established next to the airport by 1977 (Ethell 1977). Since its initial construction, the airport has continued to expand.

## **4.0 RESULTS OF THE ARCHITECTURAL SURVEY**

### **4.1 METHODS**

#### **4.1.1 Architectural APE**

The APE for direct and indirect effects on above-ground architectural resources was defined in consultation with VDHR (see Figure 1.1-2; Appendix A).

#### **4.1.2 Background Research**

Prior to conducting architectural fieldwork, additional background research for the current project was performed at VDHR in Richmond to gather information on recent cultural resource surveys and previously recorded architectural resources located within or adjacent to the current APE. Two previously recorded architectural resources (VDHR #020-0641 and #020-5565) are located within the current APE. Online aerial mapping and county tax information was utilized as part of background research and analysis of building dates. Consultation with the airport manager confirmed that the current airport facility post-dates 1973 and does not include historic buildings (Thomas Trudeau, personal communication 2013).

#### **4.1.3 Architectural Field Methods**

Fieldwork for the architectural investigation was conducted by vehicle and on foot. The purpose of the study was twofold: 1) to provide specific information concerning the location, nature, and significance of buildings more than 50 years old in the APE; and 2) to identify buildings that appear to be potentially eligible for the NRHP. Each resource that was determined to be more than 50 years old was recorded and photographed. If possible, property owners were interviewed regarding the history of each structure. VDHR Data Sharing System (DSS) forms and packets were prepared for each newly recorded resource.

## 4.2 PREVIOUSLY RECORDED ARCHITECTURAL RESOURCES

Two previously recorded architectural resources are located within the current APE (Figure 4.2-1). One of these resources, a ca. 1950 gas station and associated farmstead (VDHR# 020-5565), was previously determined not eligible for the NRHP (Humphries et al. 2011). The other previously recorded architectural resource (VDHR# 020-0641) in the current APE had no prior NRHP eligibility determination; however, this resource was recorded as no longer extant during the current survey.

**VDHR RESOURCE NUMBER:** 020-0641

**RESOURCE NAME/TYPE:** House, 8131 Iron Bridge Road

**DATE:** ca. 1870

**PREVIOUS NRHP RECOMMENDATIONS/STATUS:** Not Evaluated; No Longer Extant

**DESCRIPTION:** This resource was recorded in 1977 by Jeffrey M. O'Dell. The digital resource form in DSS has the date of construction as ca. 1870 while the Virginia Historic Landmarks Commission survey form that is on file with the VDHR has the date of construction as late nineteenth to early twentieth century, but probably closer to ca. 1910 to 1930. This survey form also states that the house was in fair to good condition, and was a two-story frame construction with a catslide roof and low second floor.

The house is no longer extant. Only an equipment shed is present on the property, and this is associated with a house on the adjacent property. This house, located to the northeast, was recorded during the current survey as VDHR #020-5607. According to the Chesterfield County tax records both the parcel on which VDHR #020-0641 stood and the parcel on which VDHR #020-5607 is located are now currently owned by the same property owner.

The DSS form has been updated to reflect that VDHR #020-0641 has been demolished since it was originally recorded in 1977. Information that was recorded on the original survey form but was absent on the DSS form has also been added.

**RECOMMENDATIONS:** This resource was documented as no longer extant during the current survey.

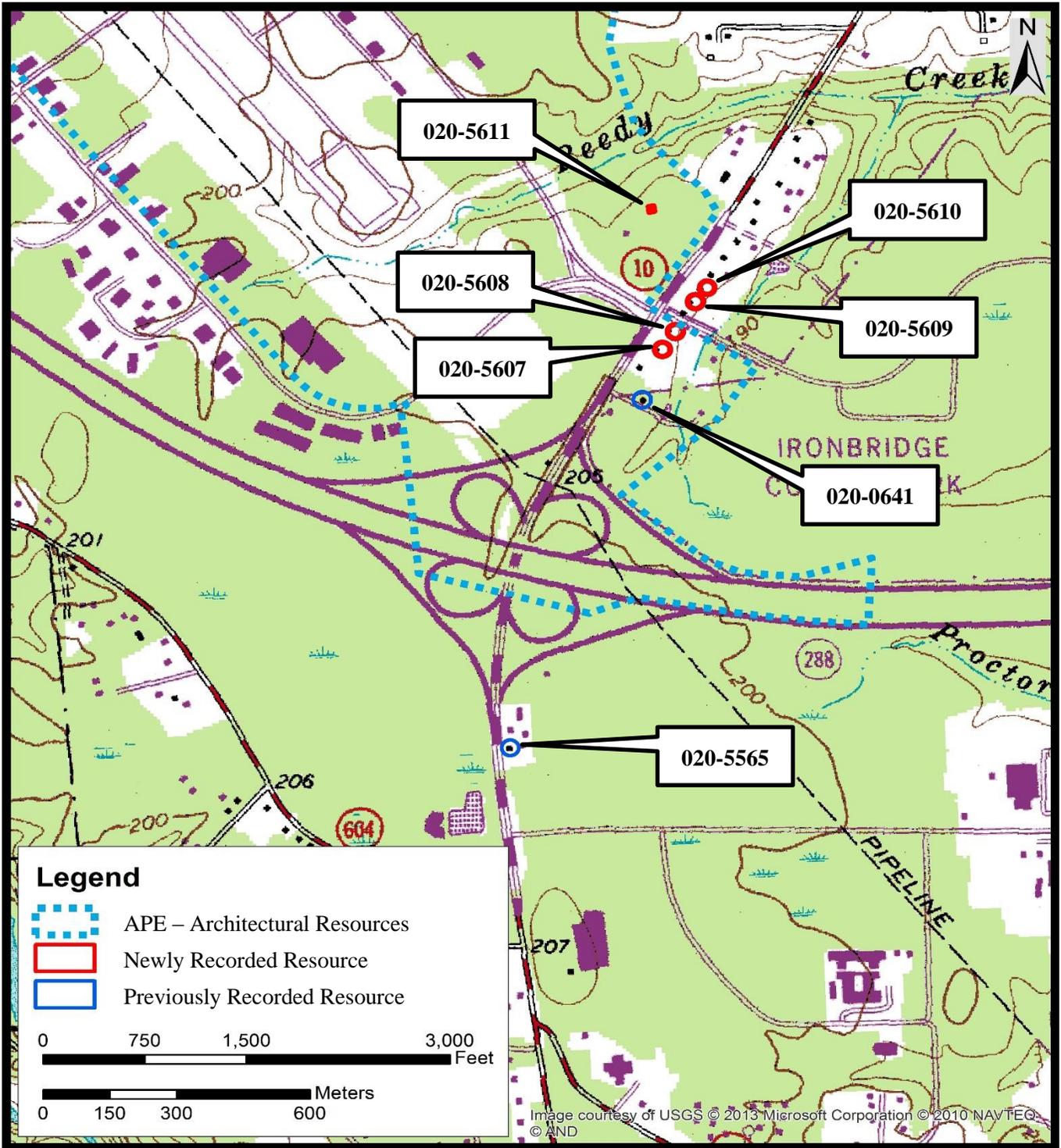


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

### 4.3 NEWLY RECORDED ARCHITECTURAL RESOURCES

Five newly recorded architectural resources were recorded within the current APE (see Figure 4.2-1). Appendix A contains the DSS forms for the newly recorded architectural resources along with a map showing their general location, sketch maps illustrating the features of the resources, and representative photographs of each resource. These newly recorded architectural resources are described in detail below.

**VDHR RESOURCE NUMBER:** 020-5607

**RESOURCE NAME/TYPE:** House, 8121 Iron Bridge Road (SR 10)

**DATE:** ca. 1941

**DESCRIPTION:** The house is located on the southeast side of Iron Bridge Road (SR 10) near the Chesterfield County Airport (see Figure 4.2-1). The building sits approximately 140 ft back from the road, and is surrounded by a lawn with several mature trees and shrubs and a small wooded area to the west.

Built around 1941, according to the Chesterfield County tax information, this one-story, three-bay, front-gabled frame dwelling is typical of the Vernacular-style dwellings popular at that time. A hip-roofed porch supported by four square posts shelters the three bays on the northwest (front) gable end. Three-over-one wooden sash Craftsman-style windows flank the glazed entry door on the front gable end. The building sits on a continuous brick foundation and is clad in aluminum siding and ashlar-patterned asphalt shingles.

Located to the southwest of the dwelling is a small open-fronted front-gabled frame garage clad in vertical composition board siding. To the southwest of the garage stands a large three-bay machine shed, with one enclosed bay with vertical composition board siding and a six-over-six vinyl sash replacement window.

**RECOMMENDATIONS:** Overall, this property retains a low level of integrity due to the replacement of the original siding. The dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not

appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

***VDHR RESOURCE NUMBER:*** 020-5608

***RESOURCE NAME/TYPE:*** House, 8111 Iron Bridge Road (SR 10)

***DATE:*** ca. 1940

***DESCRIPTION:*** The house is located on the south corner of the intersection between Iron Bridge Road (SR 10) and Whitepine Road near the Chesterfield County Airport (see Figure 4.2-1). The building sits approximately 145 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

Built around 1940, according to the Chesterfield County tax information, this one-story, side-gabled concrete-block dwelling is an example of the Minimal Traditional style. A double and a single six-over-six wooden-sash window flank a fifteen-light glazed entry door on the northwest (front) elevation of the dwelling. A small metal awning, supported by two studs, shelters the entry door, and a frame shed addition covers half of the southeast (rear) elevation of the dwelling. German or drop siding fills the gable peaks and a brick chimney extends through the rear slope of the roof.

***RECOMMENDATIONS:*** Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

***VDHR RESOURCE NUMBER:*** 020-5609

***RESOURCE NAME/TYPE:*** House, 8041 Iron Bridge Road (SR 10)

***DATE:*** ca. 1950

***DESCRIPTION:*** The house is located on the east corner of the intersection between Iron Bridge Road (SR 10) and Whitepine Road near the Chesterfield County Airport (see Figure 4.2-

1). The building sits approximately 150 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

Built around 1950, according to the Chesterfield County tax information, this one-story, side-gabled concrete-block Minimal Traditional-style dwelling has a brick chimney on the northeast (front) elevation flanking the entry door to the right. A section of the front slope of the roof extends to shelter the door and the brick continues around the door tying the chimney and the door together and providing a decorative emphasis on the front elevation. The windows are double or single horizontal two-over-two wooden-sash windows with rusticated faux shutters. The dwelling sits on a full basement, with an external entry door on the southeast (rear) elevation and two-light steel casement hopper windows.

Located to the northeast of the dwelling is a modern metal carport, and to the southwest of the dwelling stands a modern gable-roofed shed/garage clad in vinyl German or drop siding with small four-over-four vinyl-sash windows and a garage door opening in the southeast gable end.

**RECOMMENDATIONS:** Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**VDHR RESOURCE NUMBER:** 020-5610

**RESOURCE NAME/TYPE:** House, 8031 Iron Bridge Road (SR 10)

**DATE:** ca. 1930

**DESCRIPTION:** The house is located on the southeast side of Iron Bridge Road (SR 10) near the Chesterfield County Airport (see Figure 4.2-1). The building sits approximately 150 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

Built around 1930, according to the Chesterfield County tax information, this one-story, side-gabled frame dwelling is an example of the Minimal Traditional style. A decorative cross gable with a centrally placed single-shouldered chimney, flanked by the entry door to the left and a large rectangular single-pane picture window to the right, emphasizes the northwest (front) elevation of the dwelling. A small front-gabled portico, supported by decorative metal posts, shelters the entry door. The dwelling sits on a continuous brick foundation and is clad in composition board siding with an ashlar veneer running below the windows on the front elevation, and has eight-over-eight and six-over-six wooden sash windows. A small one-story hyphen against the southwest gable end connects the main section of the dwelling to a small side-gabled one-story wing. The hyphen has double three-light louvered or awning windows on the front and back elevations allowing it to become a breezeway. A one-and-a-half-car, flat-roofed garage was built against the northeast gable end of the dwelling at a later date.

Located behind the house to the southwest are two small modern garden sheds. One is a side-gabled shed clad in M-panel, and the other is a gambrel-roofed shed clad in vertical composition board siding with a double door in the front gable end.

**RECOMMENDATIONS:** Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**VDHR RESOURCE NUMBER:** 020-5611

**RESOURCE NAME/TYPE:** Farmer-Rudd Cemetery, West Side of Iron Bridge Road (SR 10), North of Whitepine Road

**DATE:** Late Nineteenth to Mid-Twentieth Century

**DESCRIPTION:** The cemetery is located in a wooded area on the west side of Iron Bridge Road (SR 10), north of Whitepine Road (Figure 4.3-1). It is associated with archaeological site 44CF0782, which was recorded during the current survey as a late eighteenth- to mid-twentieth-century domestic scatter and structural ruins (see Section 5: Results of the Archaeological Survey for more detail on the site).

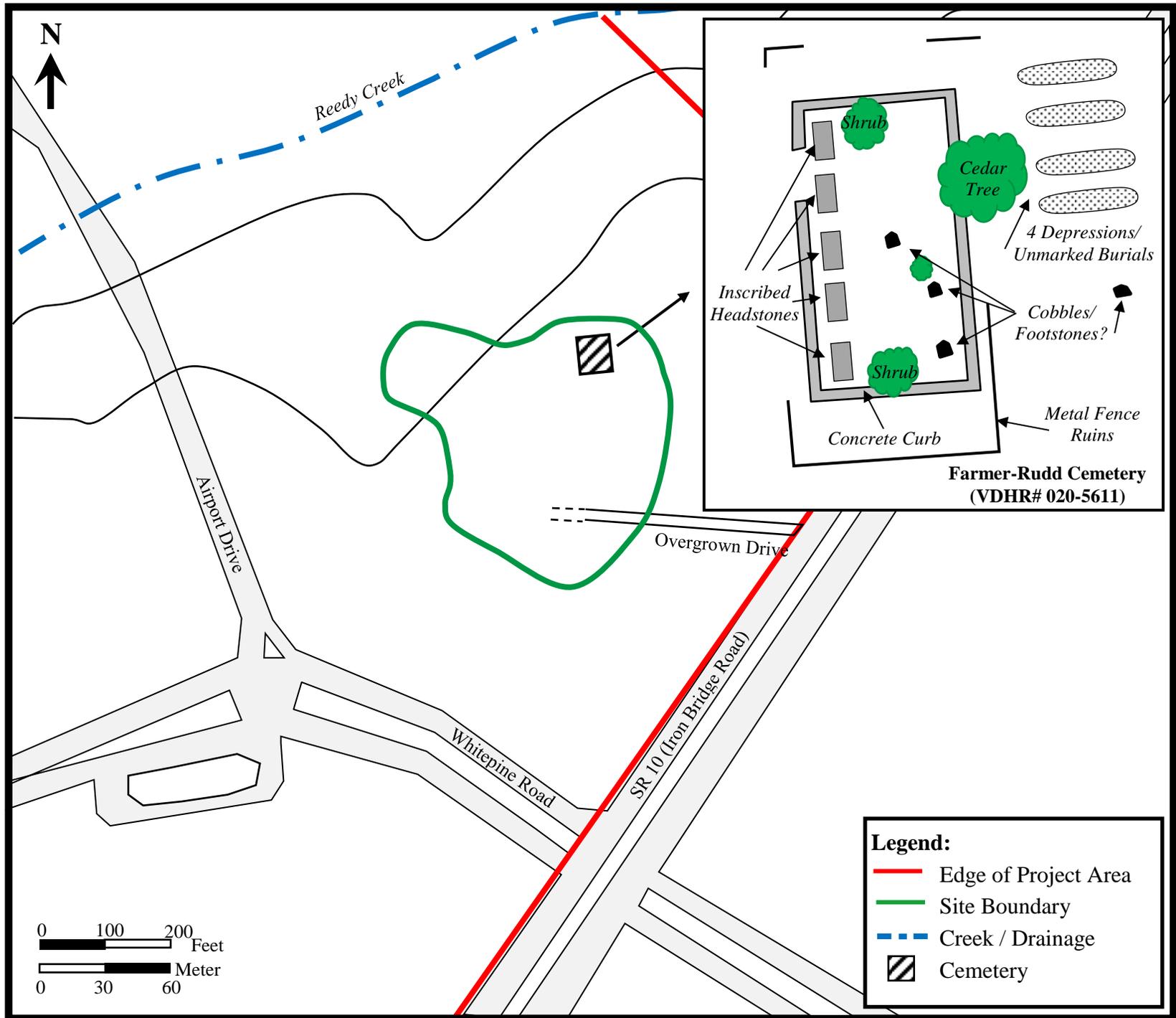


Figure 4.3-1: Sketch Map Showing the Location of Farmer-Rudd Cemetery (VDHR# 020-5611) and Site 44CF0782.

The cemetery consists of five burials within an enclosed low concrete wall or curb as well as at least four to five unmarked burials located approximately 12.5 ft (3.8 m) east-northeast of the curbed portion (Figures 4.3-2 and 4.3-3). The dimensions of the curbed wall are roughly 15 ft (4.6 m) east-west and 30 ft (9.1 m) north-south. The five burials within the curbed portion all have a similar style granite grave marker and are aligned in a row roughly north-south with the headstones at the western portion. Within the curbed portion, the oldest burial took place in 1891 and the most recent in 1935. From south to north, the inscriptions on the five head stones read:

- 1) SUSAN FARMER RUDD  
DIED 1891 AGED 78 YRS
  
- 2) R. BONAPARTE FARMER  
MARCH 31 1848  
MAY 28 1907
  
- 3) BLANCH A. FARMER  
DEC 23 1900  
FEB 11 1901
  
- 4) ANNIE McGEE FARMER  
WIFE OF R.B. FARMER  
DEC 3 1859  
OCT 10 1935
  
- 5) JAMES A. FARMER  
FEB 18 1882  
OCT 8 1928

The three southernmost burials also have associated foot stones, which are unmarked granite cobbles. On the west wall of the curb near the north end there is an entrance where the curb is flush with the ground surface. The stone at this entrance is inscribed with the word “Farmer”, representing the family’s surname.

There are four linear depressions that are located approximately 12.5 ft (3.8 m) east of the northeast portion of the curbed area, and they appear to be unmarked burials (see Figure 4.3-1). The depressions are approximately 5 ft (1.5 m) long east-west and are aligned in a row north-south. No visible stones or grave markers are associated with these depressions. Approximately



Figure 4.3-2: VDHR# 020-5611, Farmer-Rudd Cemetery, View of Cemetery Looking Northeast.



Figure 4.3-3: VDHR# 020-5611, Farmer-Rudd Cemetery, View of Two of the Unmarked Burials within the Cemetery, Looking Northeast.

10 ft (3.0 m) south of these linear depressions is a granite cobble that looks similar to the three foot stones within the curbed portion of the cemetery. This stone may be marking a fifth unmarked burial or it may be a foot stone from one of the other two burials within the curbed portion that has been moved.

There is a metal fence surrounding a portion of the cemetery, however much of the fence has fallen and is no longer visible (see Figure 4.3-1). The vegetation in the area includes mostly younger deciduous growth with some older trees as well as holly and vines. There is also some ornamental growth of the type commonly found in and near cemeteries, such as shrubbery and cedar trees. Two large shrubs are located within the curbed portion of the cemetery, one each along the north and south walls. A large cedar tree is located just outside of the curbed wall near the northeast corner (see Figure 4.3-1).

A map of the region dating to 1888 shows that Rudd family occupied land nearby (LaPrade 1888) (see Figure 3.3-5). A census record search of the Farmer and Rudd families shows that in 1860 Susan Farmer, age 41, lived with R. B. Farmer, age 12, within the Northern District of Chesterfield County, Virginia (Ancestry.com 2013a). The 1870 census shows that James Rudd, age 50, was the head of a household which included Amanda S. Rudd, age 51 (presumably Susan Farmer Rudd); Rosser B. Farmer, age 22; and Rosa Clarke, age 14 (Ancestry.com 2013b). No house number or street name is provided in this census record, but it does specify it is from the 2nd Revenue District of Dale Township in Chesterfield County, Virginia. In 1880, James Rudd, age 60, was the head of a household, which is listed as including his wife Amanda S. Rudd, age 61; son R. B. Farmer, age 32; and servant Lucy Friend, age 50 (Ancestry.com 2013c). This location is shown as being in the Dale District of Chesterfield County, Virginia. In 1900, Rosser B. Farmer, age 52, is listed as the head of a household which included his wife, Ann E., age 40; his son, James A., age 18; son Wallace C., age 15; daughter Mary E., age 14; son Lois, age 11; and daughter Roberta, age 6 (Ancestry.com 2013d). No address is provided on this census, but it does state that they lived in the Dale Magisterial District of Chesterfield County, Virginia.

Based on the information obtained from historic maps, census records, and the grave stone inscriptions, it appears that the Farmer family buried in the cemetery includes Rosser Bonaparte,

his wife Annie (McGee), their son James, and possibly their infant daughter Blanch, as well as Rosser's mother Susan Farmer Rudd. Based on census records it appears that Susan Farmer Rudd married James Rudd, possibly after the death of her husband, who was Rosser B. Farmer's father. It is unknown who is buried in the unmarked graves at VDHR #021-5611.

**RECOMMENDATIONS:** This cemetery does not lend itself to comparative archaeological or physical anthropological studies. The cemetery is recommended as not eligible for the NRHP under Criteria A, B, C, or D. It is also recommended as not eligible under Criteria Consideration C for association with important persons or Criteria Consideration D, as it contains no graves of important persons, is not of great age, contains no special design elements, and is not associated with significant events. However, relevant local and state statutes regarding the protection and relocation of cemeteries must be followed if the cemetery is to be impacted by land-altering activities. It is also recommended that prior to any land-altering activities in this area there be remote sensing such as ground penetrating radar (GPR) or soil stripping to locate any additional unmarked burials.

#### **4.4 SUMMARY**

Two previously recorded architectural resources are located within the current APE (Table 4.4-1; see Figure 4.2-1). One of these resources, a ca. 1950 gas station and associated farmstead (VDHR# 020-5565), was previously determined not eligible for the NRHP (Humphries et al. 2011). The other previously recorded architectural resource (VDHR# 020-0641) in the current APE had no prior NRHP eligibility determination; however, this resource was recorded as no longer extant during the current survey.

The architecture survey identified five newly recorded resources within the APE (see Table 4.4-1) (see Figure 4.2-1). These newly recorded resources include four houses (VDHR #020-5607 through 020-5610), all of which lack significance and are recommended as not eligible for listing on the NRHP. A family cemetery (VDHR #020-5611) was also recorded during the current survey. This cemetery is recommended not eligible for the NRHP; however, all relevant statutes regarding the protection and relocation of cemeteries must be followed.

Table 4.4-1: Previously and Newly Recorded Architectural Resources Within the Current APE.

<b>VDHR #</b>	<b>Resource Name, Location</b>	<b>Date</b>	<b>NRHP Recommendation or Status</b>
020-0641	House, 8131 Iron Bridge Road (SR 10) (Previously Recorded)	ca. 1870	Not Extant
020-5565	CITGO Gas Station and Farmstead, 8701 Iron Bridge Road (Previously Recorded)	ca. 1850	Previously Determined Not Eligible (Humphries et al. 2011)
020-5607	House, 8121 Iron Bridge Road (SR 10)	ca. 1941	Recommended Not Eligible
020-5608	House, 8111 Iron Bridge Road (SR 10)	ca. 1940	Recommended Not Eligible
020-5609	House, 8041 Iron Bridge Road (SR 10)	ca. 1950	Recommended Not Eligible
020-5610	House, 8031 Iron Bridge Road (SR 10)	ca. 1930	Recommended Not Eligible
020-5611	Farmer-Rudd Cemetery, West Side of Iron Bridge Road (SR 10), North of Whitepine Road	Late 19th- to mid-20th cent	Recommended Not Eligible

## **5.0 ARCHAEOLOGICAL SURVEY METHOD AND RESULTS**

### **5.1 METHODS**

#### **5.1.1 Archaeological Area of Potential Effects (APE)**

The APE for the current archaeological survey conducted at the Chesterfield County Airport was defined as the limits of proposed ground disturbance or project area, as specified by Delta Airport Consultants, Inc. (see Figure 1.1-2). The APE for the archaeological portion of the survey includes approximately 760 acres, roughly 460 of which are disturbed due to the existing airport and nearby roadways, and approximately 40 acres of which have been previously delineated as wetland (Figure 5.1-1). Portions of the proposed survey area also involve larger rural tracts with wooded areas and smaller residential or commercial parcels.

#### **5.1.2 Background Research**

Prior to conducting archaeological fieldwork, background research for the current project was performed at VDHR in Richmond and the library of CCR in Tarboro. CCR's research from past projects in Chesterfield County was utilized to the extent possible. The purpose of this background research was to identify any previously recorded archaeological sites in or adjacent to the project area, to obtain information on project-specific natural characteristics and cultural patterns, and to review the results of cultural resource investigations in the region. For those sites in which a report was never produced, or there was not one found on file at VDHR, basic information about the sites was obtained from the DSS archaeological site forms.

#### **5.1.3 Field Methods**

The entire APE was given full consideration during the archaeological field survey. Any areas that were wet, steeply sloped, or obviously disturbed were briefly examined but not intensively surveyed. Due to very limited or somewhat reduced ground surface visibility in the intensively surveyed areas, survey included shovel testing at 50-ft (approximately 15-m) intervals. As

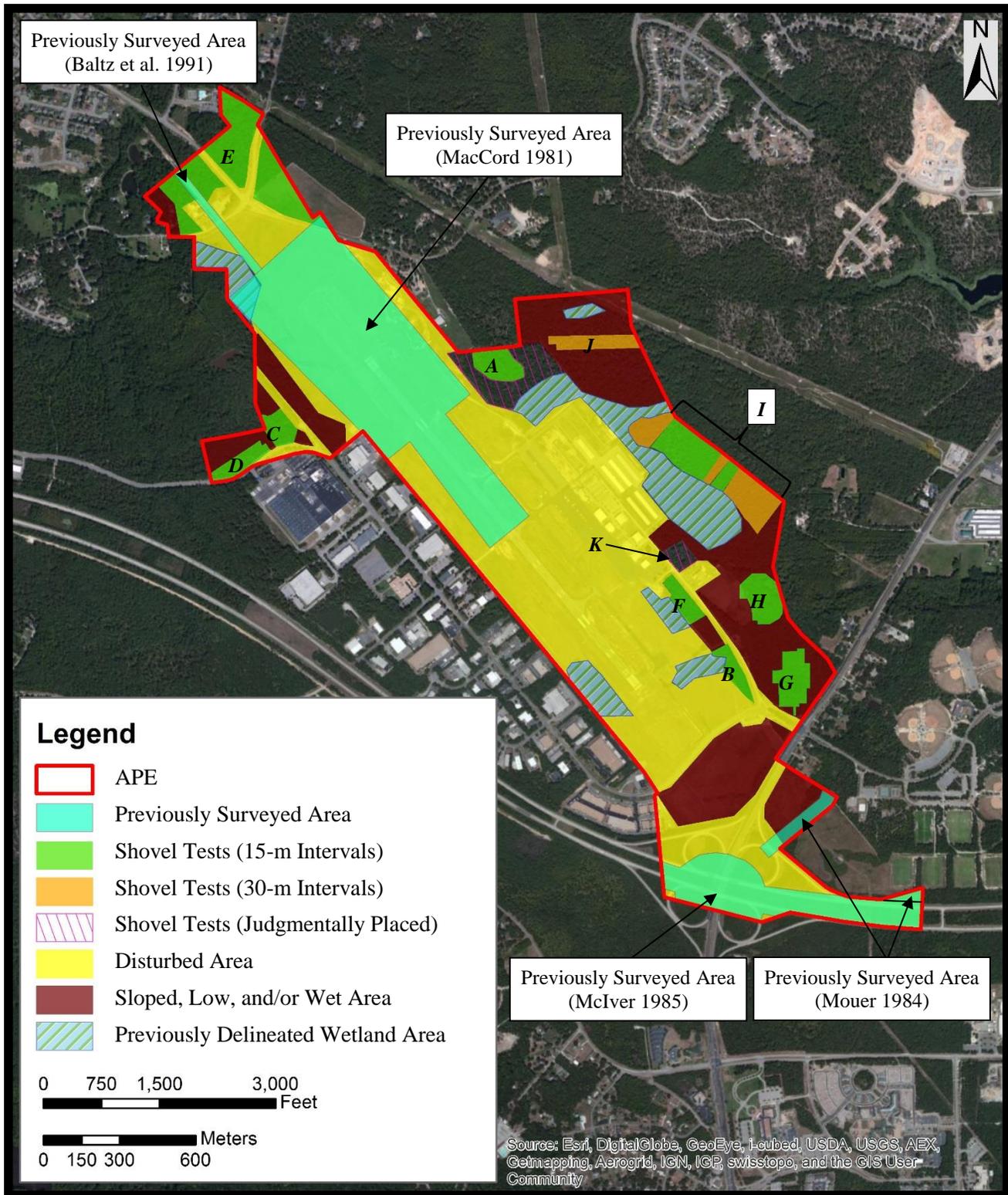


Figure 5.1-1: View of the APE for Archaeology Showing Previously Surveyed Areas, the Existing Conditions, and Coverage for the Current Archaeological Survey. Note the areas where shovel testing was conducted are labeled Segment 'A' through 'K'.

appropriate, the interval was expanded and/or shovel tests were placed judgmentally to delineate and document areas of poor drainage or disturbance that were not obvious from surface conditions (see Figure 5.1-1). Shovel tests were generally 30 x 30 cm (1 ft) in diameter and were excavated into sterile soil. Materials from the shovel tests were screened through 6.35-mm (0.25-in) hardware cloth. The shovel test locations were noted on the project map, and records of shovel test results were compiled on standardized forms and included depth, soil color, and texture. Digital photographs were used to document the general conditions of the project area.

The areas where shovel tests were conducted, either at regular intervals or judgmentally placed, were designated Segments A through K (see Figure 5.1-1). This was done to facilitate the organization of field documents such as shovel test recordation forms, maps, and notes.

An archaeological site was defined by the recovery of three or more artifacts in reasonable association. Discoveries consisting of fewer than three artifacts are reported as artifact locations. Historic sites were also identified by the presence of surface or subsurface structural remains. When archaeological material was recorded in shovel tests, radial shovel tests were excavated at 25-ft (7.5 m) intervals in cardinal directions to determine the site boundary. Site boundaries were defined based on the location of positive shovel tests and/or the distribution of artifacts recovered from the surface or the location of structural remains. Artifacts recovered during site excavations were placed in bags labeled with the appropriate provenience information.

The purpose of the current project was to determine if archaeological sites that are on, eligible for, or potentially eligible for the NRHP are located within the APE. Archaeological sites are assessed against the NRHP criteria for integrity and significance to determine eligibility. However, isolated artifact locations, in most cases, are not considered eligible for the NRHP. The NRHP criteria require that the quality of significance in American history, architecture, culture, and archaeology should be present in buildings, structures, objects, sites, or districts that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that the buildings, structures, objects, sites, or districts:

- A. are associated with events that have made a significant contribution to the broad patterns of our history;
  - B. are associated with the lives of persons significant in our past;
  - C. embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
  - D. have yielded, or may be likely to yield, information important in prehistory or history
- (National Park Service 2013).

In general, archaeological sites that lack sub-plow zone artifact-bearing deposits, have low-density artifact distributions, contain evidence of deep plowing, lack spatial integrity, lack artifact concentrations, or exhibit signs of earth-disturbing activities do not appear to be good candidates for inclusion in the NRHP. Sites that contain concentrations of artifacts, intact surface features, or intact subsurface remains may be recommended for additional evaluation to determine if they are eligible for inclusion in the NRHP.

#### **5.1.4 Laboratory Methods**

Upon completion of fieldwork, the recovered artifacts were processed and analyzed by CCR staff members. All artifacts were cleaned, labeled, and prepared for curation according to the standards and guidelines issued by VDHR. The artifacts will be submitted to the curation facility of VDHR or another appropriate depository selected by the client.

Analysis included classification and quantification of artifacts and other cultural materials. In general, lithic artifacts are defined in terms of raw material, morphology, and manufacturing stage. Fire-cracked rock and unmodified cobbles are noted if present, but generally not retained. Prehistoric ceramics, if recovered, are defined as to type and temporal placement using the appropriate typologies. Historic artifacts are analyzed using standard reference materials. There are no materials requiring stabilization or further treatment.

## **5.2 PREVIOUS RESEARCH**

### **5.2.1 Archaeological Sites and Surveys in the Vicinity of the Archaeological APE**

Ten archaeological sites are located within one mile of the current archaeological APE, and two additional sites (44CF225 and 44CF229) are located just beyond one mile of the current survey area (Table 5.2-1). Seven cultural resources surveys have been conducted in the vicinity of the Chesterfield County Airport, four of which overlap with a portion of the current proposed survey area (see Figure 5.1-1). No previously recorded sites are located within the current APE.

In 1981, Howard MacCord, with the Archaeological Society of Virginia (ASV), surveyed a portion of the Chesterfield County Airport property in an area of proposed expansion. The project area consisted of approximately 95 acres, all of which is fully contained within the current proposed survey area (see Figure 5.1-1). The methodology employed during this survey consisted of pedestrian survey and shovel testing at both regular intervals and judgmentally placed in wooded areas on landforms and along former roadways (MacCord 1981:5-6). No sites were located during this survey.

In 1983, a Phase I archaeological survey was conducted by L. Daniel Mouer for Chesterfield County's Department of Parks and Recreation prior to the development of Dale Park (Mouer 1984). According to the county's parks and facilities website, the park is now known as the Harry G. Daniel Park at Iron Bridge (Chesterfield County 2012). The park is located near the northeast junction of SR 10 (Iron Bridge Road) and SR 288 (World War II Veterans Memorial Highway). The southwest portion of the Dale Park archaeological survey area overlaps with the extreme southeast portion of the current project area for the Chesterfield County Airport (see Figure 5.1-1). No sites were found within the proposed development area during the 1983 survey for Dale Park; however, Mouer also investigated portions of the park outside of the survey area and did record five archaeological sites. These sites are designated 44CF194 through 44CF198, two of which, 44CF197 and 44CF198, are within one mile of the current proposed survey area for the Chesterfield County Airport. Site 44CF197 is located on an upland flat above Proctors Creek. The site was discovered while conducting raking transects in the

Table 5.2-1: Previously Recorded Archaeological Sites Within the Vicinity of the Current APE.

Site	Site Type/Date	Current NRHP Eligibility	Reference
44CF0197	Native American lithic scatter, indeterminate	Not Evaluated	Mouer 1984
44CF0198	Native American lithic and ceramic scatter, Woodland period	Not Evaluated	Mouer 1984
44CF0225	Native American lithic and ceramic scatter, Late Archaic to Woodland period	Not Evaluated	DSS Site Form
44CF0229	Historic domestic, late 18th to early 19th century	Not Evaluated	DSS Site Form
44CF0237	Native American lithic and ceramic scatter, Woodland period	Not Evaluated	DSS Site Form
44CF0238	Native American lithic and ceramic scatter, Late Archaic to Woodland period; Historic isolate, indeterminate (17th to 19th century)	Not Evaluated	DSS Site Form
44CF0269	Native American lithic and ceramic scatter, Woodland period	Not Evaluated	McIver 1985; Cromwell et al. 1986
44CF0270	Native American lithic scatter, indeterminate	Not Evaluated	McIver 1985; Cromwell et al. 1986
44CF0415	Native American lithic scatter, indeterminate	Not Evaluated	Baltz et al. 1991
44CF0416	Native American lithic scatter, indeterminate	Not Evaluated	Baltz et al. 1991
44CF0417 (020-0012)	Native American lithic scatter, indeterminate; Historic domestic, mid-19th to 20th century; with associated Historic Cemetery, early 20th century	Not Evaluated	Baltz et al. 1991
44CF0418	Native American lithic scatter, indeterminate	Not Evaluated	Baltz et al. 1991

woods (Mouer 1984). Mouer recommended that no further work be conducted at Site 44CF197 because of the low density of artifacts; however, these recommendations do not appear to have been reviewed by the VDHR and have not received comment. Site 44CF198 is a Native American lithic and ceramic scatter dating to the Woodland period. The site is located on a low terrace along the bank of Reedy Creek and was discovered by raking the top of the frozen ground over a 2-foot wide circle. No subsurface testing was conducted on 44CF198 during the 1983 survey. Mouer (1984) did recommend that systematic subsurface testing be conducted at the site. This site has not yet had a NRHP eligibility determination, and the proposed recommendations made by Mouer do not appear to have been reviewed by the VDHR.

Sites 44CF225, 44CF229, 44CF237, and 44CF238 are all located within Pocahontas State Park, southwest of the current project area. All of these sites were recorded by Chris Chapman with Virginia Commonwealth University (VCU). The information regarding these sites was obtained from the DSS archaeology site forms. Site 44CF225 is a Late Archaic to Woodland Period site. The artifacts recovered at 44CF225 include Native American ceramics, a possible Bare Island or Small Savannah River projectile point, and one gun flint. Site 44CF229 it is a historic period domestic site with temporally diagnostic artifacts dating from the latter half of the eighteenth century to the early nineteenth century. According to the DSS site form for 44CF237, it is a Woodland Period Native American site and the artifacts recovered there include lithics such as flakes and a Morrow Mountain projectile point as well as FCR. Native American sand-tempered ceramics were also recovered from site 44CF237. Site 44CF238 is a multicomponent site that consists of a Late Archaic to Woodland Period Native American component as well as a historic element. According to the DSS site form the artifacts recovered at the site include lithics such as flakes, cores, a Savannah River projectile point, and FCR as well as Native American ceramics. A historic pipe bowl fragment was also recovered from the site. None of these four sites appear to have had an NRHP eligibility determination made. Also, it does not appear that recommendations regarding these sites have been reviewed by the VDHR.

In 1985, a survey was conducted by archaeologists with the James Madison University Archaeological Research Center (JMUARC) along the proposed construction right-of-way for SR 288 (McIver 1985). This highway corridor is now located immediately southwest and south

of the Chesterfield County Airport. The methodology employed during this survey generally consisted of shovel tests excavated at a maximum interval of 50 ft (approximately 15 m). A portion of the current project area for the Chesterfield County Airport is within the area that was surveyed during the investigation in 1985 for the proposed SR 288 (World War II Veterans Memorial Highway) construction (see Figure 5.1-1). Two of the sites identified during the survey conducted by JMUARC, 44CF269 and 44CF270, are located less than one mile from the current project area, southeast of the airport.

Site 44CF269 is located on terrace above Proctors Creek, approximately 1.07 km (0.66 mi) west of the junction of SR 288 (World War II Veterans Memorial Highway) and Salem Church Road. It was recorded as a Late Woodland lithic scatter and the artifacts recovered during the survey include lithic shatter and flakes as well as one triangular projectile point (McIver 1985). Following the initial survey of the site further archaeological investigations were recommended to determine the site's significance. Later that year, archaeologists from JMUARC conducted a Phase II significance evaluation at 44CF269, which consisted of the excavation of 18 2-x-2-ft test units (Cromwell et al. 1986). The artifacts recovered during the evaluation of 44CF269 include lithic debitage as well as three projectile points including a possible Morrow Mountain and a Savannah River-like point as well as Late Woodland triangular point (Cromwell et al. 1986:232). Quartz-tempered and sand-tempered Native American ceramic sherds, all thought to date from the Middle Woodland Period, were also recovered from the site. This site was recommended for further archaeological investigations prior to the construction of SR 288 (World War II Veterans Memorial Highway) (Cromwell et al. 1986). However, there does not seem to be a NRHP eligibility determination made by officials nor do the proposed recommendations appear to have been reviewed by the VDHR. It is unknown if additional archaeological excavations were conducted at 44CF269 prior to the construction of SR 288 (World War II Veterans Memorial Highway). Site 44CF270 is located west-southwest of 44CF269, on an upland flat above Proctors Creek and approximately 1.34 km (0.83 mi) east of the junction of SR 288 (World War II Veterans Memorial Highway) and SR 10 (Iron Bridge Road). It was recorded as a Native American lithic scatter of an indeterminate date (McIver 1985). Additional archaeological investigations prior to the construction of SR 288 (World War II Veterans Memorial Highway) were recommended to determine the significance of 44CF270.

In November of 1985, archaeologists with JMUARC conducted a Phase II significance evaluation at the site, and excavated 40 2-x-2-ft test units and two 5-x-5-ft test units (Cromwell et al. 1986). The artifacts recovered during the evaluation include various lithic debitage, none of which was temporally diagnostic, therefore making the site age difficult to determine. No additional archaeological excavations were recommended at 44CF270 prior to the construction of SR 288 (World War II Veterans Memorial Highway); however, the DSS site form does not specify if these recommendations were reviewed.

In 1990, archaeologists with Gray and Pape, Inc., conducted a cultural resources survey of a proposed pipeline corridor for Columbia Gas Transmission Corporation (Baltz et al. 1991). A portion of this survey, the Licking Creek pipeline loop, overlaps with the current project area, in an area north of the existing runway for the Chesterfield County Airport (see Figure 5.1-1). The methodology employed during this survey included the excavation of one shovel test every 15 ft along the center of the proposed pipeline area, with the shovel tests either directly on the centerline or staggered between 5 to 7.5 m away from the centerline (Baltz et al. 1991:45). Four of the archaeological sites identified during this survey are located within a mile of the current project area. These four sites located northwest of the airport along the gas pipeline are 44CF415, 44CF416, 44CF417, and 44CF418.

Site 44CF415 was recorded as a Native American lithic scatter of an indeterminate age. It is located on a floodplain along the north side of Licking Creek and immediately southwest of Cogbill Road. The artifacts recovered from this site include four quartz flakes and a core fragment, all of which were recovered from the ground surface. The two shovel tests excavated on the site did not yield any artifacts (Baltz et al 1991). Site 44CF416 was also recorded as an indeterminate lithic scatter, and is located approximately 150 m (492 ft) northwest of 44CF415. The site is situated on a side ridge above Licking Creek. Fifteen shovel tests were excavated at 44CF416. Four of the shovel tests were positive for cultural materials, each containing one quartzite flake. A lithic scatter was also observed on the ground surface, and consisted of flakes, shatter, and core debris, as well as a quartzite biface blank (Baltz et al. 1991). According to Baltz et al. (1991), both 44CF415 and 44CF416 were recommended as not eligible for the NRHP and needed no additional archaeological investigations prior to the placement of the gas pipeline

(Baltz et al. 1991). The DSS forms for these sites do not specify whether these recommendations were reviewed by the VDHR. Site 44CF417 is a multicomponent site that consists of an indeterminate Native American lithic scatter and a historic component, which includes a house and associated outbuildings that date to the latter half of the nineteenth century as well as an associated family cemetery. The site is located approximately 170 m (557 ft) east of Cogbill Road, at the edge of a ridge spur above an unnamed tributary of Licking Creek. The area currently has newer construction homes that are situated on the end of a cul-de-sac along Garden Grove Road. The Native American artifacts recovered from 44CF417 consisted of flakes and shatter. The historic artifacts that were recovered from the site include ceramics such as creamware, pearlware, ironstone, porcelain, and stoneware, as well as other domestic related artifacts such as glass, nails, and brick. The historic house itself was not recommended for inclusion on the NRHP; however, the subsurface archaeological component associated with the house was determined to be potentially eligible for the NRHP and it was recommended that additional archaeological excavations be conducted to determine the site's significance (Baltz et al. 1991). The Native American component of the site was recommended as having no potential for significance for inclusion on the NRHP. The DSS form on file for this site does not specify if these recommendations were reviewed by the VDHR. Site 44CF418 was recorded as an indeterminate Native American lithic scatter on a ridge spur above the confluence of Licking Creek and an unnamed tributary. None of the shovel tests excavated at this site were positive for cultural materials, and all of the artifacts recovered from 44CF418 were located on the ground surface. These artifacts included a biface midsection, flakes, and core debris. This site was recommended as not having potential for inclusion on the NRHP and no additional archaeological research was recommended (Baltz et al. 1990). The DSS form on file for 44CF418 does not specify if these recommendations were reviewed by the VDHR.

In 2004, Gray and Pape, Inc., conducted a small Phase I cultural resources survey along the north side of SR 604 (Courthouse Road), approximately 3.75 km (2.33 mi) west of the junction with SR 10 (Iron Bridge Road) (McDonald 2004). This survey area is located southwest of the airport. No archaeological sites were documented during this survey.

In 2004, the James River Institute for Archaeology (JRIA) conducted a cultural resources survey for the Kingsland Glen residential development (Tyrer and Laird 2004). A portion of the project area for this development is located northeast of the Chesterfield County Airport, along Cogbill Road. No archaeological sites were documented this survey.

In 2005, Gray and Pape, Inc., conducted a cultural resources survey for the Chesterfield County Department of Parks and Recreation, for an access road to a proposed park along Cogbill Road (Clarke 2005). This project area is located northeast of the Chesterfield County Airport. No archaeological sites were recorded during this survey.

### **5.2.2 Summary**

Seven cultural resource surveys have been conducted in the vicinity of the Chesterfield County Airport and twelve archaeological sites have been previously recorded within approximately one mile (see Table 5.2-1). The majority of the Native American sites in the area are recorded as either ephemeral lithic scatters or lithic and ceramic scatters. These sites are generally located above creeks and other drainageways. Two of the historic sites within the vicinity of the project area are domestic in nature, and there is one multicomponent site that has an historic isolate or artifact location associated with it. While most of the previously recorded sites were recommended as not eligible for the NRHP and required no further work, none of these sites appear to have been reviewed by VDHR. However, none of the sites are located within the current APE.

## **5.3 ARCHAEOLOGICAL SURVEY RESULTS**

### **5.3.1 Overview of Survey Results**

The current APE is primarily composed of areas of development (graded, paved, and/or built upon) associated with the Chesterfield County Airport and nearby roadways such as SR 288. Some areas of secondary mixed forest growth are present within the current APE, mostly to the east of the airport, with smaller portions to the north along Belmont Road and Cogbill Road, and

to the west along Whitepine Road. Several areas within the APE have also been previously delineated as wetland (see Figure 5.1-1). Figures 5.3-1 through 5.3-6 present views of the current project area and the typical conditions that were encountered during the archaeological survey.

A total of 1,223 shovel tests were excavated as part of the archaeological survey. The majority of these shovel tests were in areas that had well-drained to moderately well-drained soils as shown on the Chesterfield County soil survey map (see Figure 5.1-1) (Hodges 1978; USDA/NRCS 2012). The conditions that were encountered within these intensively surveyed areas (Segments A through K) are described in more detail below. Four archaeological sites and one artifact location were recorded during the current archaeological survey (Figure 5.3-7) (Table 5.3-1).

Table 5.3-1: Newly Recorded Archaeological Sites Within the Current APE.

Site	Site Type	Recommended NRHP Eligibility
44CF0781	Native American lithic scatter, Late Archaic	Not Eligible
44CF0782	Late Eighteenth- to Mid-Twentieth-Century domestic scatter and structural ruins; Native American lithic scatter, indeterminate	Not Eligible
44CF0783	Native American lithic scatter, indeterminate	Not Eligible
44CF0784	Native American lithic scatter, indeterminate	Not Eligible

### 5.3.2 Newly Recorded Archaeological Site and Artifact Location Descriptions

**SITE NUMBER:** 44CF0781

**SITE TYPE:** Native American lithic scatter, Late Archaic

**SOIL TYPE:** Bourne fine sandy loam, 2 to 6 percent slopes

**SITE SIZE:** 50 x 50 m

**SELECTED ARTIFACTS:** interior flakes, core, shatter, Small Savannah River Stemmed projectile point

**SITE DESCRIPTION:** This low-density lithic scatter is located in a wooded area on a ridge toe above Licking Creek, which is approximately 300 m west-northwest of the site (Figure 5.3-8).

There is also a pond approximately 65 m to the north of the site. This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals, on a landform above the parking lot for the Five Forks Village Community Center. The community center is located



Figure 5.3-1: View of Field with Standing Water From Southeast Side of SR 10 (Iron Bridge Road), Looking South.



Figure 5.3-2: View of Airport and Runway from Gravel Road Next to Segment A, Looking Southwest.



Figure 5.3-3: View Along Airfield Drive, at the Northern Corner of Segment F, Showing Road and Utility Disturbance, Looking South.



Figure 5.3-4: View of Typical Wooded Area Encountered During the Archaeological Survey, With Uprooted Trees, as Shown from Near the Eastern Edge of Segment J, Looking West.



Figure 5.3-5: View of Typical Previously Delineated Wetland Area Encountered During the Archaeological Survey, as Shown from Area North of Belmont Road, Looking North.



Figure 5.3-6: View of Fallow Agricultural Field in Segment E, Along the Northern Side of Cogbill Road Near the Junction with Belmont Road, Looking Northeast.

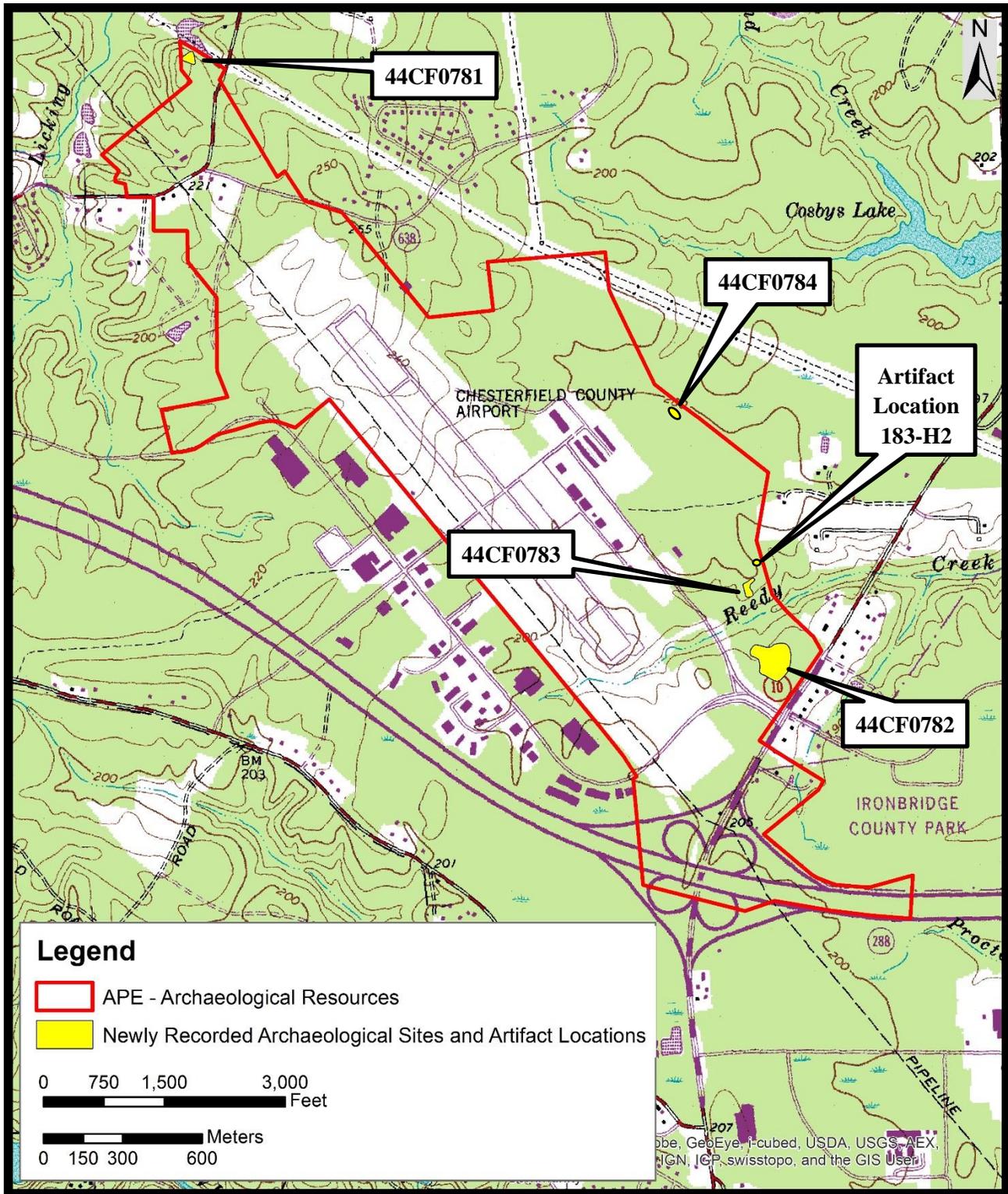


Figure 5.3-7: Locations of Newly Recorded Archaeological Sites, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

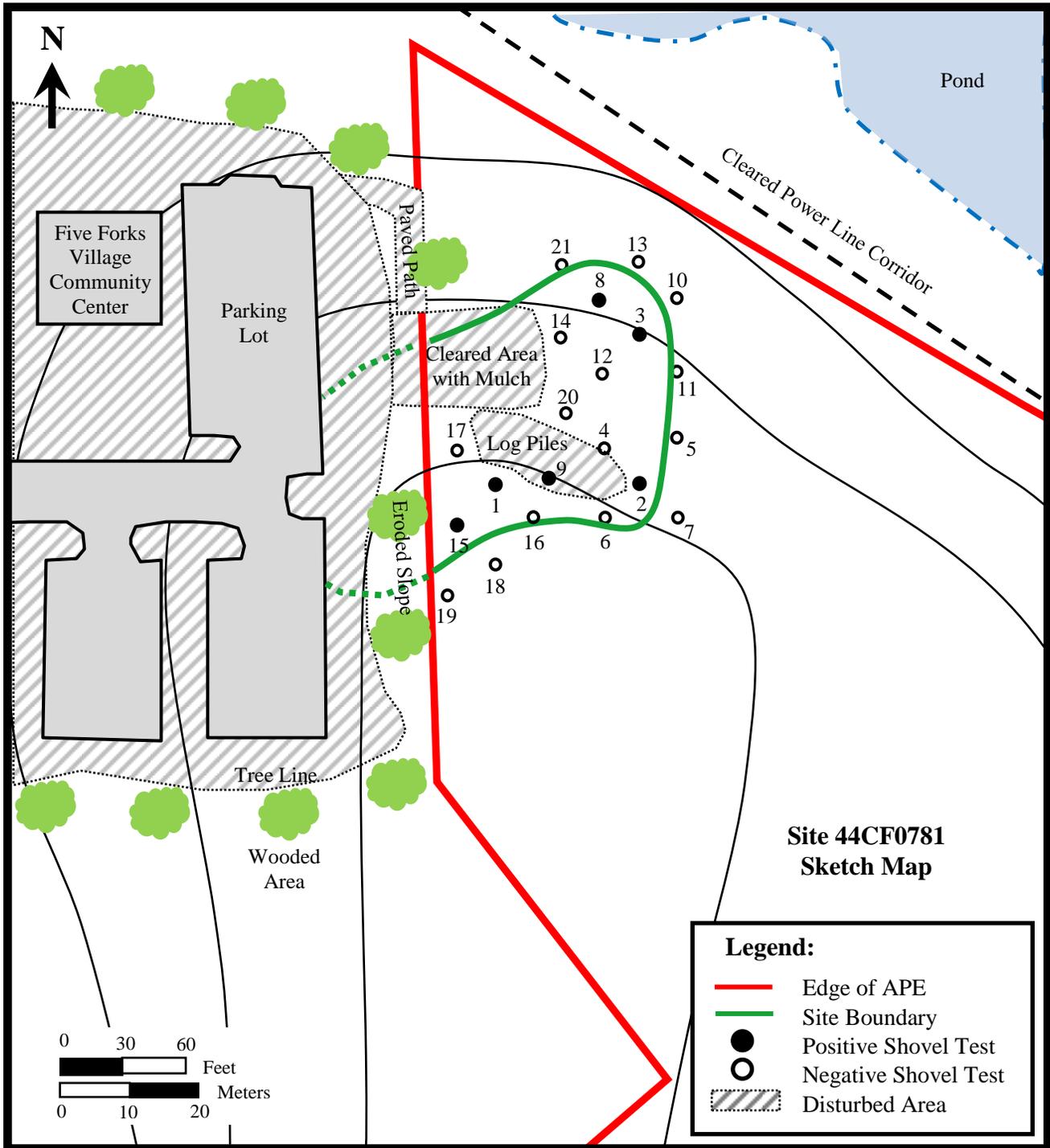


Figure 5.3-8: Site 44CF0781, Sketch Map Showing Site Boundary and Shovel Test Locations.

along Five Forks Lane, which runs northeast off of Cogbill Road approximately 1,450 ft (442 m) from the junction with Belmont Road.

Twenty-one shovel tests were excavated on 44CF0781. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals around the positive shovel tests, in order to determine the extent and significance of the site (see Figure 5.3-8). Six of the 21 shovel tests were positive for cultural material. Twelve artifacts were recovered from the six positive shovel tests and an additional three artifacts were found on an eroded slope above the parking lot. These artifacts include 11 quartzite interior flakes, one quartzite core, and two quartz shatter as well as a quartzite projectile point. The point is a resharpened, Small Savannah River Stemmed that is nearly complete with all but the tip (Figure 5.3-9). It has an unground base, and the blade edges are beveled from resharpening. The Small Savannah River Stemmed type dates to the Late Archaic period (Dent 1995; Oliver 1981).

The typical soil profile at this site showed three soil zones. Zone 1 appears to be a natural A-horizon, and it was generally a dark yellowish brown (10YR 3/2) sandy loam. This zone averaged approximately 13 cm in thickness. Below this was the upper subsoil, Zone 2, that was a sandy clay loam between 13 and 30 cm thick. This zone was generally a light olive brown (2.5Y 5/4) to a light yellowish brown (2.5Y 6/4). Zone 3, the lower subsoil, was sterile for cultural materials, and generally was comprised of a yellowish brown (10YR 5/4) sandy clay to coarse sandy clay.

The artifacts were recovered from both Zones 1 and 2. The shovel tests on 44CF0781 had a high degree of root disturbance throughout, which suggests the presence of lithics in Zone 2 through bioturbation.

The western portion of the site appears to have been disturbed by the construction of the parking lot for the community center. The site likely extended outside of the APE to the west-southwest, but if so, this portion has probably been destroyed from construction. Just west of the APE is an eroded berm that slopes down to the parking lot. Several lithics were found on the ground surface of this eroded slope. In the northwest portion of the site is a cleared area that is bordered



Figure 5.3-9: Small Savannah River Stemmed Projectile Point from Site 44CF0781.

by railroad ties and has a paved path leading to it from the parking lot. Current online satellite imagery shows playground equipment in this area, though there was none there at the time of the survey. Figures 5.3-10 through 5.3-13 present views of the current conditions at 44CF0781 and show areas of disturbance.

**RECOMMENDATIONS:** Given the low density of artifacts and evidence of disturbance, the portion of site 44CF0781 within the current APE lacks the potential to provide additional information on Native American settlement or lifeways of the transitional region between the Coastal Plain and Piedmont of Virginia and would not contribute to any NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

**SITE NUMBER:** 44CF0782

**SITE TYPE:** Late Eighteenth- to Mid-Twentieth-Century Domestic Scatter and Structural Ruins; Indeterminate Native American Lithic Scatter

**SOIL TYPE:** Bourne fine sandy loam, 2 to 6 percent slopes

**SITE SIZE:** 140 m x 150 m

**SELECTED ARTIFACTS:** creamware, pearlware, dark olive green container glass, opaque white “milk” glass, cut nails, wire nails

**SITE DESCRIPTION:** 44CF0782 is a multicomponent site situated on an upland flat above Reedy Creek, and is in a wooded area near the northwest corner of SR 10 (Iron Bridge Road) and Whitepine Road (see Figure 4.3-1). The site was documented while shovel testing at 50-ft (approximately 15-m) intervals in Segment G, and is located on property that is currently owned by the Chesterfield County Airport. Prior to excavating shovel tests in Segment G, we were informed by airport personnel of a small family cemetery in the woods within this area, as well as a brick or stone-lined well that had been filled in by airport maintenance workers a year earlier. The well posed a risk because according to airport personnel the wall of it was flush with the ground surface (Jeremy Wilkinson, personal communication 2013).

While conducting shovel tests in this area several piles of structural debris were documented, including brick, cinderblock, and stone (Figure 5.3-14). Nineteen of the original shovel tests that were excavated on the transects at 50-ft (approximately 15-m) intervals were positive for cultural materials. All but one of these shovel tests contained historic materials. One of the original 19 positive shovel tests had only a quartz shatter fragment present in it, while two of the other



Figure 5.3-10: Site 44CF0781, View towards Shovel Test 1, Looking South-Southeast.



Figure 5.3-11: Site 44CF0781, View of Cleared Area with Mulch and Log Piles, Looking South.



Figure 5.3-12: Site 44CF0781, View of Cleared Area with Mulch and Eroded Berm from Paved Path above Parking Lot, Looking South-Southwest.



Figure 5.3-13: Site 44CF0781, View Towards Site from Five Forks Village Community Center Parking Lot, Showing Eroded Slope, Looking East-Northeast.

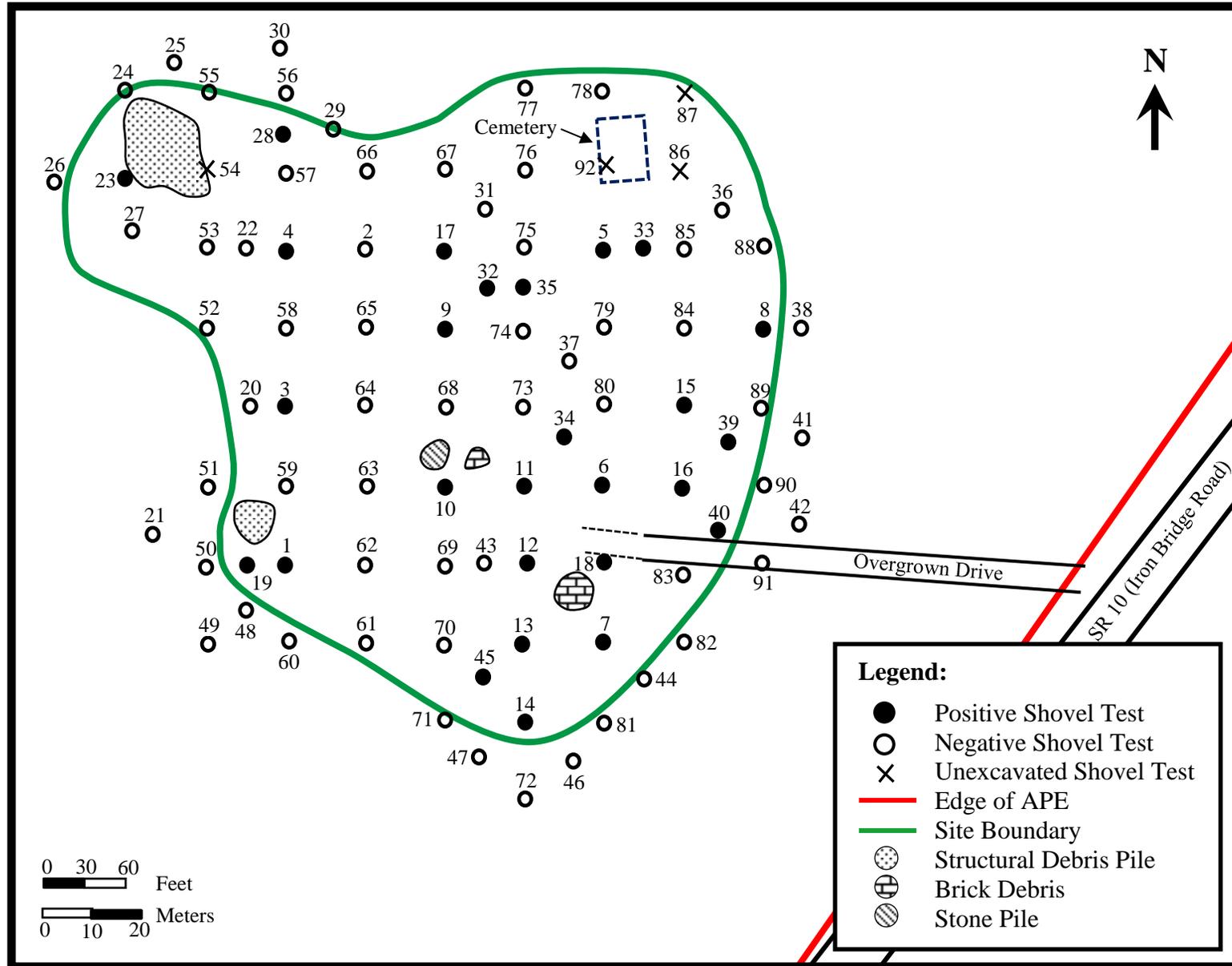


Figure 5.3-14: Site 44CF0782, Sketch Map Showing Site Boundary and Shovel Test Locations.

positive shovel tests had one quartzite interior flake each, in addition to the historic artifacts. In order to determine the extent and significance of the site, additional radial shovel tests were typically excavated around the positive shovel tests at 25 ft (approximately 7.5-m) intervals. In all, 88 shovel tests were excavated on 44CF0782, and of these, 27 contained cultural materials (see Figure 5.3-14). The historic artifacts that were recovered from this site include refined earthenware ceramics such as creamware and pearlware as well as window glass, container glass, and nails (Table 5.3-2) (Figure 5.3-15). A total of 118 artifacts were recovered from 44CF0782.

Table 5.3-2: Summary of Artifact Types and Counts from Site 44CF0782.

<b>Artifact Type</b>	<b>Count</b>	<b>Percentage of Total</b>
Brick Fragment	2	1.69%
Ceramic; Porcelain	2	1.69%
Ceramic; Refined Earthenware	17	14.41%
Ceramic; Coarse Earthenware (including Terra Cotta Pot Fragments)	4	3.39%
Glass; Container	29	24.58%
Glass; Window	26	22.03%
Nail; Cut	4	3.39%
Nail; Wire	4	3.39%
Nails and Nail Fragments; Indeterminate	17	14.41%
Miscellaneous Metal	3	2.54%
Miscellaneous Historic	7	5.93%
Lithic Debitage	3	2.54%
<b>TOTAL</b>	<b>118</b>	<b>100.00%</b>

The typical soil profile at this site showed three soil zones. Zone 1 was either an old plow zone or a natural A-horizon, and it was generally a sandy loam that ranged in color from a dark yellowish brown (10YR 4/4) to a very dark grayish brown (10YR 3/2). Zone 1 was typically between 10 and 20 cm thick. Below this was Zone 2, a sandy loam to sandy clay loam soil that was generally 15 to 25 cm thick. Zone 2, the upper subsoil, ranged in color from a light yellowish brown (2.5Y 6/4) to a brownish yellow (10YR 6/6). Zone 3, the lower subsoil, was sterile for cultural materials, and generally was comprised of a yellowish brown (10YR 5/8) sandy clay.



Figure 5.3-15: Sample of Artifacts Collected from Site 44CF0782. Clockwise from the Top Right the Artifacts Include a Cut Nail (Acc #44CF0782-08), a Blue Shell-Edged Pearlware Rim Fragment (Acc #44CF0782-11), a Banded Dipped Pearlware Rim Fragment (Acc #44CF0782-25), and a Blue Painted Pearlware Fragment (Acc #44CF0782-16).

The artifacts (n=118) that were recovered from 44CF0782 were mostly found in Zone 1, however some were recovered in Zone 2, and likely represent bioturbation. The temporally diagnostic historic artifacts from the site generally range in age from the late eighteenth to mid-nineteenth century. Pearlware was the most common type of refined earthenware ceramic recovered at the site, with 15 of the 17 total refined earthenware fragments being identified as pearlware. The different types of pearlware recovered from the site include plain, blue shell-edged, transfer-printed, and banded dipped ware. Generally, these types of pearlware date from 1780 to 1830 (Miller et al. 2000; Noel Hume 1970). Two plain creamware fragments were also recovered from the site, and these date from 1762 to 1820 (Miller et al. 2000). Other temporally diagnostic artifacts recovered from 44CF0782 include cut and wire nails. Cut nails date from 1790 to the twentieth century while wire nails, which are still produced today, were first produced in the 1850s (Nelson 1968). Twenty-five nails and nail fragments were recovered from the site, most were so heavily corroded they were indeterminate; however, four of the nails appeared to be cut and four appeared to be wire nails. One fragment of opaque white “milk” glass was also recovered from this site. This has a general date range from 1743 to the mid-twentieth century, however this type of glass was especially uncommon before the 1870s (Lindsey 2013; Miller et al. 2000). Some of the artifacts that were recovered from the site that are not temporally diagnostic appear to be somewhat more recent in age, such as molded and embossed container glass, aluminum foil, composition board, and terra cotta flower pot fragments. Based on the artifacts, it appears this site was continuously occupied over a long period of time, or at least occupied several times. The historic occupation of the site may have begun as early as the late eighteenth century and people were likely still occupying this property up until the mid-twentieth century.

Very little brick was recovered from the shovel tests, while some was observed in the structural debris piles scattered about the site. Five areas of structural debris concentrations were observed across the site. The debris pile in the northwest portion of the site appears to have been from a house because of the large size and varied nature of the materials that are present (see Figure 5.3-14). The structural debris pile in the southeast portion of the site contained cinderblock and appeared to be the remains of a relatively modern outbuilding. In addition to these areas of structural debris there was also an area where bricks were piled next to a tree near the center of

the site. One of these debris piles may be associated with the well that was filled in by airport personnel, although the exact placement of the well was not relocated during the current survey. Figures 5.3-16 through 5.3-19 present views of the current conditions at 44CF0782 and also show several of the structural debris piles.

The 1963 USGS 7.5' Chesterfield, Virginia topographic quadrangle map shows a structure in the location of the site (Figure 5.3-20). A 1968 satellite image of the area also shows a possible structure where 44CF0782 is located (USGS 2013) (Figure 5.3-21). The large cedar tree near the family cemetery to the north of the house site is evident on this aerial, as well as an old driveway to the house and possible structures or structural debris that appear to be under a large tree. The area is currently much more overgrown than it appears to have been at the time the aerial photograph was taken; however, portions of this old driveway were still evident among the newer tree growth during the current survey (see Figure 5.3-19).

The cemetery and the house site are believed to be associated (see Figure 4.3-1). The cemetery was given a state architectural resource number (VDHR # 020-5611). It is described in further detail in Section 4: Results of the Architectural Survey. The area that contains 44CF0782 and the associated cemetery is thought to have been occupied by the Farmer and/or Rudd families. A map of the region dating to 1888 shows that Rudd family occupied land nearby (LaPrade 1888) (see Figure 3.3-5). The Farmer family (R. Bonaparte, Blanche, Annie, and James) is buried in the cemetery along with the mother of R. Bonaparte Farmer. According to census records, Rosser's mother Susan Farmer Rudd married James Rudd sometime between 1860 and 1870 (Ancestry.com 2013a; 2013b).

In regards to the historic component of the site, no subsurface features were revealed during the archaeological survey at 44CF0782. The area appears to have been disturbed with the house and outbuildings apparently demolished and/or razed. No structures were found intact on the site; rather there are overgrown debris and/or push piles. The area was likely plowed for agricultural purposes at the time of historic occupation and may have since been logged. The Native American component at 44CF0782 is an indeterminate lithic scatter. These three lithics were found spread across the site in three different shovel tests.



Figure 5.3-16: Site 44CF0782, View of Structural Debris Pile Near Shovel Test 23, Looking Northwest.



Figure 5.3-17: Site 44CF0782, View of Structural Debris Pile Near Shovel Test 19, Looking South.



Figure 5.3-18: Site 44CF0782, View of Brick Debris Near Shovel Test 10, Looking East.



Figure 5.3-19: Site 44CF0782, View of Overgrown Drive Extending Towards SR 10 (Iron Bridge Road), Looking East.

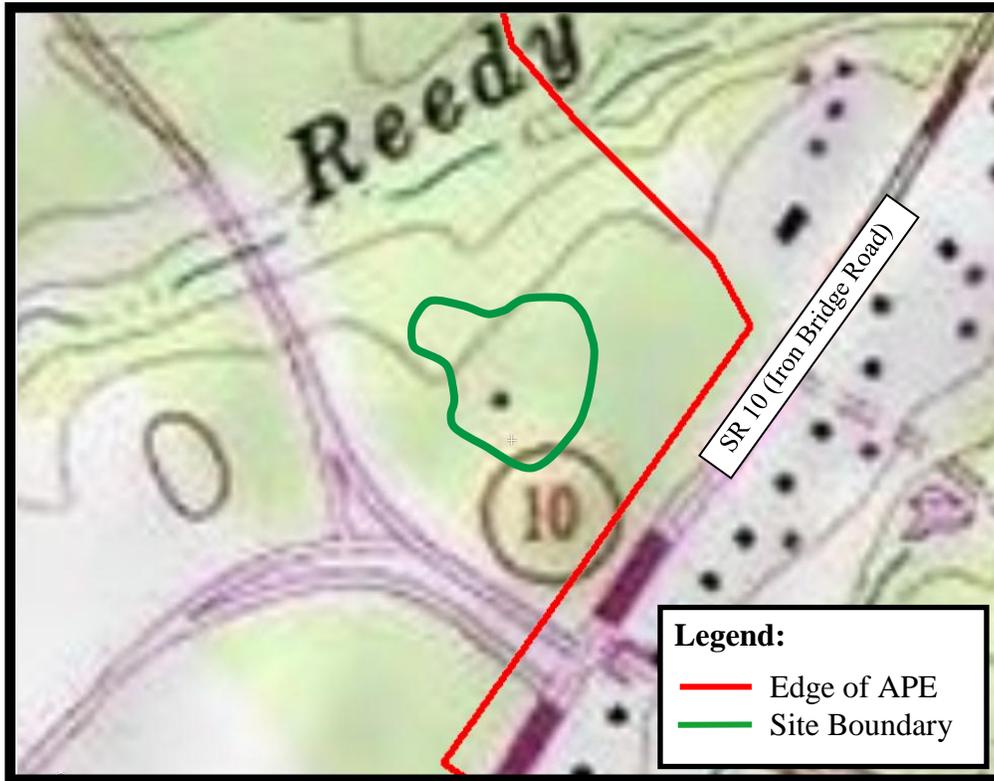


Figure 5.3-20: Portion of 1963 USGS 7.5' Chesterfield, Virginia Topographic Quadrangle Map Showing Structure at the Location of Site 44CF0782.

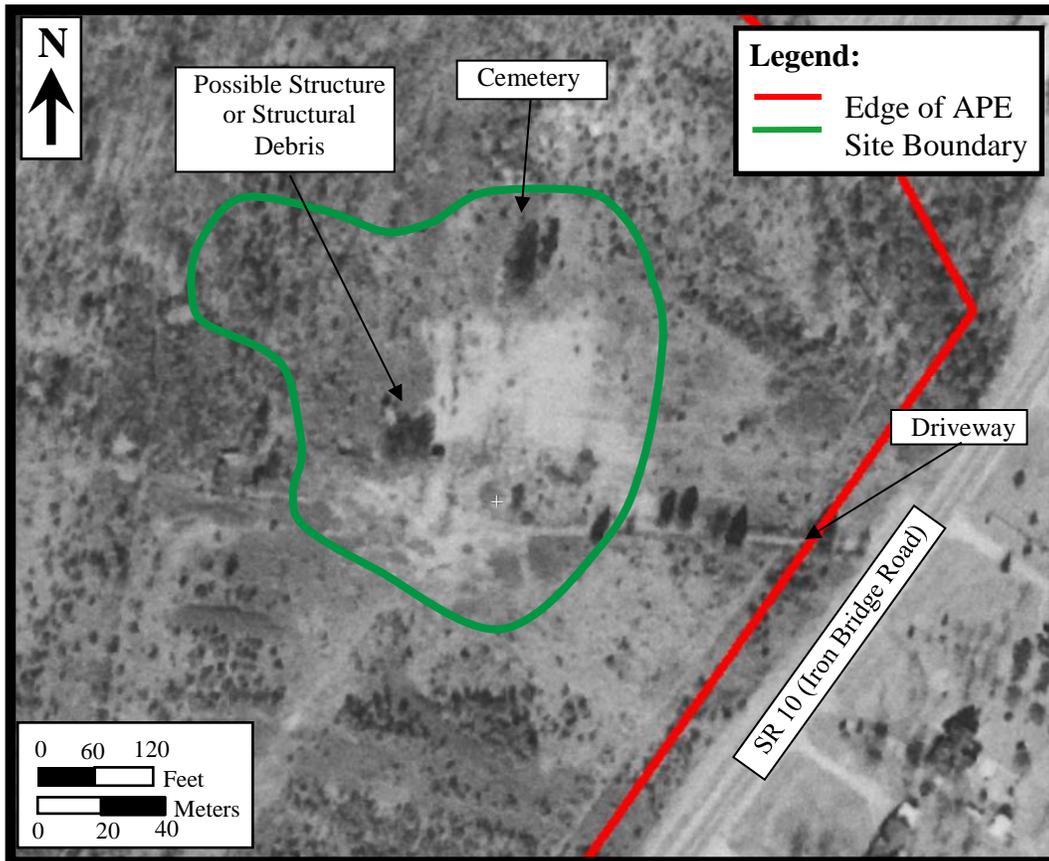


Figure 5.3-21: Portion of 1968 Satellite Image Zoomed-In on the Location of Site 44CF0782 (USGS 2013).

**RECOMMENDATIONS:** Given the low density of artifacts, the lack of evidence for intact subsurface deposits or features, and the lack of areas of subsurface concentrations of structural material or refuse deposits, this site lacks the potential to provide additional information on the Native American or historic lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia and does not appear eligible for the NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

**SITE NUMBER:** 44CF0783

**SITE TYPE:** Native American lithic scatter, indeterminate

**SOIL TYPE:** Bourne fine sandy loam, 2 to 6 percent slopes

**SITE SIZE:** 53 x 51 m

**SELECTED ARTIFACTS:** interior flakes, decortication flake, core fragment, shatter, late stage biface

**SITE DESCRIPTION:** This low-density lithic scatter is located near the edge of an upland flat, on a terrace above Reedy Creek (Figure 5.3-22). The creek is located approximately 60 m south of site 44CF0783. The area consists of mostly secondary deciduous growth with some younger evergreen trees such as holly (Figure 5.3-23). This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals within Segment H (see Figure 5.1-1).

Twenty-nine shovel tests were excavated on 44CF0783. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals in order to delineate the boundary of the site (see Figure 5.3-22). Eight of the 29 shovel tests were positive for cultural materials. Eleven artifacts were recovered from the shovel tests and included one quartzite and six quartz interior flakes, one quartz decortication flake, one quartzite core fragment, one quartz shatter, and one late stage quartz biface.

The typical soil profile at this site showed three soil zones. Zone 1 appears to be a natural A-horizon, and it was generally a dark yellowish brown (10YR 3/2) sandy loam. This zone ranged between 9 to 26 cm in thickness. Below this was the upper subsoil, Zone 2, which was a sandy clay loam that averaged about 21 cm in thickness. This zone was generally a light olive brown (2.5Y 5/4) to a yellowish brown (10YR 5/4). Zone 3, the lower subsoil, was sterile for cultural materials, and ranged from a yellowish brown (10YR 5/6) to a brownish yellow (10YR 6/8) sandy clay.

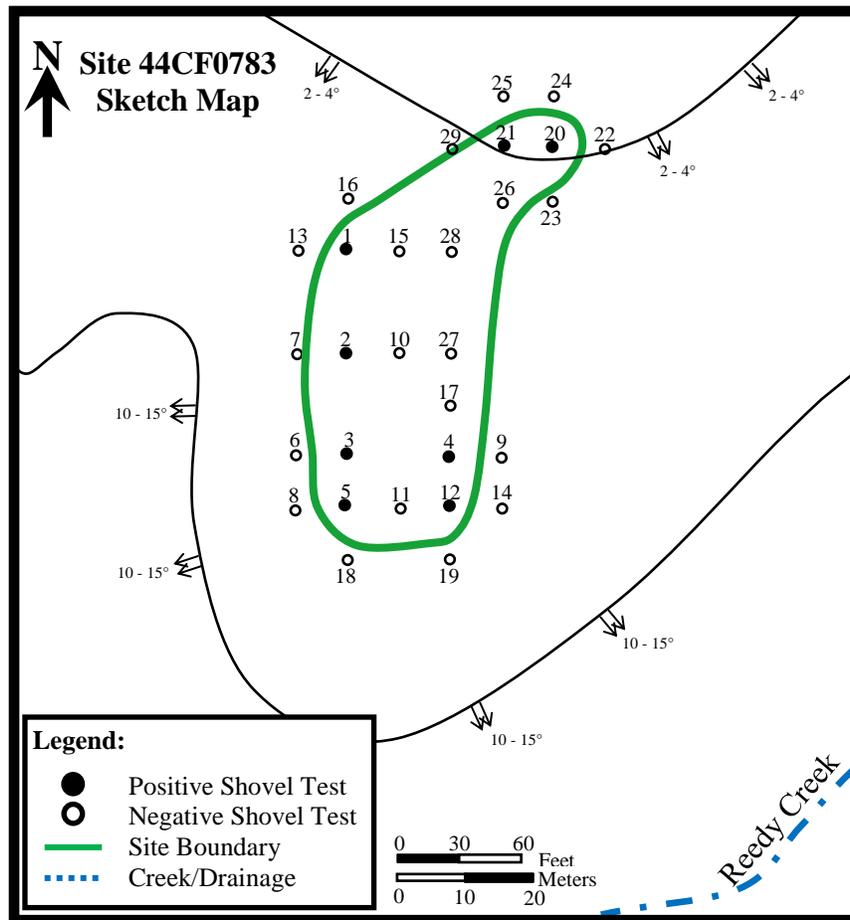


Figure 5.3-22: Site 44CF0783, Sketch Map Showing Site Boundary and Shovel Test Locations.



Figure 5.3-23: Site 44CF0783, View from Shovel Test 3, Looking North.

All of the artifacts recovered from the site were found in Zone 2, most of which appeared to come from near the top of the zone and likely were introduced through bioturbation.

**RECOMMENDATIONS:** Given the low artifact density and absence of temporally diagnostic artifacts as well as the lack of subsurface features or activity areas, this site lacks the potential to provide additional information on the Native American settlement or lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia and does not appear eligible for the NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

**SITE NUMBER:** 44CF0784

**SITE TYPE:** Native American lithic scatter, indeterminate

**SOIL TYPE:** Bourne fine sandy loam, 2 to 6 percent slopes

**SITE SIZE:** 27 x 12 m

**SELECTED ARTIFACTS:** interior flakes, flake fragments, shatter

**SITE DESCRIPTION:** This low-density lithic scatter is located near the edge of an upland flat, southwest of a low-lying, wet area (Figure 5.3-24). Reedy Creek is approximately 840 m southeast of the site and an unnamed tributary of Cosbys Lake is roughly 640 m to the north of the site. The area consists of mostly secondary deciduous growth with some younger evergreen trees such as holly (Figure 5.3-25). This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals within Segment I (see Figure 5.1-1).

Eight shovel tests were excavated on 44CF0784. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals in order to delineate the boundary of the site (see Figure 5.3-24). Two shovel tests were positive for cultural materials. Shovel Test 1 contained 10 quartzite interior flakes, three quartzite flake fragments, and one piece of quartzite shatter. Shovel Test 2 contained one quartzite interior flake and one quartzite indeterminate cobble spall. All of the artifacts recovered from the site were dispersed within Zone 2

The typical soil profile at this site included three soil zones. Zone 1 was a dark yellowish brown (10YR 4/4) sandy loam, and appears to be a natural A-horizon. This zone ranged from 7 to 14 cm in thickness. Below this was the upper subsoil, Zone 2, which was a light yellowish brown

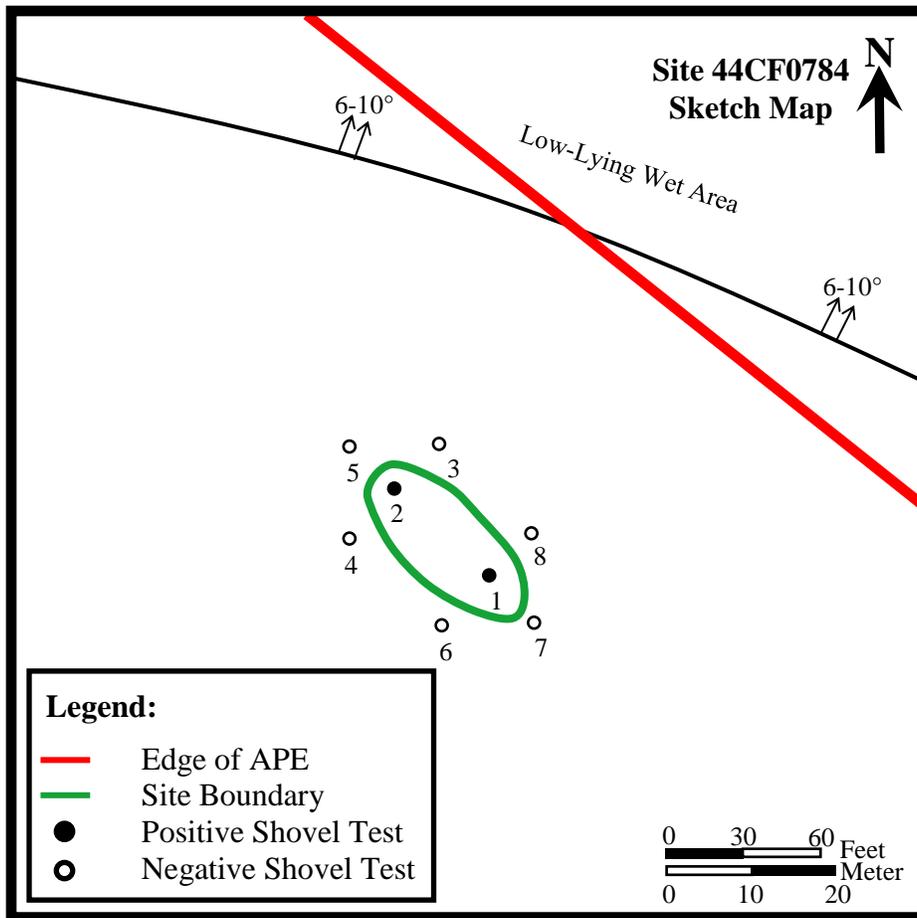


Figure 5.3-24: Site 44CF0784, Sketch Map Showing Site Boundary and Shovel Test Locations.



Figure 5.3-25: Site 44CF0784, View from Shovel Test 2, Looking East.

(2.5Y 6/4) sandy clay loam that averaged about 25 cm in thickness. Zone 3, the lower subsoil, was sterile for cultural materials, and consisted of a yellowish brown (10YR 5/6) sandy clay.

**RECOMMENDATIONS:** Despite recovery of numerous flakes in Shovel Test 1, the overall small size of the site and lack of evidence for additional concentrations or subsurface features suggests that this site lacks the potential to provide additional information on the Native American settlement or lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia and does not appear eligible for the NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

### **Artifact Location 183-H2**

Artifact Location 183-H2 is a quartzite interior flake recovered from the top of Zone 2 within a shovel test in Segment H (see Figure 5.3-7). This artifact location was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals. Four additional radial shovel tests that were excavated around the one positive shovel test at 25-ft (approximately 7.5-m) intervals yielded no additional artifacts. This artifact location lacks the potential to provide additional information on the Native American settlement or lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia.

### **5.3.3 Discussion of Project Area Conditions and Shovel Tested Areas**

Much of the current APE is comprised of developed areas (graded, paved, and/or built upon) associated with the Chesterfield County Airport, is sloped and/or low, or has been previously delineated as wetland (see Figure 5.1-1). Areas that were intensively surveyed were located mostly in undeveloped, wooded areas with better-drained soils with higher potential for sites.

**Segment A.** This segment is located in a wooded area northwest of the Chesterfield County Airport terminal (see Figure 5.1-1). Segment A is bounded on the north and east sides by the airport fence and to the south and west by a wood line. The area outside of the wood line is developed and/or disturbed from the airport construction. This segment consists of 23.3 acres. Approximately 5.06 of these acres were surveyed with shovel tests placed at 50-ft

(approximately 15-m) intervals while the remaining portion was surveyed with judgmentally placed shovel tests. A total of 104 shovel tests were excavated within this segment, 78 of which were placed at regular intervals and 26 that were judgmentally located. See Appendix E for representative shovel test profiles within Segment A. The majority of the shovel-tested portion of Segment A is shown on the soil map as having moderately well-drained soils (USDA/NRCS 2012). The remainder of the segment has soils that are classified as poorly drained or somewhat poorly drained. The vegetation in the moderately well-drained area was mostly secondary deciduous growth with younger holly trees while the areas with poorer drainage typically had coniferous tree growth such as pines or dense undergrowth with briar vines. There was standing water on the ground surface in some areas of Segment A, and in other areas judgmentally located shovel tests indicated hydric soils. No artifacts were recovered from Segment A, and no sites were recorded within this segment.

**Segments B.** Segment B is a wooded section of land at the northwest junction of Airfield Drive and Whitepine Road (see Figure 5.1-1). This segment is bounded on the east by Airfield Drive, on the north by a cleared utility corridor, on the west by the airport fence, and on the south by Whitepine Road. Reedy Creek bisects the northern portion of this segment, running roughly west to east. The vegetation in the area was mixed with pines and deciduous growth. Thirty-nine shovel tests were excavated at 50-ft (approximately 15-m) intervals. See Appendix E for representative shovel test profiles within Segment B. No artifacts were recovered in this segment and no sites were recorded.

**Segments C and D.** These adjacent segments are located in a wooded area along the north side of Whitepine Road, west of the runway, within a spur of the current APE (see Figure 5.1-1). The vegetation in this area was mixed with pines and deciduous growth. Fifty-five shovel tests were excavated in Segment C and 44 in Segment D, all at 50-ft (approximately 15-m) intervals. See Appendix E for representative shovel test profiles. No artifacts were recovered and no sites were recorded in either Segment C or D.

**Segment E.** Segment E is located at the northern end of APE and includes the entire area around the intersection of Belmont Road and Cogbill Road (see Figure 5.1-1). Much of this segment is

wooded; however there is a portion near the southeast junction of Belmont Road and Cogbill Road that is an open, fallow agricultural field. The vegetation in the wooded portions of Segment E consists mainly of secondary deciduous growth with some younger evergreen trees such as holly. Several structures such as houses and a church are located within this segment. Shovel tests were not excavated in the areas immediately around these structures because of disturbance and the probability of buried utilities. In addition to these structures other disturbances within Segment E include the roadways and a cleared natural gas pipeline corridor that runs northwest off from Cogbill Road. Four hundred and sixty-four shovel tests were excavated in Segment E. See Appendix E for representative shovel test profiles within this segment. The shovel test transects were placed at 50-ft (approximately 15-m) intervals. Twenty-one of these shovel tests were located at 44CF0781, a Late Archaic period lithic scatter. This site was the only one recorded in this segment.

***Segment F.*** Segment F is located along the southwest side of Airfield Drive, across the street from the Chesterfield County Fire Station #15 (see Figure 5.1-1). It is a wooded area that consisted of mixed deciduous and pine trees. Forty-five shovel tests were excavated in this segment, all at 50-ft (approximately 15-m) intervals. Most of the shovel tests within this segment displayed evidence of hydric soils and standing water was on the ground surface in some places. See Appendix E for representative shovel test profiles within Segment F. No artifacts were recovered and no sites were recorded in Segment F.

***Segments G.*** Segment G is a relatively level area with moderately well-drained soils along the western side of SR 10 (Iron Bridge Road), north of Whitepine Road (see Figure 5.1-1). Reedy Creek runs along the northwest portion of the segment. The area is wooded with a variety of vegetation including younger deciduous trees with smaller evergreens such as holly as well as some vines and underbrush. Segment G was intensively surveyed with shovel tests at 50-ft (approximately 15-m) intervals. See Appendix E for representative shovel test profiles within Segment G. A total of 146 shovel tests were excavated in this segment, 88 of which were located on site 44CF0782. This site was recorded as a multicomponent site that consisted of a late eighteenth- to mid-twentieth-century domestic scatter with structural ruins and an

indeterminate Native American Lithic Scatter. 44CF0782 was the only one recorded within Segment G.

**Segment H.** Segment H is a slightly elevated area of moderately well-drained soil, northwest and upslope from Reedy Creek. The segment is located in a wooded area east-southeast of an open field that is adjacent to the fire house at Chesterfield County Fire Station #15 along Whitepine Road (see Figure 5.1-1). The vegetation consisted mainly of secondary deciduous growth with some smaller evergreens such as holly trees. One hundred and thirty-one shovel tests were excavated in Segment H, at 50-ft (approximately 15-m) intervals. See Appendix E for representative shovel test profiles within this segment. One indeterminate Native American lithic scatter site (44CF0783) and one lithic artifact location (183-H2) were recorded within this segment.

**Segment I.** Segment I is large wooded area on a broad and very low ridge east of the airport terminal. It is bounded to the north and west by previously delineated wetlands, to the south by an area of poorly drained soils associated with moderate drainage slope, and to the east by the edge of the APE (see Figure 5.1-1). A total of 166 shovel tests were excavated in this segment, eight of which were located on 44CF0784. This site, an indeterminate Native American lithic scatter, was the only site recorded in Segment I. See Appendix E for representative shovel test profiles within Segment I. The shovel tests were excavated at intervals that varied between 50-ft (approximately 15-m) and 100-ft (approximately 30-m), depending on the soil conditions. This area is mapped as having moderately well-drained soils (USDA/NRCS 2012); however, some of the excavated shovel tests had hydric soils and there was standing water on the ground surface in portions of Segment I. The vegetation in this area consisted mostly of secondary deciduous growth with some underbrush. There was also a large amount of tree fall throughout this segment.

**Segment J.** Segment J is located in a wooded area on a broad and very low ridge along the eastern edge of the APE (see Figure 5.1-1). Twenty-three shovel tests were excavated in this segment, at 100-ft (approximately 30-m) intervals. Although the area was mapped as having well-drained or moderately well-drained soils, the expanded interval was based upon similarities

in vegetation when compared to portions of Segment I with reduced site potential. This area also had a high degree of tree fall. See Appendix E for representative shovel test profiles within Segment J. No artifacts were recovered and no sites were recorded in this segment.

***Segment K.*** Segment K is a small area along the east side of Airfield Drive, northwest of Chesterfield County Fire Station #15 (see Figure 5.1-1). Six judgmentally placed shovel tests were excavated within this segment, several of which revealed wet, hydric soils. See Appendix E for representative shovel test profiles. The vegetation in the area was mixed with pines and deciduous growth, and some underbrush. No artifacts were recovered and no sites were recorded within this segment.

## **6.0 CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 ARCHITECTURAL RESOURCES**

Two previously recorded architectural resources are mapped within the APE, one of which (VDHR #020-0641) is no longer extant and the other (VDHR #020-5565) was previously determined not eligible for the NRHP. Five new architectural resources were identified during the current survey (see Figure 4.3-1; Table 4.4-1). VDHR #s 020-5607 through 020-5610 are all dwellings that date to the first half of the twentieth century. VDHR #020-5607 retains a low level of integrity, lacks significance, and represents a common design for the period of construction and place. The other three dwellings (VDHR #020-5608 through #020-5610) retain a high level of integrity; however, they also lack significance and represent common designs for the period of construction and place. All four of these historic homes are recommended as not eligible for listing on the NRHP. VDHR #020-5611 is a small family cemetery with the earliest known internment taking place in 1891 and the most recent in 1935. This cemetery is recommended not eligible for the NRHP; however, all relevant statutes regarding the protection and relocation of cemeteries must be followed. Based on the results of the current survey, CCR recommends that no architectural resources will be affected by the current undertaking.

### **6.2 ARCHAEOLOGICAL SITES**

Four archaeological sites (44CF0781 through 44CF0784) and one artifact location (183-H2) were recorded during the current archaeological survey (see Table 5.3-1; Figure 5.3-7). Site 44CF0781 is a Late Archaic Native American lithic scatter that has a relatively low artifact density and displays evidence of disturbance; therefore, it is not recommended eligible for the NRHP. Site 44CF0782 includes a late eighteenth- to mid-twentieth-century component comprised of domestic scatter with structural ruins as well as an indeterminate Native American lithic scatter. This site has a relatively low artifact density, lacks evidence for intact subsurface deposits or features, and lacks areas of subsurface concentrations of structural material or refuse deposits. This site is also recommended not eligible for the NRHP. Sites 44CF0783 and 44CF0784 were both recorded as indeterminate Native American lithic scatters and are also

recommended as not eligible for the NRHP. Site 44CF0783 has a low artifact density with no temporally diagnostic artifacts and lacks evidence of intact subsurface features or activity areas. Site 44CF0784 is relatively small in size, lacks temporally diagnostic artifacts, and revealed no evidence for intact subsurface deposits. None of the newly recorded archaeological resources are recommended as potentially eligible for the NRHP, and no previously recorded sites are located in the current APE. CCR therefore recommends that no archaeological resources will be affected by the current undertaking.

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Virginia Department of Historic Resources (VDHR)

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**APPENDIX A**

**RECORD OF CONSULTATION ON THE  
APE FOR DIRECT AND INDIRECT EFFECTS**



# COMMONWEALTH of VIRGINIA

## Department of Historic Resources

Douglas W. Domenech  
*Secretary of Natural Resources*

2801 Kensington Avenue, Richmond, Virginia 23221

Kathleen S. Kilpatrick  
*Director*

Tel: (804) 367-2323  
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[www.dhr.virginia.gov](http://www.dhr.virginia.gov)

November 15, 2012

Marcus Brundage, Environmental Specialist  
Federal Aviation Administration  
Washington Airports District Office  
23723 Air Freight Lane, Suite 210  
Dulles, VA 20166

Re: Chesterfield County Airport – Five Year Development Plan  
Chesterfield, Virginia  
DHR File No. 2012-1591

Dear Mr. Brundage,

On October 15, 2012, the Virginia Department of Historic Resources (DHR) received information regarding the above referenced project for our review and comment pursuant to Section 106 of the National Historic Preservation Act of 1966, as amended. It is our understanding that the Federal Aviation Administration (FAA) will provide funding for the Environmental Assessment, and would like to initiate consultation at this time.

DHR understands that the Chesterfield County Airport is proposing a five year development plan to include:

- Existing Obstruction Removal
- Extend Runway 15
- Hangar Construction
- Relocate Glideslope Equipment
- Fuel Farm Improvement
- Replace Rotating Beacon

Unfortunately, the DHR Archives search you provided, at five years old, is out-of-date. For Section 106 consultation, DHR requires the archives search to be current to within six months. Please submit another archives search within your Area of Potential Effect (APE). Make sure to include the resource numbers on the map and any spreadsheet that lists the resources captured by the search.

Based upon a review of the information provided, DHR concurs with the APE as delineated for direct and indirect effects. In order to continue with the Section 106 process, DHR requests that the FAA move forward with the identification of known and unknown historic resources within the

Administrative Services  
10 Courthouse Ave.  
Petersburg, VA 23803  
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Capital Region Office  
2801 Kensington Office  
Richmond, VA 23221  
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Tidewater Region Office  
14415 Old Courthouse Way  
2<sup>nd</sup> Floor  
Newport News, VA 23608  
Tel: (757) 886-2807  
Fax: (757) 886-2808

Roanoke Region Office  
1030 Penmar Avenue, SE  
Roanoke, VA 24013  
Tel: (540) 857-7585  
Fax: (540) 857-7588

Northern Region  
Preservation Office  
P.O. Box 519  
Stephens City, VA 22655  
Tel: (540) 868-7029  
Fax: (540) 868-7033

November 15, 2012  
Mr. Marcus Brundage  
Page 2

APE. Please complete a Phase I Cultural Resources Survey for both architectural and archaeological resources within the APE. The architectural survey should be at the reconnaissance level to identify those resources older than 50 years, and should evaluate the potential for any district. The Phase I archaeological survey should be conducted at all areas of proposed ground disturbance that have not been previously studied.

These recommended studies must be completed by a qualified professional in each respected discipline, architectural history and archaeology, who meets the *Secretary of the Interior's Professional Qualification Standards*. Please refer to our *CRM Guidelines for Conducting Cultural Resource Survey in Virginia* (rev. October 2011), for surveying architectural resources, and our *Survey Guidelines* (rev. 2003), for archaeological resources. The report can be combined but please make sure each section is clearly separated. Two hardcopies and one digital copy of the resulting report should be submitted to our office for review prior to any ground disturbance. Once we have the results of the survey, we will be able to advise you whether any further investigations are warranted.

For questions regarding archaeology, please contact Roger Kirchen at (804) 482-6091. Should you have additional questions, please contact me at (804) 482-6084, or via email at [andrea.kampinen@dhr.virginia.gov](mailto:andrea.kampinen@dhr.virginia.gov).

Sincerely,



Andrea Kampinen  
Architectural Historian, Office of Review and Compliance

Cc: Susan Simmers, DOAV  
Colleen Cummins, Delta Airport Consultants, Inc.  
Kirk Turner, Chesterfield Co. Historic Districts and Landmarks  
Thomas Trudeau, Airport Manager

Administrative Services  
10 Courthouse Ave.  
Petersburg, VA 23803  
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2801 Kensington Office  
Richmond, VA 23221  
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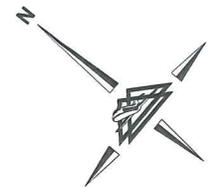
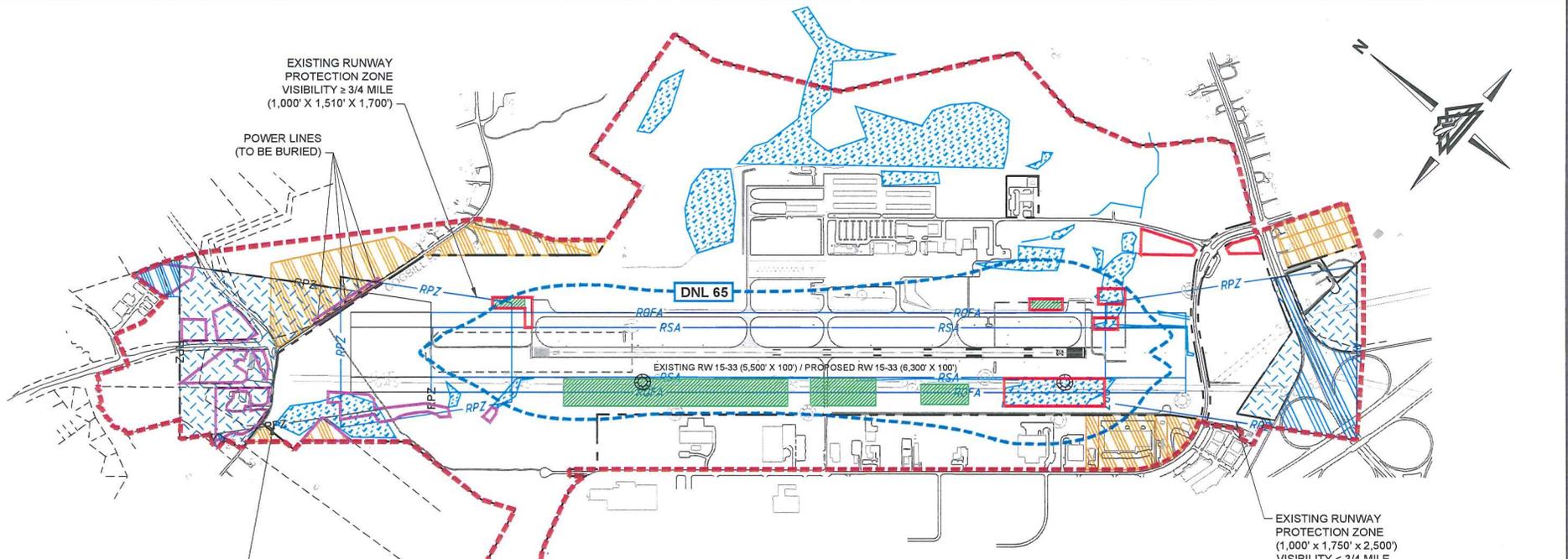
Tidewater Region Office  
14415 Old Courthouse Way  
2<sup>nd</sup> Floor  
Newport News, VA 23608  
Tel: (757) 886-2807  
Fax: (757) 886-2808

Roanoke Region Office  
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Roanoke, VA 24013  
Tel: (540) 857-7585  
Fax: (540) 857-7588

Northern Region  
Preservation Office  
P.O. Box 519  
Stephens City, VA 22655  
Tel: (540) 868-7029  
Fax: (540) 868-7033

N:\GKFC104 CAD\10086\Area of Potential Effect\10086-ex-h-area-potential-effect.dwg, L1, 10/9/2012 5:14:24 PM, rww

DRAWING: 10086-ex-h-area-potential-effect.dwg LAYOUT: L1



**SOURCES:**

1. WETLAND AREA AND STREAM LOCATIONS WERE DETERMINED BY A SURVEY AND DELINEATION PROVIDED BY MILL CREEK ENVIRONMENTAL CONSULTANTS, LTD. (SEPTEMBER 2009); JURISDICTIONAL DETERMINATION FROM ARMY CORP OF ENGINEERS IS PENDING.
2. THE TERRAIN OBSTRUCTION AREAS WERE DETERMINED FROM DATA COLLECTED AND PROVIDED BY WOOLPERT SURVEYS (2008-2009).

LEGEND		
DESCRIPTION	EXISTING	PROPOSED
AREA OF POTENTIAL EFFECT	NA	---
AIRPORT PROPERTY LINE	---	---
PAVEMENT	---	---
RUNWAY SAFETY AREA (RSA)	— RSA —	— RSA —
RUNWAY OBJECT FREE AREA (ROFA)	— ROFA —	— ROFA —
RUNWAY PROTECTION ZONE (RPZ)	— RPZ —	— RPZ —
NOISE CONTOURS	--- (2008) ---	NA
AVIGATION EASEMENT	▨	▨
LAND ACQUISITION	NA	▨
WETLAND AREAS	▨	NA
TERRAIN OBSTRUCTIONS (APPROX.)	▨	NA
OBSTRUCTIONS (TO BE REMOVED)	—	—
OBSTRUCTION LIGHT	⊙	⊙



**AREA OF POTENTIAL EFFECT  
CHESTERFIELD COUNTY AIRPORT**

EXHIBIT  
--



DRAWN BY: RWW CHECKED BY: CMC SCALE: 1"=1000' DATE: OCTOBER 2012

**APPENDIX B**

**VDHR DSS FORMS FOR ARCHITECTURAL RESOURCES  
RECORDED OR UPDATED DURING THE CURRENT SURVEY**

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5607**

**Other DHR ID#:**

**Resource Information**

*Resource Name(s):* House, 8121 Iron Bridge Road (SR 10)  
{Function/Location}  
*Date of Construction:* ca 1941  
*Local Historic District :*

*National Register Eligibility Status*

**Location of Resource**

*County/Independent City:* Commonwealth of Virginia  
Chesterfield  
*Magisterial District:*  
*Town/Village/Hamlet:* Chesterfield  
*Tax Parcel:*  
*Zip Code:*  
*Address(s):* 8121 Iron Bridge Road (SR 10) {Current}  
*USGS Quadrangle Name:* CHESTERFIELD  
*UTM Boundary Coordinates :*

NAD                      Zone                      Easting                      Northing

*UTM Center coordinates :*  
*UTM Data Restricted?.* No

**Resource Description**

*Ownership Status:* Private  
*Government Agency Owner:*  
*Acreage:*  
*Surrounding area:* Transportation Corridor  
*Open to Public:* No  
*Site Description:*

2013 CCR: The house is located on the southeast side of Iron Bridge Road (SR 10) near the Chesterfield County Airport. The building sits approximately 140 ft back from the road, and is surrounded by a lawn with several mature trees and shrubs and a small wooded area to the west.

*Secondary Resource Summary:*

2013 CCR: Located to the southwest of the dwelling is a small open-fronted front-gabled frame garage clad in vertical composition board siding. To the southwest of the garage stands a large three-bay machine shed, with one enclosed bay with vertical composition board siding and a six-over-six vinyl sash replacement window.

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Single Dwelling	Contributing
1	Garage	Contributing
1	Shed, Vehicle/Equipment	Contributing

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5607**

**Other DHR ID#:**

**Individual Resource Detail Information**

<i>Resource Type:</i>	Garage	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	ca 1941 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Located to the southwest of the dwelling is a small open-fronted front-gabled frame garage clad in vertical composition board siding.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Single Dwelling	<i>Primary Resource?</i>	Yes
<i>Date of Construction:</i>	ca 1941 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	Vernacular	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Built around 1941, according to the Chesterfield County tax information, this one-story, three-bay, front-gabled frame dwelling is typical of the Vernacular-style dwellings popular at that time. A hip-roofed porch supported by four square posts shelters the three bays on the northwest (front) gable end. Three-over-one wooden sash Craftsman-style windows flank the glazed entry door on the front gable end. The building sits on a continuous brick foundation and is clad in aluminum siding and ashlar-patterned asphalt shingles.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Shed, Vehicle/Equipment	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	ca 1941 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: To the southwest of the garage stands a large three-bay machine shed, with one enclosed bay with vertical composition board siding and a six-over-six vinyl sash replacement window.

**Primary Resource Exterior Component Description:**

<u>Component</u>	<u>Comp Type/Form</u>	<u>Material</u>	<u>Material Treatment</u>
Porch	Porch - Hipped	Wood	Porch - Post, Square
Roof	Roof - Gable, Front	Asphalt	Roof - Shingle
Structural System	Structural System - Frame	Wood	Structural System - Siding, Aluminum
Windows	Windows - Sash, Double-Hung	Wood	Windows - 3/1
Chimneys	Chimneys - Interior	Brick	
Foundation	Foundation - Solid/Continuous	Brick	

*Historic Time Period(s):* Q- World War I to World War II (1917-1945)  
S- The New Dominion (1946- Present)

*Historic Context(s):* Domestic

**Significance Statement**

2013 CCR: Overall, this property retains a low level of integrity due to the replacement of the original siding. The dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5607**

**Other DHR ID#:**

***National Register Eligibility Information (Intensive Level Survey):***

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

***Graphic Media Documentation***

<i>DHR Negative #</i>	<i>Photographic Media</i>	<i>Negative Repository</i>	<i>Photo Date</i>	<i>Photographer</i>
	Digital Images	CCR, Tarboro	January 17, 2013	J. van den Hurk

***Bibliographic Documentation***

***Cultural Resource Management (CRM) Events***

*CRM Event # 1,*

*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance

*Date of CRM Event:* January 17, 2013

*CRM Person:* Coastal Carolina Research

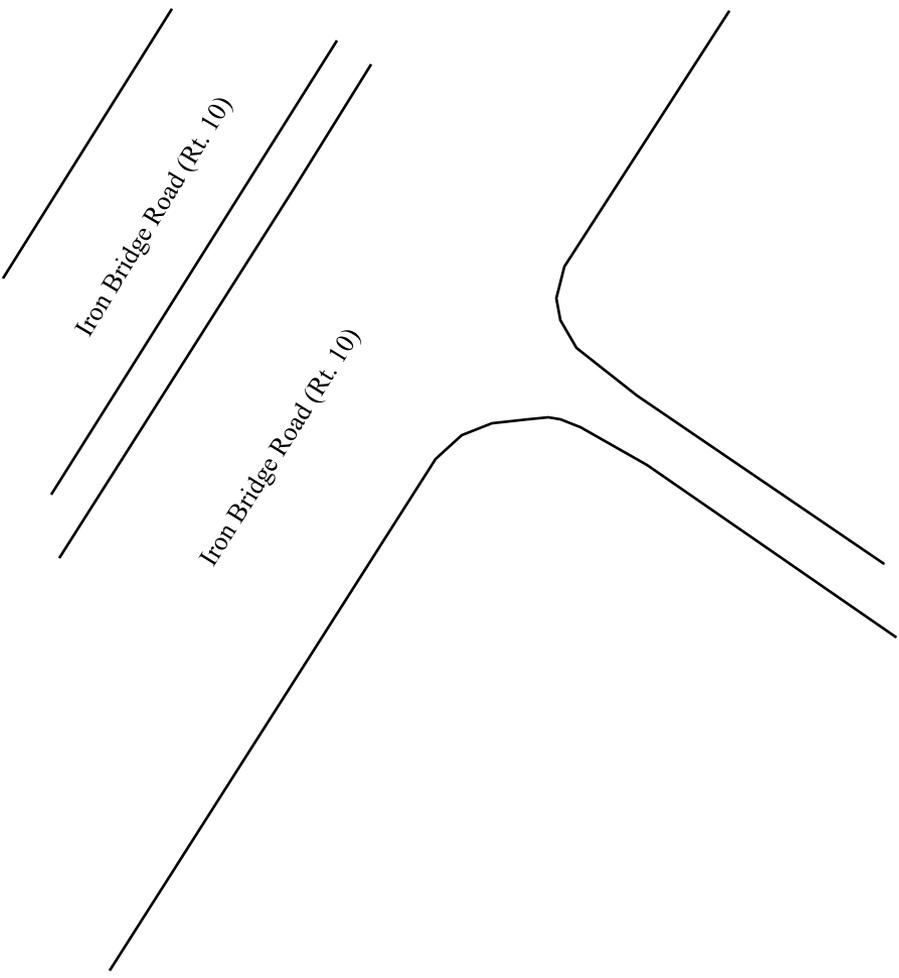
*CRM Event Notes or Comments:*

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

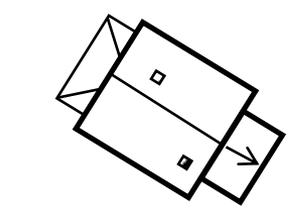
***Bridge Information***

***Cemetery Information***

***Ownership Information***



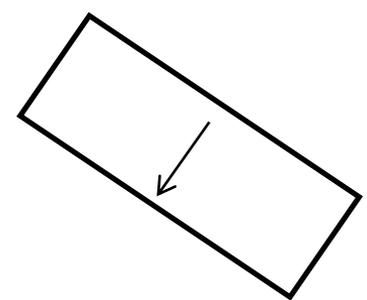
VDHR # 020-5607  
House  
8121 Iron Bridge Rd (Rt. 10)  
Richmond, VA  
Not to scale



House



Garage



Machine Shed

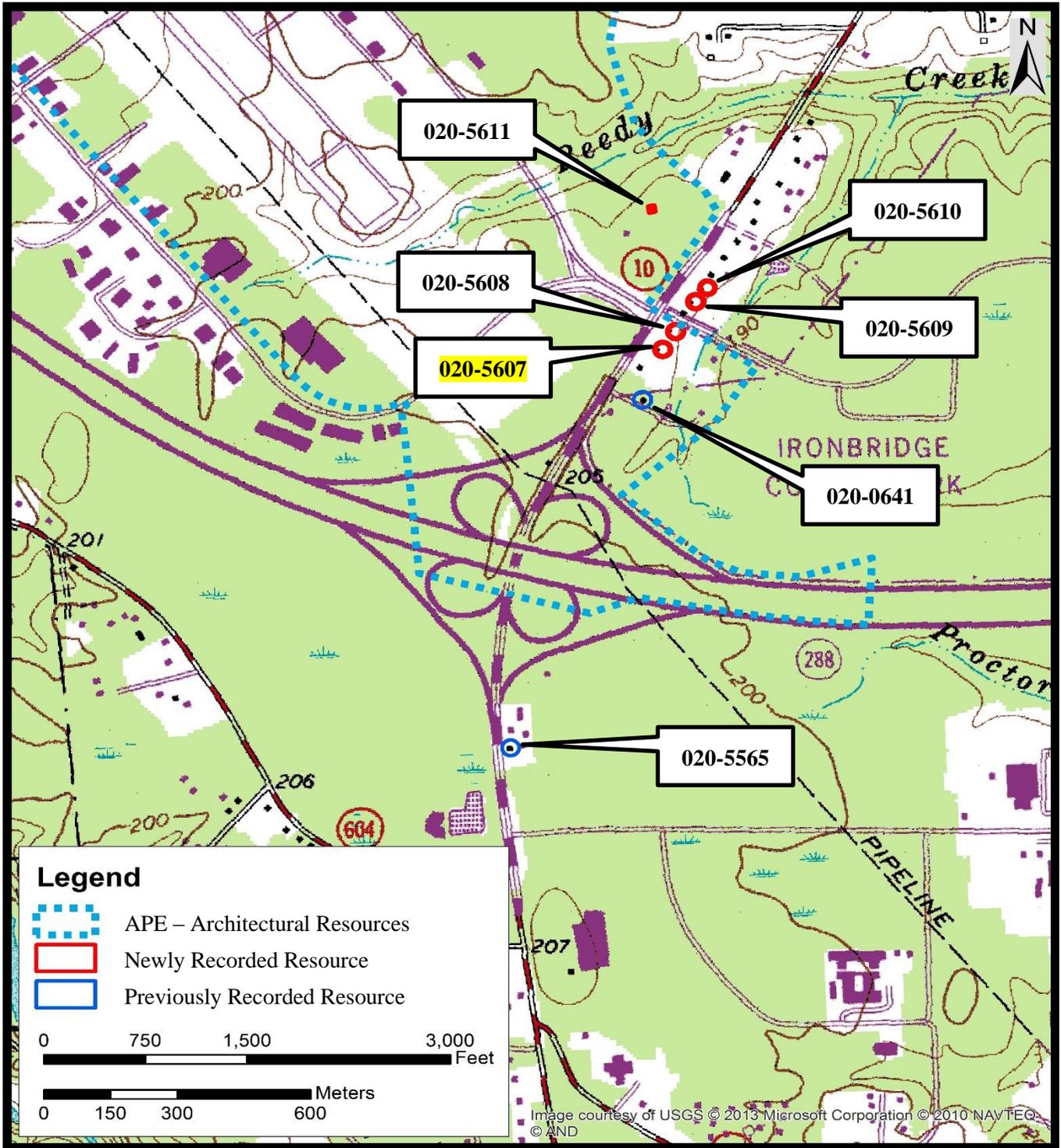


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.



House, 8121 Iron Bridge Road (SR10)  
020-5607  
January 17, 2013  
J. van den Hurk  
View of House looking East

House, 8121 Iron Bridge Road (SR10)  
020-5607  
January 17, 2013  
J. van den Hurk  
View of House looking Northwest

House, 8121 Iron Bridge Road (SR10)  
020-5607  
January 17, 2013  
J. van den Hurk  
View of Garage looking East

House, 8121 Iron Bridge Road (SR10)  
020-5607  
January 17, 2013  
J. van den Hurk  
View of Machine shed looking South

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5608**

**Other DHR ID#:**

**Resource Information**

*Resource Name(s):* House, 8111 Iron Bridge Road (SR 10)  
{Function/Location}  
*Date of Construction:* ca 1940  
*Local Historic District :*

**National Register Eligibility Status**

**Location of Resource**

*County/Independent City:* Commonwealth of Virginia  
Chesterfield  
*Magisterial District:*  
*Town/Village/Hamlet:* Chesterfield  
*Tax Parcel:*  
*Zip Code:*  
*Address(s):* 8111 Iron Bridge Road (SR 10) {Current}  
*USGS Quadrangle Name:* CHESTERFIELD  
*UTM Boundary Coordinates :*

NAD                      Zone                      Easting                      Northing

*UTM Center coordinates :*  
*UTM Data Restricted?.*                      No

**Resource Description**

*Ownership Status:* Private  
*Government Agency Owner:*  
*Acreage:*  
*Surrounding area:* Transportation Corridor  
*Open to Public:* No  
*Site Description:*

2013 CCR: The house is located on the south corner of the intersection between Iron Bridge Road (SR 10) and Whitepine Road near the Chesterfield County Airport. The building sits approximately 145 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

*Secondary Resource Summary:*

2013 CCR: None

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Single Dwelling	Contributing

**Individual Resource Detail Information**

<i>Resource Type.</i>	Single Dwelling	<i>Primary Resource?</i>	Yes
<i>Date of Construction:</i>	ca 1940 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	Minimal Traditional	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Built around 1940, according to the Chesterfield County tax information, this one-story, side-gabled concrete-block dwelling is an example of the Minimal Traditional style. A double and a single six-over-six wooden-sash window flank a fifteen-light glazed entry door on the northwest (front) elevation of the dwelling. A small metal awning, supported by two studs, shelters the

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5608**

**Other DHR ID#:**

entry door, and a frame shed addition covers half of the southeast (rear) elevation of the dwelling. German or drop siding fills the gable peaks and a brick chimney extends through the rear slope of the roof.

**Primary Resource Exterior Component Description:**

<u>Component</u>	<u>Comp Type/Form</u>	<u>Material</u>	<u>Material Treatment</u>
Chimneys	Chimneys - Interior	Brick	
Foundation	Foundation - Solid/Continuous	Concrete	Foundation - Block
Porch	Porch - Awning	Brick	Porch - Post, Square
Roof	Roof - Gable, Side	Shingle	Roof - Shingle
Structural System	Structural System - Masonry	Concrete	Structural System - Block
Windows	Windows - Sash, Double-Hung	Wood	Windows - 6/6
Windows	Windows - Sash, Double-Hung	Wood	Windows - 6/6, Paired

*Historic Time Period(s):* Q- World War I to World War II (1917-1945)  
S- The New Dominion (1946- Present)

*Historic Context(s):* Domestic

**Significance Statement**

2013 CCR: Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**National Register Eligibility Information (Intensive Level Survey):**

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

**Graphic Media Documentation**

<u>DHR Negative #</u>	<u>Photographic Media</u>	<u>Negative Repository</u>	<u>Photo Date</u>	<u>Photographer</u>
	Digital Images	CCR, Tarboro	January 17, 2013	J. van den Hurk

**Bibliographic Documentation**

**Cultural Resource Management (CRM) Events**

CRM Event # 1,  
*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance  
*Date of CRM Event:* January 17, 2013  
*CRM Person:* Coastal Carolina Research  
*CRM Event Notes or Comments:*

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

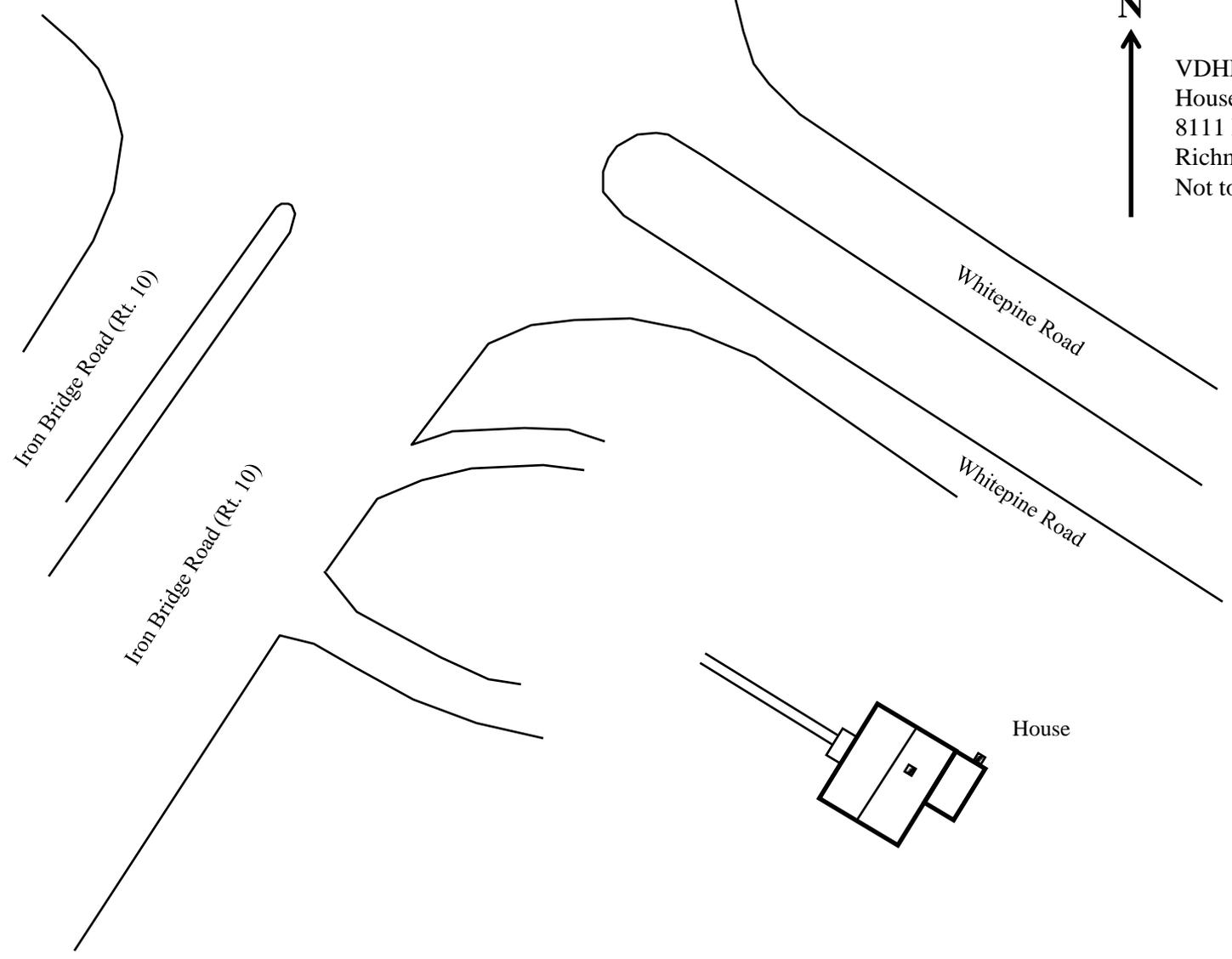
**Bridge Information**

**Cemetery Information**

**Ownership Information**



VDHR # 020-5608  
House  
8111 Iron Bridge Rd (Rt 10)  
Richmond, VA  
Not to scale



*Iron Bridge Road (Rt. 10)*

*Iron Bridge Road (Rt. 10)*

*Whitepine Road*

*Whitepine Road*

House

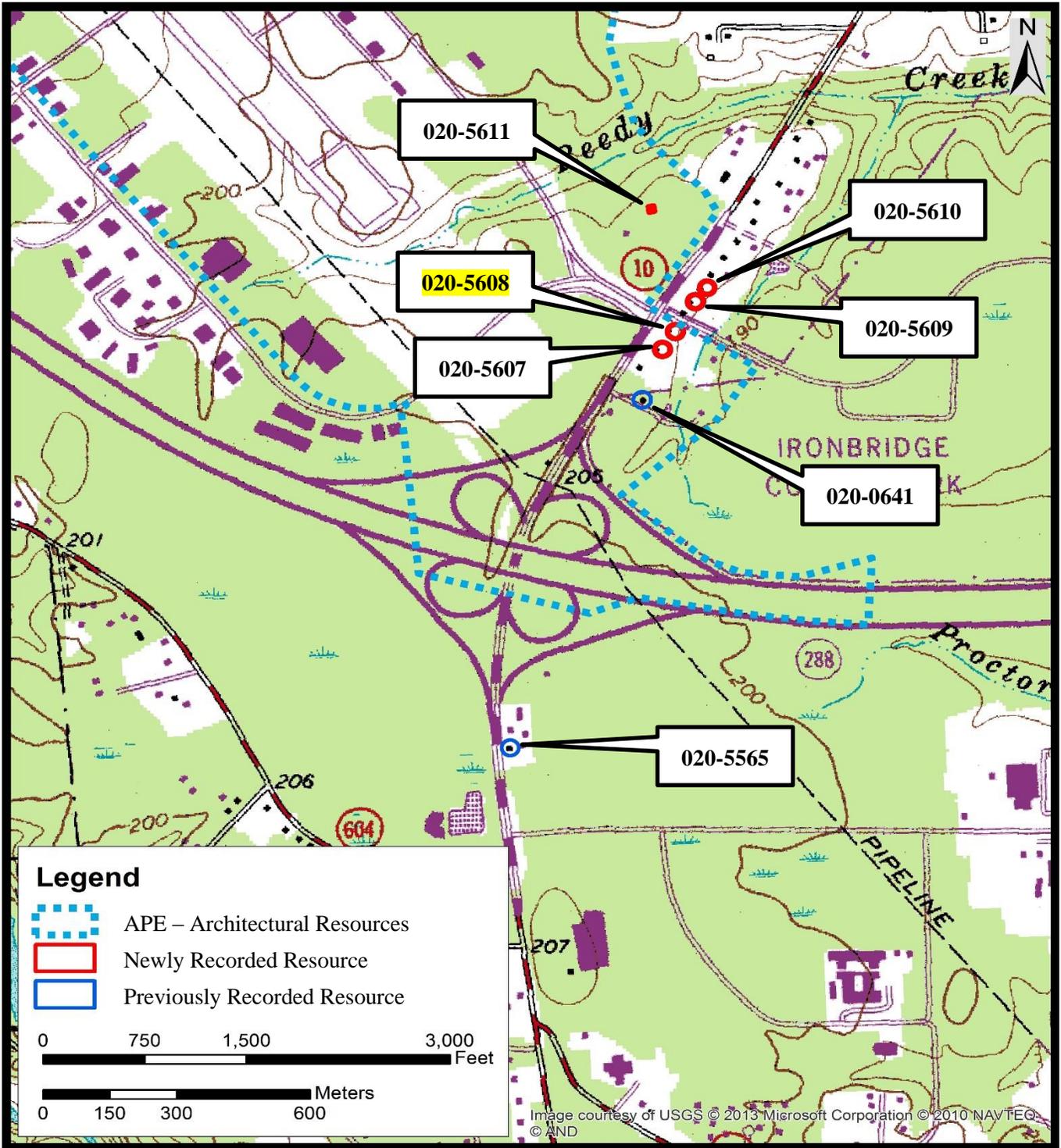


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

House, 8111 Iron Bridge Road (CR# 10)  
VDHR # 020-5608



House, 8111 Iron Bridge Road (SR 10)  
VDHR # 020-5608

House, 8111 Iron Bridge Road (SR10)  
020-5608  
January 17, 2013  
J. van den Hurk  
View of House looking Southeast

House, 8111 Iron Bridge Road (SR 10)  
020-5608  
January 17, 2013  
J. van den Hurk  
View of House looking Northwest

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5609**

**Other DHR ID#:**

**Resource Information**

*Resource Name(s):* House, 8041 Iron Bridge Road (SR 10)  
{Function/Location}  
*Date of Construction:* ca 1950  
*Local Historic District :*

**Location of Resource**

*County/Independent City:* Commonwealth of Virginia  
Chesterfield  
*Magisterial District:*  
*Town/Village/Hamlet:* Chesterfield  
*Tax Parcel:*  
*Zip Code:*  
*Address(s):* 8041 Iron Bridge Road (SR 10) {Current}  
*USGS Quadrangle Name:* CHESTERFIELD  
*UTM Boundary Coordinates :*

NAD                      Zone                      Easting                      Northing

*UTM Center coordinates :*  
*UTM Data Restricted?.* No

**Resource Description**

*Ownership Status:* Private  
*Government Agency Owner:*  
*Acreage:*  
*Surrounding area:* Transportation Corridor  
*Open to Public:* No  
*Site Description:*

2013 CCR: The house is located on the east corner of the intersection between Iron Bridge Road (SR 10) and Whitepine Road near the Chesterfield County Airport. The building sits approximately 150 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

*Secondary Resource Summary:*

2013 CCR: Located to the northeast of the dwelling is a modern metal carport, and to the southwest of the dwelling stands a modern gable-roofed shed/garage clad in vinyl German or drop siding with small four-over-four vinyl-sash windows and a garage door opening in the southeast gable end.

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Single Dwelling	Contributing
1	Carport	Non-Contributing
1	Shed, Vehicle/Equipment	Non-Contributing

**National Register Eligibility Status**

Resource has not been evaluated.\*

\* Resource has not been formally evaluated by DHR or eligibility information has not been documented in DSS at this time.

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5609**

**Other DHR ID#:**

**Individual Resource Detail Information**

<i>Resource Type:</i>	Single Dwelling	<i>Primary Resource?</i>	Yes
<i>Date of Construction:</i>	ca 1950 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	Minimal Traditional	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Built around 1950, according to the Chesterfield County tax information, this one-story, side-gabled concrete-block Minimal Traditional-style dwelling has a brick chimney on the northeast (front) elevation flanking the entry door to the right. A section of the front slope of the roof extends to shelter the door and the brick continues around the door tying the chimney and the door together and providing a decorative emphasis on the front elevation. The windows are double or single horizontal two-over-two wooden-sash windows with rusticated faux shutters. The dwelling sits on a full basement, with an external entry door on the southeast (rear) elevation and two-light steel casement hopper windows.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Shed,Vehicle/Equipment	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	9999	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: To the southwest of the dwelling stands a modern gable-roofed shed/garage clad in vinyl German or drop siding with small four-over-four vinyl-sash windows and a garage door opening in the southeast gable end.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Carport	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	9999	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Located to the northeast of the dwelling is a modern metal carport.

**Primary Resource Exterior Component Description:**

<u>Component</u>	<u>Comp Type/Form</u>	<u>Material</u>	<u>Material Treatment</u>
Chimneys	Chimneys - Exterior side	Brick	
Chimneys	Chimneys - Interior	Brick	
Porch	Porch - Stoop	Concrete	
Roof	Roof - Gable, Side	Shingle	Roof - Shingle
Structural System	Structural System - Masonry	Concrete	Structural System - Block
Windows	Windows - Sash, Double-Hung	Wood	Windows - 2/2, Horizontal
Foundation	Foundation - Not Visible		

*Historic Time Period(s):* S- The New Dominion (1946- Present)

*Historic Context(s):* Domestic

**Significance Statement**

2013 CCR: Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5609**

**Other DHR ID#:**

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**National Register Eligibility Information (Intensive Level Survey):**

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

**Graphic Media Documentation**

<i>DHR Negative #</i>	<i>Photographic Media</i>	<i>Negative Repository</i>	<i>Photo Date</i>	<i>Photographer</i>
	Digital Images	CCR, Tarboro	January 17, 2013	J. van den Hurk

**Bibliographic Documentation**

**Cultural Resource Management (CRM) Events**

*CRM Event # 1,*

*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance

*Date of CRM Event:* January 17, 2013

*CRM Person:* Coastal Carolina Research

*CRM Event Notes or Comments:*

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

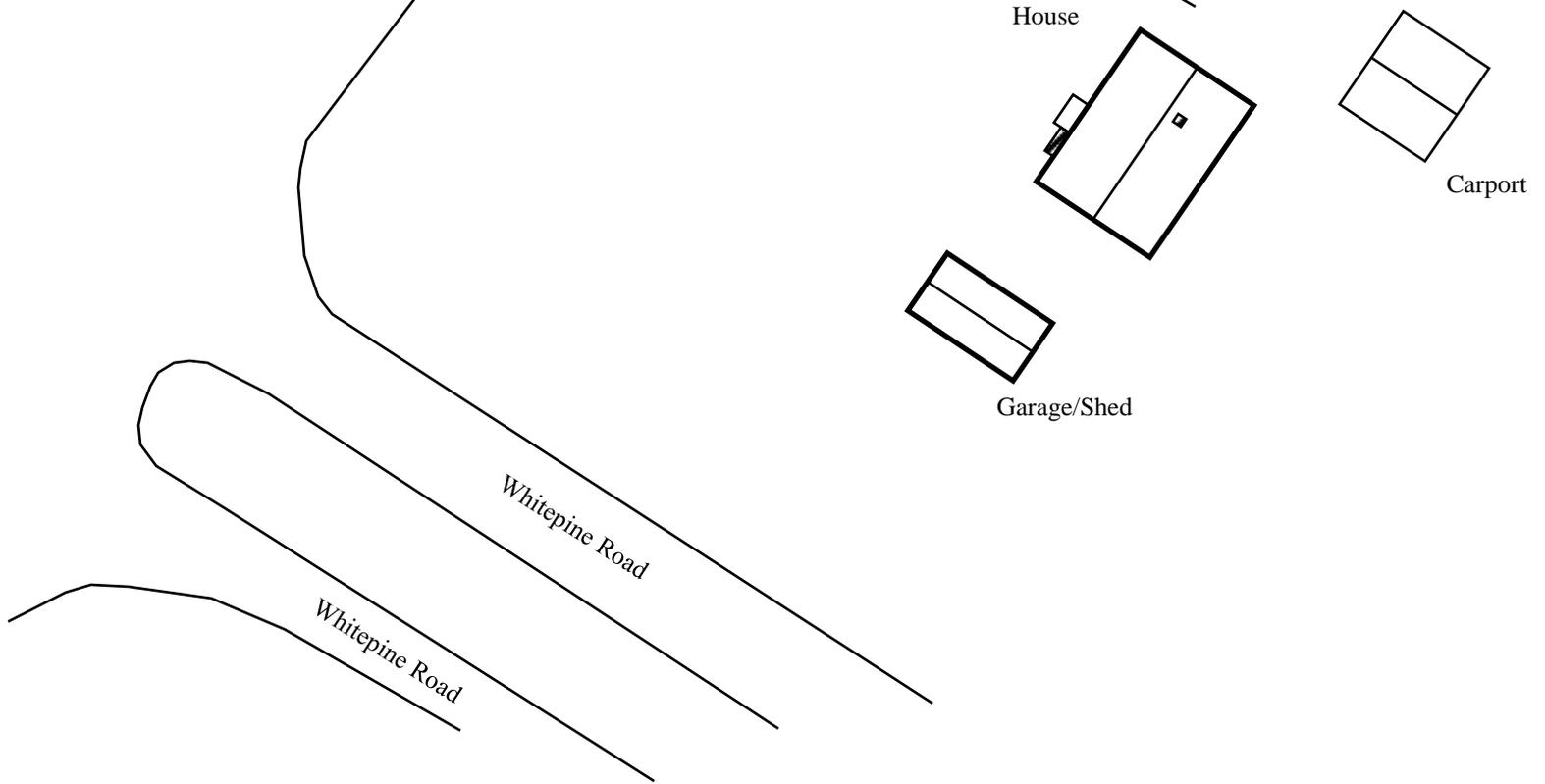
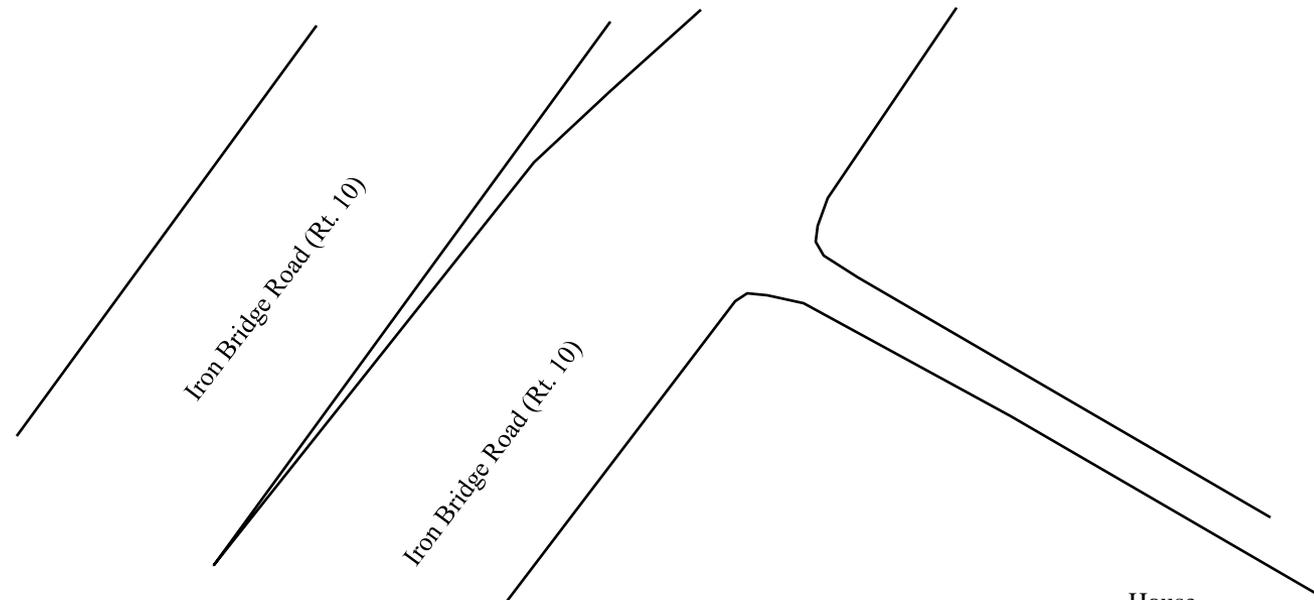
**Bridge Information**

**Cemetery Information**

**Ownership Information**



VDHR # 020-5609  
House  
8041 Iron Bridge Rd (Rt 10)  
Richmond, VA  
Not to scale



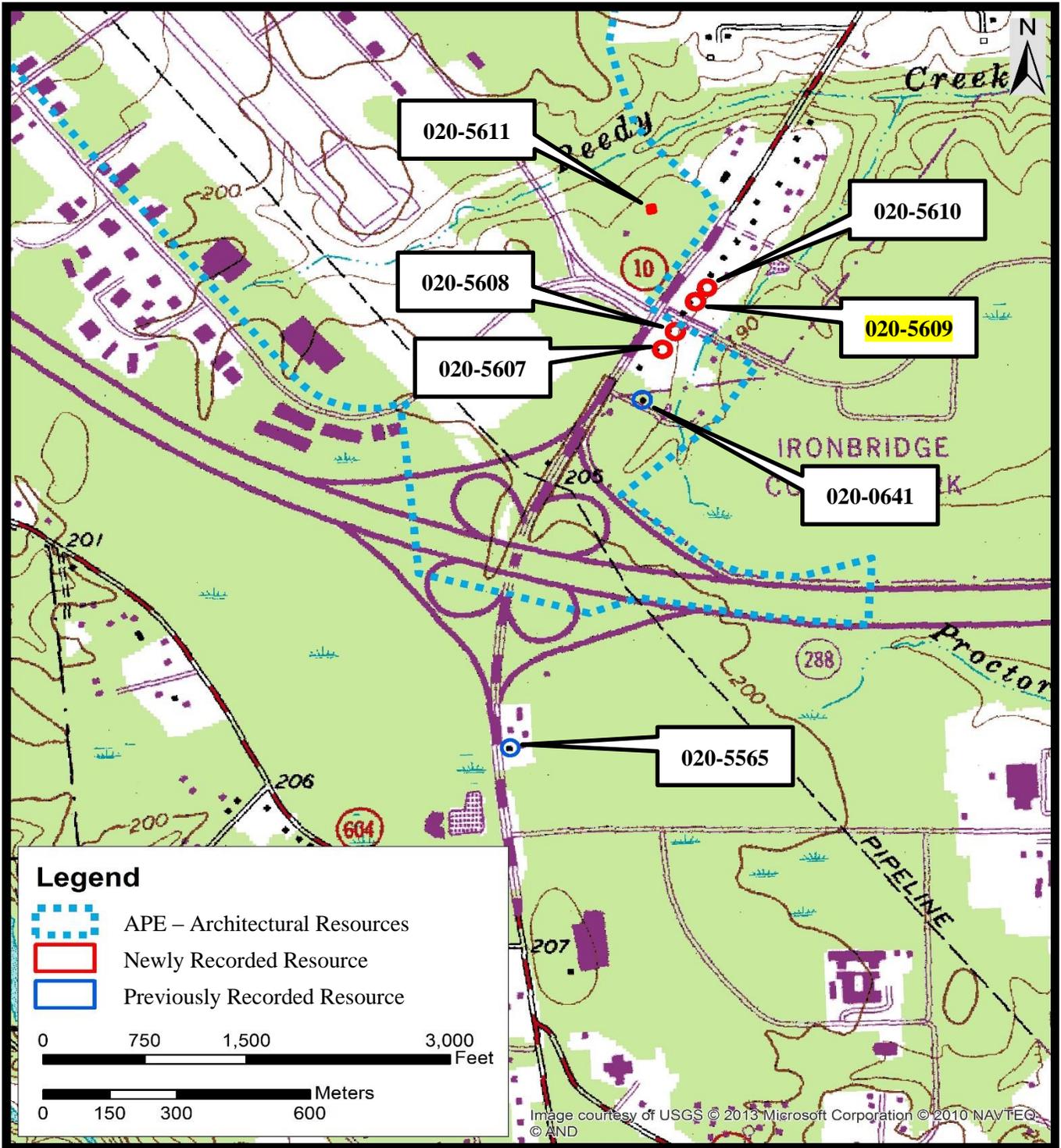
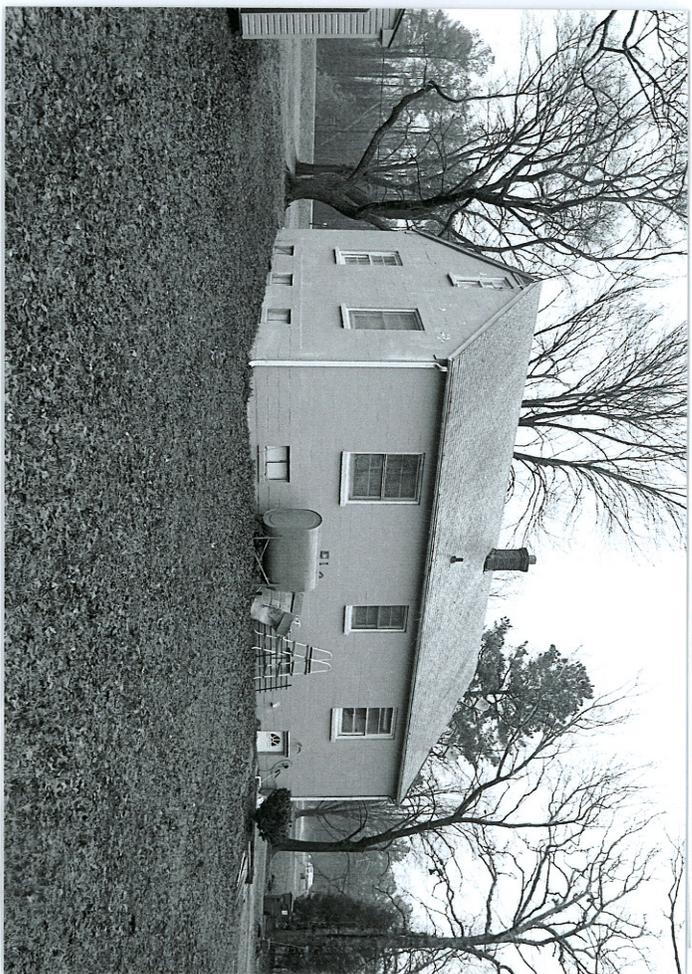


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

House, 8041 Iron Bridge Road, Rt 10)  
VDHR #020-5609



House, 8041 Iron Bridge Road (Rt 10)  
VDHR #020-5609

House, 8041 Iron Bridge Road (SR 10)  
020-5609  
January 17, 2013  
J. van den Hurk  
View of House looking Southeast

House, 8041 Iron Bridge Road (SR 10)  
020-5609  
January 17, 2013  
J. van den Hurk  
View of House looking North

House, 8041 Iron Bridge Road (SR10)  
020-5609  
January 17, 2013  
J. van den Hurk  
View of Carport looking East

House, 8041 Iron Bridge Road (SR 10)  
020-5609  
January 17, 2013  
J. van den Hurk  
View of Shed/Garage looking Northwest

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5610**

**Other DHR ID#:**

**Resource Information**

*Resource Name(s):* House, 8031 Iron Bridge Road (SR 10)  
{Function/Location}  
*Date of Construction:* ca 1930  
*Local Historic District :*

**Location of Resource**

*County/Independent City:* Commonwealth of Virginia  
Chesterfield  
*Magisterial District:*  
*Town/Village/Hamlet:* Chesterfield  
*Tax Parcel:*  
*Zip Code:*  
*Address(s):* 8031 Iron Bridge Road (SR 10) {Current}  
*USGS Quadrangle Name:* CHESTERFIELD  
*UTM Boundary Coordinates :*

NAD                      Zone                      Easting                      Northing

*UTM Center coordinates :*  
*UTM Data Restricted?.*                      No

**National Register Eligibility Status**

Resource has not been evaluated.\*

\* Resource has not been formally evaluated by DHR or eligibility information has not been documented in DSS at this time.

**Resource Description**

*Ownership Status:* Private  
*Government Agency Owner:*  
*Acreage:*  
*Surrounding area:* Transportation Corridor  
*Open to Public:* No  
*Site Description:*

2013 CCR: The house is located on the southeast side of Iron Bridge Road (SR 10) near the Chesterfield County Airport. The building sits approximately 150 ft back from the road, and is surrounded by a lawn with several mature trees and a wooded area to the southeast.

*Secondary Resource Summary:*

2013 CCR: Located behind the house to the southwest are two small modern garden sheds. One is a side- gabled shed clad in M-panel, and the other is a gambrel-roofed shed clad in vertical composition board siding with a double door in the front gable end.

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Single Dwelling	Contributing
2	Shed,Tool	Non-Contributing

**Individual Resource Detail Information**

<i>Resource Type.</i>	Shed,Tool	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	9999	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5610**

**Other DHR ID#:**

2013 CCR: Located behind the house to the southwest are two small modern garden sheds. One is a gambrel-roofed shed clad in vertical composition board siding with a double door in the front gable end.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Shed, Tool	<i>Primary Resource?</i>	No
<i>Date of Construction:</i>	9999	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Located behind the house to the southwest are two small modern garden sheds. One is a side-gabled shed clad in M-panel.

**Individual Resource Detail Information**

<i>Resource Type:</i>	Single Dwelling	<i>Primary Resource?</i>	Yes
<i>Date of Construction:</i>	ca 1930 {Local Records, Tax}	<i>Accessed?</i>	No Not accessible
<i>Architectural Style:</i>	Minimal Traditional	<i>Number of Stories:</i>	1.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: Built around 1930, according to the Chesterfield County tax information, this one-story, side-gabled frame dwelling is an example of the Minimal Traditional style. A decorative cross gable with a centrally placed single-shouldered chimney, flanked by the entry door to the left and a large rectangular single-pane picture window to the right, emphasizes the northwest (front) elevation of the dwelling. A small front-gabled portico, supported by decorative metal posts, shelters the entry door. The dwelling sits on a continuous brick foundation and is clad in composition board siding with an ashlar veneer running below the windows on the front elevation, and has eight-over-eight and six-over-six wooden sash windows. A small one-story hyphen against the southwest gable end connects the main section of the dwelling to a small side-gabled one-story wing. The hyphen has double three-light louvered or awning windows on the front and back elevations allowing it to become a breezeway. A one-and-a-half-car, flat-roofed garage was built against the northeast gable end of the dwelling at a later date.

**Primary Resource Exterior Component Description:**

<u>Component</u>	<u>Comp Type/Form</u>	<u>Material</u>	<u>Material Treatment</u>
Chimneys	Chimneys - Exterior side	Brick	
Chimneys	Chimneys - Interior end	Brick	
Foundation	Foundation - Solid/Continuous	Brick	
Porch	Porch - Portico	Concrete	Porch - Cast Metal Supports
Roof	Roof - Gable, Side	Shingle	Roof - Shingle
Structural System	Structural System - Frame	Wood	Structural System - Siding, Composition
Windows	Windows - Sash, Double-Hung	Wood	Windows - 6/6
Windows	Windows - Sash, Double-Hung	Wood	Windows - 8/8

*Historic Time Period(s):* Q- World War I to World War II (1917-1945)  
S- The New Dominion (1946- Present)

*Historic Context(s):* Domestic

**Significance Statement**

2013 CCR: Overall, this property retains a high level of integrity. However, the dwelling lacks significance and represents a common design for the period of construction and place. Furthermore, the dwelling has no significant association or linkage to events or persons of demonstrable importance in the past and does not appear to have the ability to yield important and unique information for research based on physical evidence. This architectural resource is recommended as not eligible for the NRHP under Criteria A, B, C, or D.

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5610**

**Other DHR ID#:**

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**National Register Eligibility Information (Intensive Level Survey):**

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

**Graphic Media Documentation**

<i>DHR Negative #</i>	<i>Photographic Media</i>	<i>Negative Repository</i>	<i>Photo Date</i>	<i>Photographer</i>
	Digital Images	CCR, Tarboro	January 17, 2013	J. van den Hurk

**Bibliographic Documentation**

**Cultural Resource Management (CRM) Events**

*CRM Event # 1,*

*Cultural Resource Management Event:*

Survey:Phase I/Reconnaissance

*Date of CRM Event:*

January 17, 2013

*CRM Person:*

Coastal Carolina Research

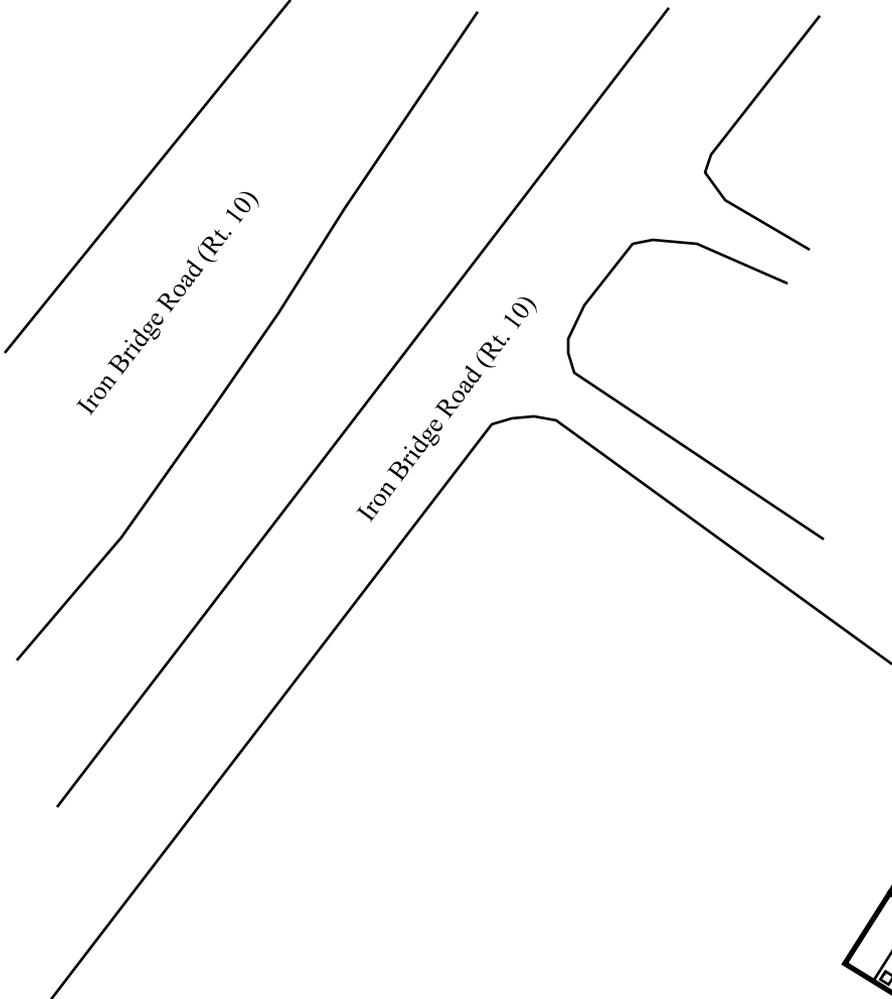
*CRM Event Notes or Comments:*

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

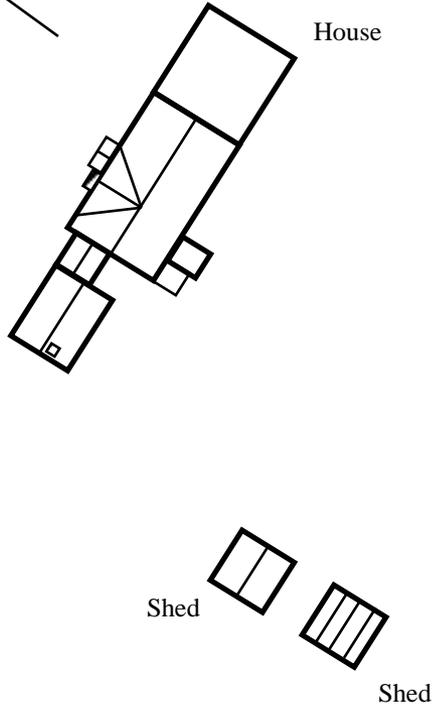
**Bridge Information**

**Cemetery Information**

**Ownership Information**



VDHR # 020-5610  
House  
8031 Iron Bridge Rd (Rt 10)  
Richmond, VA  
Not to scale



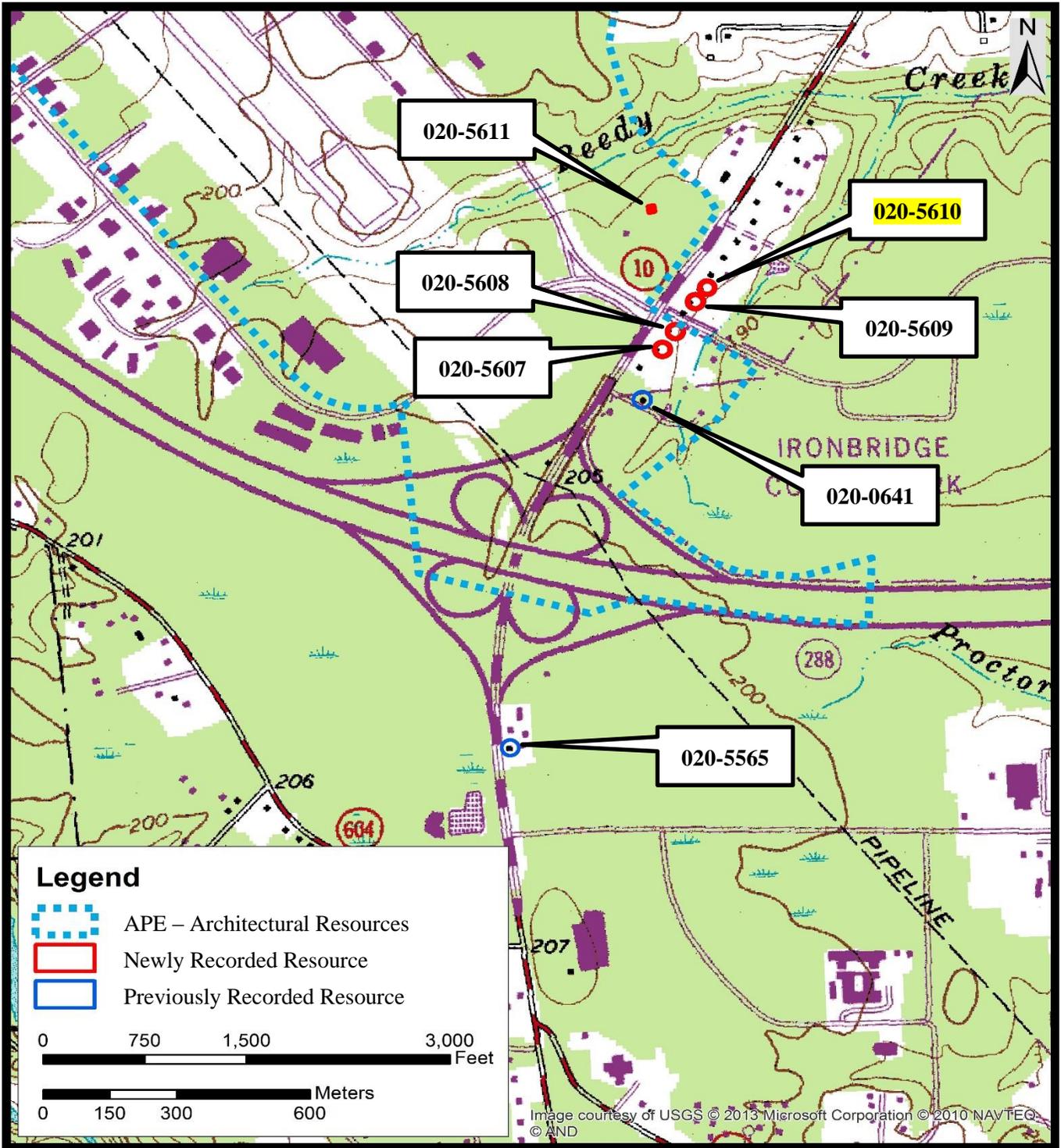


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

House, 8031 Iron Bridge Road, (Cr+10)  
VDHR # 020-5610



House, 8031 Iron Bridge Road (CR+10)  
VDHR # 020-5610

House, 8031 Iron Bridge Road (SR 10)  
020-5610  
January 17, 2013  
J. van den Hurk  
View of House looking Southeast

House, 8031 Iron Bridge Road (SR 10)  
020 - 5610  
January 17, 2013  
J. van den Hurk  
View of House looking Northwest

House, 8031 Iron Bridge Road (SR 10)  
020-5610  
January 17, 2013  
J. van den Hurk  
View of Sheds looking South

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5611**

**Other DHR ID#:**

44CF0782

**Resource Information**

*Resource Name(s):* Farmer-Rudd Cemetery {Historic/Current}

*Date of Construction:* ca 1891

*Local Historic District :*

**National Register Eligibility Status**

**Location of Resource**

Commonwealth of Virginia

*County/Independent City:* Chesterfield

*Magisterial District:*

*Town/Village/Hamlet:* Chesterfield

*Tax Parcel:*

*Zip Code:*

*Address(s):* Iron Bridge Road (SR 10) {Current}

*USGS Quadrangle Name:* CHESTERFIELD

*UTM Boundary Coordinates :*

	<u>NAD</u>	<u>Zone</u>	<u>Easting</u>	<u>Northing</u>
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<i>UTM Center coordinates :</i>	1983	18	277671	4142335
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<i>UTM Data Restricted?.</i>	No			
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**Resource Description**

*Ownership Status:* Public - Local

*Government Agency Owner:*

*Acreage:* 0.04

*Surrounding area:* Rural

*Open to Public:* No

*Site Description:*

2013 CCR: The cemetery is located in a wooded area on the west side of SR 10 (Iron Bridge Road), north of Whitepine Drive. It is associated with the archaeological site 44CF0782, which was recorded during the current survey as a late eighteenth- to mid-twentieth-century domestic scatter and structural ruins.

*Secondary Resource Summary:*

2013 CCR: None

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Cemetery	Contributing

**Individual Resource Detail Information**

<u>Resource Type.</u>	<u>Cemetery</u>	<u>Primary Resource?</u>	<u>Yes</u>
<i>Date of Construction:</i>	ca 1891 {Site Visit}	<i>Accessed?</i>	Not Evaluated
<i>Architectural Style:</i>	No Discernable Style	<i>Number of Stories:</i>	0.0
<i>Form:</i>		<i>Condition:</i>	Good
<i>Interior Plan Type:</i>		<i>Threats to Resource:</i>	Transportation Expansion

2013 CCR: The cemetery consists of five burials within an enclosed low concrete wall or curb as well as at least four to five unmarked burials located approximately 12.5 ft (3.8 m) east-northeast of the curbed portion. The dimensions of the curbed wall are roughly 15 ft (4.6 m) east-west and 30 ft (9.1 m) north-south. The five burials within the curbed portion all have a similar style granite grave marker and are aligned in a row roughly north-south with the headstones at the western portion. Within the curbed portion,

**Virginia Department of Historic Resources**  
**Reconnaissance Level Survey**

**DHR ID#: 020-5611**

**Other DHR ID#:**

44CF0782

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the oldest burial took place in 1891 and the most recent in 1935. From south to north, the inscriptions on the five head stones read:

- 1) SUSAN FARMER RUDD  
DIED 1891 AGED 78 YRS
- 2) R. BONAPARTE FARMER  
MARCH 31 1848  
MAY 28 1907
- 3) BLANCH A. FARMER  
DEC 23 1900  
FEB 11 1901
- 4) ANNIE McGEE FARMER  
WIFE OF R.B. FARMER  
DEC 3 1859  
OCT 10 1935
- 5) JAMES A. FARMER  
FEB 18 1882  
OCT 8 1928

The three southernmost burials also have associated foot stones, which are unmarked granite cobbles. On the west wall of the curb near the north end there is an entrance where the curb is flush with the ground surface. The stone at this entrance is inscribed with the word "Farmer", representing the family's surname.

There are four linear depressions that are located approximately 12.5 ft (3.8 m) east of the northeast portion of the curbed area, and they appear to be unmarked burials. The depressions are approximately 5 ft (1.5 m) long east-west and are aligned in a row north-south. No visible stones or grave markers are associated with these depressions. Approximately 10 ft (3.0 m) south of these linear depressions is a granite cobble that looks similar to the three foot stones within the curbed portion of the cemetery. This stone may be marking a fifth unmarked burial or it may be a foot stone from one of the other two burials within the curbed portion that has been moved.

There is a metal fence surrounding a portion of the cemetery, however much of the fence has fallen and is no longer visible. The vegetation in the area includes mostly younger deciduous growth with some older trees as well as holly and vines. There is also some ornamental growth of the type commonly found in and near cemeteries, such as shrubbery and cedar trees. Two large shrubs are located within the curbed portion of the cemetery, one each along the north and south walls. A large cedar tree is located just outside of the curbed wall near the northeast corner.

A map of the region dating to 1888 shows that Rudd family occupied land nearby. A census record search of the Farmer and Rudd families shows that in 1860 Susan Farmer, age 41, lived with R. B. Farmer, age 12, within the Northern District of Chesterfield County, Virginia. The 1870 census shows that James Rudd, age 50, was the head of a household which included Amanda S. Rudd, age 51 (presumably Susan Farmer Rudd); Rosser B. Farmer, age 22; and Rosa Clarke, age 14. No house number or street name is provided in this census record, but it does specify it is from the 2nd Revenue District of Dale Township in Chesterfield County, Virginia. In 1880, James Rudd, age 60, was the head of a household, which is listed as including his wife Amanda S. Rudd, age 61; son R. B. Farmer, age 32; and servant Lucy Friend, age 50. This location is shown as being in the Dale District of Chesterfield County, Virginia. In 1900, Rosser B. Farmer, age 52, is listed as the head of a household which included his wife, Ann E., age 40; his son, James A., age 18; son Wallace C., age 15; daughter Mary E., age 14; son Lois, age 11; and daughter Roberta, age 6. No address is provided on this census, but it does state that they lived in the Dale Magisterial District of Chesterfield County, Virginia.

Based on the information obtained from historic maps, census records, and the grave stone inscriptions, it appears that the Farmer family buried in the cemetery includes Rosser Bonaparte, his wife Annie (McGee), their son James, and possibly their infant daughter Blanch, as well as Rosser's mother Susan Farmer Rudd. Based on census records it appears that Susan Farmer Rudd married James Rudd, possibly after the death of her husband, who was Rosser B. Farmer's father. It is unknown who is buried in the unmarked graves at VDHR #021-5611.

**Primary Resource Exterior Component Description:**

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-5611**

**Other DHR ID#:**

44CF0782

*Historic Time Period(s):* P- Reconstruction and Growth (1866 to 1916)  
Q- World War I to World War II (1917-1945)

*Historic Context(s):* Funerary

**Significance Statement**

CCR 2013: This cemetery does not lend itself to comparative archaeological or physical anthropological studies. The cemetery is recommended as not eligible for the NRHP under Criteria A, B, C, or D. It is also recommended as not eligible under Criteria Consideration C for association with important persons or Criteria Consideration D, as it contains no graves of important persons, is not of great age, contains no special design elements, and is not associated with significant events. However, relevant local and state statutes regarding the protection and relocation of cemeteries must be followed if the cemetery area is to be impacted by land-altering activities. It is also recommended that prior to any land-altering activities in this area there be remote sensing such as ground penetrating radar (GPR) or soil stripping to locate any additional unmarked burials.

**National Register Eligibility Information (Intensive Level Survey):**

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

**Graphic Media Documentation**

<i>DHR Negative #</i>	<i>Photographic Media</i>	<i>Negative Repository</i>	<i>Photo Date</i>	<i>Photographer</i>
	Digital	CCR, Tarboro	January 24, 2013	L. Flood

**Bibliographic Documentation**

**Cultural Resource Management (CRM) Events**

*CRM Event # 1,*

*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance

*Date of CRM Event:* January 24, 2013

*CRM Person:* Coastal Carolina Research

*CRM Event Notes or Comments:*

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

**Bridge Information**

**Cemetery Information**

*Cemetery #:1*

<i>Religious Affiliation:</i>	Unknown	<i>Marked Graves?</i>	Marked and unmarked
<i>Artistic Values:</i>	Low	<i>Approx. No. of Gravestones:</i>	5 or less
<i>Type of Cemetery:</i>	Abandoned	<i>Earliest Marked Death Date:</i>	1891
<i>Enclosure Type:</i>	Fence	<i>Latest Marked Death Date:</i>	October 10, 1935

*Cemetery(s) Ethnic Affiliation*

*Cemetery #:* 1

Unknown

**Ownership Information**

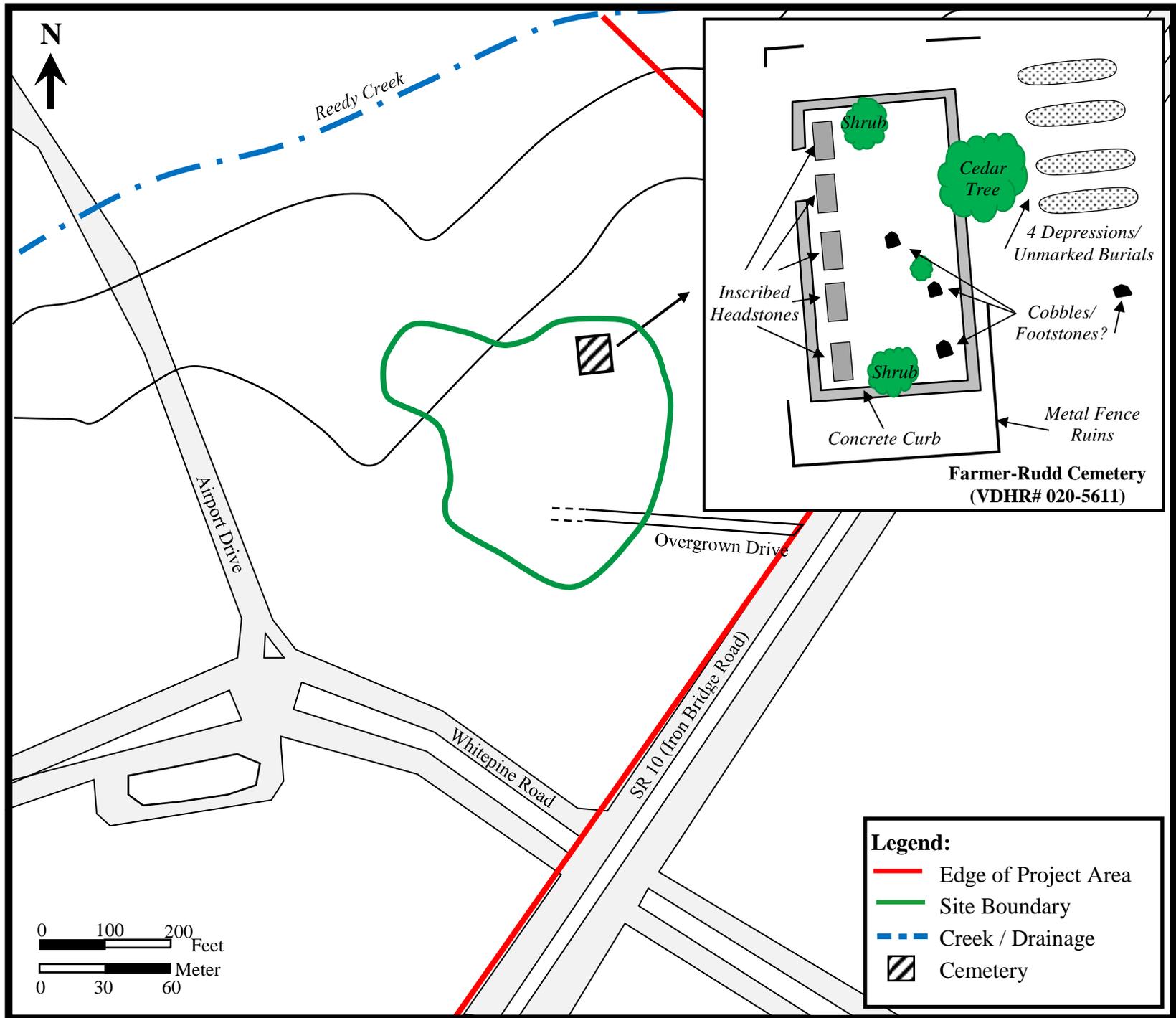


Figure 4.3-1: Sketch Map Showing the Location of Farmer-Rudd Cemetery (VDHR# 020-5611) and Site 44CF0782.

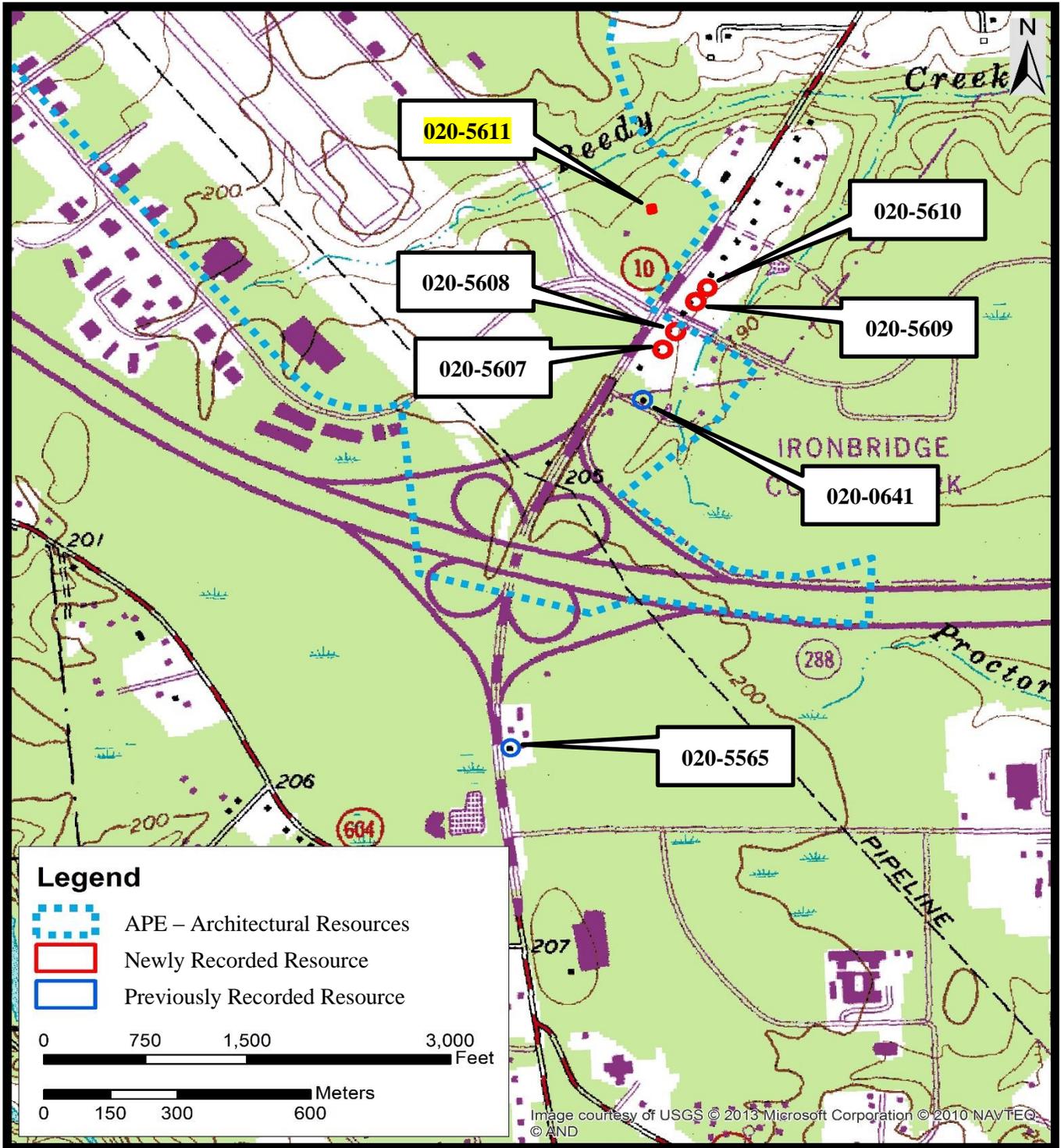
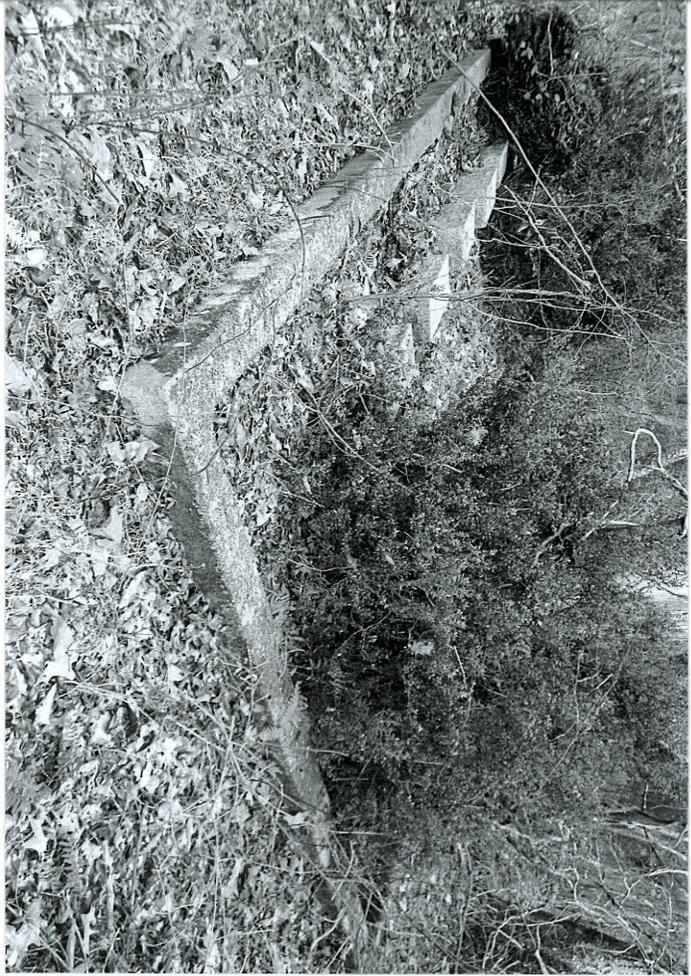


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

Farmer - Rudd Cemetery, Iron Bridge Road (Rt. 10)  
VDHR # 020-5611



Farmer - Rudd Cemetery, Iron Bridge Road (Rt. 10)  
VDHR # 020-5611

Farmer - Rudd Cemetery, Iron Bridge Rd. (SR10)  
020-5611  
January 24, 2013  
J. van den Hurk  
View of cemetery looking Northeast

Farmer-Rudd Cemetery, Iron Bridge Rd. (SR10)  
020-5611  
January 24, 2013  
J. van den Hurk  
View of unmarked graves looking East-Southeast

Farmer-Rudd Cemetery, Iron Bridge Rd. (SR10)  
020-5611  
January 24, 2013  
J. van den Hurk  
View of Headstone looking North-Northwest

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-0641**

**Other DHR ID#:**

**Resource Information**

*Resource Name(s):* House, 8131 Ironbridge Road  
{Function/Location}  
*Date of Construction:* ca 1870  
*Local Historic District :*

**Location of Resource**

*County/Independent City:* Commonwealth of Virginia  
Chesterfield  
*Magisterial District:*  
*Town/Village/Hamlet:*  
*Tax Parcel:*  
*Zip Code:*  
*Address(s):* 8131 Ironbridge Road {Current}  
*USGS Quadrangle Name:* CHESTERFIELD  
*UTM Boundary Coordinates :*

NAD                      Zone                      Easting                      Northing

*UTM Center coordinates :*  
*UTM Data Restricted?.* No

**National Register Eligibility Status**

Resource has not been evaluated.\*

\* Resource has not been formally evaluated by DHR or eligibility information has not been documented in DSS at this time.

**Resource Description**

*Ownership Status:* Private  
*Government Agency Owner:*  
*Acreage:*  
*Surrounding area:* Transportation Corridor  
*Open to Public:* No  
*Site Description:*

2013 CCR: The dwelling at 8131 Ironbridge Road is no longer extant. There is currently an equipment shed located on the property. This shed is associated with the house on the adjacent lot (DHR# 020-5607), which was recorded during the current survey.

*Secondary Resource Summary:*

2013 CCR: None

**Individual Resource Information**

<u>Count</u>	<u>Resource Types</u>	<u>Resource Status</u>
1	Single Dwelling	Contributing

**Individual Resource Detail Information**

<u>Resource Type.</u>	<u>Single Dwelling</u>	<u>Primary Resource?</u>	<u>Yes</u>
<i>Date of Construction:</i>	ca 1870 {Site Visit}	<i>Accessed?</i>	
<i>Architectural Style:</i>	Vernacular	<i>Number of Stories:</i>	2.0
<i>Form:</i>		<i>Condition:</i>	Demolished
<i>Interior Plan Type:</i>			

*Threats to Resource:*

1977 Virginia Historic Landmarks Commission Survey Form (O'Dell) on file at VDHR: This house is an interesting example of early 20th century vernacular, with its catslide roof and low second floor. Dwelling: 2 stories; frame with composition-board siding (probably replacing or covered earlier weatherboards); masonry foundations; 3 bay (?) front; \_\_\_\_\_ plan (probably 2-room);

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

**DHR ID#: 020-0641**

**Other DHR ID#:**

catslide roof (covering rear shed as well as main section).

**Primary Resource Exterior Component Description:**

<u>Component</u>	<u>Comp Type/Form</u>	<u>Material</u>	<u>Material Treatment</u>
Roof	Roof - Gable		
Structural System	Structural System - Frame	Wood	Structural System - Siding, Composition
Foundation	Foundation - Solid/Continuous		

*Historic Time Period(s):* P- Reconstruction and Growth (1866 to 1916)  
Q- World War I to World War II (1917-1945)  
S- The New Dominion (1946- Present)

*Historic Context(s):* Domestic

**Significance Statement**

2013 CCR: No longer extant.

**National Register Eligibility Information (Intensive Level Survey):**

*National Register Criteria:*

*Period of Significance:*

*Level of Significance:*

**Graphic Media Documentation**

<u>DHR Negative #</u>	<u>Photographic Media</u>	<u>Negative Repository</u>	<u>Photo Date</u>	<u>Photographer</u>
	Digital Images	CCR, Tarboro	January 15, 2013	L. Flood

**Bibliographic Documentation**

**Cultural Resource Management (CRM) Events**

CRM Event # 1,  
*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance  
*Date of CRM Event:* 1977  
*CRM Person:* J.M. O'Dell  
*CRM Event Notes or Comments:*

CRM Event # 2,  
*Cultural Resource Management Event:* Survey:Phase I/Reconnaissance  
*Date of CRM Event:* January 15, 2013  
*CRM Person:* Coastal Carolina Research  
*CRM Event Notes or Comments:*  
No longer extant.

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

**Bridge Information**

**Cemetery Information**

**Virginia Department of Historic Resources  
Reconnaissance Level Survey**

***DHR ID#: 020-0641***

***Other DHR ID#:***

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***Ownership Information***

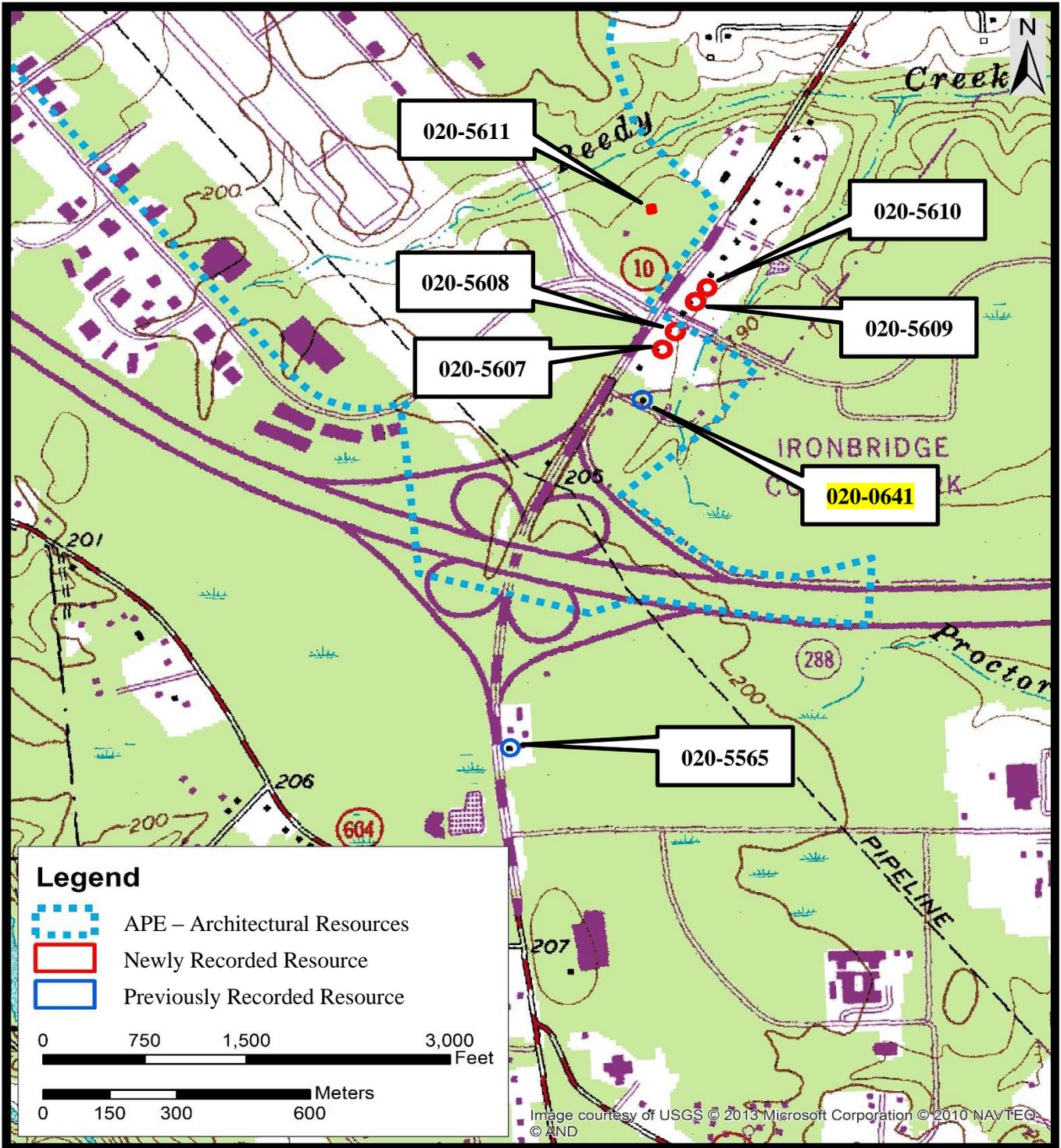


Figure 4.2-1: Locations of Previously and Newly Recorded Architectural Resources, Shown on the USGS 7.5' Chesterfield, Virginia Topographic Quadrangle.

House, 8131 Ironbridge Road (Rt 140)  
VDHR # 020-0641



House, 8131 Ironbridge Road (Rt 201)  
VDHR # 020-0641

House (no longer extant), 8131 Ironbridge Road  
020-0641  
January 15, 2013  
L. Flood  
View of old driveway on east side of SR10  
(Ironbridge Road) looking East-Southeast

House (no longer extant), 8131 Ironbridge Road  
020-0641  
January 17, 2013  
J. van den Hurk  
View of Equipment shed now on property  
(associated with adjacent resource VDHR #  
020-5607) looking Southeast

**APPENDIX C**

**VDHR DSS FORMS FOR ARCHAEOLOGICAL SITES  
RECORDED DURING THE CURRENT SURVEY**



**City/County:** Chesterfield

**Site Condition:** Unknown Portion of Site Destroyed

**Threats to Resource:** Transportation Expansion

**Survey Description:**

2013 CCR: This low-density lithic scatter is located in a wooded area on a ridge toe above Licking Creek, which is approximately 300 m west-northwest of the site. There is also a pond approximately 65 m to the north of the site. This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals, on a landform above the parking lot for the Five Forks Village Community Center. The community center is located along Five Forks Lane, which runs northeast off of Cogbill Road approximately 1,450 ft (442 m) from the junction with Belmont Road.

Twenty-one shovel tests were excavated on the site. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals around the positive shovel tests, in order to determine the extent and significance of the site. Six of the 21 shovel tests were positive for cultural material. Twelve artifacts were recovered from the six positive shovel tests and an additional three artifacts were found on an eroded slope above the parking lot. These artifacts include 11 quartzite interior flakes, one quartzite core, and two quartz shatter as well as a quartzite projectile point. The point is a resharpened, Small Savannah River Stemmed that is nearly complete with all but the tip. It has an unground base, and the blade edges are beveled from resharpening. The Small Savannah River Stemmed type dates to the Late Archaic period.

The typical soil profile at this site showed three soil zones. Zone 1 appears to be a natural A-horizon, and it was generally a dark yellowish brown (10YR 3/2) sandy loam. This zone averaged approximately 13 cm in thickness. Below this was the upper subsoil, Zone 2, that was a sandy clay loam between 13 and 30 cm thick. This zone was generally a light olive brown (2.5Y 5/4) to a light yellowish brown (2.5Y 6/4). Zone 3, the lower subsoil, was sterile for cultural materials, and generally was comprised of a yellowish brown (10YR 5/4) sandy clay to coarse sandy clay.

The artifacts were recovered from both Zones 1 and 2. The shovel tests had a high degree of root disturbance throughout, which suggests the presence of lithics in Zone 2 through bioturbation.

The western portion of the site appears to have been disturbed by the construction of the parking lot for the community center. The site likely extended outside of the APE to the west-southwest, but if so, this portion has probably been destroyed from construction. Just west of the APE is an eroded berm that slopes down to the parking lot. Several lithics were found on the ground surface of this eroded slope. In the northwest portion of the site is a cleared area that is bordered by railroad ties and has a paved path leading to it from the parking lot. Current online satellite imagery shows playground equipment in this area, though there was none there at the time of the survey.

**CURRENT LAND USE**

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**Land Use:** Landscape      **Example:** Forest      **Dates of Use:** 2013/01/22  
**Comments/Remarks:**

**SPECIMENS, FIELDNOTES, DEPOSITORIES**

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**Specimens Obtained?** Yes      **Specimens Depository:** Virginia Department of Historic Resources, Richmond

City/County: Chesterfield

**Assemblage Description:**

2013 CCR:

ST 1

3 flakes

ST 2

1 core, 1 flake, 1 Savannah River Stemmed point

ST 3

1 flake

ST 8

1 flake

ST 9

1 flake

ST 15

1 flake, 2 shatter

Surface

3 flakes

**Specimens Reported?** Yes

**Assemblage Description--Reported:**

**Field Notes Reported?** Yes

**Depository:** Coastal Carolina Research - Tarboro, North Carolina

**REPORTS, DEPOSITORY AND REFERENCES**

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**Report (s) ?** Yes **Depository:** VDHR, CCR - Tarboro, NC

**DHR Library Reference Number:**

**Reference for reports and publications:**

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

**PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY**

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<b>Photographic Documentation?</b>	<b>Depository</b>	<b>Type of Photos</b>	<b>Photo Date</b>
Yes	CCR - Tarboro, NC	Digital	2013/01/22

**CULTURAL RESOURCE MANAGEMENT EVENTS**

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<b>Cultural Resource Management Event:</b> Survey:Phase I/Reconnaissance	<b>Date:</b> 2013/01/22
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**Organization and Person:**

**Organization:** CCR - Tarboro **First:** Lindsay **Last:** Flood

**Sponsor Organization:**

**DHR Project Review File No:**

**CRM Event Notes or Comments:**







**City/County:** Chesterfield

**Landform:** other

**SITE CONDITION/SURVEY DESCRIPTION**

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**Site Dimensions:** 460 feet by 492 feet

**Acreage:** 3.80

**Survey Strategy:** Subsurface Testing

**Site Condition:** Surface Features  
Site Condition Unknown

**Threats to Resource:** Transportation Expansion

**Survey Description:**

2013 CCR: This site is a multicomponent site situated on an upland flat above Reedy Creek, and is in a wooded area near the northwest corner of SR 10 (Iron Bridge Road) and Whitepine Drive. The site was documented while shovel testing at 50-ft (approximately 15-m) intervals in Segment G, and is located on property that is currently owned by the Chesterfield County Airport. Prior to excavating shovel tests in Segment G, we were informed by airport personnel that there is a small family cemetery in the woods within this area, as well as a brick or stone-lined well that had been filled in by airport maintenance workers a year earlier. The well posed a risk for people and/or animals because, according to airport personnel, the wall of it was not raised and it was essentially flush with the ground surface (Jeremy Wilkinson, personal communication 2013).

While conducting shovel tests in this area several piles of structural debris were documented, including brick, cinderblock, and stone. Nineteen of the original shovel tests that were excavated on the transects at 50-ft (approximately 15-m) intervals were positive for cultural materials. All but one of these shovel tests contained historic materials. One of the original 19 positive shovel tests had only a quartz shatter fragment of quartz present in it, while two of the other positive shovel tests had one quartzite interior flake each, in addition to the historic artifacts. In order to determine the extent and significance of the site, additional radial shovel tests were typically excavated around the positive shovel tests at 25 ft (approximately 7.5-m) intervals. In all, 88 shovel tests were excavated on the site, and of these, 27 contained cultural materials. The historic artifacts that were recovered from this site include refined earthenware ceramics such as creamware and pearlware as well as window glass, container glass, and nails. A total of 118 artifacts were recovered from the site.

The typical soil profile at this site showed three soil zones. Zone 1 was either an old plow zone or a natural A-horizon, and it was generally a sandy loam that ranged in color from a dark yellowish brown (10YR 4/4) to a very dark grayish brown (10YR 3/2). Zone 1 was typically between 10 and 20 cm thick. Below this was Zone 2, a sandy loam to sandy clay loam soil that was generally 15 to 25 cm thick. Zone 2, the upper subsoil, ranged in color from a light yellowish brown (2.5Y 6/4) to a brownish yellow (10YR 6/6). Zone 3, the lower subsoil, was sterile for cultural materials, and generally was comprised of a yellowish brown (10YR 5/8) sandy clay.

The 1963 USGS 7.5' Chesterfield, Virginia topographic quadrangle map shows a structure in the location of the site. A 1968 satellite image of the area also shows a possible structure where the site is located. The cemetery and the house site are believed to be associated. The cemetery was given a state architectural resource number (VDHR # 020-5611).

In regards to the historic component of the site, no subsurface features were revealed during the archaeological survey of the site. The area appears to have been disturbed with the house and outbuildings apparently demolished and/or razed. No structures were found intact on the site; rather there are overgrown debris and/or push piles. The area was likely plowed for agricultural purposes at the time of historic occupation and may have since been logged. The Native American component at this site is an indeterminate lithic scatter. These three lithics were found spread across the site in three different shovel tests.

**CURRENT LAND USE**

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**Land Use:** Landscape

**Example:** Forest

**Dates of Use:** 2013/01/25

**Comments/Remarks:**

City/County: Chesterfield

**SPECIMENS, FIELDNOTES, DEPOSITORIES**

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**Specimens Obtained?** Yes                      **Specimens Depository:** Virginia Department of Historic Resources, Richmond

**Assemblage Description:**

2013 CCR: 2 brick fragments, 2 porcelain sherds, 17 refined earthenware sherds, 4 coarse earthenware sherds, 29 container glass shards, 26 window glass shards, 4 cut nails, 4 wire nails, 17 indeterminate nails and nail fragments, 3 miscellaneous metal fragments, 7 miscellaneous historic artifacts, 3 lithics

**Specimens Reported?** Yes

**Assemblage Description--Reported:**

**Field Notes Reported?** Yes                      **Depository:** Coastal Carolina Research - Tarboro, North Carolina

**REPORTS, DEPOSITORY AND REFERENCES**

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**Report (s) ?** Yes                      **Depository:** VDHR, CCR - Tarboro, NC

**DHR Library Reference Number:**

**Reference for reports and publications:**

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

**PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY**

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<b>Photographic Documentation?</b>	<b>Depository</b>	<b>Type of Photos</b>	<b>Photo Date</b>
Yes	CCR - Tarboro, NC	Digital	2013/01/24

**CULTURAL RESOURCE MANAGEMENT EVENTS**

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<b>Cultural Resource Management Event:</b> Survey:Phase I/Reconnaissance	<b>Date:</b> 2013/01/24
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**Organization and Person:**

**Organization:** CCR - Tarboro                      **First:** Lindsay                      **Last:** Flood

**Sponsor Organization:**

**DHR Project Review File No:**

**CRM Event Notes or Comments:**

2013 CCR: Given the low density of artifacts, the lack of evidence for intact subsurface deposits or features, and the lack of areas of subsurface concentrations of structural material or refuse deposits, this site lacks the potential to provide additional information on the Native American or historic lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia and does not appear eligible for the NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

**INDIVIDUAL/ORGANIZATION/AGENCY INFORMATION**

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**Individual Category Codes:**







**City/County:** Chesterfield

**Threats to Resource:** Transportation Expansion

**Survey Description:**

2013 CCR: This low-density lithic scatter is located near the edge of an upland flat, on a terrace above Reedy Creek. The creek is located approximately 60 m south of the site. The area consists of mostly secondary deciduous growth with some younger evergreen trees such as holly. This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals within Segment H.

Twenty-nine shovel tests were excavated on 44CFxxxx. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals in order to delineate the boundary of the site. Eight of the 29 shovel tests were positive for cultural materials. Eleven artifacts were recovered from the shovel tests and included one quartzite and six quartz interior flakes, one quartz decortication flake, one quartzite core fragment, one quartz shatter, and one late stage quartz biface.

The typical soil profile at this site showed three soil zones. Zone 1 appears to be a natural A-horizon, and it was generally a dark yellowish brown (10YR 3/2) sandy loam. This zone ranged between 9 to 26 cm in thickness. Below this was the upper subsoil, Zone 2, which was a sandy clay loam that averaged about 21 cm in thickness. This zone was generally a light olive brown (2.5Y 5/4) to a yellowish brown (10YR 5/4). Zone 3, the lower subsoil, was sterile for cultural materials, and ranged from a yellowish brown (10YR 5/6) to a brownish yellow (10YR 6/8) sandy clay.

All of the artifacts recovered from the site were found in Zone 2, most of which appeared to come from near the top of the zone and likely were introduced through bioturbation.

**CURRENT LAND USE**

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**Land Use:** Landscape      **Example:** Forest      **Dates of Use:** 2013/01/29

**Comments/Remarks:**

**SPECIMENS, FIELDNOTES, DEPOSITORIES**

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**Specimens Obtained?** Yes      **Specimens Depository:** Virginia Department of Historic Resources, Richmond

**Assemblage Description:**

City/County: Chesterfield

2013 CCR:

ST 1  
1 biface

ST 2  
1 flake

ST 3  
1 flake

ST 4  
3 flakes

ST 5  
1 core fragment

ST 12  
1 flake

ST 20  
1 flake

ST 21  
1 flake, 1 shatter

Specimens Reported? Yes

Assemblage Description--Reported:

Field Notes Reported? Yes                      Depository: Coastal Carolina Research - Tarboro, North Carolina

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**REPORTS, DEPOSITORY AND REFERENCES**

Report (s) ? Yes                      Depository: VDHR, CCR - Tarboro, NC

DHR Library Reference Number:

Reference for reports and publications:

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

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**PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY**

Photographic Documentation?	Depository	Type of Photos	Photo Date
Yes	CCR - Tarboro, NC	Digital	2013/01/28

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**CULTURAL RESOURCE MANAGEMENT EVENTS**

<b>Cultural Resource Management Event:</b> Survey:Phase I/Reconnaissance	<b>Date:</b> 2013/01/28
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Organization and Person:

Organization: CCR - Tarboro                      First: Lindsay                      Last: Flood

Sponsor Organization:

DHR Project Review File No:

CRM Event Notes or Comments:







City/County: Chesterfield

Threats to Resource: Transportation Expansion

**Survey Description:**

2013 CCR: This low-density lithic scatter is located near the edge of an upland flat, southwest of a low-lying, wet area. Reedy Creek is approximately 840 m southeast of the site and an unnamed tributary of Cosbys Lake is roughly 640 m to the north of the site. The area consists of mostly secondary deciduous growth with some younger evergreen trees such as holly. This site was discovered while excavating shovel tests on transects at 50-ft (approximately 15-m) intervals within Segment I.

Eight shovel tests were excavated on this site. Radial shovel tests were excavated at 25-ft (approximately 7.5-m) intervals in order to delineate the boundary of the site. Two shovel tests were positive for cultural materials. Shovel Test 1 contained 10 quartzite interior flakes, three quartzite flake fragments, and one piece of quartzite shatter. Shovel Test 2 contained one quartzite interior flake and one quartzite indeterminate cobble spall. All of the artifacts recovered from the site were dispersed within Zone 2

The typical soil profile at this site included three soil zones. Zone 1 was a dark yellowish brown (10YR 4/4) sandy loam, and appears to be a natural A-horizon. This zone ranged from 7 to 14 cm in thickness. Below this was the upper subsoil, Zone 2, which was a light yellowish brown (2.5Y 6/4) sandy clay loam that averaged about 25 cm in thickness. Zone 3, the lower subsoil, was sterile for cultural materials, and consisted of a yellowish brown (10YR 5/6) sandy clay.

**CURRENT LAND USE**

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Land Use: Landscape      Example: Forest      Dates of Use: 2013/01/29

Comments/Remarks:

**SPECIMENS, FIELDNOTES, DEPOSITORIES**

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Specimens Obtained? Yes      Specimens Depository: Virginia Department of Historic Resources, Richmond

**Assemblage Description:**

2013 CCR:

ST 1  
13 flakes, 1 shatter

ST 2  
1 spall, 1 flake

Specimens Reported? Yes

Assemblage Description--Reported:

Field Notes Reported? Yes      Depository: Coastal Carolina Research - Tarboro, North Carolina

**REPORTS, DEPOSITORY AND REFERENCES**

---

City/County: Chesterfield

Report (s) ? Yes      Depository: VDHR, CCR - Tarboro, NC

DHR Library Reference Number:

Reference for reports and publications:

Flood et al. (2013) Phase I Cultural Resources Survey Environmental Assessment, Chesterfield County Airport, Richmond, Virginia.

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**PHOTOGRAPHIC DOCUMENTATION AND DEPOSITORY**

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Photographic Documentation?	Depository	Type of Photos	Photo Date
Yes	CCR - Tarboro, NC	Digital	2013/01/29

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**CULTURAL RESOURCE MANAGEMENT EVENTS**

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<b>Cultural Resource Management Event:</b> Survey:Phase I/Reconnaissance	<b>Date:</b> 2013/01/29
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**Organization and Person:**

**Organization:** CCR - Tarboro      **First:** Lindsay      **Last:** Flood

**Sponsor Organization:**

**DHR Project Review File No:**

**CRM Event Notes or Comments:**

2013 CCR: Despite recovery of numerous flakes in Shovel Test 1, the overall small size of the site and lack of evidence for additional concentrations or subsurface features suggests that this site lacks the potential to provide additional information on the Native American settlement or lifeways within the transitional zone between the Coastal Plain and Piedmont regions of Virginia and does not appear eligible for the NRHP under Criterion D. The site also does not appear eligible under Criteria A, B, or C.

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**INDIVIDUAL/ORGANIZATION/AGENCY INFORMATION**

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**Individual Category Codes:**

**Honorif:**      **First:**      **Last:**

**Suffix:**

**Title:**

**Company/**

**Agency:**

**Address:**

**City:**      **State:**      **Zip:**

**Phone/Ext:**

**Notes:**

**Ownership Type:** Public - Local

**Government Agency:**



**APPENDIX D**

**ARTIFACTS RECOVERED DURING THE CURRENT SURVEY**

## Appendix D - Artifacts Recovered During the Current Survey

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
	183-H2-01	ST 1	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-01	ST 1	1	Lithic Deb	3	interior flake	Quartzite								
44CF0781	44CF0781-02	ST 2	2	Lithic Biface	1	point	Quartzite	complete except tip				Resharpended, Small Savannah River Stemmed	Dent 1995; Oliver 1981		Nicely flaked with edge beveling. unground base, app. 63mmL, 27mmSW, 9 mmTH
44CF0781	44CF0781-02	ST 2	2	Lithic Core	1	core	Quartzite								Small/exhausted
44CF0781	44CF0781-02	ST 2	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-03	ST 3	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-04	ST 8	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-05	ST 9	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-06	ST 15	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0781	44CF0781-06	ST 15	2	Lithic Deb	2	Shatter	Quartz								
44CF0781	44CF0781-07	Surf Near Car Lot		Lithic Deb	3	interior flake	Quartzite								
44CF0782	44CF0782-01	ST 1	2	H Fasten/ Tool	1	Nail	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-02	ST 3	2	Glass	1	Window Glass				Colorless					

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
44CF0782	44CF0782-03	ST 4	1	Brick	1	Brick Fragment/ Brick Tile Fragment									0.67 g
44CF0782	44CF0782-03	ST 4	1	H Fasten/ Tool	1	Nail	Iron				Corroded	Wire Nail (2.5")	1850s - Present	Nelson 1968	
44CF0782	44CF0782-04	ST 4	2	Lithic Deb	1	Interior Flake	Quartzite								
44CF0782	44CF0782-05	ST 5	1	Glass	1	Container Glass		Rim Fragment		Colorless					
44CF0782	44CF0782-06	ST 6	1	H Fasten/ Tool	1	Strap with Nail	Iron				Corroded	Iron Strap (8") with Wire Nail (2.5")	1850s - Present	Nelson 1968	
44CF0782	44CF0782-07	ST 6	2	Glass	1	Window Glass				Colorless					
44CF0782	44CF0782-07	ST 6	2	Glass	1	Container Glass		Body Fragment		Colorless					
44CF0782	44CF0782-07	ST 6	2	H Fasten/ Tool	1	Nail Fragment	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-07	ST 6	2	H Fasten/ Tool	1	Nail	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-08	ST 7	2	H Fasten/ Tool	1	Nail	Iron					"Modern" Machine-Cut Nail (1.75")	late 1830s - Present	Nelson 1968	
44CF0782	44CF0782-09	ST 8	2	Glass	2	Window Glass				Colorless					
44CF0782	44CF0782-10	ST 9	2	H Ceramic	1	Pearlware	Refined Earthenware	Body Fragment		White			1780 - 1820	Noel Hume 1970	
44CF0782	44CF0782-11	ST 10	1	Glass	1	Container Glass		Base Fragment		Colorless					

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
44CF0782	44CF0782-11	ST 10	1	Glass	3	Container Glass		Body Fragments	Molded/ Embossed Design	Colorless					
44CF0782	44CF0782-11	ST 10	1	Glass	1	Container Glass		Body Fragment		Colorless/ "Straw" or Slightly Yellow					
44CF0782	44CF0782-11	ST 10	1	Glass	2	Container Glass		Body Fragments		Colorless					
44CF0782	44CF0782-11	ST 10	1	H Ceramic	1	Pearlware	Refined Earthenware	Rim Fragment	Scalloped, Incised, and Shell-Edged	White and Blue		Blue Shell-Edged	1780 - 1835	Miller et al. 2000	
44CF0782	44CF0782-11	ST 10	1	H Ceramic	1	Whiteware	Refined Earthenware	Body Fragment	Overglaze Floral Decal	White with Red, Yellow, and Black		Decalcomania	1890- Present	Miller et al. 2000	
44CF0782	44CF0782-11	ST 10	1	H Ceramic	6	Pearlware	Refined Earthenware	Body and Base (with Foot Ring) Fragments		White			1780 - 1820	Noel Hume 1970	some of the fragments refit together
44CF0782	44CF0782-11	ST 10	1	H Fasten/ Tool	2	Nail or Bolt?	Iron				Corroded				either large, heavily corroded nails, or corroded bolts
44CF0782	44CF0782-12	ST 11	1	Brick	1	Brick Fragment			Glazed						
44CF0782	44CF0782-12	ST 11	1	Glass	1	Window Glass				Colorless					
44CF0782	44CF0782-12	ST 11	1	Glass	1	Container Glass		Body Fragment		Colorless					
44CF0782	44CF0782-12	ST 11	1	Glass	1	Container Glass		Body Fragment	Molded/ Embossed Band	Colorless					
44CF0782	44CF0782-12	ST 11	1	Glass	1	Window Glass				Aqua/ Pale Blue					
44CF0782	44CF0782-12	ST 11	1	Glass	1	Container Glass		Body Fragment		Aqua/ Pale Blue	Melted/ Heat-Altered				

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
44CF0782	44CF0782-12	ST 11	1	H Fasten/ Tool	1	Strap Fragment	Iron				Corroded				
44CF0782	44CF0782-12	ST 11	1	H Fasten/ Tool	1	Nail	Iron				Corroded	Cut Nail (1.75")	1790 - Present	Nelson 1968	
44CF0782	44CF0782-12	ST 11	1	H Misc.	1	Metal Spring	Iron				Corroded				
44CF0782	44CF0782-13	ST 12	1	Glass	6	Window Glass				Colorless					
44CF0782	44CF0782-13	ST 12	1	H Ceramic	1	Porcelain		Toy Dog		White and Brown					
44CF0782	44CF0782-13	ST 12	1	H Fasten/ Tool	1	Indeterminate Metal Concretion/ Nail?	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-13	ST 12	1	H Misc.	1	Composition Board Fragment	Fiber			Tan					
44CF0782	44CF0782-14	ST 13	1	Glass	2	Window Glass				Colorless					
44CF0782	44CF0782-14	ST 13	1	Glass	8	Container Glass		Body Fragment		Colorless					
44CF0782	44CF0782-14	ST 13	1	Glass	1	Container Glass		Body/ Base Fragment	Molded/ Embossed Markings	Colorless					
44CF0782	44CF0782-14	ST 13	1	Glass	1	Window Glass				Colorless	Melted/ Heat-Altered				
44CF0782	44CF0782-14	ST 13	1	H Ceramic	1	Porcelain		Body Fragment		White					
44CF0782	44CF0782-14	ST 13	1	H Fasten/ Tool	1	Nail	Iron				Corroded	Cut Nail (2")	1790 - Present		

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
44CF0782	44CF0782-14	ST 13	1	H Fasten/ Tool	2	Nail	Iron				Corroded	Wire Nails (3")	1850s - Present	Nelson 1968	
44CF0782	44CF0782-14	ST 13	1	H Fasten/ Tool	2	Nail Fragment	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-14	ST 13	1	H Fasten/ Tool	3	Nail	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-14	ST 13	1	H Misc.	2	Metal Foil Fragments	Aluminum								
44CF0782	44CF0782-14	ST 13	1	H Misc.	1	Metal Pipe Fragment	Copper								
44CF0782	44CF0782-14	ST 13	1	H Misc.	1	Rubber Fragment	Rubber								
44CF0782	44CF0782-14	ST 13	1	Lithic Deb	1	Interior Flake	Quartzite								
44CF0782	44CF0782-15	ST 14	1	H Fasten/ Tool	1	Nail Fragment	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-16	ST 15	1	H Ceramic	1	Pearlware	Refined Earthenware	Body Fragment	Painted	White and Blue			1779 - 1830	Miller et al. 2000	
44CF0782	44CF0782-17	ST 16	1	H Fasten/ Tool	1	Nail	Iron				Corroded	Cut Nail (3")	1790 - Present	Nelson 1968	
44CF0782	44CF0782-17	ST 16	1	H Fasten/ Tool	1	Nail	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-18	ST 17	2	H Ceramic	1	Pearlware	Refined Earthenware			White			1780 - 1820	Noel Hume 1970	
44CF0782	44CF0782-19	ST 18	1	Glass	1	Container Glass		Body Fragment		Colorless					

Site	Accession #	Shovel Test (ST) #	Zone	Analytic Class	Count	Object/ Material	Base Material	Form/ Portion	Decoration/ Treatment	Color	Condition	Type	Production Date Range	Date Reference	Comment
44CF0782	44CF0782-19	ST 18	1	Glass	1	Container Glass		Body Fragment		Yellowish Olive Green					
44CF0782	44CF0782-19	ST 18	1	Glass	5	Window Glass				Colorless/ Light Aqua					
44CF0782	44CF0782-20	ST 19	1	Glass	1	Container Glass		Base Fragment		Opaque White/ Milk Glass			1743 - mid-1900s	Lindsey 2013; Miller et al. 2000	rare before the 1870s
44CF0782	44CF0782-20	ST 19	1	Glass	4	Window Glass				Colorless					
44CF0782	44CF0782-20	ST 19	1	H Ceramic	2	Indeterminate	Coarse Earthenware	Body Fragments		Red/ Orange					
44CF0782	44CF0782-20	ST 19	1	H Ceramic	1	Terra Cotta	Earthenware	Flower Pot Rim Fragment		Red					May be modern?
44CF0782	44CF0782-21	ST 23	1	Lithic Deb	1	Shatter	Quartz								
44CF0782	44CF0782-22	ST 28	1	Glass	1	Container Glass		Body Fragment	Molded/ Embossed Markings	Colorless					
44CF0782	44CF0782-23	ST 32	1	H Ceramic	1	Pearlware	Refined Earthenware	Rim Fragment		White			1780 - 1820	Noel Hume 1970	
44CF0782	44CF0782-24	ST 33	1	H Fasten/ Tool	1	Nail Fragment	Iron				Corroded	Indeterminate Type			
44CF0782	44CF0782-25	ST 34	1	Glass	1	Window Glass				Colorless					
44CF0782	44CF0782-25	ST 34	1	Glass	1	Container Glass		Body Fragment	Molded/ Embossed Numbers and/or Letters	Light Aqua					
44CF0782	44CF0782-25	ST 34	1	Glass	1	Container Glass		Body Fragment	Molded/ Embossed Design	Colorless					





**APPENDIX E**

**SELECTED SHOVEL TEST PROFILES**

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

<u>Site # (if applicable)</u>	<u>ST #</u>	<u>Zone 1 (Depth and Soil Color/Texture)</u>		<u>Zone 2 (Depth and Soil Color/Texture)</u>		<u>Zone 3 (Depth and Soil Color/Texture)</u>		<u>Zone 4 (Depth and Soil Color/Texture)</u>		<u>Positive or Negative for Cultural Materials</u>
44CF0781	1	0-13	10YR 3/2 very dark grayish brown SL	13-26	2.5Y 5/4 light olive brown SCL	26-36	10YR 5/4 yellowish brown SC			Positive
	2	0-23	10YR 3/2 very dark grayish brown SL	23-42	2.5Y 5/4 light olive brown SCL	42-60	10YR 5/4 yellowish brown SC			Positive
	3	0-9	10YR 3/2 very dark grayish brown SL	9-22	2.5Y 5/4 light olive brown SCL	22-37	10YR 5/4 yellowish brown SC			Positive
	8	0-12	10YR 3/2 very dark grayish brown SL	12-26	2.5Y 5/4 light olive brown SCL	26-38	10YR 5/4 yellowish brown SC			Positive
	9	0-12	10YR 3/2 very dark grayish brown SL	12-30	2.5Y 5/4 light olive brown SCL	30-50	10YR 5/4 yellowish brown SC			Positive
	15	0-12	10YR 3/2 very dark grayish brown SL	12-26	2.5Y 5/4 light olive brown SCL	26-39	10YR 5/4 yellowish brown SC			Positive
	20	0-9	10YR 4/4 dark yellowish brown SL	9-39	2.5Y 6/4 light yellowish brown SL	39-49	10YR 5/8 yellowish brown SCL			Negative
	21	0-10	10YR 5/2 grayish brown SL	10-27	2.5Y 7/6 yellow SCL	27-39	2.5Y 6/4 light yellowish brown SC			Negative
44CF0782	1	0-11	2.5Y 5/4 light olive brown SL	11-23	2.5Y 6/4 light yellowish brown SCL	23-34	2.5Y 6/8 olive yellow SC			Positive
	2	0-16	10YR 4/4 dark yellowish brown SL	16-30	10YR 6/6 brownish yellow S	30-40	10YR 5/6 yellowish brown SCL			Positive
	3	0-15	2.5Y 5/4 light olive brown SL	15-22	2.5Y 6/4 light yellowish brown SCL	22-33	10YR 5/8 yellowish brown SC			Positive
	4	0-17	2.5Y 5/4 light olive brown SL	17-34	2.5Y 6/4 light yellowish brown SCL	34-44	2.5Y 6/8 olive yellow SC			Positive
	5	0-15	2.5Y 5/4 light olive brown SL	15-27	2.5Y 6/4 light yellowish brown SCL	27-40	2.5Y 6/8 olive yellow SC			Positive
	6	0-17	10YR 3/2 very dark grayish brown SL	17-50	2.5Y 6/6 olive yellow SCL mottled with 2.5Y 6/8 olive yellow SCL and 2.5Y 4/3 olive brown SCL					Positive
	7	0-12	2.5Y 5/4 light olive brown SL	12-26	2.5Y 6/6 olive yellow SCL	26-36	2.5Y 6/8 olive yellow SC			Positive
	8	0-20	2.5Y 5/4 light olive brown SL	20-34	2.5Y 6/6 olive yellow SCL	34-44	2.5Y 6/8 olive yellow SC			Positive
	9	0-11	10YR 4/4 dark yellowish brown SL	11-36	2.5Y 6/4 light yellowish brown SL	36-46	10YR 5/8 yellowish brown SCL			Positive
	10	0-26	10YR 3/2 very dark grayish brown SL	26-39	10YR 4/4 dark yellowish brown SL	39-49	10YR 5/8 yellowish brown SCL			Positive
	11	0-40	10YR 3/3 dark brown SL	40-45	10YR 4/4 dark yellowish brown S	45-55	10YR 5/6 yellowish brown SCL			Positive
	12	0-18	10YR 3/3 dark brown SL	18-45	10YR 4/4 dark yellowish brown S	45-55	10YR 5/6 yellowish brown SCL			Positive
	13	0-20	10YR 3/3 dark brown SL	20-42	10YR 4/4 dark yellowish brown S	42-52	10YR 5/6 yellowish brown SCL			Positive
	14	0-15	10YR 3/3 dark brown SL	15-30	10YR 4/4 dark yellowish brown S	30-41	10YR 5/6 yellowish brown SCL			Positive
	15	0-16	10YR 4/4 dark yellowish brown SL	16-30	10YR 6/6 brownish yellow S	30-40	10YR 5/6 yellowish brown SCL			Positive
	16	0-20	10YR 4/4 dark yellowish brown SL	20-38	10YR 6/6 brownish yellow S	38-48	10YR 5/6 yellowish brown SCL			Positive
	17	0-9	10YR 4/4 dark yellowish brown SL	9-38	2.5Y 6/4 light yellowish brown SL	38-48	10YR 5/8 yellowish brown SCL			Positive
	19	0-12	10YR 4/4 dark yellowish brown SL	12-31	10YR 6/6 brownish yellow S	31-41	10YR 5/6 yellowish brown SCL			Positive

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

	23	0-14	10YR 4/3 brown SL	14-34	2.5Y 5/4 light olive brown SCL	34-46	10YR 6/8 brownish yellow SC			Positive
	25	0-13	10YR 3/4 dark yellowish brown	13-36	2.5Y 6/6 olive yellow SCL	36-47	10YR 6/8 brownish yellow SC			Negative
	28	0-26	10YR 3/4 dark yellowish brown	26-30	2.5Y 6/6 olive yellow SCL	30-40	10YR 6/8 brownish yellow SC			Positive
	31	0-33	10YR 4/4 dark yellowish brown SL	33-39	10YR 6/6 brownish yellow S	39-59	10YR 6/4 light yellowish brown SCL			Negative
	32	0-8	10YR 4/3 brown SL	8-36	2.5Y 5/4 light olive brown SCL	36-47	2.5Y 5/6 light olive brown SC			Positive
	33	0-16	10YR 4/3 brown SL	16-43	2.5Y 5/4 light olive brown SCL	43-54	2.5Y 5/6 light olive brown SC			Positive
	34	0-30	10YR 4/4 dark yellowish brown SL	30-39	10YR 6/6 brownish yellow S	39-58	10YR 5/6 yellowish brown SC			Positive
	35	0-12	10YR 4/4 dark yellowish brown SL	12-24	10YR 6/6 brownish yellow S	24-34	10YR 5/6 yellowish brown SC			Positive
	39	0-20	10YR 4/4 dark yellowish brown SL	20-37	10YR 6/6 brownish yellow S	37-47	10YR 5/6 yellowish brown SC			Positive
	40	0-38	10YR 4/4 dark yellowish brown SL	38-45	10YR 6/6 brownish yellow S	45-55	10YR 5/6 yellowish brown SC			Positive
	45	0-26	10YR 4/4 dark yellowish brown SL	26-35	10YR 6/6 brownish yellow S	35-41	10YR 5/6 yellowish brown SC			Positive
	49	0-13	10YR 3/2 very dark grayish brown SL	13-20	10YR 5/6 yellowish brown SCL	20-30	10YR 6/8 brownish yellow SC			Negative
	50	0-8	10YR 4/4 dark yellowish brown SL	8-20	10YR 5/8 yellowish brown SCL					Negative
	57	0-15	2.5Y 5/4 light olive brown SL	15-40	2.5Y 6/6 olive yellow SC	40-52	2.5Y 5/6 light olive brown SC			Negative
44CF0783	1	0-13	10YR 3/2 very dark grayish brown SL	13-27	10YR 5/4 yellowish brown SCL	27-37	2.5Y 6/6 olive yellow SC			Positive
	2	0-18	10YR 3/2 very dark grayish brown SL	18-34	10YR 5/4 yellowish brown SCL	34-44	2.5Y 6/6 olive yellow SC			Positive
	3	0-12	10YR 4/3 brown SL	12-28	2.5Y 6/4 light yellowish brown SL	28-38	10YR 5/8 yellowish brown SCL			Positive
	4	0-19	10YR 4/3 brown SL	19-36	2.5Y 6/4 light yellowish brown SL	36-46	10YR 5/8 yellowish brown SCL			Positive
	5	0-26	10YR 3/2 very dark grayish brown SL	26-40	10YR 5/4 yellowish brown SCL	40-50	2.5Y 6/6 olive yellow SC			Positive
	12	0-13	10YR 3/2 very dark grayish brown SL	13-29	10YR 5/4 yellowish brown SCL	29-39	2.5Y 6/6 olive yellow SC			Positive
	19	0-12	10YR 4/2 dark grayish brown SL	12-33	10YR 5/4 yellowish brown SCL	33-43	2.5Y 6/6 olive yellow SC			Negative
	20	0-18	10YR 4/2 dark grayish brown SL	18-45	2.5Y 5/4 light olive brown SCL	45-55	10YR 5/6 yellowish brown SC			Positive
	21	0-12	10YR 4/2 dark grayish brown SL	12-30	2.5Y 5/4 light olive brown SCL	30-40	10YR 5/6 yellowish brown SC			Positive
	28	0-14	10YR 3/2 very dark grayish brown SL	14-26	10YR 5/4 yellowish brown SCL	26-40	2.5Y 6/8 olive yellow SC			Negative
	29	0-14	10YR 3/2 very dark grayish brown SL	14-38	2.5Y 5/4 light olive brown SCL	38-48	10YR 5/6 yellowish brown SC			Negative
44CF0784	1	0-14	10YR 4/4 dark yellowish brown SL	14-44	2.5Y 6/4 light yellowish brown SL	44-55	10YR 5/6 yellowish brown SC			Positive
	2	0-7	10YR 4/4 dark yellowish brown SL	7-32	2.5Y 6/4 light yellowish brown SL	32-42	10YR 5/6 yellowish brown SC			Positive
Artifact Location 183-H2	1-11	0-11	10YR 4/2 dark grayish brown SL (wet)	11-38	2.5Y 5/4 light olive brown SCL (wet)	38-50	10YR 5/6 yellowish brown SC (wet)			Positive

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

General Shovel Tests - Seg. A	1-1	0-20	10YR 4/4 dark yellowish brown SL	20-50	10YR 5/3 brown SL	50-60	10YR 6/6 brownish yellow SC			Negative
	1-6	0-25	10YR 4/4 dark yellowish brown SL	25-60	10YR 6/4 light yellowish brown SL	60-70	10YR 6/6 brownish yellow SC			Negative
	2-1	0-9	10YR 4/3 brown SL	9-30	10YR 6/4 light yellowish brown SL	30-44	10YR 6/3 pale brown SCL			Negative
	2-2	0-12	10YR 4/3 brown SL	12-30	10YR 6/4 light yellowish brown SL	30-50	2.5Y 6/6 olive yellow SC			Negative
	2-7	0-11	7.5YR 5/1 gray SL	11-34	2.5Y 6/6 olive yellow SC	34-47	2.5Y 6/6 olive yellow SC			Negative
	4-1	0-15	10YR 4/1 dark gray SL	15-33	2.5Y 5/4 light olive brown SCL	33-43	2.5Y 6/4 light yellowish brown SC with gravels			Negative
	4-5	0-14	7.5YR 5/1 gray SL	14-28	2.5Y 6/4 light yellowish brown SL	28-41	2.5Y 6/4 SC			Negative
	4-8	0-13	10YR 4/3 brown SL	13-32	2.5Y 5/3 light olive brown SCL	32-42	2.5Y 5/6 light olive brown SC			Negative
	6-1	0-9	10YR 3/2 very dark grayish brown SL	9-16	2.5Y 6/4 light yellowish brown SL	16-27	10YR 5/6 yellowish brown SCL			Negative
	7-4	0-13	10YR 4/4 dark yellowish brown SL	13-33	10YR 6/4 light yellowish brown S	33-43	10YR 5/6 yellowish brown SCL			Negative
	7-5	0-17	10YR 4/3 brown SL	17-25	2.5Y 5/4 light olive brown SCL	25-32	10YR 5/6 yellowish brown SC			Negative
	8-5	0-7	10YR 4/3 brown SL	7-15	10YR 6/8 brownish yellow SL	15-33	2.5Y 5/3 light olive brown SCL	33-43	2.5Y 5/6 light olive brown SC	Negative
	8-7	0-11	10YR 4/2 dark grayish brown SL	11-37	2.5Y 5/3 light olive brown SCL	37-50	2.5Y 5/6 light olive brown SC			Negative
	9-7	0-16	10YR 3/2 very dark grayish brown SL	16-34	2.5Y 6/4 light yellowish brown SL	34-44	10YR 5/8 yellowish brown SCL			Negative
	10-4	0-16	10YR 4/4 dark yellowish brown SL	16-37	10YR 6/4 light yellowish brown SL	37-50	10YR 5/4 yellowish brown SCL			Negative
	11-1	0-14	10YR 3/2 very dark grayish brown SL	14-30	2.5Y 5/4 light olive brown SCL	30-40	10YR 6/4 light yellowish brown SC			Negative
	11-2	0-10	10YR 4/2 dark grayish brown SL	10-23	2.5Y 5/3 light olive brown SCL	23-30	10YR 6/8 brownish yellow SC			Negative
	J-8	0-18	10YR 3/2 very dark grayish brown SL	18-32	10YR 5/6 yellowish brown SCL					Negative
	J-18	0-15	10YR 4/2 dark grayish brown SL	15-32	10YR 5/1 gray SC mottled with 7.5YR 6/8 reddish yellow SC (hydric)					Negative
J-21	0-19	10YR 4/4 dark yellowish brown SL	19-30	10YR 6/6 brownish yellow SC (hydric)					Negative	
General Shovel Tests - Seg. B	1-2	0-30	10YR 4/4 dark yellowish brown SL	30-40	10YR 6/6 brownish yellow SC (wet)					Negative
	4-1	0-17	10YR 4/3 brown SL	17-30	10YR 5/6 yellowish brown SCL (wet)					Negative
	5-1	0-15	10YR 4/1 dark gray SL	15-44	2.5Y 5/4 light olive brown SCL	44-54	2.5Y 6/4 light yellowish brown SC			Negative
	5-5	0-6	10YR 4/4 dark yellowish brown SL	6-50	2.5Y 6/4 light yellowish brown SCL	50-60	10YR 5/8 yellowish brown mottled SC mottled with 2.5Y 6/4 light yellowish brown SC			Negative
	5-7	0-18	10YR 4/4 dark yellowish brown SL	18-30	2.5Y 6/4 light yellowish brown SCL	30-40	10YR 6/6 brownish yellow SC			Negative
	7-2	0-30	10YR 4/4 dark yellowish brown SL	30-40	10YR 5/6 yellowish brown SCL					Negative
General Shovel Tests - Seg. C	1-1	0-20	10YR 4/4 dark yellowish brown SL	20-35	10YR 5/6 yellowish brown SCL					Negative

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

	1-4	0-12	10YR 4/4 dark yellowish brown SL	12-25	2.5Y 6/4 light yellowish brown SL	25-40	10YR 5/8 yellowish brown SC			Negative
	2-1	0-18	10YR 4/3 brown SL	18-32	2.5Y 6/6 olive yellow SC					Negative
	2-5	0-11	10YR 4/3 brown SL	11-21	10YR 5/6 yellowish brown SCL	21-33	2.5Y 6/6 olive yellow SC			Negative
	3-4	0-5	10YR 4/4 dark yellowish brown SL	5-17	10YR 6/6 brownish yellow SCL	17-34	10YR 5/8 yellowish brown			Negative
	4-3	0-15	10YR 4/1 dark gray SL	15-25	2.5Y 5/4 light olive brown SCL	25-35	2.5Y 6/4 light yellowish brown SC			Negative
	6-6	0-8	10YR 4/1 dark gray SL	8-13	2.5Y 5/4 light olive brown SCL	13-30	10YR 7/2 light gray SC			Negative
	7-1	0-18	10YR 4/4 dark yellowish brown SL	18-30	2.5Y 6/4 light yellowish brown SL	30-40	10YR 5/6 yellowish brown SC			Negative
General Shovel Tests - Seg. D	1-1	0-10	10YR 4/4 dark yellowish brown SL	10-21	2.5Y 5/6 light olive brown S	21-35	10YR 5/6 yellowish brown SC			Negative
	1-10	0-9	10YR 4/4 dark yellowish brown SL	9-24	2.5Y 6/4 light yellowish brown SCL	24-34	10YR 6/6 brownish yellow SC			Negative
	2-5	0-12	10YR 4/3 brown SL	12-24	10YR 5/6 yellowish brown SCL	24-34	2.5Y 6/6 olive yellow SC			Negative
	2-11	0-12	10YR 4/3 brown SL	12-30	10YR 5/6 yellowish brown SCL	30-47	7.5YR 5/8 strong brown SC			Negative
	3-1	0-12	10YR 4/3 brown SL (wet)	12-24	2.5Y 5/4 light olive brown SCL (wet)	24-34	10YR 6/4 light yellowish brown SC (wet)			Negative
	3-8	0-13	10YR 4/3 brown SL	13-24	2.5Y 5/4 light olive brown SCL mottled with 10YR 6/4 light yellowish brown SCL and 10YR 5/6 yellowish brown SCL					Negative
	3-11	0-12	10YR 4/3 brown SL	12-26	10YR 5/4 yellowish brown SCL	26-36	10YR 5/6 yellowish brown SC			Negative
General Shovel Tests - Seg. E	1-6	0-10	10YR 4/4 dark yellowish brown SL	10-45	2.5Y 6/4 light yellowish brown S	45-55	10YR 5/6 yellowish brown SC			Negative
	2-7	0-16	10YR 4/3 brown SL	16-35	10YR 5/6 yellowish brown SCL	35-45	7.5YR 6/6 reddish yellow SC			Negative
	4-3	0-15	10YR 4/3 brown SL	15-27	2.5Y 5/4 light olive brown SCL	27-37	10YR 5/6 yellowish brown SC			Negative
	5-1	0-24	10YR 4/3 brown SCL	24-34	10YR 4/4 dark yellowish brown SC (hydric)					Negative
	5-5	0-16	10YR 4/4 dark yellowish brown SL	16-30	2.5Y 6/4 light yellowish brown SC mottled with 10YR 5/6 yellowish brown SC					Negative
	9-2	0-16	10YR 4/2 dark grayish brown SL	16-27	2.5Y 6/4 light yellowish brown S	27-39	10YR 5/6 yellowish brown SC			Negative
	10-3	0-8	10YR 4/4 dark yellowish brown SL	8-30	10YR 5/6 yellowish brown SC					Negative
	15-1	0-13	10YR 4/4 dark yellowish brown SL	13-29	2.5Y 6/4 light yellowish brown SL	29-39	10YR 6/6 brownish yellow SC			Negative
	19-1	0-6	10YR 4/4 dark yellowish brown SL with dense gravels	6-22	2.5Y 6/4 light yellowish brown with gravels	22-32	10YR 5/6 yellowish brown SC			Negative
	20-3	0-12	10YR 4/3 brown SL	12-24	2.5Y 5/6 light olive brown SC	24-34	7.5 YR 6/6 reddish yellow SC (wet)			Negative
	21-2	0-17	10YR 4/4 dark yellowish brown SL	17-30	10YR 6/8 brownish yellow S	30-40	10YR 5/6 yellowish brown SC			Negative
	23-4	0-12	10YR 3/2 very dark grayish brown SL	12-26	10YR 6/6 brownish yellow SL	26-38	10YR 6/8 brownish yellow SCL			Negative
	23-6	0-4	10YR 3/2 very dark grayish brown SL mottled with 10YR 6/8 brownish yellow SL (wet)	4-30	10YR 6/8 brownish yellow SCL (wet)					Negative

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

	24-1	0-19	10YR 3/2 very dark grayish brown SL	19-30	10YR 6/8 brownish yellow SC (wet)					Negative
	26-1	0-8	10YR 4/3 brown SL	8-14	2.5Y 6/6 olive yellow SCL	14-23	2.5Y 4/4 olive brown SCL	23-33	2.5Y 5/6 light olive brown SC	Negative
	26-3	0-16	2.5Y 2.5/1 black SL	16-37	2.5Y 5/4 light olive brown SCL (wet)					Negative
	27-2	0-17	10YR 5/8 yellowish brown SL	17-28	10YR 5/2 grayish brown SCL	28-38	10YR 5/6 yellowish brown SC			Negative
	30-12	0-27	10YR 3/2 very dark grayish brown SL	27-37	10YR 3/3 dark brown SC (hydric)					Negative
	31-2	0-16	10YR 4/3 brown SL	16-30	2.5Y 5/6 light olive brown SC mottled with 2.5Y 5/2 grayish brown and 7.5YR 5/8 strong brown (hydric)					Negative
	31-12	0-11	2.5Y 4/2 dark grayish brown SL	11-30	2.5Y 5/1 gray SC mottled with 2.5Y 5/6 light olive brown SC and 7.5YR 5/8 strong brown SC (hydric)					Negative
	33-1	0-10	10YR 6/6 brownish yellow SL	10-19	10YR 3/3 dark brown SL	19-30	10YR 5/6 yellowish brown SC			Negative
	33-2	0-19	10YR 3/3 dark brown SL	19-26	10YR 7/4 very pale brown SL	26-36	10YR 5/6 yellowish brown SC			Negative
	33-9	0-20	10YR 6/6 brownish yellow SL	20-30	10YR 6/6 brownish yellow SC (hydric)					Negative
	37-3	0-12	10YR 3/3 dark brown SL	12-24	10YR 6/6 dark brown S	24-34	10YR 5/6 yellowish brown SC			Negative
	42-4	0-9	10YR 4/4 dark yellowish brown SL	9-30	10YR 6/6 dark brown S	30-40	10YR 5/6 yellowish brown SC (wet)			Negative
	45-1	0-10	10YR 4/4 dark yellowish brown SL	10-26	10YR 6/6 brownish yellow S	26-36	10YR 7/3 very pale brown SC (hydric)			Negative
	48-2	0-12	10YR 4/3 brown SL	12-20	2.5Y 5/6 light olive brown SCL	20-32	2.5Y 6/6 olive yellow SC			Negative
	48-6	0-9	10YR 4/1 dark gray SL	9-14	2.5Y 5/6 light olive brown SCL	14-27	2.5Y 6/6 olive yellow SC			Negative
	48-8	0-11	10YR 3/1 very dark gray SL	11-21	10YR 4/1 dark gray SL	21-31	10YR 5/2 grayish brown SC mottled with 7.5YR 5/8 strong brown (hydric)			Negative
	50-11	0-14	10YR 4/4 dark yellowish brown SL	14-30	2.5Y 6/4 light yellowish brown SL	30-44	10YR 5/8 yellowish brown SCL			Negative
	53-3	0-12	10YR 3/2 very dark grayish brown SL	12-30	2.5Y 5/4 light olive brown SCL	30-40	10YR 5/6 yellowish brown SC			Negative
	59-6	0-16	10YR 3/2 very dark grayish brown SC	16-30	2.5Y 5/4 light olive brown SCL mottled with 10YR 6/8 brownish yellow SC					Negative
	61-9	0-13	10YR 6/1 gray SL	13-26	2.5YR 6/6 olive yellow SL (wet)					Negative
	61-13	0-12	10YR 5/2 grayish brown SL	12-20	2.5Y 7/6 yellow SCL	20-32	2.5Y 6/4 light yellowish brown SC			Negative
	66-1	0-13	2.5Y 5/2 grayish brown SL	13-24	2.5Y 5/6 light olive brown SCL	24-47	2.5Y 6/6 olive yellow SC			Negative
	68-3	0-11	2.5Y 5/2 grayish brown SL	11-23	2.5Y 5/6 light olive brown SCL	23-40	2.5Y 6/4 light yellowish brown SC			Negative
	72-2	0-14	2.5Y 5/2 grayish brown SL	14-34	2.5Y 6/6 olive yellow SCL	34-43	2.5Y 7/4 pale yellow SC			Negative
	75-5	0-20	10YR 4/4 dark yellowish brown SL	20-37	10YR 8/2 very pale brown SC mottled with 10YR 5/8 yellowish brown SC					Negative

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

General Shovel Tests - Seg. F	1-1	0-13	10YR 4/1 dark gray SCL	13-24	10YR 5/2 grayish brown SC mottled with 7.5YR 5/8 strong brown (hydric)					Negative
	6-2	0-20	10YR 3/2 very dark grayish brown	20-27	10YR 5/2 grayish brown SC mottled with 7.5YR 5/8 strong brown (hydric)					Negative
	6-4	0-16	10YR 3/2 very dark grayish brown SCL	16-28	10YR 5/6 yellowish brown SC mottled with 2.5Y 5/4 SC					Negative
	7-1	0-18	10YR 4/4 dark yellowish brown SL	18-37	10YR 6/4 light yellowish brown SL	37-47	10YR 5/6 yellowish brown SC			Negative
	10-4	0-16	2.5Y 4/4 olive brown SL	16-27	2.5Y 6/4 light yellowish brown SCL	27-37	2.5Y 6/6 olive yellow SC			Negative
	11-1	0-20	10YR 4/4 dark yellowish brown SL	20-40	10YR 5/2 grayish brown SC mottled with 7.5YR 5/8 strong brown (hydric)					Negative
General Shovel Tests - Seg. G	1-6	0-7	10YR 4/4 dark yellowish brown SL	7-15	2.5Y 6/4 light yellowish brown SL	15-30	10YR 5/8 yellowish brown SCL			Negative
	2-1	0-11	2.5Y 5/4 light olive brown SL	11-26	2.5Y 6/4 light yellowish brown SCL	26-35	2.5Y 6/8 olive yellow SC			Negative
	2-12	0-13	2.5Y 5/4 light olive brown SL	13-32	2.5Y 6/6 olive yellow SC	32-45	10YR 5/8 yellowish brown SC			Negative
	3-2	0-8	10YR 4/4 dark yellowish brown SL	8-18	10YR 5/3 brown S	18-30	2.5Y 5/6 light olive brown SC			Negative
	3-14	0-12	10YR 4/4 dark yellowish brown SL	12-50	10YR 6/6 brownish yellow S with gravels	50-60	10YR 5/6 yellowish brown SL			Negative
	7-2	0-17	10YR 4/4 dark yellowish brown SL	17-34	10YR 6/6 brownish yellow S	34-44	10YR 6/4 light yellowish brown SC			Negative
	8-1	0-15	10YR 4/3 brown SL	15-20	2.5Y 6/4 light yellowish brown SCL	20-30	10YR 5/8 yellowish brown SC			Negative
	8-11	0-17	2.5Y 5/4 light olive brown SL	17-25	2.5Y 6/6 olive yellow SCL	25-36	2.5Y 6/8 olive yellow SC			Negative
	9-4	0-10	10YR 3/2 very dark grayish brown SL	10-18	10YR 4/4 dark yellowish brown SL	18-32	10YR 5/8 yellowish brown SCL			Negative
General Shovel Tests - Seg. H	1-2	0-11	10YR 3/2 very dark grayish brown SL	11-42	2.5Y 5/4 light olive brown SCL	42-53	10YR 5/6 yellowish brown SC			Negative
	2-2	0-14	10YR 3/2 very dark grayish brown SL	14-23	10YR 5/2 grayish brown SCL	23-34	2.5Y 6/6 olive yellow SC			Negative
	2-6	0-12	10YR 3/2 very dark grayish brown SL	12-23	10YR 6/4 light yellowish brown SCL	23-39	2.5Y 6/8 olive yellow SC			Negative
	3-3	0-12	10YR 4/3 brown SL	12-20	2.5Y 6/4 light yellowish brown SL	20-30	10YR 5/8 yellowish brown SCL			Negative
	4-5	0-4	2.5Y 7/1 light gray SL	4-12	10YR 3/2 very dark grayish brown SL	12-23	2.5Y 6/4 light yellowish brown SCL	23-36	2.5Y 6/6 olive yellow SC	Negative
	4-9	0-12	10YR 3/2 very dark grayish brown SL	12-33	10YR 6/6 brownish yellow SC mottled with 10YR 8/8 yellow SC (hydric)					Negative
	5-5	0-14	10YR 4/2 dark grayish brown SL	14-28	2.5Y 5/4 light olive brown SL	28-38	10YR 5/6 yellowish brown SC			Negative
	5-7	0-20	10YR 3/2 very dark grayish brown SCL	20-40	10YR 6/6 brownish yellow SC mottled with 10YR 8/8 yellow SC (hydric)					Negative
	8-5	0-20	10YR 3/2 very dark grayish brown SL	20-24	10YR 5/4 yellowish brown SCL	24-34	10YR 5/2 grayish brown SC mottled with 7.5YR 5/8 strong brown (hydric)			Negative
	8-9	0-10	10YR 4/2 dark grayish brown SL	10-28	2.5Y 5/4 light olive brown SCL	28-38	10YR 8/8 yellow SC			Negative

**APPENDIX E: SELECTED SHOVEL TEST PROFILES**

	10-3	0-14	10YR 4/2 dark grayish brown SL	14-28	10YR 5/8 yellowish brown SC						Negative
	11-8	0-15	2.5Y 5/1 gray SCL	15-22	2.5Y 5/3 light olive brown SCL	22-28	2.5Y 6/3 light yellowish brown SC	28-43	2.5Y 6/4 light yellowish brown SC		Negative
	14-1	0-9	10YR 4/4 dark yellowish brown SL	9-25	Hydric						Negative
General Shovel Tests - Seg. I	1-5	0-9	10YR 4/2 dark grayish brown SL	9-20	10YR 5/4 yellowish brown SCL	20-31	2.5Y 6/6 olive yellow SC				Negative
	3-4	0-10	10YR 4/2 dark grayish brown SCL mottled with 10YR 5/8 yellowish brown SCL	10-33	2.5Y 5/4 light olive brown SCL	33-43	10YR 6/6 brownish yellow SC (wet)				Negative
	4-3	0-9	10YR 4/4 dark yellowish brown SL	9-27	2.5Y 6/4 light yellowish brown SL	27-37	10YR 5/8 yellowish brown SCL				Negative
	5-3	0-14	10YR 4/2 dark grayish brown SL	14-32	2.5Y 6/4 light yellowish brown SCL	32-42	10YR 6/6 brownish yellow SC				Negative
	5-7	0-15	10YR 3/2 very dark grayish brown SCL	15-37	10YR 5/8 yellowish brown SC						Negative
	6-6	0-9	10YR 4/2 dark grayish brown SL	9-28	2.5Y 6/8 olive yellow SCL	28-40	10YR 6/8 brownish yellow SC				Negative
	7-3	0-13	10YR 4/4 dark yellowish brown SL	13-24	10YR 5/6 yellowish brown SCL	24-36	10YR 5/8 yellowish brown SC				Negative
	7-6	0-12	10YR 3/2 very dark grayish brown SL	12-20	2.5Y 6/4 light yellowish brown SCL mottled with 10YR 5/8 yellowish brown SCL	20-30	10YR 5/6 yellowish brown SC				Negative
	9-7	0-8	10YR 4/2 dark grayish brown SL	8-28	2.5Y 6/8 olive yellow SCL	28-40	2.5Y 6/6 olive yellow SC				Negative
	10-2	0-8	10YR 4/4 dark yellowish brown SCL	8-33	2.5Y 6/4 light yellowish brown SCL	33-45	10YR 6/6 brownish yellow SC				Negative
	15-4	0-18	10YR 3/2 very dark grayish brown SCL	18-30	2.5Y 6/4 light yellowish brown SCL	30-40	10YR 6/6 brownish yellow SC				Negative
	16-4	0-8	10YR 4/4 yellowish brown SL	8-29	2.5Y 6/4 light yellowish brown SCL	29-39	10YR 5/6 yellowish brown SC				Negative
	24-1	0-11	10YR 4/2 dark grayish brown SL	11-25	2.5Y 5/4 light olive brown SCL	25-35	2.5Y 6/8 olive yellow SC				Negative
	28-1	0-10	10YR 3/2 very dark grayish brown SL	10-20	2.5Y 5/4 light olive brown SCL	20-30	10YR 5/8 yellowish brown SC				Negative
	28-9	0-10	10YR 3/2 very dark grayish brown SL	10-23	10YR 6/4 light yellowish brown SCL	23-33	10YR 5/8 yellowish brown SC				Negative
29-7	0-12	10YR 4/2 dark grayish brown SL	12-29	2.5Y 6/6 olive yellow SCL	29-40	10YR 5/6 yellowish brown SC				Negative	
General Shovel Tests - Seg. J	1-1	0-14	10YR 4/2 dark grayish brown SL	14-28	2.5Y 5/4 light olive brown SCL	28-42	2.5Y 6/6 olive yellow SC				Negative
	1-6	0-9	10YR 4/3 brown SL	9-26	2.5Y 5/4 light olive brown SCL	26-36	10YR 6/6 brownish yellow SC				Negative
	2-3	0-13	10YR 4/4 dark yellowish brown SL	13-29	2.5Y 6/4 light yellowish brown SL	29-39	10YR 5/6 yellowish brown SCL				Negative
	2-8	0-7	10YR 4/4 dark yellowish brown SL	7-30	10YR 5/6 SCL						Negative
General Shovel Tests - Seg. K	J-1	0-9	10YR 4/4 dark yellowish brown SL	9-25	2.5Y 6/4 light yellowish brown SL	25-35	10YR 5/6 yellowish brown SCL				Negative
	J-5	0-15	10YR 4/2 dark grayish brown SL	15-26	2.5Y 5/4 light olive brown SCL	26-36	2.5Y 6/8 olive yellow SC				Negative

NASIS Soils: **COS**=Coarse Sand, **S**=Sand, **FS**=Fine Sand, **VFS**=Very Fine Sand, **LCOS**=Loamy Coarse Sand, **LS**=Loamy Sand, **LFS**=Loamy Fine Sand, **LVFS**=Loamy Very Fine Sand, **COSL**=Coarse Sandy Loam, **COSC**=Coarse Sandy Clay, **SL**=Sandy Loam, **FSL**=Fine Sandy Loam, **VFSL**=Very Fine Sandy Loam, **L**=Loam, **SIL**=Silt Loam, **SI**=Silt, **SCL**=Sandy Clay Loam, **CL**=Clay Loam, **SICL**=Silty Clay Loam, **SC**=Sandy Clay, **SIC**=Silty Clay, **C**=Clay