

## EXHIBIT 17- CULTURAL RESOURCE SURVEY

# A CULTURAL RESOURCE SURVEY OF THE PROPOSED 700-ACRE DEVELOPMENT OF ENGLAND AIRPARK SITE W-1 IN RAPIDES PARISH, LOUISIANA



by  
Jay W. Gray, RPA, Benjamin J. Bilgri,  
Jeremy Pye, and Paul D. Bundy, RPA

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Prepared for

England Economic &  
Industrial Development  
District

Pan American Engineers—  
Alexandria, Inc.



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Prepared by



Kentucky | West Virginia | Ohio  
Wyoming | Illinois | Indiana | Louisiana | Tennessee  
New Mexico | Virginia | Colorado



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# ABSTRACT

Cultural Resource Analysts, Inc., personnel completed a records review and cultural resource survey for a 283.4 ha (700.0 acres) development in Rapides Parish, Louisiana. This study was conducted to meet the requirements of an Industrial Site Certification from Louisiana Economic Development, which requires an archaeological assessment as part of the review process for the certification. The records review for the project was conducted on November 27, 2012. Fieldwork for this project was conducted between November 29 and December 28, 2012. This tract is located to the west of the existing Alexandria International Airport in England Airpark, approximately 11.5 km (7.1 mi) west of Alexandria, Louisiana.

The records review consisted of a file search using information provided by the Louisiana Office of Cultural Development Division of Archaeology to identify cultural resources or cultural resource investigations documented in the vicinity of the project area. The records review indicated that one previous archaeological survey overlaps the project area and resulted in the recordation of two archaeological sites that are within the current project area; within a 1 mi radius of the project area two additional archaeological sites have been previously documented and three surveys have been conducted.

The field investigation consisted of an intensive pedestrian survey supplemented with screened shovel tests. Shovel tests were in intervals of 30 m and 50 m in areas of high and low site probability, respectively. During the survey, both of the previously recorded sites, 16RA692 and 16RA703 were relocated, and this work resulted in the expansion of the western boundary of the latter. In addition, three newly recorded archaeological sites were located (16RA1504–16RA1506), along with four structures, one isolated find, and additional non-site localities.

Re-examination of the previously recorded portions of Sites 16RA692 and 16RA703 indicated the sites have not been significantly disturbed in the intervening years since they were originally recorded, and both appear to retain intact cultural deposits. Site 16RA692 is a nineteenth-century plantation house and twentieth-century house site, and site 16RA703 is a twentieth-century tenant farm quarters area, and both are currently considered eligible for listing on the National Register of Historic Places. Based on the results of our investigation, we agree with the findings of the previous research for both sites; they should be avoided during development, or if they cannot be avoided they should receive additional archaeological testing to assess their eligibility for listing in the National Register of Historic Places and mitigation of impacts as necessary.

None of the newly recorded sites appear to have the potential to yield any significant archaeological data, and as a result are not recommended for additional archaeological work. The newly recorded sites consist of two historic artifact scatters that lack contextual integrity and one location consisting of silo ruins that are not likely to yield any significant data. Additionally, the four structures and other non-site localities are recommended not eligible for listing in the National Register of Historic Places, and no additional archaeological work is recommended.



# ACKNOWLEDGMENTS

Cultural Resource Analysts, Inc., would like to thank Thomas David of Pan American Engineers – Alexandria, Inc., for selecting us to conduct this study. Kyle Randall facilitated coordination with the England Airport Authority during fieldwork, and his efforts are greatly appreciated. The staff at the Louisiana Division of Archaeology provided assistance with the issuance of site numbers and catalog numbers for the sites visited during the project.





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# Chapter 1. Introduction

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Cultural Resource Analysts, Inc. (CRA), personnel completed a file search on November 27, 2012, and fieldwork between November 29 and December 28, 2012, for the proposed industrial development of England Airpark Site W-1 in Rapides Parish, Louisiana (Figure 1.1). This file search and cultural resource survey were conducted at the request of Thomas C. David, Jr., President of Pan American Engineers–Alexandria, Inc. The proposed project area consisted of approximately 283.4 ha (700.0 acres) to the west of the existing Alexandria International Airport (AEX) in England Airpark (Figure 1.2). This location is approximately 11.5 km (7.1 mi) west of Alexandria, Louisiana.



Figure 1.1. Map showing the location of Rapides Parish in the state of Louisiana.

The archaeological file search, using information provided by the Louisiana Office of Cultural Development Division of Archaeology, was conducted by Benjamin J. Bilgri. Fieldwork for the project was supervised by Benjamin J. Bilgri and Paul D. Bundy, and the field crew consisted of Charlie Burton, Jenny Lee, Jeremy Mangum, Justin Morrison, and Joey Rantz.

## Purpose of Study

This study was conducted to meet the requirements of an Industrial Site Certification from Louisiana Economic Development (LED). This certification requires an archaeological assessment as part of the review process for the certification. The purpose of this assessment was to locate, describe, evaluate, and to make appropriate recommendations for the future treatment of any historic or prehistoric archaeological properties that may be affected by proposed construction activities.

## Project Description

Pan American Engineers–Alexandria, Inc., seeks to receive an Industrial Site Certification through LED for anticipated industrial development of the England Airpark Site W-1. The proposed development may include the entire project area, but at present the plans for development and schedule are not finalized.

The project area consisted of a combination of cultivated fields with excellent surface visibility, airstrips and adjacent grass-covered areas, and some wooded areas. The project area was considered to have varying levels of site probability based on distance to water and distance to mapped historic structures and roads (Figure 1.3).

## Summary of Findings

The records review, which was conducted using data available from the Louisiana State Historic Preservation Office (SHPO), indicated that a small tract in the southern portion of the project area had been previously surveyed, and two previously recorded archaeological sites existed in the project area.

Fieldwork included a revisit to Sites 16RA692 and 16RA703, leading to the expansion of the western boundary of the latter, and the discovery of three newly recorded historic sites. The two previously

recorded sites are recommended for avoidance if possible or for data recovery if they cannot be avoided during development of the England Airpark Site W-1 property. This recommendation is in part based on the previous work conducted at these sites by Wessel et al. (1993), and on data gathered during our field investigation. Both sites retain a high level of contextual integrity and are have a fair likelihood of producing previously unattained archaeological data. The three newly recorded sites (16RA1504–16RA1506), the isolated find, the four standing structures, and the other non-site localities are all recommended as not eligible for listing in the National Register of Historic Places (NRHP) due to their limited research potential.

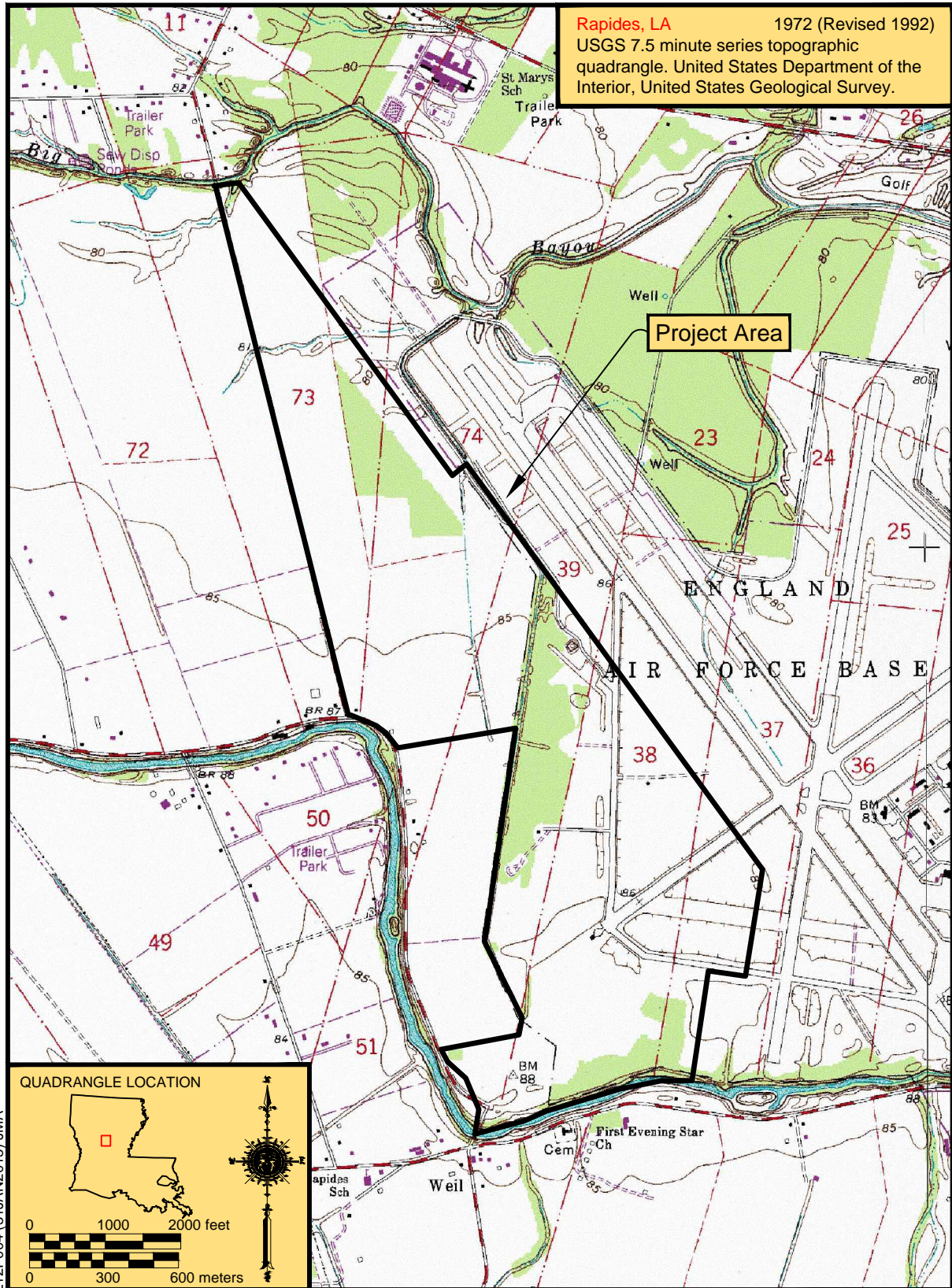


Figure 1.2. Topographic map showing the location of the project area.

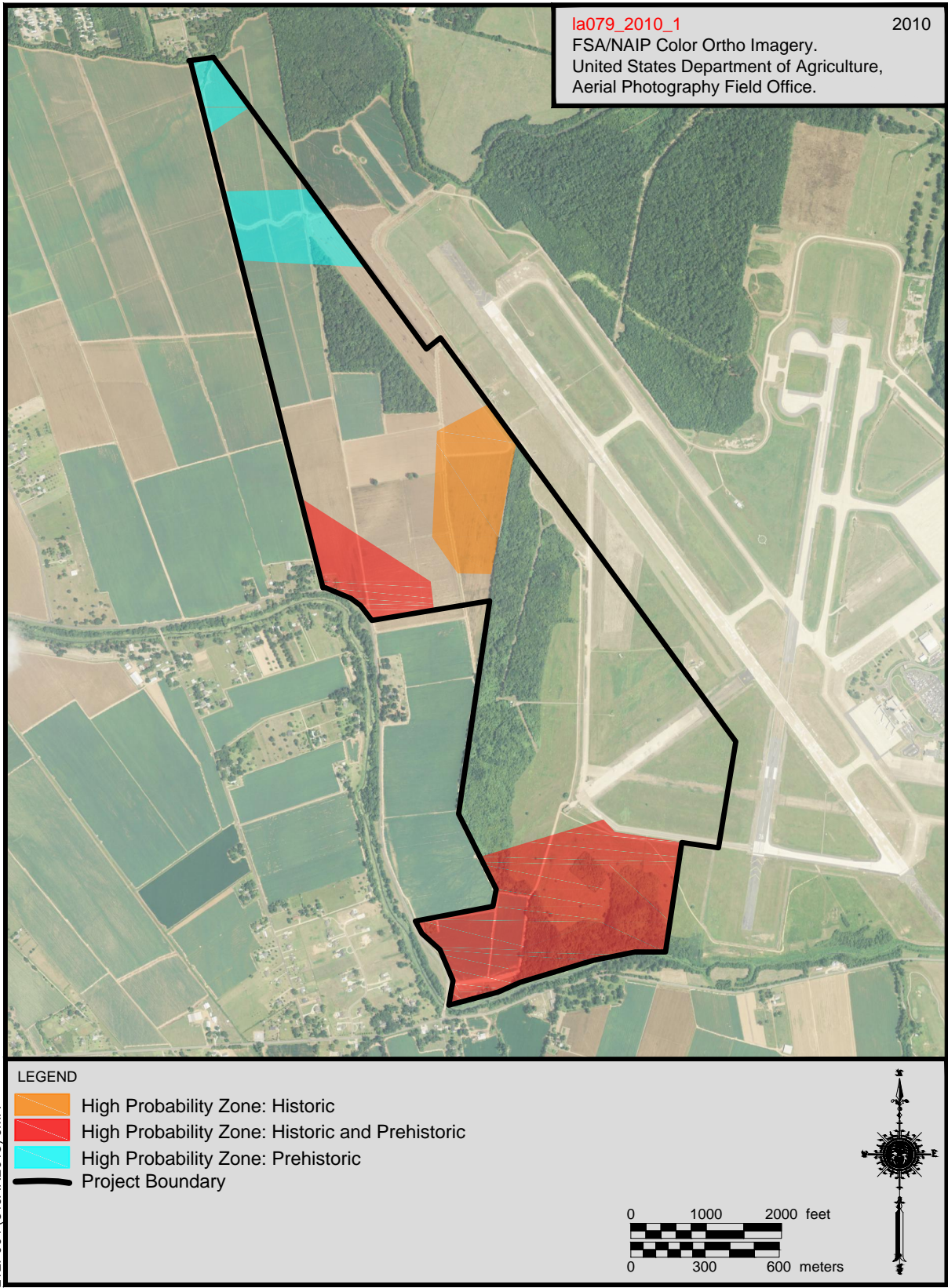


Figure 1.3. Project location depicted on the aerial map showing zones of high and low probability for containing historic and prehistoric resources.

## Chapter 2. Environmental Setting

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This section of the report provides a description of the modern environment and considers those aspects of the physical environment that may have influenced the location and methods for finding archaeological sites. The discussion of the modern environment specifically provides information regarding the physiography, geomorphology, soils, vegetation, and climate.

### Physiography

The project area is located in central Louisiana, in Rapides Parish. In terms of regional physiography, Louisiana is within the Coastal Plain Physiographic Province, which consists of a geosyncline of Mesozoic and Cenozoic sediments that dips toward the Gulf of Mexico (Murray 1961). Located in central Louisiana, Alexandria and most of Rapides Parish are within the Red River Alluvial Plain (Yodis et al. 2003).

Rapides parish covers an area of 871, 467 acres, with 17,601 acres of that total consisting of water sources, including various lakes, bayous, and the Red River (Kerr et al. 1980). The project area is 23 m (75 ft) above mean sea level (AMSL) and is located between two relict channels of the Red River, known as Big Bayou and Bayou Rapides, approximately 2 km south of the Red River's current channel (Pearson and Hunter 1993b).

There are two environmental classification schemes that are important to understanding the physical setting of the project area. From a geological perspective, Kerr et al. (1980) note that Rapides Parish contains four primary physiographic zones: 1) nearly level Red River alluvial plain; 2) nearly level upland drainage ways; 3) gently sloping uplands; and 4) strongly sloping uplands. Daigle et al. (2006), however, use the term "ecoregion" to refer to "areas of general similarity in ecosystems," as well as in environmental characteristics and resources (biotic and abiotic). Pertinent characteristics in this classification scheme include not only geology

and physiography, but also vegetation, climate, soils, land use, wildlife, and hydrology. Much of Rapides Parish lies within three primary ecoregions: 1) Pleistocene fluvial terraces; 2) Southern tertiary uplands; and 3) Red River bottomlands. Following both of these classification schemes, the project area is located within the Red River alluvial floodplain (Kerr et al. 1980) and the Red River bottomlands (Daigle et al. 2006).

### Geomorphology

The Red River Bottomlands contain the floodplain and low alluvial terraces of the Red River. This area is relatively flat with natural levee deposits, the meandering Red River channel, oxbow lakes, meander scars, ridges, and backswamps. The nature of the soils that contain the river channel contribute to its meandering habit. Historically, the Red River was more commonly turbid when compared to other rivers in the region due to its high silt load. River development, specifically the construction of the lock and dam system, has diminished the silt load (Daigle et al. 2006). The rapid deposition of sediment can result in the quick development of point bars and cutbank erosion. The destruction of land along the river due to erosion and entrenchment commonly disturbs trees and other vegetation, and historically contributed to the development of large rafts which often built up and provided yet another catalyst to a change in the river channel and the development of backswamp lakes (Pearson and Hunter 1993a).

Some scholars have argued that approximately 1700 years B.P. the Red River altered its course through Monela Gap near Marksville, Louisiana, resulting in the draining of backswamp lakes in the area, the entrenchment of the river channel, and development of a knockpoint, or a point of change in river channel gradient. The knockpoint migrated along the river channel until it hit a Miocene siltstone ridge at

Alexandria. The ridge was removed by the U.S. Army Corps of Engineers in 1892 and 1893. The continued resulting entrenchment, coupled with the draining of backswamp lakes from the removal of log jams and rafts from above the Alexandria area beginning in the mid-1870s, have greatly altered the geomorphology of the region (Pearson and Hunter 1993a). As mentioned previously, the two most prominent geomorphic features near the project area are Bayou Rapides and Big Bayou, both relict courses of the Red River. The highest segments of the natural levees along Bayou Rapides are 27 m AMSL, while the backswamp areas lay at 24 m AMSL. Pearson and Hunter (1993a) note that Bayou Rapides appears at one point to crosscut Big Bayou. This, along with the heavy amount of channel fill in Big Bayou compared to Bayou Rapides suggests that Big Bayou was occupied by the Red River flow at an earlier date than Bayou Rapides (Pearson and Hunter 1993b).

## Soils

The Holocene alluvium associated with the Red River Bottomlands consists of “somewhat poorly drained Vertisols and Entisols with clayey and loamy, reddish-brown, neutral to calcareous surfaces” (Daigle et al. 2006). The project area is mapped as two primary soil units: the Moreland series and the Norwood series. Thirty-seven percent of the project area contains Moreland clay, 0–1 percent slope (MnA). This soil is nearly level, somewhat poorly drained, has high natural fertility, and slow runoff. MnA dominates the Red River alluvial floodplain with a typical pedon consisting of dark reddish-brown (5YR 3/2) clay from 0 to 10 cm (0 to 4 in), dark reddish-brown (5YR 3/3) clay from 10 to 30 cm (4 to 12 in), dark reddish-brown (5YR 3/4) silty clay of variable quality and characteristics from 30 to 127 cm (12 to 50 in), and dark reddish-brown (5YR 4/4) silty clay from 127 to 163 cm (50 to 64 in). The project area contained two Norwood series soil units: Coughatta silt loam, 0–1 percent slope (Nd), and the Coughatta silty clay loam, 0–1 percent slope (Nw). These soils occupy

39.2 percent and 23.6 percent of the project area, respectively. Both Nd and Nw are natural levee soils in the Red River bottomlands and are generally well drained, compared to the Moreland series, and highly fertile. Both have a similar soil profiles with the one difference being that Nw has a silty clay loam surface layer. The typical Norwood pedon consists of reddish-brown (5YR 5/4) silt loam from 0 to 10 cm (0 to 4 in), reddish-brown (5YR 4/4) silt loam from 10 to 41 cm (4 to 16 in), reddish-brown (5YR 5/4) silt loam of varying characteristics from 41 to 84 cm (16 to 33 in), reddish-brown (5YR 4/4) silty clay loam from 84 to 104 cm (33 to 41 in), reddish-brown (5YR 4/4) silt loam from 104–124 cm (41 to 49 in), reddish-yellow (5YR 6/6) very fine sandy loam from 124 to 140 cm (49 to 55 in), reddish-brown (5YR 4/4) silty clay loam from 140 to 170 cm (55 to 67 in), and reddish-brown (5YR 4/4) silt loam from 170 to 193 cm (67 to 76 in) (Kerr et al. 1980).

## Vegetation

The Red River Bottomlands ecoregion, where the project area is situated, originally contained abundant hardwood forests (Pearson and Hunter 1993a). Species contained within these forests included water oak, sweetgum, willow oak, overcup oak, Nuttall oak, honey locust, water locust, river birch, red maple, green ash and American elm (Daigle et al. 2006). In the days of early European settlement, however, the natural woodlands were largely cleared to make room for cropland and pasture (Daigle et al. 2006; Pearson and Hunter 1993a). Farming quickly became the principal interest of the settlers in Rapides Parish, who had acquired large plots of land under Spanish land grants. The primary early crops as reported by Smies et al. (1918) were cotton and corn and the plantations in the parish became large and prosperous, some consisting of thousands of acres. The financial demoralization that followed the Civil War resulted in the abandonment of many of the plantations and cultivated lands. African-American sharecroppers who returned to the land grew mostly cotton; however, the industry was hit



hard in the late nineteenth century by severe infestations of the boll weevil and again by a major flood of the Red River 1908 (Smies et al. 1918). Farming rebounded later in the twentieth century and grew to include such principal crops as soybeans, cotton, corn, wheat, sugarcane, and even rice in some areas (Daigle et al. 2006; Kerr et al. 1980).

## Climate

Rapides Parish has a humid, subtropical climate. There is little fluctuation in climate throughout the parish, and it is characterized by relatively long and hot summers, short and mild winters, and abundant rainfall. Summer temperatures typically range from 7 to 31 degrees C (45 to 90 degrees F), with an average of 27.4 degrees C (81.3 degrees F). Temperatures sometimes exceed 38 degrees C (100 degrees F), such as in July of 1901 when a temperature of 43 degrees C (109 degrees F) was recorded in Alexandria. This warm summer pattern typically persists from late April or early May through October. Winters are generally mild with a mean temperature of about 10 degrees C (50 degrees F), although temperatures have been known to rise to around 30 degrees C (mid-80s F) and even drop to 16 degrees C (3 degrees F), a temperature which was reported in Alexandria in February of 1899. Between October and early April temperatures have been known to drop below freezing; however, cold fronts are often short lived and temperatures rarely stay at or below freezing throughout the day (Kerr et al. 1980; Smies et al. 1918).

The climate in Rapides Parish is heavily affected by warm, moist air traveling north from the Gulf of Mexico and meeting cooler air moving south from the continent. This movement of air masses contributes to a relatively high level of precipitation. Kerr et al. (1980) indicate that precipitation occurs two out of every seven days throughout much of the year, most commonly taking the form of short showers occurring primarily during cooler months. Thunderstorms are known to occur in any season, but are recorded more frequently in July and August. Snow has been known to fall December through February, but

is so infrequent that Kerr et al. (1980) note that it is an “insignificant” contributor to annual precipitation.

## Description of the Project Area

The England Airpark Site W-1 project area is located approximately 11.5 km (7.1 mi) west of downtown Alexandria, Louisiana. The project area encompasses a contiguous irregular polygon, measuring roughly 3.9 km (2.4 mi) from north to south and 2.3 km (1.4 mi) from west to east. Situated within the southwest quadrant of AEX and immediately outside the airport perimeter to the northwest, west, and southwest, the England Airpark Site W-1 survey area covers approximately 283.4 ha (700.0 acres) (Figures 1.2 and 1.3). The project area is bounded to the west by Jimmy Brown Road, Bayou Rapides, an arbitrary boundary within a cotton field and Bayou Rapides Road; to the south by the north bank of Bayou Rapides, and to the east by an arbitrary boundary within a cotton field, the perimeter fence of AEX, and an arbitrary boundary within and to the south of the airport. The northern tip of the project area lies along Jimmy Brown Road roughly 1.4 km (.9 mi) south of Interstate 49 and 4.0 km (2.5 mi) south of the Red River.

Two intermittent streams traverse the northern portion of the project area. One streambed traverses the project area from southwest to northeast approximately 100 m (328 ft) south of the area’s northern tip, eventually merging with Big Bayou to the north. The second streambed crosses the project area from west to east approximately 650 m (2,133 ft) south of the area’s northern tip. A dirt field road parallels this streambed, which eventually flows into drainage ditches outside the airport perimeter fence. Both of the streambeds were dry at the time of the survey, but they represent long-term landscape features, being visible on topographic maps as early as 1941.

The majority of the project area was covered by fallow cotton fields at the time of the survey (Figure 2.1). The absence of any sort of ground cover (other than isolated remnants of the prior season's cotton crop) resulted in exceptional (greater than 90 percent) surface visibility. The agricultural fields within the project area are traversed by a network of dirt field roads, all running roughly north-south or east-west.

Approximately 60 percent of the project area is located in cotton fields, and more than half of the remaining portion lies within the perimeter fence of AEX. Vegetation in this area consists of low grass, and this portion of the project area had been modified by the addition of two paved taxiways running north-south and east-west and one paved runway running southwest-northeast. In addition, smaller paved roads connect several buildings of cinder block construction to the runway and taxiways. All structures, runways, and taxiways associated with the airport and in the project area were permanently decommissioned prior to the survey, and the

survey crew had full access to examine these portions of the project area.

The remainder of the project area is covered by a mixture of low grass, mixed deciduous forest, and a small portion of fallow cornfield just to the east of the point where Bayou Rapides meets the project area's western border. Near the southern border of the project area, previously recorded portions of Sites 16RA692 and 16RA703 are situated almost entirely within a forested area. Another forested area was surveyed to the west of the airport perimeter fence; it included dirt and gravel roads connecting three additional abandoned airport-related buildings of cinder block construction and a series of four dumps containing bulldozed material associated with airport activities. A gravel airport perimeter road runs north-south and east-west just outside the airport perimeter fence, connecting at its southwest corner to another gravel road that runs south and west to Bayou Rapides Road near the project area's southwestern corner.



Figure 2.1. Project area overview, view south

Aside from the roads and streams described above, disturbance observed in the project area appears to be the result of agricultural practices, as well as construction and land modification activities associated with airport operations. Portions of the project area within the airport perimeter fence have been extensively disturbed by these land modification activities. The survey strategies employed in these locations are discussed in the Methods chapter of this report.

As the Geomorphology and Soils sections summarize above, this area consists of broad and generally level bottomlands of the Red River that are well to somewhat poorly drained. Elevations in the project area vary by roughly 1.5 m (5.0 ft), from approximately 26 m (85 ft) AMSL in the southern and western portions of the project area near Bayou Rapides and within the airport, to roughly 24 m (80 ft) AMSL in the northern portions of the project area. The most visibly prominent topographic features within the project area are occasional natural drainages encountered within forested areas and those associated with the aforementioned intermittent streams in the northern portion of the project. Artificially elevated road beds are also slightly prominent visibly. Artificial drainage ditches are present along portions of Jimmy Brown Road, Bayou Rapides Road, and the airport perimeter fence.

Sediments throughout the project area generally consist of banded layers of loam, loamy clay, and clay. Shovel tests in the southern half of the project area typically contained more loam than those in the northern half, the latter containing a greater proportion of clay (possibly due to their proximity to the Red River).



## Chapter 3. Previous Research and Cultural Overview

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Prior to the initiation of fieldwork, a search of online records maintained by the SHPO determined that two previously recorded archaeological sites were situated within a small portion of the project area that had been surveyed along the southern boundary. The site forms for sites within and surrounding the project area were consulted to provide information concerning the types of archaeological resources that could be expected within the project area. A review of professional survey reports and records of archaeological sites for an area encompassing a 1 mi radius of the project area follows.

### Previous Cultural Resource Investigations

SHPO records indicated that four previous archaeological surveys (22-478, 22-497, 22-1664, and 22-2007) have been conducted within a 1 mi radius of the current project area. Each is discussed below.

#### Shreveport to Opelousas Expressway (22-478)

SHPO report number 22-478 documents work conducted by Northeast Louisiana University in 1978. The report details the findings of a phase I and II project conducted for a proposed north-south expressway stretching from Shreveport to Opelousas and was completed for Howard, Needles, Tammen, and Bergendoff. In total, 35 archaeological sites were recorded as a result of the survey, and 1 was recommended for avoidance. None of the recorded sites are within the 1 mi radius of the England Airpark Site W-1 tract (Heartfield et al. 1978a).

#### Shreveport to Opelousas Expressway, Alignment A (22-497)

SHPO report number 22-497 also documents work conducted by Northeast

Louisiana University in 1978. The report details the findings of archaeological work conducted within an amendment to the earlier phase I and II project of a proposed north-south expressway from Shreveport to Opelousas. The amendment consists of a 41.8 km (26.0 mi) realignment stretching from Alexandria to Boyce in Rapides Parish (Alignment A) and a 16.1 km (10.0 mi) realignment in Natchitoches Parish (Alignment B). This project was completed for Howard, Needles, Tammen and Bergendoff. The survey of Alignment A resulted in the recordation of three historic sites, none of which is located within the 1 mi radius of the England Airpark Site W-1 tract (Heartfield et al. 1978b).

#### England Air Force Base Survey (22-1664)

SHPO report number 22-1664 documents the findings of an archaeological survey conducted by Coastal Environments, Inc., The Earth Technology Corporation, and Tetra Tech, Inc. of England Air Force Base (AFB). The Defense Base Closure and Realignment Commission (DBCRA) recommended closure of the base in 1991, during which the U.S. Air Force was required to comply with the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the Archaeological Resources Protection Act (ARPA). The cultural resources work was conducted in 1992 and consisted of a pedestrian survey and associated archival research as well as subsurface shovel testing in the southwestern portion of the tract where subsurface deposits were deemed likely. The shovel tested area corresponds with the historic McNutt Plantation residence area and Weil property, both of which are depicted on the 1941 Boyce, Louisiana, 15' USGS Quadrangle map (see Map Data section below). The archaeological remains of these sites were identified during the field survey and were recorded as archaeological sites 16RA692 (McNutt Plantation) and 16RA703

(Weil property), and both were recommended for further work to test their eligibility for the NRHP. The Oak Isle Plantation (16RA704) and Ennis Memorial Cemetery were also identified during the survey to the east of the present project area within the area of the existing airfield. A portion of the Oak Isle Plantation site was recommended for additional archaeological testing, while the Ennis Memorial Cemetery was noted to have still been in use. The England AFB survey area encompasses the entire England Airpark Site W-1 tract, and the majority of the shovel tested area is within the Site W-1 tract (Wessel et al. 1993).

## JRTC Cultural Resources Assessment (22-2007)

SHPO report number 22-2007 documents a cultural resources assessment that was conducted in 1993 by Geo-Marine, Inc., for a proposed intermediate staging base and a forward operating location for the Joint Readiness Training Center (JRTC) of the U.S. Army. England Industrial Park, formerly England AFB, was one of three alternatives considered for the proposed development, and it was determined to have a greater likelihood than either Barksdale Air Force Base or Chennault Industrial Airpark to contain buried archaeological materials. Geo-Marine, Inc., found that no archaeological sites had been formally recorded at the time of their investigation, although the newly recorded historic sites from the England AFB survey were noted, and an actively used cemetery associated with the Oak Isle Plantation was known to exist within the southeastern corner of the property. Since the England AFB survey (Wessel et al. 1993) sites had not been filed with the Louisiana SHPO prior to the cultural resource assessment, these sites were not considered in the assessment; however, none of these sites overlapped the proposed development and would therefore not be impacted. No historic standing structures at England Industrial Park were found to be eligible for listing in the NRHP (Winchell 1993).

## Previously Recorded Archaeological Sites

SHPO records indicated that four archaeological sites (15RA692, 16RA703, 16RA704 and 16RA768) have been recorded within a 1 mi radius of the current project area (Figure 3.1). Each of the previously recorded sites is individually discussed below.

### 16RA692 (McNutt Plantation)

Site 16RA692 is within the southern extent of the England Airpark Site W-1 tract and consists of the main residence at the McNutt Plantation. This site was recorded during the 1992 England AFB Survey in an area where shovel tests were conducted due to the likelihood that the area contained subsurface archaeological remains (Wessel et al. 1993).

McNutt Plantation is an antebellum and post-Civil War plantation along Bayou Rapides. Archival research by Wessel et al. (1993) indicates that it was owned by Anderson McNutt, a Virginia planter, as early as 1829. In 1860, McNutt owned 94 slaves that were housed in 18 dwellings, and the plantation produced 400 bales of ginned (corn [sic]) cotton, although corn, potatoes, and sweet potatoes were planted and livestock were also raised. After McNutt's death in 1861, ownership of the plantation passed to his seven sisters none of whom lived in Alexandria, and a neighbor to the property, James Andrews leased the land. Control of the plantation land was in turn superseded by James Andrews's sons, John and James, upon his death in 1894. John built five tenant cabins on the property and at his death in 1920 owned 100 acres, while James owned 40 acres, and Elizabeth Taylor (presumably a daughter of James Andrews) owned 98 acres. After the death of the last of McNutt's sisters, the property entered into a sheriff's sale that forced the Andrews off the property, and in 1895 it belonged to Bernard Mayer. Upon his death in 1907 the property, described as consisting of 1,000 acres, was left to his wife and eight children. The McNutt plantation house is thought to have been standing upon the acquisition of the property by the City of Alexandria for the construction of the airfield in the 1940s (Wessel et al. 1993).

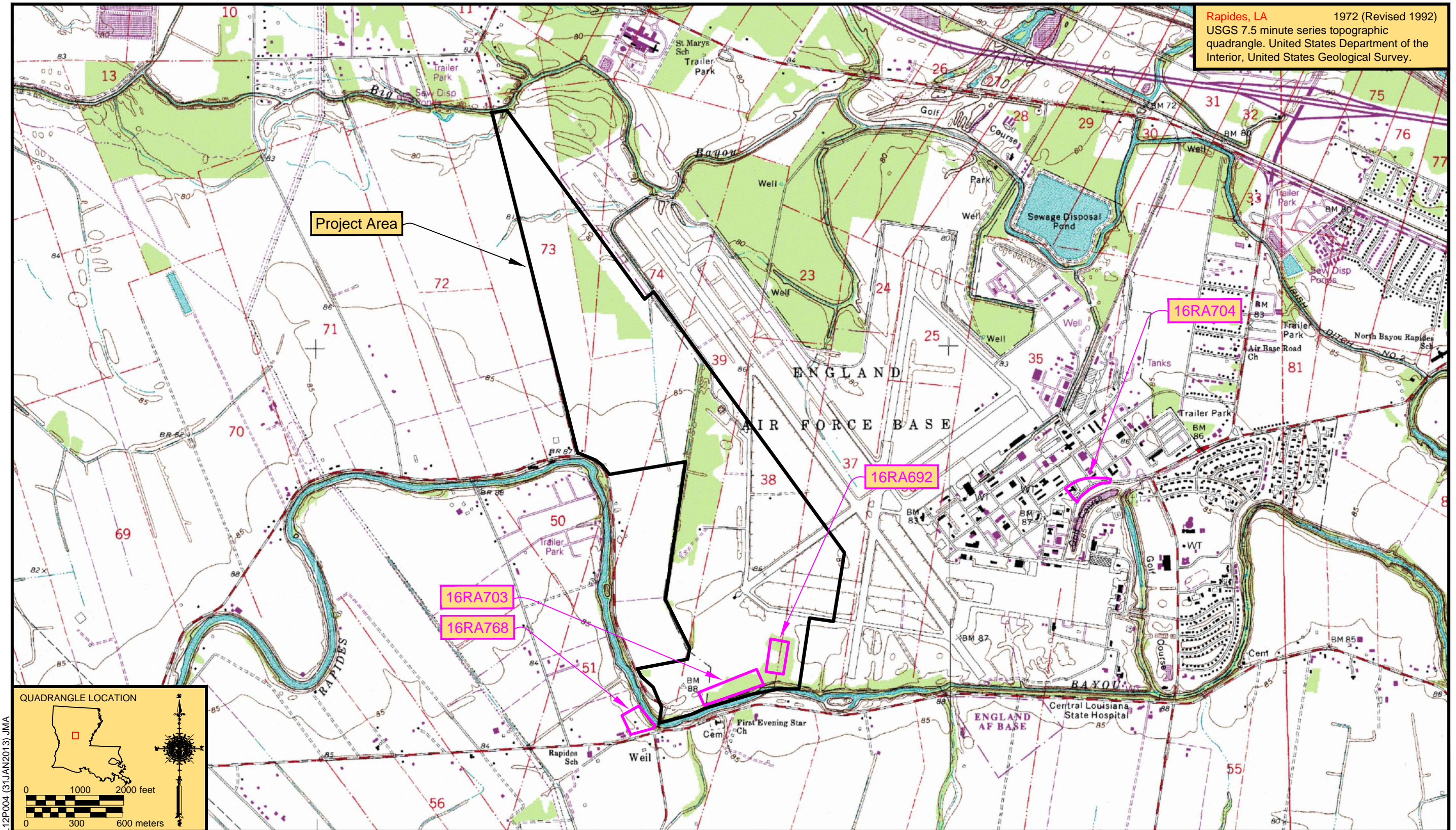


Figure 3.1. Topographic map showing the location of previously recorded sites within 1 mile of the project area (Taken from SHPO website).





The archaeological remains associated with this site include an artifact scatter containing architectural remains and domestic artifacts that suggest a date range of 1870–1920, and is currently thought to represent the main residence of the plantation. Intact midden and subsurface archaeological features were encountered during the investigation. Features include two trash-filled pits that were encountered in shovel tests, along with the midden deposit which extends from 5.0 to 25.0 cm (2.0 to 9.8 in) bgs over an area of approximately 105.0-x-45.0 m (344.5-x-147.6 ft) (Wessel et al. 1993).

The McNutt Plantation site was recommended for avoidance or additional archaeological testing because of the preserved midden and features, and because it was primarily located within an area planted in local vegetation that seems to have escaped much of the destructive development and agricultural practices seen elsewhere on the Air Force base (Wessel et al. 1993). The previously recorded portion of the site is partially within the England Airpark Site W-1 tract.

### **16RA703 (Weil Property)**

Site 16RA703 is within the southern extent of the England Airpark Site W-1 tract, to the west of the McNutt Plantation site. It consists of architectural and domestic artifacts associated with tenant quarters depicted on the 1941 Boyce, Louisiana 15' USGS quadrangle map and was recorded in an area shovel tested during the 1992 England AFB Survey due to the likelihood that it contained subsurface archaeological remains (Wessel et al. 1993).

According to archival and informant research conducted by Wessel et al. (1993), the Weil property is thought to have belonged to Simon Weil, owner of a local country store that served as a post office. In addition to the country store, 15 structures are depicted on the 1941 Boyce, Louisiana 15' USGS quadrangle map, which are thought to have been leased by Weil as residences for tenant farming operations. The Weil leases are thought to have begun around 1900, but whether these

tenant residences were newly constructed by Weil or represent structures built by John Andrews on the McNutt Plantation prior to 1895 is unknown (Wessel et al. 1993).

The archaeological remains associated with the Weil property include a dense surface scatter of domestic artifacts, suggesting a 1920–1940 occupation along with structural remains. The Weil property is located in an uncultivated, non-developed area, and as a result the archaeological remains have a high probability of preservation and were therefore recommended for avoidance or additional archaeological testing (Wessel et al. 1993). The previously recorded portion of the Weil Property site is within the England Airpark Site W-1 tract.

### **16RA704 (Oak Isle Plantation)**

Site 16RA704 is to the east of the England Airpark Site W-1 tract in the area of the England International Airport airfield. It consists of surface and subsurface remains associated with the Oak Isle Plantation recorded during the 1992 England AFB Survey (Wessel et al. 1993).

Archival research conducted by Wessel et al. (1993) indicates that the 1,204-acre plantation was founded by Dr. John Seip of Natchez, Mississippi in the early 1800s. By the middle of the century, the plantation housed 118 slaves in 24 dwellings, which had been established in two quarters areas and included a cemetery. The plantation produced sugar, corn, sweet potatoes, peas, beans, dairy, and livestock. In 1860, the plantation produced 766 bales of ginned cotton but seems to have ceased producing sugar. Like most of Alexandria, the Monticello style mansion that served as the main residence and most of the structures at the Oak Isle Plantation were burned by Union troops during the Civil War, although the slave quarters were spared. After the close of the Civil War and the death of Dr. Seip, his son Major Frederic Seip returned and began construction of a second residence, which was completed by 1866. The plantation continued operations as Seip employed former slaves as sharecroppers. Major Seip operated a

cattle farm and truck farm on the land prior to 1910, and upon his death in 1911 left it under the control of his eldest son James. In the 1930s the property was sold to John and James Verzwylt. Upon the acquisition of the property by the City of Alexandria in the 1940s, 15 structures could be seen at the location of the plantation, including the main residence constructed by Major Frederic Seip (Wessel et al. 1993).

The archaeological remains of the Oak Isle Plantation consist of a large surface scatter of artifacts within which exists an approximately 150-x-35 m subsurface deposit and a 35-x-40 m midden. The midden contained artifacts that indicated a date range of 1780–1850, other subsurface artifacts indicated a date range from the early 1800s to the early 1900s. Surface materials included materials that suggest dates ranging from 1800 to as late as 1960. Prehistoric artifacts indicating a Baytown or Plaquemine affiliation (A.D. 1200 to 1700) were also found below the historic midden. Additionally, the Ennis Memorial Cemetery is a private cemetery that may have been the original slave cemetery established by Dr. Seip. The cemetery was still in use at the time of the England AFB Survey, and contained 44 marked graves and vaults, the earliest of which reads 1899. The cemetery is also likely to contain a number of unmarked graves (Wessel et al. 1993).

The midden deposit and underlying prehistoric component were recommended for avoidance or additional archaeological testing as a result of the investigations. The relatively intact nature of the midden deposit, when compared with the other deposits, and its relatively early age indicated that it may be eligible for listing in the NRHP (Wessel et al. 1993).

## 16RA768 (Tyrone Plantation)

Site 16RA768 is located on private property across Bayou Rapides to the west of the England Airpark Site W-1 tract. It was recorded during the 1995 season of the Regional Archaeology Program, Management

Unit 1 and consisted of a standing structure and historic structural ruins (Girard 1995).

The main residence at the Tyrone Plantation was constructed by General George Mason Graham in 1843 and was occupied continuously until its recordation in 1995, and presently serves as a bed and breakfast. The site contains foundation patterns of additional structures associated with the plantation that have experienced only minimal disturbance. Investigations by the Regional Archaeology Program included a surface collection and test pit excavation. The site was largely delimited using modern property lines and is unlikely to include all of the historical remains. Artifacts were recovered within the upper 20–30 cm of the deposit, although the area was not tested for any more deeply buried components (Girard 1995).

At the time that it was recorded as an archaeological site, the Tyrone Plantation was considered recommended eligible for listing in the NRHP. The Louisiana State Site Form indicates that documentation for the NRHP was being completed by the central Chapter of the Louisiana Archaeological Society, although the site is not presently listed on the NRHP (National Register of Historic Places website 2012).

## Map Data

In addition to the file search, a review of available maps was conducted to help identify historic structures that may be located within the project area. These maps provide information on the dynamics of the cultural landscape in response to political and social changes, as well as technological innovations associated with agricultural industries.

The earliest available map depicting structures within the project area is the 1941 Boyce, Louisiana, 15' USGS quadrangle map, which provides information about the property only a short time prior to the acquisition of the land for construction of the airfield (Figure 3.2). On this map, a number of structures are depicted along unimproved roads mapped within the project area.

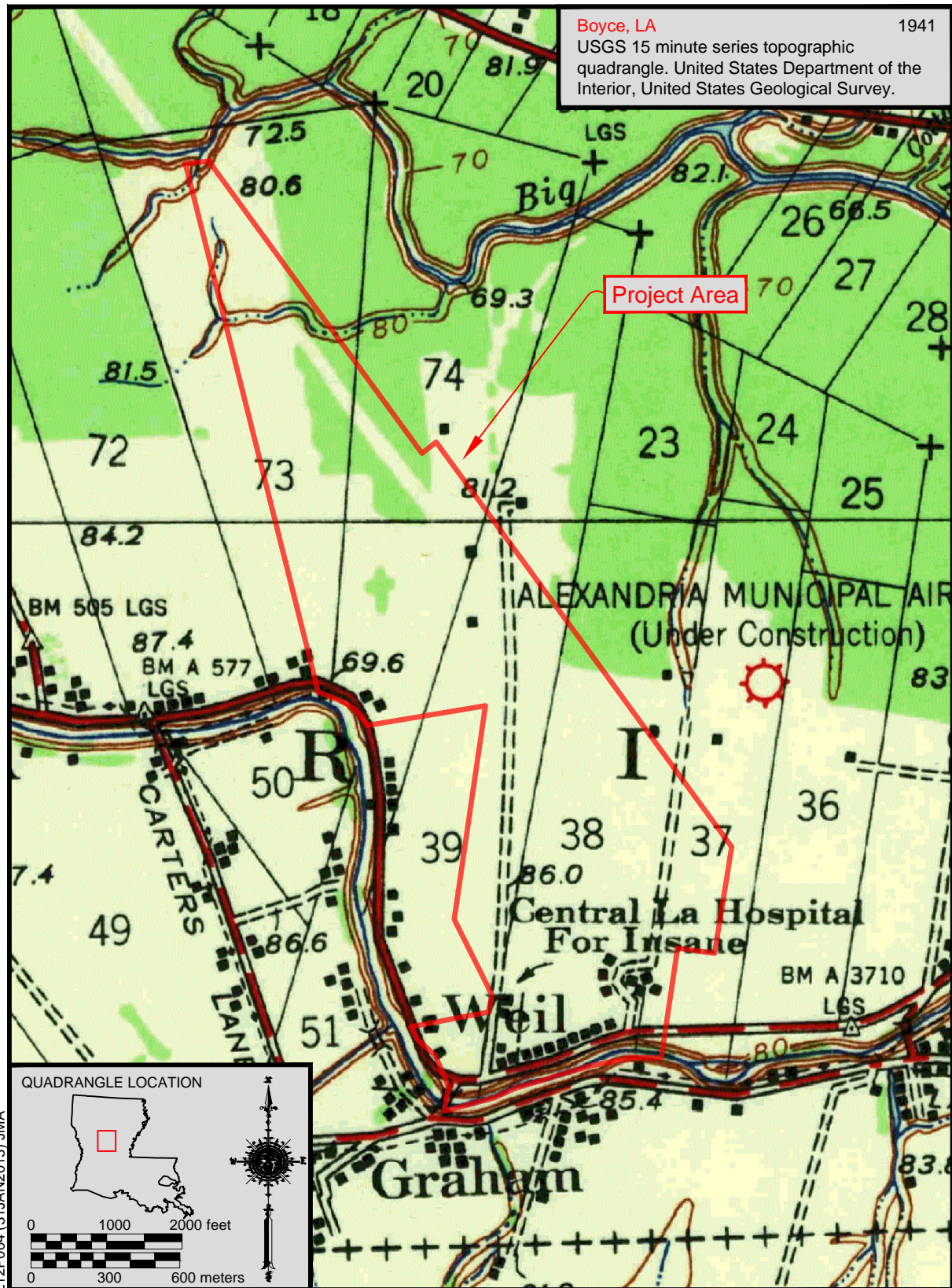


Figure 3.2. Project location depicted on the 1941 Boyce, Louisiana 15' Topographic Quadrangle map.

The name Weil appears in the southwestern extent of the project area near the intersection of an unimproved road and Highway 1202 (Bayou Rapides Rd). Highway 1202 is depicted as a hard impervious surface to the west of the intersection, and it appears to have continued along Bayou Rapides to the east as an “other surface improvement”. Along the hard impervious section of Highway 1202, three structures are depicted within the project area and another two are depicted in the project area near an abrupt westward bend in Bayou Rapides and Highway 1202 (presently the intersection with Jimmy Brown Road). To the east of the Highway 1202 and unimproved road intersection, a row of 10 structures in close proximity to one another is depicted. Along the unimproved road and a short distance to the north there are three additional structures. Near this same unimproved road, three additional structures are depicted along the northern half and at the road terminus. Another unimproved road is depicted to the east along a section line dividing Sections 37 and 38. At a bend in this road, another seven structures are depicted within the project area.

The 1945 and 1949 Boyce southeast, Louisiana, 7.5' USGS quadrangle maps differ little in their depiction of the project area, both indicating that many of the structures that appeared on the earlier map were still present (Figure 3.3). A number of structures follow the Bayou Rapides Road in the southern extent of the project area. Due to slightly different positioning and probably refinement of the mapped structure locations as a result of the larger scale of the map, it is impossible to confidently correlate the individual structures with those on the earlier map. Within the project area, one structure is depicted to the west of the intersection of the unimproved road with Bayou Rapides Road and seven are located in the tightly clustered row to the east. The western-most unimproved road is not depicted on this map, and only a short section of the unimproved road separating Sections 37 and 38 is present. Two structures are depicted along this road, and the small remaining section of unimproved road seems to serve as a drive to reach one of the structures. The Clio

Plantation is indicated on this map along Bayou Rapides south of the unimproved road, and a few row houses are present in the extreme southeast corner of the project area. Three structures are depicted along the sharp bend in Bayou Rapides and Highway 1202 to the northwest. Another unimproved road is shown extending northward from this bend, paralleling the present day Jimmy Brown Road.

The 1956 Boyce southeast, Louisiana 7.5' USGS quadrangle map is the first to illustrate England AFB (Figure 3.4). On this map, only two structures are depicted within the England Airpark Site W-1 tract. One of these is located along the portion of Bayou Rapides Road that extended along the southern boundary of the project area on earlier maps, although this road is no longer depicted. The other structure is along the sharp westward bend in Bayou Rapides and Highway 1202, where Jimmy Brown Road presently intersects.

The 1972 Rapides, Louisiana, 7.5' USGS quadrangle map depicts structures that were absent on the earlier maps (Figure 3.5). The section of Bayou Rapides Road along the southern project area boundary is depicted on this map and there are three unoccupied structures indicated in this area. At the westward bend of Bayou Rapides, Jimmy Brown Road is depicted. An occupied structure is depicted to the east of the intersection and an unoccupied structure is depicted a short distance to the southeast. These structures are depicted outside the mapped boundary of England AFB, but they are within the England Airpark Site W-1 tract. An additional four structures are mapped within England AFB on this map. Based on their locations, these structures are inferred to have been erected to assist in functions associated with the airstrip maintenance. One of these structures is slightly larger than the others and is positioned at the end of a section of airstrip. The other three are all located along roads that extend from airstrips.

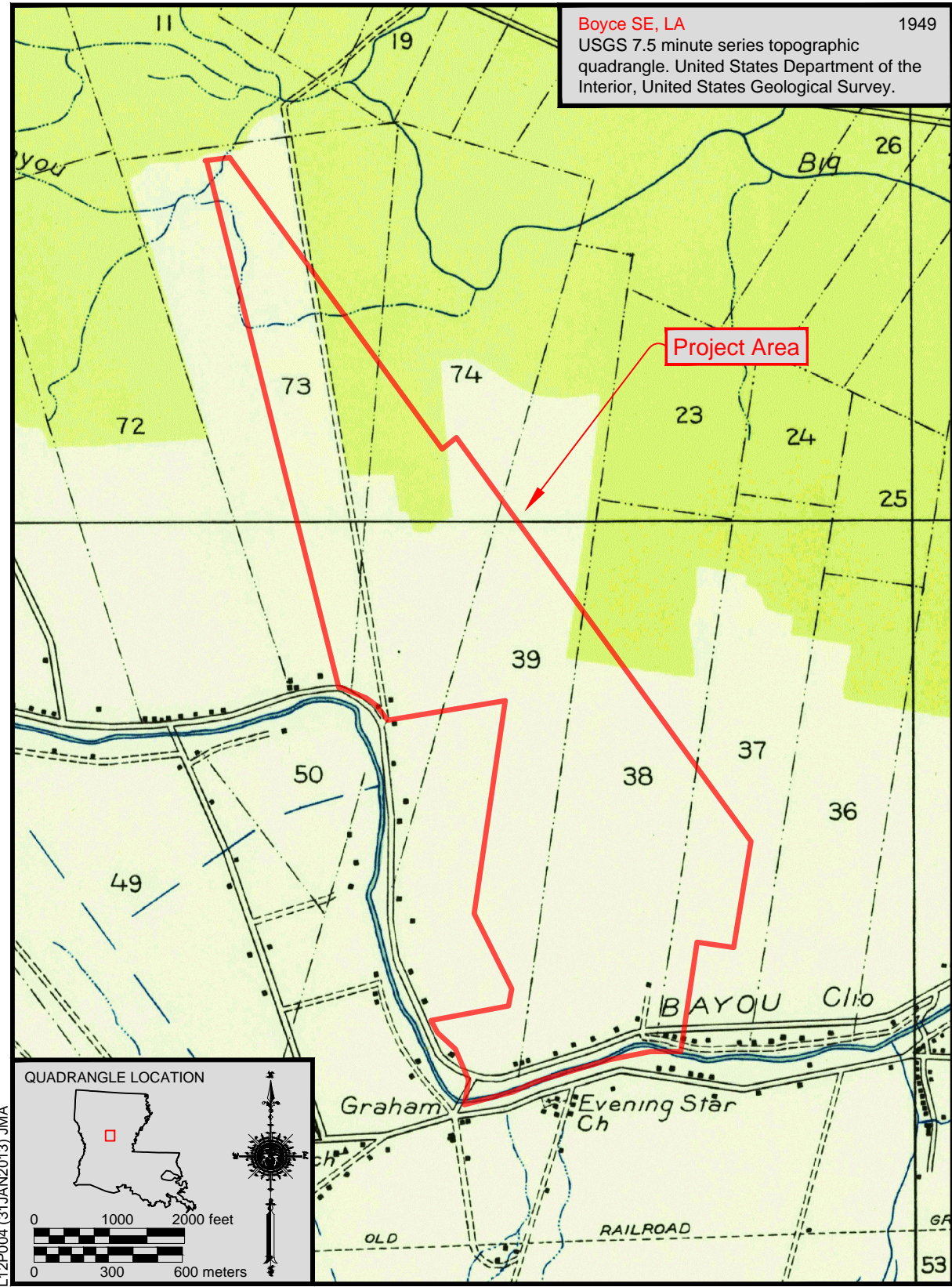


Figure 3.3. Project location depicted on the 1949 Boyce southeast, Louisiana, 7.5' Topographic Quadrangle map.

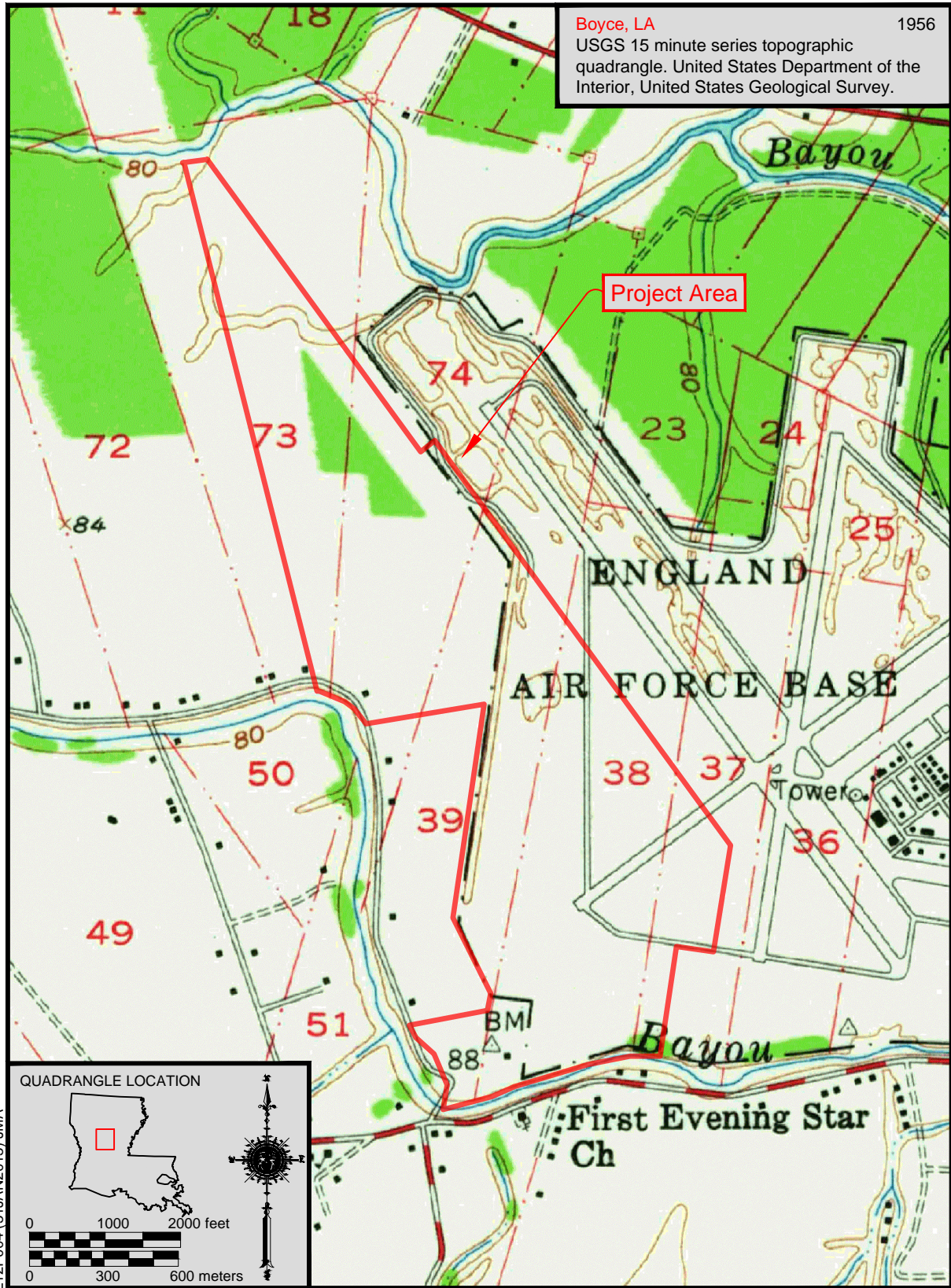


Figure 3.4. Project location depicted on the 1956 Boyce southeast, Louisiana, 7.5' Topographic Quadrangle map.

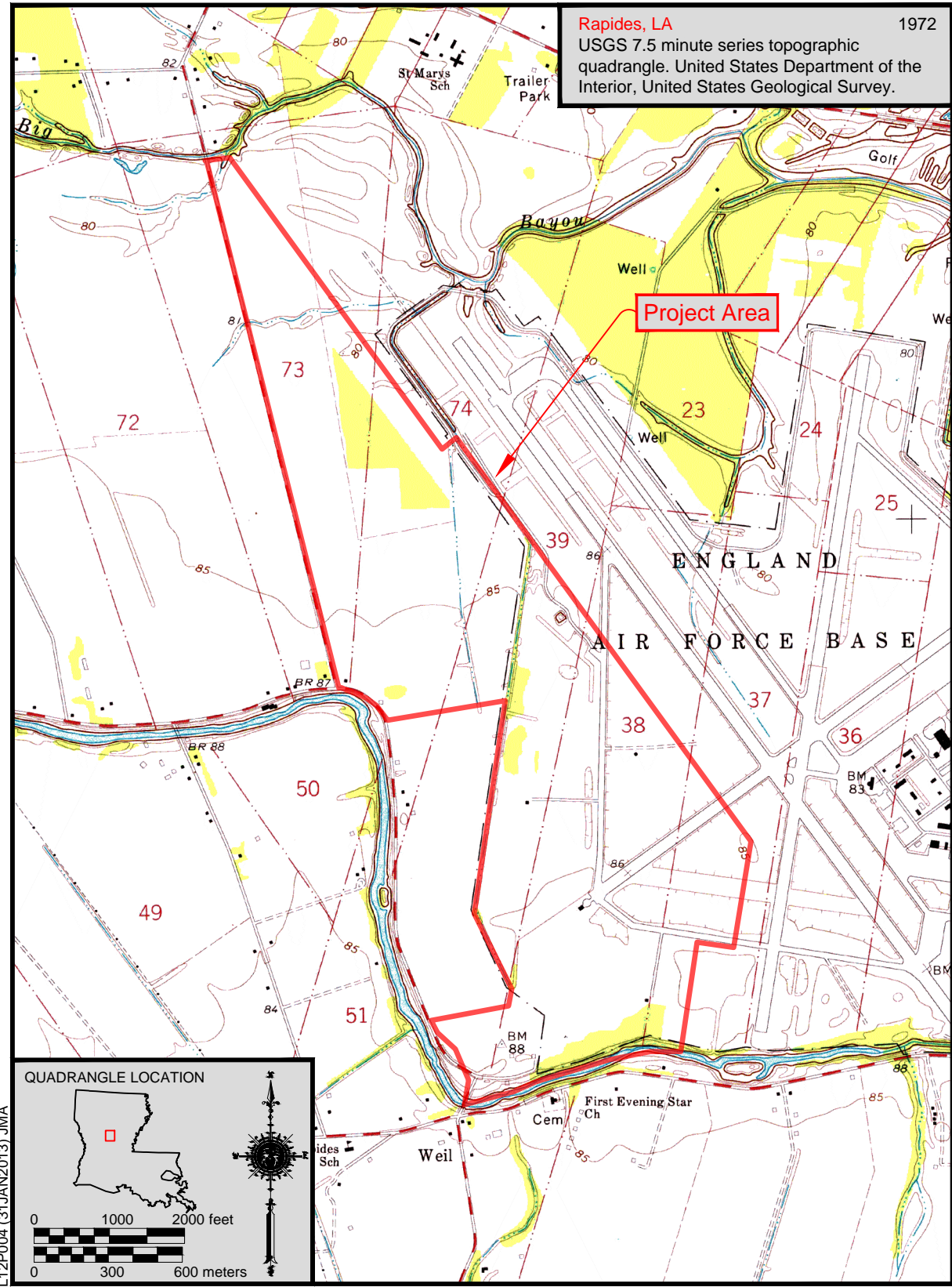


Figure 3.5. Project location depicted on the 1972 Rapides, Louisiana, 7.5' Topographic Quadrangle map.

## Survey Predictions

Considering the geomorphology and soils data, information gleaned from historic maps, and the known distribution of sites surrounding the England Airpark Site W-1 tract, certain predictions are possible regarding the kinds of sites that might be encountered within the project area.

The geomorphological work conducted along the Red River and its abandoned channels in Rapides Parish indicate that natural levees would represent the most suitable location for prehistoric habitation in the vicinity of the project area. These landforms would be expected to have formed along Bayou Rapides in the southern extent of the project area when it served as the active channel of the Red River. Much of the remaining portion of the England Airpark Site W-1 tract would historically have been backswamp and unsuitable for prehistoric habitation (Pearson and Hunter 1993a).

Historic maps and site data indicate that the project parcel and surrounding areas were used primarily for sugar and cotton plantations during the nineteenth and early twentieth centuries. Several sites associated with such plantations have been recorded within a 1 mi radius of the project area. A portion of the project area is associated with the McNutt Plantation, which was established during the early nineteenth century. Multiple nineteenth- and twentieth-century structures are depicted along Bayou Rapides in the project area's southern and western boundaries and along unimproved roads extending northward. While it is possible that historic sites may be located anywhere on the property, based on the distribution of known sites, the most likely areas for domestic sites also seem to be along Bayou Rapides along the southern and western edges of the project area.

## Cultural Overview

This section provides a cultural and historical overview of the project area. This information is drawn from a number of local and regional studies that are believed to be

applicable to the cultural history of central Louisiana. This section incorporates data from nearby military installations, in particular Fort Polk to the west of the project area, due to the extensive number of archaeological studies that have been conducted there.

## Paleoindian (11,500–8000 B.C.)

The Paleoindian period represents the earliest manifestation of humans in the New World and is separated into a tripartite set of temporal sequences based on technological innovations presumed to correspond with cultural change. The Early Paleoindian period is presently described as the period from 11,500–9500 B.C., the Middle Paleoindian period is thought to have lasted from 9500–8800 B.C., and the Late Paleoindian period is believed to have lasted from 8800 to 8000 B.C.

### *Early Paleoindian*

The Early Paleoindian period is based on a relatively few recently discovered sites that are thought to predate the well-known Clovis culture that is a hallmark of the Paleoindian period. The most notable of these sites in North America are Meadowcroft Rockshelter in Pennsylvania, Cactus Hill in Virginia, and the Topper site in South Carolina (Goodyear 2006; Meltzer 2009). The existence of a pre-Clovis Early Paleoindian culture is still somewhat controversial but is gaining acceptance in the archaeological community (see Meltzer 2009). The earliest date that is broadly accepted for this period is approximately 11,500 B.C. though some researchers refute the evidence for a pre-Clovis occupation altogether, favoring the Clovis-first hypothesis for colonization of the New World. Pre-Clovis components have been reported from a number of sites that have not seen peer review and have not been widely accepted by the archaeological community, and some of these boast dates that are earlier than most researchers accept as valid (Meltzer 2009). By definition, the pre-Clovis Early Paleoindian period ended with the introduction of the Clovis projectile point at approximately 9500 B.C.



To date, no pre-Clovis sites have been identified in Louisiana (Anderson and Smith 2003:350). Given the scant evidence of later Paleoindian sub-periods and the generally meager evidence of Paleoindian habitation in the state in general, Early Paleoindian components would likely be difficult to find (Rees 2010). As a result of the relatively recent acceptance of a pre-Clovis Early Paleoindian colonization of North America and the low number of sites dating to this period, little is presently known about the social organization, diet, and other cultural characteristics of these populations.

### *Middle Paleoindian*

The Middle Paleoindian period is represented by distinctive lanceolate fluted points including the well-known Clovis type. Paleoindian sites dating to this period in Louisiana are rare, amounting to just a few across the entire state. As a result of the poor representation of this period little is known of the dates for Clovis culture in Louisiana and much of the information regarding chronology and culture comes from other parts of the Southeast. The accepted date range for Clovis in the Southeast generally falls into the range from 9500 to 8800 B.C. (Rees 2010).

The Middle Paleoindian period has been traditionally characterized as consisting of small, extremely mobile groups that utilized a specialized lithic tool kit designed primarily for hunting, butchering, and hide-working activities (Maggard and Stackelbeck 2008). What is known of the settlement, mobility, and diet of these groups suggests that they subsisted largely through hunting big-game species, supplemented by the acquisition and consumption of seasonally available plant resources (Anderson and Sassaman 1996). The emphasis on big game hunting in these models has recently been criticized by Kornfeld (2007), who notes that during the development of Paleoindian subsistence models Pleistocene megafauna “kill sites” were most often used to identify Clovis components, and therefore, other site types were underrepresented during model-building and the importance of other dietary resources may be underestimated.

Whether these Paleoindian groups were big game specialists or had a more generalized diet has become a topic of debate among researchers in recent years, and very little subsistence data has been secured from Middle Paleoindian sites in Louisiana to contribute to subsistence modeling.

The distribution of identified Middle Paleoindian occupations in North America has shown that major river valleys like the Mississippi, Ohio, Tennessee, and Cumberland, as well as parts of the Atlantic coastal plain into Florida, appear to have been favorable locations for Clovis populations (Anderson and Smith 2003). In Louisiana, Paleoindian occupations along the major river valleys are likely inaccessible due to massive accumulations of sediment, and many may have been destroyed through erosive alluvial processes. For example, along the Atchafalaya River, as much as 40 m (131 ft) of sediment may overlie components dating back to only 3500 B.C. (Smith et al. 1986, cited in Rees 2010:41).

Among the most impressive Middle Paleoindian sites known in Louisiana is the John Pearce site (16CD56) along the Tertiary Uplands of northwest Louisiana, in Caddo Parish. Webb et al. (1971) reported three Clovis points along with several other lanceolate points from excavations at the site. It was unclear to the researchers whether the Clovis points were contemporaneously deposited with Pelican, Meserve (or possibly Dalton or San Patrice) and other lanceolate points usually associated with the Late Paleoindian period or if the Clovis points predated them (Webb et al. 1971, cited in Rees 2010). The co-occurrence of Clovis with Late Paleoindian lanceolate points has also been reported at other sites in Louisiana (see Rees 2010:49) and elsewhere, including San Patrice points at the Big Eddy site in southwest Missouri where they have been interpreted as having been deposited coevally during a single component (Lopinot et al. 1998). These data suggest the possibility that Clovis and other Middle Paleoindian points may have been introduced later in some areas, or that their use

may have persisted into the Late Paleoindian period.

Peason Ridge is a lithic quarry located in west-central Louisiana at Fort Polk, and has produced lanceolate points from an apparently undisturbed Middle Paleoindian occupation that has been intensively studied. Among other information that this site has provided, it has shown that well-preserved Clovis sites exist in upland locations in Louisiana (Rees 2010). Since this site is a quarry locale, we would expect that it would be more easily identified archaeologically than more ephemeral site types with fewer artifacts, but we should fully expect that other well-preserved Middle Paleoindian sites exist in northwest and central Louisiana and have escaped detection thus far.

Other, less intensely studied Middle Paleoindian sites have been identified throughout the state. According to research by Gagliano and Gregory (1965), the distribution of Clovis points shows the greatest representation along the Tertiary Uplands of northwest Louisiana. Like most areas of the Southeast, Clovis and other large lanceolate points in Louisiana have primarily been found in surface contexts. The distributions of these points may provide coarse-grained information on the distributions of Clovis culture (Rees 2010), although greater surface visibility along eroded uplands may favor their detection in these areas, as has been suggested elsewhere (Perkinson 1971).

### *Late Paleoindian*

The Late Paleoindian period is thought to represent a period of decreased residential mobility and population increase, based on an increasing regional diversity in projectile point types, decreased use of exotic lithic materials, and an increased number of identified sites. This sub-period coincides temporally with the Younger Dryas, a period of dramatically colder temperatures and increased aridity. Projectile point types that represent the Late Paleoindian period in Louisiana include the Pelican type and several varieties of the San Patrice types, which are thought to temporally precede the Angostura, Folsom, Meserve midland, Plainview, Quad, and Scottsbluff

types later during this sub-period (Rees 2010). These types display varied stylistic qualities, and in some cases occur in fairly restricted spatial distributions, suggesting increased regionalization or isolation of cultural groups as population levels increased and group mobility decreased (Anderson and Smith 2003: 353).

Research into the Late Paleoindian period in Louisiana has included Peason Ridge, which contains a number of Paleoindian and Early Archaic components. The availability of high quality lithic material, such as Eagle Hill chert, is among the factors that may have made this location attractive for Middle and Late Paleoindian habitation. Eagle Hill is also one of the highest points in the immediate region, possibly making it a valued lookout point. It is also at a convenient location between the Sabine, Calcasieu, and Red Rivers, providing an adequate rendezvous point for peoples from each drainage area. Based on the extensive use of Eagle Hill during the Paleoindian and Early Archaic periods, Anderson and Smith (2003:363–364) have suggested that this area may represent an aggregation locus utilized by bands occupying the nearby drainages for critical social and biological functions (*sensu* Anderson and Hanson 1988).

The transition from lanceolate points during the early part of the Late Paleoindian period to side-notched forms by the end of this sub-period may relate to technological shifts such as the introduction of the atlatl (Jennings 2008). The shift in hafting technology, from basally-thinned to side-notched, along with inferred changes in patterns of settlement and mobility have suggested to some researchers a greater cultural continuity with the Early Archaic period than with the preceding Paleoindian sub-periods (Anderson and Smith 2003).

### **Archaic (8000–1250 B.C.)**

The Archaic period represents an era of human adaptation to the warmer conditions brought on at the onset of the Holocene epoch in North America. This period is sub-divided

into the Early Archaic (8000–6000 B.C.), Middle Archaic (6000–2000 B.C.) and Late Archaic (2000–1200 B.C.). These sub-periods are defined by changes in hafted bifaces and other non-perishable technology, which are believed to relate to changes in resource exploitation, ultimately corresponding with transitions in settlement and mobility strategies and social organization.

### *Early Archaic*

The Early Archaic period spans from the end of the Younger Dryas to the beginning of the Hypsithermal episode, which was a warming climatic trend in the Middle Holocene. Projectile point styles associated with this period in the greater Southeast follow a sequence from side-notched to corner-notched and finally bifurcated forms during the end of the Early Archaic period. In central Louisiana, San Patrice, vars. Keithville, Dixon and Leaf River and Big Sandy points represent the side-notched tradition. Corner-notched varieties include the Palmer and Kirk types, which are found throughout the Southeast, as well as Angostura and Scottsbluff points found on the Great Plains. Bifurcated points, which are found during the terminal Early Archaic period in the South Appalachian area, have not been reported from sites in Louisiana. These forms show a decreasing frequency gradient away from the mountains of North Carolina, where they were first identified (Claggett and Cable 1982:434), and seem to have a much narrower distribution than the side- and corner-notched types discussed above. The Middle Archaic Kisatchie Phase, identified by Sinner points, may have its origin in the terminal Early Archaic period in Louisiana (Anderson and Smith 2003), although the use of this phase in central Louisiana is tenuous.

### *Middle Archaic*

The Middle Archaic period is believed to represent human adaptation to the Hypsithermal episode. A warmer and dryer climate resulted in decreased water levels, which is believed to have led to increased habitation near permanent bodies of water.

This period marks the beginnings of earthen architecture in northeast Louisiana, which is the earliest known monumental architecture in North America. Research conducted at Watson Brake and other Middle Archaic mound complexes in northeast Louisiana have provided a baseline for identifying and understanding Middle Archaic components elsewhere, although these patterns have not been well established in central Louisiana. Mound construction during this period may generally be regarded as signaling greater population densities and increased sedentism, and there appears to have been increased interaction among Middle Archaic groups compared with earlier periods. Increased competition and warfare among groups was likely a response to more restricted access to resources as a result of population increase (Anderson and Smith 2003).

Sinner hafted bifaces represent a poorly-defined Kisatchie phase, which has been proposed for the terminal Early Archaic and early Middle Archaic periods (approximately 7500–6600 B.C.) at Fort Polk in western Louisiana (Thomas et al. 1997). Evans type hafted bifaces are the primary diagnostic of this period and date from around 2500 B.C. into the Late Archaic period. Central Louisiana is at the southern extent of their distribution, which spans from the Catahoula Lake area of central Louisiana northward into south-central Arkansas. Several single component sites dating to the Middle Archaic have been identified at Fort Polk in west-central Louisiana, yielding hafted bifaces characteristic of Evans or Sinner point types. Evans points are medium to large corner-notched points that exhibit an additional deep notch on the mid or lower edge that distinguishes them from other point types in the region (Webb 2000; Anderson and Smith 2003). Webb (2000) describes Sinner points as typically having two or more notches on the edges of the body and being smaller, and more poorly made than Evans points (Webb 2000). Other points found in the area that are thought to date to the Middle Archaic include the Bulverde and Yarbrough types. Bulverde points typically have a more western

distribution than the Evans point type, though they have been found in context with one another (Anderson and Smith 2003).

### *Late Archaic*

The Late Archaic is believed to mark a period of increased regional population densities as environmental conditions began to display more modern characteristics. In northeast Louisiana, large-scale mound construction, long distance trade, and warfare increased during this period. The well-known Poverty Point site in northeast Louisiana represents a pinnacle of earthwork construction during the Archaic period, between 1730 and 1250 B.C. (Gibson 2010).

Sites dating to the Late Archaic period in central Louisiana are situated on terrace margins and rises overlooking tributaries. Based on the increased occurrence of plant-processing artifacts on sites dating to this period, such as sandstone manos and metates, it is inferred that there was an increase in plant processing, although it was still probably not extensive (Anderson and Smith 2003). The Birds Creek and Leander Phases have been identified at Fort Polk in west-central Louisiana. The Leander phase is identified by the presence of Motley, Epps, Delhi, and Calcasieu point types, and is strongly associated with the Poverty Point Culture. The Birds Creek phase is identified by the presence of Epps and Ensor point types, both of which are common at Fort Polk (Anderson and Smith 2003). Additionally, baked clay objects have been found on both Birds Creek and Leander phase sites and are indistinguishable from baked clay objects found at the Poverty Point site (Anderson and Smith 2003). Fiber-tempered pottery also made its appearance during this time period and has been found on sites throughout Louisiana.

### **Woodland (1250 B.C.–A.D. 900)**

Like the preceding periods, the Woodland period is divided into Early (1250 B.C.–A.D. 1), Middle (A.D. 1–400) and Late (A.D. 400–900) sub-periods in the Southeast. The beginning of the Woodland period is arbitrarily set at the widespread adoption of

ceramic vessels. In addition to changes to projectile point morphology, the shifts in material culture that archaeologists use to denote Woodland sub-periods include stylistic changes to pottery. Other innovations that are thought to have affected subsistence practices during the Woodland period include broad implementation of the bow and arrow, and the adoption of horticulture (Anderson and Smith 2003).

### *Early Woodland/Tchefuncte*

The Early Woodland period, referred to in the lower Mississippi Alluvial Valley as the Tchula period began at approximately 1250 B.C. The best known Early Woodland culture in Louisiana is Tchefuncte, which is believed to have existed between 800 B.C.–A.D. 1 (Hays and Weinstein 2010). During the first several centuries of the Early Woodland period, fluctuating climatic conditions resulted in cooler temperatures, and two short-term cold events are likely to have had a pronounced effect on native populations in the region. The widespread adoption of pottery manufacture signals the onset of the Early Woodland period; the end of Poverty Point culture in Louisiana also corresponds to this sub-period.

Although information pertaining to Early Woodland settlement is limited, based on the presence of well-defined structures, large subterranean storage pits, and dense occupational middens at some sites, Early Woodland groups are believed to have experienced increased sedentism with some groups inhabiting specific settlement locations year-round. Though this may be true at some locations, Anderson and Mainfort (2002) indicate that sites in the Central Mississippi Valley are typically small, having a few structures and probably no more than 50–60 people. With group mobility still a prominent characteristic of many indigenous groups, social organization appears to have been based on unranked or minimally ranked lineages and clans (Anderson and Mainfort 2002:45).

The Early Woodland period in the Southeast saw the cultivation of native plant species like goosefoot, sumpweed, sunflower,

knotweed, squash/gourd, and maygrass, though the level of dependence upon such crops is unknown. The use of cultigens during this period likely varied regionally (Anderson and Mainfort 2002).

Tchefuncte culture appears to have been centered in eastern Louisiana and along the Gulf Coast, where small groups occupied sedentary and autonomous hamlets along slow-moving streams (Hays and Weinstein 2010). In central Louisiana, very few Tchefuncte period sites have been identified. Among the most prominent assemblages found near west-central Louisiana is a collection of eight sherds from a site along Peason Ridge at Fort Polk, illustrating the scarcity of this cultural material in the region (Anderson and Smith 2003). A few possible Tchefuncte sites have also been reported near Lake Rodemacher approximately 10 km (6 mi) northwest of the England Airpark (House 1972) and in a cluster around southern Natchitoches Parish and northern Rapides Parish (Gergory and Curry 1978). The latter have been assigned to a Lena phase and have produced Lake Borgne Incised and Orleans Punctate pottery with Pontchartrain hafted bifaces and tubular clay pipes (Gregory and Curry 1978).

### *Middle Woodland/Marksville and Troyville*

Throughout much of the Eastern Woodlands during the Middle Woodland period, Hopewell culture thrived and culminated in the construction of massive earthen ceremonial centers and the implementation of an extensive trade network throughout much of the South Atlantic Slope and the Southeast. The Middle Woodland period in Louisiana is associated with the Marksville culture which existed from approximately A.D. 1 to 400 (McGimsey 2010) and the Troyville culture, which existed from approximately A.D. 300 to 900 (Lee 2010).

Marksville culture has traditionally been viewed as a regional variation of the Hopewell culture due to the presence of large earthen

mounds, an elaborate mortuary complex, and intricately designed ceramics with similar iconographic themes to the Hopewell at the earliest Marksville sites discovered and studied. Although contemporaneous with Hopewell, many of the defining traits of this culture are not universally present at Marksville sites in Louisiana and most sites are relatively small. For example, the evidence of widespread, long-distance trade is not found on Marksville sites, or is at least not as extensive as on Hopewell sites. Relatively few examples of non-local materials, such as galena or copper, have been found in burial contexts at Marksville sites, although an abundance of extra-local chert seems to have been acquired through trade. The archaeological patterns found among Marksville sites and cemeteries also do not indicate that a hierarchical social organization was imbedded in the culture, but rather that it was largely egalitarian (McGimsey 2010).

Troyville culture is usually associated with the Baytown period (A.D. 400–700) (Lee 2010). Although it has been described as a period of cultural decline between the earlier Marksville and later Coles Creek cultures, the Baytown period is presently thought to represent a time that increased regional differentiation set the stage for the later, more complex societies (Lee 2010). Cultural continuities with earlier cultures include some evidence of long-distance trade and mound construction for public ceremonies and interment, while innovations during this period likely include the introduction of the bow and arrow sometime around A.D. 600–700. Like the preceding Marksville culture, there does not appear to be a great deal of status differentiation among individuals at Troyville sites (Lee 2010).

Subsistence patterns compiled using data from Middle Woodland sites in Louisiana indicate that there is little change from the patterns of the preceding Tchefuncte culture. An emphasis on gathering and hunting of locally available flora and fauna is inferred from the dietary remains at these sites, and there is little indication that Marksville or Troyville populations participated in the

cultivation of domesticated seed plants used by Hopewell populations during this period (Lee 2010, McGimsey 2010).

Marksville sites are identified by the presence of incised and zoned rocker-stamped Marksville ceramics (McGimsey 2010), while the later Baytown/Troyville ceramics are recognized by Baytown Plain and newly-introduced bi-chrome and polychrome painted ceramics (Lee 2010). Hafted bifaces are not generally considered diagnostic for the Middle Woodland period due to the long temporal range of points found in contexts dating to this period.

Marksville sites at Fort Polk in west-central Louisiana have been assigned to the Whiskey Chitto phase (Campbell et al. 1987). These sites are typically identified by the presence of Marksville stamped and Marksville incised pottery types, exhibiting rim forms and motifs like those of the Marksville in the Lower Mississippi Valley. Grog temper appears to be predominant in these specimens, though there are hints of bone and/or sandy paste in some. Dooley Branch, Ellis, Gary, Kent, the Williams cluster and similar points occur at Whiskey Chitto sites, though as mentioned before they are not diagnostic of this specific time period due to their temporal range (Anderson and Smith 2003). There are no complex ceremonial centers dating to this period known to exist in the vicinity of the project area, although several Marksville sites have been recorded to the east and southeast of Alexandria (Wessel et al. 1993). Marksville ceramics were also present at the Coral Snake Mound along the Sabine River to the west, Bellevue Mound in northwest Louisiana, and the Fredericks site near Natchitoches (Anderson and Smith 2003). Other cultures that potentially influenced developments in northwest Louisiana during the Middle Woodland include the Mossy Grove culture from eastern Texas and the Fourche Maline in northwest Louisiana and beyond.

No phases for Troyville culture have been identified in central Louisiana or at Fort Polk, and these components seem to be rare in

general. The rarity of Mulberry Creek Cord Marked ceramics, which is the primary defining type for this period in the region, has been noted throughout western Louisiana (Anderson and Smith 2003). Several sites dating to the Baytown period have been recorded to the east of Alexandria near Catahoula Lake and in the Black River and Little River watersheds (Wessel et al. 1993).

### *Late Woodland/Coles Creek*

The Late Woodland sub-period (circa A.D. 400–900) experienced a slight fluctuation in climate, with temperatures mildly dropping between circa A.D. 400 and 800, but warming again to a point beneficial for agriculture in the East (Anderson and Smith 2003). At this time, a continuation of the Troyville culture is believed to have occurred along the Red River, with the emergence of the Coles Creek culture at approximately A.D. 700 (Roe and Schilling 2010).

The Coles Creek period is believed to represent an important shift toward hierarchical social organization from the egalitarian order of earlier periods. This is reflected in the changing role of earthen architecture from primarily serving a mortuary function to providing a platform for structures and ceremonies for community functions or possibly related to a chiefly elite. Although formalization of a mound and plaza ceremonial center appears to have occurred at Coles Creek sites, the differentiation of hierarchical groups is difficult to see through mortuary and other archaeological remains (Roe and Schilling 2010).

Like the preceding Marksville and Troyville cultures, Coles Creek populations seem to have relied primarily upon local wild plants and animals for subsistence, although domesticated versions of native grasses including maygrass, chenopod, and knotweed were identified at some Coles Creek sites. Since other sites from which subsistence data have been obtained lack evidence of domesticated cultigens, the use of cultigens is believed not to have been widespread. At the end of the Coles Creek period, the use of

starchy seeds seems to have increased with maize playing a minor role (Roe and Schilling 2010).

A variety of Late Woodland ceramics comprise Coles Creek assemblages, consisting primarily of grog-tempered or grog-and-sand-tempered Chevalier Stamped, Coles Creek Incised, Evansville Punctated, French Fork Incised, Mazique Incised, and Pontchartrain Check Stamped ceramics. Use of the bow and arrow flourished during the Late Woodland period, which is reflected in the abundance of small arrow point types dating to this period. Alba, Catahoula, Hayes, Friley, Scallorn, and possibly Colbert points are associated with the Coles Creek and Caddo cultures (Anderson and Smith 2003).

Truncated pyramidal mounds have been recorded at numerous Coles Creek sites in the region, but not in the vicinity of the project area. To the east of Alexandria, near Catahoula Lake and Jonesville, numerous Coles Creek sites have been recorded (Wessel et al. 1993). Presently at Fort Polk, there is little evidence of long-term habitation by Coles Creek or affiliated peoples. Based on the limited amount of ceramics found at Coles Creek sites and the small size of sites, it is suggested that the sites resulted from short-term activities (Anderson and Smith 2003).

## Late Prehistoric (A.D. 900–1700)

The end of the Late Woodland period, between A.D. 900 and 1100 marked the emergence of Caddo and Mississippian cultures across much of Louisiana (Anderson and Smith 2003). During the early part of this period, from A.D. 800–1300, a favorable climate for agriculture is thought to have prevailed with temperatures approaching near those of the present. At approximately A.D. 1300 the Little Ice Age is thought to have reversed these favorable conditions (Anderson and Smith 2003).

### *Caddo*

Although its origins are unsettled, Caddo culture is thought to have developed along the Red River and its tributaries in areas extending

into northwest Louisiana at around A.D. 900 (Girard 2010). Along the lower Mississippi, Arkansas, and Red River valleys, the Coles Creek and affiliated peoples had previously been the primary cultural system. Webb saw the Caddo culture as a direct antecedent to the Coles Creek culture, having emerged in the Great Bend region of the Red River (Webb and McKinney 1975; Webb and Gregory 1986). Similarly, Anderson and Smith (2003: 392) believe that Caddo cultures emerged directly from the preceding Coles Creek culture along the middle course of the Red River, and within areas situated between the Red, Sabine, and Trinity Rivers. In contrast, Schambach (1982) has suggested that Caddo culture emerged in the Great Bend region from the Fourche Maline culture of southwest Arkansas.

Early Caddoan ceremonial centers have been found along the Red River, namely those at Mounds Plantation, Crenshaw, and Gahagan, though monumental construction at these sites is believed to have occurred after A.D. 1000. (Anderson and Smith 2003). During the initial expressions of Caddo culture, more extensive use of floodplains along the Red River occurred than preceding cultures, and large earthen mound complexes were constructed and apparently supported significant populations during ceremonial events. In addition to the mound complexes, these initial Caddoan settlements are assumed to have been similar to later ones with small villages on tributary streams or along lakes, or possibly scattered villages situated in floodplains (Anderson and Smith 2003). Mound centers contained residential areas for leaders that held political control over these outlying settlements. Burial data suggest that the Caddo culture was hierarchical, with finely constructed and decorated ceramics in the graves of apparent community leaders. Trade items recovered at Caddo sites have also indicated that these polities maintained contact with Mississippian chiefdoms in other areas of the southeast, including the Cahokia paramount chiefdom near St. Louis, Missouri (Girard 2010).

After approximately A.D. 1200, Caddo communities largely abandoned their ceremonial centers along the Red River and instead occupied upland areas and the banks of smaller tributary streams. Dispersed floodplain villages along these tributaries became the norm, replacing what were likely more compact villages along the Red River during the earlier Caddo period. This pattern of residence persisted into the early historic period and one such village was depicted on a map produced during the 1691–1692 Domingo Teran de los Rios expedition (Girard 2010). Jeffrey Girard has documented a dispersed floodplain village site in northwest Louisiana. The Willow Chute Bayou locality consists of a series of sites stretching along a 12 km (7 mi) long section of the bayou, most of which are small in size and light in density and seem to represent hamlets, although at least three mounds are also present (Girard 2010, 2012).

The Caddo culture is generally confined to northwest Louisiana, extending only as far south as Natchitoches, and no major sites related to this culture are known within the vicinity of the project area. Several small sites identified at Fort Polk are thought to have Caddo affiliations. Archaeologically, the Caddo have been broken down into two major aspects (Gibson and Fulton), and are further divided into several subgroups (Alto/Alto-Gahagan, Haley, Bossier, Belcher, Glendora). Alto is the earliest focus, and the most commonly assigned Caddo focus at Fort Polk (Anderson and Smith 2003).

### *Mississippian and Plaquemine*

The Mississippian period comprises the last 500 years of Southeastern prehistory, prior to European contact. The period is generally believed to have begun in the southern Lower Mississippi Valley in A.D. 1200 and to have lasted until the establishment of European settlements around A.D. 1700, whereas in the broader Southeast the Mississippian period is generally regarded as the period from A.D. 1000 to 1500 (Rees 2010). Plaquemine culture is a regionalized expression of Mississippian culture with sites occurring in southern and eastern areas of Louisiana that are

differentiated from Mississippian sites by distinctive ceramic types (Rees 2010).

Mississippian subsistence patterns were of two varieties—riverine: the use of crop rotation in which plants, especially maize, were cultivated and supplemented by the collection of wild foods; and coastal: farming played a smaller role while hunting, gathering, and fishing were emphasized (Bense 1994). This dichotomy in subsistence also seems to have characterized Plaquemine groups, with inland communities relying on the use of cultivars and decreased dependence upon aquatic resources, in contrast to coastal communities, which were more reliant upon a subsistence economy based on marsh, back swamp, and estuarine resources (Rees 2010).

The political organization of groups into chiefdoms stands as a defining characteristic of Mississippian culture, along with widespread trade, shared regional iconographic symbols, and the expansion of platform mound centers (Bense 1994). These traits also characterized Plaquemine culture, although many of the regional mound centers found in Louisiana are generally smaller than the immense centers that characterize the Mississippian sphere at sites such as Cahokia and Moundville (Rees 2010). Such large Mississippian regional centers also seem to be absent in Louisiana, and in general, Mississippian sites seem less well-represented than in neighboring states, suggesting that they may in fact be invasive cultural elements (Rees 2010).

Mississippian chiefdoms were either simple or complex in organization. Simple chiefdoms were typically comprised of several communities under the control of a single ruler. Complex chiefdoms consisted of several simple chiefdoms controlled by the ruling elite of a paramount center, having a paramount chief. The main themes in Mississippian society were ancestor worship, war, and fertility. Status differentiation was expressed through the acquisition of ritual items and the ritual use of space (i.e. mound construction), and these served as the major mechanisms for political control (Bense 1994).



Mississippian culture in the greater Southeast seems to have flourished at approximately A.D. 1200, and this was accompanied by increased warfare. The end of this period saw political turmoil and population relocations. Instability and violence encountered in some areas is thought to have resulted from environmental problems, possibly related to the changing climatic conditions known as the Little Ice Age, as well as political problems. Though mound building began to wane in some areas during this interval, it continued in others (Bense 1994).

No Mississippian or Plaquemine sites are known in the vicinity of the project area, although a few potential Plaquemine components have been identified at Fort Polk based on ceramic and point types exhibiting stylistic qualities consistent with those from Plaquemine sites. It is noted by Anderson and Smith (2003) that the Plaquemine presence in this region was slight.

## French Colonial (A.D. 1682–1763)

The beginning of the French Colonial Period in Louisiana is heralded by a journey by René Robert Cavelier, sieur de La Salle to the mouth of the Mississippi River and the Gulf of Mexico in 1682. A decade earlier in 1672 Joliet and Marquette had explored the headwaters of the Mississippi River from French Canada, documenting its course to the south toward the Gulf of Mexico (Wall 2002:19). La Salle, his lieutenant Henri de Tonti, and a party of French men and Native Americans followed the Mississippi River during a two month journey to chart the new route to the Gulf of Mexico. At the mouth of the Mississippi, La Salle and his men erected a large cross, proclaiming possession of the country by France. After returning to France to report his claim, La Salle organized a second expedition to the Mississippi River with the intention of colonization, but instead overshot the mouth of the river and landed in what is now South Texas. The expedition ended in peril as La Salle's party became mutinous, murdering their leader, and

eventually succumbing to starvation and exposure, and also hostility first by native groups and ultimately by the Spanish (Wall 2002).

It would not be until a second voyage to the Basse Louisiane, or South Louisiana territory in 1699 that a French presence would be sufficient enough to result in archaeologically-identifiable manifestations of material culture (Mann 2010). The expedition was led by Pierre Le Moyne d'Iberville, who was accompanied by his younger brother and lieutenant, Jean Baptiste Le Moyne, sieur de Bienville, along with 200 prospective colonists and two companies of royal marines. Iberville and Bienville sailed from La Rochelle, France to St. Domingue first and then to Mobile Bay where they erected a temporary encampment near present day Biloxi, Mississippi. Upon exploring the region, Iberville was informed by native groups of a great river to the west, convincing him that they were near the Mississippi River. A small party was assembled to scout the coast to the west, and they successfully located the mouth of the Mississippi on Mardi Gras day in 1699. The party navigated upriver as far as the present location of Pointe Coupee and spent several days at a large Houma village before returning to the temporary encampment near Mobile Bay (Wall 2002).

Before returning to France that same year, Iberville established the permanent settlement of Fort Maurepas to defend the mouth of the river, near present day Biloxi Bay, and left it under the command of Ensign de Sauvole. Shortly thereafter, while on a return journey into the Mississippi River, Bienville and a small contingency encountered a British ship south of present day New Orleans that was reconnoitering a site for settlement. Bienville informed the English ship's captain that they were in French territory and bluffed them, successfully convincing them that French reinforcements were available to combat the ship if it did not retreat. The site of this encounter is known as English Turn to this day, and this event is significant in that the British never returned to make a claim on Louisiana (Wall 2002).

The encounter with the English convinced Bienville of the need for a fort on the Mississippi River to properly defend the new French territory. Upon Iberville's return from France in 1700, Fort de la Boulaye, later known as Fort de la Rivière, was constructed about 50 mi upriver from the head of passes, in what is now Plaquemines Parish. The site of the fort proved to flood frequently and it ultimately served primarily as a stopover and staging ground for the French during expeditions against native groups. In 1707, Iberville ordered the abandonment of Fort de la Rivière (Mann 2010).

The French settlement of Fort Louis de Louisiane, or La Mobile as it came to be known, was established on the Mobile River in 1702 and would serve as the headquarters for French activities in the area until 1711. The French also consolidated their claims on interior areas of their territory by establishing Fort Rosalie near present-day Natchez, Mississippi and Fort St. Jean Baptiste in Natchitoches, Louisiana, in 1714 (Mann 2010; Wall 2002). Fort St. Jean Baptiste was established by Louis Juchereau de St. Denis at the site of the Natchitoches Caddo Indians to facilitate trade with the Caddo tribes of northwest Louisiana. Given the interior location of the newly established fort, St. Denis saw great potential for trade with the Spaniards of Mexico and appealed to the viceroy of Spain, despite Spanish and French laws forbidding trade with foreign nations. Upon realizing the position of the French fort, the Spanish soon after established four forts of their own to form the boundary between their territories. Ironically, St. Denis had managed to marry the daughter of a Spanish commandant, Don Diego Ramón and was assigned as a co-commander to establish these forts along with Ramón in 1716. This heralded a period of clandestine trade between the French at Natchitoches and the Spanish, which proved profitable for St. Denis (Wall 2002).

New Orleans was founded in 1718 and was named the capital of Louisiana in 1721. The early years of occupation in New Orleans proved difficult for the colonists because of frequent flooding and a hurricane that

destroyed two-thirds of the buildings in 1722 (Wall 2002).

Small farms were established in areas upriver and downriver from New Orleans by the 1730s. In central Louisiana, a set of large siltstone shoals along the Red River created an obstruction for navigation and Frenchmen travelling toward or away from Natchitoches had to portage the rapids. This area, which came to be known as Rapide by the French and eventually contributed to the name of Rapides Parish, remained a wilderness to Europeans during the French Colonial period (Wessel et al. 1993).

## Spanish Rule (A.D. 1763–1800)

In 1763 France ceded all of the land of Louisiana west of the Mississippi River to Spanish rule as a result of the Peace of Paris accord, drafted at the close of the Seven Years' War. While news of the transfer caused an immediate reaction among the residents of Louisiana, it would have little effect on the lives of the inhabitants until the arrival of Governor Antonio de Ulloa to Balize at the mouth of the Mississippi River in 1767. As a result of the resentment over Spanish rule, and tempered by Spain's poorly funded and understaffed attempt at governance, the residents of New Orleans formed an insurrection in October of 1768 and demanded that Ulloa leave Louisiana. Less than one year later, General Alejandro O'Reilly, returned to New Orleans with a large contingency of soldiers to investigate the insurrection, and he named 13 individuals as leaders of the insurrection and charged them with treason. Six of these individuals were convicted and were put to death by a firing squad (Wall 2002).

Lands to the east of the Mississippi River had been ceded to England as a provision of the Treaty of Paris, and the British rapidly began to occupy their new territory. During Spanish rule the population in Louisiana increased more rapidly than it had under French rule, receiving immigrants from French Canada, the Caribbean, and Africa, in addition to Europe. The colonization of the

southeastern United States by Europeans and others during the seventeenth and eighteenth centuries had a lasting effect on native tribes. Many groups occupying areas that would become Mississippi, Alabama, and Tennessee moved into unoccupied areas of Louisiana to escape British and French intrusion. The Apalachee came from Florida to the banks of the Red River north of present-day Alexandria in 1763. Other groups including the Alabama, Pascagoula, Biloxi, Chacato, and some Choctaws moved into Rapide during this period (Wessel et al. 1993). The Koasati also moved into central Louisiana along the Red River in what is now Rapides Parish in the late eighteenth century, which was welcomed by the Spanish who hoped that the native group would form a buffer with the British to the east (Wall 2002).

Under Governor Ulloa's leadership, the Rapides post was established along the Red River in Rapide, but European population in the area remained low. The European population of Rapide in 1770 consisted of 17 males and 16 females, as well as 12 male and 6 female slaves. Native Americans outnumbered Europeans, with four bands including 43 Apalachee, 22 Alabama, 17 Mobilians, and a number of Chacato. In 1788 the population of Rapide included 135 men, women, children, and slaves (De Ville 1985, cited in Wessel et al. 1993).

Under Spanish rule, the economy of Rapide relied upon the raising of livestock and commercial crops including corn, indigo, and tobacco. Some limited cotton production began after the invention of the cotton gin by Eli Whitney in 1793. The deer and bear skin trades for European markets began an economic engaged practiced by the native groups (Wessel et al. 1993).

## **Antebellum and Late Nineteenth Century (A.D. 1800 to 1899)**

The Louisiana territory was retroceded to France by Spain in 1800, and then to the United States in 1803. What is now Rapides Parish was first part of the Orleans section of the territory, and then a part of Rapide County

after the sections were restructured. Rapides Parish was then established as one of the 19 Louisiana civil parishes in 1807 (Wessel et al. 1993; Wall 2002). Alexandria was founded in 1805 in Rapide County, which covered much of central and west-central portion of Orleans Parish and buffered the unchartered Texas frontier to the west. The area was occupied at the time by native groups including Biloxi, Pascagoula, Apalachee, and Choctaw, and several Anglos moved into Rapide County after the founding of Alexandria. In 1810, the population consisted of 2,200 individuals, including 996 whites, 1,081 slaves, and 123 free persons of color. During this interval, the deer skin trade continued to be a part of the Rapide economy, although numerous plantations had been established along the Red River and Bayou Boeuf (Whittington 1970, cited in Wessel et al. 1993).

The number of plantations in the South increased during the 1820s as a result of innovations in cotton production and transport. The introduction of the steam engine on boats and cotton gins made the separation of seeds from the cotton fiber more efficient and allowed relatively cheap transport of the ginned cotton. In 1821, there were two steamboats that operated on the Red River between Natchitoches and New Orleans, and this number increased to five steamboats by the following year (Sibley 1822, cited in Wessel et al. 1993). The aforementioned shoals along the Red River near Alexandria continued to present a navigational obstacle, which was remedied through the use of a 2-mile long horse-drawn rail line freight was loaded on (Wessel et al. 1993).

The population of Rapides Parish totaled 6,063 in 1820, and consisted of 2,491 whites, 3,487 slaves, and 85 free persons of color. This population grew to 8,555 by 1830; the largest growth rate among slaves rose to 5,329 and attested to the plantation economy of the region (Wessel et al. 1993).

As the number of slaves on plantations in Louisiana increased in the nineteenth century so did fear of the threat of a slave revolt, especially since a large number of slaves were

brought from the island of St. Domingue where a successful revolt was carried out, forming the nation of Haiti. In 1811 a slave revolt did take place and a group of as many as 500 poorly armed individuals stormed New Orleans only to be defeated by residents and a detachment of U.S. troops. The fear of insurrection continued to plague slaveholders in Louisiana, although none as large as the 1811 uprising would occur (Wall 2002).

During the early antebellum years, cotton would continue to be the main staple crop, although sugarcane was grown on plantations in the area as well. By 1860 the population of Rapides Parish had grown to 21,000 people, including 1,300 slaves. While sugarcane production somewhat waned, cotton remained the major crop. During this period Alexandria became a mercantile center, due to its position at the head of navigation along the Red River (Wessel et al. 1993).

In 1861 Louisiana seceded from the Union and joined the Confederate States of America. After the siege of New Orleans in 1862, the only Confederate strongholds remaining along the Mississippi River were at Vicksburg and Port Hudson. In an attempt to divide the Confederacy, Federal forces put their sights on the capture of Shreveport to stop the flow of supplies from Texas. In May 1863, a coordinated attack by a fleet of gunboats and Union forces successfully forced the retreat of Confederate troops from Fort De Russy south of Alexandria, but the attack was not successful at capturing Shreveport, so a second attempt was launched in spring of 1864. Confederate troops were able to remove most of their supplies from Fort De Russy prior to the earlier attack, and fought with greater resistance upon the return of Union forces (Wessel et al. 1993). The successful capture of Alexandria, along with Vermillionville and Opelousas to the south, put all of southwestern Louisiana under Federal control (Wall 2002).

Union forces proceeded toward Shreveport after ascending the river from Alexandria, but fell short of capturing the city due to a heated battle with troops from

Mansfield that routed the Union's army positions and resulted in a shortage of support for the Union gunboats. On their retreat downriver, the Union boats were stranded at the shoals near Alexandria due to a low water level in the Red River. A Union engineer put the forces to work constructing a set of dams downriver from the falls that allowed the gunboats to safely pass over the shoals, but during their retreat through Alexandria the city was burned. Although Confederate troops quickly reoccupied the area after Union forces left, the end of the war soon followed (Wessel et al. 1993).

The Civil War would lead to a restructuring of the agricultural production in Louisiana as farms struggled to meet higher labor costs after the emancipation of slaves. The plantations along the Red River were particularly impoverished as the infrastructure for processing sugar and cotton had been largely demolished during the war. After Reconstruction, tenant farming and sharecropping became the primary forms of agricultural production in the state (Wessel et al. 1993).

## Twentieth Century (A.D. 1900–1999)

With the development of the railroad system, many commercial steamboats were outcompeted, leading to a shift away from the river as the main avenue for commerce. While farming continued to be the primary economic activity in Rapides Parish, lumbering boosted the central Louisiana economy. Sugarcane and cotton remained the most important crops, but corn, rice, potatoes, and oats were also produced on Rapides Parish farms.

Other industries that developed in the area included a large iron works, cotton seed mills, an ice factory, and several boiler and engine manufacturers. By 1940, Alexandria became the fifth largest metropolitan area in the state (Wessel et al. 1993).

England Airpark began with the establishment of Esler Field by the City of Alexandria in 1939. Esler field was the

regional airport that served central Louisiana prior to World War II, but was then leased by the Army Air Corps from Alexandria and became known as the Alexandria Army Air Base. In 1955 it became England AFB in response to threats in Korea and was assigned to the Tactical Air Command. In December of 1992 the base was closed and went into remediation. It is now the location of the AEX (EPA 2009).



## Chapter 4. Methods

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The entire project area was subjected to a pedestrian survey supplemented by shovel testing, with the exception of two previously recorded sites that had been determined eligible for listing in the NRHP. The specific methods in each of these areas are further discussed below.

The project area was divided into high and low probability areas for containing cultural resources based on proximity to natural water sources and the known prior locations of historic structures. All areas within 200 m of a natural body of water or within 100 m of a mapped structure were considered high probability zones. All areas greater than 200 m from water or greater than 100 m from a mapped structure were considered low probability zones. Shovel tests were excavated on a 30 m (98 ft) grid in areas considered to have a high probability of containing cultural resources. In areas with a low probability, shovel tests were excavated on a 50 m (164 ft) grid. The high and low probability transect areas are presented on Figure 4.1.

All shovel tests measured 30-x-30 cm (12-x-12 in) and were excavated to 50 cm (20 in) below surface or until sterile subsoil was encountered. Fill removed from the tests was screened through .64 cm (.25 in) mesh hardware cloth, or was trowel-sorted in instances where the soil was extremely clayey. Shovel tests were recorded using standardized shovel test recording forms, and the sidewalls and bottoms of shovel tests were examined for cultural material and features. Along each transect the ground surface was visually inspected for artifacts. In areas where transects were spaced at 50 m intervals, the area between transects was also walked and visually inspected. The entire area of land inside the airport fence was subjected to 50 m interval pedestrian survey and shovel testing, which verified the destruction of the natural stratigraphy in this area as a result of land leveling and the addition of fill soil during Air Force base and airport development in the second half of the twentieth century.

Shovel tests were not systematically excavated within the known boundaries of the

two previously recorded archaeological sites, 16RA692 and 16RA703 since both were previously delineated and deemed eligible for listing in the NRHP (Wessel et al. 1993). The sites were still subjected to pedestrian survey, and judgmental shovel tests were added to each to confirm that the sites remained intact, but shovel testing was kept at a minimum to avoid disturbing cultural deposits.

Site boundary recordation relied on a combination of visual examination of surface exposures to delimit the extent of artifacts in surface contexts, and shovel testing to delimit the extent of subsurface artifacts. Most of the project area offered excellent surface visibility in cultivated fields, and the extent of artifacts along surface exposures proved to be a more reliable method of delineation in most instances. Given the large size of most of the recorded sites and the excellent surface visibility, a relatively large interval of 20 m (66 ft) was used to shovel test across the sites. The locations of all shovel tests were drawn on a gridded sketch map in relation to a grid datum arbitrarily assigned a grid coordinate of N1000 E1000. Shovel test mapping ensured that sites had been sufficiently delineated, such that site boundaries had been determined by the excavation of two negative shovel tests beyond each positive shovel test and the extent of the surface scatter of artifacts. Sketch maps included the locations of positive and negative shovel tests, the extent of surface artifacts and cultural features, as well as topographic and environmental information, and project boundaries. A photograph of each site was taken to illustrate the conditions at the time of the survey.

The locations of transects and site datums were recorded using Universal Transverse Mercator (UTM) coordinates recorded with a MobileMapper 6 global positioning system (GPS) unit manufactured by Magellan. All UTM positions recorded by the GPS unit during the project were taken under sunny conditions, with typically three to five satellites being tracked. This unit is capable of greater than 3 m (10 ft) accuracy.

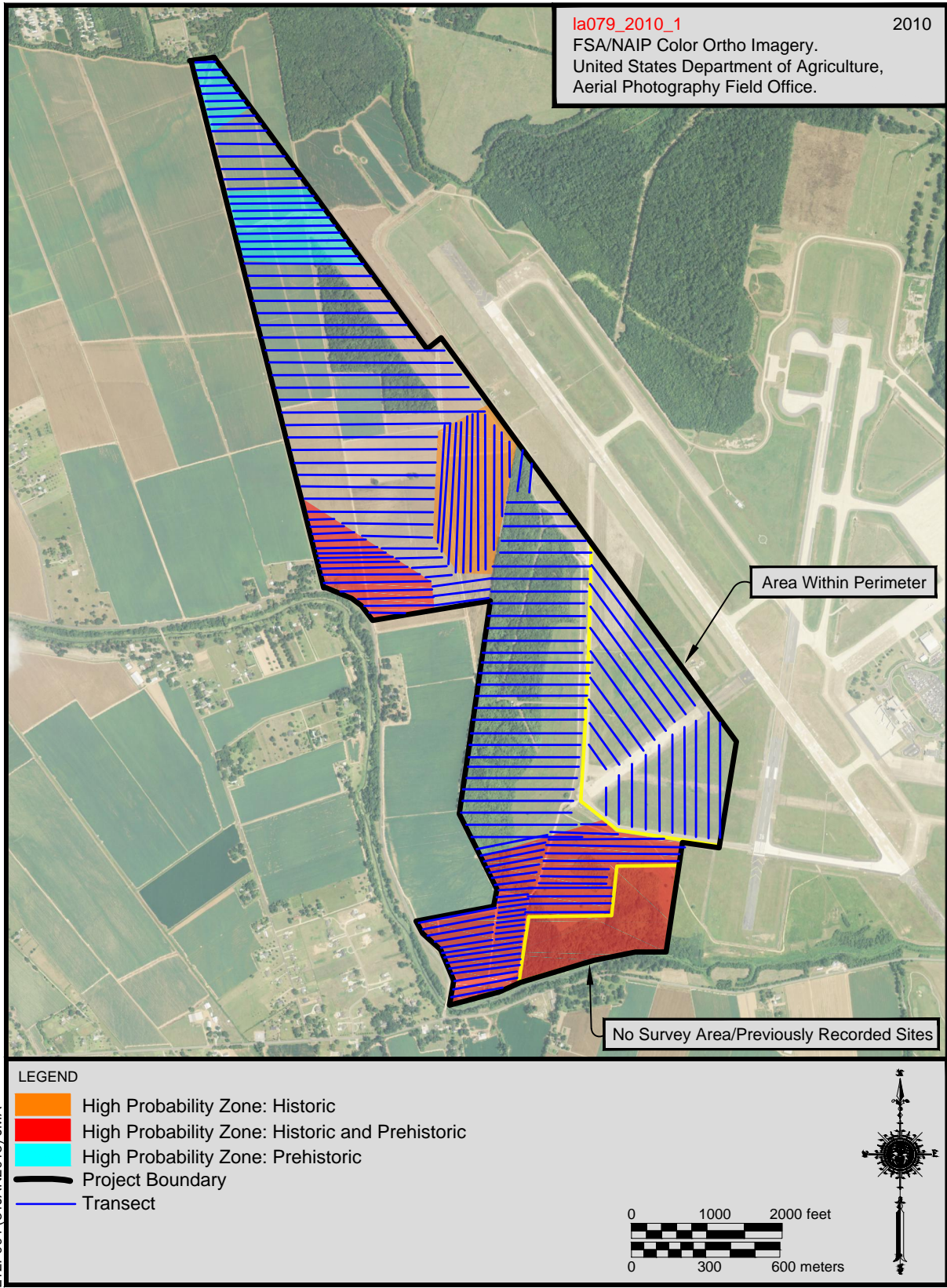


Figure 4.1. Project area aerial photo showing the location of high and low probability transect areas and no-test areas.



## Chapter 5. Materials Recovered

Historic materials were recovered during the current survey from four sites (16RA P004-1, 16RAP004-2, 16RA692, and 16RA703 and one isolated find. The assemblage is described below. In addition, an inventory of materials recovered from the site listed by provenience is presented in the site description section of this report, Chapter VI. Representative samples of each broad grouping of artifacts are also illustrated in Figures 5.1 and 5.2.

### Methods

The historic assemblage includes artifacts classified and grouped according to a scheme originally developed by Stanley South (1977). South believed that his classification scheme would present patterns in historic site artifact assemblages that would provide cultural insights. Questions of historic site function, the cultural background of a site's occupants, and regional behavior patterns were topics to be addressed using this system.

South's system was widely accepted and adopted by historical archaeologists. However, some have criticized South's model on theoretical and organizational grounds (Orser 1988; Wesler 1984). One criticism is that the organization of artifacts is too simplistic. Swann (2002) observed that South's groups have the potential to be insufficiently detailed. She suggested the use of sub-groups to distinguish between, for example, candleholders used for religious purposes and those used for general lighting. Others, such as Sprague (1981), have criticized South's classification scheme for its limited usefulness

on late nineteenth and early twentieth century sites, sites which include an array of material culture—such as automobile parts—not considered by South. Despite its shortcomings, most archaeologists recognize the usefulness of South's classification system to present data.

Stewart-Abernathy (1986), Orser (1988), and Wagner and McCorvie (1992) have subsequently revised this classification scheme. In this report, artifacts were grouped into the following categories: architecture, arms, clothing, communication and education, domestic, faunal/floral, furnishings, maintenance and subsistence, personal, transportation, and unidentified. Not all of these groups were populated. The artifacts recovered during this project are summarized in Table 5.1.

Grouping artifacts into these specific categories makes it more efficient to associate artifact assemblages with historic activities or site types. One primary change associated with the refinement of these categories is reassigning artifacts associated with the "Miscellaneous and Activities" under South's (1977) original system. Considering the potential variety of historic occupations and activities within the project area, a refinement of the artifact groupings was considered important to perhaps observe whether the distribution of specific artifact groups would produce interpretable patterns related to activity areas or structure types. Each one of these groups and associated artifacts is discussed in turn.

Table 5.1. Historic Artifacts Recovered According to Functional Group.

Sites	Architectural	Faunal/Floral	Clothing	Domestic	Furnishings	Maintenance	Personal	Unidentified	Grand Total
16RA692	32	0	0	18	0	3	0	1	54
16RA703	1	0	0	9	0	0	0	0	10
16RA1504	9	1	1	113	1	7	0	1	133
16RA1505	4	1	0	124	0	0	0	5	134
L12P004-4	84	2	2	416	0	8	1	5	518
Isolated Finds	0	0	0	2	0	0	0	0	2
Grand Total	130	4	3	682	1	18	1	12	851



Figure 5.1. Selected Artifacts from the Container Glass, Lighting and Fittings Classes. Top row (left to right): Owens-Illinois Glass Company amber bottle produced in 1940 in the Clarksburg, VA plant (16RA703), amber colored embossed panel bottle fragment (L12P004-4), amber colored bottle base from the Ihmsen Glass Co., Ltd.; amethyst depression glass tableware (16RA1504), clear glass bottle base with embossed "9" (L12P004-4); Second row: light green glass (16RA1505), olive colored wine bottle blob seal with Pernod Company maker's mark (16RA1504); opaque white glass jar fragment with external threaded rim; Third row: amber colored Illinois Glass Company panel bottle base (L12P004-4), opaque blue glass tableware (16RA1505), amethyst glass bottle rim with picnic-style double-ring finish, cobalt glass jar fragment with double-ring finish (L12P004-4); Fourth row: possible whiteware lamp base with transfer-print decoration, brown ceramic door knob (16RA1504).



Figure 5.2. Selected Artifacts from the Button, Cooking, Utensil, Hardware, and Ceramic Classes. Top row (left to right): 4-hole sew-through Prosser button (L12P004-4), fragment of a cast iron kettle, large ferrous locking washer, ferrous cog (16RA1504), copper alloy utensil handle (L12P004-4); Second row: whiteware with "B. P. Co." maker's mark (L12P004-4), ironstone with purple transfer print and annular decoration, blue shell-edged whiteware, flow-blue whiteware; Third row: whiteware with "H. ALC...EN" (Henry Alcock & Co, England) maker's mark (16RA1505); yellowware base (L12P004-4); Bristol-slipped stoneware (16RA1505), molded and green-slipped whiteware (16RA703); Fourth row: ironstone with "Honi soit qui mal y pense" and British coat of arms maker's mark; Fifth row: whiteware with "Pearl White" maker's mark, coarse earthenware sewer pipe (L12P004-4).

Usually, an artifact has specific attributes that represent a technological change, an invention in the manufacturing process, or simple stylistic changes in decoration. These attribute changes usually have associated dates derived from historical and archaeological research. For example, bottles may have seams that indicate a specific manufacturing process patented in a certain year. The bottle then can be assigned a “beginning” date for the same year of the patent. New technology may eliminate the need for the same patent and the bottle would no longer be produced. The “ending” date will be the approximate time when the new technology took hold and the older manufacturing processes are no longer in use.

Specific styles in ceramic decorations are also known to have changed. Archaeological and archival researchers have defined time periods when specific ceramic decorations were manufactured and subsequently went out of favor (e.g., Lofstrom et al. 1982; Majewski and O’Brien 1987). South’s (1977) mean ceramic dating technique uses this information. The dates presented here should not be considered absolute but are the best estimates of an artifact’s age available at this time. A blank space indicates that the artifact could not be dated or, alternately, that the period of manufacture was so prolonged that the artifact was being manufactured before America was colonized. An open-ended terminal date was assigned for artifacts that may be acquired today. The rationale for presenting dates for the artifacts recovered is to allow a more precise estimate of the time

span the site was occupied, rather than the mean occupation date of a site.

A summary of the artifacts recovered follows. Information on the age of artifacts as described in the artifact analysis is derived from a variety of sources cited in the discussion. Beginning and end dates for some artifacts were approximated. A complete inventory of the historic artifacts can be found in Appendix A.

## Materials Recovered by Functional Group

There were 850 historic artifacts recovered during the investigation. The following provides a descriptive discussion of the types and ages of artifacts recovered from throughout the survey area.

### Architecture Group (N = 130)

The architecture group is comprised of artifacts directly related to buildings, as well as those artifacts used to enhance the interior or exterior of buildings. These artifacts primarily consist of window glass, nails, and construction materials, such as brick and mortar. The architecture group items are discussed below (Table 5.2).

#### *Construction Materials (n = 44)*

Construction materials refer to all elements of building construction. For this project, the building materials collected consisted primarily of brick, but also included two pieces of mortar, one small piece of slate, and three ceramic tile fragments.

Table 5.2. Summary of Architectural Group Artifacts Recovered from the Project Area.

Sites	Construction Material	Fittings and Hardware	Flat Glass	Nails	Grand Total
16RA692	13	0	1	18	32
16RA703	0	0	0	1	1
16RA1504	2	2	0	5	9
16RA1505	3	0	0	1	4
L12P004-4	26	11	14	33	84
Isolated Finds	0	0	0	0	0
Grand Total	44	13	15	58	130

The recovered brick fragments (n = 38) included nine fragments of machine-made bricks, three of which were non-vitrified, and six that were vitrified. There were both non-vitrified and vitrified types of bricks (n = 28) that were classified as indeterminate. Hand-made or early machine-made bricks often have a glaze, resulting from the sand in the clay turning to glass in the kiln. The paste is usually more porous, and the shape of the early bricks is more irregular. The later machine-made bricks have a harder, more consistent paste and are uniform in shape. Machine-made bricks will often have marks in the clay related to the machine manufacturing process (Greene 1992; Gurcke 1987). There was also one brick fragment classified as firebrick, which is a type of dense brick most commonly used in kilns or where the brick would be exposed to high heat or friction. The brick fragments recovered were not assigned specific dates.

The remaining construction materials recovered included mortar, ceramic tile, and slate. There are many different kinds of mortar differentiated by the materials used in their preparation. Hydraulic lime was a common ingredient in mortar preparation from ancient times. Ceramic tile may have been used both on the exterior and interior during building construction. These tiles were used for flooring and roofing typically (Harris 2000:551; 576). Quality slate was used for roofing, since it was easily split and durable. Slate roofs in the United States were not common until the late nineteenth century, when the housing industry began simulating earlier European traditions (McAlester and McAlester 1984:45).

### *Fittings and Hardware (n = 13)*

This class of artifacts includes fittings for structures, such as plumbing pipes and other architectural hardware. These items were decorative and functional items used in architectural construction that were fixed but were not built in. The items recovered from this category during the current project include 3 ceramic doorknob fragments with a brown glaze on the surface, and 10 pieces of

stoneware water/sewer pipe. The type of door knob recovered was common throughout the nineteenth and early twentieth centuries and the remaining items did not suggest specific date ranges.

### *Flat Glass (n = 15)*

Cylinder glass was developed in the late eighteenth century to enable the inexpensive production of window glass. With this method, glass was blown into a cylinder and then cut flat (Roenke 1978). This method of producing window glass replaced that of crown glass production, which dates back to the Medieval period and was capable of fabricating only very small, usually diamond-shaped panes (Roenke 1978:5). Cylinder glass was the primary method of window glass production from the late eighteenth century through the early twentieth century, at which time cylinder glass windows were slowly replaced by plate glass windows. Plate glass window production became mechanized after 1900 but did not become a commercial success in the United States until around 1917 (Roenke 1978:11).

Cylinder window glass has been shown to gradually increase in thickness through time and can be a useful tool for dating historic sites. Several dating schemes and formulas have been devised that use average glass thickness to calculate building construction or modification dates. These formulas include those of Ball (1984), Roenke (1978), and Chance and Chance (1976), to name a few. Like previously derived formulas, Moir (1987) developed a window glass dating formula to estimate the initial construction dates for structures built primarily during the nineteenth century. Although Moir (1987:80) warns that analysis on structures built prior to 1810 or later than 1915 have shown poor results, most research in this area shows the regression line extending back beyond 1810 (Moir 1977; Roenke 1978). Sample size is also a consideration when using the Moir window glass regression formula. According to Moir (1987), sample sizes also need to be “reasonable and not collected from a point or two” in order to accurately date the

construction of a building. This investigation did not recover a “reasonable” sample size, which CRA typically considers 25 or more shards of window glass.

Each fragment of flat glass was measured for thickness and recorded to the nearest hundredth of a millimeter using calipers. The differences between cylinder window glass, mirror glass, and plate glass were in part determined by the thickness and wear of each flat glass fragment. Although Moir (1987:80) states that dating window glass after 1915 is not as reliable for dating sites, for the purposes of this study, window glass that measured 2.41 mm is assumed to date to 1916 and was included in the calculations, because according to Roenke (1978), plate glass does not become widely or successfully produced in the United States until 1917. Fifteen flat glass shards were recovered during the current survey. This sample was not appropriate to apply Moir’s window glass technique, which relies on statistically meaningful samples from discreet contexts for accuracy. Nonetheless, for general purposes, the thicknesses from the majority of the flat glass shards range in thickness from 1.69 to 2.16 mm, which would date between 1850 and 1900.

### *Nails (n = 58)*

There are three stages recognized in the technological chronology of nails: wrought nails, cut nails, and wire-drawn nails. Each of these technological changes is temporally diagnostic.

Wrought nails were handmade and were the primary type of construction fastener in the eighteenth and early nineteenth centuries. Their use ended around 1810 with the widespread use of square cut or machine cut nails (Nelson 1968:8).

The cut nail, introduced in approximately 1800, originally had a machine-cut body with a hand-made head. Around 1815, crude machine-made heads replaced hand-made heads on cut nails, and overall, cut nails replaced wrought nails in the construction industry. Early fully machine-cut nails exhibit a “rounded shank under the head,” and

therefore, often appear pinched below the head of the nail (Nelson 1968:8). By the late 1830s, these “early” fully machine-cut nails were replaced with “late” fully, or modern, machine-cut nails.

The first wire-drawn nails were introduced into the United States from Europe by the mid-nineteenth century. These early wire nails were primarily used for box construction and were not well adapted for the building industry until the 1870s. Although the cut nail can still be purchased today, the wire nail nearly universally replaced it by the turn of the twentieth century (Nelson 1968:8).

A total of 58 nail fragments were recovered from the project area. Of the nails recovered, 17 were cut nails with machine-made heads, 7 were wire-drawn nails, and 34 were indeterminate nail fragments that could not be identified to type. No complete nails were recovered and all of the recovered nail fragments were heavily rusted and in poor condition.

### **Clothing Group (N = 3)**

The clothing group typically includes buttons, clothing fasteners, footwear, and other clothing-related items, such as belts and fabric. However, only three buttons were recovered during this project (Table 5.3).

**Table 5.3. Summary of Clothing Group Artifacts Recovered from the Project Area.**

Sites	Buttons	Grand Total
16RA692	0	0
16RA703	0	0
16RA1504	1	1
16RA1505	0	0
L12P004-4	2	2
Isolated Finds	0	0
<b>Grand Total</b>	<b>3</b>	<b>3</b>

### *Buttons (n = 3)*

The three recovered buttons were all white, four-hole, sew-through ceramic buttons (including one 17-line, one 18-line, and one 28-line button). These buttons have been referred to in the collector’s literature as porcelain buttons or china buttons (Albert and Adams 1951; Albert and Kent 1949; Luscomb

1992), but Sprague (2002) urges archaeologists to refer to these buttons as Prosser buttons for clarity in referencing material characteristics and production process.

Prosser buttons are any that are manufactured out of fine clay powder that was pressed in molds and fired (Albert and Kent 1949:32; Sprague 2002). The manufacturing process, referred to as the Prosser process (in honor of Richard Prosser, who patented it) was developed in the 1830s and received an official patent in 1840 (Sprague 2002). The most common color for Prosser buttons was white, but black versions have also been recovered. Additionally, hundreds of varieties or colorful “calico” and molded buttons were produced (Lamm et al. 1970).

Prosser buttons can be identified by the dimpled-like, or “orange-peel”, texture on the back (Sprague 2002), but there is a wide variability in the occurrence of this characteristic. Prosser buttons date from 1840 to 1920 (Luscomb 1992) and were considered highly fashionable between circa 1850 and 1920. Pre-1900 Prosser buttons are generally of a higher quality than the later varieties. Plain Prosser buttons often served utilitarian purposes, being used for undergarments, shirts, dresses, and infant and child clothing. The number of holes in a porcelain button is suggestive of the type of garment on which it was attached. Four-hole buttons were the major utilitarian button, being used on a variety of garments (i.e., dresses, shirts, and undergarments) and were available in many

styles. White four-hole buttons are probably the most common form identified in archaeological assemblages, followed by pantywaist, calicos, and piecrust (Sprague 2002).

## Domestic Group (N = 681)

Artifacts included in the domestic group consisted of ceramics (n = 379), container glass (n = 285), cookware (n = 1), glass tableware (n = 15), and utensils (n = 1) (Table 5.4). Such artifacts could have a wide variety of functions within the domestic setting, including those related to cooking, serving, eating, decoration, or waste disposal.

The ceramic inventory consisted of refined and utilitarian wares dating from the nineteenth century through the twentieth century. A full description of ceramic types recovered from the project area is listed below, followed by descriptions of other domestic group artifacts.

### *Ceramics (n = 379)*

The ceramics recovered were grouped into eight major ware types: ironstone (n = 35), pearlware (n = 6), porcelain (n = 32), refined redware (n = 1), stoneware (n = 88), unidentified refined earthenware (n = 2), whiteware (n = 198), and yellowware (n = 17) (Table 5.5). Ceramics within each of these ware groups were separated into decorative types that have temporal significance. Each of these ware groups is reviewed below, followed by discussions of associated decorative types.

Table 5.4. Summary of Domestic Group Artifacts Recovered from the Project Area.

Sites	Ceramics	Container Glass	Cookware	Glass Tableware	Utensils	Grand Total
16RA692	6	11	0	1	0	18
16RA703	4	5	0	0	0	9
16RA1504	47	62	1	3	0	113
16RA1505	94	25	0	5	0	124
L12P004-4	228	181	0	6	1	416
Isolated Finds	0	1	0	0	0	1
Grand Total	379	285	1	15	1	681

Table 5.5. Summary of Ceramic Artifacts Recovered from the Project Area.

Sites	Ironstone	Pearlware	Porcelain: Canton	Porcelain: Hard Paste	Porcelain: Soft Paste (Bone China)	Refined Redware	Stoneware	UID Refined Earthenware	Whiteware	Yellowware	Grand Total
16RA692	0	0	0	1	0	0	1	0	4	0	6
16RA703	0	0	0	0	0	0	0	0	4	0	4
16RA1504	3	3	1	1	1	0	20	0	18	0	47
16RA1505	17	0	0	8	4	0	21	2	37	5	94
L12P004-4	15	3	0	16	0	1	46	0	135	12	228
Isolated Finds	0	0	0	0	0	0	0	0	0	0	0
Grand Total	35	6	1	26	5	1	88	2	198	17	379



## Ironstone (n = 35)

Ironstone is a white or gray-bodied, refined stoneware with a clear glaze. It is often indistinguishable from whiteware. Ironstone differs from whiteware in that the body is more vitreous and dense. In addition, a bluish tinge or a pale blue-gray cast often covers the body. In some cases, a fine crackle can be seen in the glaze; however, this condition is not as common as it is in whiteware (Denker and Denker 1982:138).

Confusion in the classification of white-bodied wares is further compounded by the use of the term as a ware type or trade name in advertising of the nineteenth century. Both ironstones and whitewares were marketed with names such as “Patent Stone China,” “Pearl Stone China,” “White English Stone,” “Royal Ironstone,” “Imperial Ironstone,” “Genuine Ironstone,” “White Granite,” and “Granite Ware” (Cameron 1986:170; Gates and Ormerod 1982:8). These names do not imply that true ironstone was being manufactured. Some investigators avoid the distinctions entirely by including ironstones as a variety of whiteware. Others, such as Wetherbee (1980) refer to all nineteenth-century white-bodied earthenwares as ironstone. For this analysis, the primary determining factor in classification of a sherd as ironstone was the hardness and porosity of the ceramic paste. Sherds with a hard vitreous paste were classified as ironstone.

Charles James Mason is usually credited with the introduction of ironstone (referred to as Mason’s Ironstone China) in 1813 (Dodd 1964:176). Others, including the Turners and Josiah Spode, produced similar wares as early as 1800 (Godden 1964). As a competitive response to the highly popular oriental porcelain, British potters initiated this early phase of ironstone production. The ironstone of this early phase bears a faint blue-gray tint and oriental motifs, much like Chinese porcelain. A second phase of ironstone began after 1850 in response to the popularity of hard paste porcelains produced in France. This variety of ironstone had a harder paste and

reflected the gray-white color of French porcelains.

While some ironstones continued to use oriental design motifs after 1850, the general trend was toward undecorated or molded ironstones (Collard 1967:125–130; Lofstrom et al. 1982:10). Ironstone continued to be produced in England, and, after 1870, it was also manufactured by numerous American companies. For many years, classic ironstone—the heavy, often undecorated ware—had been frequently advertised as being affordable and suitable for “country trade” (Majewski and O’Brien 1987:121). By the late 1800s, these thick, heavy ironstones began losing popularity and were often equated with lower socioeconomic status (Collard 1967:13). At the same time, ironstone manufacturers began shifting to thinner, lighter weight ironstones. As a result, this type of ironstone became popular tableware in American homes during most of the twentieth century (Majewski and O’Brien 1987:124–125). In spite of the shift toward thinner and lighter ironstones, heavy ironstone remained on the market and continues to be popular in hotel/restaurant service (hence, this heavy, twentieth-century ironstone is sometimes called “hotelware”); however, its production for home use all but ceased by the second decade of the twentieth century (Lehner 1980:11).

Most of the ironstone sherds recovered from the current study were plain or undecorated (n = 31). However, there was one with an applied decoration of unknown character, as well as one purple transfer print and two green transfer-printed sherds. The two green transfer-printed sherds included partial maker’s marks. One simply reads “...stone” with a possible crown below it, suggesting it was a piece of the proper “Ironstone” brand. The other maker’s mark shows the British coat of arms with the French phrase, “Honi soit qui mal y pense,” which was the motto of the Order of the Garter, founded in 1348 by King Edward III. It is not known during which period this mark was used on ceramics.

## Pearlware (n = 6)

Pearlware was introduced as an alternative and improvement to creamware (Majewski and O'Brien 1987:118). It was also thought that this ceramic type would return a greater profit and bring in more customers than creamware (Miller and Hunter 2001:145). Pearlware, also known as China Glaze, differed from creamware largely because of its whitened body and its bonding acceptance of blue painting and blue printing (Noël Hume 1972:232–233). This ceramic type was introduced as early as 1775; however, it was not widely available until the 1780s. Josiah Wedgwood referred to his new ware as “Pearl White” as early as 1778; however, few sites have contained this ceramic type dating prior to 1779 (Seidel: 1990). This date has become a popular terminus post quem for any context containing these wares (Miller and Hunter 2001).

This refined earthenware possesses a white paste and clear lead glaze, to which a small amount of cobalt was added. Although cobalt was used as the coloring agent on all pearlware, the eighteenth-century pearlware exhibits a dark, gray-toned color, and the pearlware after 1820 is a brighter purple-toned color (Sussman 1977). Because of the blue-tinted glaze, pearlware was able to replicate Chinese porcelain (Miller and Hunter 2001:146). According to Noël Hume (1985:129–133), pearlware is the most common ceramic item found on early-nineteenth-century sites. It can be readily distinguished from late creamware by the way the bluish glaze puddles in the crevices of footings and around handles.

Pearlware is often identified by its decorative type. Popular types of decoration on pearlware include blue or green shell-edge or edge decorations, hand-painted motifs, slip decorations, applied decorations, spatter ware, lustre ware, and transfer-printed designs (Faulkner 2000; Hughes and Hughes 1968:104; Majewski and O'Brien 1987; Sussman 1977:105–111). The primary reason for the replacement of creamware with pearlware was that pearlware was more

lavishly decorated. The majority of creamware was undecorated, and the market began demanding decorated wares. The American love affair with Chinese porcelain improved the pearlware market and increased this demand (Miller and Hunter 2001:156–157).

By the 1820s, the popularity of British pearlware, too, had begun to diminish. At this time, hard whitewares were being locally produced and began to replace pearlware as the preferred choice of consumers (Majewski and O'Brien 1987:119). As bone china grew in popularity, earthenware producers were pressured to create a whiter ware type. In the CRA laboratory, the classification of pearlware is based on the color of the decoration and the identification of the glaze tint.

Six fragments of pearlware were recovered during this project. These consisted of four undecorated sherds and two transfer-printed sherds. The recovered pearlware sherds are considered to date from the 1780s to the 1830s (Lange and Carlson 1985; Lofstrom et al. 1982; Noël Hume 1969; Hunter and Miller 1994:433; Majewski and O'Brien 1987).

## Whiteware (n = 198)

As a ware type, whiteware includes all refined earthenware that possesses a relatively non-vitreous, white to grayish-white clay body. Undecorated areas on dishes exhibit a white finish under clear glaze. This glaze is usually a variant combination of feldspar, borax, sand, nitre, soda, and china clay (Wetherbee 1980:32). Small amounts of cobalt were added to some glazes, particularly during the period of transition from pearlware to whiteware and during early ironstone manufacture. Some areas of thick glaze on whiteware may, therefore, exhibit bluish or greenish-blue tinting. Weathered paste surfaces are often buff or off-white and vary considerably in color from freshly exposed paste (Majewski and O'Brien 1987).

Most whiteware produced before 1840 had some type of colored decoration. These decorations are often used to designate ware

groups (i.e., edgeware, polychrome, and colored transfer print). Most of the decorative types are not, however, confined to whiteware. Therefore, decoration alone is not a particularly accurate temporal indicator or actual ware group designator (Price 1981).

The most frequently used name for undecorated whiteware is the generic "ironstone," which derives from "Ironstone China" patented by Charles Mason in 1813 (Mankowitz and Haggart 1957). For purposes of clarification, ironstone will not be used when referring to whiteware. Ironstone is theoretically harder and denser than whiteware produced prior to circa 1840. Manufacturer variability is, however, considerable and precludes using paste as a definite ironstone identifier or as a temporal indicator. Consequently, without independent temporal control, whiteware that is not ironstone is difficult to identify, as is early versus later ironstone. For this analysis, the primary determining factor in classification of a sherd as whiteware was the hardness and porosity of the ceramic paste. Decorative types observed on the whiteware sherds in our assemblage are summarized and defined in the following discussions.

*Plain (n = 153)*

This whiteware type includes vessels which are undecorated. While some researchers, such as Lofstrom et al. (1982:10) and Wetherbee (1980) include molded designs with "plain" whiteware, we agree with Majewski and O'Brien (1987:153) that molded vessels should be grouped on their own. Plain whiteware vessels became very popular following the United States Civil War and continued in popularity throughout the late nineteenth and early twentieth centuries (Faulkner 2000). Bacteriological research emerged after the Civil War, and it was not long before it became widely known that there is a link between bacteria and disease (Duffy 1978:395). Since bacteria could not be seen with the naked eye, it was commonly thought that plain, undecorated wares were best suited for maintaining and serving clean, bacteria-free food. Hence, bacteriological research

helped spur the rise in popularity of undecorated vessels, which resulted in increasing competition between whiteware and ironstone manufacturers.

Purity crusades also indirectly helped increase the popularity of plain, white vessels in the late nineteenth and early twentieth centuries as social reformers focused on cleaning up city streets, improving sanitation, and ridding cities of disease epidemics. Part of this crusade was the public promotion of purity at the dinner table. Unfortunately, many of these white public health reformers were also motivated by Social Darwinist ideas, and sanitation problems and disease epidemics were often blamed on African Americans and East-European immigrants who were stereotyped as being the harbingers of disease and social decay (Friedman 1970:123).

One hundred and fifty-three undecorated, or plain, whiteware sherds were recovered during the current survey. These sherds were dated from 1830 to the present (Majewski and O'Brien 1987:119). While plain sherds may have come from plain vessels, it should be noted that many of these sherds may be undecorated parts of decorated vessels.

*Embossed/Molded Design (n = 6)*

As transfer printing became popular on pearlware, molded designs were simplified. Molded designs were revived with the introduction of whiteware in the late 1830s, but they did not attain the elaborateness of previous forms. Specialized moldings for whiteware were common in the 1840s, when the ware had a more limited and generally more affluent market (Wetherbee 1980).

During the 1860s, embossing tended to become softer in relief than the angular and sculpted forms of the 1840s and 1850s (Wetherbee 1980). During the 1870s and 1880s, molded decorations occupied smaller areas on dishes, and elaboration was confined to handles and lids. British stylistic trends dominated the embossed and molded whiteware industry throughout most of the nineteenth century (Wetherbee 1980). Since a distinction between mold types was not made,

the date for the six embossed/molded design whiteware sherds recovered during the current excavations was from 1860 to the present.

*Edge decorated (n = 5)*

This decorative type is a continuation of the edge decoration mostly prevalent on pearlware plates that first appeared circa 1779 (Noël Hume 1978:45). Some researchers, such as Hunter and Miller (1994), have examined shell-edge decoration on both pearlware and whiteware and concluded that this particular decorative technique was most commonly utilized between 1780 and 1860. Since whiteware was not manufactured before 1830, Majewski and O'Brien (1987) suggest a more general date range of 1830–1860 for green or blue edge-decorated whiteware, 1780–1830 for pearlware.

Edge decorations can occur with or without other decorations, such as hand painting or spatter, and if other decorations are present, they usually occur on plate bottoms (Greaser and Greaser 1967). Towards the second quarter of the nineteenth century, whiteware plates generally exhibited edge decoration without a complimentary decoration on the bottom. Noël Hume (1978:45–46) provides additional insights into edge-decorated vessels. He contrasts the popular “shell edge” rim treatment in production during the 1820s with later, simpler varieties:

At the outset, the painting of the rims harmonized with the grooved modeling of the shell edge, the brush strokes being carried to the center so that a feathering effect was achieved. Before long, the painters simply placed the brush at right angles to the rim and applied a stripe as the plate was rotated. Hence, over time, edge decorations on whiteware became less elaborate as molded rims were decreasingly produced and fanciful painting on the edges was replaced by a simple painted line paralleling the vessel rim. [Hume 1978: 45–46]

A study by Sussman (1977:108) indicates that dating style-specific edge decorations is difficult, even for nineteenth-century pearlware, because “the degree of sharpness of

the molded relief [is] not helpful in dating shell-edge dinner ware.” Sussman (1977:108) also notes that simpler, as well as more stylized, edge decorations were occurring as early as the eighteenth century, and by the end of the pearlware production period, variation in design was significant. However, with the introduction of whiteware, one can observe a significant difference between early whiteware edge decorations and later whiteware edge decorations. It is reasonable to suggest, therefore, that the degree or lack of refinement on nineteenth-century edge-decorated whiteware is related more to production costs and retail price than to simple temporal change.

For this study, a basic date range of 1830–1860, following Majewski and O'Brien (1987), is used to temporally classify the recovered edge-decorated whiteware sherds. Three blue shell-edged sherds were identified, as well as one purple unspecified edge decoration and one sherd with an unidentified edge decoration.

*Chromatic Glaze (n = 1)*

Solid colored, or chromatic, glazed ceramics became popular during the second quarter of the twentieth century (Majewski and O'Brien 1987:164). As chain stores dealing in five- and ten-cent merchandise, groceries, drugs, and clothing sought to provide an increased array of cheap merchandise for consumers, pottery companies expanded their production efforts with the use of tunnel kilns. These kilns, which contained continuous flow ovens, allowed pottery manufacturers to significantly increase the output of cheap dishes available to chain stores and, ultimately, consumers (Blaszczuk 2000:120–121).

One of the first well-known and popular styles to be produced in the 1920s had a yellow or ivory glaze with or without decals (Blaszczuk 2000:121). By the 1930s, other chromatic glazes in colors such as red, cobalt blue, and green also became popular, as exemplified by the excitement surrounding Homer-Laughlin's introduction of Fiesta

tableware to the consumer market in 1936 (Gonzalez 2000). Over time, other colors were added to the chromatic-glazed tablewares available to consumers, and although chromatic-glazed vessels are still available today, the height of their popularity was seen between the 1920s and 1960s. A single polychrome chromatic glazed whiteware sherd recovered from the current project likely dates from sometime between the 1920s and 1960s.

*Transfer Print (n = 12)*

By the late 1780s, transfer printing was being developed in the potteries of Staffordshire, England, as a fast and inexpensive method of mass producing decorated pearlware and whiteware. It was originally perfected circa 1756 for use on porcelains and was not used on earthenwares until Thomas Minton designed his blue willow pattern in 1780, which initiated a wider commercial use (Little 1969:15–17; Norman-Wilcox 1978). This process revolutionized the Staffordshire ceramic industry and allowed for the first time a set of tableware to be produced with design uniformity (Samford 1997:1).

When transfer printing, the required pattern is first engraved by hand on a copper plate, from which a tissue-paper print called a “pull” or “proof” is taken. Then, by pressing the tissue against a piece of undecorated ware, the design is deposited or transferred to the surface of the vessel. On early ceramic vessels, these prints were added after the final glazing process had been completed. This was often referred to as bat printing, cold printing, or overglaze printing. These early designs were often found in black, red, brown, and purple. Transfer prints applied underneath the glaze were first attempted circa 1780 (Samford 1997:2–3). Early underglaze prints were often blue, since cobalt was the only coloring agent that could withstand the heat of the firing process at this time (Samford 1997:21). As technology improved and glazes became clearer, other colors began to be used.

According to Hughes and Hughes (1968:150) and others, such as Godden (1964), blue was the dominant color of transfer-printed wares prior to the 1830s. With

advances in ceramic technology, brown and black prints appeared after 1825, and by 1830, green, red, pink, mulberry, and light blue were also being produced (Bemrose 1952:23; Little 1969:13–22; Wetherbee 1980:15). By the late 1840s, a technique for transferring more than one primary color to a vessel was perfected (Godden 1964; Samford 1997:22). Green transfer-printed wares were generally no longer produced after 1859 (Samford 1997:20).

Early patterns include the willow pattern and other Chinese design motifs. Although some Chinese-style motifs were still being used, the use of classical and romantic scenic themes became popular in the early nineteenth century. These patterns included country scenes, floral motifs, and travel scenes. Patterns depicting American buildings and scenery were popular after 1812 (Snyder 2000:5). The patterns on these sherds were suggestive of prints of the early nineteenth century (Price 1979:19). Since whiteware was not generally available to the consumer market until 1830, this date was used as the beginning date of manufacture for most transfer-printed whiteware recovered, while the maximum date was based on the color.

Transfer prints produced in the late nineteenth through the early twentieth centuries were of a poor quality. For the most part, these can be identified by uneven patterning and overlapping seams in the transfer pattern. These late transfer prints were often reproductions of earlier transfer printed designs and were found in many different colors. Some of the patterns began to be litho-printed by machine instead of being engraved by hand, as had been conducted in the past. This allowed for mass production (Neale 2005:17).

There were a variety of transfer-printed designs present in the current collection. Although often the ceramic sherds were too small to discern much of the larger pattern to the piece, the colors were typically observable. Four blue-green, one black, one light blue, two dark blue, and four green transfer-printed sherds were recovered. Three of the green

transfer-printed sherds exhibited partial maker's marks. The mark "H. ALC...EN" could refer to Henry Alcock & Co, England, which produced this type of ware between circa 1861 and 1910. The second mark read, "Pearl White" over the image of a bird in a circle with a cross. "Pearl" (and by extension "Pearl White") was a term used by manufacturers of pearlware to mark their products much like the "ironstone" mark, but the recipe and characteristics of many pearlwares are so similar to the general white ware category that the term can appear on both types. The final partial mark read "WARRA...", which could be "Warranted." However, it is unclear what this might indicate.

#### *Flow Decorated (n = 1)*

Flowed decoration is a variant of transfer printing and was popular from 1839 to 1908 (Lange and Carlson 1985; Majewski and O'Brien 1987:142–143; Samford 1997:20). Three peak periods of production have been noted, including circa 1835–1850, 1850–1860, and late nineteenth/early twentieth century (Freeman 1954:8; Majewski and O'Brien 1987:143). Little (1969:21) indicates that "flowing" or "flown blue" was developed in England during the 1820s. Some late-nineteenth- and early-twentieth-century varieties of flow decorated wares occur and often exhibit gilding or molding, and sometimes overglaze enameling or hand painting. These decorations are not normally found on whiteware.

The term "flow blue" is derived from the fact that the transfer print, or other underglaze decoration, actually flows or blends with the clear glaze during the glaze firing. The effect is a blurring of print or hand-painted details and a deep creamy glaze. Many have attributed its success to the reduction in the mechanical effect of the print. The "flowing" was obtained by placing either a flow powder or cups of a flow liquid in the saggars during the glaze firing. The "flowing" compound was usually a volatilizing mixture, such as lime or chloride of ammonia, which would evolve chlorine at the glaze firing temperature. As chlorine

evolved from the mixture, it combined with the cobalt glaze, in effect rendering it soluble in the glaze (Dodd 1964:117; Little 1969:21). It is also possible to find black, mulberry, yellow, brown, and green decorated ware types with a flown decoration. The production of flow decorations was more prominent on ironstones than any other ware type (Majewski and O'Brien 1987:143).

It should be noted that there is disagreement as to what should actually be classified as flow decorated. Some individuals (often collectors and antique dealers) base classification on pattern and maker's marks. This frequently results in pieces with dark transfer-print designs being classified as flow blue. For the purposes here, as well as to set a standard of consistency within the CRA laboratory, only sherds that exhibit a blurred look due to excess dye or ink were classified as flow decorated.

The recovered flowblue examples is a base fragment from an indeterminate vessel type that has a partial footring and it depicts twin birds on the body of the vessel.

#### *Decal (n = 1)*

Decal decoration was rare before 1900 on ceramics other than imported porcelains (Majewski and O'Brien 1987:147). The process of decalomania consists of applying decals—designs printed on a film or paper—to ceramic vessels. This decorative technique is often confused with transfer printing; however, decals can be distinguished from transfer prints by the sharpness of the design, the presence of shading, the use of bright colors, and the slight relief often felt when touching the edge of a decal design (Majewski and O'Brien 1987:146). Decals are applied to vessels prior to the final firing and are usually put through the decorating kiln in order to harden the decal for permanency. The decals include stipple and line-engraved motifs created using a lithographic process in an assortment of colors (Majewski and O'Brien 1984:36). It should also be noted that decals were often found in gold and are sometimes confused with gilded ceramics. Gilt decals, or gold decals, exhibit the slight relief of regular

decals, and their sharp design sets them apart from gilded wares.

In contrast to the polychrome sprig and broadline floral style popular in the mid-nineteenth century, floral decals are characterized by their use as a border or vessel accent. Frequently, these appeared as small sprays of flowers applied off-center and often in conjunction with thin-line border stripes, raised-border motifs, hand painting, and gilding (Majewski and O'Brien 1984:36). By the 1880s, monochrome decals were being filled in with hand-painted accents (Blaszczyk 2000:155; Majewski and O'Brien 1987:147). Majewski and O'Brien (1987) suggest that this motif began in the late 1800s as an inexpensive alternative to multicolored hand-painted techniques. Decals remained a popular method of decoration until the introduction of new decorating methods, including chromatic glazes and silk screening in the mid-twentieth century (Blaszczyk 2000:155). Decal decorations can occur on whiteware, ironstone, and porcelain. Decal-decorated whiteware was commonly found between 1880 and 1940.

The one decal decorated sherd present in the current assemblage is pink in color. It is possibly part of a floral motif. It can be dated between 1880 and 1940 according to the literature.

#### *Hand Painted (n = 6)*

Hand-painted decorations began to appear on whiteware vessels immediately after their introduction in the first quarter of the nineteenth century. In the early nineteenth century, blue was the most frequently used color. Only colors capable of withstanding the heat of the glaze firing could be applied. Greaser and Greaser (1967) reported that children were utilized by some Staffordshire potteries to hand paint ceramics.

Pink, green, yellow, and red were commonly used from approximately 1830 through the mid-nineteenth century. The most common decorative motif on hand-painted ceramics was some type of floral design (Majewski and O'Brien 1987:157). There are

several varieties of hand-painted floral decoration, including fine line, broad line, or a combination of the two. Floral decorations were applied in many different ways. These designs were applied either freehand using brushes, by stencil, or by the turn of the twentieth century, by filling in printed outlines (Majewski and O'Brien 1987:157).

Another popular motif was borderline hand painting, or banding, usually surrounding the rim of the vessel. These borderlines were often found on the rims of hand-painted floral-decorated vessels as well. Without the complete vessel, it is impossible to determine if the banding or borderline sherds date to the nineteenth century or represent ceramics that became popular in the early twentieth century (Majewski and O'Brien 1987:160).

The term polychrome refers to the use of more than one color in hand painting, whereas the term monochrome is used to refer to the use of only one color. Majewski and O'Brien (1987) suggest that the peak popularity period for hand-painted whiteware vessels was 1840–1860; however, some were produced as early as 1830. Price (1979:31) suggested a circa 1830–1860 time frame for hand-painted whiteware ceramics recovered in Missouri, while Garrow and Wheaton (1986: Appendix 2) utilized an 1830–1875 manufacturing range. For this study, the date range of Lange and Carlson (1985)—who suggested a date range of 1830–1870 for hand-painted wares such as whiteware, ironstone, and porcelain—is used.

Two blue monochrome decorated sherds were recovered during the current survey. One unspecified polychrome sherd, one polychrome sherd with fine green, black, and red pigments, one broadline polychrome with a purple line over red pigment, and one borderline sherd with a wide blue line and a narrow green line were also found.

#### *Slip Decorated (n = 11)*

Slip decorating, variously termed dipped, annular, or banded, refers to a technique used to apply bands or stripes horizontally to hollow vessel forms such as mugs, bowls,

cups, and covered dishes (Majewski and O'Brien 1984:163). The bands or stripes applied to the particular vessel, unlike hand-painted flat decorations, will have slight relief. Various colors can be found on slip-decorated wares. Over time, the bands became wide, and the colors changed from earthen browns, greens, yellows, blues, and black to bolder colors, such as bright blues, yellows, and white. Very narrow bands of white or black were often found on the later, brightly colored vessels. Slip-decorated vessels may be further enhanced with one or more of the following decorative types: rouletted or engine-turned decoration, hand-painted swirls, marbled motifs, and mocha designs.

Rouletted decoration is produced when a shaped instrument is pressed onto a still damp slipped vessel as it is turned on a potter's wheel, thereby exposing the contrasting paste color beneath (Godden 1963:105). Hand-painted decorations were often used on annular wares as accents between bands. These designs were often swirled, resembling finger painting or black-and-white "cat's eyes." In addition to these hand-painted motifs, zigzag and other abstract-shaped concentric lines were often applied between bands (Majewski and O'Brien 1984:163). Mocha decoration is produced when an acidic mixture (usually consisting of various combinations of tobacco juice, hops, urine, dry printer's black, turpentine, citric acid, and water) is dripped onto the colored slip, where it spreads into forms resembling trees, seaweed, or fronds, among other things (Majewski and O'Brien 1984:163).

Slip decorations were incorporated into the production of a wide range of earthenwares beginning in the second half of the eighteenth century. This decorative type was found on expensive creamware vessels as well as low-end utilitarian earthenwares (Carpentier and Rickard 2001:115). One of the earliest forms of slip decoration was made using an engine-turning lathe circa 1760. This type of decoration is also referred to as rouletted and is most often found in its earliest form on refined redware. By 1780, it was used on both creamware and pearlware vessels

(Carpentier and Rickard 2001:116–118). Most annular-decorated nonvitreous earthenware was produced in England from circa 1790 through the early twentieth century (Majewski and O'Brien 1984:163). These wares were produced for both local use and export. Some annular wares were produced in the United States around 1850 (Majewski and O'Brien 1984:164). Mocha decorations appeared as early as 1790 (Carpentier and Rickard 2001:122). Dendritic mocha decorations were seen as late as 1939 (Carpentier and Rickard 2001:125). Worm, cable, twig, and "cat's eye" decorations were implemented in the last decade of the eighteenth century (Carpentier and Rickard 2001:128). A wide variety of decoration on vessels of similar size and form can be found on many types of slip-decorated earthenwares.

Slip-decorated whiteware began to be produced around 1830, when the production of pearlware ceased, and continued to be made until the end of the nineteenth century (Carpentier and Rickard 2001:132; Price 1981:18). By the late nineteenth century, utilitarian vessel forms, as well as mugs, were the most commonly found slip-decorated items. One sherd with a light green slip was recovered in the current survey, as was one with a pale blue slip. One sherd exhibited both dark blue and pale blue colors and it is possible it could have come from the same vessel as the other pale blue sherd. Three sherds from the same vessel exhibited a light to medium green slip on top of a molded pattern. Another molded sherd had a dark blue and green exterior slip and a yellow and dark blue interior. Four annular varieties were present, including one with blue and green lines, one with green, black, and purple lines, and one with green, white, and blue lines.

### Porcelain (n = 32)

Porcelain is the name given to high-temperature fired, translucent ware. This ware type was first developed by the Chinese. Chinese, or hard paste, porcelain was introduced to Europe by Portuguese sailors that had traveled to China during the sixteenth century. The formula for true, or feldspathic,



porcelain was not discovered in Europe until 1708 and not marketed until 1713 (Boger 1971:266). The production of true porcelain was limited to three factories in England, all other products were softer porcelains made with glass, bone ash, or soapstone. Porcelain made with bone ash, often called "bone china," became the preferred product after 1800, since the paste was harder and the ware was cheaper to produce with bone than with glass or soapstone (Mankowitz and Haggard 1957:179). Among the more affluent households in Europe and North America, porcelain was common tableware used during the eighteenth and nineteenth centuries (Fay 1986:69). Porcelain production in America was not successful until 1826, and the number of porcelain factories in the United States remained small throughout the nineteenth century.

In the laboratory, bone china can be differentiated from hard paste porcelain by placing it under ultraviolet light. Bone china fluoresces blue-white, whereas hard paste porcelain fluoresces magenta (Majewski and O'Brien 1987:128). Like pearlware, few undecorated porcelain vessels were manufactured from the eighteenth through the nineteenth century, or in the previous centuries. However, plain porcelain was manufactured in quantity in the twentieth century.

Three types of porcelain were identified in the current artifact assemblage: Canton (n = 1); Hard Paste (n = 26); and Soft Paste (Bone China) (n = 5). Twenty-two of the hard paste sherds were undecorated, as were four of the soft paste sherds and the one Canton sherd. It is possible that the plain sherds recovered from the current project came from undecorated portions of decorated vessels. Other decorative types were identified in the porcelain assemblage, including decal, transfer-printed, molded design/embossed, and edge decorated sherds. See the whiteware section for a full discussion of decorative types.

## Yellowware (n =17)

Ramsay (1939:148) states that yellowware represents the transition from "pottery" to earthenware. The paste is finer than the coarse earthenwares but coarser than whiteware and ironstone. Prior to the glaze firing, the paste is a buff or cream color; however, the addition of an alkaline glaze creates a deep yellow upon firing. Yellowware was most commonly a utilitarian ware produced for chamber pots, slop jars, urinals, mugs, pitchers, mixing bowls, cuspidors, pie plates, food molds, and canning jars. Nevertheless, since yellowware is a transitional ware, it was occasionally used for more refined wares, such as cups, saucers, plates, and bowls.

For the purposes of this study, yellowware is assumed to be American, although it is realized that the wares were generally of English inspiration, and some English yellowware was imported into this country. James Bennett, an English emigrant who left Cincinnati in 1839, is generally credited with the introduction of American yellowware to East Liverpool in 1840 (Gates 1984:47; Stout 1923:16). Vodrey and Frost of Pittsburgh were the first to produce yellowware in the United States, perhaps as early as 1827 (Ramsay 1939:74). Yellowware, produced in molds, was very conducive to mass production, and other potters in Ohio, Vermont, and New Jersey opened factories in the 1840s. Ohio was one center of yellowware manufacture, and it is estimated that in 1850, half of all United States yellowware was manufactured in East Liverpool (Gates 1984:47). Yellowware is rarely marked, although William Bromley, who operated potteries in Cincinnati and Covington, Kentucky, during the mid-nineteenth century, included an elaborate molded mark on some of his finer Cincinnati pieces (Genheimer 1987).

One decorative treatment of yellowware, called Rockingham, is simply a mottled, brown-glazed yellowware. It is sometimes referred to as Bennington ware; however, it was manufactured throughout the eastern United States. A glaze of pure oxide of manganese produced a brown or purple brown

tint, resulting in a mottled or streaked effect (Hughes and Hughes 1956:130). Originally, Rockingham ware referred to ornate porcelain manufactured between 1826 and 1842 at Swinton, Yorkshire, England, on the estate of the Marquis of Rockingham (Dodd 1964:232). Hence, the term is not actually paste specific; the characteristic glaze was applied to redwares, whitewares, porcelain, and yellowware.

Christopher Webber Fenton at Bennington, Vermont, introduced Rockingham wares to the United States around 1845. Yellowware potteries in East Liverpool and other parts of Ohio and the eastern United States quickly took up its production. Bennington designs were closely copied in Ohio, including round-handled pitchers, book flasks, picture frames, mugs, pie plates, and milk pans (Ramsay 1939:76–77). During the mid-nineteenth century, both Rockingham and yellowware were marketed as “Liverpool” ware and “Queensware” (Gates and Ormerod 1982:7).

Another prominent decorative treatment for yellowware includes the application of annular-slip bands, which were usually blue, white, or brown, as well as mocha techniques, such as cat’s eye, swirl/wormware, and dendritic. Slip decorating, variously termed dipped, annular, or banded, refers to a technique used to apply bands or stripes horizontally to hollow vessel forms, such as mugs, bowls, cups, and covered dishes (Majewski and O’Brien 1984:163). The bands or stripes applied to the particular vessel—unlike hand-painted, flat decorations—will have slight relief. Various colors can be found on slip-decorated wares. Over time, the bands became wide, and the colors changed from earthen browns, greens, yellows, blues, and black to bolder colors, such as bright blues, yellows, and white. Very narrow bands of white or black were often found on the later, brightly colored vessels. Slip-decorated vessels may be further enhanced with one or more of the following decorative types: rouletted or engine-turned decoration, hand-painted swirls, marbled motifs, and mocha designs. Rouletted decoration, hand-painting,

and Mocha decorations described previously are also found on yellowware.

Another popular type of yellowware is flint enameled. Flint enameled yellowware looks very similar to Rockingham yellowware; however, flint enameling also uses more expensive oxides, such as copper and cobalt, creating blue and green flowing lines often interspersed with the manganese brown used in Rockingham decorations (Leibowitz 2002:14). Flint enameling was introduced in 1849. This decorative type is produced by sprinkling metallic oxides onto a transparent-glazed vessel. The piece was then fired and the oxides melted and fused with the underglaze, creating one solid surface. The melted oxides flowed and spread over the surface, creating a glaze that looked similar to Rockingham decorations with blues and green added (Barrett 1958:19).

Several decorative types were recovered during the current excavations, including plain ( $n = 13$ ) and slip-decorated with annular patterns ( $n = 4$ ). The annular decoration includes both white and brown line patterns. These types of yellowwares date between the 1830s and circa 1900, with some types being produced up to 1925.

### Refined Redware ( $n = 1$ )

Refined redware exhibits a fine-grained, porous dark red body and can be decorated in a multitude of ways. The following decorative treatments may be found on refined redware: clear glaze/lead glaze, lustre, tin glaze, both early and late Jackfield, Astbury, twentieth-century designs, and unglazed. It is also possible for refined redware to exhibit molded, rouletted, and rusticated designs.

Refined redware was generally produced for teawares (teapots, cups, mugs, and tableware), although no matching sets were manufactured (Faulkner 2000; Miller et al. 1994:241). The earliest refined redware teapots were produced around 1690. Shortly after this, the early Jackfield teawares were produced. Jackfield redware exhibits a dark red body and a shiny black glaze. Other refined redware teapots were in production

during this time period but exhibited a plain lead or black glaze. Clear or lead glaze was used in a combination of three parts red lead, one part clay, and one part sand or silica in a watery glasslike finish through which the natural clay body might be seen (Ketchum 1991). Most American potters employed this basic glaze in the production of redware. Colored glazes were produced by adding coloring agents—iron oxide, copper oxide, and manganese dioxide—to the clear/lead glaze. When manganese oxide was added to the glaze, the result was a brown to lustrous jet-black surface (Ketchum 1991). These teawares have been in continuous production in England since the eighteenth century (Miller et al. 1994:241).

Another popular form of early refined redware was called Astbury. This ceramic type is associated with John Astbury of Shelton, England (Noël Hume 2001:259). Astbury created this rich brown refined redware by using both yellow and red firing clays, to which he then applied small molded fragments in white, or kaolin, pipe clay. This type of ceramic decoration typically dates from 1725 to around 1750 (Faulkner 2000). Tin glaze was another popular decorative type used on refined redwares. This white glaze was developed in order to make an earthen ware that simulated Chinese porcelains at a fraction of the cost. Tin glazing was used between 1740 and 1770 (Burrow et al. 2003; Faulkner 2000). Lustred redware was also a popular form of refined earthenware. This decoration was typically found in silver or copper but may also be found in other colors. This decorative type dates from 1740 to around 1850 (Burrow et al. 2003). In general, refined redware was most popular between 1800 and 1840 (Mullins 1988:7).

A second phase of refined redware was produced from the mid-nineteenth century into the first quarter of the twentieth century. The most common type of redware to be reproduced is now considered to be late Jackfield. This ceramic type exhibits the same paste type and glaze color as the early Jackfield; however, the majority of the late Jackfield was decorated with small painted

accents, gilding, and/or an iridescent lustre (Faulkner 2000). Some late refined redware may also exhibit a twentieth-century glaze.

Faulkner (1984) stated that the temporal position of refined redware in Tennessee was not known but that this ceramic type most likely dated from the late eighteenth through the early nineteenth centuries. Until more research on refined redware is conducted throughout the Ohio Valley, the CRA historic analysts will also use this time frame for the analysis of this material type. The refined redware identified during the current project included just one sherd of undecorated redware.

### Stoneware (n = 88)

Stoneware served as the “daily use” pottery of America, particularly rural America, after its introduction during the last decade of the eighteenth century. By 1850, this ware generally replaced coarse redware as the primary utilitarian ware used in American households. Stoneware is a semi-vitreous ware manufactured of a naturally fine, but dense, clay. The pottery was fired longer and to a higher temperature than earthenwares; a kiln temperature of at least 1,200 to 1,250 degrees Celsius had to be obtained (Cameron 1986:319; Dodd 1964:274–275). As a result, stoneware generally exhibits a hard body and a very homogeneous texture. The paste may vary from gray to brown, depending on the clay source, and length and intensity of the firing.

Because this ware is fired at such high temperatures, its body is nonporous and well suited to liquid storage. Stoneware, as mentioned, was not typically manufactured as a refined ware (such as its cousin, ironstone, or eighteenth-century refined white salt-glazed stoneware), and hence, it was, for the most part, utilized for utilitarian activities associated with jars, churns, crocks, tubs, jugs, mugs, pans, and pots. These vessels were typically glazed, with salt glazing and slip glazing most common.

Although refined salt glazing was practiced in England during the eighteenth

century, by 1780, the production of English salt-glazed tableware had been virtually supplanted by the manufacture of cream colored earthenwares (Lewis 1950:29). The salt-glazing technique continued to be utilized for utilitarian vessels, however, and was eventually introduced to the United States in the early nineteenth century. Salt glazing was accomplished by introducing sodium chloride into the kiln during the firing process, at which point the salt quickly volatilized. The vapor reacted with the clay to form a sodium aluminum silicate glaze (see Billington 1962:210; Dodd 1964:239). The surface of the glaze is typically pitted, having what is commonly known as an “orange peel” effect.

Stoneware may also be coated with a colored slip (a suspension of fine clay and pigment). The Albany slip, named after the rich brown clay found near Albany, New York, first appeared in the 1820s. Initially, it was mainly used for the interior of stoneware vessels. However, by the 1850s, it was also used as an exterior glaze. Bristol glaze, an opaque white slip, was introduced late in the nineteenth century. When used in combination with Albany slip, Bristol-glazed stoneware vessels have a general date range of 1880–1925 (Ketchum 1983:19; Raycraft and Raycraft 1990:5).

A third glaze often used on stoneware is the alkaline glaze. Like the Albany slip, it was developed in the 1820s. The basic alkaline glaze is made up of wood ash, clay, and sand. Other additions may be slaked lime, ground glass, iron foundry cinders, or salt. These additions affected the color and texture of the glaze. Colors vary from olive to brown to a gray-green or yellowish hue, depending on adjustments in proportion of ingredients (Ketchum 1991:9). Although not as prevalent, alkaline glazing has been used in combination with salt glazing. This causes the stoneware vessel to exhibit the colors of alkaline glazing with the pitted texture of a salt glaze.

Twenty-four Bristol slipped exterior, five Albany slipped exterior, two Albany and Bristol slipped exterior, seventeen salt glazed exterior, one salt and Albany glazed exterior,

thirty-one slipped exterior, one chromatic glaze exterior, and seven unglazed or clear glazed exterior sherds. Interior decorations are variably associated with exterior treatments. There are 11 Bristol slipped interior, 7 Albany slipped interior, 42 slipped interior (mostly dark brown), 8 salt glazed interior, 1 chromatic glaze interior, 10 unglazed interior, 7 clear glazed interior sherds, and 2 sherds with eroded interiors.

Based on the stoneware literature, glazes represented in the stoneware assemblage indicate a date from 1780 to 1825. The Albany slipped examples date between 1830 and 1925. The Bristol slipped vessels date roughly between 1880 and 1925 (Ketchum 1983:19; Raycraft and Raycraft 1990:5).

#### **Unidentified Refined White Earthenware (n = 2)**

This category is a “catch-all” for all white-bodied wares that could not be further classified as to ware type. Frequently, sherds put into this classification have been burned, affecting determination of the original ware. Sherds in this classification may also be eroded pieces of ceramic paste.

#### ***Container Glass (n = 285)***

Bottle and other glass container typology is an important factor in classification. Although typology is not a precise science, the general shape of a bottle or glass container gives an indication of what the original contents were or its function. It is also important to note that although a bottle may be placed in a specific category, bottles were often reused and recycled for unrelated products. Specific categories of bottles include liquor/wine/beer bottles, soda/water bottles, medicine bottles, commercial bottles, household bottles, canning jars, nursing bottles, toiletry/perfume bottles, miscellaneous bottles, and miscellaneous jars.

Liquor/wine/beer bottles came in a wide variety of shapes and sizes holding from a few ounces to a gallon. Liquor bottles were one of the most diverse groups of bottles manufactured. These bottles ranged from

small flasks to large jugs. Wine bottles were one of the least diverse groups of bottles, generally only found as round, heavy glass bottles. Beer bottles were typically found as round, heavy glass bottles also, but this group of bottles was generally smaller than the wine bottles previously mentioned. Soda and mineral water bottles also had to be made of relatively thick glass. This allowed for strength during shipping and handling as well as during the reuse of these bottles.

Medicine bottles are the most diverse group. The medicine bottle category contains early medicine bottles, patent and proprietary medicine bottles, druggist bottles, and prescription bottles. Many of these bottles exhibit embossing and maker's marks, indicating specific medicines of drug companies that allowed for specific dating.

Commercial bottles were also a diverse group with many different shapes and sizes. The commercial bottle category contained sauce bottles, condiment bottles, pickle and preserved food bottles, vegetable oil bottles, and milk bottles. When possible, these bottles were assigned specific dates, and a specific bottle type within this category was noted.

The household bottles category contained ink bottles, shoe polish bottles, toiletry bottles, and household cleaning product bottles. This category, although smaller than the others, contained a diverse group of bottles with a wide range of dates.

As the name implies, canning jars were used to preserve foods. The most distinctive attribute of canning jars was their closure type. Canning jars are a ubiquitous type of artifact in the nineteenth and early twentieth centuries and can be assigned specific dates of manufacturer when maker's marks or other distinguishing characteristics are present.

Glass containers can come in a variety of colors. Colors include amber, amethyst, aqua, leaded or clear flint, green, light green, olive green, opaque white, clear, selenium, cobalt, blue-green, cornflower blue, and yellow/green glass. Jones and Sullivan (1985) observed that chemicals color glass, either as natural

inclusions or additions by the manufacturer. Although glass color is a relatively obvious descriptive attribute of a historic bottle, it is of limited utility in dating or type casting a bottle.

Amber glass was created from the natural impurities in glass as well as from popular color additives, such as nickel, sulfur, and carbon. Amber glass, because of the many amber variations, dates throughout the nineteenth century; however, amber glass was not widely used until the mid-nineteenth century (Fike 1987:13; Lindsey 2008).

According to Lockhart (2006), amethyst glass began to be manufactured around 1870, when manganese was being added to the glass recipe. Although initially colorless, the glass will turn a distinctive purplish color when exposed to sunlight over time. It was previously thought that amethyst glass production ceased by 1914 due to a shortage of manganese from Germany during World War I; however, the change was actually a result of technological advancements in the glass industry, mainly the conversion to automatic bottle machines (Lockhart 2006:53).

Following World War I, the cost of selenium was lowered and it proved to be an inexpensive decolorant in glass production and ultimately displaced manganese as a decolorizer by 1920 (Lockhart 2006:53). Selenium glass exhibits a straw or amber tint in the thickest portions of the glass. This glass color was used in BIM bottles, but typically those dating to the 1910s (Faulkner 2000; Lindsey 2008).

Aqua colored glass had many different variations. Aqua glass is a result of the iron impurities found in natural sand. Although sand was available in the eastern United States, some western-American glass factories were importing sand from Belgium. Because aqua glass is one of the most common glass colors in American made bottles, this glass color is not assigned a specific date of manufacture (Lindsey 2008). Light blue and cornflower blue are often grouped into the aqua glass category. These glass colors are not typically assigned specific dates; however,

cornflower blue glass was available as early as 1820 (Jones 2000:147).

Cobalt glass is produced with the addition of the coloring agent cobalt oxide to the glass batch (Lindsey 2008). The introduction of what Lindsey (2008) calls “true blue” glass began in 1840 with the production of soda, mineral water, and ink bottles.

Opaque white glass, also referred to generally as milk glass, was produced with the addition of tin or zinc oxide and phosphates to the glass recipe. Some more opalescent varieties of milk glass were even infused with arsenic. Opaque white glass was used for a variety of different bottle types and glass tableware, including most commonly cosmetic and toiletry bottles dating from 1870 to 1920. This glass type was noted as early as 1830 and continued to be used until circa 1960, when the process of making opaque white glass changed (Husfloen 1992:163; Lindsey 2008).

Green glass is found in more shades than any other glass color. These colors include, but are not limited to, light green, olive green, blue-green, and yellow-green. Green glass was produced by using the coloring agents iron, chromium, and copper. Many shades of green glass do not have diagnostic dates, since they have been used for many centuries in glass production and continue in popularity today. Emerald green or bright glass, however, was introduced in the mid-nineteenth century (Fike 1987:13; Lindsey 2008).

Clear or colorless glass was difficult to produce because it required the use of nearly perfect materials. With the public’s growing desire to see the contents of the bottles, clear glass came into demand and was popular beginning in the 1860s (Baughner-Perlin 1982:261). However, it should be noted that clear glass was available to a limited degree before this time. Clear-flint, or leaded, glass was made with lead oxide. This glass color was available to the bottle industry as early as the early nineteenth century and was utilized until the end of the nineteenth century (Lindsey 2008; Pullin 1986:354–355).

The lip on a bottle can be informative. A lipping tool, patented in the United States in 1856, smoothes and shapes the glass rim into a more uniform edge than a hand-smoothed lip or “laid-on ring.” Certain types or styles of lips were associated with specific contents; for example, medicines were often contained in bottles with prescription lips (Jones and Sullivan 1985). A “sheared,” or unfinished, bottle lip typically dates before 1880.

Lipping tools were used throughout the middle and end of the nineteenth century until the advent of the fully automatic bottle machine (ABM) in 1903. It should be noted, however, that as automated bottle manufacture became available after the turn of the twentieth century (see below), tooled finishes continued to be produced—albeit in steadily decreasing numbers. That is, there is a lag time between tooled finishes and ABM finishes, and although ABM glass is given start date of 1903, most tooled-glass vessel shards will be given a terminal date around the 1920s due to this lag time, unless other diagnostic characteristics are observed enabling one to give it an earlier terminal date.

The approximate date of manufacture for bottles and bottle fragments recovered from the project area was established first by attempting to determine the manufacturing process associated with the bottle (i.e., creation of the base and lip of the container) and using any patent or company manufacturing marks or dates embossed on the bottle and comparing those to the published literature (Baughner-Perlin 1982; Jones and Sullivan 1985; and Toulouse 1971). The majority of the container glass recovered during the current project, however, was too fragmentary to identify manufacture type. For these artifacts, glass color was the only attribute that could be used for dating those fragments.

The manufacturing process can be roughly divided into four groups, including free blown, blown in mold (BIM), semi-automatic, and automatic bottle machine manufactured (ABM) vessels (Baughner-Perlin 1982:262–265). BIM, semi-automatic, and ABM bottles

or bottle fragments were recovered from the current project. An unidentified category was used for those artifacts for which the manufacture process was indeterminable (Table 5.6).

### Blown in Mold (BIM) (n = 2)

Most molded bottles are constructed in pieces and have distinctive seams. The dip mold was used from the late seventeenth through the mid-nineteenth century (Baughner-Perlin 1982:262). It leaves no seams, unless glass adhered to the edges of the bottle mold as it was attached to the free blown shoulder and bottle neck. The key mold, on the other hand, was a type of two-piece mold that was used from approximately 1750 to 1880 (Jones and Sullivan 1985:27). Key mold seams cross the base and are concealed in the corners of a flat-sided body.

The turn paste mold was used from circa 1870 to the early twentieth century and does not contain seams because the glass is blown into a container that is spun. The glass conforms to the mold from the centrifugal force produced. Vessels formed from this process usually have faint horizontal lines from the spinning process. The three-part mold has seams running around the shoulder of the vessel and partially up the neck of the vessel. This style of mold lost popularity around 1870. The blow-back mold was another mold type, and this was used in the manufacture of jars such as the distinctive Mason jar, which was patented in 1858.

Post mold and cup mold bases were the most common bottle mold types during the last part of the nineteenth century. The post mold is a three-part mold variation where the middle portion of the base is formed by a small separate plate, while the neck, shoulder, body, and the outside edges of the base are formed by two side

mold plates (Jones and Sullivan 1985; Lindsey 2008). A number of post mold bottles exhibit a mold seam at the upper edge of the heel that appears identical to the seam created by the cup base mold. For this reason, post molds and cup base molds identified in the glass assemblage recovered during the current excavations were called cup/post bottom molds. The cup mold was a three-part mold where the third part was a base plate that molded the entire bottle base and lower heel of the bottle. The remaining portions of the bottle were formed by two other plates (Toulouse 1969). Both post molds and cup molds were utilized beginning circa 1850 (Lindsey 2008).

The term “finish” originated with the mouth-blown bottle manufacturing process where the last step in the completion of a finished bottle was to “finish the lip.” The finish is the top part of the neck of a bottle or jar made to fit the cork or other closure used to seal the vessel. The finish is often simply referred to as either the lip or rim. Glass factories in the late-nineteenth and early-twentieth centuries produced a wide variety of finishes for their containers (Jones and Sullivan 1985:78). These finish types included a laid-on ring, a rolled finish, a flared or flanged finish, an applied finish, and a tooled finish. The most commonly found finish types are the applied finish and the tooled finish. An applied finish was created when applied hot glass is added at the point where the blowpipe was removed. Once reheating or refiring the end of the neck was accomplished, a lipping tool was inserted into the neck of the bottle and rotated while squeezing the jaws to manipulate the applied hot glass and form the finish desired (Lindsey 2008).

Table 5.6. Summary of Container Glass Recovered from the Project Area.

Sites	BIM	ABM	Semi-Automatic	Undiagnostic container fragment	Other	Grand Total
16RA692				11		11
16RA703		1		4		5
16RA1504	2	3		56	1	62
16RA1505		2		23		25
L12P004-4		4	2	175		181
Isolated Finds				1		1
Grand Total	2	10	2	270	1	285

Embossing on container glass vessels was made possible by engraving the mold, into which the glass was blown. Embossing generally consists of lettering, numbers, and/or designs that were intended to either attract the consumer or to establish ownership of the bottle, since bottles were often reused. This was first conducted in the mid-eighteenth century and continued into the twentieth century. The panel bottle came into popular existence around 1860, and the shape of this vessel was useful because the name of the commodity or the manufacturing company could be changed on the bottle form by substituting a different “slug-plate” into the mold. This process can be identified through the distinctive seams, since they follow the rectangular shape of the nameplate. The date of the manufacturer’s patent on the bottle and the name of the company, when present, can often be utilized to determine a date of manufacture for the container.

Pattern molding, a variation of the dip mold, was another form of body decoration on mold blown containers. Pattern molding consists of an inscribed pattern inside the surface of the mold being transferred to the glass surface while the bottle is being blown.

These molds often had diamonds or spiral rib patterns engraved on the surface. Pattern molding was used to produce bottles during the first half of the nineteenth century (Lindsey 2008). It was also possible for bottles to exhibit overglaze hand-painting similar to enameled machine-made bottles. This decorative type is rare and is usually not assigned a specific date.

Two BIM bottle fragments were recovered from the current project. One was cobalt glass likely made on a two-piece mold and dates from approximately 1750 to 1880 (Jones and Sullivan 1985:27). The other fragment was an amber bottle base made on a post-bottom mold and embossed with the lettering, “I G Co L.” It is possible that the mark could refer to a number of companies, including Illinois Glass Company (Alton, IL) and the Ihmsen Glass Co., Ltd. (Pittsburgh, PA), according to Toulouse (1971). However, Lockhart et al.

(2012) assert that the Illinois Glass Company used the “I G Co” mark and not the “I G Co L” mark. This latter mark was used by the Ihmsen Glass Co., Ltd. between 1878 and 1896 (Lockhart et al. 2005).

### Semi-Automatic Bottle Machine (n = 2)

Starting in the 1860s, producers of glass bottles recognized that rather than forming the finish last as had always been done with blown bottles, it would be more efficient to form the finish as the first stage in the process. This was a revolutionary idea that would change the bottle making industry; however, it was not until 1882 that technology had advanced to the point that the idea could be realized. During that year, Philip Arbogast was granted a patent for a two mold pressing and then blowing bottle making process, which would mark the beginning of the move to fully automatic machines by the introduction of the Owen’s machine by 1907 (Miller and Sullivan 1984).

Whether semi-automatic or fully automated, machine bottle production occurred in three stages. First, a gob of molten glass enters a ring and parison mold and the application of force through suction, air pressure or plunger conforms to the shape of the mold. Second, the parison mold is removed. The final step involves attaching a full-sized (or blow mold) to the ring mold after which the body of the container is blown to its full size by an air hose attached to the machine (Miller and Sullivan 1984:83).

The fundamental difference between semi and fully automatic bottles lies not in the steps of the production process, but in their execution. Semi-automatic machines often required several semi-skilled operators to function. The machines were supplied with molten glass laborers who transferred the glass from the furnace. Fully automatic machines, however, typically included devices known as “gob feeders,” which directly gathered molten glass from the furnace, removing all requirements for human labor in the process (Miller and Sullivan 1984:83).



It can be difficult to distinguish fragments of semi-automatic bottles from other late-nineteenth- or early-twentieth-century BIM bottles or from later ABM bottles because they share a variety of characteristics. The bases of semi-automatic bottles often exhibit characteristics of earlier BIM types because blow molds were commonly used in their production. Semi-automatic bottles will have a body, neck, and finishes typical of machine-made bottles with the side seam running up to the top of the lip. The lip styles, however, did vary between some semi and automatic bottles. The semi-automatic bottles often exhibit a ground or external thread ground finish. These finish types date from the late nineteenth century into the early twentieth century following the period of production of semi-automatic bottles (Miller and Sullivan 1984).

Two semi-automatic bottle fragments were recovered in the current project. Both were lip and neck portions exhibiting styles typical of semi-automatic bottles produced between 1890 and 1915. One was made of amber glass, while the other was made of amethyst glass, both of which were in production still during that period.

#### **Automatic Bottle Machine (ABM) (n = 10)**

The Owens automatic bottle-making machine was patented in 1903 and creates suction scars and distinctive seams that run up the length of the bottle neck and onto the lip. This ABM mold provides a firm manufacturing date at the beginning of the twentieth century. Another automatic bottle machine, called the Individual Section, was also used in the commercial production of bottles. This machine was widely used starting in 1925 and, by 1940, became the most widely used bottle manufacturing device (Jones and Sullivan 1985:39). The Individual Section bottle machine was more cost effective than the Owens machine, which was no longer used after 1955.

Valve marks are indicative of machine-made bottles formed by a press-and-blow type of machine. This mark was formed when the ejection valve rod pushed the partially

expanded parison out of the blank mold. When the parison was placed in the second blow mold, the ejection mark was left behind. These marks are typically found on wide mouth ABM bottles, such as food bottles and jars, milk bottles, and canning jars. These marks are usually found on bottles and jars dating from the 1910s to circa 1950 but are most common on wide mouth bottles produced in the 1930s and 1940s (Lindsey 2008; Rock 1980:7).

Although a full discussion of color types was discussed in the introductory section of this artifact group, it should be noted that a few of the glass colors identified were only manufactured for a short time in the ABM industry. Amethyst glass, for instance, was only utilized in the ABM industry until 1920, when it was superseded by selenium glass (Lockhart 2006). Selenium glass was only popular until around 1930, when the glass recipe was perfected and selenium was no longer added (Faulkner 2000). Opaque white and cobalt colored glass, although still found contemporarily, decreased in popularity circa 1960 (Jones and Sullivan 1985; Lindsey 2008).

Ten ABM bottles/bottle fragments were recovered during the current survey. These included one complete bottle, as well as lip and basal fragments with morphological or temporally diagnostic features. Colors of glass included amber (n = 5), amethyst (n = 1), cobalt (n = 1), clear (n = 1), and opaque white (n = 2) (one of which was labeled Other Glass Container, and is likely to be associated with a container closure).

One base fragment contains a valve mark as well as the embossed lettering, "...RE...", but that is not sufficient to determine a manufacturer or a tighter time range. Another base fragment exhibits an embossed diamond shape with a capital "I" in the middle, which was the mark of the Illinois Glass Company between 1916 and 1929 (Toulouse 1971). Two base fragments exhibit stippling or knurling in a ring around the base. Stippling is a feature that was added to bottle starting in 1940 by the Owens-Illinois Glass Company for a variety of

reasons, including masking the valve mark, providing a higher friction contact between the bottle base and a table (or other surface), and hiding the sedimented contents in the bottom of the bottle (Toulouse 1971).

The only complete bottle recovered from the current survey was also an Owen's bottle presenting the typical Owen's scar (valve mark) on the base as well as stippling around the edge of the base. This was a later example than the one just discussed because it was produced after the Illinois Glass Company merged with the Owen's group in 1929. The diamond O-I mark graces the bottom of the base with the number 4 appearing to the left of the mark and the number 0 to the right. Therefore, no question remains about the dating or manufacturing location of this bottle. Lockhart (2004) notes that Plant Number 4, located in Clarksburg, West Virginia, was in operation between 1930 and 1944. Date marks were not in use in 1930, so the "0" could only refer to 1940. The presence of stippling on the base, which was first produced in 1940 supports this date.

### **Undiagnostic Container Glass (n = 270)**

When no other diagnostic features were present, the color of the glass was noted, although there is some subjectivity inherent in color classification. Jones and Sullivan (1985) observed that chemicals color glass, either as natural inclusions or additions by the manufacturer. The concern for the current study was primarily to note the presence of datable glass in the small fragments recovered. The colors present in the undiagnostic container glass fragments included aqua (n = 43), amber (n = 27), amethyst (n = 47), black (n = 3), clear (n = 74), cobalt (n = 11), light green (n = 18), olive green (n = 20), blue-green (n = 11), green (n = 5), opaque white (n = 10), and translucent white (n = 1).

Occasionally, artifacts which may be temporally diagnostic end up in this category because they are not diagnostic of the manufacture process of the container itself. One excellent example of this is an embossed, olive green colored blob seal recovered from the current survey. The blob seal indicates that

the bottle to which it was affixed was a wine bottle produced by the Pernod Company, a French company originally started in Switzerland. Not much is currently known about the history of the company and the marks used on their blob seals, so it is not possible to accurately date this item, but it has potential. Blob seals themselves were common on wine bottles from the end of the eighteenth century into the twentieth century.

### ***Cookware (n = 1)***

Artifacts used primarily for the preparation and cooking of food, such as bakeware, pots, and pans, were included in the cookware category. Only one item, a small fragment of what appears to be a cast iron kettle was recovered during the current survey. This item was not assigned specific dates because cast iron has been used for the production of such items for centuries.

### ***Glass Tableware (n = 15)***

Press molding was first used (although on a very small scale) in England in the late seventeenth century to make small solid glass objects, such as watch faces and imitation precious stones (Buckley 1934). By the end of the eighteenth century, decanter stoppers and glass feet for objects were also being produced (Jones and Sullivan 1985). The production of complete hollowware glass objects did not become possible until there were innovations in press-molded techniques in the United States during the late 1820s (Watkins 1930). Mass production of press-molded glassware was well established by the 1830s (Watkins 1930).

Earlier press-molded glass objects were predominately made of colorless, lead glass (Jones and Sullivan 1985). William Leighton of the Hobbs-Brockunier Glass Works in Wheeling, West Virginia, invented lime glass. This type of glass looked like lead glass, had superior pressing attributes, and was much more inexpensive than lead glass (Revi 1964). Advancements in mold technology in the 1860s and 1870s led to the application of steam-powered mold operation. This, in turn, led to increased production and reduced costs

(Revi 1964). Modern press molding is conducted entirely by machine (Jones and Sullivan 1985).

Press-molded table glass was made by dropping hot pieces of glass into a mold. A plunger was then forced into the mold, pressing the hot glass against it. The outer surface of the glass took on the form of the mold, while the inner surface of the glass was shaped by the plunger. The plunger was withdrawn and the glass object was removed from the mold. The surface of the glass was often fire polished to restore the brilliance of the glass surface that was disturbed by its contact with the mold (Jones and Sullivan 1985).

Press-molded glass may be recognized by several characteristics. Usually, the glass object must be open-topped in order for the plunger to be withdrawn from the mold. Narrow mouthed vessels were produced, but additional manipulation of the glass was necessary after the plunger was removed from the mold. Evidence of this manipulation should be present on the vessel (Jones and Sullivan 1985). There is no relationship between the exterior shape and design of a press-molded vessel to the interior shape and design because the plunger shapes the interior of the object, most often leaving behind a smooth surface. This differs from earlier glass vessel production techniques like blown glassware, where interior shape was related to the exterior shape and design (Jones and Sullivan 1985).

Another characteristic of press-molded containers was that mold seams were generally present. The seams were sharp and distinct, unless steps had been taken to deliberately remove them. The texture of the glass surface of press-molded glass was disturbed and often disguised by an all-over stipple design. The edges of the designs on press-molded glass had a predisposition toward rounded edges. The bases of press-molded objects were usually polished. The quality of the designs on press-molded glassware was precise and the design motifs were numerous (Jones and Sullivan 1985).

In contrast to press-molded glass, cut glass generally had a polished, smooth, glossy surface texture. The design edges were sharp and distinct. Cut glass designs consisted mostly of panels, flutes, and miters. The designs were often slightly uneven and asymmetrical. Mold seams were usually absent; they were polished off prior to cutting (Jones and Sullivan 1985). Contact-molded glass also differs from press-molded glass in that the exterior and interior of the vessel will portray parallel patterns. The interior of the vessel is also generally much more diffuse towards the base.

Pattern molding was also occasionally found on glass tableware vessels. This mold type was performed in the same way that it was performed on BIM glass. Free-blown glass tableware was the first type of glass tableware to be created and, therefore, cannot be assigned a specific period of manufacture.

Glass tableware was decorated in numerous ways, including applied color, acid etching, painting, engraving, wheel etching, iridescent, heat treating, gilding, and flashing. Glass tableware with applied color decoration is also referred to as enameled tableware. Enameling on tableware was produced much in the same way as in bottle manufacturing; however, enameled tableware appears much earlier. Vitreous colors were mixed with an adhesive, and after application to the glass surface, the vessel was reheated, fusing the color to the glass. Enameling was popular on glass tableware from the 1880s through the twentieth century (Jones 2000:150).

Wheels and abrasives were used to engrave glass tableware. Wheel engraving, also referred to as wheel etching, allowed for a greater variety of motifs to be cut and often accommodated thin glass. Engraving can be found on pieces of glass tableware dating prior to the early nineteenth century (Jones 2000:177). Acid etching was performed by coating a glass object with a hydrofluoric acid resistant compound. The glass was then placed in an acid bath. Once removed from the bath, the resist was removed, and the glass was polished, frosted, textured, or etched. This

process was originally introduced in the eighteenth century (Jones 2000:182). Painting on glass tableware was rare but was identified in the current glass tableware assemblage. This glass type was not assigned a specific date, since the painting may have been performed outside of the glass factory where the vessel itself was created.

Iridescent glass tableware was introduced in the 1870s, although years would pass before this glass type was available commercially. It was produced by exposing hot glass to metallic chlorides, producing an iridescent color overlay. This decoration was used on pressed glass beginning in 1905 and was referred to as “carnival glass” (Jones 2000:151). Heat sensitive, or heat treated, glass tableware was introduced in the 1880s. This category of glass tableware contains a few different heat treatments. The first heat treatment involves glass batches containing ingredients that when heated, cooled, and reheated would change the color of the glass at its thickest points. Hobnails, often found in glass tableware, were the most popular result of this heat treatment. Cased or flashed glass was the other result of heat treatments. This treatment involved the layering of glasses using hot glass. This glass type usually refers to a thin layer of colored glass placed over a thicker layer of colorless glass (Jones 2000:148–149). Gilding was performed by applying a layer of gold leaf, gold paint, or gold dust to the glass surface. This treatment was then fired or unfired. Unfired gilding does not preserve well and was used for cheaply decorated wares circa 1890 (Jones 2000:150).

A total of 15 pieces of glass tableware was recovered. All were heavily fragmented and no complete or nearly complete vessels were encountered. Colors of glass present included opaque blue, cornflower blue, clear, amethyst, and opaque white. Molded, faceted, depressed, geometric, and incised glass design elements were all present in the sample.

### *Utensils (n = 1)*

Artifacts used primarily for the serving and/or eating of food were included in the utensil class of artifacts. Many different

utensil artifacts could be subsumed into this category, including table forks, table spoons, knives, ladles, serving spoons, paring knives, ice tongs, and many different utensil parts, such as handles. The utensils could be made of a wide variety of materials, including copper, bone/horn, iron/steel, modern plastic, pewter, wood, silver plating, and copper alloy.

A copper alloy utensil handle fragment was the only utensil category artifact recovered during the current study. The handle fragment had incised lines on both the dorsal and ventral faces with a rounded top edge and a heart shaped termination. Because the exact form and type of utensil could not be determined, no specific dates could be assigned to this object.

### Faunal Group (N = 4)

Faunal and floral remains were assigned to this group. These remains were categorized into general classes before they were counted and weighed. Three bone fragments, consisting of one cut rib, one cut long bone, and one unaltered long bone, were recovered. All appeared to be from large mammals, most likely cow, but no detailed faunal analysis was completed. The fourth item in this group was a piece of oyster shell (Table 5.7).

Table 5.7. Summary of Faunal Material Recovered from the Project Area.

Sites	Bone	Shell	Grand Totals
16RA692	0	0	0
16RA703	0	0	0
16RA1504	1	0	1
16RA1505	1	0	1
L12P004-4	1	1	2
Isolated Finds	0	0	0
Grand Total	3	1	4

### Furnishings Group (N = 1)

The furnishings category includes artifacts usually associated with home furnishing or building, but not elements of the actual construction. Examples of furnishings include decorative elements, flooring, furniture, heating, lighting, and window and wall decorations.

The only item in this group was a large piece of refined earthenware, most likely a whiteware, with a blue-green transfer printed decoration. The morphological characteristics of the artifact suggest that it could have been the base of a lamp or similar object that required a central core for which there is a hole present (Table 5.8).

Table 5.8. Summary of Furnishings Recovered from the Project Area.

Sites	Lighting	Grand Total
16RA692	1	1
16RA703	0	0
16RA1504	1	1
16RA1505	0	0
L12P004-4	0	0
Isolated Finds	0	0
Grand Total	1	1

## Maintenance and Subsistence Group (N = 18)

The maintenance and subsistence group contains artifacts related to general maintenance activities. These artifacts were grouped into classes containing non-food cans, non-food containers, electrical, farming and gardening, stable and barn activities, general hardware, general tools, and fuel-related items, such as coal. Some of these classes were represented in the historic assemblage recovered during the current project (Table 5.9).

### *General Hardware (n = 17)*

This class of artifacts includes a wide variety of hardware fasteners and items used for a variety of purposes. Objects within this

category included 1 large locking washer, 2 bolts, 1 bracket, 1 cog, 1 possible pipe clamp, and 11 other unidentified pieces of hardware, most of which are made of ferrous metal, although there are 2 pieces that include ceramic or porcelain elements. These artifacts were not assigned specific dates.

### *Farming and Gardening (n = 1)*

This class includes artifacts associated with farming and gardening activities. Many items could be placed in this category, including common clay flower pot fragments, garden hose fragments, farm implement parts, farming or gardening equipment, etc. A large ferrous metal object reminiscent of a trailer hitch was the only artifact recovered from the current survey and placed in this category. This item could not be assigned a specific date of manufacture.

### *Personal Group (n = 1)*

The personal group includes artifacts assumed to have belonged to individuals. This category of artifacts could include health and grooming items, jewelry and beads, coins, music and art items, personal items, toys, and games. Tobacco products are also subsumed into this category.

The only item recovered during the current project and placed in this group was one fragment of a porcelain doll head. It would be assigned to the “toys and games” class within this artifact group. The doll fragment exhibits molded and incised lines showing a girl’s face with a bow and bonnet. No paint or other pigment is evident on the recovered fragment (Table 5.10).

Table 5.9. Summary of Maintenance Group Artifacts Recovered from the Project Area.

Sites	Farming and Gardening	General Hardware	Grand Total
16RA692	0	3	3
16RA703	0	0	0
16RA1504	1	6	7
16RA1505	0	0	0
L12P004-4	0	8	8
Isolated Finds	0	0	0
Grand Total	1	17	18

Table 5.10. Summary of Personal Group Artifacts Recovered from the Project Area.

Site	Toys and Games	Grand Total
16RA692	0	0
16RA703	0	0
116RA1504	0	0
16RA1505	0	0
L12P004-4	1	1
Isolated Finds	0	0
Grand Total	1	1

## Unidentified (N = 12)

This category contains artifacts that could not be identified beyond the material from which the artifact was made. There were four material classes included within this group (Table 5.11). These material classes included ceramic, glass, metal, and plastic. These artifacts were fragments of unidentifiable items and as such provide little valuable information that has not already been gleaned from more discernible artifact.

Table 5.11. Summary of Unidentified Artifacts Recovered from the Project Area.

Sites	Ceramic	Glass	Metal	Plastic	Grand Totals
16RA692	0	0	1	0	1
16RA703	0	0	0	0	0
16RA1504	0	0	1	0	1
16RA1505	1	2	0	2	5
L12P004-4	1	0	2	2	5
Isolated Finds	0	0	0	0	0
Grand Total	2	2	4	4	12

## Discussion

There were 850 historic artifacts recovered from four sites (16RA692, 16RA703, 16RA1504, and 16RA1505) and one isolated find during the investigation. The material collected is discussed in detail above, and a brief discussion is provided below by locus. A complete inventory can be found in Appendix A and a full discussion of each location is provided in the results chapter.

### *Site 16RA692 Summary*

The materials recovered from Site 16RA692 are minimal, with only 54 artifacts recovered. The most populated artifact group was architectural, with 32 objects present.

Eighteen domestic artifacts were recovered, as were three from the maintenance group and one identified item. Architectural artifacts consisted of brick fragments (n = 13), window glass (n = 1), wire nails (n = 5), cut nails (n = 2), and indeterminate nails (n = 11). Domestic group items included undiagnostic container glass fragments (n = 11), whiteware (n = 4), stoneware (n = 1), porcelain (n = 1), and undiagnostic glass tableware fragment (n = 1). The items in the maintenance group were all unidentified pieces of ferrous hardware. The unidentified group item was also a piece of ferrous metal. The artifacts suggest that at least one structure was present in the area and that a moderate to low level of domestic activity took place at the site. The date of occupation could have been the late nineteenth or possibly early twentieth century.

### *Site 16RA703 Summary*

Site 16RA703 yielded the largest number of artifacts (n=528). The field investigations at this site included a revisit to the previously recorded portion, and the expansion of the western site boundary through the recordation of field site L12P004-4. To better characterize the previously recorded portion of the site and the newly recorded portion, the materials from each are discussed individually in the following paragraphs.

The materials recovered from the revisit to the previously recorded portion of Site 16RA703 are minimal, with only 10 artifacts recovered. Of these, 9 came from the domestic group and 1 from the architectural group. The architectural group artifact was a wire nail. The domestic group artifacts consisted of 4 whiteware ceramic sherds, 4r container glass fragments, and the complete 1940 Owen-Illinois Glass Company bottle. This collection of artifacts suggests early-twentieth-century activity at this site.

The newly recorded portion of Site 16RA703 yielded a large quantity of artifacts when compared with the other sites presented in this report (n = 518). The most populated artifact group was by far domestic, with 416 objects being present. Other artifacts were included in the architectural group (n = 84),

faunal (n = 2), clothing (n = 2), maintenance (n = 8), personal (n = 1), and unidentified (n = 5).

Architectural artifacts point toward the presence of a structure in the area, and include brick fragments (n = 22), wire nails (n = 1), cut nails (n = 10), indeterminate nails (n = 22), ceramic tile/pipe (n = 13), mortar (n = 1), flat window glass (n = 14), and a ceramic doorknob fragment. The flat glass was measured and dates between 1850 and 1900 were computed based on its thickness.

One machine-cut long bone fragment and one oyster shell comprised the Faunal Group. Two four-hole Prosser buttons make up the clothing group. The maintenance group (n = 8) consists of general hardware, including a pipe clamp, bolts, and other unidentified ferrous hardware. One portion of a porcelain doll face was placed in the Personal Group. The Indeterminate Group (n = 5) consists of fragments of ceramic (n = 1), metal (n = 2), and indeterminate plastic (n = 2).

A total of 416 artifacts from this area of the site were placed in the Domestic Group category, suggesting a very high level of domestic activity. Artifacts in this group included ceramics (n = 228), container glass (n = 181), glass tableware (n = 6), and one handle of a utensil of some sort. Ceramic types included whiteware (n = 135), pearlware (n = 3), refined redware (n = 1), porcelain (n = 16), stoneware (n = 46), yellowware (n = 12), and ironstone (n = 15). This heavy reliance on whitewares particularly suggests utilitarian purposes for these vessels. The presence of pearlware at the site could suggest an early-nineteenth-century occupation. However, other ceramic types, like the whitewares, were more common in the late nineteenth and early twentieth centuries, which suggests the possibility that the pearlware may have been curated for some time by the site residents.

Container glass present at this site was similarly varied with Semi-Automatic (n = 2) and ABM (n = 4) bottles/bottle fragments being present alongside 175 fragments of undiagnostic container glass of all colors. The glass assemblage suggests a temporally wide

occupation from the late nineteenth century through to the mid-twentieth century. The bottle base from the Illinois Glass Company dating between 1916 and 1929 was found at this site.

One copper alloy utensil handle was found and placed in the Cookware Group, while three pieces of clear, two pieces of amethyst, and one cornflower blue colored fragment comprise the glass tableware category. These artifacts provide little additional information about dating or site activities.

The collection of artifacts recovered from Site 16RA703 suggests that a late-nineteenth- or early-twentieth-century structure, potentially connected to a sewer or septic system, was located in the area. A very high concentration of domestic debris also supports a late-nineteenth-century or early-twentieth-century occupation date.

### *Site 16RA1504 Summary*

A total of 133 artifacts were recovered during the survey of Site 16RA1504. The most populated artifact group was domestic with 113 objects. Other artifacts were categorized in the architectural (n = 9), faunal (n = 1), clothing (n = 1), furnishings (n = 1), maintenance (n = 7), and unidentified (n = 1) groups.

Architectural artifacts point toward the presence of a structure in the area, and include cut nails (n = 3), indeterminate nails (n = 2), slate (n = 1), mortar (n = 1), and two ceramic doorknob fragments. One long bone fragment is included in the Faunal Group. One four-hole Prosser button comprises the Clothing Group. The Furnishing Group is made up of one ceramic lamp base. The maintenance group (n = 7) consisted of general hardware and potentially parts of farm implements, including a cog, a hitch, a locking washer, and other unidentified ferrous hardware. The one item in the Indeterminate Group was also a piece of ferrous metal.

A total of 113 artifacts from this site were categorized in the Domestic Group, including ceramics (n = 47), container glass (n = 62), cookware (n = 1), and glass tableware (n = 3).

Ceramic types included whiteware (n = 18), pearlware (n = 3), porcelain (n = 3), stoneware (n = 20), and ironstone (n = 3). This heavy reliance on whiteware and stonewares suggest utilitarian purposes for these vessels. It might also suggest an occupation by individuals of a lower socio-economic level. The presence of pearlware at the site could suggest an early-nineteenth-century occupation. However, other ceramic types, like the whitewares, were more common in the late nineteenth and early twentieth centuries, which would mean that the pearlware would have likely been curated for some time by the occupants.

Container glass present at this site was similarly varied with BIM (n = 2) and ABM (n = 3) being present alongside 57 fragments of undiagnostic container glass of all colors. The glass assemblage suggests a temporally wide occupation from the late nineteenth century through to the mid-twentieth century. The bottle base from the Illinois Glass Company dating no later than 1890 was found at this site as was the Pernod blob seal dating as early as 1797, and the stippled bottle base dating no earlier than 1940.

The presence of one cast iron kettle piece in the Cookware Group does little to inform the chronology. Three pieces of amethyst glass tableware were also present and suggest a pre-WWI date. The artifacts suggest that at least one likely nineteenth-century structure was present in the area, but that the site consists of a relatively high volume of domestic debris from the early to late nineteenth century through to the mid-twentieth century.

### *Site 16RA1505 Summary*

A total of 134 artifacts were recovered during the survey of Site 16RA1504. The most populated artifact group was domestic, with 124 objects being present. Other artifacts were categorized in the architectural (n = 4), faunal (n = 1), and the unidentified (n = 5) groups.

Architectural artifacts included one cut nail and three brick fragments. One cut rib fragment comprises the faunal category. The Indeterminate Group consists of two pieces of glass, one piece of ceramic, and two piece of

celluloid plastic. The celluloid was one of the earliest plastics and would have been produced in the mid-late nineteenth century.

A total of 124 artifacts from this site were included in the Domestic Group category, including ceramics (n = 94), container glass (n = 25), and glass tableware (n = 5). Ceramic types included whiteware (n = 37), yellowware (n = 5), porcelain (n = 12), stoneware (n = 21), ironstone (n = 17), and indeterminate refined earthenware (n = 2). The heavier reliance on whitewares and stonewares suggest utilitarian purposes for the majority of these vessels. It might also suggest an occupation by individuals of a lower socio-economic level. All of these ceramic types were in common use in the late nineteenth century, as well as in the very early twentieth century.

Container glass present at this site included a variety of colors of undiagnostic container glass (n = 23), as well as fragments of ABM bottles (n = 2). The container glass assemblage suggests a temporally wide occupation from the late nineteenth century through to the early twentieth century. The presence of one clear, one opaque blue, and one opaque white fragment of glass tableware does not help to further narrow the time frame.

### *Isolated Find Summary*

This isolated find consisted of a single piece of undiagnostic clear container glass. Little can be inferred about the activities at the location based on this artifact.



## Chapter 6. Results

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The fieldwork portion of this project consisted of a combination of pedestrian survey and shovel testing. The majority of the project area was covered by fallow cotton or corn fields and had greater than 90 percent surface visibility. The remainder was vegetated with mixed deciduous forest or low grass and had less than 20 percent surface visibility in most areas.

This chapter presents data on the cultural resources that were recorded as a result of the survey and summarizes the NRHP recommendations for each site.

### Cultural Resources

Pedestrian survey and shovel testing resulted in the relocation of two previously recorded sites (16RA692 and 16RA703) and the recordation of three new sites (16RA1504, 16RA1505, and 16RA1506), as well as one isolated find (X16RAA). The presence of intact cultural deposits was confirmed at both previously known sites, and the survey resulted in an expansion of the western boundary of Site 16RA703. The location of each site is presented on the 1972 (revised 1992) Rapides, Louisiana, USGS 7.5' Quadrangle Map in Figure 6.1, and on the historic 1941 Boyce, Louisiana, USGS 15' Quadrangle Map in Figure 6.2. The following section provides an overview of the investigations and findings at these cultural resources and the justification for our NRHP recommendations.

#### Site 16RA692 (McNutt Plantation)

UTM Coordinates:

1992 Site Datum: 15N, N3464500 E0542560 (NAD 83)

Elevation: 26 m (85 ft) AMSL

Components: Historic

Specific Components: Nineteenth-century plantation and twentieth-century house site

Site Type: Residential

Size: 16,562 sq m (178,272 sq ft)

Distance/direction to nearest water: Bayou Rapides, 60 m (197 ft) to the south.

Type and extent of previous disturbance: Minimal disturbance from property clearing and variable erosion

Topography: Natural levee

Vegetation: Mixed hardwood forest

Ground surface visibility: Less than 30 percent

Slope Direction (Aspect): very slight to the north

Recommended NRHP status: Recommended eligible; Avoidance or NRHP eligibility testing with appropriate mitigation measures recommended

### Site Description

Site 16RA692 refers to the historic McNutt Plantation and was originally recorded by Donald G. Hunter of Coastal Environments, Inc., in November of 1992. The site was mapped within the current project area between the southern boundary of AEX and the extreme southern edge of the current project area, just to the northeast of site 16RA703 (Weil Site). Site 16RA692 occupies a rectangular footprint in a forest of mixed hardwoods along the natural levee of Bayou Rapides, the long axis of the rectangle oriented roughly north-south.

The 1992 site form described 16RA692 as consisting of a surface and subsurface concentration of historic artifacts related to the nineteenth-century McNutt Plantation house and a twentieth-century residence. The northern half of the site area coincides with the location of two historic structures depicted along the north side of an unimproved road on the 1941 Boyce, Louisiana, USGS 15' Quadrangle Map (Figure 6.2).

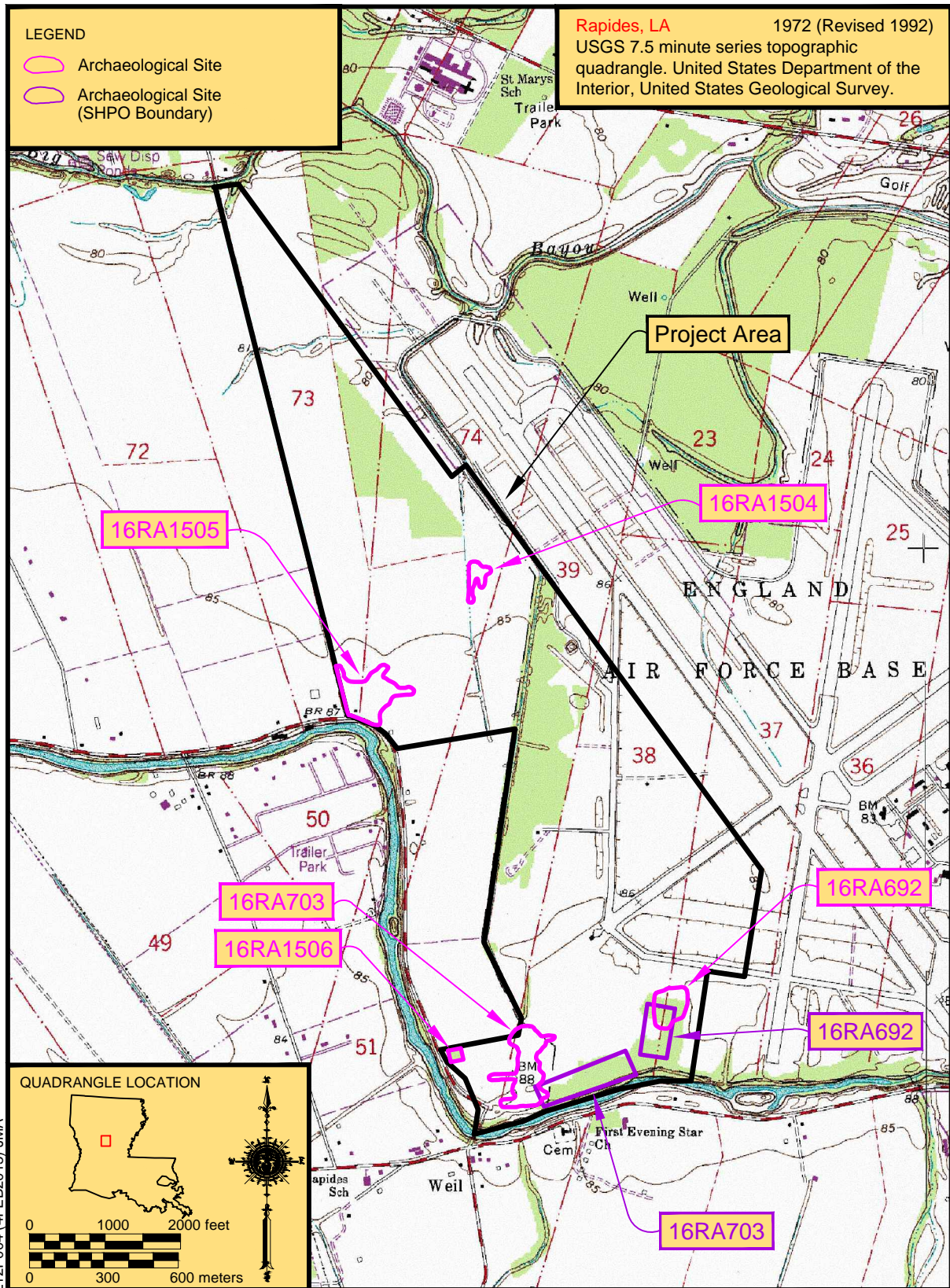


Figure 6.1. Depiction of project area with archaeological site boundaries on 1972 (Revised 1992) Rapides, Louisiana, USGS 7.5' Quadrangle Map.

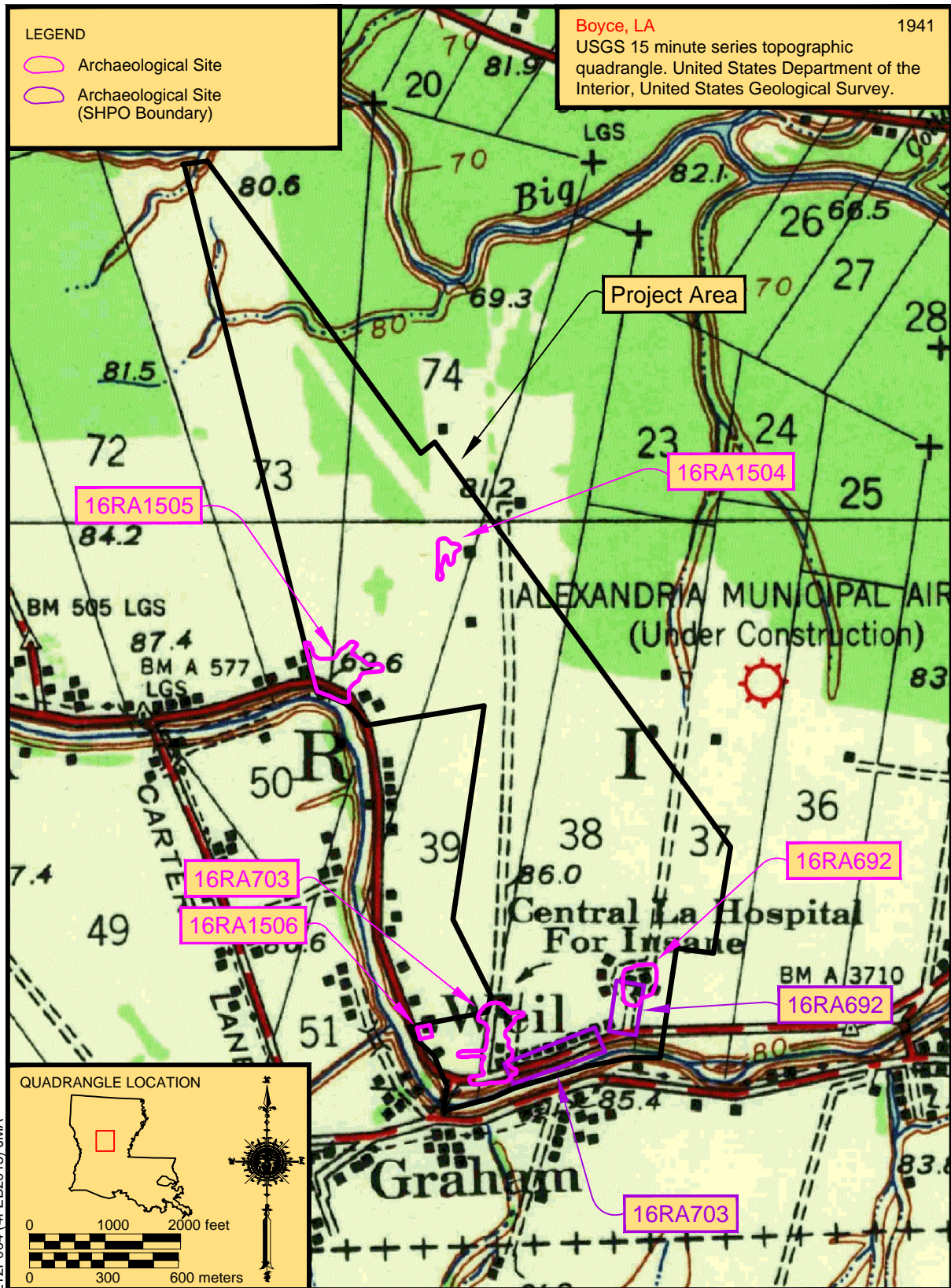


Figure 6.2. Depiction of project area with archaeological site boundaries on 1941 Boyce, Louisiana, USGS 15' Quadrangle Map.

A historic sheet midden and intact subsurface features in the form of trash pits were encountered during shovel testing in 1992. Two trash pits and shovel tests yielded a variety of historic ceramics, container glass, brick fragments, and machine-cut nails. Portions of the historic sheet midden, features, and associated surface scatter appeared minimally disturbed in 1992, and site 16RA692 was recommended as eligible for listing in the NRHP. Two judgmental shovel tests excavated during the current project confirmed the presence of intact subsurface cultural deposits and the site's eligibility for listing in the NRHP.

## Investigation Methods

As intact subsurface cultural deposits were already known to be present at 16RA692, the footprint of the site was not subjected to the systematic shovel testing conducted throughout the rest of the project area, in order to preserve the integrity of the intact deposits. Instead, two judgmental shovel tests were excavated within the site boundaries to determine whether the area had suffered any disturbance in the intervening years since it was initially recorded (Figure 6.3). Both shovel tests yielded cultural material and verified the presence of intact subsurface cultural deposits. The recovered artifacts are discussed in the previous Materials Recovered chapter. No major new disturbance was noted at the site during the 2012 revisit.

As the site was recommended as eligible for listing in the NRHP during its initial recording, and no evidence to the contrary was found during the site revisit, the remainder of the known extent of 16RA692 was avoided during the survey to preserve the intact cultural deposits.

## Depositional Context

The soils in the area of Site 16RA692 are typically brown or reddish brown Coughatta silt loams and silty clay loams (Kerr et al. 1980). However, the shovel test profiles observed at Site 16RA692 during the 2012 survey were not typical of the Coughatta

series, having likely been altered during the deposition of the historic sheet midden noted during testing.

The profile of a representative shovel test excavated during the survey (ST 2) consisted of black (10YR 2/1) A horizon silt loam in the top 10 cm (4 in), overlying the historic midden layer of strong brown (7.5YR 4/6) silty clay loam from 10 to 35 cm (4 to 14 in), both strata contained abundant artifacts. This was in turn underlain by a layer corresponding to a Coughatta B21 or B22 horizon, consisting of light reddish brown (5YR 6/4) silt loam from 35 to approximately 45 cm (14 to 18 in). An unidentified horizon of yellowish brown (10YR 5/6) silt loam extended from 45 cm to the base of the shovel test at roughly 50 cm (18 to 20 in) bgs. This final stratum is not consistent with the Coughatta soils typical of the area. All artifacts recovered from the two judgmental shovel tests excavated during the 2012 survey were found in the upper two strata, which are believed to represent the historic sheet midden previously described at 16RA692. Though the fourth stratum is inconsistent with the typical pedon of Coughatta silt loam described by Kerr et al. (1980), no artifacts were recovered from either of the lower two strata.

Shovel tests excavated at Site 16RA692 did not extend deeper than 50 cm (20 in) bgs, but in a typical Coughatta series solum, the B22 horizon extends to a depth of 69 cm (27-in), and is in turn underlain by a C1 horizon of reddish brown (5YR 4/4) silt loam from 69 to 97 cm (27 to 38 in), a C2 horizon of reddish brown (5YR 5/4) loamy very fine sand from 97 to 112 cm (38 to 44 in), and a C3 horizon of reddish brown (5YR 4/4) silt loam from 112 to 155 cm (44 to 61 in) bgs. The latter stratum contained a few fine strata of reddish brown (5YR 4/3) heavy silt loam.

Divergence from the typical Coughatta series soil profile at Site 16RA692 may be explained by historic use of the area, including the formation of an historic midden soil. The characterization of these dark upper strata as a sheet midden is confirmed by the presence of a dense lens of historic artifacts.

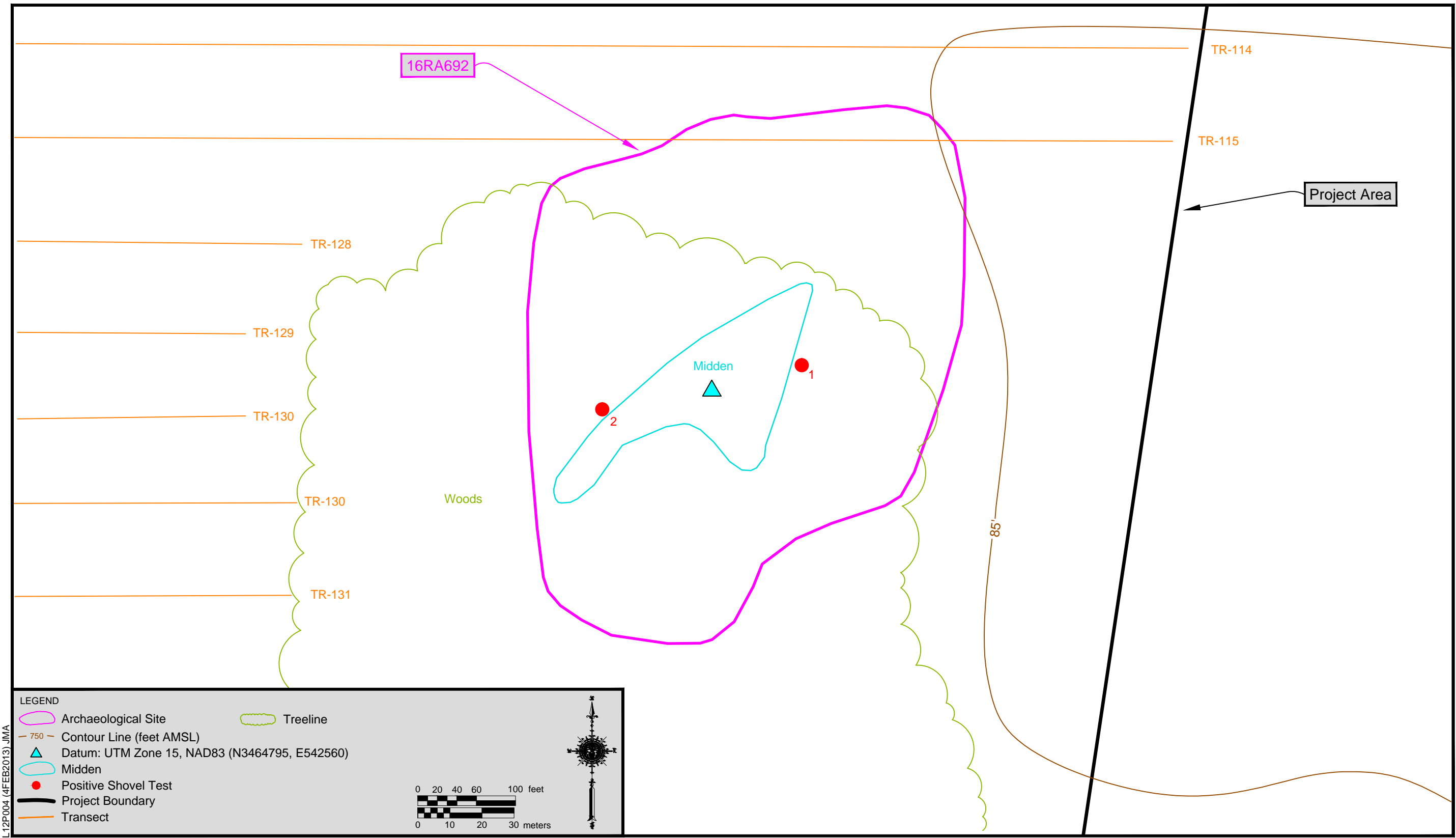


Figure 6.3. 16RA692 site map (from LA Division of Archaeology Site Record Form) showing locations of judgmental shovel tests.



## Artifacts

The McNutt Plantation assemblage recovered during the survey consists of 54 artifacts collected from both of the judgmental shovel tests excavated within the site boundaries. The majority of these artifacts (59 percent) fall within the Architecture Group. Domestic Group artifacts were the second most common, constituting 33 percent of the assemblage. The four artifacts that represent the remaining 8 percent of the assemblage fall into the Maintenance (n = 3) and Unidentified (n = 1) groups. Artifacts recovered from the field investigation are tabulated by provenience in Table 6.1.

The terminus post quem (TPQ), or earliest dates, and terminus ante quem (TAQ), or latest dates associated with artifact types from 16RA692 are generally consistent with a mid- to late-nineteenth-century occupation, correlating well with the known use of the area by the McNutt Plantation.

The available TPQ and TAQ dates are derived from Domestic and Architecture Group artifacts, the former including whiteware which went into production in 1830 (Majewski and O'Brien 1987:119) and hard paste porcelain which began being produced in 1800 (Faulkner 2000). Both remain in production today. One stoneware sherd indicates a date between A.D. 1780 and 1925 (Greer 1999; Ketchum 1983).

Architectural Group artifacts should provide some indication of the date at which structures were constructed. These include two machine-cut nails, indicating a range from A.D. 1800 to 1880 (Nelson 1968). Four wire nails were also recovered, which were not produced until after A.D. 1880 (Nelson 1968). Taken together, the architectural and domestic materials from the McNutt Plantation site generally indicate that construction occurred and habitation activities took place at the site from as early as 1800,

continuing through the nineteenth and possibly early twentieth centuries.

It should be emphasized that the two judgmental shovel tests excavated at 16RA692 during the project were intended solely to confirm the presence of intact subsurface deposits at the site. They did not constitute a systematic survey of this previously documented area, and as such meaningful conclusions related to the spatial distribution or temporal span of the recovered artifacts cannot be derived. However, the large relative proportion of recovered Domestic Group artifacts (when compared with non-architecturally related groups) clearly indicates that the structure or structures represented by the 16RA692 assemblage were utilized as residences.

## Features

The profiles of both excavated shovel tests were examined for cultural features and other in situ historic deposits. As mentioned above, both shovel tests provided clear evidence for an in situ historic sheet midden. While two trash pits were noted during the 1992 survey, the limited excavations during the 2012 revisit did not reveal any additional features apart from the sheet midden. No recent disturbance to the intact deposits at the site was noted during the revisit.

## Summary and National Register Evaluation

Site 16RA692 was originally recorded in 1992, and represents the remains of the nineteenth-century McNutt Plantation house and a twentieth-century residence. The entirety of Site 16RA692 is located within the southern portion of the current project area. The northern half of the rectangular site footprint coincides with the location of two historic structures depicted along the north side of an unimproved road on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map.

Table 6.1. 16RA692 Artifact Recovery by Provenience.

Provenience	Architectural	Domestic	Maintenance	Unidentified	Total
STP # 1	17	11	3	1	32
STP #2	15	7			22
Total	32	18	3	1	54

Two judgmental shovel tests within the site boundaries were excavated during the current survey to verify the presence of intact subsurface cultural deposits and assess any disturbances that had taken place in the decades since the site had been recorded. The presence of an historic sheet midden at 16RA692 was confirmed, and very little disturbance was noted. Other than the excavation of the two judgmental shovel tests, the McNutt Plantation site was avoided by the cultural survey in order to preserve intact cultural material known to be present.

The functional group distribution of the recovered artifacts suggests that the structures at 16RA692 were utilized as residences. The temporal span of the recovered artifacts indicates a date from the early nineteenth through the late nineteenth- or early twentieth centuries for the McNutt Plantation. However, the small sample size did not allow any meaningful analysis of the artifact spatial or temporal distribution within the site.

The 2012 survey of 16RA692 confirmed that significant undisturbed historic cultural deposits remain in situ at the site. McNutt Plantation was recommended as eligible for listing in the NRHP during its initial recording in 1992, and no evidence to the contrary was found during the site revisit. Given the high degree of preservation of 16RA692, and the site's potential to yield historical information on domestic activities in postbellum and early-twentieth-century central Louisiana, this site is recommended for avoidance during any ground disturbing activities, or site testing to determine its eligibility for listing in the NRHP and mitigation of impacts as necessary if the site cannot be avoided.

## Site 16RA703 (Weil Site)

UTM Coordinates:

1992 Site Datum: 15N, N3464300 E0542300 (NAD 83)

2012 Site Extension Datum: 15N, N3464454 E0542058 (NAD 83)

Elevation: 26 m (85 ft) AMSL

Components: Historic

**Specific Components:** Mid-nineteenth to mid-twentieth century quarters area

**Site Type:** Residential

**Size:** 212,400 sq m (2,286,255 sq ft)

**Distance/direction to nearest water:** Bayou Rapides, 60 m (197 ft) to the south.

**Type and extent of previous disturbance:** Minimal disturbance from property clearing and variable erosion in original eastern portion, significant disturbance from agricultural activities in newly recorded western portion.

**Topography:** Natural levee

**Vegetation:** Mixed hardwood forest, cotton field

**Ground surface visibility:** Approximately 90 percent in cotton field, approximately 30 percent in forested areas

**Slope Direction (Aspect):** very slight to the south

**Recommended NRHP status:** Recommended eligible for listing in the NRHP; Avoidance or NRHP eligibility testing with appropriate mitigation measures recommended

## Site Description

Site 16RA703 was originally recorded by Donald G. Hunter of Coastal Environments, Inc., in November of 1992. The site was mapped at the extreme southern edge of the current project area, occupying a rectangular footprint along the natural levee of Bayou Rapides just to the southwest of Site 16RA692 (McNutt Plantation). Shovel testing during the current survey within the previously recorded portion of the site was limited to two judgmental shovel tests to verify that it had not experienced significant disturbance since its recordation (Figure 6.3). Both shovel tests yielded cultural material and verified the presence of intact subsurface cultural deposits. The recovered artifacts are discussed in the previous Materials Recovered chapter. During pedestrian survey and shovel testing, the Weil Site was extended to the west and north of its previously known boundary. This extension was referred to with the temporary field designation of L12P004-4 until mapping revealed its association with the previously recorded portion of 16RA703.



The 1992 site form described the Weil Site as consisting of a surface and subsurface concentration of twentieth-century historic artifacts related to a row of African-American tenant farmer residences, once owned by the Weil Company of Alexandria, Louisiana. A variety of historic ceramics, wire nails, window glass, machine-made bottles, and brick fragments were observed. The historic sheet midden and associated surface scatter appeared minimally disturbed in 1992, and Site 16RA703 was recommended as eligible for the NRHP.

The newly recorded portion of the Weil Site located during the current survey consists of a surface and subsurface concentration of mid-nineteenth- to mid-twentieth-century historic artifacts in a fallow cotton field to the north of Bayou Rapides, immediately to the west of the previously defined, forested area of the site. Surface visibility was excellent at the time of the survey, estimated at 91 to 100 percent (Figure 6.4). As such, the site was primarily delineated using surface visibility and transects excavated at 20 m intervals throughout the newly recorded area of the site. This area coincides with the location of four historic structures depicted along the east side of an unimproved road on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map (Figure 6.2).

Like the previously recorded portion of the Weil Site, these mapped structures likely represent tenant farming residences, and the recovered artifact assemblage is consistent with a domestic function. The recovered materials indicate a mid-nineteenth- to mid-twentieth-century date, suggesting the possibility that one or more of the structures may have existed as a part of the earlier McNutt Plantation (16RA692).

Artifact recovery in the newly recorded area of the site was primarily from surface contexts, while those from subsurface contexts were often found within strata that had been disrupted by plowing. As mentioned above, features and a sheet midden had been previously documented within the site, but the newly recorded portion seemed to lack both due to disturbance by agricultural activities. These findings suggest that the newly recorded portion of the Weil Site has limited research potential and should not be considered for additional archaeological work. The previously recorded portion of site 16RA703 was recommended as eligible for listing in the NRHP during its initial recording, and no evidence to the contrary was found during the site revisit.



Figure 6.4. Overview of newly recorded portion of Site 16RA703, view north.

## Investigation Methods

The portion of the project area containing the newly recorded portion of 16RA703 had already been designated as an area with a high probability of containing cultural materials, due to its proximity to Bayou Rapides. Therefore, pedestrian survey and shovel testing were being conducted on a 30 m (98 ft) grid when artifacts were first observed. The site was first detected through visual observation. Upon encountering cultural material, shovel testing and pedestrian survey proceeded on a 20 m (66 ft) grid to examine the depth of the cultural deposits. To the east, positive shovel tests connected the surface scatter with the previously defined 16RA703 site boundary. The southern, western, and northern 16RA703 site boundaries were primarily defined by the extent of the surface artifact scatter (Figure 6.5). A total of 42 shovel tests yielded cultural material, including 40 within the newly defined western extension of the Weil Site and 2 judgmental shovel tests excavated within the previously defined site boundaries to verify the presence of in situ cultural material.

The surface scatter of artifacts within the newly recorded portion of 16RA703 covered a much larger area than could be defined by positive shovel tests. Since the exceptional surface visibility led to the detection of the newly recorded portion of the site, and the depth of the cultural deposit had been established, the boundaries of the site were defined by the extent of the surface artifact scatter, as per the Field and Report Standards of the Louisiana Division of Archaeology. The recovered artifacts are discussed in the previous Materials Recovered chapter.

As previously mentioned, two judgmental shovel tests were excavated in the previously recorded portion of the Weil Site during the revisit and showed that this area has seen little or no disturbance in the intervening years since it was recorded. As the site was recommended as eligible for listing in the NRHP during its initial recording, and no evidence to the contrary was found during the site revisit, the remainder of 16RA703 was avoided during the survey to preserve the intact cultural deposits known to be present.

A locational data point was collected at the site datum of L12P004-4, the rough center point of the newly recorded extension to site 16RA703. Site 16RA703 is roughly L-shaped, with the long axis of the originally recorded portion of the site paralleling the north bank of Bayou Rapides, and the long axis of the newly recorded portion running north–south from the western edge of the original site.

## Depositional Context

Profiles observed at Site 16RA703 during the cultural survey were typical of those encountered in the southern half of the project area (Coushatta silty clay loam). A historic sheet midden and subsurface cultural features had been encountered in 1992 within the original site boundaries, but no such intact features were found in the site's newly recorded portions in 2012.

The profile of a representative positive shovel test from the newly recorded portion of the site (Transect 89, Shovel Test 2) consists of an Ap horizon of brown (7.5YR 5/2) silty clay loam in the top 15 cm (6 in), overlying reddish brown (5YR 4/4) silty clay loam from 15 to 35 cm (6 to 14 in) that is believed to correspond with a B21 horizon described by Kerr et al. (1980). Both of these strata contained moderately abundant (2 percent) small brick and cement flecks. This was in turn underlain by a horizon consisting of dark reddish brown (5YR 3/3) silty clay from 35 to approximately 40 cm (14 to 16 in) believed to correspond to a B22 horizon described by Kerr et al. (1980).

Shovel tests excavated at site 16RA703 did not extend below the B22 soil horizon, but in a typical Coushatta series solum, the B22 horizon extends to a depth of 69 cm (27 in), and is in turn underlain by a C1 horizon of reddish brown (5YR 4/4) silt loam from 69 to 97 cm (27 to 38 in), a C2 horizon of reddish brown (5YR 5/4) loamy very fine sand from 97 to 112 cm (38 to 44 in), and a C3 horizon of reddish brown (5YR 4/4) silt loam from 112 to 155 cm (44 to 61 in) bgs. The latter stratum contained a few fine strata of reddish brown (5YR 4/3) heavy silt loam.

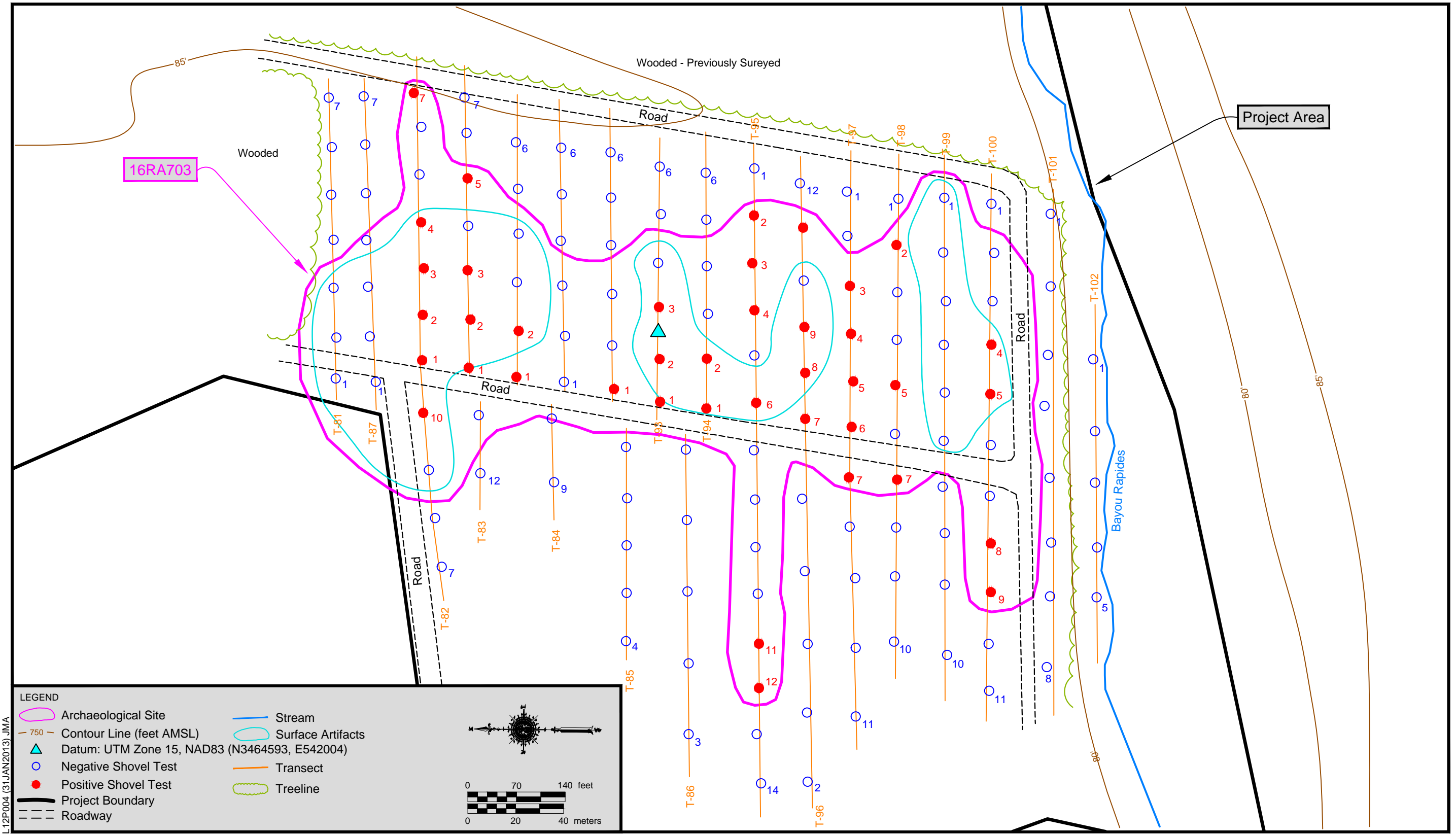


Figure 6.5. Schematic plan map of newly recorded portion of Site 16RA703 within the project area.



The Coushatta series soils at 16RA703 were observed throughout the southern half of the project area. The presence of very small flecks of brick and cement rubble throughout the Ap horizon in several positive shovel tests within the newly-recorded portion of the site indicates that plowing may have disturbed much of the Ap horizon in the western portion of 16RA703 surveyed in 2012. No breaks within the soil horizon could be seen in exposed soil profiles.

Shovel tests excavated at 16RA703 always encountered the Ap and B21 horizons, but the transition to the B22 horizon was occasionally not observed in those cases where a given shovel test was not excavated to sufficient depth or the transition took place at an unusual depth. Artifacts were routinely recovered throughout the Ap horizon and in several cases extended into the underlying B21 and B22 horizons.

## Artifacts

The Site 16RA703 assemblage recovered during the survey consists of 528 artifacts, including 518 from the newly recorded western extension of the site and 10 from the two shovel tests excavated within the original site boundary. The vast majority of these artifacts (80 percent) were categorized the Domestic Group. Architecture Group artifacts were less common, constituting 16 percent of the assemblage while Maintenance Group artifacts constitute 2 percent. All other groups that are represented, including Biological, Clothing, Personal and Unidentified Items constitute the remaining 2 percent of the assemblage. Artifacts recovered from the field investigation are tabulated by provenience in Table 6.2.

The terminus post quem (TPQ), or earliest dates, and terminus ante quem (TAQ), or latest dates associated with artifact types from 16RA703 are generally consistent with an early- to mid-twentieth-century occupation, correlating well with the depictions of structures on historic maps of the area. However, a small quantity of Architectural Group artifacts indicate that structures may have been present at the location as early as the

mid- to late nineteenth century, suggesting the possibility that one or more of the structures may have existed as a part of the earlier McNutt Plantation (16RA692).

The earliest TPQ and TAQ dates are from Domestic Group artifacts, including stoneware that was in production from A.D. 1780 to 1925 (Greer 1999; Ketchum 1983). Hard paste porcelain went into production in 1800 (Faulkner 2000), and whiteware went into production in 1830 (Majewski and O'Brien 1987:119). Both remain in production today. Some yellowware sherds indicate a date from A.D. 1830 to 1925 (Raycraft and Raycraft 1990:7), while glass container fragments formed by an Automatic Bottle Machine (ABM) denote a date after A.D. 1903 (Jones and Sullivan 1985; Lindsey 2008).

Architectural Group artifacts should provide some indication of the date at which structures were constructed; machine-cut nails indicate a range from A.D. 1800 to 1880 (Nelson 1968). Two wire nails were also recovered, which were not produced until after A.D. 1880 (Nelson 1968). Taken together, the architectural and domestic materials from the Weil Site indicate that the earliest construction must have occurred sometime after 1800, and the site was likely occupied through the nineteenth and early to mid-twentieth centuries. It should be noted, however, that a TPQ of 1800 is the very earliest possible date at which machine-cut nails and hard paste porcelain would appear in the archaeological record, and does not encompass the TPQ date of 1830 for whiteware or yellowware, which were also found in significant quantities at the site. Therefore, the 16RA703 assemblage indicates that initial construction and habitation were more likely to have occurred from the mid-nineteenth through the mid-twentieth centuries.

There is no clear spatial distribution of artifacts recovered from 16RA703 by functional group. Domestic Group artifacts represent the vast majority of the cultural material recovered from the site during the survey, and were collected throughout the site's western extension in surface and subsurface contexts.

Table 6.2. 16RA703 Artifact Recovery by Provenience.

Provenience	Architectural	Biological	Clothing	Domestic	Maintenance	Personal	Unidentified	Total
GSC TR 100 # 5				11				11
GSC TR 100 #8				1				1
GSC TR 81 # 1		1		27				28
GSC TR 81 # 2	3			14	1			18
GSC TR 81 # 3				4				4
GSC TR 82 # 9	1							1
GSC TR 87 # 1	1			4				5
GSC TR 87 # 2	1			2				3
GSC TR 87 # 3				3				3
GSC TR 88 # 1				2				2
GSC TR 88 # 2			1	3				4
GSC TR 88 # 3	1			4	1	1	1	8
GSC TR 89 # 1				2				2
GSC TR 89 # 2				3				3
GSC TR 90 # 1				13				13
GSC TR 90 # 2				14				14
GSC TR 90 # 3				5				5
GSC TR 90 # 4				5				5
GSC TR 93 # 1				6				6
GSC TR 93 # 2				6				6
GSC TR 93 # 4				3				3
GSC TR 93 # 3				5				5
GSC TR 94 # 1				4				4
GSC TR 95 # 2				5				5
GSC TR 95 # 6				2				2
GSC TR 95 # 3				4				4
GSC TR 95 # 4	4			27				31
GSC TR 95 # 6,7	2			3			2	7
GSC TR 96 # 10	2			7				9
GSC TR 96 # 11	3			13				16
GSC TR 96 # 8				10				10
GSC TR 96 # 9	2			20				22
GSC TR 96 # 7				1				1
GSC TR 97 # 5				1				1
GSC TR 99 # 1				12				12
GSC TR 99 # 2			1	4				5
GSC TR 99 # 3				7				7
GSC TR 99 # 5				8	1			9
GSC TR 99 # 6				6				6
GSC TR 99 # 4				7				7
STP TR 100 # 5	2			15			1	18
STP TR 100 # 8				2	1			3
STP TR 100 # 4				1				1
STP TR 100 # 5	7			9				16
STP TR 100 # 9				2				2
STP TR 82 # 10				1				1
STP TR 88 # 1	3			8				11
STP TR 88 # 4				1				1
STP TR 88 # 7				1				1
STP TR 88 # 2	1							1
STP TR 88 # 3				1				1
STP TR 89 # 2	1			11				12
STP TR 89 # 3				5				5
STP TR 89 # 5					1			1
STP TR 89 # 1	2			6				8
STP TR 90 # 2	4			7				11
STP TR 90 # 1	1							1
STP TR 92 # 1				1				1
STP TR 93 # 1	1			2				3
STP TR 93 # 2				1				1
STP TR 93 # 3				1				1
STP TR 93 # 1	2			1				3
STP TR 94 # 1				4				4
STP TR 94 # 2				1				1
STP TR 95 # 12				1				1
STP TR 95 # 2				3				3
STP TR 95 # 3				3				3

Provenience	Architectural	Biological	Clothing	Domestic	Maintenance	Personal	Unidentified	Total
STP TR 95 # 4	8			7			1	16
STP TR 95 # 6				2				2
STP TR 95 #11				1				1
STP TR 95 #3	1			1				2
STP TR 95 #4	4			8				12
STP TR 96 # 11	1							1
STP TR 96 # 8	10			12	1			23
STP TR 96 # 9				3				3
STP TR 96 #7				1				1
STP TR 96 #8				2				2
STP TR 97 # 4	1			1				2
STP TR 97 # 5				2	1			3
STP TR 97 # 7				1				1
STP TR 97 #3	1			1				2
STP TR 97 #6	11			1	1			13
STP TR 98 # 5	2	1		3				6
STP TR 98 # 7				2				2
STP TR 98 3 2	1			2				3
GSC #2				1				1
STP #1	1			7				8
STP #2				1				1
Total	85	2	2	425	8	1	5	528

Similarly, Architectural and Maintenance Group artifacts were also recovered throughout the newly recorded portion of the site, both above and below the ground surface. The small quantities of Biological, Clothing, and Unidentified Group artifacts were found in both the northern and southern portions of the newly recorded site extension. The homogenous distribution of artifact types throughout the newly recorded area of the Weil Site may possibly be a reflection of disturbance to the site from agricultural activities. The large relative proportion of Domestic Group artifacts in the assemblage clearly indicates that the structures at the site were utilized as residences.

The spatial distribution of artifacts by TPQ/TAQ date range does not show any unambiguous indications as to the temporal changes, if any, that took place in this portion of the site. As mentioned above, all artifact types that were recovered in significant quantities were found throughout the newly recorded area of the site. One of the two wire nails recovered was found in a judgmental shovel test in the originally recorded portion of the site, while the other was recovered from the southern portion of the newly recorded western extension. Similarly, all five of the ABM glass container fragments were found either in a judgmental shovel test within the

original site boundaries (n = 1) or in the southern portion of the newly-recorded western extension (n = 4). These artifacts may indicate that the northern half of the 16RA703 western extension recorded during the current survey might represent the location of an older nineteenth-century structure once associated with the earlier McNutt Plantation, and that the southern half of the western extension is representative of the remainder of the Weil Site as the location of tenant farmer residences constructed in the late nineteenth or early twentieth centuries. However, it must be emphasized that the small number of recovered wire nails and unambiguous ABM glass fragments makes any conclusion of temporal gradations within the site tenuous at best.

## Features

The profiles of all excavated shovel tests were examined for cultural features and other in situ historic deposits. While a historic sheet midden and subsurface cultural features had been encountered in 1992 within the original site boundaries, no such intact features were found in the newly recorded portions of 16RA703 in 2012. This absence is possibly the result of disturbance to the western portion of the Weil Site caused by plowing and other agricultural activities, a conclusion reinforced

by the disparity in land use between the forested original footprint of the site and the newly recorded portion that has been subjected to cultivation.

## Summary and National Register Evaluation

Site 16RA703 was originally recorded in 1992, and represents the remains of a mid-nineteenth- to mid-twentieth-century row of African-American tenant farmer residences, once owned by the Weil Company of Alexandria, Louisiana. The originally defined boundaries of Site 16RA703 are located within the southern portion of the project area. The 2012 cultural survey resulted in an extension of the western and northern boundaries of the Weil Site to include a surface and subsurface deposit of historic artifacts, also within the England Airpark Site W-1 project area. This newly recorded portion of the site coincides with the location of four historic structures depicted along the east side of an unimproved road on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map.

The investigation and delineation of the newly recorded portion of Site 16RA703 revealed no unambiguous temporal gradations within the site, though the nineteenth-century age of a portion of the artifacts recovered in 2012 suggests that one or more of the structures may have existed as a part of the earlier McNutt Plantation. The large relative proportion of Domestic Group artifacts recovered (80 percent) strongly indicates that the structures represented by the 16RA703 assemblage were utilized as residences.

No subsurface cultural features or historic sheet middens were found in the portions of the Weil Site surveyed in 2012, though both features and an historic sheet midden had been noted in the site's original boundary in 1992. Two judgmental shovel tests excavated within the original boundary of the Weil Site confirmed the presence of intact subsurface cultural deposits in this area of the site. Both the absence of subsurface features and the homogenous distribution of the recovered artifacts indicate that modern disturbance has

compromised the contextual integrity of the newly recorded portions of the Weil Site. It is likely that plowing and other agricultural activities conducted over the years in the areas surveyed in 2012 have disrupted the integrity of cultural deposits. The apparent disparity of preservation between the plowed newly-recorded portion and the forested original footprint of the site supports this interpretation.

The 2012 survey of 16RA703 suggests that the newly recorded portion of the Weil Site has limited research potential and should not be considered for additional archaeological work. However, the original portion of the site was recommended as eligible for listing in the NRHP during its initial recording in 1992, and no evidence to the contrary was found during the site revisit. Indeed, the presence of intact subsurface deposits was confirmed in the original boundary of the Weil site via judgmental shovel tests. Given the high degree of preservation of the forested portions of 16RA703, and the site's potential to yield historical information on tenant farmer domestic activities in postbellum and early-twentieth-century central Louisiana, this area of the site is recommended for avoidance, or site testing to determine its eligibility for listing in the NRHP and mitigation of impacts as necessary if this portion of the site cannot be avoided. The newly recorded portion of the site within the cultivated field is recommended for cultural resource clearance and no further archaeological work is recommended in this area of the site.

## Site 16RA1504

UTM Coordinates:

Site Datum: 15N, N3466425 E0542004 (NAD 83)

Elevation: 25 m (81 ft) AMSL

Components: Historic

Specific Components: Twentieth-century tenant farm

Site Type: Residential

Size: 18,700 sq m (201,285 sq ft)

Distance/direction to nearest water: Drainage canal tributary of Big Bayou, 50 m (164 ft) to the west.



**Type and extent of previous disturbance:**  
Extensive disturbance from plowing and other agricultural activities

**Topography:** Alluvial plain

**Vegetation:** None (fallow cotton field)

**Ground surface visibility:** More than 90 percent

**Slope Direction (Aspect):** very slight to the southeast

**Recommended NRHP status:** Not eligible due to heavy disturbance; no further work recommended

## Site Description

Site 16RA1504 is a newly recorded archaeological site as a result of this survey. The site consists of a surface and subsurface scatter of late-nineteenth- to mid-twentieth-century historic artifacts in a fallow cotton field on the east side of a dirt road. A historic structure is depicted on the 1941 Boyce, Louisiana USGS 7.5' Quadrangle Map at the approximate location of the site (Figure 6.2).

Surface visibility was excellent at the time of the survey, estimated at 91 to 100 percent

(Figure 6.6). As such, the site was primarily delineated using surface visibility, and shovel tests were excavated at 20 m intervals throughout the site. The site contains a surface concentration of primarily domestic artifacts and a subsurface scatter of similar materials to a depth of 22 cm (9 in) bgs. A variety of historic ceramics, glass container fragments, and ferrous metal objects were observed. No artifacts remained in situ, as plowing and other agricultural activities over the entire site area had disrupted any integrity the cultural deposits might once have had.

The recovered artifact assemblage is consistent with a domestic function. Given the site's location and its probable mid-twentieth-century date, it likely represents a tenant farming lease. No intact surface or subsurface features or midden soils were encountered during investigations at the site, and plowing disturbance is extensive. This site is recommended not eligible for listing in the NRHP, and no further archaeological work is recommended.



Figure 6.6. Overview of Site 16RA1504, view north.

## Investigation Methods

The portion of the project area containing the site had been designated before conducting the survey as an area with a high probability to contain cultural materials. As the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map depicted a number of structures as having once stood within the boundary of the project area, a 200 m (656 ft) buffer area was established around the location of each of the mapped structures, within which pedestrian survey and shovel testing was conducted at a 30 m (98 ft) high-probability interval. The site was first detected through visual observation.

Upon encountering cultural material over an area greater than 50 m (164 ft) in diameter, shovel test transects were excavated at a 20 m (66 ft) interval through the site area to examine the depth of the cultural deposits. Only five shovel tests yielded subsurface deposits, but the surface scatter associated with 16RA1504 extended over a much larger area. The surface visibility was exceptional at the time of the survey, and it was felt that the depth of the cultural deposit had been established through shovel testing, and therefore the boundaries of the site were defined by measurement of the extent of the surface artifact scatter (Figure 6.7). Since the site was mapped to the east of a dirt road on the historic quadrangle map and the surface distribution of artifacts confirmed this location, close-order (20 m interval) delineation shovel tests were not excavated to the west of the road. The recovered artifacts are discussed in the previous Materials Recovered chapter.

The cultural deposits at 16RA1504 have been severely disrupted by plowing and other agricultural activities. No artifacts remain in situ, and no intact surface or subsurface features or midden soils were encountered during investigations at the site. A locational data point was collected at the site datum of 16RA1504. The site shape is irregular, with a roughly circular central portion and additional surface artifacts extending to the south.

## Depositional Context

Profiles observed at Site 16RA1504 during the cultural survey were typical of those encountered in the northern half of the project area and mapped as Moreland silty clay (Kerr et al. 1980). The profile of a representative positive shovel test from the site (Transect 56, Shovel Test 3) consisted of an Ap horizon of dark brown (7.5YR 3/2) silt loam in the top 10 cm (4 in), overlying a zone of reddish brown (5YR 4/3) silty clay from 10 to 22 cm (4 to 9 in). This was in turn underlain by a zone consisting of light reddish brown (5YR 6/4) silt loam from 22 to 37 cm (9 to 15 in) and a horizon consisting of reddish brown (5YR 4/4) silty clay from 37 to approximately 47 cm (15 to 19 in).

Shovel tests excavated at Site 16RA1504 did not extend below the reddish brown silty clay horizon, but in a typical Moreland series solum, a Bw horizon extends to a depth of 66 cm (26 in), and is in turn underlain by a Bkss1 horizon of reddish brown (5YR 4/3) clay from 66 to 132 cm (26 to 52 in) and a Bkss2 horizon of reddish brown (5YR 4/4) clay from 132 to 160 cm (52 to 63 in) bgs.

The Moreland series soils at 16RA1504 were observed throughout the northern half of the project area. No breaks within the soil horizon could be seen in exposed soil profiles. Shovel tests excavated at 16RA1504 always encountered the Ap and A horizons, from which artifacts were recovered. No artifacts extended into the underlying horizons.

## Artifacts

The Site 16RA1504 assemblage recovered during the survey consists of 133 artifacts. The vast majority of these artifacts (85 percent) fall within the Domestic Group. Architecture Group artifacts were less common, constituting 7 percent of the assemblage, while Maintenance Group artifacts constituted 5 percent. All other groups that are represented, including Biological, Clothing, Furnishings and Unidentified constituted the remaining 3 percent of the assemblage. Artifacts recovered from the field investigation are tabulated by provenience in Table 6.3.

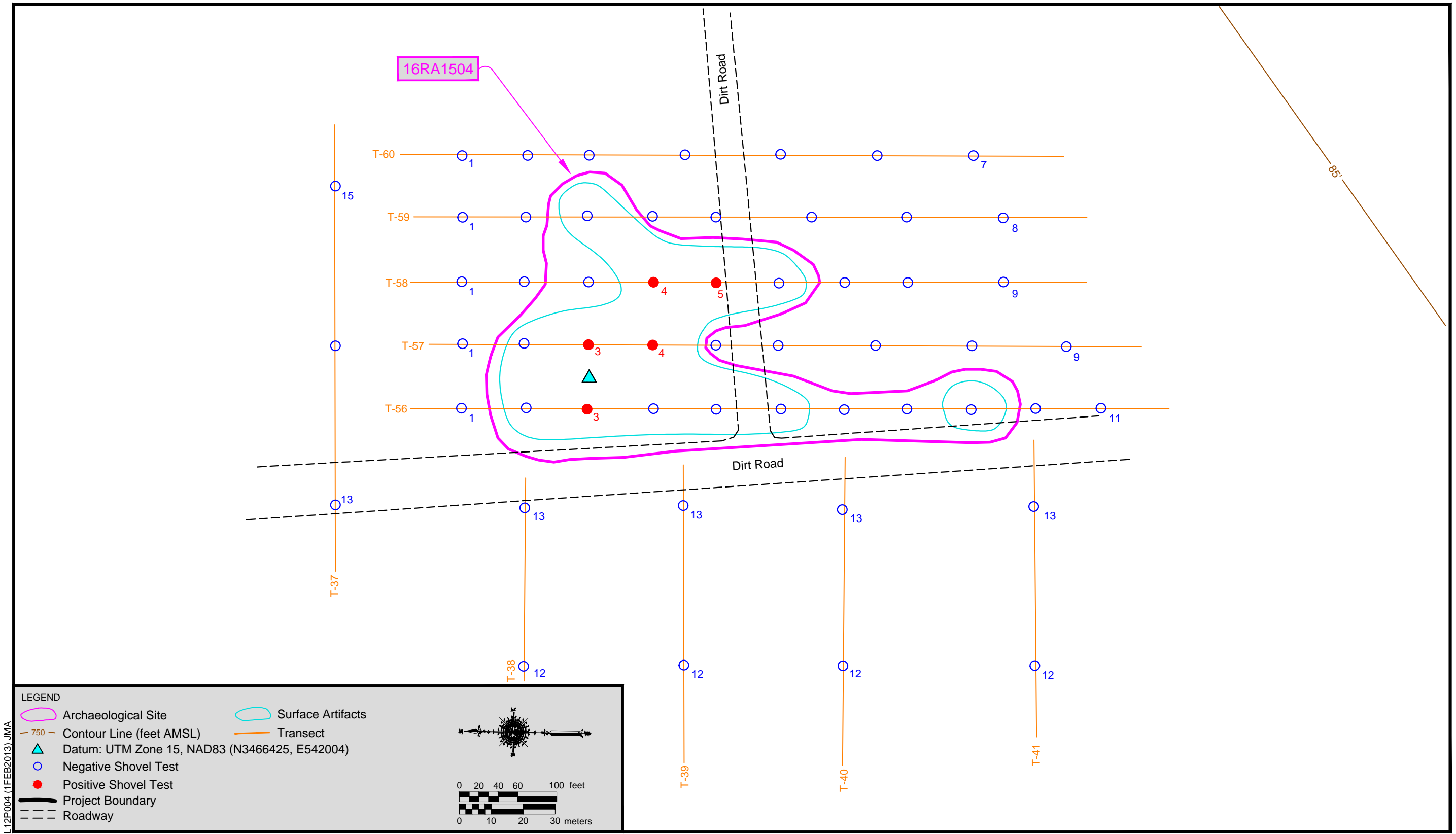


Figure 6.7. Schematic plan map of Site 16RA1504 within the project area.



The terminus post quem (TPQ), or earliest dates, and terminus ante quem (TAQ), or latest dates associated with artifact types from 16RA1504 are generally consistent with a late-nineteenth- to early-twentieth-century occupation, correlating well with the depictions of structures on historic maps of the area.

The available TPQ and TAQ dates are from Domestic and Architecture Group artifacts, the former including whiteware and ironstone, both of which went into production in 1830 and remain in production today (Faulkner 2000; Majewski and O'Brien 1987:119) Stoneware sherds recovered indicate a date between A.D. 1780 and 1925 (Greer 1999; Ketchum 1983). Additionally, three glass container fragments formed by an Automatic Bottle Machine (ABM) denote a date after A.D. 1903 (Jones and Sullivan 1985; Lindsey 2008).

Architectural Group artifacts should provide some indication of the date structures were constructed. These include two machine cut-nails, indicating a range from A.D. 1800 to 1880 (Nelson 1968). Taken together with the available USGS map data, the architectural and domestic materials from Site 16RA1504 generally indicate that construction occurred at the site in the late nineteenth century, and that habitation activities likely took place through

the late nineteenth and into the mid-twentieth centuries.

There is no clear spatial distribution of artifacts recovered from 16RA1504 by functional group. Domestic Group artifacts represent the vast majority of the cultural material recovered from the site during the survey, and were collected throughout the site in surface and subsurface contexts. Similarly, Architectural and Maintenance Group artifacts were also recovered throughout the site's footprint, both above and below the ground surface. The small quantity of Biological, Clothing, Furnishings, and Unidentified Group artifacts were generally found in the center of the site's footprint, but this may be a function of the small sample size (only four artifacts total). Similarly, the spatial distribution of artifacts by TPQ/TAQ date range does not show any unambiguous indications as to the temporal changes, if any, that took place at the site.

The homogenous distribution of artifact types throughout Site 16RA1504 is possibly a reflection of disturbance to the site from agricultural activities, but the large relative proportion of recovered Domestic Group artifacts clearly indicates that the structure represented by the assemblage was utilized as a residence.

Table 6.3. 16RA1504 Artifact Recovery by Provenience.

Provenience	Architectural	Biological	Clothing	Domestic	Furnishings	Maintenance	Unidentified	Total
GSC TR 38 #15				1				1
GSC TR 39 #13				1				1
GSC TR 55 #2				4				4
GSC TR 55 #4		1		12				13
GSC TR 55 #5				4				4
GSC TR 55 #6				2				2
GSC TR 55 #9				2				2
GSC TR 56 #2				9		1	1	11
GSC TR 56 #3	1		1	22		2		26
GSC TR 57 #4				9				9
GSC TR 57 #5				17	1	2		20
GSC TR 57 #6				1				1
GSC TR 58 #3	1			2		1		4
GSC TR55 #3	3			20		1		24
STP TR 56 # 4				1				1
STP TR 56 #3	4			2				6
STP TR 57 #4				2				2
STP TR 57# 5				1				1
STP TR55 #3				1				1
<b>Total</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>113</b>	<b>1</b>	<b>7</b>	<b>1</b>	<b>133</b>

## Features

The profiles of all excavated shovel tests were examined for cultural features and other in situ historic deposits, but no such intact deposits were found. This absence is possibly the result of disturbance to the site caused by plowing and other agricultural activities.

## Summary and National Register Evaluation

Site 16RA1504 is a newly recorded archaeological site as a result of this survey, and represents the remains of a late-nineteenth- to mid-twentieth-century tenant farm residence. The site consists of a surface and subsurface scatter of historic artifacts in a fallow cotton field on the east side of a dirt road. An historic structure is depicted on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map at the approximate location of the site (Figure 6.2), and so an early- to mid-twentieth-century date for the site is assigned.

The cotton field within which the site is situated had exceptional surface visibility at the time of the survey, and the site was originally located via visual observation. Shovel test transects at 20 m (66 ft) intervals were excavated across the site, but the boundary of 16RA1504 was primarily defined by visual observation of the extent of the surface artifact scatter. Disturbance from plowing was extensive, and subsurface artifacts were recovered from only five shovel tests at a maximum depth of 22 cm (9 in) bgs. No features or other intact subsurface deposits were noted.

The functional group distribution of the recovered artifacts definitively indicates that the structure at 16RA1504 was utilized as a residence. The age of the artifacts confirms a date from the late nineteenth through the mid-twentieth centuries for the tenant farm residence. However, their homogeneity of distribution did not allow any meaningful analysis of spatial or temporal artifact distribution within the site.

Investigations at 16RA1504 indicate that this resource contains very low density subsurface remains and has experienced considerable modern disturbance through plowing and other agricultural activities. No artifacts remain in situ, and the site has little remaining integrity. Based on its limited research potential, Site 16RA1504 is recommended not eligible for listing in the NRHP. This site is unlikely to produce any significant data relative to local and regional research themes, and no further work is recommended.

## Site 16RA1505

### UTM Coordinates:

Site Datum: 15N, N3466587 E0541787 (NAD 83)

Elevation: 26 m (86-ft) AMSL

Components: Historic

Specific Components: Mid- to late-twentieth-century tenant farm; twenty-first-century residence

Site Type: Residential

Size: 66,000 sq m (710,418 sq ft)

Distance/direction to nearest water: Bayou Rapides, 30 m (98 ft) to the southwest.

Type and extent of previous disturbance: Extensive disturbance from plowing and other agricultural activities

Topography: Alluvial plain

Vegetation: None (fallow cotton field)

Ground surface visibility: More than 90 percent

Slope Direction (Aspect): very slight to the west

Recommended NRHP status: Not eligible due to heavy disturbance; no further work recommended

## Site Description

Site 16RA1505 is a newly recorded archaeological site as a result of this survey. The site consists of a surface and to a lesser degree subsurface scatter of mid-twentieth- to early-twenty-first-century historic artifacts in a fallow cotton field on the east side of Jimmy Brown Road and Louisiana Highway 1202. Two paved driveways lead to the site area, one from Jimmy Brown Road and one from Highway 1202. Two historic structures are

depicted on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map at the approximate location of the site (Figure 6.2), and a modern residence occupied the site's southwestern portion as late as 2009.

Surface visibility was excellent at the time of the survey, estimated at 91 to 100 percent (Figure 6.8). The site was primarily delineated using surface visibility and transects excavated at 20 m intervals throughout the site. The site contains a surface concentration of primarily domestic artifacts and a subsurface scatter of similar materials to a depth of 20 cm (8 in) bgs. A variety of historic ceramics and glass container fragments were observed. No artifacts were found in situ, as plowing and other agricultural activities over the entire site area seemed to have destroyed any integrity the cultural deposits might once have had.

The recovered artifact assemblage is consistent with a domestic function. Given the site's location and the mid-twentieth-century date of the original buildings, it likely originally represented a tenant farming lease. Google Earth imagery, however, indicates that the southwestern portion of the site, at the northeast corner of the intersection of Jimmy

Brown Road and Louisiana Highway 1202, was in use as a residence as late as December of 2009. This house had been demolished or moved by June 2011, and it was apparently only in the year prior to the survey that the location was plowed and utilized to grow cotton. No intact surface or subsurface features or midden soils were encountered during investigations at the site, and plowing disturbance is extensive. This site is recommended not eligible for listing in the NRHP, and no further archaeological work is necessary.

## Investigation Methods

The portion of the project area containing the site had been designated before the survey as an area with a high probability to contain cultural materials. Since the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map depicted a number of structures within the boundary of the project area, a 100 m (328 ft) buffer area was established around the location of each of the mapped structures, within which pedestrian survey and shovel testing was conducted at a 30 m (98 ft) high-probability interval. The site was first detected through visual observation.



Figure 6.8. Overview of Site 16RA1505, view south.

Upon encountering the surface concentration of cultural material, 13 shovel tests were excavated at 20 m (66 ft) intervals through the site area to examine the depth and subsurface spatial extent of the cultural deposit. Only 10 shovel tests were positive for cultural material, but the surface scatter associated with 16RA1505 extended over a much larger area. Since the surface visibility was exceptional, the depth of the cultural deposit had been established, the boundaries of the site were defined by measurement of the extent of the surface artifact scatter, per the Field and Report Standards of the Louisiana Division of Archaeology (Figure 6.9). The recovered artifacts are discussed below in the Artifacts section.

As mentioned above, the cultural deposits at 16RA1505 have been severely disturbed by plowing and other agricultural activities, and represent a homogenous mix of mid-twentieth-century to near contemporary cultural material. No artifacts remain in situ, and no intact surface or subsurface features or midden soils were encountered during investigations at the site. A locational data point was collected at the site datum of 16RA1505. The site shape is highly irregular.

## Depositional Context

Profiles observed at 16RA1505 during the cultural survey were typical of those encountered in the southern half of the project area (Coushatta silt loam). The profile of a representative positive shovel test from the site (Transect 73, Shovel Test 2) consists of an Ap horizon of reddish brown (5YR 4/4) silt loam in the top 20 cm (8 in), overlying a horizon consisting of light reddish brown (5YR 6/3) silt loam from 20 to 40 cm (8 to 16 in). This was in turn underlain by a horizon consisting of reddish brown (5YR 4/4) silty clay subsoil from 40 to approximately 45 cm (16 to 18 in).

Shovel tests excavated at site 16RA1505 did not extend below the 40 cm bgs, but in a typical Coushatta series solum, a B22 horizon extends to a depth of 69 cm (27 in), and is in

turn underlain by a C1 horizon of reddish brown (5YR 4/4) silt loam from 69 to 97 cm (27 to 38 in), a C2 horizon of reddish brown (5YR 5/4) loamy very fine sand from 97 to 112 cm (38 to 44 in), and a C3 horizon of reddish brown (5YR 4/4) silt loam from 112 to 155 cm (44 to 61 in) bgs. The latter stratum contained a few fine strata of reddish brown (5YR 4/3) heavy silt loam.

The Coushatta series soils at 16RA1505 were observed throughout the southern half of the project area. No breaks within the soil horizon could be seen in exposed soil profiles. Shovel tests excavated at the site always encountered the Ap and underlying horizon, but the transition to the third stratum was occasionally not observed where a given shovel test was not excavated to sufficient depth or the transition took place at an unusual depth. Artifacts were exclusively recovered from the Ap horizon.

## Artifacts

The Site 16RA1505 assemblage recovered during the survey consists of 134 artifacts. The vast majority of these artifacts (93 percent) are included in the Domestic Group. The remaining 7 percent of the assemblage is comprised of only 10 artifacts, including 5 artifacts in the Unidentified Group, 4 in the Architecture Group, and 1 artifact from the Biological Group. Artifacts recovered from the field investigation are tabulated by provenience in Table 6.4. Artifacts observed but not collected during the survey consisted of several pieces of modern plastic (including ball point pen barrels and other clearly contemporary material).

The terminus post quem (TPQ), or earliest dates, and terminus ante quem (TAQ), or latest dates associated with artifact types from 16RA1505 are generally consistent with a mid-twentieth- to early-twenty-first-century occupation, correlating well with the depictions of structures on historic maps of the area and Google Earth imagery.



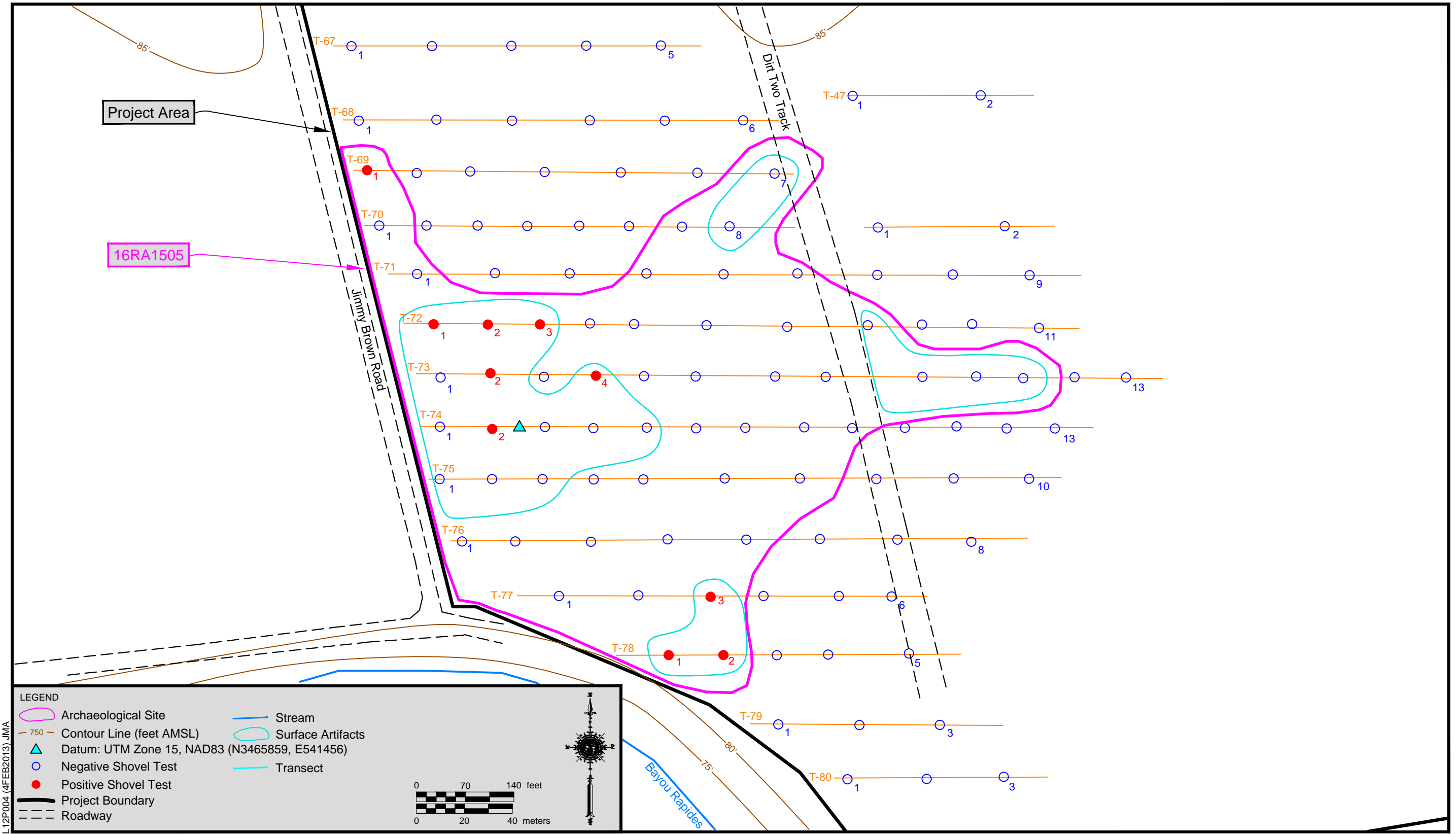


Figure 6.9. Schematic plan map of Site 16RA1505 within the project area.



The available TPQ and TAQ dates are almost exclusively from Domestic Group artifacts, including whiteware and ironstone ceramics, both of which went into production in 1830 and remain in production today (Faulkner 2000; Majewski and O'Brien 1987:119). Similarly, hard paste porcelain went into production around 1800 and is still produced (Faulkner 2000). Recovered stoneware sherds were manufactured between A.D. 1780 and 1925 (Greer 1999; Ketchum 1983). Five yellowware sherds were produced from A.D. 1830 to 1925 (Raycraft and Raycraft 1990:7), while two glass container fragments formed by an Automatic Bottle Machine (ABM) denote a date after A.D. 1903 (Jones and Sullivan 1985; Lindsey 2008). Finally, a single machine-cut nail from the Architecture Group indicates a date range from A.D. 1800 to 1880 (Nelson 1968).

Taken together with the available USGS map and Google Earth data, the architectural and domestic materials from Site 16RA1505 generally support the conclusion that residential activities took place at the site from

the mid-twentieth to the early twenty-first centuries. The presence of the single machine-cut nail and yellowware and stoneware fragments suggest the possibility that domestic activities occurred at the site as early as the first quarter of the twentieth century, but the small number of recovered artifacts dating to this era render any such conclusions tenuous at best.

There is no clear spatial distribution of artifacts recovered from 16RA1505 by functional group. Domestic Group artifacts represent the vast majority of the cultural material recovered from the site during the survey, and were collected throughout the site in surface and subsurface contexts. The small quantity of Biological, Architecture and Unidentified Group artifacts were generally found in the center of the site, but this may be a function of the small sample size (only 10 artifacts total). Similarly, the spatial distribution of artifacts by TPQ/TAQ date range does not show any unambiguous indications as to the temporal changes that took place at the site.

Table 6.4. 16RA1505 Artifact Recovery by Provenience.

Provenience	Architectural	Biological	Domestic	Unidentified	Total
GSC TR 69 # 7			8		8
GSC TR 70 #8			2	2	4
GSC TR 72 # 1			4		4
GSC TR 72 #8			2	1	3
GSC TR 73 #10			2		2
GSC TR 73 #11	2		3		5
GSC TR 73 #2,3			4	1	5
GSC TR 73 #9	1		2		3
GSC TR 74 # 1			16		16
GSC TR 74 # 2			44		44
GSC TR 74 # 5			8		8
GSC TR 74 #3			1		1
GSC TR 74 #4			8		8
GSC TR 75 # 2			1		1
GSC TR 75 # 3		1			1
GSC TR 75 #1			2		2
GSC TR 78 # 1			3	1	4
GSC TR 78 #2,3			5		5
STP TR 69 #1	1				1
STP TR 72 # 2			2		2
STP TR 73 # 2			1		1
STP TR 73 # 4			1		1
STP TR 74 # 2			3		3
STP TR 77 # 3			1		1
STP TR 78 #1			1		1
<b>Total</b>	<b>4</b>	<b>1</b>	<b>124</b>	<b>5</b>	<b>134</b>

The 16RA1505 assemblage may represent an amalgam of multiple, discrete residences. As discussed above, the 1941 Boyce, Louisiana, USGS quadrangle depicts two structures in the site area, but both of these are situated to the south of the more recent residence mapped within the site boundaries, as shown in early-twenty-first-century Google Earth imagery. Agricultural activities over the intervening years have mixed any artifact concentrations that might once have been temporally and spatially discrete. The homogenous distribution of artifact types throughout Site 16RA1505 is likely a reflection of disturbance to the site from agricultural activities, but the large relative proportion of recovered Domestic Group artifacts clearly indicates that the structure or structures represented by the assemblage were utilized as residences.

## Features

The profiles of all excavated shovel tests were examined for cultural features and other in situ historic deposits, but no such intact deposits were found. This absence is possibly the result of disturbance to the site caused by plowing and other agricultural activities.

## Summary and National Register Evaluation

Site 16RA1505 is a newly recorded archaeological site as a result of this project, and represents the remains of one or more mid-twentieth- to early-twenty-first-century residences. The site consists of a surface and subsurface scatter of historic artifacts in a fallow cotton field on the east side of Jimmy Brown Road and Louisiana Highway 1202. Two historic structures are depicted on the 1941 Boyce, Louisiana USGS 7.5' Quadrangle Map at the approximate location of the site (Figure 6.2), and a modern residence occupied the site's southwestern portion as late as 2009.

The cotton field the site is situated in had exceptional surface visibility at the time of the survey, and the site was originally located by surface inspection. Shovel testing was

conducted at 20 m (66 ft) intervals across the site, but the boundary of 16RA1505 was primarily defined by visual observation of the extent of the surface artifact scatter. Disturbance from plowing was extensive, and subsurface artifacts were recovered from only 10 shovel tests at a maximum depth of 20 cm (8 in) bgs. No features or other intact subsurface deposits were noted.

The functional group distribution of the recovered artifacts indicates that the structure or structures at 16RA1505 were utilized as residences. The age of the artifacts and available historical information confirms a date from the mid-twentieth to early twenty-first centuries. The 16RA1505 assemblage may represent an amalgam of multiple, discrete residences, but the homogeneity of spatial distribution of the recovered artifacts (likely as a result of agricultural activities) did not allow any meaningful analysis of spatial or temporal artifact distribution within the site.

Investigations at 16RA1505 indicate that this resource contains low density subsurface remains and has seen considerable modern disturbance through plowing and other agricultural activities. No artifacts are likely to remain in situ, and the site seems to have little remaining integrity. Based on its limited research potential, Site 16RA1505 is recommended not eligible for listing in the NRHP. This site is unlikely to produce any significant data relative to local and regional research themes, and no further work is recommended.

## Site 16RA1506

### UTM Coordinates:

Site Datum: 15N, N3466411 E0541984 (NAD 83)

Elevation: 27 m (88-ft) AMSL

Components: Historic

Specific Components: Mid- to late-twentieth-century agricultural storage silos and concrete enclosure

Site Type: Industrial

Size: 2,250 sq m (24,219 sq ft)

Distance/direction to nearest water: Bayou Rapides, 80 m (262 ft) to the west.

**Type and extent of previous disturbance:** Silos are missing roofing material and enclosure is overgrown, but generally little disturbance

**Topography:** Alluvial plain

**Vegetation:** Fallow cotton field and grass outside enclosure, dense brush within

**Ground surface visibility:** More than 90 percent in cotton field, less than 30 percent in grass, N/A in concrete-paved interior of enclosure

**Slope Direction (Aspect):** Level

**Recommended NRHP status:** Not eligible due to little research potential; no further work recommended

## Site Description

Site 16RA1506 is a newly recorded archaeological site as a result of this survey. The site consists of the remains of a mid- to late-twentieth-century pair of concrete agricultural storage silos within a rectangular concrete enclosure measuring 45-x-50 m (148-x-164 ft), just to the east of Louisiana Highway 1202 in the southwestern corner of the project area. The wall of the enclosure is 1.5 m (5.0 ft) in height and has a series of threaded metal bolts with square nuts attached protruding from its top. Discrete portions of the wall on all four sides have collapsed or been demolished. The silos are located within the eastern half of the enclosure, one to the north and one to the south. Each is approximately 10 m (33 ft) in height, 4 m (13 ft) in diameter, and extends roughly 2–3 m (7–10 ft) bgs. A series of concrete openings for unloading doors, approximately 1-x-1 m (3-x-3 ft) in width, are spaced up the northern side of the north silo and the southern side of the south silo. The concrete silos do not contain any roofing material but are otherwise in good condition.

One structure is depicted on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map at the location of the site (Figure 6.2), indicating that the silos may have been present at least as early as that date. The site's boundary is marked by the extent of the concrete enclosure wall, which at the time of the survey was surrounded on the north, east, and south by fallow cotton fields and on the west by an open grassy area between the

concrete wall and Highway 1202. A dirt two-track road runs directly along the northern edge of the concrete wall, and the project area boundary lies in the cotton field immediately to the north of the two-track road. Surface visibility in the fallow cotton fields was excellent at the time of the survey, estimated at 91 to 100 percent. The grassy area to the west of the site had a surface visibility of less than 30 percent.

Shovel tests on transects spaced at 30 m (98 ft) intervals were excavated to the west, east, and south of the site as part of the general survey strategy in the southwest corner of the project area. However, no shovel tests could be excavated within the interior of the concrete enclosure, as the entire ground surface within the concrete wall is paved with solid concrete. This fact was not immediately apparent, as the entire interior of the enclosure is heavily vegetated with brush (Figure 6.10). No artifacts were recovered from any of the shovel tests surrounding the enclosure, and no artifacts were found on the surface within the site boundaries. No features or midden soils were encountered. As such, Site 16RA1506 is comprised solely of the aboveground physical remains of the silos and their enclosure, and while the site is generally in good condition, it holds little research potential. This site is recommended not eligible for listing in the NRHP, and no further archaeological work is necessary.

## Investigation Methods

The portion of the project area containing the site had been designated before the survey as an area with a high probability to contain cultural materials. As the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map depicted a number of structures as having once stood within the boundary of the project area, a 200 m (656 ft) buffer area was established around the location of each of the mapped structures, within which pedestrian survey and shovel testing was conducted at a 30 m (98 ft) high-probability interval. The site was detected through visual observation.



Figure 6.10. Overview of Site 16RA1506 showing heavy vegetation within enclosure, view west.

As mentioned above, no artifacts were recovered from any shovel tests near the site, and no shovel tests could be excavated within the site boundaries due to concrete paving within the enclosure (Figure 6.11). No surface artifacts were seen within the concrete wall. The boundaries of the site were defined by measurement of the extent of its rectangular concrete enclosure. No intact surface or subsurface features or midden soils were encountered during investigations at the site. A locational data point was collected at the site datum of 16RA1506.

## Depositional Context

No shovel tests could be excavated within the boundaries of Site 16RA1506. However, profiles observed in the shovel tests just outside the site boundaries were generally typical of those encountered in the southern half of the project area (Coushatta silt loam). The profile of a representative shovel test from just outside the site to the west (Transect 83,

Shovel Test 1) consists of a disrupted Ap horizon of mixed reddish brown (5YR 4/4) and brown (7.5YR 5/2) silt loam in the top 3 cm (1 in), overlying a horizon of light brown (7.5YR 6/3) silt loam from 3 to 30 cm (1 to 12 in). This was in turn underlain by a horizon consisting of reddish brown (5YR 4/4) silty clay from 30 to approximately 40 cm (12 to 16 in) bgs.

Shovel tests excavated near Site 16RA1506 did not extend below the second soil horizon, but in a typical Coushatta series solum, a B22 horizon extends to a depth of 69 cm (27 in), and is in turn underlain by a C1 horizon of reddish brown (5YR 4/4) silt loam from 69 to 97 cm (27 to 38 in), a C2 horizon of reddish brown (5YR 5/4) loamy very fine sand from 97 to 112 cm (38 to 44 in), and a C3 horizon of reddish brown (5YR 4/4) silt loam from 112 to 155 cm (44 to 61 in) bgs. The latter stratum contained a few fine strata of reddish brown (5YR 4/3) heavy silt loam.

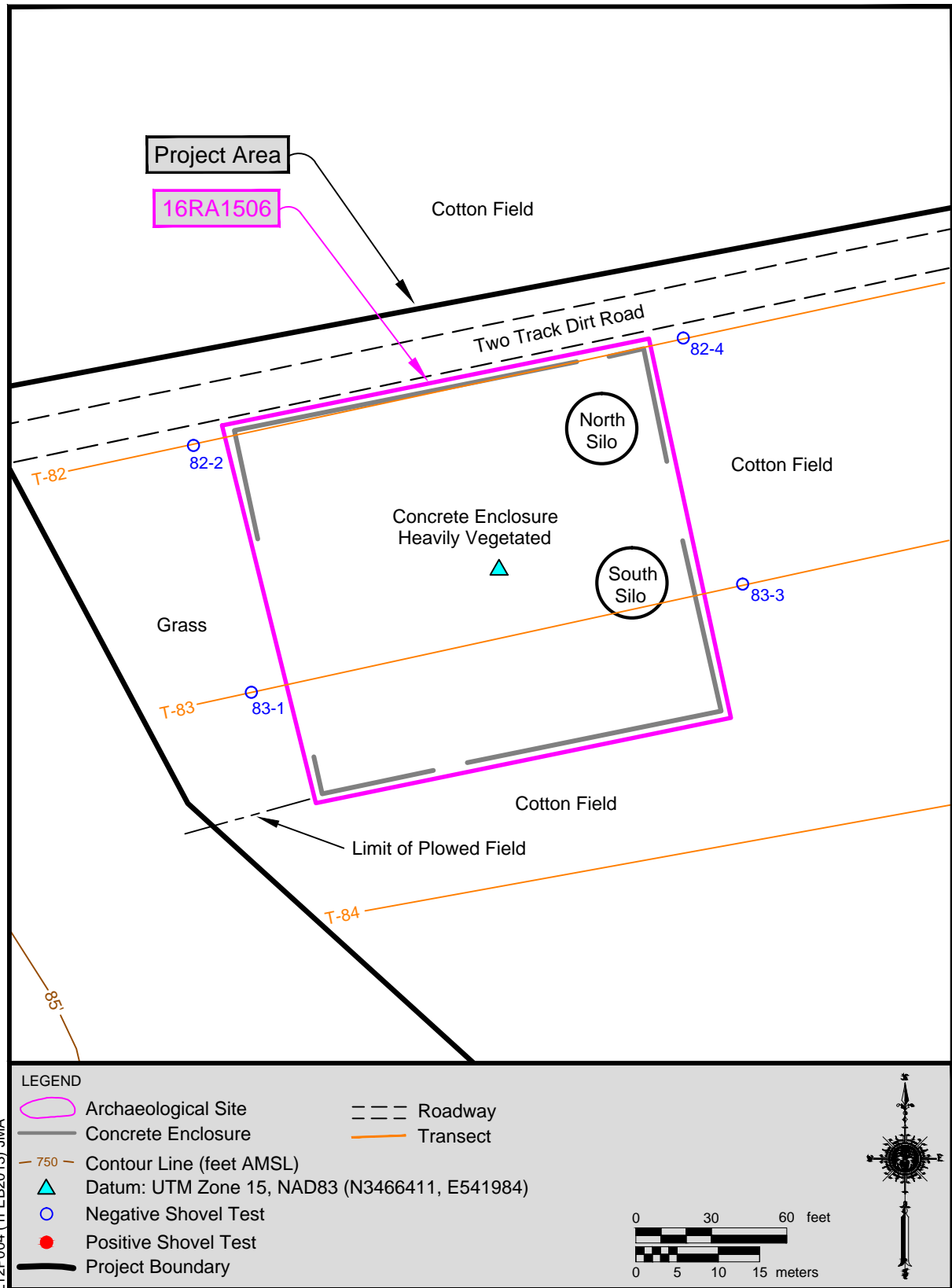


Figure 6.11. Schematic plan map of Site 16RA1506 within the project area.

The Coushatta series soils outside 16RA1506 were observed throughout the southern half of the project area. No breaks within the soil horizon could be seen in exposed soil profiles near the site. Shovel tests excavated near the site always encountered the Ap and underlying horizon, but the transition to the following horizon was occasionally not observed where a given shovel test was not excavated to sufficient depth or the transition took place at an unusual depth.

## Artifacts

No artifacts were recovered from Site 16RA1506. As discussed above, the 1941 Boyce, Louisiana, 7.5' USGS quadrangle depicts a structure in the site vicinity, indicating that the silos may be as old as the mid-twentieth century. The agricultural utilization of the site is apparent in its construction.

## Features

The profiles of all shovel tests excavated near the site boundaries were examined for subsurface cultural features and other in situ historic deposits, but no such intact deposits were found. The only site features include the aboveground remains of the silo.

## Summary and National Register Evaluation

Site 16RA1506 is a newly recorded archaeological site as a result of this survey, and consists of the remains of a mid- to late-twentieth-century pair of concrete agricultural storage silos within a concrete enclosure, just to the east of Louisiana Highway 1202 in the southwestern corner of the project area. One structure is depicted on the 1941 Boyce, Louisiana, USGS 7.5' Quadrangle Map at the location of the site, indicating that the silos may have been present at least as early as that date.

The site's boundary is marked by the extent of the concrete enclosure wall, as no artifacts were recovered from shovel tests excavated around the site or from the surface within the concrete wall. The ground surface

within the enclosure is paved with additional concrete, so no shovel tests could be excavated within the site boundaries. No features or other intact subsurface deposits were noted.

Investigations at 16RA1506 indicate that this resource contains no significant subsurface remains and consists solely of the concrete structural material associated with the silos and their enclosure wall. While generally well-preserved, the site has little research potential. Site 16RA1506 is recommended not eligible for listing in the NRHP. This site is unlikely to produce any significant data relative to local and regional research themes, and no further work is recommended.

## Isolated Find X16RAA

### UTM Coordinates:

Site Datum: 15N, N3465163 E0541984 (NAD 83)

Elevation: 26 m (86-ft) AMSL

Components: Historic

Specific Components: Twentieth century

Topography: Forested alluvial plain

Vegetation: Mixed hardwood forest

Ground surface visibility: Less than 30 percent

Slope Direction (Aspect): Level

Recommended NRHP status: Not eligible; no further work

## Description

Isolated find X16RAA consists of a single fragment of colorless glass, found at a depth of 15 cm (6 in) in a shovel test in a hardwood forested area approximately 350 m (1,148 ft) west of the perimeter fence of Alexandria International Airport. The glass fragment likely dates to the twentieth century. The excavation of eight shovel tests in a cruciform pattern centered on the positive shovel test failed to reveal any subsurface remains or to recover any additional artifacts. This resource falls short of the minimum number of artifacts that constitute a site and is unlikely to provide any information regarding use of the area. This resource is recommended not eligible for listing in the NRHP, and no further archaeological work is recommended.



## Standing Structures

Four standing structures were encountered during the fieldwork. Each of these structures is of mid- to late-twentieth-century construction and appears on the 1972 Rapides, LA 7.5' USGS Quadrangle map. All four were constructed when the England Airpark Site W-1 tract was a part of England Air Force Base and all are located adjacent to mapped or existing infrastructure features such as airstrips or communication towers. The location of each of the structures, numbered Buildings 1–4 in the order in which they were recorded, is presented below on Figure 6.12 and they are discussed individually below.

### Building 1

Building 1 was located along an existing road that traverses a portion of the survey area outside the Alexandria International Airport circumference fence in the southern half of the England Airpark Site W-1 Tract (Figure 6.13). It consisted of a concrete block structure on a poured concrete pad adjacent to two metal towers that may have served as weather towers or as communication towers. These towers were approximately 4 m (13 ft) west of the building and each had a set of three large electrical cables connecting it to the building. Additional sets of the types of connectors that hold the cables that were not in use were also observed. A much taller modern weather tower with an adjacent power station was located approximately 6 m (26 ft) north of the towers.

Building 1 exhibits a single-story, five-bay (w/w/d/d/w) form and is oriented to the east. The façade features a double-leaf entrance and a single-leaf entrance, each with two-light metal doors. There is a metal vent between the right-most door and the right-most window. The building features a flat, built-up roof with metal vents. There is a narrow, exterior concrete block chimney on the eastern elevation of the structure. All windows exhibit 12-pane metal casements reinforced with metal mesh. The southern elevation of the structure features two evenly-spaced windows. The northern elevation features two

large entrances; the right entrance features a pair of swinging metal doors, and the left entrance is missing its doors. The western (rear) elevation features the chimney, near the left side of the elevation, and two windows. Building 1 contains three rooms, the largest of which constituted the southern two-thirds of the structure, while smaller rooms formed the western and eastern halves of the northern one-third. The approximate dimensions of Building 1 are 12.4 m north–south and 7.6 m east–west. The double-leaf entrance opens outward on the eastern side of the largest room, while a secondary, single-leaf entrance opens on the east side of one of the smaller rooms. The large entrances opened along the north end of the building into both of the smaller rooms. The northeastern room had a window and a vent along the eastern wall, the larger southern room had two windows along the eastern wall and three along the western wall, and the smaller room to the northwest had no windows but contained a chimney. The northwestern room also contained some large electrical devices of unknown function. There were concrete pads outside each of the bay doors and the main entrance. An air conditioner unit was located outside of the building to the west, and a parking area with an asphalt surface was located to the east.

The northeastern room contained high-voltage breaker boxes along an interior wall, and smaller breaker boxes were located within the largest room on a wall opposite the northeastern room. No interior doors connected the northeastern room with the remainder of the structure. The northwestern room and the larger room to the south were connected by one interior door. Many of the windows of the building were painted on the outside in a brown hue and had metal grate interior covers. The building contained metal lockers, desks, metal carts, and tables that seemed to indicate that it was being used until at least the latter part of the twentieth century. The outside of the building was beginning to be overtaken somewhat by vine growth.

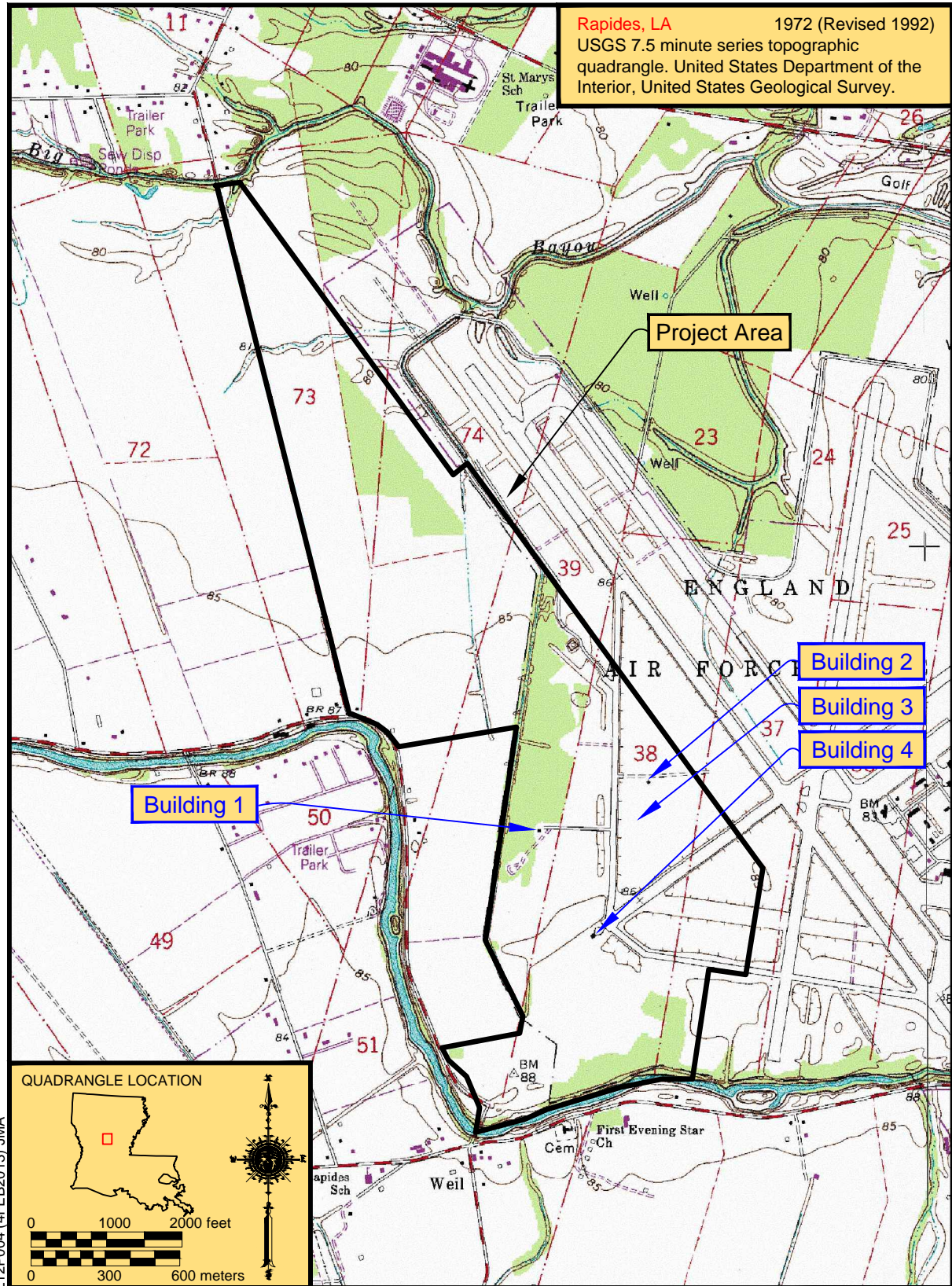


Figure 6.12. 1992 Rapides, Louisiana, 7.5' Quadrangle map showing mapped structures.



Figure 6.13. Building 1 overview, view west.

This structure was first depicted on the 1972 Rapides, Louisiana, 7.5' Quadrangle map at the end of the road extending west from an airstrip. Although the airstrip was present on the 1955 Rapides, Louisiana, 7.5' Quadrangle map, the road and structure were not depicted. This structure likely was constructed after the 1955 acquisition of the property for the development of England Air Force Base, and appears typical of mid- to late-twentieth-century construction. Research was unable to identify maps showing the airport during the 1960s, making the exact date of construction unknown.

Building 1 is an undistinguished structure that does not appear eligible for listing in the NRHP. Research has yet to identify associations between the structure and persons or events of local or national significance; in addition, the building's poor physical condition has left it unable to convey any historic associations it may have. The

structure exhibits an undistinguished architectural form that was commonly seen in accessory buildings constructed throughout the second half of the twentieth century. It does not exhibit any rare, important, or exceptional qualities that would make it eligible for listing under Criterion C. Consequently, CRA recommends that Building 1 is not eligible for NRHP listing under Criterion A, B, or C.

## Building 2

Building 2 was located in the southern half of the England Airpark Site W-1 Tract within the Alexandria International Airport circumference fence (Figure 6.14). It consisted of a concrete block structure on a poured concrete pad with a parking area. A fenced high-voltage area was observed approximately 1.2 m to the east of the structure, along its southern end.



Figure 6.14. Building 2 overview, view east.

Building 2 exhibits a single-story, two-bay (d/w) rectangular form and is oriented to the west. The building features a flat, built-up roof. The façade features a single-leaf metal door and a window that has been obscured with metal panels. The door and window are separated by a metal vent; there is another metal vent to the right of the window. The northern elevation features two small, square, unglazed windows. The eastern elevation features a single-leaf door. The southern elevation features no doors or windows, but did feature a metal vent near the left side of the elevation. The building contains three rooms, and features total dimensions of approximately 18.4 m north–south and 7.2 m east–west. The largest room constituted the northern two-thirds of the space in the building, while a slightly smaller room constituted the southern one-third, and the smallest was a closet-like room in the northeast corner of the southernmost room.

Doors opened to the east and west of the largest room, just north of the wall separating this room from the others. A door also opened to the smallest room to the south of the largest room, near the eastern exterior wall, and only one door from this room could be used to access the southernmost room. The southernmost room contained one window between two large vents along the western wall, a large vent on the southern wall, and one along the eastern wall, while the larger room to the north only contained two very small square windows to the north.

Building 2 is thought to have served as a warehouse or storage facility based on its overall layout and appearance. It was first depicted on the 1972 Rapides, Louisiana, 7.5' Quadrangle map along a road that extends from an area of airstrip within England Air Force Base. The airstrip was shown on the 1955 Rapides, Louisiana 7.5' Quadrangle map, but the road and structure were not

depicted. This structure likely was constructed after the 1955 acquisition of the property for the development of England Air Force Base, and appears typical of mid- to late-twentieth-century construction. Research was unable to identify maps showing the airport during the 1960s, making the exact date of this building's construction unknown.

Building 2 is an undistinguished structure that does not appear eligible for listing in the NRHP. Research has yet to identify associations between the structure and persons or events of local or national significance; in addition, the building's poor physical condition has left it unable to convey any historic associations it may have. The structure exhibits an undistinguished architectural form that was commonly seen in accessory buildings constructed throughout the second half of the twentieth century. It does not exhibit any rare, important, or exceptional qualities that would make it eligible for listing under Criterion C. Consequently, CRA recommends that Building 2 is not eligible for NRHP listing under Criterion A, B, or C.

## Building 3

Building 3 was located in the southern half of the England Airpark Site W-1 Tract within the Alexandria International Airport circumference fence (Figure 6.15). It consisted of a small concrete block structure on a poured concrete pad surrounded by a pea gravel parking area. A metal high-voltage box was observed approximately 4 m to the northwest of the building, and a concrete pier with heavy bolts was found 2 m north of the structure along its western end.

Building 3 exhibits a single-story, single-bay rectangular form. The façade is characterized by an entrance featuring a pair of metal doors. There is a metal vent to the left of the doors. The northern elevation features no doors or windows. The eastern elevation features a metal vent. The southern elevation features a metal vent or window. The building consists of a single room, and measures approximately 7.2 m east–west and 5.4 m north–south.



Figure 6.15. Building 3 overview, view north.

It contained a rectangular concrete platform oriented with the long axis of the building in the center of the room, and the room had metal vents along the eastern and western ends. A series of electrical boxes were observed along its northern wall. Extant signage within the building indicated its function. A framed sign reading “CAUTION; HAZARDOUS NOISE AREA; MAY CAUSE HEARING LOSS; HEARING PROTECTION REQUIRED; CAUTION; Generator may automatically start” indicated that the small structure once housed a large generator.

Building 3 is not depicted on any of the historic maps that were examined for this project, and therefore likely post-dates 1972. This structure was likely a later addition to support Air Force operations after the development of England Air Force Base. Given its late construction date, this structure does not meet age criteria for NRHP eligibility, and is therefore not eligible for listing in the NRHP.

## Building 4

Building 4 was located along the Alexandria International Airport circumference fence in the southern half of the England Airpark Site W-1 Tract (Figure 6.16). Like the other standing structures, it consisted of a large concrete block structure on a poured concrete pad. At the time it was recorded, Building 4 was being used to store large hay bales and farming machinery, as well as maintenance vehicles, and there were piles of concrete culverts to the south. The building is partially overgrown and obscured by vegetation.

Building 4 exhibits a single-story, single bay structure with a flat, built-up roof, oriented to the northeast. Building 4 is the largest of the standing structures and is rectangular in floor plan. It features an open façade and no other windows or doors on any of the remaining elevations. The shape of the structure suggests it was likely constructed as a storage area to house airstrip maintenance vehicles, equipment and machinery. Building 4 is located along the end of an old airstrip, which can be seen clearly on the 1972 Rapides, Louisiana, 7.5' Quadrangle map.



Figure 6.16. Building 4 overview, view east.

This is the earliest map examined during the records review that this structure was depicted on. While the airstrip was shown on the 1955 Rapides, Louisiana, 7.5' Quadrangle map, the structure was not depicted. This structure likely was constructed after the 1955 acquisition of the property for the development of England Air Force Base, and appears typical of mid- to late-twentieth-century construction. Research was unable to identify maps showing the airport during the 1960s, making the exact date of construction for Building 4 unclear.

Building 4 is an undistinguished structure that does not appear eligible for listing in the NRHP. Research has yet to identify associations between the structure and persons or events of local or national significance. The structure exhibits an undistinguished architectural form that was commonly seen in accessory buildings constructed throughout the second half of the twentieth century. It does not exhibit any rare, important, or exceptional qualities that would make it eligible for listing under Criterion C. Consequently, CRA recommends that Building 4 is not eligible for NRHP listing under Criterion A, B, or C.

## Non-Site Localities

In addition to the archaeological sites and standing structures recorded above, a number of non-site localities worthy of mention were recorded in the project area. These consist of various remains that are thought to be associated with England AFB but do not represent standing structures and do not qualify as archaeological sites. Most of these represent large-scale industrial waste disposal on the former air force installation.

Two major dumping sites and several discarded items were encountered during the field investigations. Dump 1 consisted of a large pile of concrete and other debris along a drainage canal to the east of the AEX perimeter fence. This dump was on the western boundary of what was once England AFB. The concrete included thick slab with rough surfaces, some of which contained

concrete reinforcement, that were in large piles suggesting that it was transported to this location. This dumping site is referenced on a map in the Final Environmental Impact Statement (FEIS) for England AFB as Installation Restoration Program (IRP) Site 30, and is described as a construction rubble disposal site (United States Air Force 1992).

Dump 2 also contained a large pile of concrete along with other debris and was located outside of the AEX perimeter fence, to the south of Dump 1. The concrete included thick slabs and rubble and was generally similar to Dump 1. This dumping site is also referenced on a map in the FEIS for England AFB as IRP Site 32, and is described as a construction rubble disposal site (United States Air Force 1992).

In addition to the major dumping sites described above, a discarded fighter jet fuselage, a car body, a concentration of oil drums, and strips of Marsden matting were encountered in the former England AFB area to the west of the AEX perimeter fence. The FEIS for England AFB references four additional IRP sites within the portion of the Aviation Support area that overlaps the present project area. IRP Sites 23 and 24 are described as fire training drum storage areas, and these roughly correspond to the location of the oil drums that were encountered. IRP Sites 5 and 13 are described as fire protection training areas (United States Air Force 1992).





## Chapter 7. Conclusions and Recommendations

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Cultural Resource Analysts, Inc., personnel completed a records review and cultural resource survey for the proposed industrial development of England Airpark Site W-1 in Rapides Parish, Louisiana. The records review, which was conducted using data available from the Louisiana SHPO, indicated that a small tract in the southern portion of the project area had been previously surveyed, and two previously recorded archaeological sites existed in the project area. Within a 1.6 km (1.0 mi) radius of the project area, SHPO records indicated that three additional previous archaeological surveys have been conducted, and two additional archaeological sites have been previously recorded.

Fieldwork conducted for this project consisted of a combination of pedestrian survey and shovel testing. During the fieldwork, Sites 16RA692 and 16RA703 were revisited and determined to have not been significantly disturbed since their discovery and to retain their integrity. The survey methods beyond the boundaries of these sites led to the expansion of the western boundary of Site 16RA703, and the discovery of three newly recorded historic sites, four standing structures, and one isolated find.

The two previously recorded sites, 16RA692 and 16RA703, are recommended for avoidance if possible or NRHP eligibility testing and appropriate mitigation of impacts as needed if they are not avoidable during future development of the England Airpark Site W-1 property. This recommendation is in part based on the previous work conducted at these sites by Wessel et al. (1993), and on data gathered during our field investigations. Both sites retain a high level of contextual integrity and are have a fair likelihood of producing previously unattained archaeological data. The three newly recorded sites (16RA1504–16RA1506), the isolated find, the four standing structures, and the other non-site localities encountered during this project are all recommended as not eligible for listing in

the NRHP due to their limited research potential. Cultural resource clearance is recommended for all areas of the England Airpark Site W-1 tract outside the boundaries of the previously recorded archaeological sites. Note that a principal investigator or field archaeologist cannot grant clearance to a project. Although the decision to grant or withhold clearance is based, at least in part, on the recommendations made by the field investigator, clearance may be obtained only through an administrative decision made by the SHPO.

If any previously unrecorded archaeological materials are encountered during activities in the project area, the SHPO should be notified immediately. If human skeletal material is discovered, the construction activities should cease, SHPO and local law enforcement should be contacted immediately, and SHPO Guidelines should be followed.



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## APPENDIX A. ARTIFACT INVENTORY



Table A-1. Artifact Inventory.

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
16RA1504	GSC TR 38 #15	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Unidentified glass container/amber glass - Blob	No	No	No	37.29	1	In.	Lip with neck	Indeterminate	Other - Indet	0	0		Bottle Fragment Broken/Chipped In Places-Difficult To Determine Characteristics-With Blob Finish		
16RA1504	GSC TR 39 #13	- Surface	1	D	Ceramics	Whiteware	1		No	No	No	0.88	0.7	In.	Body	-		0	0		Fragment With Rim And Base. Colors Gray On Rim And Red On Base		
16RA1504	GSC TR 55 #2	- Surface	1	D	Ceramics	Stoneware	1	Unglazed exterior, Unglazed interior, Indeterminate	No	No	No	22.17	1.9	In.	Rim, body, base	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 55 #2	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	5.49	1.2	In.	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Very Light Purple Glass Shard-Medium Thickness, Flat		
16RA1504	GSC TR 55 #2	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Aqua glass	No	No	No	6.26	1.26	Mm	Body	Indeterminate	Other - Indet	0	0		Light Green Shard, Slightly Curved, Medium To Thick		
16RA1504	GSC TR 55 #2	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.03	1.1	In.	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Clear Shard, Slight Curve, Relatively Thin		
16RA1504	GSC TR55 #3	- Surface	5	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amber glass	No	No	No	4.13	Mm	Mm	-	Indeterminate bottle/jar	Bottle - Jar	0	0		2 Small Brown Glass Shards, Thickness: Thin To Medium		
16RA1504	GSC TR55 #3	- Surface	6	D	Container Glass	Undiagnostic container fragment	2	Fragment, Aqua glass	No	No	No	11.55	Mm	Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		2 Aqua Glass Shards, Thickness: Thin To Medium.		
16RA1504	GSC TR55 #3	- Surface	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	4.07	Mm	Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Medium Thickness		
16RA1504	GSC TR55 #3	- Surface	8	D	Container Glass	Undiagnostic container fragment	2	Fragment, Olive green glass	No	No	No	9.62	Mm	Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		1 Dark Olive, 1 Medium Olive, Medium Thickness		
16RA1504	GSC TR55 #3	- Surface	9	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.23	Mm	Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Very Light Amethyst, Thickness: Thin		
16RA1504	GSC TR55 #3	- Surface	10	D	Container Glass	Undiagnostic container fragment	1	Fragment, Green glass	No	No	No	5.73	Mm	Mm	-	Indeterminate bottle/jar	Bottle - Jar	0	0		Medium Green, Thickness: Medium		
16RA1504	GSC TR55 #3	- Surface	14	D	Ceramics	Pearlware	1	Undecorated	No	No	No	3.41	Mm	Mm	Rim	Indeterminate	Other - Indet	0	0		Thin, Flat		
16RA1504	GSC TR55 #3	- Surface	11	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	12.06	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Brown Slip On Interior And Exterior, Paste Is Tan/Peach		
16RA1504	GSC TR55 #3	- Surface	12	D	Ceramics	Porcelain: Canton	1	Undecorated	No	No	No	2.15	Mm	Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR55 #3	- Surface	13	D	Ceramics	Whiteware	1	Plain	No	No	No	6.44	Mm	Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR55 #3	- Surface	15	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	2.49	Mm	Mm	Rim	Cup	Place Setting	0	0				
16RA1504	GSC TR55 #3	- Surface	16	D	Ceramics	Whiteware	1	Transfer printed Blue-green / aqua / turquoise	No	No	No	2.91	Mm	Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR55 #3	- Surface	3	M	General Hardware	Washer	1	Iron / steel	No	No	No	17.66	1.25	In.	-	-		0	0		Ferrous Metal Washer, Nearly Complete-Broken Or Possible Small Fragment Missing		
16RA1504	GSC TR55 #3	- Surface	17	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	2.71	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Peachy Color Paste		
16RA1504	GSC TR55 #3	- Surface	18	D	Ceramics	Whiteware	2	Plain	No	No	No	9.4	Mm	Mm	Rim	Indeterminate	Other - Indet	0	0		Medium Thick, Buff Paste, Flat-Possible Plates Or Platters		

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord	
16RA1504	GSC TR55 #3	Surface	19	D	Ceramics	Stoneware	1	Bristol slipped exterior. Slipped interior	No	No	No	6.56		Mm	Body with base	Indeterminate	Other - Indet	0	0					
16RA1504	GSC TR55 #3	Surface	2	A	Nails	Cut Nail: unspecified	1	Common	No	No	No	7.93		Mm	-	-		0	0		Head Fragment			
16RA1504	GSC TR55 #3	Surface	1	A	Fittings and Hardware	Door hardware	2	Other Ceramic: earthenware	No	No	No	174.5		In.	-	-		0	0		1 Round Door Knob Complete - With Metal Attachment & 1 Fragment. Polished Stoneware & Metal Materials			
16RA1504	GSC TR55 #3	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	12.63	2	In.	-	Indeterminate bottle/jar	Bottle - Jar	0	0		Brown Glass Bottle, Medium To Thick			
16RA1504	STP TR55 #3	0-13 cm bgs	1	D	Ceramics	Ironstone	1	Plain	No	No	No	1.25		Mm	Body	Indeterminate	Other - Indet	0	0		Very Thin			
16RA1504	GSC TR 55 #4	Surface	1	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amethyst glass	No	No	No	7.98		Mm	-	Indeterminate bottle/jar	Bottle - Jar	0	0		2 Very Light Amethyst Glass. Thickness: Very Thin			
16RA1504	GSC TR 55 #4	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	3.76		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Light Olive, Thickness: Thin To Medium			
16RA1504	GSC TR 55 #4	Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	2.34		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Shard - Curved Indentation Running Along Surface Of Shard			
16RA1504	GSC TR 55 #4	Surface	10	B	Faunal Remains	Bone /tooth/ claw	1		No	No	No	10.89		Mm	-	-		0	0		Long Bone			
16RA1504	GSC TR 55 #4	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	6.78		Mm	Body	Liquor/Beer/Wine	Bottle - Jar	1797	0		Embossed Blog Seal - Pernod Co.			
16RA1504	GSC TR 55 #4	Surface	3	D	Glass Tableware	Undiagnostic fragment	2	Amethyst glass Moulded design/pattern, Depression glass-	No	No	No	7.96		Mm	Body	-	-	0	0					
16RA1504	GSC TR 55 #4	Surface	8	D	Ceramics	Whiteware	2	Plain	No	No	No	6.64		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1504	GSC TR 55 #4	Surface	7	D	Ceramics	Whiteware	1	Plain	No	No	No	3.2		Mm	Base	Plate	Place Setting	0	0					
16RA1504	GSC TR 55 #4	Surface	9	D	Cookware	Kettle / Pot	1	Cast iron	No	No	No	12.23		Mm	Rim	-	-	0	0					
16RA1504	GSC TR 55 #4	Surface	6	D	Ceramics	Ironstone	1	Plain	No	No	No	1.68		Mm	Body	Cup	Place Setting	0	0					
16RA1504	GSC TR 55 #5	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.48		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		1 Light Amethyst, Thickness: Thin			
16RA1504	GSC TR 55 #5	Surface	2	D	Glass Tableware	Undiagnostic fragment	1	Fragment, Amethyst glass Undecorated/ Plain	No	No	No	9.53		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thick, Curved/Rounded Fragment			
16RA1504	GSC TR 55 #5	Surface	3	D	Ceramics	Whiteware	2	Plain	No	No	No	8.11		Mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Peach Colored Paste			
16RA1504	GSC TR 55 #6	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	0.8		Mm	Body	Indeterminate	Other - Indet	0	0		Small Light Cobalt Shard, Thickness: Thin			
16RA1504	GSC TR 55 #6	Surface	1	D	Container Glass	Automatic Bottle Machine	1	Indeterminate, Amber glass Indeterminate, External thread	No	No	No	12.21		Mm	Lip, neck, body	Liquor/Beer/Wine	Bottle - Jar	0	0					
16RA1504	GSC TR 55 #9	Surface	1	D	Container Glass	Automatic Bottle Machine	1	Indeterminate, Amber glass Indeterminate, Indeterminate lip	No	No	No	11.35		Mm	Base	Miscellaneous bottle	Bottle - Jar	1940	0		Stippling could be diagnostic Toulouse 1971	Stippling Or Knurling Present On Portion Of One Surface.		



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16RA1504	GSC TR 55 #9	Surface	2	D	Container Glass	Automatic Bottle Machine	1	Indeterminate, Amber glass Indeterminate, Indeterminate lip	No	No	No	43.88		Mm	Body	Miscellaneous bottle	Bottle - Jar	1940	0	Catalog Item #1 appears to be from the same vessel. Stippling on that shard could be diagnostic (Toulouse 1971).					
16RA1504	GSC TR 56 #2	Surface	4	D	Ceramics	Stoneware	1	Bristol slipped exterior, Salt glazed interior	No	No	No	3.37		Mm	Body	Indeterminate	Other - Indet	0	0		Brown Interior Glaze, Bristol? Exterior Glaze				
16RA1504	GSC TR 56 #2	Surface	5	D	Ceramics	Whiteware	1	Handpainted monochrome, Blue	No	No	No	1.91		Mm	Body with base	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #2	Surface	6	M	General Hardware	Bracket / Angle	1		No	No	No	190		Mm	-	-		0	0		Ferrous Metal				
16RA1504	GSC TR 56 #2	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	0.64		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #2	Surface	2	D	Container Glass	Blown in Mold	1	Fragment, Cobalt glass	No	No	No	1.67		Mm	Rim	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #2	Surface	3	D	Ceramics	Stoneware	1	Salt glazed exterior, Unglazed interior	No	No	No	21.69		Mm	Body	Indeterminate	Other - Indet	0	0			Gray Exterior Glaze			
16RA1504	GSC TR 56 #2	Surface	5	D	Ceramics	Pearlware	1	Transfer printed, Light blue	No	No	No	1.89		Mm	Base	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #2	Surface	4	D	Ceramics	Stoneware	1	Salt & Albany exterior, Slipped interior	No	No	No	3.36		Mm	Body	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #2	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	1.67		Mm	Rim	Indeterminate bottle/jar	Bottle - Jar	0	0						
16RA1504	GSC TR 56 #2	Surface	6	U	Metal	Iron / Steel	1	Unspecified iron / steel, Flat: thick	No	No	No	213		Mm	-	-		0	0		Tapered End Like Bastard File, Bent Twice Squared, Thick				
16RA1504	GSC TR 56 #2	Surface	3	D	Ceramics	Stoneware	1	Bristol slipped exterior, Unglazed interior	No	No	No	21.68		Mm	Body	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #3	Surface	5	D	Ceramics	Stoneware	1	Unglazed exterior, Slipped interior	No	No	No	36.99		Mm	Body with base	Indeterminate	Other - Indet	0	0			Thick, Course Fragment. Dark Brown Interior Slip, Cream Color Glaze On Exterior			
16RA1504	GSC TR 56 #3	Surface	6	D	Ceramics	Stoneware	1	Salt glazed exterior, unglazed interior	No	No	No	44.31		Mm	Body	Indeterminate	Other - Indet	0	0			Course Gray Paste With Tan, Unglazed Interior, Salt Glazed Exterior			
16RA1504	GSC TR 56 #3	Surface	7	D	Ceramics	Porcelain: soft paste (bone China)	1	Undecorated	No	No	No	2.17		In.	Base	Indeterminate	Other - Indet	0	0			Scalloped Edge, Other Molded Decoration On Body			
16RA1504	GSC TR 56 #3	Surface	8	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	4.26		Mm	Rim with body	Indeterminate	Other - Indet	0	0						
16RA1504	GSC TR 56 #3	Surface	9	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	6.43	0.7	In.	Lip	Indeterminate	Other - Indet	0	0			Incomplete Lip-Cannot Determine Attributes. Imperfections In Shape Indicate Free Blown Or Bim			
16RA1504	GSC TR 56 #3	Surface	10	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	20.8		Mm	Lip with neck	Liquor/Beer/Wine		0	0						
16RA1504	GSC TR 56 #3	Surface	11	C	Buttons	Sew-through	1	Four holesone-piecedomed Prosser: plain	No	No	No	1.76	17.77	Mm	-	-		0	0		28 Line, Complete Button				
16RA1504	GSC TR 56 #3	Surface	12	A	Construction Material	Slate	1	Roofing / siding	No	No	No	3.78		Mm	-	-		0	0		Black Slate Fragment, Shape And Utility Indeterminate				

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16RA1504	GSC TR 56 #3	Surface	13	M	Farming and Gardening	Farm Implement Part	1		No	No	No		3.5	In.	-	-		0	0		Complete Ferrrous Metal Face, Two Screw Holes On Each Side. May Be Hitch For Connecting Farm Equip		
16RA1504	GSC TR 56 #3	Surface	14	M	General Hardware	Indeterminate	1		No	No	No	53.34	2.75	In.	-	-		0	0		Thin, Flat Rectangular Ferrrous Metal Piece, Bent At One End-No Whole Or Other Diagnostic Attributes		
16RA1504	GSC TR 56 #3	Surface	1	D	Container Glass	Undiagnostic container fragment	6	Fragment, Aqua glass	No	No	No	38.73		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 56 #3	Surface	2	D	Container Glass	Undiagnostic container fragment	5	Fragment, Amethyst glass	No	No	No	17.42		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 56 #3	Surface	3	D	Container Glass	Undiagnostic container fragment	3	Fragment, Olive green glass	No	No	No	19.73		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 56 #3	Surface	4	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amber glass	No	No	No	33.47		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	STP TR 56 #3	10-22 cm bgs	2	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	3.13		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	STP TR 56 #3	10-22 cm bgs	1	A	Nails	Nails	2		No	No	No	4.52		Mm	-	-		0	0				
16RA1504	STP TR 56 #3	10-22 cm bgs	1	A	Nails	Cut Nail: unspecified	2	Common	No	No	No	4.53		Mm	-	-		0	0				
16RA1504	STP TR 56 #3	10-22 cm bgs	2	D	Ceramics	Stoneware	1	Salt glazed exterior, Salt glazed interior	No	No	No	3.12		Mm	Body	-		0	0				
16RA1504	STP TR 56 # 4	8-14 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	6.39		Mm	Handle	Cup	Place Setting	0	0				
16RA1504	GSC TR 57 #4	Surface	1	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	2.58		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	2.84		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	3	D	Ceramics	Stoneware	1	Albany slipped exterior, Albany slipped interior	No	No	No	5.66		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	4	D	Ceramics	Stoneware	1	Salt glazed exterior, Unglazed interior	No	No	No	6.16		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	5	D	Ceramics	Ironstone	1	Plain	No	No	No	1.44		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	6	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	3.22		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	7	D	Ceramics	Whiteware	1	Plain	No	No	No	3.1		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1504	GSC TR 57 #4	Surface	8	D	Ceramics	Whiteware	1	Plain	No	No	No	5.15		Mm	Base	Plate	Other - Indet Place Setting	0	0				
16RA1504	STP TR 57 #4	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	1.91		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0				

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16RA1504	STP TR 57 #4	0-10 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Other color	No	No	No	0.32	Mm	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Translucent White Glass. Thickness: Thin		
16RA1504	GSC TR 57 #5	Surface	1	F	Lighting	Lamp Base	1	Ceramic: earthenware	No	No	No	60.39	Mm	Mm	-	-		0	0		White ware With Blue-Green Transfer Print Along Edge Of Rim/Base Fragment Flat On Bottom Slight Curve On Top Surface. Likely Close To Rim As Indicated By Indentation		
16RA1504	GSC TR 57 #5	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	6.26	Mm	Mm	Base	Indeterminate	Other - Indet	0	0		Flat On Bottom With Curve On Top Surface. Flat On Bottom. Possible Plate?		
16RA1504	GSC TR 57 #5	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	13.1	Mm	Mm	Rim, body, base	Plate	Place Setting	0	0		Only Small Section Of Print, Possible Animal Depiction (Maybe A Horse?)		
16RA1504	GSC TR 57 #5	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	5.89	Mm	Mm	Rim	-		0	0		Brown Slip		
16RA1504	GSC TR 57 #5	Surface	5	D	Ceramics	Pearlware	1	Transfer printed Green	No	No	No	6.74	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Dark Gray Paste, With Gray Salt Glaze On Exterior		
16RA1504	GSC TR 57 #5	Surface	6	D	Ceramics	Stoneware	1	Slipped exterior, slipped interior	No	No	No	10.63	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Yellowish/Buf Slipped Exterior, Brown Slip Interior		
16RA1504	GSC TR 57 #5	Surface	7	D	Ceramics	Stoneware	1	Salt glazed exterior, unglazed interior	No	No	No	7.94	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Indentation Running Along Edge		
16RA1504	GSC TR 57 #5	Surface	8	D	Ceramics	Stoneware	1	Slipped exterior, slipped interior	No	No	No	4.75	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		1 Fragment Has Curve And 2 Indented Lines Running Parrallel To One Another Down Length Of Fragment		
16RA1504	GSC TR 57 #5	Surface	9	D	Container Glass	Other glass container	1	Fragment, Opaque white glass	No	No	No	2.14	Mm	Mm	Rim	Indeterminate	Other - Indet	0	0		Thickness: Thin		
16RA1504	GSC TR 57 #5	Surface	10	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	7.32	Mm	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Row Of Incised Lines Decoration		
16RA1504	GSC TR 57 #5	Surface	11	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	2.49	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		Amber Bottle Base, Embossed Lettering On Bottom: I G Co L....The Ihmsen Glass Co., Lid		
16RA1504	GSC TR 57 #5	Surface	12	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	3.09	Mm	Mm	Body	Indeterminate	Other - Indet	0	0		No Seam Visible. Bubbles Indicate May Be Free Blown But Unable To Determine From Frag. Tooled Finish		
16RA1504	GSC TR 57 #5	Surface	13	D	Container Glass	Undiagnostic container fragment	3	Fragment, Amber glass	No	No	No	14.29	Mm	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Unidentified Ferrous Metal. Nearly Complete Circle-Possible Missing Piece. Thick		
16RA1504	GSC TR 57 #5	Surface	14	D	Container Glass	Blown in Mold	1	Post bottom mold Embossed Indeterminate Indeterminate lip	No	No	No	35.2	Mm	Mm	Base	Indeterminate bottle/jar	Bottle - Jar	1878	1896		Unidentified Flat, Thin Rectangular Ferrous Metal Fragment		
16RA1504	GSC TR 57 #5	Surface	15	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	22.55	In.	In.	Lip with neck	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1504	GSC TR 57 #5	Surface	16	M	General Hardware	Indeterminate	1		No	No	No	194.09	In.	In.	-	-		0	0				
16RA1504	GSC TR 57 #5	Surface	17	M	General Hardware	Indeterminate	1		No	No	No	25.7	Mm	Mm	-	-		0	0				

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16RA1504	STP TR 57# 5	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	5.73		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Glass Fragment Decorated With Molded Pattern And Incised Lines			
16RA1504	GSC TR 57 #6	Surface	1	D	Ceramics	Stoneware	1	Albany slipped exterior, Albany slipped interior	No	No	No	8.26		Mm	Body	Indeterminate	Other - Indet	0	0		Interior But Remains In A Few Spots			
16RA1504	GSC TR 58 #3	Surface	1	M	General Hardware Construction Material	Other	1	Fragment.	No	No	No	53.23	2	In.	-	-	-	0	0		Complete Cog, Ferrous Metal			
16RA1504	GSC TR 58 #3	Surface	2	A	Mortar	Mortar	1	Fragment.	No	No	No	28.62		Mm	-	-	-	0	0					
16RA1504	GSC TR 58 #3	Surface	3	D	Ceramics	Stoneware	1	Bristol slipped exterior, Slipped interior	No	No	No	12.42		Mm	Body	Indeterminate	Other - Indet	0	0		Black Glaze On Interior			
16RA1504	GSC TR 58 #3	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	3.09		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	STP TR 69 #1	Surface 15-25 cm bgs	1	A	Nails	Cut Nail: unspecified	1	Common	No	No	No	5.5		Mm	-	-	-	0	0		Head Fragment			
16RA1505	GSC TR 69 #7	Surface	6	D	Ceramics	Stoneware	1	Chromatic glaze exterior, Chromatic glaze interior	No	No	No	1.9		Mm	Body	Indeterminate	Other - Indet	0	0		Brown Slip			
16RA1505	GSC TR 69 #7	Surface	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	2.1		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0					
16RA1505	GSC TR 69 #7	Surface	9	D	Ceramics	Refined Earthenware	1	Eroded paste	No	No	No	10.3		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 69 #7	Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	4.1		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 69 #7	Surface	1	D	Ceramics	Yellowware	1	Plain	No	No	No	10.2		Mm	Rim	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 69 #7	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	1.7		Mm	Rim	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 69 #7	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	5.4		Mm	Base	Plate	Place Setting	0	0					
16RA1505	GSC TR 69 #7	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	2.8		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 70 #8	Surface	1	D	Ceramics	Porcelain: soft paste (Bone China)	1	Undecorated	No	No	No	2.6		Mm	Base	Saucer	Place Setting	0	0					
16RA1505	GSC TR 70 #8	Surface	4	U	Plastic	Celluloid	1	Item / part	No	No	No	0.5		Mm	-	-	-	0	0					
16RA1505	GSC TR 70 #8	Surface	2	U	Glass	Amorphous	1	Glass	No	No	No	5.2		Mm	-	-	-	0	0		Amethyst Glass Chunk			
16RA1505	GSC TR 70 #8	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	5		Mm	Base	Plate	Place Setting	0	0					
16RA1505	GSC TR 72 #1	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	2.6		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 72 #1	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	16.8		Mm	Base	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 72 #1	Surface	1	D	Ceramics	Stoneware	1	Albany & Bristol exterior, Bristol slipped interior	No	No	No	7.2		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 72 #1	Surface	1	D	Ceramics	Whiteware	1	Transfer printed black	No	No	No	1.1		Mm	Body	Indeterminate	Other - Indet	0	0					
16RA1505	STP TR 72 #2	-20 cm bgs	1	D	Glass Tableware	Glass Tableware	2	Fragment, Clear unleaded glass Undecorated / Plain	No	No	No	1.1		Mm	Body	-	-	-	0	0				
16RA1505	GSC TR 72 #8	Surface	1	U	Ceramic	Other ceramic	1	Unspecified	No	No	No	24.4		Mm	-	-	-	0	0		Coarse Earthenware, Glazed Int & Ext			
16RA1505	GSC TR 72 #8	Surface	2	D	Ceramics	Ironstone	1	Plain	No	No	No	3.4		Mm	Base	Indeterminate	Other - Indet	0	0					
16RA1505	GSC TR 72 #8	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	1.5		Mm	Body	Indeterminate	Other - Indet	0	0					

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16RA1505	GSC TR 73 #2.3	Surface	5	U	Glass	Flat	1	Glass	No	No	No	4.04		Mm	-	-		0	0		Flat Amber Glass, One Face Is Opaque.		
16RA1505	GSC TR 73 #2.3	Surface	4	D	Ceramics	Whiteware	1	Chromatic glaze (polychrome) Indeterminate polychrome Bristol slipped exterior, Slipped interior	No	No	No	0.95		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #2.3	Surface	3	D	Ceramics	Stoneware	1	Bristol slipped exterior, Slipped interior	No	No	No	6.16		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #2.3	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	4.76		Mm	Rim	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #2.3	Surface	1	D	Ceramics	Whiteware	1	Plain	No	No	No	6.55		Mm	Base	Indeterminate	Other - Indet	0	0				
16RA1505	STP TR 73 # 2	-3 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	6.8		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	STP TR 73 # 4	-5 cm bgs	1	D	Ceramics	Yellowware	1	Plain	No	No	No	18.7		Mm	Rim	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #9	Surface	3	D	Ceramics	Porcelain: soft paste (Bone China)	1	Molded / Embossed border	No	No	No	1.7		Mm	Base	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #9	Surface	2	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	25.6		Mm	-	-		0	0		Frag.		
16RA1505	GSC TR 73 #9	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, "Black" glass	No	No	No	30.8		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 73 #10	Surface	2	D	Ceramics	Whiteware	1	Undecorated	No	No	No	5.72		Mm	Footring	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 73 #10	Surface	1	D	Ceramics	Ironstone	1	Undecorated	No	No	No	31.66		Mm	Rim	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 73 #11	Surface	1	D	Ceramics	Ironstone	2	Undecorated	No	No	No	8.27		Mm	Body	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 73 #11	Surface	3	A	Construction Material	Brick (measure in inches)	2	Machine made brick: vitrified	No	No	No	3.37		Mm	-	-		1876	0				
16RA1505	GSC TR 73 #11	Surface	2	D	Ceramics	Ironstone	1	Undecorated	No	No	No	7.23		Mm	Rim	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 1	Surface	5	D	Ceramics	Whiteware	1	Slip decorated	No	No	No	3.35		Mm	Body	Indeterminate	Other - Indet	1830	1900		Whiteware Body Sherd With Light Green Slip.		
16RA1505	GSC TR 74 # 1	Surface	9	D	Ceramics	Ironstone	1	Undecorated	No	No	No	13.21		Mm	Footring	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 1	Surface	10	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	1.32		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 1	Surface	1	D	Ceramics	Stoneware	3	Bristol slipped exterior, Other interior	No	No	No	21.9		Mm	Body	Indeterminate	Other - Indet	1880	1925		Three Body Sherds With Clear-Glazed Interiors.		
16RA1505	GSC TR 74 # 1	Surface	2	D	Ceramics	Stoneware	2	Other exterior, Other interior	No	No	No	16.57		Mm	Body	Indeterminate	Other - Indet	1780	1925		Two Body Sherds With Clear Glazes On Both Interior And Exterior.		
16RA1505	GSC TR 74 # 1	Surface	11	D	Container Glass	Undiagnostic container fragment	1	Fragment, Green glass	No	No	No	5.41		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 1	Surface	4	D	Ceramics	Whiteware	1	Slip decorated	No	No	No	2.05		Mm	Body	Indeterminate	Other - Indet	1830	1900		Body Sherd With Pale Blue Slip Decoration Over Entire Fragment; Possible Faceted Embossing		
16RA1505	GSC TR 74 # 1	Surface	8	D	Ceramics	Ironstone	1	Undecorated	No	No	No	6.59		Mm	Rim	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 1	Surface	6	D	Ceramics	Whiteware	1	Undecorated	Yes	No	No	2.85		Mm	Body	Indeterminate	Other - Indet	1830	0		Burned Whiteware Body Fragment.		
16RA1505	GSC TR 74 # 1	Surface	7	D	Ceramics	Whiteware	3	Undecorated	No	No	No	13.59		Mm	Body	Indeterminate	Other - Indet	1830	0				

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16RA1505	GSC TR 74 # 1	- Surface	3	D	Ceramics	Yellowware	1	Slip decorated Annular	No	No	No	2.92		Mm	Body	Indeterminate	Other - Indet	1830	1900		Yellowware Body Sherd Decorated On Exterior With White Slip And Blue Annular Ring.		
16RA1505	GSC TR 74 # 2	- Surface	11	D	Ceramics	Stoneware	1	Slipped exterior, Unglazed interior	No	No	No	3.25		Mm	Footring with base	Indeterminate	Other - Indet	1800	1925		Fragment Contains Portion Of Footring And Base. Slip Is Brown And Variable In Thickness. Three Fragments Are Of Indeterminate Location On The Vessel, And One May Be A Portion Of Bottleneck.		
16RA1505	GSC TR 74 # 2	- Surface	5	D	Container Glass	Undiagnostic container fragment	4	Fragment, Olive green glass	No	No	No	18.43		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Mold Seam Visible, But Manufacturing Method Is Unclear.		
16RA1505	GSC TR 74 # 2	- Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	2.74		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 2	- Surface	7	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amber glass	No	No	No	11.13		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 2	- Surface	8	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	5.99		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	1903	1960		Fragment Consists Of A Portion Of A Ribbed Vessel Body.		
16RA1505	GSC TR 74 # 2	- Surface	9	D	Ceramics	Stoneware	1	Unglazed exterior, Unglazed interior	No	No	No	39.56		Mm	Base	Indeterminate	Other - Indet	1780	1925		Contains Portion Of Flat Base Of Vessel, Two Bristol-Slipped Fragments With Clear- Glazed Interiors.		
16RA1505	GSC TR 74 # 2	- Surface	14	D	Ceramics	Stoneware	2	Bristol slipped exterior, Other interior	No	No	No	31.98		Mm	Body	Indeterminate	Other - Indet	1880	1925				
16RA1505	GSC TR 74 # 2	- Surface	15	D	Ceramics	Ironstone	3	Undecorated	No	No	No	36.37		Mm	Body	Indeterminate	Other - Indet	1830	0		One Fragment Has A Portion Of Footring, And The Other Fragment Has A Portion Of Base. Base Fragment With Valve Mark And Embossed Lettering "...RE..."		
16RA1505	GSC TR 74 # 2	- Surface	16	D	Ceramics	Ironstone	2	Undecorated	No	No	No	28.83		Mm	Footring with base	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 2	- Surface	24	D	Container Glass	Automatic Bottle Machine	1	Valve markopaque white glass Embossed	No	No	No	4.52		Mm	Base	Indeterminate bottle/jar	Bottle - Jar	1930	1950		Likely A Stoneware Cover Or Lid; Fragment Contains Portion Of Rise In Center For Handle. Molded Handle Fragment.		
16RA1505	GSC TR 74 # 2	- Surface	12	D	Ceramics	Stoneware	1	Slipped exterior, Unglazed interior	No	No	No	29.93		Mm	Cover / Lid	Indeterminate	Other - Indet	1800	1925				
16RA1505	GSC TR 74 # 2	- Surface	21	D	Ceramics	Whiteware	1	Molded Molded	No	No	No	2.05		Mm	Handle	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 2	- Surface	23	D	Ceramics	Yellowware	1	Undecorated	No	No	No	3		Mm	Body	Indeterminate	Other - Indet	1830	1925		Purple Transfer Print; Indeterminate Decoration With Two Annular Rings On Rim.		
16RA1505	GSC TR 74 # 2	- Surface	22	D	Ceramics	Ironstone	1	Transfer printed Purple	No	No	No	4.66		Mm	Rim	Indeterminate	Other - Indet	1830	1867				
16RA1505	GSC TR 74 # 2	- Surface	18	D	Ceramics	Whiteware	1	Undecorated	No	No	No	9.83		Mm	Body	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 2	- Surface	19	D	Ceramics	Whiteware	1	Undecorated	No	No	No	7.03		Mm	Rim	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 2	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	7.93		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				

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16RA1505	GSC TR 74 # 2	- Surface	20	D	Ceramics	Whiteware	1	Transfer printed Green	No	No	No	2.02		Mm	Base	Indeterminate	Other - Indet	1861	1910		Partial Transfer- Printed Maker's Mark: "H. ALC...EN". (Henry Alcock & Co, England, C. 1861- 1910)		
16RA1505	GSC TR 74 # 2	- Surface	13	D	Ceramics	Stoneware	5	Slipped exterior, Slipped interior	No	No	No	64.26		Mm	Base	Indeterminate	Other - Indet	1800	1925		4 Body Frags And 1 Frag With A Portion Of Flat Base. Possible Lower Portions Of Bristol-Slip Vessel. Fragment Contains Portions Of Heel And Slightly Recessed Base.		
16RA1505	GSC TR 74 # 2	- Surface	10	D	Ceramics	Stoneware	1	Slipped exterior, Albany slipped interior	No	No	No	13.13		Mm	Base	Indeterminate	Other - Indet	1830	1925				
16RA1505	GSC TR 74 # 2	- Surface	17	D	Ceramics	Ironstone	2	Undecorated	No	No	No	12.05		Mm	Rim	Indeterminate	Other - Indet	1830	0				
16RA1505	GSC TR 74 # 2	- Surface	26	D	Ceramics	Porcelain: hard paste	4	Undecorated	No	No	No	17.34		Mm	Footring	Indeterminate	Other - Indet	1800	0		Four Porcelain Fragments Containing Portions Of Footring.		
16RA1505	GSC TR 74 # 2	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	6.33		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	1880	0				
16RA1505	GSC TR 74 # 2	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.17		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 2	- Surface	27	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.43		Mm	Rim	Indeterminate	Other - Indet	1800	0				
16RA1505	GSC TR 74 # 2	- Surface	25	D	Ceramics	Porcelain: hard paste	1	Molded / embossed border	No	No	No	0.72		Mm	Body	-		1860	1900		Porcelain Fragment With Molded Human Eye. Unable To Determine Whether Part Of Vessel Or Toy.		
16RA1505	GSC TR 74 # 2	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	1.78		Mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 74 # 2	- Surface	28	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	5.98		Mm	Body	Indeterminate	Other - Indet	1800	0				
16RA1505	STP TR 74 # 2	0-10 cm bgs	1	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior Slip decorated -	No	No	No	5.8		Mm	Body	Indeterminate	Other - Indet	1800	0		Possible Off-White Portion Of A Bristol Slip.		
16RA1505	STP TR 74 # 2	0-10 cm bgs	2	D	Ceramics	Whiteware	2	Undecorated	No	No	No	5.35		Mm	Body	Indeterminate	Other - Indet	1830	0		Two Body Sherds From Two Separate Unidentified Vessels.		
16RA1505	GSC TR 74 #3	- Surface	1	D	Container Glass	Automatic Bottle Machine	1		No	No	No			Mm	-	-		0	0				
16RA1505	GSC TR 74 #4	- Surface	6	D	Glass Tableware	Undiagnostic fragment	1	Opaque blue glass Undecorated / Plain	No	No	No	19.1		Mm	Footring with base	Indeterminate	Other - Indet	1870			Base Fragment With A Small Portion Of Footring.		
16RA1505	GSC TR 74 #4	- Surface	1	D	Ceramics	Ironstone	2	Undecorated	No	No	No	24.31		Mm	Rim	Indeterminate	Other - Indet	1830	0		Two Ironstone Fragments, One With A Portion Of Rim. Dark Blue And Light Blue Pigments Below Undecorated Rim.		
16RA1505	GSC TR 74 #4	- Surface	5	D	Ceramics	Whiteware	1	Slip decorated	No	No	No	0.68		Mm	Rim	Indeterminate	Other - Indet	1830			Hand-Painted Decoration Contains Green, Black, And Red Pigments (Indeterminate Floral Motif).		
16RA1505	GSC TR 74 #4	- Surface	4	D	Ceramics	Whiteware	1	Handpainted polychrome (late) Fine line	No	No	No	2.92		Mm	Body	Indeterminate	Other - Indet	1930					
16RA1505	GSC TR 74 #4	- Surface	3	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	5.96		Mm	Body	Indeterminate	Other - Indet	1800					
16RA1505	GSC TR 74 #4	- Surface	2	D	Ceramics	Yellowware	1	Undecorated	No	No	No	2.9		Mm	Body	Indeterminate	Other - Indet	1830					

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16RA1505	GSC TR 74 #4	-	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	26.03		Mm	Base	Liquor/Beer/Wine	Bottle - Jar	0	0		Portion Of Base: Probably Not Machine-Made, But No Pontil Mark Present.		
16RA1505	GSC TR 74 #5	-	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	5.28		Mm	Body	Indeterminate	Other - Indet	0	0		Indeterminate Age Or Type: No Mold Marks Or Striations		
16RA1505	GSC TR 74 #5	-	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, "Black" glass	No	No	No	162.3	69	Mm	Base	Liquor/Beer/Wine	Bottle - Jar	0	0		Not Likely Machine-Made, But No Clear Pontil Mark.		
16RA1505	GSC TR 74 #5	-	5	D	Ceramics	Undiagnosed Refined Earthenware	1	Undecorated / Plain	No	No	No	5.46		Mm	Body	Indeterminate	Other - Indet	0	0		Small Stone Inclusions In Paste, Clear Glaze, Wheel Turning Marks On Interior.		
16RA1505	GSC TR 74 #5	-	3	D	Ceramics	Whiteware	2	Undecorated	No	No	No	14.89		Mm	Footring with base	Indeterminate	Other - Indet	1830			One Sherd With Portion Of Footring And Base, One Body Sherd		
16RA1505	GSC TR 74 #5	-	4	D	Ceramics	Whiteware	1	Handpainted polychrome (late)	No	No	No	0.69		Mm	Rim	Indeterminate	Other - Indet	1930			Decorations Contains Gray, Blue, Yellow, And Green Pigments (Indeterminate Motif).		
16RA1505	GSC TR 74 #5	-	2	D	Ceramics	Whiteware	1	Edge decorated (other) Purple	No	No	No	5.18		Mm	Rim	Indeterminate	Other - Indet	1830			One Purple Annular Ring At Edge Of Rim		
16RA1505	GSC TR 74 #5	-	1	D	Ceramics	Whiteware	1	Edge decorated (shell edged) Blue	No	No	No	2.56		Mm	Rim	Indeterminate	Other - Indet	1830	1840		Scalloped Rim, Curved Impressed Lines, Blue Color		
16RA1505	GSC TR 75 #1	-	2	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	113.3		Mm	Base	Other	Other - Indet	0	0		Bottle		
16RA1505	GSC TR 75 #1	-	1	D	Ceramics	Porcelain: soft paste (Bone China)	1	Undecorated	No	No	No	1.2		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 75 #2	-	1	D	Ceramics	Whiteware	1	Flow decorated Blue	No	No	No	18.15	54	Mm	Footring with base	Indeterminate	Other - Indet	1839	0		Flow Blue Decoration With Twin Birds; Fragment Contains A Portion Of Base And Footring.		
16RA1505	GSC TR 75 #3	-	1	B	Faunal Remains	Bone /tooth/ Porcelain: soft paste (Bone China)	1	Undecorated	No	No	No	7.6	19	Mm	-	-	Other - Indet	0	0		Rib Fragment, Cut At Both Ends		
16RA1505	GSC TR 78 #1	-	3	U	Plastic	Celluloid	1	Amorphous	No	No	No	0.4		Mm	-	-	Other - Indet	0	0		Greenish Stain On Part		
16RA1505	GSC TR 78 #1	-	2	D	Ceramics	Whiteware	1	Transfer printed Light blue Indeterminate	No	No	No	3.7		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 78 #1	-	1	D	Glass	Undiagnostic fragment	2	Opaque white glass Undecorated / Plain	No	No	No	3.4		Mm	-	Indeterminate	Other - Indet	0	0				
16RA1505	STP TR 78 #1	-20 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	1.5		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 78 #2,3	-	5	D	Ceramics	Whiteware	1	Plain	No	No	No	2.9		Mm	Body	Indeterminate	Other - Indet	0	0				
16RA1505	GSC TR 78 #2,3	-	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	11		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA1505	GSC TR 78 #2,3	-	4	D	Ceramics	Whiteware	2	Plain	No	No	No	9.6		Mm	Base	Plate	Place Setting	0	0				
16RA1505	GSC TR 78 #2,3	-	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	7.3		Mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 81 #1	-	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	3.77		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		



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L12P004-4	GSC TR 81 # 1	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	11.39	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Embossed Lettering On Fragment: "S", "T", AND POSSIBLE "O" (ABOVE ST). Olive/Amber Color Embossed Lettering: "... Co." And Incised Lines Around Lettering.			
L12P004-4	GSC TR 81 # 1	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.79	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Green glass	No	No	No	36.92	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	22.14	Mm	Body with base	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	16.13	Mm	Lip, neck, body	Indeterminate bottle/jar	Bottle - Jar	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	7	D	Ceramics	Stoneware	1	Albany slipped exterior, Albany slipped interior	No	No	No	29.41	Mm	Rim	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	8	D	Ceramics	Stoneware	1	Salt glazed exterior, Salt glazed interior	No	No	No	25.49	Mm	Rim with body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	9	D	Ceramics	Stoneware	1	Salt glazed exterior, Salt glazed interior	No	No	No	21.98	Mm	Body with base	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	10	D	Ceramics	Stoneware	1	Albany slipped exterior, Slipped interior	No	No	No	11.18	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	11	D	Ceramics	Stoneware	1	Albany & Bristol exterior, Slipped interior	No	No	No	3.63	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	12	D	Ceramics	Stoneware	2	Bristol slipped exterior, Slipped interior	No	No	No	19.48	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	13	D	Ceramics	Whiteware	2	Plain	No	No	No	12.2	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	14	D	Ceramics	Pearlware	1	Undecorated	No	No	No	3.83	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	15	D	Ceramics	Whiteware	1	Handpainted monochrome Blue	No	No	No	10.6	Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	16	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	3.91	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			
L12P004-4	GSC TR 81 # 1	- Surface	17	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	6.57	Mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Much Patina			

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
L12P004-4	GSC TR 81 # 1	- Surface	18	D	Ceramics	White ware	1	Plain	No	No	No	5.47		Mm	Body	Indeterminate	Other - Indet	0	0		Thin, Buff Paste, Curvature Indicates May Have Been A D Cup Or Bowl But Frag To Small To Determine		
L12P004-4	GSC TR 81 # 1	- Surface	19	D	Ceramics	White ware	1	Plain	Yes	No	No	3.4		Mm	Rim with body	Indeterminate	Other - Indet	0	0		Thin, Buff Paste, Burned At Rim Thick, Cream Paste, Body Extending From Both Sides Of Rim, Flat On Bottom-Platter/Other Serving?		
L12P004-4	GSC TR 81 # 1	- Surface	20	D	Ceramics	White ware	1	Plain	No	No	No	28.21		Mm	Rim, body, base	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Buff Paste, Flat		
L12P004-4	GSC TR 81 # 1	- Surface	21	D	Ceramics	White ware	4	Plain	No	No	No	29.09		Mm	Rim	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Buff Paste, Flat		
L12P004-4	GSC TR 81 # 1	- Surface	22	D	Ceramics	White ware	1	Plain	No	No	No	5.7		Mm	Base	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Buff Paste, Concave Bottom With Ridge At Edge-Stable Surface For Serving		
L12P004-4	GSC TR 81 # 1	- Surface	23	B	Faunal Remains	Shell: aquatic	1		No	No	No	1.85		Mm	-	-	Other - Indet	0	0		Oyster Fragment		
L12P004-4	GSC TR 81 # 2	- Surface	3	D	Ceramics	Ironstone	1	Plain	No	No	No	12.72		Mm	Handle	Indeterminate	Other - Indet	0	0		Medium To Thick, Buff-Color Paste		
L12P004-4	GSC TR 81 # 2	- Surface	4	D	Ceramics	White ware	4	Plain	No	No	No	32.04		Mm	Rim	Plate	Other - Indet	0	0		Very Thin To Medium Thick Fragments Part Of Maker's Mark Visible On Fragment. Medium Thickness		
L12P004-4	GSC TR 81 # 2	- Surface	5	D	Ceramics	White ware	1	Plain	No	No	No	21.18		Mm	Base	Indeterminate	Other - Indet	0	0		Thin, Floral/Chinese Motif, Cobalt Color Transfer Print-Flow Blue		
L12P004-4	GSC TR 81 # 2	- Surface	6	D	Ceramics	White ware	1	Transfer printed Dark blue	No	No	No	2.02		Mm	Rim	Indeterminate	Other - Indet	0	0		Thick Porcelain Fragment		
L12P004-4	GSC TR 81 # 2	- Surface	7	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	32.34		Mm	Rim, body, base	Indeterminate	Other - Indet	0	0		Possible Lip Fragment. Medium Cobalt Color		
L12P004-4	GSC TR 81 # 2	- Surface	8	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.05		Mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 81 # 2	- Surface	9	D	Container Glass	Undiagnositic container fragment	1	Fragment, Opaque white glass	No	No	No	8.77		Mm	Rim, body, base	Indeterminate	Other - Indet	0	0		Milk Glass Fragment		
L12P004-4	GSC TR 81 # 2	- Surface	10	D	Container Glass	Undiagnositic container fragment	1	Fragment, Cobalt glass	No	No	No	2.13		Mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 81 # 2	- Surface	11	D	Container Glass	Undiagnositic container fragment	1	Fragment, Amber glass	No	No	No	6.61		Mm	Body	Indeterminate	Other - Indet	0	0		Porcelain Unidentified Hardware Fragment, Round, With Small Hole In Center. Nearly Complete		
L12P004-4	GSC TR 81 # 2	- Surface	13	M	General Hardware	Indeterminate	1		No	No	No	29.78		Mm	-	-	Other - Indet	0	0		Very Flat On One Side, Well Consolidated Fragment		
L12P004-4	GSC TR 81 # 2	- Surface	14	A	Construction Material	Brick (measure in inches)	1	Machine made brick: non-vitrified	No	No	No	7.71		mm	-	-	Other - Indet	0	0		Porcelain Tile Fragment, Medium To Thick		
L12P004-4	GSC TR 81 # 2	- Surface	15	A	Construction Material	Ceramic	1	Tile	No	No	No	7.16		mm	-	-	Other - Indet	0	0		Dark Buff Paste, Medium Thickness, Possible Bowl Fragment		
L12P004-4	GSC TR 81 # 2	- Surface	1	D	Ceramics	Yellow ware	1	Plain	No	No	No	14.35		mm	Rim	Indeterminate	Other - Indet	0	0				

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L12P004-4	GSC TR 81 # 2	Surface	2	D	Utensils	Unidentified handle	1	Utensil/Indeterminate material Copper alloy	No	No	No	14.75		mm		Platter	Serving	0	0		Handle Fragment- Incised Lines On Both Int & Ext (Heart Shape End (Near Top Edge) , Rounded Top Edge Earthenware Pipe Fragment-Very Coarse And Thick With Brown Glaze		
L12P004-4	GSC TR 81 # 2	Surface	12	A	Fittings and Hardware	Stoneware Water Pipe (weigh)	1	Fittings / Hardware/Ceramic: earthenware	No	No	No	52		mm	-	-			0	0		Medium Thickness	
L12P004-4	GSC TR 81 # 3	Surface	1	D	Ceramics	Yellowware	1	Plain	No	No	No	4.36		mm	Body	Indeterminate	Other - Indet	0	0		Late Shell Edged- (19 Century): Edge Not Scalloped And No Embossing		
L12P004-4	GSC TR 81 # 3	Surface	2	D	Ceramics	Whiteware	1	Edge decorated (shell edged) Blue	No	No	No	1.35		mm	Rim	Indeterminate	Other - Indet	1851	0		Post Bottom Mold Fragment-Unable To Determine Dating Or Glass Making Method From This Frag.		
L12P004-4	GSC TR 81 # 3	Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass Indeterminate Indeterminate	No	No	No	7.05		mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0		Flat, Thin To Medium Thickness, Colorless		
L12P004-4	GSC TR 81 # 3	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.75		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Unidentified Coarse, Thick Earthenware. Possible Sewer Line Tile?		
L12P004-4	GSC TR 82 # 9	Surface	1	A	Fittings and Hardware	Other	1	Ceramic: earthenware	No	No	No	87.77		mm	-	-		0	0		Flat, Thin To Medium Thickness		
L12P004-4	STP TR 82 #10	-20 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.7		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 87 # 1	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.98		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 87 # 1	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	2.24		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 87 # 1	Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.78		mm	Base	Indeterminate	Other - Indet	0	0		Thin, Small Base Fragment-Unable To Determine Attributes		
L12P004-4	GSC TR 87 # 1	Surface	5	A	Construction Material	Brick (measure in inches)	1	Machine made brick: non-vitrified	No	No	No	9.33		mm	-	-		0	0		Fragment		
L12P004-4	GSC TR 87 # 1	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	2.74		mm	Body	Indeterminate	Other - Indet	0	0		Thin With Slight Curve		
L12P004-4	GSC TR 87 # 2	Surface	1	D	Ceramics	Yellowware	1	Slip decorated Annular	No	No	No	1.37		mm	Body	Indeterminate	Other - Indet	0	0		Body Fragment Mostly Shows Yellow Slip, Very Edge Of Fragment Shows White Line Decoration		
L12P004-4	GSC TR 87 # 2	Surface	3	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	0.9		mm	-	-		0	0		Small, Flat Fragment, Possibly Eroded		
L12P004-4	GSC TR 87 # 2	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	4.74		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thickness		
L12P004-4	GSC TR 87 # 3	Surface	1	D	Ceramics	Stoneware	1	Bristol slipped exterior, Salt glazed interior	No	No	No	15.55		mm	Body	Indeterminate	Other - Indet	0	0		Tan Paste, Black Interior Salt Glaze. Medium Thickness		
L12P004-4	GSC TR 87 # 3	Surface	2	D	Ceramics	Whiteware	2	Plain	No	No	No	7.74		mm	Body	Indeterminate	Other - Indet	0	0		1 Fragment Has Black Staining On It		
L12P004-4	GSC TR 88 # 1	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	5.74		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Light Cobalt Glass Fragment, Row Of Molded Conical Protuberances		

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
L12P004-4	GSC TR 88 # 1	Surface	2	D	Ceramics	Whiteware	1	Handpainted polychrome (late) Broad line	No	No	No	1.4		mm	Rim	Indeterminate	Other - Indet	0	0		Very Thin, Broad Purple Line Painted Near Rim, Rounded Red Paint Below Purple Line (Cut-Off)		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	1	D	Container Glass	Undiagnostic container fragment	2	Fragment, Olive green glass	No	No	No	2.47		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness, Very Dark Olive Color		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	0.71		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin To Medium, Very Light Green		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	3	D	Container Glass	Undiagnostic container fragment	3	Fragment, Clear glass	No	No	No	5.93		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	5	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	2.17		mm	-	-		0	0		Fragment		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	6	A	Nails	Indeterminate	2	Common	No	No	No	7.09		mm	-	-		0	0		Can Not Determine Length--Head & Shank Fragment, Too Corroded To Determine Attributes Or Types		
L12P004-4	STP TR 88 # 1	0-30 cm bgs	4	D	Ceramics	Whiteware	2	Plain	No	No	No	2.39		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 88 # 2	Surface	1	C	Buttons	Sew-through	1	Four holes:One-piece domed Prosser: plain	No	No	No	0.35	0.4	in.	-	-		0	0		17line		
L12P004-4	GSC TR 88 # 2	Surface	2	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	12.01		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Medium Gray Paste, Exterior Slip Included Brown, Tanpe, And Dark Brown, Brown Inter		
L12P004-4	GSC TR 88 # 2	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	10.81		mm	Rim	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Flat, Possible Plate		
L12P004-4	GSC TR 88 # 2	Surface	4	D	Ceramics	Whiteware	1	Slip decorated Annular bands	No	No	No	4.27		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Decoration: Green (Cut-Off), Thin White Line, And Blue (Thick), Corroded Nail		
L12P004-4	STP TR 88 #2	0-30 cm bgs	1	A	Nails	Indeterminate	1		No	No	No	4.88		mm	-	-		0	0		Fragment--Can Not Determine Type Or Length		
L12P004-4	GSC TR 88 # 3	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	1		mm	Rim, body, base	Indeterminate	Other - Indet	0	0		Running Along Fragment, Just Below Rim, Medium Thickness		
L12P004-4	GSC TR 88 # 3	Surface	5	D	Ceramics	Whiteware	1	Plain	No	No	No	1.3		mm	Body with base	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Body Of Fragment Curves Nearly Straight Up From Base		
L12P004-4	GSC TR 88 # 3	Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.3		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Frag Has Incised Lines In Starburst Pattern With A Line Of "X"'S Coming Down Every Other Starburst, Very Light Aqua, Rim Irregularities In Shape		
L12P004-4	GSC TR 88 # 3	Surface	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	0.7		mm	Lip	Indeterminate	Other - Indet	0	0				

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L12P004-4	GSC TR 88 # 3	- Surface	8	M	General Hardware	Other Fasteners	1	Other Fastener	No	No	No	55.7	41.46	mm	-	-		0	0		Ferrous Metal. Possible Pipe Clamp Fragment. One End Complete-Includes Hole For Bolting Down		
L12P004-4	GSC TR 88 # 3	- Surface	1	P	Toys and Games	Doll / Doll Part	1	Porcelain: bisque (pressed)	No	No	No	16.28			Doll: head	-		0	0		Girl With Bow And Bonnet, Molded & Incised Lines, No Paint Or Color Visible On Fragment		
L12P004-4	GSC TR 88 # 3	- Surface	2	U	Ceramic	Stoneware	1		No	No	No	0.3		mm	-	-		0	0		Gray Stoneware Cylindrical Fragment With Hole Through It. Incised Lines		
L12P004-4	GSC TR 88 # 3	- Surface	3	A	Fittings and Hardware	Door hardware	1	OtherCeramic: earthenware	No	No	No	3.7		mm	-	-		0	0		Door Knob Fragment. Polished Stoneware		
L12P004-4	STP TR 88 #3	0-37 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.8		mm	Rim	Indeterminate	Other - Indet	0	0		Very Light Amethyst. Thin Fragment With Undulating Molded Ridge Along Edge		
L12P004-4	STP TR 88 #4	0-37 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	1.1		mm	Rim	Indeterminate	Other - Indet	0	0		Very Thin Fragment		
L12P004-4	STP TR 88 #7	0-19 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	0.09		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin Fragment		
L12P004-4	GSC TR 89 # 1	- Surface	1	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	23.7		mm	Body with base	Indeterminate	Other - Indet	0	0		Thick Fragment. Frag Appears To Thin Out As It Moves Away From Edge Of Base		
L12P004-4	GSC TR 89 # 1	- Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	1.2		mm	Footring with base	Plate	Place Setting	0	0		Medium Thick		
L12P004-4	STP TR 89 #1	5-40 cm bgs	1	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amethyst glass	No	No	No	1		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Thin To Medium Thickness		
L12P004-4	STP TR 89 #1	5-40 cm bgs	2	D	Ceramics	Whiteware	2	Plain	No	No	No	1.07		mm	Body	Indeterminate	Other - Indet	0	0		2 Thin Fragments		
L12P004-4	STP TR 89 #1	5-40 cm bgs	3	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	2.44		mm	Footring with base	Indeterminate	Other - Indet	0	0		Thin With Relatively Deep Foot Ring On Base		
L12P004-4	STP TR 89 #1	5-40 cm bgs	4	D	Ceramics	Stoneware	1	Slipped exterior, Salt glazed interior Brushed -	No	No	No	2.51		mm	Body	Indeterminate	Other - Indet	0	0		Med To Thick, Gray Paste, Dark Brown Slip, Fragment Has Area Without Slip-Part Of Larger Design?		
L12P004-4	STP TR 89 #1	5-40 cm bgs	5	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: vitrified	No	No	No	23.6		mm	-	-		0	0		Brick Fragment Eroded, Small Ares Remains Intact-Vitrified		
L12P004-4	STP TR 89 #1	5-40 cm bgs	6	A	Nails	Indeterminate	1		No	No	No	3.2		mm	-	-		0	0		Shank Fragment-Too Corroded To Determine Type, Etc		
L12P004-4	GSC TR 89 # 2	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Valve markClear glass Embossed Indeterminate lip	No	No	No	18.25		mm	Base	Indeterminate	Other - Indet	0	0		Post Bottom Mold And Valve Mark Present. Embossed "g" Present On Base Fragment		
L12P004-4	GSC TR 89 # 2	- Surface	2	D	Ceramics	Whiteware	1	Slip decorated Combination of elements	No	No	No	4.28		mm	Body	Indeterminate	Other - Indet	0	0		Molden Lines And Shapes, Cobalt And Green Slip On Exterior, Yellow And Cobalt On Interior		
L12P004-4	GSC TR 89 # 2	- Surface	3	D	Ceramics	Yellowware	1	Plain	No	No	No	28.19		mm	Footring with base	Indeterminate	Other - Indet	0	0		Deep Footring, Medium Thickness		

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L12P004-4	STP TR 89 # 2	0-15 cm bgs	1	A	Nails	Cut Nail: unspecified	1	Common	No	No	No	5.98		mm	-	-	0	0			Machine Cut-- Rectangular Head, Rectangular Shank But Too Corroded To Determine Early Or Late-Fragment Flat, Thin To Medium Thickness			
L12P004-4	STP TR 89 # 2	0-15 cm bgs	2	D	Ceramics	Yellowware	1	Plain	No	No	No	1.49		mm	Rim	Indeterminate	Other - Indet	0	0			Incised Lines From Body Up To Edge Of Rim, Footing Visible On Base, Very Small Proportions On Frag- Slight Embossing On Edge, Edge Is Flat. Thin Fragment		
L12P004-4	STP TR 89 # 2	0-15 cm bgs	3	D	Ceramics	Yellowware	1	Plain	No	No	No	1.54		mm	Body	Indeterminate	Other - Indet	0	0					
L12P004-4	STP TR 89 # 2	0-15 cm bgs	4	D	Ceramics	Porcelain: hard paste	1	Edge decorated (other) Other	No	No	No	1.4		mm	Rim, body, base	Indeterminate	Other - Indet							
L12P004-4	STP TR 89 # 2	0-15 cm bgs	5	D	Ceramics	Whiteware	1	Edge decorated (shell edged) Blue	No	No	No	4.85		mm	Rim	Indeterminate	Other - Indet	1860	1890					
L12P004-4	STP TR 89 # 2	0-15 cm bgs	6	D	Ceramics	Whiteware	1	Plain	No	No	No	1.32		mm	Rim	Indeterminate	Other - Indet	0	0			Thin, Flat		
L12P004-4	STP TR 89 # 2	0-15 cm bgs	7	D	Ceramics	Whiteware	1	Plain	No	No	No	0.36		mm	Body	-		0	0			Thin, Flat, Very Small Fragment		
L12P004-4	STP TR 89 # 2	0-15 cm bgs	8	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	0.61		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			Thin To Medium Thickness		
L12P004-4	STP TR 89 # 2	0-15 cm bgs	9	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	0.68		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			Very Light Green, Thin		
L12P004-4	STP TR 89 # 2	0-15 cm bgs	10	D	Container Glass	Undiagnostic container fragment	3	Fragment, Amethyst glass	No	No	No	2.52		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			2 Very Thin, 1 Thin To Medium		
L12P004-4	STP TR 89 # 3	0-15 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	7.28		mm	Body	Indeterminate	Other - Indet	0	0			Medium To Thick		
L12P004-4	STP TR 89 # 3	0-15 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	1.38		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			Very Light Green With Frost Finish, Curved, Medium Thickness		
L12P004-4	STP TR 89 # 3	0-15 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.47		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			Very Thin, Nearly Flat		
L12P004-4	STP TR 89 # 3	0-15 cm bgs	4	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	3.05		mm	Body	Indeterminate	Other - Indet	0	0			Medium To Thick, Dark Brown With Red Slip On Interior Thin To Medium, Some Embossing Visible Can Not Determine Age Or Design From Fragment		
L12P004-4	STP TR 89 # 3	0-15 cm bgs	5	D	Ceramics	Whiteware	1	Other 1	No	No	No	1.66		mm	Body	Indeterminate	Other - Indet	0	0			Unidentified Ferrous Metal Fragment, Flat With Medium Thickness, Rectangular, Very Corroded		
L12P004-4	STP TR 89 # 5	-10 cm bgs	1	M	General Hardware	Indeterminate	1		No	No	No	11.1		mm	-	-		0	0			Medicine Bottle Frag, With Partial Base, Embossed Lettered Panel, Possibly Contained Bitters		
L12P004-4	GSC TR 90 # 1	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	38.42		mm	Body with base	Other	Other - Indet	0	0			Curved Milk Glass Fragment, Near Lip Or Base?		
L12P004-4	GSC TR 90 # 1	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	3.67		mm	Indeterminate part	Indeterminate	Other - Indet	0	0					

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
L12P004-4	GSC TR 90 # 1	Surface	3	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amethyst glass	No	No	No	3.83		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		1 Thin To Medium Frag, 1 Med To Thick Frag With Embossed Line Of Rounded Shapes		
L12P004-4	GSC TR 90 # 1	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.3		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness, Curved		
L12P004-4	GSC TR 90 # 1	Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	3.11		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0		Thin To Medium, Flat		
L12P004-4	GSC TR 90 # 1	Surface	6	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	5.49		mm	Footring with base	Indeterminate	Other - Indet	0	0		Deep Footring, Some Imperfections Visible On Surface (Not Considered Design Elements)		
L12P004-4	GSC TR 90 # 1	Surface	7	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	12.08		mm	Body	Indeterminate	Other - Indet	0	0		Reddish Paste, Dark Brown Slip On Interior, Gray Salt Glaze On Exterior Dark Brown Lines		
L12P004-4	GSC TR 90 # 1	Surface	8	D	Ceramics	Yellowware	1	Slip decorated Annular	No	No	No	4.63		mm	Body	Indeterminate	Other - Indet	0	0		Across Fragment Interspersed With Undecorated Lead Glaze Lines		
L12P004-4	GSC TR 90 # 1	Surface	9	D	Ceramics	Ironstone	1	Plain	No	No	No	9.41		mm	Base	Indeterminate	Other - Indet	0	0		Medium Thickness		
L12P004-4	GSC TR 90 # 1	Surface	10	D	Ceramics	Whiteware	3	Plain	No	No	No	7.64		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, 1 Frag Has Foot Ring		
L12P004-4	STP TR 90 #1	30-40 cm bgs	1	A	Nails	Cut Nail: unspecified	1		No	No	No	6.03	6.12	mm	-	-	-	0	0		Machine Cut Shank Fragment, Can Not Determine Early Or Late Due To Corrosion		
L12P004-4	GSC TR 90 # 2	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	13.31		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick		
L12P004-4	GSC TR 90 # 2	Surface	2	D	Container Glass	Undiagnostic container fragment	2	Fragment, Aqua glass	No	No	No	14.54		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, 1 Curved, 1 Flat With Possible Start Of Base Thin To Med Thick.		
L12P004-4	GSC TR 90 # 2	Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	7.17		mm	Base	Indeterminate	Other - Indet	0	0		Light Aqua, Post Mold Bottom Visible On Frag-Can Not Determine Other Attributes		
L12P004-4	GSC TR 90 # 2	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	11.38		mm	Lip	Indeterminate	Other - Indet	0	0		Medium Thickness, 1 Slightly Curved, 1 Very Curved-Can Not Determine Lip Types From Fragments		
L12P004-4	GSC TR 90 # 2	Surface	5	D	Glass Tableware	Undiagnostic fragment	1	Clear unleaded glass Undecorated / Plain	No	No	No	3.32		mm	Rim	Indeterminate	Other - Indet	0	0		Medium Thickness, Some Curve, Flat, Undecorative Rim		
L12P004-4	GSC TR 90 # 2	Surface	6	D	Ceramics	Ironstone	2	Plain	No	No	No	49.6		mm	Footring with base	Indeterminate	Other - Indet	0	0		1 Thick With Deep Footring, 1 Thin With Shallow Footring		
L12P004-4	GSC TR 90 # 2	Surface	7	D	Ceramics	Stoneware	1	Bristol slipped exterior, Slipped interior	No	No	No	20.88		mm	Base	Indeterminate	Other - Indet	0	0		Thick Fragment, Red- Buff Color Paste		
L12P004-4	GSC TR 90 # 2	Surface	8	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	4.65		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Gray Paste		

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L12P004-4	GSC TR 90 # 2	Surface	9	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	5.13		mm	Body	Indeterminate	Other - Indet	0	0		Thin Fragment, Brown Paste, Ext Has Dark Tan Salt Glaze, Int Has Dark Brown Slip-Shine Eroded Away		
L12P004-4	GSC TR 90 # 2	Surface	10	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.88		mm	Footring with base	Indeterminate	Other - Indet	0	0		Thin To Medium Thick, Shallow Footring		
L12P004-4	GSC TR 90 # 2	Surface	11	D	Ceramics	Whiteware	1	Plain	No	No	No	9.61		mm	Footring with base	Indeterminate	Other - Indet	0	0		Medium Thickness, Buff Paste, Shallow Footring, Flat		
L12P004-4	GSC TR 90 # 2	Surface	12	D	Ceramics	Whiteware	1	Plain	No	No	No	1.09		mm	Body	Indeterminate	Other - Indet	0	0		Very Thin Fragment, Off-White Paste, Slight Curve		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	1	D	Ceramics	Whiteware	2	Plain	No	No	No	11.12		mm	Body	Indeterminate	Other - Indet	0	0		1 Thin, Flat, 1 Medium Thick, Flat With Curved Area On One Side, Pastes Are Buff Colored		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	2	D	Ceramics	Whiteware	1	Transfer printed Blue-green / aqua / turquoise	No	No	No	1.59		mm	Rim	Indeterminate	Other - Indet	0	0		Buff, Compact Paste, Thin Frag, Embossed Line Just Below Rim, Irregularly Present In Shape Of Rim		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	16.3		mm	Body with base	Indeterminate	Other - Indet	0	0		Medium Thickness, Light Colored Amber		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	4	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	1.09		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		1 Very Thin With Curve, 1 Thin & Nearly Flat		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	6	A	Nails	Indeterminate	4	Common	No	No	No	8.13		mm	-	-	-	0	0		3 Head & Shank Fragments, 1 Shank Fragment--All Too Corroded To Determine Type, Etc		
L12P004-4	STP TR 90 # 2	0-12 cm bgs	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.44		mm	Base	Indeterminate	Other - Indet	0	0		Base Fragment--Can Not Determine Anything Diagnostic--Frag Too Small		
L12P004-4	GSC TR 90 #3	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	5.48		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium To Thick, Medium Amber Color, Flat		
L12P004-4	GSC TR 90 #3	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	11.97		mm	Footring with base	Indeterminate	Other - Indet	0	0		Medium Thick Milk Glass Fragment		
L12P004-4	GSC TR 90 #3	Surface	3	D	Ceramics	Ironstone	1	Plain	No	No	No	19.13		mm	Handle	Indeterminate	Other - Indet	0	0		Thick Handle Fragment		
L12P004-4	GSC TR 90 #3	Surface	4	D	Ceramics	Ironstone	1	Plain	No	No	No	20.93		mm	Footring with base	Indeterminate	Other - Indet	0	0		Medium Thickness, Shallow Footring		
L12P004-4	GSC TR 90 #3	Surface	5	D	Ceramics	Whiteware	1	Plain	No	No	No	6.15		mm	Base	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, Flat		
L12P004-4	GSC TR 90 #4	Surface	1	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	9.79		mm	Body	Indeterminate	Other - Indet	0	0		Med To Thick Gray W Black Specks Salt Glaze On Ext, Dark Brown Slip W No Shine On Inter. Red-Br Paste		
L12P004-4	GSC TR 90 #4	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	5.79		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thickness, Curved		
L12P004-4	GSC TR 90 #4	Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	9.3		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick, Curved		



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L12P004-4	GSC TR 90 #4	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	6.87	mm	mm	Base	Indeterminate	Other - Indet	0	0		Medium Thickness. Post Mold Mark Present But Fragment Too Small To Determine More. Light Aqua Color		
L12P004-4	GSC TR 90 #4	- Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.15	mm	mm	Body	Indeterminate	Other - Indet	0	0		Medium Thickness, Curved		
L12P004-4	STP TR 92 #1	-5 cm bgs	1	D	Ceramics	Whiteware	1	Undecorated	No	No	No	3.03	mm	mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 93 #1	0- Surface	5	D	Ceramics	Ironstone	1	Undecorated	No	No	No	16.56	mm	mm	Rim	Indeterminate	Other - Indet	1830	0				
L12P004-4	GSC TR 93 #1	0- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	1.75	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 93 #1	0- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	1.62	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 93 #1	0- Surface	4	D	Ceramics	Stoneware	1	Salt glazed exterior, Salt glazed interior	No	No	No	21.03	mm	mm	Body	Indeterminate	Other - Indet	1780	1925				
L12P004-4	GSC TR 93 #1	0- Surface	6	D	Ceramics	Whiteware	1	Transfer printed Green	No	No	No	5.57	mm	mm	Base	Indeterminate	Other - Indet	0	0		Base Fragment With Green Transfer Print Lettering "WARRA..." Visible. Warranted?		
L12P004-4	GSC TR 93 #1	0- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	2	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	1880	1914				
L12P004-4	STP TR 93 #1	0-18 cm bgs	1	A	Nails	Cut Nail, late machine headed	1	Common	No	No	No	2.84	mm	mm	-	-		1830	1880				
L12P004-4	STP TR 93 #1	0-18 cm bgs	3	D	Ceramics	Whiteware	1	Undecorated	No	No	No	1.88	mm	mm	Rim	Indeterminate	Other - Indet	1830	0				
L12P004-4	STP TR 93 #1	0-18 cm bgs	2	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	0.37	mm	mm	Body	Indeterminate	Other - Indet	1800	0				
L12P004-4	STP TR 93 #1	40-50 cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: vitrified	No	No	No	4.02	mm	mm	-	-		0	0				
L12P004-4	STP TR 93 #1	40-50 cm bgs	3	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.54	mm	mm	-	-		1785	1917				
L12P004-4	STP TR 93 #1	40-50 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.87	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	1880	1914				
L12P004-4	GSC TR 93 #2	- Surface	4	D	Ceramics	Whiteware	1	Molded	No	No	No	2.29	mm	mm	Body	Indeterminate	Other - Indet	1830	0				
L12P004-4	GSC TR 93 #2	- Surface	6	D	Ceramics	Porcelain: hard paste	1	Decal	No	No	No	2.13	mm	mm	Body	Indeterminate	Other - Indet	1890	1940		Indeterminate Decalcomania Scene In Red.		
L12P004-4	GSC TR 93 #2	- Surface	5	D	Ceramics	Yellowware	1	Undecorated	No	No	No	11.78	mm	mm	Footring with base	Indeterminate	Other - Indet	1830	1925				
L12P004-4	GSC TR 93 #2	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	3.33	mm	mm	Lip	Indeterminate bottle/jar	Bottle - Jar	0	0		Possible Machine-Made Champagne Finish, But Cannot Determine With Certainty.		
L12P004-4	GSC TR 93 #2	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	9.39	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Mold Seam Present.		
L12P004-4	GSC TR 93 #2	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	18.26	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 93 #2	0-20 cm bgs	1	D	Ceramics	Stoneware	1	Slipped exterior, Albany slipped interior	No	No	No	4.34	mm	mm	Body	Indeterminate	Other - Indet	1830	1925				
L12P004-4	GSC TR 93 #3	- Surface	3	D	Ceramics	Whiteware	1	Undecorated	No	No	No	1.28	mm	mm	Body	Indeterminate	Other - Indet	1830	0				

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L12P004-4	GSC TR 93 #3	Surface	4	D	Ceramics	Stoneware	1	Salt glazed exterior, Salt glazed interior	No	No	No	6.13		mm	Body	Indeterminate	Other - Indet	1780	1925				
L12P004-4	GSC TR 93 #3	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	6.3		mm	Body	Indeterminate bottle/jar	Bottle - Jar	1880	1914				
L12P004-4	GSC TR 93 #3	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	6.65		mm	Lip	Indeterminate bottle/jar	Bottle - Jar	1880	1920				
L12P004-4	GSC TR 93 #3	Surface	5	D	Ceramics	Whiteware	1	Handpainted borderline Blue	No	No	No	1.27		mm	Body	Indeterminate	Other - Indet	1830	1870				
L12P004-4	STP TR 93 # 3	16-24 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.46		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 93 # 4	Surface	3	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	35.93		mm	Body with base	Indeterminate	Other - Indet	1800	1925				
L12P004-4	GSC TR 93 # 4	Surface	2	D	Ceramics	Whiteware	1	Undecorated	No	No	No	8.52		mm	Rim	Indeterminate	Other - Indet	1830	0				
L12P004-4	GSC TR 93 # 4	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.62		mm	Body	Indeterminate bottle/jar	Bottle - Jar	1880	1914				
L12P004-4	GSC TR 94 # 1	Surface	3	D	Ceramics	Whiteware	1	Decal	No	No	No	5.91		mm	Footring	Indeterminate	Other - Indet	1880	1940				
L12P004-4	GSC TR 94 # 1	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	1.69		mm	Body	Indeterminate bottle/jar	Bottle - Jar	1840	1960				
L12P004-4	GSC TR 94 # 1	Surface	2	D	Ceramics	Whiteware	1	Undecorated	No	No	No	2.9		mm	Footring with base	Indeterminate	Other - Indet	1830	0				
L12P004-4	GSC TR 94 # 1	Surface	1	D	Ceramics	Stoneware	1	Albany slipped exterior, Albany slipped interior	No	No	No	1.9		mm	Body	Indeterminate	Other - Indet	1830	1925				
L12P004-4	STP TR 94 # 1	5-25 cm bgs	1	D	Ceramics	Whiteware	1	Undecorated	No	No	No	0.46		mm	Body	Indeterminate	Other - Indet	1830	0				
L12P004-4	STP TR 94 # 1	5-25 cm bgs	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	0.46		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 94 # 1	5-25 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.46		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 94 # 1	5-25 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.82		mm	Body	Indeterminate bottle/jar	Bottle - Jar	1880	1914				
L12P004-4	STP TR 94 # 2	-5 cm bgs	1	D	Ceramics	Whiteware	1	Undecorated	No	No	No	1.68		mm	Footring	Indeterminate	Other - Indet	1830	0				
L12P004-4	GSC TR 95 # 2	Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.79		mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 95 # 2	Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.53		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 95 # 2	Surface	1	D	Ceramics	Whiteware	1	Undecorated	No	No	No	1.24		mm	Body	Indeterminate	Other - Indet	1830	0				

Pink Decal Decoration.

One Fragment Of Amethyst Glass Decorated With Embossed Linear Ridges (Possible Honey Jar)?

Fragment Contains Two Hand-Painted Annular Borderlines: A Wide Blue Line And A Narrower Green Line. One Very Slightly Curving Fragment Of Colorless Glass.

Body With A Portion Of Base. Base Exterior Is Unglazed.

Fragment Contains Mold Seam And Molded Faceted Design-Possible Fragment Of Panel Bottle?

Fragment Contains A Portion Of Post Mold Seam, But Complete Manufacturing Method Is Indeterminate.

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L12P004-4	GSC TR 95 # 2	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	4.76		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 95 # 2	Surface	5	D	Glass Tableware	Undiagnostic fragment	1	Cornflower blue glass Undecorated / Plain	No	No	No	3.36		mm	Rim	Indeterminate	Other - Indet	1820	0		Fragment Contains A Small Portion Of Chipped Rim.		
L12P004-4	STP TR 95 # 2	0-10 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	1.39		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Body Seam Present On Fragment, But Full Manufacturing Method Is Indeterminate.		
L12P004-4	STP TR 95 # 2	0-10 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	0.27		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 95 # 2	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.51		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 95 # 3	Surface	1	D	Ceramics	Whiteware	1	Transfer printed Blue-green / aqua / turquoise	No	No	No	0.62		mm	Body	Indeterminate	Other - Indet	0	0		Very Thin Frag. Blue-Green Transfer Printed Various Small Shapes Red-Brown Paste, Medium Thick. Light Gray Slip On Ext. Black Slip On Interior Thin To Medium Thick, Flat Medium Thick, Flat, Ridge (Footring?-Flush With Body) On Bottom		
L12P004-4	GSC TR 95 # 3	Surface	2	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	6.72		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 95 # 3	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	8.51		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 95 # 3	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	5.83		mm	Base	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 95 # 3	0-10 cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	4.25		mm	-	-	-	0	0		Small, Eroded Fragment		
L12P004-4	STP TR 95 # 3	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.47		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 95 # 3	10-20 cm bgs	1	D	Ceramics	Whiteware	1	Edge decorated (other) No color	No	No	No	3.7		mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 95 # 3	10-20 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	1.01		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		(Transition From 1 Side To Another Side Of Bottle Fragment) Thin, Curved Fragment With Very Pale Amethyst Coloration Possible Sewer Pipe Fragment With Brown Glaze And Grout Attached		
L12P004-4	STP TR 95 # 3	20-30 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.48		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 95 # 4	Surface	1	A	Fittings and Hardware	Stoneware Water Pipe (weight)	1	Ceramic: earthenware	No	No	No	101.93		mm	-	-	-	0	0				
L12P004-4	GSC TR 95 # 4	Surface	2	A	Construction Material	Brick (measure in inches)	1	Firebrick	No	No	No	6.86		mm	-	-	-	0	0		Red Brick With Gray Finish On One Side-Machine Made		
L12P004-4	GSC TR 95 # 4	Surface	3	A	Construction Material	Brick (measure in inches)	1	Machine made brick: non-vitrified	No	No	No	4.35		mm	-	-	-	0	0		Angled Fragment		
L12P004-4	GSC TR 95 # 4	Surface	4	D	Ceramics	Stoneware	1	Slipped exterior, Bristol slipped interior Slip decorated -	No	No	No	9.45		mm	Body	Indeterminate	Other - Indet	0	0		Bristol Slip & Light Blue Slipped (Turn/Brush Lines) Separated By Unglazed Line/Gap. Med Thick Frag		

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L12P004-4	GSC TR 95 #4	Surface	5	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	4.47		mm	Body	Indeterminate	Other - Indet	0	0		Unsmoothed Turn Lines On Interior. Cream Colored Slip And Paste. Thin To Medium Thick		
L12P004-4	GSC TR 95 #4	Surface	6	D	Ceramics	Ironstone	1	Transfer printed Green	No	No	No	2.85		mm	Base	Indeterminate	Other - Indet	0	0		"...Stone", Contains A Possible Crown Image Below It (Patented Ironstone China ?) Applied Decoration. Indeterminate		
L12P004-4	GSC TR 95 #4	Surface	7	D	Ceramics	Ironstone	1	Applied decoration / relief	No	No	No	11.39		mm	Body	Indeterminate	Other - Indet	0	0		Shape/Design. Relatively Thin For Ironstone But Quite Vitrified		
L12P004-4	GSC TR 95 #4	Surface	8	D	Ceramics	Ironstone	1	Plain	No	No	No	1.04		mm	Handle	Indeterminate	Other - Indet	0	0		Very Thin And Small Ironstone Handle Frag- Vitrified And Compact-No Shine To Paste		
L12P004-4	GSC TR 95 #4	Surface	9	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.04		mm	Rim	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 95 #4	Surface	10	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	2.03		mm	Body	Plate	Place Setting	0	0		Relatively Flat With Some Irregularities In Shape		
L12P004-4	GSC TR 95 #4	Surface	11	D	Ceramics	Whiteware	1	Plain	No	No	No	4.55		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thick Fragment: 2 Flat Sections With Beveled Edges And Deep Side, Frag Tapers (Thickest At Edge)		
L12P004-4	GSC TR 95 #4	Surface	12	D	Ceramics	Whiteware	1	Plain	No	No	No	3.36		mm	Footring with base	Indeterminate	Other - Indet	0	0		Thin To Medium Thick Frag. Footring Has Moderate Depth		
L12P004-4	GSC TR 95 #4	Surface	13	D	Ceramics	Whiteware	3	Plain	No	No	No	11.45		mm	Rim	Indeterminate	Other - Indet	0	0		2 Thin Frag And Flat, 1 Curved Thick Fragment		
L12P004-4	GSC TR 95 #4	Surface	14	D	Ceramics	Whiteware	7	Plain	No	No	No	14.29		mm	Body	Indeterminate	Other - Indet	0	0		Ranges From Very Thin To Medium-Thick. All Relatively Flat		
L12P004-4	GSC TR 95 #4	Surface	15	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	20.41		mm	Base	Indeterminate	Other - Indet	0	0		Post Mold Mark Visible But No Other Attributes Can Be Determined From Frag. Medium To Thick		
L12P004-4	GSC TR 95 #4	Surface	16	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	21.33		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Long, Rounded Fragment. Possible Stopper Or Cand Jar (Etc.) Finial		
L12P004-4	GSC TR 95 #4	Surface	17	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	7.12		mm	Cover / Lid	Indeterminate	Other - Indet	0	0		Possible Bottle Stopper Fragment. Broken (Round ?) Top With Conical Shape Attached		
L12P004-4	GSC TR 95 #4	Surface	1	A	Fittings and Hardware	Stoneware Water Pipe (weigh)	1		No	No	No			mm	-	-		0	0		Milk Glass Fragment. Medium To Thick. Embossed Decoration		
L12P004-4	GSC TR 95 #4	Surface	18	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	3.25		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				

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L12P004-4	GSC TR 95 #4	Surface	19	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	1.1	mm	mm	Lip	Indeterminate	Other - Indet	0	0		Possible Lip Ring Fragment-Can Not Determine Type, Etc From Size Of Fragment		
L12P004-4	GSC TR 95 #4	Surface	20	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	3.38	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0		1 Has Much Patina. Both Medium Thickness		
L12P004-4	GSC TR 95 #4	Surface	21	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	4.22	mm	mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick		
L12P004-4	GSC TR 95 #4	Surface	22	D	Glass Tableware	Undiagnostic fragment	1	Amethyst glass Undecorated / Plain	No	No	No	4.83	mm	mm	Rim	Indeterminate	Other - Indet	0	0		Medium Thickness, Slight Curve		
L12P004-4	STP TR 95 #4	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	4.66	mm	mm	Body with base	Indeterminate	Other - Indet	0	0		Only Small Piece Of Base Visible From Fragment-Can Not Determine Type, Etc		
L12P004-4	STP TR 95 #4	0-10 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.58	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Flat Fragment		
L12P004-4	STP TR 95 #4	0-10 cm bgs	3	D	Container Glass	Undiagnostic container fragment	3	Fragment, Light green glass	No	No	No	2.26	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin To Medium Thick, Curved		
L12P004-4	STP TR 95 #4	0-10 cm bgs	4	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	2.25	mm	mm	Rim	Indeterminate	Other - Indet	0	0		Medium To Thick, Rim Has Beveled Edge As It Blends Into Body		
L12P004-4	STP TR 95 #4	0-10 cm bgs	5	D	Ceramics	Whiteware	1	Plain	No	No	No	1.9	mm	mm	Rim	Indeterminate	Other - Indet	0	0		Thin & Flat Rim Visible On Very Small Piece Of Fragment		
L12P004-4	STP TR 95 #4	0-10 cm bgs	7	A	Flat Glass	Window Glass	1	>2.41 mm thick	No	No	No	1.39	mm	mm	-	-	Other - Indet	0	0		2.91mm		
L12P004-4	STP TR 95 #4	0-10 cm bgs	8	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.75	mm	mm	-	-	Other - Indet	0	0		1.97mm		
L12P004-4	STP TR 95 #4	0-10 cm bgs	9	A	Nails	Cut Nail: unspecified	1	Common	No	No	No	2.61	mm	mm	-	-	Other - Indet	0	0		Head And Shank Fragment-Machine Cut But Can Not Determine Early Or Late Due To Corrosion		
L12P004-4	STP TR 95 #4	0-10 cm bgs	10	A	Nails	Indeterminate	1	Tack	No	No	No	7.76	mm	mm	-	-	Other - Indet	0	0		Shiny/Heavy Metal (Possibly Lead) Material. Fragment		
L12P004-4	STP TR 95 #4	0-10 cm bgs	6	D	Ceramics	Whiteware	1	Plain	No	No	No	1.21	mm	mm	Body	Indeterminate	Other - Indet	0	0		Thin, Flat		
L12P004-4	STP TR 95 #4	10-20 cm bgs	1	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	2.32	mm	mm	-	-	Other - Indet	0	0		2 Eroded, Small Brick Fragments		
L12P004-4	STP TR 95 #4	10-20 cm bgs	2	A	Nails	Indeterminate	3		No	No	No	3	mm	mm	-	-	Other - Indet	0	0		Small Shank Fragments. Can Not Determine Length Or Type (Too Corroded)		
L12P004-4	STP TR 95 #4	10-20 cm bgs	3	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.5	mm	mm	-	-	Other - Indet	0	0		1.69mm		
L12P004-4	STP TR 95 #4	10-20 cm bgs	4	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	5.36	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0		1 Medium Thick With Slight Curve, And 1 Thick And Relatively Flat		
L12P004-4	STP TR 95 #4	10-20 cm bgs	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.58	mm	mm	Body	Indeterminate	Other - Indet	0	0		Very Thin, Curved. Embossed Lines And Lettering (Partial Letter Visible-Possible "O", "C", Or "C")		
L12P004-4	STP TR 95 #4	10-20 cm bgs	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	0.83	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Flat		

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L12P004-4	STP TR 95 # 4	10-20 cm bgs	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.5		mm	Lip	Indeterminate	Other - Indet	0	0		Very Small Possible Lip Fragment. Too Small To Determine Lip Type		
L12P004-4	STP TR 95 # 4	10-20 cm bgs	8	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	4.08		mm	Body with base	Indeterminate	Other - Indet	0	0		Medium To Thick. Post Mold Mark Visible But Fragment Too Small To Determine Type. Etc		
L12P004-4	STP TR 95 # 4	20-30 cm bgs	1	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.26		mm	-	-	Other - Indet	0	0		Eroded		
L12P004-4	STP TR 95 # 4	20-30 cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	4.06		mm	-	-	Other - Indet	0	0		Small Fragment, Very Corroded		
L12P004-4	STP TR 95 # 4	20-30 cm bgs	4	U	Metal	Iron / Steel	1	Unspecified iron / steelFlat: thin	No	No	No	2.28		mm	-	-	Other - Indet	0	0		Very Curved. Broke In Such A Way-Difficult To Determine Thickness		
L12P004-4	STP TR 95 # 4	20-30 cm bgs	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.39		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Head And Shank Fragment. Too Eroded To Determine Type		
L12P004-4	STP TR 95 # 4	20-30 cm bgs	3	A	Nails	Indeterminate	1	Common	No	No	No	2.03		mm	-	-	Other - Indet	0	0		Lead Glaze On Exterior With Greenish Hue And Small Circular Indentations Across The Surface		
L12P004-4	GSC TR 95 # 6	Surface	1	D	Ceramics	Stoneware	1	Other exterior. Eroded interior	No	No	No	2.23		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium, Curved		
L12P004-4	GSC TR 95 # 6	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	4.9		mm	Rim	Plate	Place Setting	0	0		Cream Color. 1 Round Piece With Hole, "Tom" Imprint. 1 Thin Long Piece		
L12P004-4	STP TR 95 # 6	0-10 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	2.75		mm	Body	Indeterminate	Other - Indet	0	0		Large Red Brick Fragment. 1 Vitrified Face Red. 1 Vitrified Face Brown		
L12P004-4	STP TR 95 # 6	0-10 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Green glass	No	No	No	1.33		mm	Body	Indeterminate	Other - Indet	0	0		Gray Paste With Dark Brown Slip. Possible Sewer Tile?		
L12P004-4	GSC TR 95 #6,7	Surface	1	U	Plastic	Indeterminate plastic	2	Plastic/tem/ part	No	No	No	0.37		mm	-	-	Other - Indet	0	0		Thin To Medium, Curved		
L12P004-4	GSC TR 95 #6,7	Surface	2	A	Construction Material	Brick (measure in inches)	1	Machine made brick: vitrified	No	No	No			mm	-	-	Other - Indet	0	0		Cream Color. 1 Round Piece With Hole, "Tom" Imprint. 1 Thin Long Piece		
L12P004-4	GSC TR 95 #6,7	Surface	3	A	Fittings and Hardware	Other	1		No	No	No	187.56		mm	-	-	Other - Indet	0	0		Large Red Brick Fragment. 1 Vitrified Face Red. 1 Vitrified Face Brown		
L12P004-4	GSC TR 95 #6,7	Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	4.1		mm	Footring with base	Plate	Place Setting	0	0		Thin To Medium Thickness		
L12P004-4	GSC TR 95 #6,7	Surface	5	D	Ceramics	Whiteware	1	Slip decorated Annular bands	No	No	No	1.09		mm	Rim	Indeterminate	Other - Indet	0	0		Thin, Flat. Thin Green Line. Medium Depth Black Line. Thick Purple Line (Cut-Off)		
L12P004-4	GSC TR 95 #6,7	Surface	6	D	Ceramics	Stoneware	1	Salt glazed exterior. Eroded interior	No	No	No	1.73		mm	Body	Indeterminate	Other - Indet	0	0		Can Not Determine Thickness Due To Erosion On One Side		
L12P004-4	STP TR 95 #11	0-10 cm bgs	1	D	Ceramics	Refined Redware	1	Unglazed	No	No	No	32.42		mm	Body	Indeterminate	Other - Indet	0	0		Thick. Slightly Curved Fragment		
L12P004-4	STP TR 95 # 12	0-10 cm bgs	1	D	Ceramics	Stoneware	1	Salt glazed exterior. Slipped interior	No	No	No	1.92		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thickness, Flat		
L12P004-4	GSC TR 96 #7	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	2.85		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness, Slightly Curved		
L12P004-4	STP TR 96 #7	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	2.11		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness, Slightly Curved		

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L12P004-4	GSC TR 96 # 8	- Surface	9	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amethyst glass	No	No	No	2.84	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 8	- Surface	4	D	Ceramics	Whiteware	1	Undecorated	Yes	No	No	2.15	mm	mm	Body	Indeterminate	Other - Indet	0	0		Burned; Glaze On Only One Side.		
L12P004-4	GSC TR 96 # 8	- Surface	1	D	Ceramics	Whiteware	2	Undecorated	No	No	No	2.67	mm	mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 8	- Surface	2	D	Ceramics	Whiteware	1	Molded	No	No	No	1.65	mm	mm	Body	Indeterminate	Other - Indet	0	0		Fragment Contains A Shallow Molded Ridge.		
L12P004-4	GSC TR 96 # 8	- Surface	3	D	Ceramics	Whiteware	1	Undecorated	No	No	No	2.19	mm	mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 8	- Surface	5	D	Ceramics	Ironstone	1	Undecorated	No	No	No	4.92	mm	mm	Footring	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 8	- Surface	6	D	Ceramics	Stoneware	1	Slipped exterior, Albany slipped interior	No	No	No	5.81	mm	mm	Body	Indeterminate	Other - Indet	0	0		Exterior Slip May Represent The Lower Portion Of A Bristol Slip.		
L12P004-4	GSC TR 96 # 8	- Surface	8	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	1.08	mm	mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0		Fragment Includes A Short Segment Of A Possible Post Mold Seam.		
L12P004-4	GSC TR 96 # 8	- Surface	7	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.72	mm	mm	Footring	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 96 # 8	0-10 cm bgs	2	D	Ceramics	Whiteware	1	Undecorated	No	No	No	3.07	mm	mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 96 # 8	0-10 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.72	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0		Small Portion Of Embossed Letter Present At One Edge.		
L12P004-4	STP TR 96 # 8	10-20 cm bgs	1	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: vitrified	No	No	No	7.18	mm	mm	-	-	-	0	0				
L12P004-4	STP TR 96 # 8	20-30 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	1.55	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	20-30 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	0.99	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	20-30 cm bgs	4	A	Construction Material	Brick (measure in inches)	3	Indeterminate brick: non-vitrified	No	No	No	23.02	mm	mm	-	-	-	0	0		2 Pcs With Mortar On Exterior.		
L12P004-4	STP TR 96 # 8	20-30 cm bgs	5	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.53	mm	mm	-	-	-	0	0				
L12P004-4	STP TR 96 # 8	20-30 cm bgs	3	D	Ceramics	Whiteware	2	Molded	No	No	No	1.55	mm	mm	Rim	Indeterminate	Other - Indet	0	0		These 2 Sherds Fit Together And Are Most Likely Part Of A Plate Or Saucer.		
L12P004-4	STP TR 96 # 8	20-30 cm bgs	6	A	Nails	Indeterminate	1	Indeterminate	No	No	No	2.21	mm	mm	-	-	-	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, "Black" glass	No	No	No	11.95	mm	mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	1.11	mm	mm	-	-	-	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Olive green glass	No	No	No	0.23	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	4	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amethyst glass	No	No	No	0.69	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	5	D	Container Glass	Undiagnostic container fragment	3	Fragment, Clear glass	No	No	No	1.04	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	6	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.26	mm	mm	-	-	-	0	0		1.71 mm		

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L12P004-4	STP TR 96 # 8	30-40 cm bgs	7	A	Fiat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.23		mm	-	-		0	0		1.79mm		
L12P004-4	STP TR 96 # 8	30-40 cm bgs	8	A	Fiat Glass	Indeterminate	1	Fiat glass	No	No	No	0.31		mm	-	-		0	0		3.98mm		
L12P004-4	STP TR 96 # 8	30-40 cm bgs	9	A	Nails	Indeterminate	1	Indeterminate	No	No	No	4.98		mm	-	-		0	0				
L12P004-4	STP TR 96 # 8	30-40 cm bgs	10	M	General Hardware	Other Fasteners	1	Other Fastener	No	No	No	1.3		mm	-	-		0	0				
L12P004-4	GSC TR 96 # 9	- Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	0.21		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	1	D	Container Glass	Undiagnostic container fragment	3	Fragment, Clear glass	No	No	No	4.51		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	1.21		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	1.08		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	8	D	Ceramics	White ware	6	Undecorated	No	No	No	25.32		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	5	D	Glass Tableware	Press mold: unladed Undiagnostic container fragment	1	Amethyst glass Molded design/pattern	No	No	No	14.56		mm	Base	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	2.75		mm	Lip	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	9	D	Ceramics	White ware	1	Undecorated	No	No	No	2.21		mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	10	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	3.68		mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	11	D	Ceramics	White ware	1	Slip decorated Annular bands	Yes	No	No	0.71		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	13	D	Ceramics	Stone ware	1	Slipped exterior, Slipped interior	No	No	No	56.1		mm	Base	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 9	- Surface	12	A	Fittings and Hardware	Stone ware Water Pipe (weigh)	2	Hardware: Ceramic: earthenware	No	No	No	113.19		mm	-	-		0	0				
L12P004-4	GSC TR 96 # 9	- Surface	4	D	Container Glass	Undiagnostic container fragment	2	Fragment, Amethyst glass	No	No	No	3.29		mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	STP TR 96 # 9	0-10 cm bgs	1	D	Ceramics	White ware	1	Plain	No	No	No	0.33		mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 96 # 9	0-10 cm bgs	2	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	3.31		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 10	- Surface	1	D	Container Glass	Undiagnostic container fragment	2	Fragment, Blue-green glass	No	No	No	2.54		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 10	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	1.53		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 10	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	11.26		mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 10	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No			mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 10	- Surface	5	D	Container Glass	Undiagnostic container fragment	1	Indeterminate Clear glass Indeterminate lip	No	No	No	1.66		mm	Lip	Indeterminate bottle/jar	Bottle - Jar	0	0				



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L12P004-4	GSC TR 96 # 10	- Surface	7	A	Construction Material	Other	1	Construction material	No	No	No	59.62	mm	mm	-	-		0	0		Thick, Glazed, Ceramic Pipe Fragment.		
L12P004-4	GSC TR 96 # 10	- Surface	8	A	Construction Material	Other	1	Construction material	No	No	No	48.58	mm	mm	-	-		0	0		Thick Ceramic Tile, Glazed On One Side, Possible Plate Or Saucer Fragment With Partial Makers Mark.		
L12P004-4	GSC TR 96 # 10	- Surface	6	D	Ceramics	Whiteware	1	Transfer printed Green	No	No	No	6.42	mm	mm	Body	Indeterminate server	Serving	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	7.6	mm	mm	Base	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	16	A	Fittings and Hardware	Stoneware Water Pipe (weigh)	1	Fittings / HardwareCeramic: earthenware Unglazed exterior, Slipped interior Indeterminate -	No	No	No	76.6	mm	mm	-	-		0	0				
L12P004-4	GSC TR 96 # 11	- Surface	13	D	Ceramics	Stoneware	1	Indeterminate brick: non-vitrified	No	No	No	6.1	mm	mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	15	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	78.4	mm	mm	-	-		0	0		Fragment Has One Rounded Edge, And A Groove.		
L12P004-4	GSC TR 96 # 11	- Surface	14	A	Flat Glass	Indeterminate	1	Flat glass	No	No	No	0.4	mm	mm	-	-		0	0				
L12P004-4	GSC TR 96 # 11	- Surface	12	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior Indeterminate -	No	No	No	11.9	mm	mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	11	D	Ceramics	Whiteware	1	Transfer printed Dark blue Indeterminate	No	No	No	0.9	mm	mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	10	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.4	mm	mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	9	D	Ceramics	Yellowware	1	Slip decorated Annular	No	No	No	8.2	mm	mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	8	D	Ceramics	Yellowware	1	Plain	No	No	No	23.3	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	7	D	Ceramics	Whiteware	1	Plain	No	No	No	0.7	mm	mm	-	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	6	D	Ceramics	Whiteware	1	Molded	No	No	No	1.7	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	4	D	Ceramics	Whiteware	1	Plain	No	No	No	2	mm	mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	2.4	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	15.1	mm	mm	Body	Indeterminate bottle/jar	Bottle - Jar	0	0				
L12P004-4	GSC TR 96 # 11	- Surface	5	D	Ceramics	Whiteware	1	Plain	No	No	No	3.3	mm	mm	Base	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 96 # 11	0-10 cm bgs	1	A	Flat Glass	Window Glass	1	>2.41 mm thick	No	No	No	0.55	mm	mm	-	-		0	0		Colorless		
L12P004-4	STP TR 97 #3	-cm bgs	1	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.48	mm	mm	-	-		0	0		2.16mm		
L12P004-4	STP TR 97 #3	-cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	1.18	mm	mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 97 # 4	-cm bgs	1	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	0.41	mm	mm	-	-		0	0				
L12P004-4	STP TR 97 # 4	-cm bgs	2	D	Ceramics	Whiteware	1	Plain	No	No	No	6.38	mm	mm	Body	Indeterminate	Other - Indet	0	0				

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L12P004-4	GSC TR 97 #5	Surface	1	D	Ceramics	Ironstone	1	Transfer printed Green	No	No	No	3.36		mm	Base	Plate	Place Setting	0	0		Maker's Mark: Hori Sot' Qui Mal Y Pense (Shame Upon Him Who Thinks Evil Upon It) W Brit Coat Of Arms		
L12P004-4	STP TR 97 # 5	- cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	0.36		mm	Indeterminate part	Indeterminate	Other- Indet	0	0				
L12P004-4	STP TR 97 # 5	- cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.21		mm	Indeterminate part	Indeterminate	Other- Indet	0	0		Very Thin, Very Slight Curve		
L12P004-4	STP TR 97 # 5	- cm bgs	1	M	General Hardware	Indeterminate	1		No	No	No	23.89		mm	-	-		0	0		Thin Flat Ferrrous Metal Fragment 4.5 In Long (Can Not Determine Whether Complete Or Frag Due To Corrosion)		
L12P004-4	STP TR 97 #6	- cm bgs	3	M	General Hardware	Bolt	1	IndeterminateIron / SteelCast Square	No	No	No	60.7	11.3	mm	-	-		0	0				
L12P004-4	STP TR 97 #6	- cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Machine made brick: vitrified	No	No	No	30.2		mm	-	-		0	0		May Be Aqua-Colored Glass (Patina Makes It Difficult To Determine)		
L12P004-4	STP TR 97 #6	- cm bgs	4	A	Flat Glass	Window Glass	1	>2.41 mm thick	No	No	No	0.62		mm	-	-		0	0		Round Head And Shank (Possible Fragment But Too Corroded To Determine)-Bent Machine Cut (Too Corroded To Determine Early Or Late), 3 Head And Shank, 1 Shank Fragment		
L12P004-4	STP TR 97 #6	- cm bgs	5	A	Nails	Wire Nail	1		No	No	No	6.21		mm	-	-		0	0		Determine Early Or Late), 3 Head And Shank, 1 Shank Fragment		
L12P004-4	STP TR 97 #6	- cm bgs	6	A	Nails	Cut Nail: unspecified	4		No	No	No	29.35		mm	-	-		0	0		Shank Fragments, Heavily Corroded, 1 Thick, 3 Average Thickness		
L12P004-4	STP TR 97 #6	- cm bgs	6	A	Nails	Indeterminate	4		No	No	No	19.63		mm	-	-		0	0		Thin, Flat		
L12P004-4	STP TR 97 #6	- cm bgs	1	D	Ceramics	White ware	1	Plain	No	No	No	0.43		mm	Body	Indeterminate	Other- Indet	0	0		Thin, Flat		
L12P004-4	STP TR 97 # 7	- cm bgs	1	D	Ceramics	White ware	1	Plain	No	No	No	0.71		mm	Body	Indeterminate	Other- Indet	0	0		Thin, Flat		
L12P004-4	STP TR 98 3 2	0-5 cm bgs	1	A	Construction Material	Mortar	1	Fragment,	No	No	No	60.77	20.34	mm	-	-		0	0		Compact, Possible Burned On One Side Bluish-Gray Glaze On Exterior Edge Of Paste. Interior Has Dark Brown Slip. Medium To Thick Curved, 1 Curved		
L12P004-4	STP TR 98 3 2	0-5 cm bgs	2	D	Ceramics	Stoneware	1	Salt glazed exterior, Slipped interior	No	No	No	5.08		mm	Body	Indeterminate	Other- Indet	0	0				
L12P004-4	STP TR 98 3 2	0-5 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.4		mm	Body	Indeterminate	Other- Indet	0	0		Thin To Medium Thick, 1 Slightly Curved, 1 Curved		
L12P004-4	STP TR 98 # 5	0-10 cm bgs	3	D	Ceramics	White ware	1	Transfer printed Blue-green / aqua / turquoise	No	No	No	0.92		mm	Body	Indeterminate	Other- Indet	0	0		Thin Fragment. Blue-Green Floral Transfer Print. Possibly Embossed As Well		
L12P004-4	STP TR 98 # 5	0-10 cm bgs	1	D	Ceramics	Stoneware	1	Slipped exterior, Unglazed interior	No	No	No	67.7		mm	Body	Indeterminate	Other- Indet	0	0		Applied Handle Fragment Visible. Black Slip On Exterior. Turn Lines On Interior		
L12P004-4	STP TR 98 # 5	0-10 cm bgs	2	D	Ceramics	Ironstone	1	Plain	No	No	No	46.77		mm	Rim, body, base	Indeterminate	Other- Indet	0	0		Very Thick Fragment		
L12P004-4	STP TR 98 # 5	0-10 cm bgs	4	B	Faunal Remains	Bone / tooth / claw	1		No	No	No	10.38	10.79	mm	-	-		0	0		Machine Cut Long Bone Fragment		

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L12P004-4	STP TR 98 # 5	0-10 cm bgs	5	A	Fittings and Hardware	Stoneware Water Pipe (weigh)	1	Fittings / Hardware	No	No	No	92.78	mm		-	-		0	0		Brown Salt Glaze On Both Sides. Embossed Maker's Mark: "...S. Dic"... Lettering Is Horizontal		
L12P004-4	STP TR 98 # 5	0-10 cm bgs	6	A	Fittings and Hardware	Other	1	Fittings / Hardware	No	No	No	94.61	mm		-	-		0	0		Salt Glazed On Both Sides-Tan Very Thick Base		
L12P004-4	STP TR 98 # 7	- cm bgs	1	D	Glass Tableware	Undiagnostic fragment	1	Clear unleaded glass Undecorated / Plain	No	No	No	67.94	mm		Base	Indeterminate	Other - Indet	0	0		Fragment. Tapers As It Moves Up From Base. Cake Stand? Vase?		
L12P004-4	STP TR 98 # 7	- cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.3	mm		Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Curved		
L12P004-4	GSC TR 99 # 1	Surface	4	D	Ceramics	Yellowware	1	Plain	No	No	No	3.18	mm		Base	Indeterminate	Other - Indet	0	0		Medium Thick. Body Angles Outwardly From Base		
L12P004-4	GSC TR 99 # 1	Surface	5	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	4.45	mm		Body	Indeterminate	Other - Indet	0	0		Thin, Curved Fragment. Brown With Tan Or Yellowish Slip On Ext. Brown Slip On Interior		
L12P004-4	GSC TR 99 # 1	Surface	6	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	15.85	mm		Rim with body	Jug	Utility Vessel	0	0		Medium To Thick. Black Slip On Interior And Exterior, Curved		
L12P004-4	GSC TR 99 # 1	Surface	7	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	14.66	mm		Footring with base	Indeterminate	Other - Indet	0	0		Thick Fragment. Body Angled Outwardly From Base. Gray Paste Medium Thickness.		
L12P004-4	GSC TR 99 # 1	Surface	8	D	Ceramics	Stoneware	1	Bristol slipped exterior, Slipped interior	No	No	No	10.52	mm		Footring with base	Indeterminate	Other - Indet	0	0		Black Slipped Interior. Body Has Slight Inward Angle From Base. Gray Paste		
L12P004-4	GSC TR 99 # 1	Surface	9	D	Ceramics	Stoneware	1	Bristol slipped exterior, Bristol slipped interior	No	No	No	3.48	mm		Body	Indeterminate	Other - Indet	0	0		Medium Thick, Flat. Gray Paste		
L12P004-4	GSC TR 99 # 1	Surface	1	D	Ceramics	Whiteware	4	Plain	No	No	No	12.23	mm		Body	Indeterminate	Other - Indet	0	0		1 Thin, 2 Medium, 1 Thick Fragment. All Relatively Flat		
L12P004-4	GSC TR 99 # 1	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	9.36	mm		Handle	Indeterminate	Other - Indet	0	0		Approx. 1 In Wide Fragment. Medium To Thick		
L12P004-4	GSC TR 99 # 1	Surface	3	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	0.51	mm		Body	Indeterminate	Other - Indet	0	0		Only 1 Surface Of Fragment Remains Intact-Can Not Determine Thickness.		
L12P004-4	GSC TR 99 # 2	Surface	1	D	Container Glass	Automatic Bottle Machine	1	Post bottom mold/Amethyst glass Recessed panel Indeterminate lip	No	No	No	34.91	mm		Base	Indeterminate	Other - Indet	0	0		Thick Base Fragment. Probably A Small Rectangular Jar/Bottle		
L12P004-4	GSC TR 99 # 2	Surface	2	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior Incised lines -	No	No	No	8.75	mm		Body with base	Indeterminate	Other - Indet	0	0		Blue Slip On Ext W Horizontal Incised Lines & Possibly Applied Oval Shapes. Thin To Med. Gray Paste		
L12P004-4	GSC TR 99 # 2	Surface	3	D	Ceramics	Whiteware	1	Plain	No	No	No	7.79	mm		Footring with base	Indeterminate	Other - Indet	0	0		Thin To Medium Thick. Curved		
L12P004-4	GSC TR 99 # 2	Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	0.49	mm		Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Curved		
L12P004-4	GSC TR 99 # 2	Surface	5	C	Buttons	Sew-through	1	Four holesOne-piece domed Prosser: plain	No	No	No	0.53	mm		-	-		0	0		18 Line, Complete Button. Dish Type		
L12P004-4	GSC TR 99 # 3	Surface	1	D	Ceramics	Whiteware	3	Plain	No	No	No	13.17	mm		Body	Indeterminate	Other - Indet	0	0		2 Thin, Curved. 1 Thin To Medium, Flat		

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L12P004-4	GSC TR 99 # 3	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.55		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness. Includes Piece Of Glass That Juts Out From The Surface Creating A Shallow Ledge		
L12P004-4	GSC TR 99 # 3	- Surface	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	5.24		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Slight Curve		
L12P004-4	GSC TR 99 # 3	- Surface	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	13.75		mm	Body	Indeterminate	Other - Indet	0	0		Medium To Thick Milk Glass, Curved		
L12P004-4	GSC TR 99 # 3	- Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	3.8		mm	Lip	Indeterminate	Other - Indet	0	0		Indeterminate Lip Fragment-Broken, Small, Thin To Medium		
L12P004-4	GSC TR 99 #4	- Surface	1	D	Ceramics	White ware	1	Plain	No	No	No	11.28		mm	Footring with base	Plate	Place Setting	0	0		Medium To Thick, Flat, Very Shallow Footring		
L12P004-4	GSC TR 99 #4	- Surface	2	D	Ceramics	Yellow ware	1	Plain	No	No	No	7.31		mm	Rim	Indeterminate	Other - Indet	0	0		Medium To Thick, Broken/Eroded, Medium To Thick, Curved		
L12P004-4	GSC TR 99 #4	- Surface	3	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	4.2		mm	Body	Indeterminate	Other - Indet	0	0		Very Thin, Curved		
L12P004-4	GSC TR 99 #4	- Surface	4	D	Ceramics	Ironstone	1	Plain	No	No	No	24.07		mm	Body with base	Indeterminate	Other - Indet	0	0		Thick, Base Unglazed, Body Glazed, Void Visible On Int-Vessel May Have Been Made By Folding Over		
L12P004-4	GSC TR 99 #4	- Surface	5	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	0.87		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thick, Curved		
L12P004-4	GSC TR 99 #4	- Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	30.51		mm	Base	Indeterminate	Other - Indet	0	0		Post Mold Mark, Embossed Maker's Mark-Only "...Co." Visible On Frag, Thick		
L12P004-4	GSC TR 99 #4	- Surface	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	23.11	7.01	mm	Lip with neck	Indeterminate	Other - Indet	0	0		Oil Finish Lip, No Seam Visible-Can Not Determine Type From Frag, Long Neck-Bitters Bottle?		
L12P004-4	GSC TR 99 # 5	- Surface	1	M	General Hardware	Indeterminate	1		No	No	No	14.97	1	in.	-	-		0	0		Small Round Ceramic Hardware Fragment With Hole Through It, Embossed With Letter "F"		
L12P004-4	GSC TR 99 # 5	- Surface	2	D	Ceramics	White ware	6	Plain	No	No	No	14.22		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium Thickness, 2 With Slight Curve, 4 Flat		
L12P004-4	GSC TR 99 # 5	- Surface	3	D	Ceramics	Ironstone	1	Plain	No	No	No	10.83		mm	Rim, body, base	Indeterminate	Other - Indet	0	0		Medium Thickness, Nearly Flat, Rim Curves Up From Base		
L12P004-4	GSC TR 99 # 5	- Surface	4	D	Ceramics	Porcelain: hard paste	1	Undecorated	No	No	No	1.19		mm	Body	Indeterminate	Other - Indet	0	0		Thin, Slight Curve		
L12P004-4	GSC TR 99 # 6	- Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	19.19		mm	Other part	Indeterminate	Other - Indet	0	0		Slopper Fragment, Much Patina		
L12P004-4	GSC TR 99 # 6	- Surface	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Cobalt glass	No	No	No	3.31		mm	Lip	Indeterminate	Other - Indet	0	0		Bead Finish, Medium Thickness		

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno
L12P004-4	GSC TR 99 # 6	Surface	3	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	63.48	mm	mm	Body with base	Indeterminate	Other - Indet	0	0		Thin To Medium Thick. Gray Paste, Cream Ext Slip, Dark Brown Int Slip (Turn Lines Unsmoothed) Medium Thickness (Base Thick, Cream Paste And Slip/Glaze. Body Extends Straight Up From Base Medium Thick, Cream Paste And Slip/Glaze. Packer & Grooved Ring Type Finishes. Assoc W #4?	
L12P004-4	GSC TR 99 # 6	Surface	4	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	36.25	mm	mm	Body with base	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 99 # 6	Surface	5	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	7.52	mm	mm	Lip	Jug	Utility Vessel	0	0			
L12P004-4	GSC TR 99 # 6	Surface	6	D	Ceramics	Whiteware	1	Transfer printed Green	No	No	No	7.36	mm	mm	Base	Indeterminate	Other - Indet	0	0			
L12P004-4	STP TR 100 # #4	-20 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	1.01	mm	mm	Body	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	1	D	Ceramics	Whiteware	1	Slip decorated Annular bands	No	No	No	1.61	mm	mm	Body	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	2	D	Ceramics	Whiteware	1	Plain	No	No	No	4.79	mm	mm	Rim, body, base	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	3	D	Ceramics	Whiteware	2	Plain	No	No	No	5.96	mm	mm	Body	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	4	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	24.98	mm	mm	Body with base	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	5	D	Container Glass	Automatic Bottle Machine	1	IndeterminateCobalt glass Indeterminate Double ring	No	No	No	5.69	mm	mm	Lip with neck	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	8.18	mm	mm	Lip with neck	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	7	D	Container Glass	Semi- Automatic	1	IndeterminateAmber glass Indeterminate Other -	No	No	No	21.23	mm	mm	Lip with neck	Indeterminate	Other - Indet	0	0			
L12P004-4	GSC TR 100 # 5	Surface	8	D	Container Glass	Semi- Automatic	1	IndeterminateAmethyst glass Indeterminate Other -	No	No	No	32.64	mm	mm	Lip with neck	Indeterminate	Other - Indet	1890	1915	picnic style double ring finish most popular between 1890 to 1915		
L12P004-4	GSC TR 100 # 5	Surface	9	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	10.66	mm	mm	Body	Indeterminate	Other - Indet	0	0			

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
L12P004-4	GSC TR 100 # 5	Surface	10	D	Container Glass	Automatic Bottle Machine	1	Owens mold Amber glass Recessed panel Indeterminate lip	No	No	No	79.36		mm	Body with base	Indeterminate	Other - Indet	1916	1929	Owen's mark is post 1905; Diamond I dates between 1916 and 1929 (Toulouse 1971)	Diamond With Capital "T"-Illinois Glass Company (Owens). Medium Thick, Rectangular		
L12P004-4	STP TR 100 # 5	0-17 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.72		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Very Thin, Curved		
L12P004-4	STP TR 100 # 5	0-17 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Aqua glass	No	No	No	3.85		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Curved		
L12P004-4	STP TR 100 # 5	0-17 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Opaque white glass	No	No	No	0.54		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Flat Milk Glass		
L12P004-4	STP TR 100 # 5	0-17 cm bgs	4	D	Ceramics	Whiteware	1	Plain	No	No	No	1.68		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium With Slight Curve		
L12P004-4	STP TR 100 # 5	35-50 cm bgs	7	D	Ceramics	Pearlware	1	Undecorated	No	No	No	1		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	1	A	Nails	Indeterminate	1	Indeterminate	No	No	No	10.4		mm	-	-	Other - Indet	0	0		Heavily Corroded.		
L12P004-4	STP TR 100 # 5	35-50 cm bgs	1	A	Nails	Cut Nail: unspecified	1	8d Pulled Common	No	No	No	10.4		mm	-	-	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	6	D	Ceramics	Pearlware	1	Undecorated	Yes	No	No	1.1		mm	Handle	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	3	U	Metal	Iron / Steel	1	Flat: thick	No	No	No	44.1		mm	-	-	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	5	D	Ceramics	Whiteware	1	Plain	No	No	No	0.8		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Amber glass	No	No	No	0.4		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	35-50 cm bgs	4	D	Container Glass	Undiagnostic container fragment	7	Fragment, Clear glass	No	No	No	7.3		mm	Body	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	1	D	Container Glass	Undiagnostic container fragment	3	Fragment, Clear glass	No	No	No	1.32		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	2	D	Container Glass	Undiagnostic container fragment	2	Fragment, Aqua glass	No	No	No	5		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	3	D	Glass Tableware	Undiagnostic fragment	1	Clear unleaded glass Molded design/pattern	No	No	No	5.05		mm	Indeterminate part	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	4	D	Ceramics	Whiteware	1	Plain	No	No	No	1.49		mm	Body with base	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	5	D	Ceramics	Whiteware	1	Plain	No	No	No	0.79		mm	Rim	Indeterminate	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	7	A	Construction Material	Brick (measure in inches)	4	Indeterminate brick: non-vitrified	No	No	No	3.64		mm	-	-	Other - Indet	0	0				
L12P004-4	STP TR 100 # 5	50-70 cm bgs	8	A	Nails	Indeterminate	2		No	No	No	5.46		mm	-	-	Other - Indet	0	0				

Determine Types, Etc

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
L12P004-4	STP TR 100 #5	50-70 cm bgs	9	A	Nails	Cut Nail: unspecified	1		No	No	No	1.45		mm	-	-		0	0		Machine Cut Nail. Head And Shank Fragment-Too Corroded To Determine Early Or Late Machine		
L12P004-4	STP TR 100 #5	50-70 cm bgs	6	D	Ceramics	WhiteWare	1	Plain	No	No	No	0.28		mm	Body	Indeterminate	Other - Indet	0	0		Thin To Medium, Flat		
L12P004-4	GSC TR 100 #8	Surface	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.97		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thickness, Curved		
L12P004-4	STP TR 100 #8	0-13 cm bgs	1	M	General Hardware	Bolt	1	IndeterminateIron / SteelCast Hex	No	No	No	65.73	13.12	mm	-	-		0	0		2.5 In. Possibly Complete Bolt		
L12P004-4	STP TR 100 #8	0-13 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	0.63		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Curved		
L12P004-4	STP TR 100 #8	0-13 cm bgs	3	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	1.26		mm	Lip	Indeterminate	Other - Indet	0	0		External Thread Lip Fragment-Can Not Determine Type From Fragment		
L12P004-4	STP TR 100 #9	5-15 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	1.3		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Curved		
L12P004-4	STP TR 100 #9	5-15 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Green glass	No	No	No	0.17		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Very Thin, Flat		
IF	STP TR 222 #6	15 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	3.3		mm	Body	Indeterminate	Other - Indet	0	0				
16RA692	STP #1	0-10 cm bgs	1	A	Nails	Indeterminate	6		No	No	No	39.89		mm	-	-		0	0		5 Head And Shank Frag, 1 Shank Fragment-Too Corroded To Determine Type And Shank Fragments-Can Not Determine Whether Early Or Late		
16RA692	STP #1	0-10 cm bgs	2	A	Nails	Cut Nail: unspecified	2		No	No	No	32.54		mm	-	-		0	0				
16RA692	STP #1	0-10 cm bgs	3	A	Nails	Wire Nail	1	8d Indeterminate	No	No	No	5.08		mm	-	-		0	0				
16RA692	STP #1	0-10 cm bgs	5	D	Glass Tableware	Undiagnostic fragment	1	Clear unleaded glass Molded design/pattern	No	No	No	1.43		mm	Rim	Indeterminate	Other - Indet	0	0		Very Thin, Curved. Undulating Rim Decoration		
16RA692	STP #1	0-10 cm bgs	6	D	Container Glass	Undiagnostic container fragment	2	Fragment, Aqua glass	No	No	No	4.9		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thick, Curved		
16RA692	STP #1	0-10 cm bgs	7	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	0.97		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Thin, Slight Curve		
16RA692	STP #1	0-10 cm bgs	8	D	Ceramics	Stoneware	1	Slipped exterior, Slipped interior	No	No	No	6.74		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Slight Curve. White Slip On Exterior, Dark Brown Slip On Interior		
16RA692	STP #1	0-10 cm bgs	9	D	Ceramics	WhiteWare	1	Plain	No	No	No	2.95		mm	Rim	Indeterminate	Other - Indet	0	0		Thin, With Very Slight Curve		
16RA692	STP #1	0-10 cm bgs	10	D	Ceramics	WhiteWare	1	Plain	No	No	No	2.29		mm	Body	Indeterminate	Other - Indet	0	0		Medium Thick, Flat		
16RA692	STP #1	0-10 cm bgs	4	M	General Hardware	Indeterminate	2	Iron / Steel	No	No	No	144.76		mm	-	-		0	0		2 Amorphous Corroded Metal Fragment		
16RA692	STP #1	10-20 cm bgs	1	A	Nails	Indeterminate	3		No	No	No	20.95		mm	-	-		0	0		3 Very Corroded Head And Shank Fragments		
16RA692	STP #1	10-20 cm bgs	2	A	Flat Glass	Window Glass	1	0.86 - 2.41 mm thick	No	No	No	1.3		mm	-	-		0	0		Slight Aqua Color		
16RA692	STP #1	10-20 cm bgs	3	U	Metal	Iron / Steel	1	Amorphous	No	No	No	16.66		mm	-	-		0	0		Somewhat Round		

Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord	
16RA692	STP #1	10-20 cm bgs	4	D	Ceramics	Whiteware	1	Plain	No	No	No	1.58		mm	Body	Indeterminate	Other - Indet	0	0		Slight Curve, Medium Thick			
16RA692	STP #1	10-20 cm bgs	5	D	Ceramics	Porcelain: hard paste	1	Transfer print Two colors	No	No	No	1.04		mm	Body	Indeterminate	Other - Indet	0	0		Green Leaves Outlined In Pink. Thin, Flat Fragment			
16RA692	STP #1	20-30 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	1.23		mm	Body	Indeterminate	Other - Indet	0	0		Thin, Slightly Curved			
16RA692	STP #1	20-30 cm bgs	2	D	Container Glass	Undiagnostic container fragment	1	Fragment, Blue-green glass	No	No	No	3.74		mm	Indeterminate part	Indeterminate	Other - Indet	0	0		Medium Thickness. Somewhat Flat. Fragment Has Strangely Shaped Rim And Surface Damage-Melted?			
16RA692	STP #1	20-30 cm bgs	3	M	General Hardware	Indeterminate	1		No	No	No	102.99		mm	-	-		0	0		Very Corroded, Oddly Shaped Ferrous Metal Fragment			
16RA692	STP #1	20-30 cm bgs	4	A	Nails	Wire Nail	1	12d Indeterminate Common	No	No	No	8.88		mm	-	-		0	0		1 Complete, Relatively Straight			
16RA692	STP #1	20-30 cm bgs	5	A	Nails	Wire Nail	2	Clinched Common	No	No	No	17.21		mm	-	-		0	0		2 Fragment: 1 Head And Shank. 1 Shank			
16RA692	STP #1	20-30 cm bgs	5	A	Nails	Indeterminate	1	Indeterminate	No	No	No	2.96		mm	-	-		0	0		1 Heavily Corroded Fragment			
16RA692	STP #2	10-20 cm bgs	1	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: vitrified	No	No	No	42.1		mm	-	-		0	0					
16RA692	STP #2	10-20 cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Machine made brick: vitrified	No	No	No	83.96		mm	-	-		0	0			Bright Red		
16RA692	STP #2	10-20 cm bgs	3	A	Construction Material	Brick (measure in inches)	1	Indeterminate brick: non-vitrified	No	No	No	65.34		mm	-	-		0	0			Unidentified Mass Attached To Shank0		
16RA692	STP #2	10-20 cm bgs	4	A	Nails	Wire Nail	1	16d Indeterminate Common	No	No	No	17.32		mm	-	-		0	0			Thin With Curves		
16RA692	STP #2	10-20 cm bgs	5	D	Ceramics	Whiteware	1	Plain	No	No	No	4.73		mm	Rim	Indeterminate	Other - Indet	0	0		Embossed Diamond Decoration, Medium Thickness, Relatively Flat			
16RA692	STP #2	10-20 cm bgs	6	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	2.5		mm	Body	Indeterminate	Other - Indet	0	0					
16RA692	STP #2	20-30 cm bgs	1	A	Construction Material	Brick (measure in inches)	9	Indeterminate brick: non-vitrified	No	No	No	9.02		mm	-	-		0	0					
16RA692	STP #2	20-30 cm bgs	3	D	Container Glass	Undiagnostic container fragment	4	Fragment, Clear glass	No	No	No	1.65		mm	Indeterminate part	Indeterminate	Other - Indet	0	0			Thin, Curved		
16RA692	STP #2	20-30 cm bgs	4	D	Container Glass	Undiagnostic container fragment	1	Fragment, Clear glass	No	No	No	14.54		mm	Body with base	Indeterminate	Other - Indet	0	0			Recessed Panel, Narrow Rectangular Bottle		
16RA692	STP #2	20-30 cm bgs	2	A	Construction Material	Brick (measure in inches)	1	Machine made brick: vitrified	No	No	No	2.7		mm	-	-		0	0					
16RA692	STP #2	30-40 cm bgs	1	A	Nails	Cut / Wrought Nail	1	Indeterminate	No	No	No	5.73		mm	-	-		0	0		Indetermine Fragment			
16RA703	STP #1	10-20 cm bgs	1	D	Ceramics	Whiteware	1	Plain	No	No	No	11.5		mm	Body	Indeterminate	Other - Indet	0	0			Green Slip, Molded Pattern Present As Well, Matches To Three Pieces In Bag		
16RA703	STP #1	10-20 cm bgs	2	D	Ceramics	Whiteware	1	Slip decorated Other	No	No	No	4.8		mm	Rim	Indeterminate	Other - Indet	0	0					
16RA703	STP #1	20-30 cm bgs	2	D	Container Glass	Undiagnostic container fragment	2	Fragment, Clear glass	No	No	No	5.6		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0					



Site	Unit #	Dep	Cat #	Group	Class Definition	Type Definition	Count	Combined Attributes	Burned	ID	Discard	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	Mindate	Maxdate	References	Comments	Figno	Figord
16RA703	STP #1	20-30 cm bgs	3	A	Nails	Wire Nail	1	8d Pulled Common	No	No	No	4.2		mm	-	-		0	0				
16RA703	STP #1	20-30 cm bgs	4	D	Ceramics	Whiteware	1	Slip decorated Other	No	No	No	3.7		mm	Body	Indeterminate	Other - Indet	0	0		Green Slip. Molded On Other Two Pieces From This Bag. Matches To One Piece In Bag 156.		
16RA703	STP #1	20-30 cm bgs	5	D	Ceramics	Whiteware	1	Slip decorated Other	No	No	No	13.6		mm	Rim	Indeterminate	Other - Indet	0	0		Green Slip. Molded Pattern Present As Well. Matches To One Body Sherd In This Bag And One Rim In 156		
16RA703	STP #1	20-30 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	Fragment, Light green glass	No	No	No	1.8		mm	Indeterminate part	Indeterminate bottle/jar	Bottle - Jar	0	0				
16RA703	GSC #2	- Surface	1	D	Container Glass	Automatic Bottle Machine	1	Owens moldAmber glass Embossed External thread	No	No	No	75		mm	-	Medicine	Bottle - Jar	1940	0	stippling ->1940, "y" date given on mark could only be 1940.	Owen's Scar And Diamond O-I Mark. Stippling On Bottom. Bottling Plant 4, 1940 Date. Ridged One Side		
16RA703	STP #2	10-20 cm bgs	1	D	Container Glass	Undiagnostic container fragment	1	IndeterminateClear glass Embossed Indeterminate lip	No	No	No	2.7		mm	Body	Indeterminate	Other - Indet	0	0				