Contract Publication Series 15-167

Exhibit UA, Holly Ridge Northeast Site Historic Preservation Phase 1

A PHASE I CULTURAL RESOURCE SURVEY OF THE PROPOSED HOLLY RIDGE NORTHEAST DEVELOPMENT IN RICHLAND PARISH, LOUISIANA

by
Benajmin J. Bilgri,
and Paul D. Bundy

Prepared for

Denmon Engineering, Inc.

Prepared by

cra
cultural resource analysts, inc

Kentucky | West Virginia | Ohio
Wyoming | Illinois | Indiana | Louisiana | Tennessee
Utah | Virginia | Colorado

Contract Publication Series 15-167

A PHASE I CULTURAL RESOURCE SURVEY OF THE PROPOSED HOLLY RIDGE NORTHEAST DEVELOPMENT IN RICHLAND PARISH, LOUISIANA

By
Benjamin J. Bilgri and Paul D. Bundy

Prepared for

Randy Denmon
Denmon Engineering, Inc.
P.O. Box 8460
Monroe, Louisiana 71211
randy@denmon.com
www.denmon.com

Prepared by

Cultural Resource Analysts, Inc.
7330 Fern Avenue, Suite 1104
Shreveport, Louisiana 71105
Phone: (318) 213-1385
Email: bundypauld@crai-ky.com
www.crai-ky.com
CRA Project No.: L15D001

Paul D. Bundy, MA, RPA
Principal Investigator

June 8, 2015

ABSTRACT

Cultural Resource Analysts, Inc., personnel completed a cultural resource file search and intensive field survey during the period extending from February 18 to April 27, 2015, as part of the Louisiana Economic Development certification process for the Holly Ridge Northeast property in Richland Parish, Louisiana. This property consists of a single tract measuring approximately 110 ha (272 acres) in area and is located to the south of the community of Holly Ridge, Louisiana.

The records review consisted of a search of online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology, correspondence with the project proponent regarding recently completed work on the property, and a review of historic maps to identify any cultural resources or cultural resource investigations previously documented in the area. The records review indicated that six cultural resource investigations (22-0091, 22-1183, 22-1703, 22-1835, 22-4252, and a reconnaissance survey), and 13 archaeological sites (16RI80, 16RI213, 16RI238–239, 16RI241–245, and 16RI302–16RI305) had been previously documented within a 1.6 km (1.0 mi) radius of the project area. In addition, the review of historic maps indicated that 55 structures were mapped within the project area, suggesting that historic cultural resources were likely to be found in the area.

Of the previous work in the area, one project, the reconnaissance survey, previously examined the current project area in a reconnaissance-level pedestrian survey. That work identified a number of field loci and documented one site in the project area (16RI302). As the reconnaissance survey was intended for planning purposes, no systematic subsurface investigation or site delineation was performed during that investigation.

The current field investigation consisted of a shovel test survey with screened 30-x-30 cm (12-x-12 in) shovel tests excavated at 30 or 50 m (98 or 164 ft) intervals, depending upon the probability of encountering cultural material, as outlined in the Louisiana Office of Cultural Development, Division of Archaeology guidelines. The entire project area was also visually inspected for cultural material during the shovel test survey. This work resulted in the recording of 10 new archaeological sites (16RI321–16RI330) and 2 isolated finds. The location of the site previously documented in the project area during the reconnaissance survey (16RI302) was revisited and examined, but no cultural material associated with this site could be located on the surface or in the shovel tests conducted at the location.

All of the cultural resources documented during this project were investigated following the Louisiana Office of Cultural Development, Division of Archaeology guidelines, including the previously documented site and field loci. Due to a high level of disturbance and lack of integrity, all 11 of the archaeological sites (16RI302 and 16RI321–330) and the 2 isolated finds documented within the investigated area have a low research potential. As a result, these sites are recommended as not eligible for listing in the National Register of Historic Places, and no further work is recommended.

Based on the findings of the records review and cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the National Register of Historic Places will be affected by the proposed development of the property. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

Chapter 1. Introduction

During the period extending from February 18 to April 27, 2015, Cultural Resource Analysts, Inc. (CRA), personnel completed a cultural resource file search and intensive field survey as part of the Louisiana Economic Development certification process for a property in Richland Parish, Louisiana (Figure 1.1). The Holly Ridge Northeast property consists of a single tract measuring approximately 110 ha (272 acres) in area and is located to the south of the community of Holly Ridge, Louisiana (Figure 1.2). This survey was conducted at the request of Denmon Engineering, Inc.

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

Purpose of Study

The purpose of this survey 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 the development of the project area. All associated field notes, records, and site photographs will be curated at the Louisiana Office of Cultural Development, Division of Archaeology.

All work associated with this investigation was conducted pursuant to standards set forth by the Louisiana Office of Cultural Development, Division of Archaeology (SHPO), to comply with the National Historic Preservation Act (NHPA) of 1966, as amended (36 CFR 800). *Louisiana's Comprehensive Archaeological Plan* (LCAP) was referred to for guidance during this investigation (Smith et al. 1983).

Project Description

The goal of the current project is to complete the Louisiana Economic Development certification process in order to make the Holly Ridge Northeast property available for potential development. The property is located to the east of the town of Rayville and west of the town of Delhi, in northeastern Richland Parish, Louisiana (Figure 1.2). The project area is bound on the south by Interstate 20 and an arbitrary boundary; on the north by an arbitrary boundary and a railroad line adjacent to US Highway 80; on the east by an arbitrary boundary; and on the west by an arbitrary boundary, LA 183, and the westbound Interstate 20 Exit 145 exit ramp. Measuring roughly 110 ha (272 acres) in area, the project area occupies portions of Sections 11 and 14 of Township 17N, Range 8E.

Summary of Findings

A records review using data available from SHPO was conducted to identify any cultural resources or cultural resource investigations previously documented in the area. The review consisted of a search of online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology; correspondence with the project proponent regarding recently completed work on the property; and a review of historic maps. The review indicated that six previous cultural resource investigations (22-0091, 22-1183, 22-1703, 22-1835, 22-4252, and a reconnaissance survey) and 13 archaeological sites (16RI80, 16RI213, 16RI238–239, 16RI241–245, and 16RI302–16RI305) had been previously documented within a 1.6 km (1.0 mi) radius of the project area. In addition, the review of

historic maps indicated that 55 structures were depicted within the project area on historic United States Geological Survey (USGS) topographic quadrangles.

Of these prior investigations, one project (the reconnaissance survey) had previously examined the current project area with a reconnaissance-level pedestrian survey. That work identified a number of field loci and documented one site in the project area (16RI302). As the reconnaissance survey was intended for planning purposes, no systematic subsurface investigation or site delineation was performed during that investigation.

The current field investigation consisted of a pedestrian survey of the entire project area along with the excavation of shovel tests on a 30 m (98 ft) grid in high probability zones and a 50 m (164 ft) grid in low probability zones. In practice, shovel tests were excavated on a 50 m (164 ft) grid throughout the entire project area, since no perennial water sources were within 200 m (656 ft) of the project area boundaries (Figure 1.3). Over the course of the project, 439 shovel tests were excavated on 48 transects, and an additional 519 shovel tests were excavated during site delineation, for a total of 958 shovel tests excavated within the project area. Of this total, 191 shovel tests were positive for cultural material.

Ten new archaeological sites (16RI321–16RI330) and two isolated finds were recorded as a result of the field survey. In addition, the location of the site previously documented in the project area during the reconnaissance survey (16RI302) was revisited and examined, but no cultural material associated with this site could be located on the surface or in the shovel tests conducted at the location. All 10 archaeological sites in the project area (16RI321–16RI330) from which artifacts were recovered consist of very low to high density scatters of historic artifacts.

Due to a high level of disturbance and lack of integrity, all 11 of the archaeological sites (16RI302 and 16RI321–330) and the 2 isolated finds documented within the project area have a low research potential. As a result, these sites are recommended as not eligible for listing in the National Register of Historic Places (NRHP), and no further work is recommended.

Based on the findings of the records review and cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the NRHP will be affected by the proposed development of the property. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

Report Organization

This report is organized into seven numbered chapters. Chapter 1 provides an overview of the project and summarizes the results of the cultural resource investigation. Chapter 2 is an overview of the environmental setting of the project area. Previous investigations and the results of the background records review of the project area are in Chapter 3 along with a cultural overview of the area. Chapter 4 details the methodological approach and research design of the cultural resource investigation. Chapter 5 details the results of artifact analysis. Chapter 6 details the results of the current investigation. A report summary and recommendations regarding future work in the project area are presented in Chapter 7.

Project Personnel

Paul D. Bundy served as project Principal Investigator. Fieldwork was conducted by Benjamin Bilgri, Kirsten Atwood, Aaron Geary, Aaron Harth, Gilson Killhour, Katrina Miller, Caitlin Payne, Jason Ross, and Cecilia Szmutko. Artifact analysis was conducted by Sarah Bourget. Benjamin Bilgri and Paul Bundy conducted the archaeological file search utilizing online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology and State Historic Preservation Office. Benjamin Bilgri and Paul Bundy authored the report. Final report production was completed by the CRA CAD and publications departments.

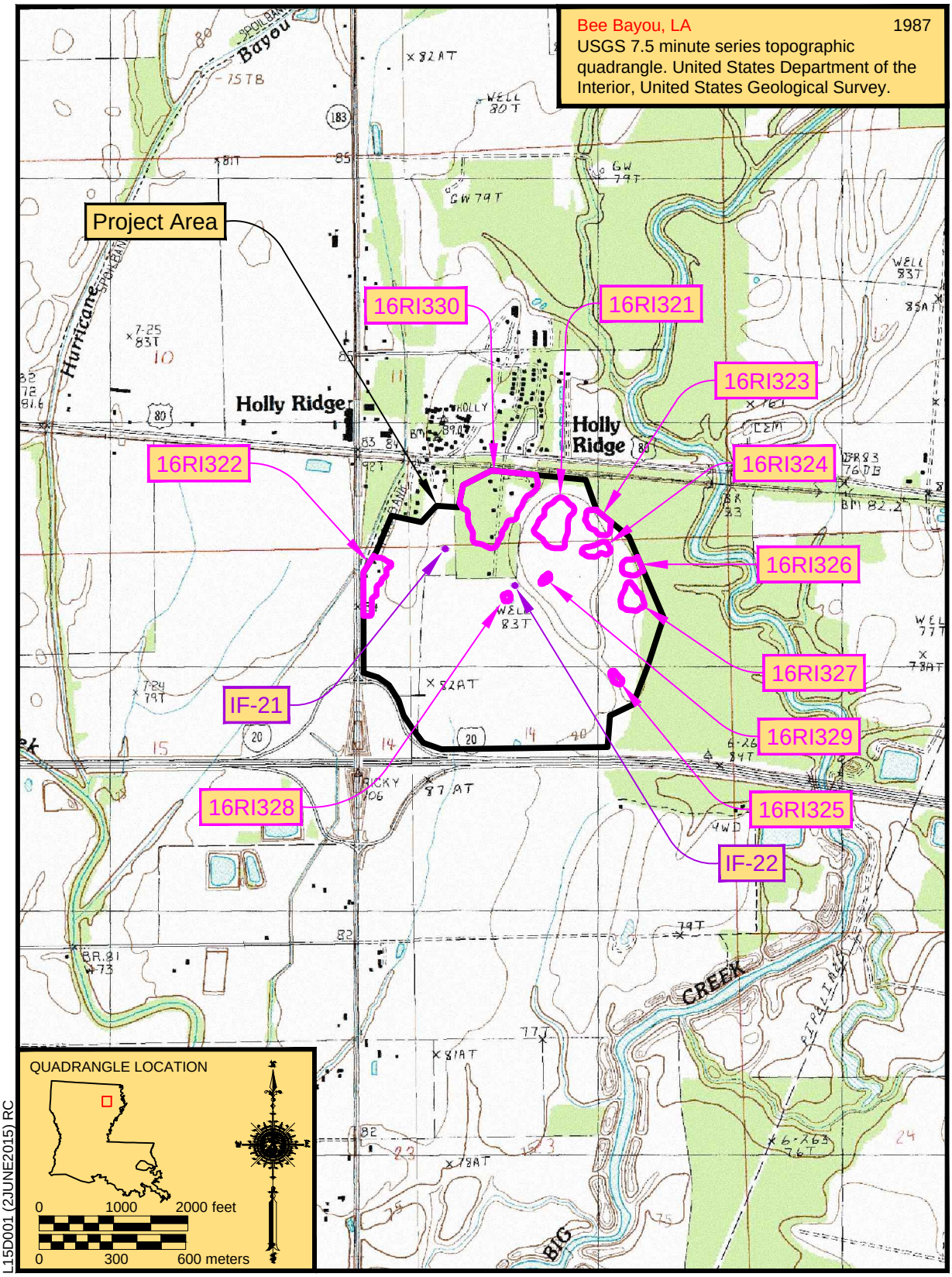

Figure 1.2. Topographic map showing the location of the project area and cultural resources within the project area.

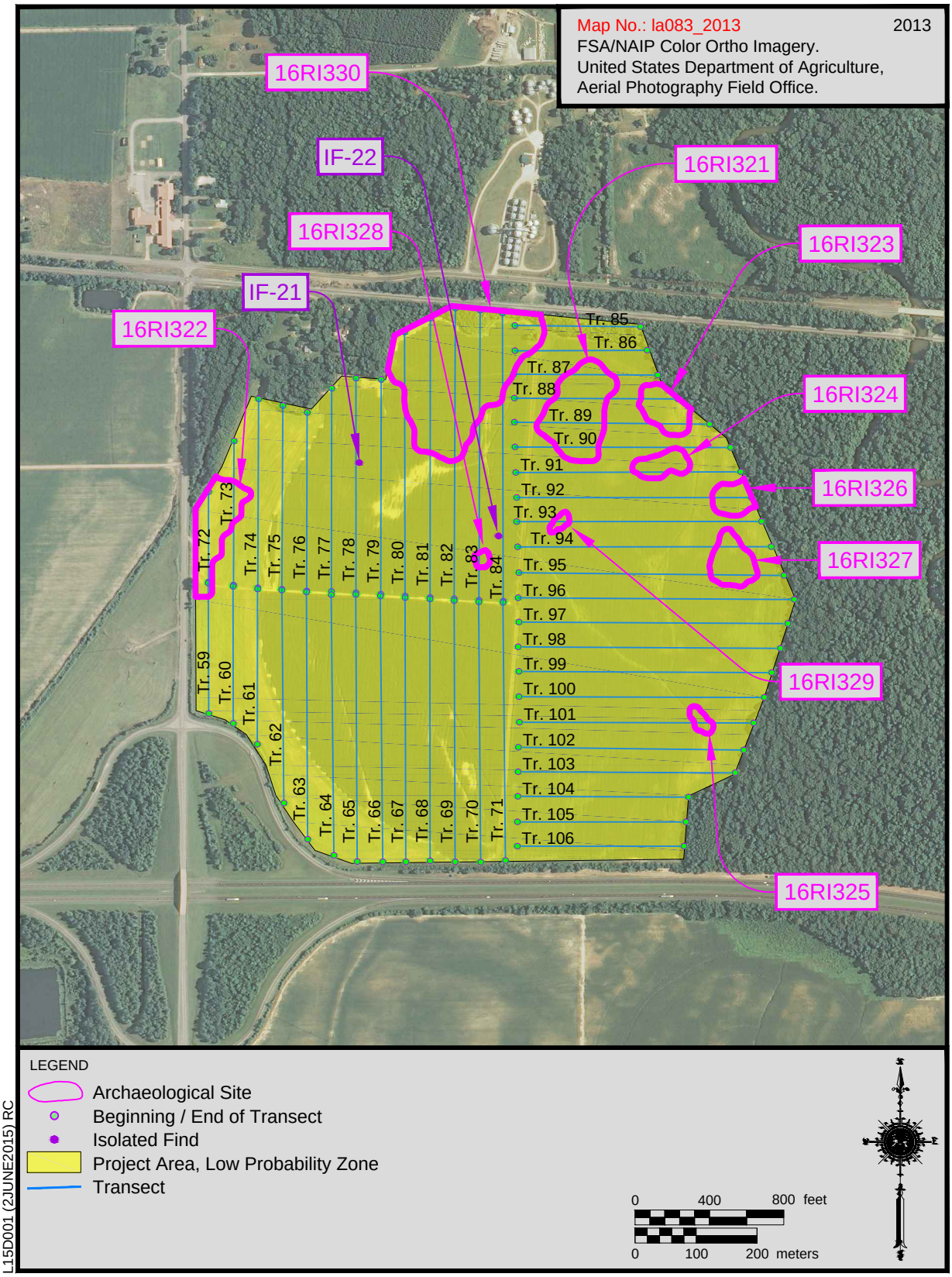

Figure 1.3. Aerial view showing the project area, probability zones, transects, and cultural resources within the project area.

Chapter 2. Environmental Setting

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 and Geomorphology

The project area is located in Richland Parish, which is situated in north Louisiana and within the Gulf Coastal Plain Physiographic Province. In terms of regional physiography, this area is part of the prominent Macon Ridge, within the Mississippi Alluvial Plain (Yodis and Colten 2003). Sitting high atop Pleistocene glacial outwash transported by the Mississippi River and subsequently veneered with loess, this area is 6–9 m (20–30 ft) higher in elevation and better drained than the adjacent ecoregions, supporting drier plant communities (Daigle 2006). Richland Parish is also mapped within the boundary of the Monroe Uplift (Yodis and Colten 2003). The Monroe Uplift is a large geologic structure of Tertiary age that has formed as voluminous deltaic sediment accumulation has advanced into the Gulf of Mexico and caused down-warping of the crustal floor and a corresponding uplift of the coastal plain in areas of northern Louisiana and Texas (Louisiana Geological Survey 2008).

The physiographic classification of the region using a holistic interpretation to assign areas to "ecoregions" has been advanced by Daigle et al. (2006). Pertinent characteristics in the classification of ecoregions include geology, physiography, vegetation, climate, soils, land use, wildlife, and hydrology. Within this classification system, Richland Parish is within the Mississippi Alluvial Plain ecoregion. More specifically, it is within the Macon Ridge sub-region, with loessial Alfisols with silt or silt loam textures that contrast with the alluvial soils of the Northern Holocene Meander Belts and Arkansas/Ouachita River Holocene Meander Belts.

The project area is drained by tributaries of Cypress Creek which is drained by Big Creek. Big Creek meanders in a southwesterly direction and is drained by the Boeuf River followed by the Ouachita River. The Ouachita River is a large meandering stream that flows southward into the Black River below its confluence with the Tensas River. The Black River in turn flows into the Red River, which becomes the Atchafalaya River below Turnbull Island and eventually flows into the Gulf of Mexico.

Soils

According to the Soil Survey of Richland Parish, Louisiana, and confirmed by a Custom Soil Resource Report of the project area that was prepared using online tools at the United States Department of Agriculture (USDA) website (USDA 2015), the project area contains five soil series: Dexter, Forestdale, Gigger, Gilbert, and Perry. Dexter soils formed in late Pleistocene deposits on long and narrow ridges on terraces, and Forestdale soils recently formed on alluvial plains. Gigger and Gilbert soils also formed in late Pleistocene deposits and are found on level or gently sloping terraces. Perry soils formed in level backswamps and swales near former river channels (Allen 1993). Table 2.1 presents texture and color information and typical pedons for the five soil series.

Flora and Fauna

Native forest types in this ecoregion range from bottomlands dominated by willow oak, water oak, and swamp chestnut oak to upland hardwood forests dominated by white oak, southern red oak, and in drier areas, post oak. The modern landscape consists of cropland

Table 2.1. Soil Series and Typical Pedons found within the Project Area.

Soil Series	Horizon	Depth (cm)	Depth (in)	Color (Munsell)	Texture
Dexter	Ap	0-15	0-6	Brown (10YR 4/3)	Silt loam
	BA	15-25	6-10	Dark brown (7.5YR 4/4)	Silt loam
	Bt1	25-43	10-17	Dark brown (7.5YR 4/4) mottled with reddish brown (5YR 4/4)	Silty clay loam
	Bt2	43-64	17-25	Dark brown (7.5YR 4/4) mottled with reddish brown (5YR 4/4)	Clay loam
	Bt3	64-81	25-32	Reddish brown (5YR 4/4) mottled with yellowish brown (5YR 4/6)	Clay loam
	2BC1	81-112	32-44	Reddish brown (5YR 4/4)	Loam
	2BC2	112-150	44-59	Dark brown (7.5YR 4/4) with pale brown (10YR 6/3)	fine sandy loam
	3C	150-152	59-60	Dark brown (7.5YR 4/4)	Loamy fine sand
Forestdale	Ap	0-10	0-4	Dark grayish brown (10YR 4/2)	Silty clay loam
	Btg1	10-25	4-10	Gray (10YR 5/1) mottled with yellowish brown (10YR 5/6)	Silty clay
	Btg2	25-46	10-18	Gray (10YR 5/1) mottled with yellowish brown (10YR 5/6)	Silty clay
	Btg3	46-86	18-34	Gray (10YR 5/1) mottled with dark yellowish brown (10YR 5/3)	Silty clay
	2BCg1	89-109	34-43	Gray (10YR 5/1) mottled with dark yellowish brown (10YR 4/4)	Silty clay
	2BCg2	109-152	43-60	Grayish brown (10YR 5/2) mottled with olive brown (2.5Y 4/4)	Silt loam
Gigger	Ap	0-15	0-6	Dark brown (10YR 3/3)	Silt loam
	Bt1	15-38	6-15	Dark brown (7.5YR 4/4)	Silt loam
	Bt2	38-61	15-24	Brown (7.5YR 4/4 and 5/4)	Silt loam
	Btx1	61-86	24-34	Dark yellowish brown (10YR 4/4), brownish gray (10YR 6/2), and grayish brown (10YR 5/2) mottled with yellowish brown (10YR 5/6)	Silt loam
	Btx2	86-114	34-45	Dark brown (7.5YR 4/4) with light brownish gray (10YR 6/2)	Silt loam
	Btx3	114-137	45-54	Dark brown (7.5YR 4/4) with light brownish gray (10YR 6/2) mottled with yellowish brown (10YR 5/4)	Silt loam
	2Bt	137-152	54-60	Dark brown (7.5YR 4/4) with light brownish gray (10YR 6/2) mottled with pale brown (10YR 6/3)	Silt loam
Gilbert	Ap	0-15	0-6	Dark grayish brown (10YR 4/2) mottled with dark yellowish brown (10YR 4/4)	Silt loam
	Eg	15-40	6-16	Light brownish gray (10YR 6/2) mottled with yellowish brown (10YR 6/2)	Silt loam
	B/E	40-58	16-23	Bt Grayish brown (10YR 5/2)/E Light brownish gray (10YR 6/2) mottled with strong brown (7.5YR 5/6)	Silty clay loam/silt loam
	Btg1	58-99	23-39	Grayish brown (10YR 5/2) mottled with brown (10YR 4/3)	Silty clay loam
	Btg2	99-111	39-44	Grayish brown (10YR 5/2) mottled with light yellowish brown (10YR 6/4) with light brownish gray (10YR 6/2)	Silty clay loam
	Btng	111-152	44-60	Grayish brown (2.5Y 5/2) mottled with yellowish brown (10YR 5/6)	Silty clay loam
Perry	Ap	0-15	0-6	Dark gray (10YR 4/1) mottled with yellowish brown (10YR 5/6)	Clay
	Bg1	15-35	6-14	Gray (10YR 5/1) mottled with strong brown (7.5YR 5/6)	Clay
	Bg2	35-53	14-21	Gray (10YR 5/1) mottled with dark brown (10YR 4/3)	Clay
	2Bw	53-79	21-31	Dark reddish brown (5YR 3/4)	Clay
	2Bk1	79-104	31-41	Reddish brown (5YR 4/3)	Clay
	2Bk2	107-152	41-60	Reddish brown (5YR 4/4)	Clay

and pasture, with some areas of woodland and forest (Daigle et al. 2006).

Agriculture has been an important activity in Richland Parish since its founding in 1868, with the name of the parish referring to the fertility of the soil of an area which was known for its “rich land” (Allen 1993). Initially, the Boeuf River provided access to the interior of the parish for a thriving steamboat trade. In early 1836 an east–west railroad was chartered, and in 1861 the first train rolled through the parish. This was followed by an era of cotton production in the 1880s, with areas near the railroad cleared and cultivated in cotton. Agriculture remains the dominant land use in the parish in the modern era, with cotton and soybeans serving as the main crops. According to the Richland Parish Office of the Agricultural Stabilization and Conservation Service, only about 13,355 ha (33,000 acres) of woodland remained in the parish in 1987, compared with 101,544 ha (250,921 acres) of cropland (Allen 1993).

Modern Climate

Richland Parish is within a subtropical zone with warm summers and mild winters. Based on data collected between 1951 and 1973 at Bastrop, the average annual temperature is about 19 degrees C (66 degrees F), with an average daily maximum temperature of 25 degrees C (77 degrees F) and an average daily minimum temperature of 12 degrees C (54 degrees F). However,

considerable variation from these averages has been seen, with a record maximum daily temperature of 41 degrees C (105 degrees F) and a record minimum daily temperature of –11 degrees C (12 degrees F) having been recorded (Allen 1993:134).

The average annual precipitation is approximately 127 cm (50 in). The parish averages 1.5 cm (0.6 in) of seasonal snowfall most years, with the most snow occurring in February. Thunderstorms occur approximately 60 days each year (Allen 1993:134).

Description of the Project Area

The project area is an irregular polygon approximately 110 ha (272 acres) in area, located roughly 12.8 km (8.0 mi) east of the town of Rayville and 12.0 km (7.4 mi) west of the town of Delhi, Louisiana. Occupying portions of Sections 11 and 14 of Township 17N, Range 8E, the project area is bound on the south by Interstate 20 and an arbitrary boundary; on the north by an arbitrary boundary and a railroad line adjacent to US 80; on the east by an arbitrary boundary; and on the west by an arbitrary boundary, LA 183, and the westbound Interstate 20 Exit 145 exit ramp (Figures 1.2 and 1.3). The survey area measures a maximum of roughly 1.1 km (0.7 mi) from north to south and 1.2 km (0.7 mi) from east to west.

The vast majority of the project area is covered by open agricultural fields that were fallow at the time of the survey. One of the only exceptions to these vegetation conditions was found in the westernmost roughly 150 m (492 ft) of the project area, in those areas immediately adjacent to LA Highway 183 and the Interstate 20 exit ramp. In these areas the agricultural fields were planted with wheat, which was very dense and approximately 1 m (3 ft) in height at the time of the survey. The fallow portions of the agricultural field had been plowed at the time of fieldwork.

The pivot point of a center pivot irrigation system is located in the approximate center of the project area. At the time of fieldwork, the wheeled sprinkler towers of the irrigation system extended south from the center pivot to the boundary of the project area adjacent to Interstate 20. One unpaved road traverses the western half of the project area, extending from LA 183 in the west to the center pivot in the center of the survey area. The ground surface is virtually level and gently undulating in the majority of the project area, though several low rises, shallow sloughs, and linear ridges are present in the survey area's eastern half, and the field surface near the project area's eastern boundary slopes gently downward to the tree line in this area.

Tree lines at the edges of the agricultural field form the eastern boundary and portions of the northern, southern, and western boundaries of the project area. Where present, these tree lines generally follow the edge of the project area quite closely, but are slightly uneven and occasionally lie several meters inside or outside the actual boundary. A stand of mixed deciduous secondary forest measuring roughly 450 m (1,476 ft) in length and 50 m (164 ft) in width at its widest point is located at the extreme northern edge of the project area, immediately south of the railroad line adjacent to US 80. Aside from the unpaved road and small segments of the aforementioned tree lines, this stand of forest is the only portion of the project area not covered by agricultural fields.

One modern standing structure is located in the center of the project area. This structure consists of a small 3-x-3 m (10-x-10 ft) open-sided corrugated metal shelter covering a generator connected to an irrigation pump, which is in turn connected to the center pivot. The structure is not depicted on any of the available USGS topographic quadrangles, and it did not display any architectural characteristics that would indicate it is greater than 50 years of age.

Chapter 3. Previous Research and Cultural Overview

On February 18, 2015, a search of records maintained by the Louisiana Office of Cultural Development, Division of Archaeology, was conducted to: 1) determine if the project area had been previously surveyed for cultural resources; 2) identify any previously recorded archaeological sites or structures that were situated within the project area; 3) provide information concerning what cultural resources could be expected within the project area; and 4) provide a context for making recommendations for any cultural resources located within the project area. The examination of Louisiana Office of Cultural Development, Division of Archaeology data consisted of a review of professional survey reports and records of archaeological sites for an area encompassing a 1.6 km (1.0 mi) radius around the project area. The review of professional survey reports and archaeological site data in the area can provide basic information on the types of archaeological resources that are likely to occur within a project area and the landforms that are most likely to contain these resources. In addition to examining the records of previous sites and surveys, CRA also corresponded with the project proponent regarding recently completed work on the property and conducted a review of available historic maps to identify any mapped historic structures in the vicinity of the project area and to aid in locating potential historic sites. The results of the records review are discussed below.

Previously Documented Cultural Resource Surveys

Six cultural resource investigations (22-0091, 22-1183, 22-1703, 22-1835, 22-4252, and a reconnaissance survey) and thirteen archaeological sites (16RI80, 16RI213, 16RI238–239, 16RI241–245, and 16RI302–16RI305) have been previously documented within a 1.6 km (1.0 mi) radius of the project area. Details of each of these investigations are presented below in chronological order by the year of publication. Following the discussion of the cultural resource investigations, the single site not associated with the documented previous work (16RI213) is briefly discussed. Figure 3.1 shows the location of the previously documented cultural resource surveys and sites, labeled by report number or site number.

SHPO Report 22-0091 (Price and Heartfield 1977)

This project was a cultural resource reconnaissance of a portion of Big and Big Colewa Creeks completed by the Research Institute of the College of Pure and Applied Sciences at Northeast Louisiana University for the United States Army, Corps of Engineers, Vicksburg District, with the report of findings published in 1977. This project was an intensive literature search, and although no intensive on-the-ground archaeological survey was conducted, the survey area was briefly examined to confirm that the research yielded results consistent with the area. Their work indicated the lack of field surveys may account for the low density of sites in Richland Parish that they observed, and that there was a good likelihood of prehistoric sites in the area given the early age of sediments. They further suggested ridges in areas of ridge and swale topography located adjacent to stream margins would be likely to contain prehistoric sites in their study area. They found it unlikely that significant historic remains would be found in their area, but anticipated scattered home sites were possible. The 1977 survey area approaches no closer than approximately 350 m (1,148 ft) from the current project area.

SHPO Report 22-1183 (Espenshade and Brockington 1987)

SHPO Report 22-1183 addresses the archaeological survey and testing of 50 km (31

mi) of a proposed pipeline in Ouachita, Morehouse, and Richland Parishes, Louisiana. The work was completed in 1987 by Brockington and Associates for ANR Pipeline Company. This work identified 16 sites, recommended NRHP evaluations for 7 of the identified sites, and ultimately recommended 2 of the sites for NRHP nomination. One of the sites investigated during this work (16RI80) is located within a 1.6 km (1.0 mi) radius of the current project area. Site 16RI80 is a historic artifact scatter from which one prehistoric potsherd and one lithic flake were collected. Due to extensive disturbance, no further work was recommended at the site. Site 16RI80 will not be affected by the proposed project.

SHPO Report 22-1703 (Saunders 1991)

The Regional Archaeology Program of the Department of Geosciences at Northeast Louisiana University, sponsored and funded by the Louisiana Department of Culture, Recreation and Tourism, Office of Cultural Development, Division of Archaeology and Northeast Louisiana University, conducted multiple site visits in Caldwell, Franklin, La Salle, Lincoln, Ouachita, Richland, and Union Parishes, Louisiana, in 1990 and 1991. The objective of this program was to record or update the status of 75 prehistoric and historic archaeological sites in Management Unit 2 and disseminate information about Louisiana archaeology to the public. Seven (16RI238–239 and 16RI241–245) of the 75 sites investigated during this project are located within a 1.6 km (1.0 mi) radius of the current project area. None of these sites will be affected by the proposed project. The nature of these seven sites is summarized in Table 3.1.

SHPO Report 22-1835 (Barnes 1994)

SHPO Report 22-1835 describes a phase I cultural resources survey of the proposed NorAm, Inc., FM-63 gas line in Richland and Franklin Parishes, Louisiana. The work was conducted by the Sponsored Research Program of the Arkansas Archeological Survey in May of 1994. The report describing the cultural resource survey of the 57.12 km (35.49 mi) gas line was completed in September of 1994. Two sites were identified as a result of this survey, both of which are beyond a 1.6 km (1.0 mi) radius of the current project area.

SHPO Report 22-4252 (Cochran 2013)

SHPO Report 22-4252 documents a negative finding phase I cultural resources survey of 32 pole locations along Entergy's proposed Oakridge to Dunn Transmission Right-of-Way in Morehouse and Richland Parishes, Louisiana. The work was conducted in March of 2013 by Horizon Environmental Services, Inc., with the United States Army Corps of Engineers, Vicksburg District serving as the lead federal agency. No cultural resources were recovered from the 149 shovel tests excavated for this project.

Table 3.1. Summary of Data for Sites 16RI238–16RI239 and 16RI241–16RI245.

Site Number	Site Description	Cultural Affiliation	Investigation	NRHP Recommendation
16RI238	Cemetery and farm house	Industrial	Surface Survey	not eligible
16RI239	Prehistoric chipping station and tenant house	Unknown prehistoric and Industrial	Surface Survey	not eligible
16RI241	Grinding station	Unknown prehistoric	Surface Survey	not eligible
16RI242	Prehistoric chipping station and tenant house	Unknown prehistoric and Industrial	Surface Survey	not eligible
16RI243	Paleoindian chipping station and Tchefuncte camp site	Paleoindian, Techefuncte, Neoindian, Industrial	Surface Survey	eligible
16RI244	Prehistoric chipping station and tenant house	Paleoindian, Neoindian, Industrial	Surface Survey	not eligible
16RI245	Prehistoric chipping station and tenant house	Unknown prehistoric and Industrial	Surface Survey	not eligible

Reconnaissance Walkover

The current project area was previously examined by a reconnaissance walkover survey in 2014, for the purposes of planning and gathering information pertaining to the current project. Details of the walkover survey were conveyed to CRA by the client, Denmon Engineering, Inc. The work was completed by R. Christopher Goodwin and Associates, Inc., in 2014. The reconnaissance walkover consisted of a desktop survey, windshield survey, and preliminary walkover of the proposed project area in Richland Parish, Louisiana. This work resulted in limited documentation of a number of loci and four sites (16RI302–16RI305). All of these resources were revisited and fully documented during the current investigation.

Sites 16RI303–16RI305 are historic artifact scatters on the west side of LA 183, just outside the current project area to the west. However, these sites are located in the Holly Ridge Northwest project area that was also surveyed by CRA and is documented in a separate report. Site 16RI302 is a historic artifact scatter located in the current project area, and is discussed in detail in Chapter 6.

Previously Recorded Archaeological Sites

Of the 13 previously recorded archaeological sites within a 1.6 km (1.0 mi) radius of the project area, a total of 12 are discussed in connection with their associated surveys in the preceding section. The thirteenth site (16RI213) is not documented in a cultural resource survey report and is discussed below.

McManus Mound (16RI213) was originally recorded by John Stubbs and Caroline Quillian Stubbs in August of 1984. It is described as a mound site containing an artifact scatter and midden deposits. Prehistoric ceramic sherds, bifaces, projectile points, ground stone artifacts and faunal bones were collected from the site at the time of the initial visit. The presumed function and cultural affiliation of the site are in question; but in the data presented, a burial mound or village is suggested, perhaps dating from the Troyville or Late Coles Creek periods. According to the site form on file with the Division of Archaeology, Site 16RI213 was considered to have good research potential. While the site is located well outside of the current project area and was not revisited during the present survey, it is indicative of the types of sites that may be in the area.

Map Data

In addition to the file search, a review of available historic maps was conducted to help identify any historic structures that may be located within the project area. The following maps were reviewed:

1935 Baskinton, Louisiana, USGS 15-minute series topographic quadrangle map (USGS 1935);

1958 Baskinton, Louisiana, USGS 15-minute series topographic quadrangle map (USGS 1958);

1987 Bee Bayou, Louisiana, USGS 7.5-minute series topographic quadrangle map (USGS 1987a); and

1987 Dunn, Louisiana, USGS 7.5-minute series topographic quadrangle map (USGS 1987b).

A total of 55 structures are mapped in the project area on the available historic maps, but many of these may be redundantly depicted on more than one map. Due to the potential for imprecise mapping, the set of structures depicted on each quadrangle are considered separately, though it is likely that in at least several cases the maps reflect identical structures at different points in time.

On the 1935 Baskinton quadrangle, 21 structures are depicted within the project area, all of which are situated along former roads that once ran throughout the area (USGS 1935) (Figure 3.2). Twelve structures in a cluster near the northern boundary of the project area are likely correlated with Site 16RI330, a large historic site that was recorded in the same location during the 2014

reconnaissance survey and relocated during the current project. Seven of the other nine structures depicted in the project area on the 1935 map are also likely correlated with sites recorded at or near their respective locations during the current survey, including Site 16RI321 (one structure), Site 16RI322 (one structure), Site 16RI323 (one structure), Site 16RI325 (one structure) Site 16RI326 (one structure), Site 16RI327 (one structure), and Site 16RI328 (one structure). No cultural material was found in the mapped locations of the final two structures on the 1935 quadrangle.

On the 1958 Baskinton quadrangle, a total of 24 structures are depicted in the project area, all of which are again situated along former roads (USGS 1958) (Figure 3.3). Ten of these structures in a cluster near the northern boundary of the project area are again likely correlated with the large Site 16RI330. Sites recorded during the current project in the same location as 11 other structures on the 1958 map include Site 16RI321 (three structures), Site 16RI322 (four structures), Site 16RI323 (one structure), Site 16RI324 (two structures), and Site 16RI329 (one structure). No cultural material was found in the mapped locations of the three final structures on the 1958 quadrangle.

Finally, a total of 10 structures are depicted in the project area on the two 1987 topographic quadrangles (USGS 1987a, 1987b) (Figure 1.2). Six of the structures are mapped within the recorded footprint of Site 16RI330, and three others are depicted within the boundaries of Site 16RI322. No cultural material was recovered from the mapped location of the final structure depicted in the project area on the 1987 maps.

By the time of the 2015 survey, none of the structures depicted in the project area on any of the reviewed topographic quadrangles were still extant. All of the sites mentioned above are discussed in detail in Chapter 6.

Survey Predictions

In recent decades, a number of attempts have been made at modeling Louisiana's archaeological sites to predict site locations, and therefore aid in the cost management of cultural resource surveys (e.g., Anderson et al. 1999; Anderson and Smith 2003; Campbell and Weed 1986; Hillman 1980; Johnson 1984a, 1984b; Johnson et al. 1986; Phillips and Willingham 1990; Servello 1983; Thomas et al. 1982; and Willingham and Phillips 1987). The factors that tend to be most commonly associated with prehistoric settlement include a close proximity to water, level ground, and in some cases, a desirable view shed. Historical draws to regions would have been the same as prehistoric, although throughout time there would have been increasing concern for the suitability of land for certain prevailing industries, such as timber production or agriculture. Considering the geomorphology, hydrology, information gleaned from historic maps, and known archaeological sites within the region, certain predictions are possible regarding the kinds of sites that might be encountered within the project area. These data are presented in the following paragraphs.

The topographic situation is generally homogenous throughout the majority of the project area, with the ground surface being virtually level and gently undulating in most areas. Several low rises, shallow sloughs, and linear ridges are present in the survey area's eastern half, and the field surface near the project area's eastern boundary slopes gently downward to the tree line in this area. The hydrological situation is slightly more varied; Big Creek runs from north to south roughly 275 m (902 ft) east of the project area, and an unnamed intermittent tributary of Cypress Creek runs from northeast to southwest just outside the northwest boundary of the survey area (Figure 1.2). No waterways run through the project area itself.

Examination of historic maps indicated that portions of the project area, most notably the northern half, had been utilized for historic activities, at least during the twentieth century. Relatively few archaeological sites had been previously recorded in the vicinity of the project area, but this seems to be an artifact of sampling strategy and is not likely to be

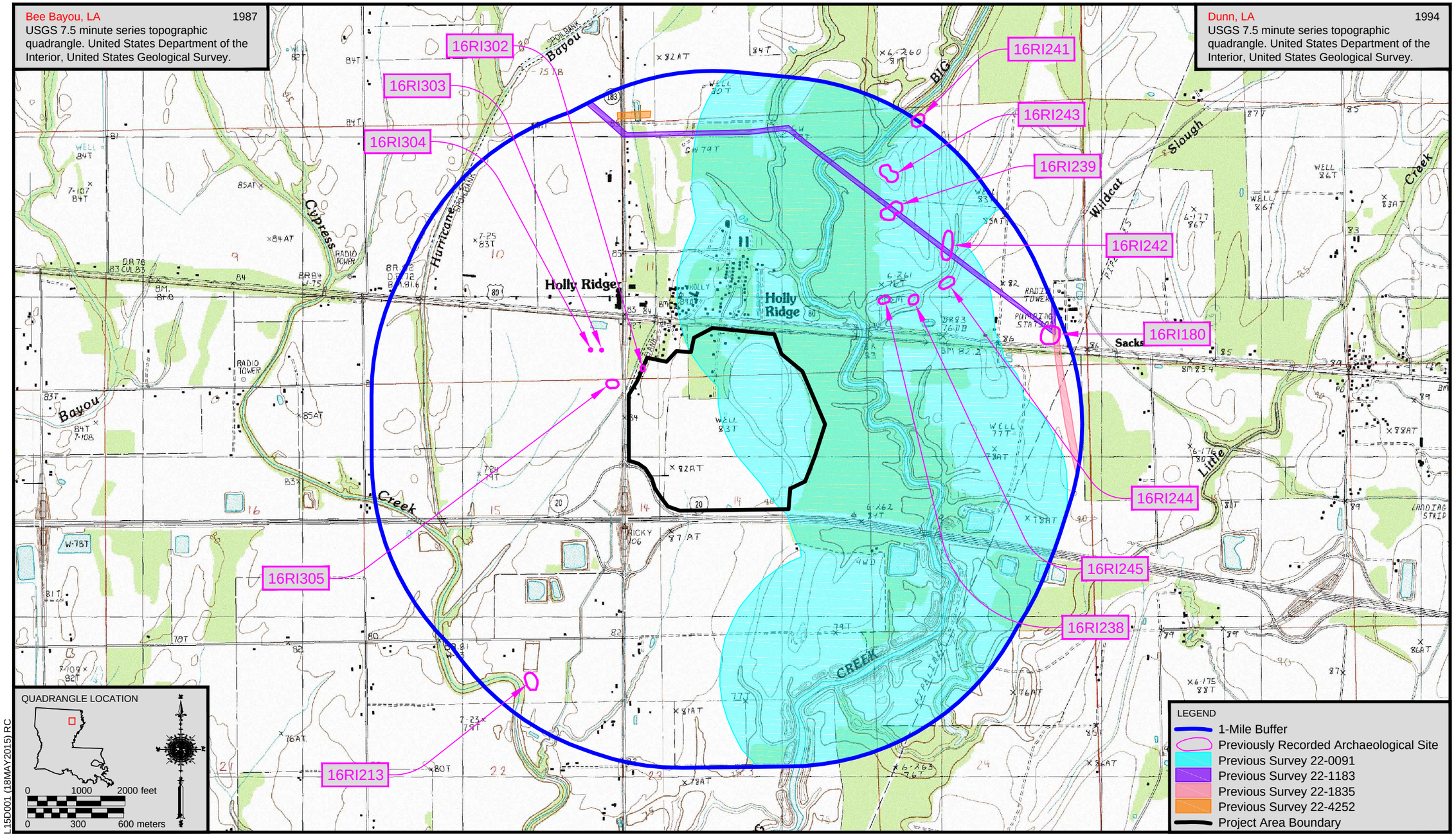

Figure 3.1. Topographic map showing the location of previously documented sites and surveys within a 1.6 km (1.0 mi) radius of the project area.

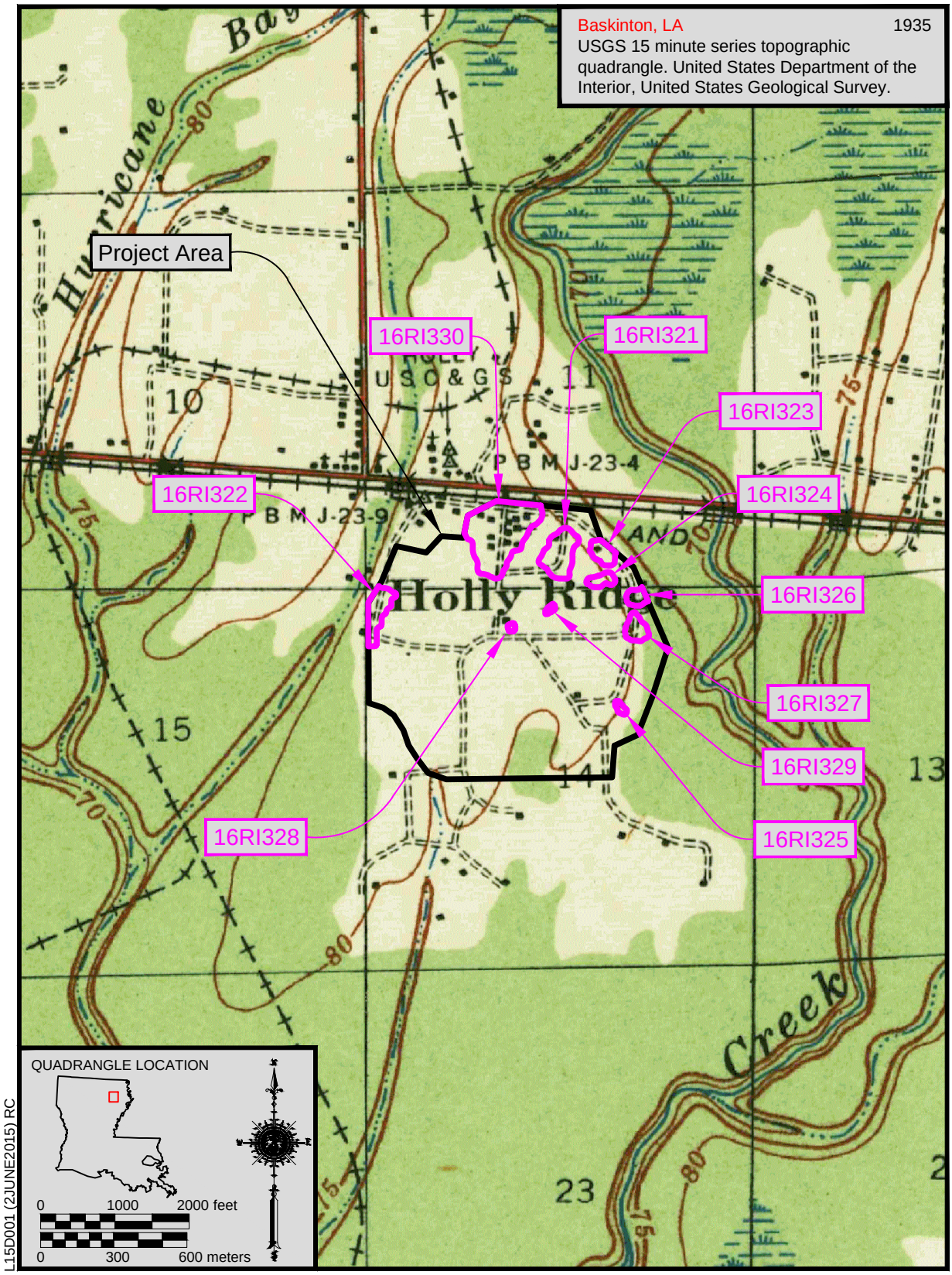

Figure 3.2. 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle map showing mapped historic structures and archaeological sites in the project area.

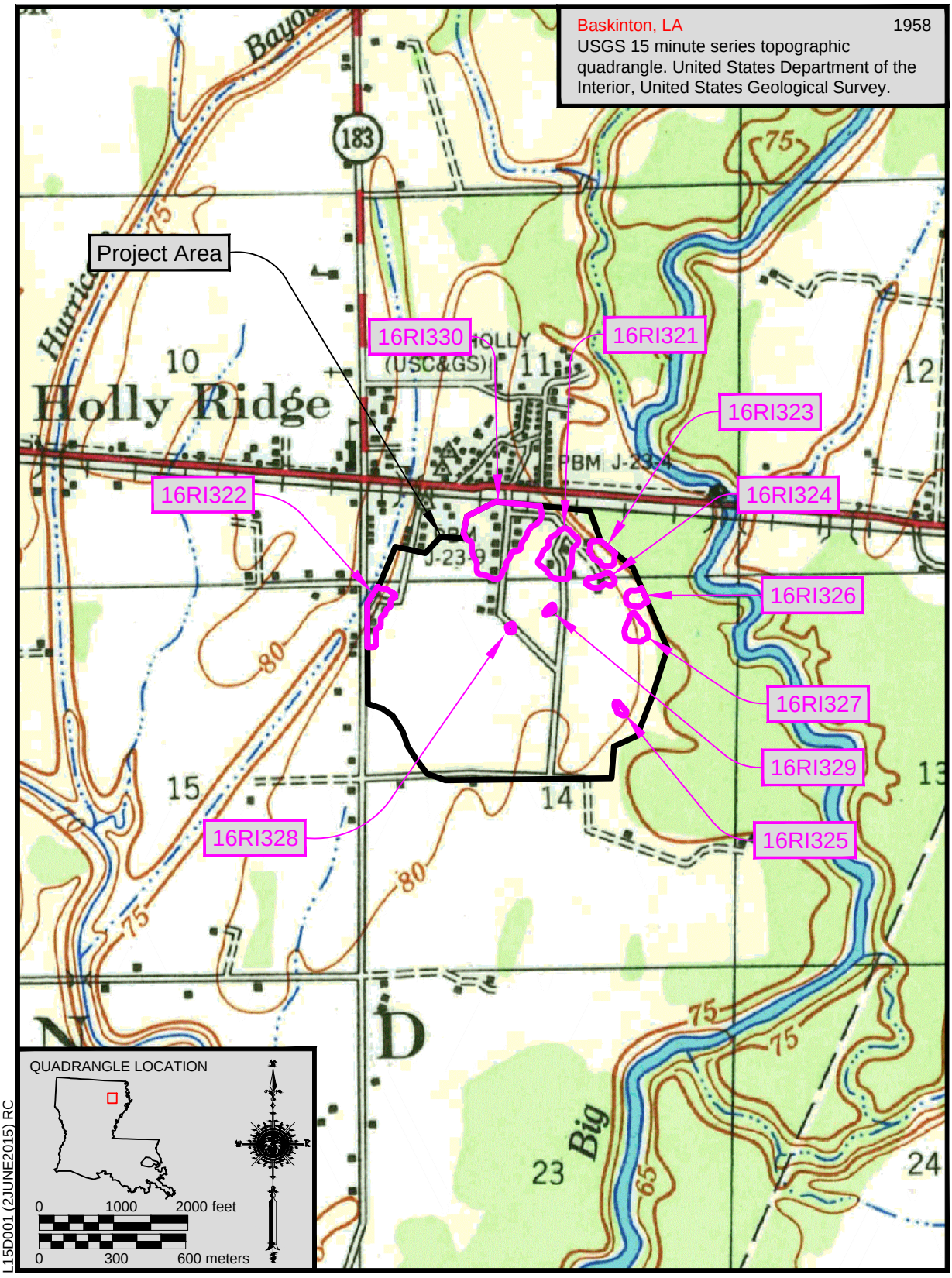

Figure 3.3. 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle map showing mapped historic structures and archaeological sites in the project area.

representative of the settlement intensity of the area, since little cultural resource work had previously been completed in the area. These data suggested that the project area was likely to contain historic sites, with a relatively high density of historic sites expected in its northern half based on historic mapped structures. However, the complete absence of perennial water sources within, or in close proximity to, the survey tract indicated that the project area had a low probability of containing prehistoric sites.

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 the uplands of north Louisiana.

Paleoindian (11,500 to 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 to 9500 B.C., the Middle Paleoindian period is thought to have lasted from 9500 to 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). Pre-Clovis components have also 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 significantly earlier than most researchers accept as valid (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. 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 2010a). 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 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 2010a).

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 has recently been criticized by Kornfeld (2007), who notes that during the development of Paleoindian subsistence models, Pleistocene megafauna "kill sites" were commonly used to identify Clovis components; therefore, other site types were underrepresented during model-building, and the importance of other dietary resources may have been 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. 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 only back to 3500 B.C. (Smith et al. 1986, cited in Rees 2010b: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 (Webb et al. 1971, cited in Rees 2010b). The co-occurrence of Clovis with Late Paleoindian lanceolate points has also been reported at other sites in Louisiana (see Rees 2010b:49). Presently, too few sites offering temporal controls for the Paleoindian point sequence have been identified or investigated to evaluate whether these forms may have been in use contemporaneously.

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 intensely studied. Among other information that this site has provided, it has shown that well-preserved Clovis sites exist in upland locations in Louisiana (Rees 2010b). 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 that 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 in 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 2010b), 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 climatic event that consisted

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 type, which are thought to temporally precede the Angostura, Folsom, Meserve midland, Plainview, Quad, and Scottsbluff types later in this subperiod (Rees 2010b). 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 the study of Peason Ridge, which contains a number of Paleoindian and Early Archaic components. Among the factors that may have made this location attractive for Middle and Late Paleoindian habitation is the availability of high quality lithic material, such as Eagle Hill chert. 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 subperiod 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 subperiods (Anderson and Smith 2003).

Archaic (8000 to 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 subdivided into the Early Archaic (8000–6000 B.C.), Middle Archaic (6000–2000 B.C.), and Late Archaic (2000–1200 B.C.). These subperiods 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 northern 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 preceding side- and corner-notched types. Sinner points may have originated during the terminal Early Archaic period in Louisiana (Anderson and Smith 2003).

The Early Archaic period also heralded new innovations in stone tool technology, as ground and pecked implements first make their appearance on sites dating to this period.

Grinding stones that were presumably used for processing vegetal food items include mortars and pestles, and these may indicate increasing use of flora for subsistence during this period.

Middle Archaic

The Middle Archaic period is believed to represent human adaptation to the Hypsithermal climatic episode. During this episode, a warmer and dryer climate resulted in decreased water levels and 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 has provided a baseline for identifying and understanding Middle Archaic components elsewhere, although these patterns have not been well established in northwest 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).

Hafted bifaces used during the Middle Archaic in Louisiana include Evans, Sinner, Bulverde, and Yarbrough types. Evans type hafted bifaces are the primary diagnostic of this period and date from around 2500 B.C. into the Late Archaic period. Evans points are corner-notched forms that are distinguished by a set of notches along the blade (Webb 2000; Anderson and Smith 2003). While they are often associated with the Middle Archaic mounds of northeast Louisiana, Evans point distribution stretches from the west side of the Mississippi River as far south as the Catahoula Lake area in central Louisiana and into southern Arkansas and northeast Texas (Anderson and Smith 2003; Saunders 2010), and similar notched blade Tangipahoa points are found to the east in Mississippi (McGahey 2000). Sinner points are generally similar in form to Evans, but Webb (2000) describes them 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). Sinner points are common in northwest Louisiana along Red Chute Bayou and Lake Bistineau, as well as on Caddo and Cross Lakes (Webb 2000). The point is diagnostic of 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). Bulverde points date to the late Middle Archaic to early Late Archaic periods in Texas, from approximately 3800 to 3150 B.C. (Turner and Hester 1993), and typically have a more western distribution than the Evans point type. Evans and Bulverde points have been found in context with one another where their range overlaps in southern Arkansas and northern Louisiana (Anderson and Smith 2003). Bulverde points have a square stem with squared to deeply barbed shoulders and excurvate blade margins (Suhm and Krieger 1954). Yarbrough points are similar in form to Bulverde points, but have a narrower blade and shoulders that are not barbed and appear inversely tapered in some instances (Suhm and Krieger 1954). In eastern Texas, Yarbrough points are common and denote a Middle or Late Archaic temporal component (Turner and Hester 1993).

Other point styles, for which formal type designations have not been assigned, were also in use during the Middle Archaic period in northern Louisiana, as has been demonstrated during excavations at the Conly site, from which radiocarbon dates of 6050 to 5550 B.C. were secured (Girard 2000). This site also yielded Johnson points, which are diagnostic of the Tom's Brook phase in southwest Arkansas (Schambach 1998).

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. 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). As just previously noted, Bulverde, Evans, and Yarboro point styles persisted into the Late Archaic, and they have been found in context with Williams points in northwest Louisiana (Kelley et al. 1988). Williams points are large, leaf-shaped dart points with pronounced barbed shoulders and expanded bases (Webb 2000).

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 Late Archaic period, between 1730 and 1250 B.C. (Gibson 2010). From sites in the Poverty Point complex, archaeologists have recovered zoomorphic and otherwise intricate stone beads and pendants, carved steatite vessels, and a myriad of shapes and styles of baked clay objects that were presumably used as boiling stones in a stone-poor region. A number of microlithic tools found on these sites are suggestive of the beginnings of a lapidary industry, although Gibson (2010:92–93) doubts there existed any craft specialization based on the variation seen in stone owl beads manufactured during this period. Exotic materials constitute a significant portion of the material culture at Poverty Point sites, with materials originating as far away as the Upper Mississippi region, the Great Lakes, the southern Appalachian Mountains, and the Rocky Mountains (Gibson 2010:81). Increased social complexity in the Poverty Point complex and surrounding region during this period has prompted some researchers to consider the Late Archaic period to have ended earlier in the Lower Mississippi Valley than elsewhere (Earth Tech, Inc. 2002), although we have elected to include it in the Late Archaic period in our discussion for simplification.

On sites in the Great Bend region, including northwest Louisiana, trade items thought to represent sumptuary goods associated with the Poverty Point culture have been found, although more utilitarian items such as baked clay objects seem to be absent (Earth Tech, Inc. 2002). Projectile point types that are associated with Poverty Point culture in Louisiana include the Motley, Hale, Delhi, Epps, Macon, and Pontchartrain types (Webb 2000), although the Gary type predominates at the Poverty Point site (Gibson 2010). These are all large, stemmed dart points with long blades that exhibit parallel or slightly divergent blade margins. Gary points are not unique to the Late Archaic period but have a broad temporal range, and they are distinguished by their contracting stem and pointed or rounded base (Webb 2000). Delhi, Pontchartrain, and Macon types all exhibit square stems, but they differ in dimensions and quality of manufacture; Delhi points usually have barbed shoulders, whereas Macon points are unbarbed, and Pontchartrain points are usually serrated (Webb 2000). Like Gary points, Pontchartrain appear to have a long temporal span. Motley and Epps types are characterized by expanded bases, but Motley points tend to have barbed shoulders, whereas Epps points have squared shoulders (Webb 2000). Hale points are the largest of the Late Archaic dart points in the region, suggesting they may have been used more as knives than projectiles, and they typically have squared or slightly barbed shoulders (Webb 2000).

In northern Louisiana, no Late Archaic phases have been identified to date. The Birds Creek and Leander phases have been identified at Fort Polk in western 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). In addition, 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 at sites throughout Louisiana.

Woodland (1250 B.C. to 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) subperiods 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 subperiods 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. and 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, and the end of Poverty Point culture in Louisiana also corresponds to this subperiod.

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 on eastern Louisiana and along the Gulf Coast, where small groups occupied sedentary and autonomous hamlets along slow-moving streams (Hays and Weinstein 2010). In the northwestern and central portions of Louisiana, Tchefuncte period sites are rare. The most prominent assemblages in this area include a collection of eight sherds from a site along Peason Ridge at Fort Polk in west-central Louisiana, illustrating the scarcity of this cultural material in the region (Anderson and Smith 2003). A few possible Tchefuncte sites have been reported from Lake Rodemacher also in central Louisiana (House 1972) and in a cluster around southern Natchitoches Parish and northern Rapides Parish (Gregory and Curry 1978). These latter sites 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 circa A.D. 1 to 400 (McGimsey 2010), and the Troyville culture, which existed from circa 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 Hopewell ceramics 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. Only relatively few examples of non-local materials, such as galena or copper have been found in burial contexts at Marksville sites, although abundant 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 embedded 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, which exhibit 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, but 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 northern 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 northwestern or central Louisiana, and these components seem to be rare in general. The rarity of Mulberry Creek Cord Marked, 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 subperiod (circa A.D. 400–900) experienced a slight fluctuation in climate, with temperatures mildly dropping circa A.D. 400–800, 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). In southwest Arkansas and southeast Oklahoma, a similar cultural expression that developed coterminous with Coles Creek is known as Fourche Maline, while in east Texas it has been termed pre-Caddoan.

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 and Fourche Maline 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 not believed 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 and consist primarily of grog-tempered or grog-and-sand-tempered Chevalier Stamped, Coles Creek Incised, Evansville Punctuated, French Fork Incised, Mazique Incised, and Pontchartrain Check Stamped ceramics. Williams Plain is a generic ceramic type similar to Baytown Plain that is frequently recovered from Fourche Maline and Coles Creek sites in the Great Bend region of the Red River (Schambach 1982, cited in Earth Tech, Inc. 2002). Use of the bow and arrow flourished during the Late Woodland, 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).

In northwest Louisiana, a local expression of Coles Creek culture known as Bellevue has been defined based on Bellevue and other mounds in Bossier Parish. Bellevue is a conical, flat-topped mound that is among the earliest known examples of earthen architecture in northwest Louisiana. This mound contained multiple burials and yielded ceramics similar to those of Marksville sites, but with characteristic bone tempering associated with the later Caddo culture (Neuman 1984:217). The Bellevue and

contemporary sites in northwest Louisiana are seen as showing more affinities with the Fourche Maline culture as represented in southwest Arkansas (Webb and Gregory 1978). Bellevue and other mound and non-mound sites in northwestern Louisiana have primarily yielded plain ceramics and a few Marksville-Issaquena-Troyville types along with Gary and Ellis points (Webb 1982).

Late Prehistoric (A.D. 900 to 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 to 1300, a favorable climate for agriculture is thought to have prevailed, with temperatures approaching near those of the present. At circa 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 approximately 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 systems. Webb saw the Caddo culture as a direct descendant of Coles Creek culture, first emerging in the Great Bend region of the Red River (Webb and McKinney 1975; Webb and Gregory 1978). 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.

In Louisiana, the Caddo culture is generally confined to the northwestern portion of the state, extending only as far south as Natchitoches. A refined ceramic tradition developed during the Caddo period, and ceramic styles have been used to divide this period into two major aspects (Gibson and Fulton) that are further divided into several foci (Alto/Alto-Gahagan, Haley, Bossier, and Belcher).

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). Alto, or Alto-Gahagan, is the earliest Caddo focus and shows a strong Coles Creek influence. A number of innovations in material culture characterize the Alto phase, including the use of carinated bowls and bottle forms with engraved and pigment-filled designs. The ceramic assemblage used to recognize this phase includes Crockett Curvilinear Incised, Pennington Punctuated-Incised, Holly Fine Engraved, Spiro Engraved, Wilkinson Punctuated, Holyknowe Ridge-Pinched, Williams Plain, and LeFlore Plain (Kelley et al. 1988).

During these initial expressions of Caddo culture, there was more extensive use of floodplains along the Red River than during 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).

A shift in mortuary customs is represented during the Alto focus by the addition of shaft burials into mounds as opposed to the pre-mound burials that characterized Coles Creek sites, and burials were more elaborately furnished (Schambach and Early 1982). Mounds Plantation (16CD12) is among the

most notable Alto focus mound site investigated in northwest Louisiana and is the basis for its definition. This site contained seven mounds around a central plaza with additional mounds on the peripheries. Burial data suggest that the early Caddo culture was hierarchical, with finely constructed and decorated ceramics in the graves of apparent community leaders (Girard 2010), and mound centers in northwest Louisiana contained residential areas for these leaders who would have held political control over outlying settlements. At one early Caddo mound site in northwest Louisiana, the Gahagan site (16RR1), burial items were manufactured from stone that originated in southwestern Illinois, showing that these early Caddo cultures may have had contact with such far away Mississippian polities as Cahokia near present-day St. Louis, Missouri (Girard 2010).

The Haley focus represents the earlier part of the Middle Caddo period in northwest Louisiana and is followed by the Bossier focus. The Haley focus is better represented in Arkansas, although northwestern Louisiana is within the peripheries of the cultural area. This focus is represented by Haley Engraved, Handy Engraved, Hickory Engraved, Haley Complicated-Incised, Pease Brushed-Incised, and Sinner Linear Punctuated ceramics. Burial customs became more elaborate than the preceding Alto focus, and temple mounds may have first appeared in the Great Bend region during this focus (Schambach and Early 1982). The Bossier focus is recognized by the presence of Pease Brushed-Incised, Belcher Ridged, Dunkin Incised, Sinner Linear Punctuated, and Maddox Engraved ceramics. The Bossier focus may have seen a decline in mound construction, although artifacts recovered from mound sites indicate extensive trade and continued elaborate ceremonialism (Earth Tech, Inc. 2002).

At the onset of the Middle Caddo period, sometime 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. Jeff Girard has documented a Middle Caddo 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) length 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 late Caddo period began around A.D. 1500 and is represented by the Belcher focus, which is primarily modeled from Webb's (1959) work at the Belcher site in northwest Louisiana. This culture appears to have centered on the Great Bend region in Arkansas, but is well represented in northwest Louisiana. The ceramics that represent this focus include Belcher Engraved, Hodges Engraved, Glassell Engraved, Foster Trailed-Incised, Belcher Ridged, and Karnack Brushed-Incised. A high degree of ceremonialism during the Belcher focus is interpreted from mass burials in shafts within mounds that are believed to represent retainer sacrifice and the inclusion of a wide variety of grave goods within the burials of some children thought to signify ascribed social ranking (Webb and Gregory 1978). Dispersed villages of hamlets and farmsteads continued to occupy the banks of upland tributary streams. There are some indications that trade interaction shifted during this focus from being predominately associated with groups in the Lower Mississippi Valley to groups in the Southern Plains (Earth Tech, Inc. 2002). The Belcher focus represents the final prehistoric manifestation of Caddo culture, and the dispersed villages in northwest Louisiana would be the same settlement type depicted on a map produced during the 1691–1692 Domingo Teran de los Rios expedition (Girard 2010).

Mississippian and Plaquemine

The Mississippian period comprises the last 500 years of Southeastern prehistory, prior to European contact. The period is generally regarded to have begun in the southern Lower

Mississippi Valley at 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 2010c). 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 2010c).

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 2010c).

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 2010c). 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 2010c).

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).

Historic Native Americans

Beginning with the exploration of the Mississippi and Red River valleys by Europeans in the late seventeenth century, a dynamic interval ensued for Native Americans in Louisiana. Northwest Louisiana was inhabited by a number of historic Caddoan speaking groups that are presumed to have descended from the Caddo period inhabitants of the region. These included the Yatasi, the Petit Caddo, the Isadohadocho, the Natchitoches, and the Adai. To the north, in southern Arkansas, were the Kadohodacho and Ouachita Caddo groups (Swanton 1946). The Yatasi were reportedly 64 km (40 mi) north of Natchitoches in 1690 (Swanton 1946; Fields et al. 1989), but split in the late seventeenth century due to pressure from Chickasaw groups. Some of the Yatasi joined the Kadohodacho confederacy, which was located in the Great Bend region of the Red River to the north, while the remainder moved south to join the Natchitoches (Swanton 1946). The Kadohodacho were forced southward during the late seventeenth century as a result of attacks from the Osage, and they settled on Caddo Lake with the Petit Caddo

northwest of Shreveport (Williams 1974), where the Freeman and Custis expedition up the Red River in 1806 documented them (Flores 1984, cited in Earth Tech, Inc. 2002). The Natchitoches Caddo were on the Red River near the present-day city of Natchitoches in 1690, and had by this time, been joined by a group of Ouachita Caddo (Lange 1974, cited in Earth Tech, Inc. 2002). The Adai were found to the west of the Natchitoches near present-day Robeline along Bayou Pierre and a seasonal lake known historically as Spanish Lake. By the early nineteenth century, both the Natchitoches and Adai were greatly reduced in number (Lange 1974 and Swanton 1946, cited in Earth Tech, Inc. 2002). A treaty with the Caddo by the United States government would eventually lead to the relocation of the remaining groups into Texas in 1835 (Swanton 1946).

In addition to the Caddo, a number of immigrant groups relocated into northern Louisiana during the historic period. A group of Koasati settled north of Shreveport on the Red River, where they were visited by Freeman and Custis in 1806. A Choctaw group moved into the area by 1763 and had formed several villages by 1820. Like the Caddo, these groups were all forced out of the United States in 1835 (Swanton 1946 and Flores 1984, in Earth Tech, Inc. 2002).

French Colonial (A.D. 1682 to 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 succumbed to starvation, exposure, and 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 French presence would be sufficient 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, first to St. Domingue and then to Mobile Bay, where they erected a temporary encampment near present-day Biloxi. 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 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 the 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, Forte de Mississippi, later known as Fort de la Boulaye, was constructed about 80 km (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 Mississippi (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 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).

Areas upriver and downriver from New Orleans began receiving small farms by the 1730s. Along the Red River there existed two major obstructions to navigation. In central Louisiana, due to a set of large siltstone shoals along the Red River, Frenchmen travelling toward Natchitoches from New Orleans 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. Along the Red River near present-day Shreveport, a logjam known as the Great Raft rendered navigation along the river's channel impossible and forced navigation through adjacent tributary streams. The Great Raft also slowed the flow of water in this area of the river and caused widespread flooding, generally preventing habitation of the area by Europeans.

Spanish Rule (A.D. 1763 to 1800)

In 1763, France ceded all of the land of Louisiana west of the Mississippi River to Spanish rule as a result of the Treaty of Paris, 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 under-staffed attempt at governance, the residents of New Orleans mounted an insurrection in October of 1768 and demanded that Ulloa

depart Louisiana. Less than one year later, General Alejandro O'Reilly returned to New Orleans with a large contingent 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 put to death by a firing squad (Wall 2002).

French 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 north and central Louisiana. The Koasati also moved into central and north Louisiana along the Red River 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).

Due to the persistence of the logjam that occupied the Red River near Shreveport, broad-scale Anglo occupation of the area would not begin to flourish until the nineteenth century. Exploration of the area likely began as early as the seventeenth century, but the area would remain unmapped until the nineteenth century.

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

The Louisiana territory was retroceded to France by Spain in 1800 and then purchased from France by the United States in 1803. In 1812, the first map of the area near present-day Shreveport showed a number of Native-American trails connecting a Koasati, or Coushatta village, with Lake Bistineau and to the hot springs near the Ouachita River in Arkansas (Southern Publishing Company 1890).

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 cotton gin and steam engines on boats made the separation of seeds from the cotton fiber more efficient and allowed relatively cheap transport of the ginned cotton. Although navigation along the tributaries to the east of the Red River were sufficient for transporting commodities such as cotton from the plantations established in the 1820s to the north of Minden, the removal of the Great Raft by Captain Henry Miller Shreve between 1833 and 1838 would open the area for habitation by Euro-Americans and would result in a population boom (Wall 2002). The area was also opened by the U.S. Government for homesteading, and prior to the Civil War a number of plantations up to 405 ha (1,000 acres) in size and smaller farms ranging in size from 16–65 ha (40–160 acres) occupied the area.

The introduction of slave labor into the area increased cotton production and sales between 1840 and 1860. 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 and formed 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 throughout Louisiana, although none as large as the 1811 uprising would occur again (Wall 2002).

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 army forces successfully forced the retreat of Confederate troops from Fort De Russy south of Alexandria, but was not, however, successful at capturing Shreveport, so a second attempt was launched in spring of 1864. Confederate troops had been 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 Confederate 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 system of 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).

Richland Parish was created by the Louisiana Legislature in 1868, with its land area being consolidated out of portions taken from the preexisting Ouachita, Carroll, Franklin, and Morehouse Parishes. The name of the parish derives from the "rich land" of the area, the fertility of which formed the backbone of the region's agricultural livelihood. Initially, the steamboat trade provided the primary means of access to and transport within the parish, with the Boeuf River providing a convenient access point to the interior of the parish. Though an east–west railroad had been chartered as early as 1836, trains did not begin running in the parish until 1861. Following the Civil War, an era of cotton production began anew in the 1880s, with areas near the railroad cleared and cultivated in cotton (Allen 1993).

Twentieth Century (A.D. 1900 to 1999)

With the development of the railroad system in northern Louisiana in the late nineteenth century, new avenues for commerce had been established by the early twentieth century. Like most of Louisiana, however, the area would never regain the wealth of the antebellum years. Small towns in the region would become centers for commerce, and the establishment of sawmills would bring some industry. However, road development was made more difficult by the extensive backswamps found in Richland Parish, and it was not until the widespread adoption of the automobile in the twentieth century that an improved road network was developed (Allen 1993).

A much improved drainage system was constructed by the Louisiana Department of

Public Works beginning in the 1950s, allowing much more land in Richland Parish to be drained for farming. Agriculture remains the dominant land use in the parish in the modern era, with cotton and soybeans serving as the main crops. Though not as important as agriculture, oil and gas production also plays a role in the modern Richland Parish economy (Allen 1993).

Chapter 4. Methods

The project area was systematically investigated by pedestrian survey and shovel testing. High probability zones (HPZs) are defined as those areas within 200 m (656 ft) of a mapped perennial water source, and are typically sampled with shovel tests at 30 m (98 ft) intervals along transects that are also spaced at 30 m (98 ft) intervals. Low probability zones (LPZs) encompass those areas greater than 200 m (656 ft) from a mapped perennial water source, and are shovel tested at 50 m (164 ft) intervals along transects spaced at 50 m (164 ft) intervals. For the current project, since the entire project area was greater than 200 m (656 ft) from a mapped perennial water source, the entire survey area was defined as an LPZ and shovel tested on a 50 m (164 ft) grid. All shovel tests measured 30.0-x-30.0 cm (11.8-x-11.8 in) and extended well into the subsoil. All fill removed from the tests was screened through .64 cm (.25 in) mesh hardware cloth, and the sidewalls and bottoms were examined for cultural material and features.

Surface visibility was generally excellent throughout the survey area. The majority of the project area consisted of open agricultural fields with excellent visibility. However, in those small portions of the survey area vegetated with secondary forest or cultivated with wheat, surface visibility was generally moderate to poor due to understory vegetation, grass cover, and/or leaf litter.

The survey of the project area was conducted during the period extending from February 18 to April 27, 2015. The tract was surveyed with a total of 48 transects, all of which were spaced 50 m (164 ft) apart with 50 m (164 ft) interval shovel tests. Transects in the western half of the project area were oriented north–south and transects in the eastern half of the project area were oriented west–east. A total of 439 shovel tests were excavated along transects in the project area. Figure 1.3 shows the distribution and locations of all transects in the survey area. In addition to shovel testing, the entire project area was visually inspected for cultural material during the excavation of the transects. Standing structures were photographically documented and their architectural style and structural characteristics were recorded.

Positive transect shovel tests were delineated to define site boundaries and investigate site context. Site boundary recordation began with the assignment of a positive shovel test as the site datum, which was arbitrarily assigned a grid coordinate of N1000 E1000. All other shovel tests excavated for site boundary delineation were also assigned coordinates in relationship to the site datum. Surrounding each positive shovel test, delineation shovel tests were placed at 10 m (33 ft) or 20 m (66 ft) intervals. All site delineations began at a 10 m (33 ft) interval, but per SHPO guidelines, in those cases where three consecutive positive shovel tests were encountered at 10 m (33 ft) intervals, or where three or more positive transect shovel tests had already been excavated, the delineation interval was expanded to 20 m (66 ft). In either event, delineation proceeded in cardinal directions until two negative shovel tests were excavated in each cardinal direction. A total of 519 shovel tests were excavated during site delineation. Universal Transverse Mercator (UTM) coordinates were recorded with a Geo XT 3000 series global positioning system (GPS) unit manufactured by Trimble to verify locations within the project area. This unit is capable of accuracy to within 3.0 m (9.8 ft).

All artifacts collected during the fieldwork were washed by CRA laboratory personnel and placed into racks to air-dry prior to further processing and analysis. Artifacts were classified according to regional typologies and were then documented and cataloged following SHPO guidelines. Recovered materials and notes will be curated with the Louisiana Office of Cultural Development, Division of Archaeology.

Chapter 5. Recovered Materials

Historic materials were recovered during the current survey from 10 sites (16RI321–16RI330) and 2 isolated finds (IF 21 and IF 22). No prehistoric artifacts were found in the project area. The recovered artifacts are discussed in this chapter, and a photograph of representative artifacts recovered during the project is presented in Figure 5.1. The assemblage from individual sites is discussed in summary below and in relation to intrasite provenience in the Results in Chapter 6. A complete inventory of all artifacts can be found in Appendix A.

Historic Artifacts

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 historic artifacts recovered during this project are summarized in Table 5.1.

Table 5.1. Historic Artifacts Recovered According to Functional Group.

Site/IF	Architecture	Biological	Domestic	Furnishings	Maintenance and Subsistence	Transportation	Personal	Unidentified	Total
16RI321	30		20					4	54
16RI322	33	1	64	2		1		11	112
16RI323	13		26					1	40
16RI324	2		9					1	12
16RI325	3		5					2	10
16RI326	6		8					1	15
16RI327	2		22					4	28
16RI328			6				1		7
16RI329	4				1				5
16RI330	155		396	1	11	1	2	72	638
IF 21								1	1
IF 22	1								1
Total	249	1	556	3	12	2	3	97	923

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 Activities" group 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.

Figure 5.1. Representative artifacts recovered from the project area. Top row, from left to right: yellow slip-decorated whiteware rim fragment, green transfer-print decorated whiteware rim fragment, salt-glazed stoneware body fragment, blue slip-decorated stoneware body fragment. Center row, from left to right: partial milk glass cosmetic container, cobalt glass medicine bottle base fragment, automatic bottling machine manufactured amethyst glass fragment with valve mark. Bottom row, from left to right: stoneware water pipe fragment, spark plug.

Each one of these groups and associated artifacts is discussed in turn.

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 rather 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.

Architecture Group

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. Artifacts from this group recovered during the current project consisted of construction materials, fittings and hardware, flat glass, and nails (Table 5.2).

Construction Materials

Construction materials refer to all elements of building construction. A total of 99 pieces of construction materials were collected during this project, including 94 brick fragments, 1 piece of concrete, 1 ceramic pipe fragment, 2 pieces of mortar, and 1 indeterminate object. These materials were recovered from nine separate locations and likely represent the remains of multiple structures.

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

Site/IF	Construction Material	Fittings and Hardware	Flat Glass	Nails	Total
16RI321	22		1	7	30
16RI322	6		19	8	33
16RI323	3		7	3	13
16RI324	1			1	2
16RI325			1	2	3
16RI326	2		2	2	6
16RI327	1		1		2
16RI329	2			2	4
16RI330	62	5	50	38	155
IF 22				1	1
Total	99	5	81	64	249

Fittings and Hardware

This class of artifacts includes fittings for structures, such as plumbing pipes and other architectural hardware. These items are decorative and functional items used in architectural construction that are fixed but not built in. The items recovered from this category during the current project consisted of five fragments of stoneware water pipe. This material was recovered from a single area.

Flat Glass

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 1978:7). 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), hence, dates calculated back to 1785 were considered plausible. Sample size is also a consideration when using the Moir window glass regression formula. According to Moir (1987:78), sample sizes need to be "reasonable" in order to accurately date the construction of a building. For the purposes of this investigation, a "reasonable" sample size is considered to be 25 window glass fragments.

In addition to providing a recommendation for a "reasonable" sample size, Moir also determined that the best results of this dating method were achieved when glass fragments were collected from more than one or two locations at a site, when structural additions were sampled separately from the main building, and when the length of occupation of the site was less than sixty years (Moir 1987). These restrictions were the result of Moir's formula being designed to derive a single manufacturing date from the mean thickness of all recovered window glass fragments. Under these circumstances, sampling a structural addition built significantly later than the primary building or a structure that had been occupied for a long period could be expected to skew the derived date for the assemblage.

A total of 81 pieces of flat glass were recovered from 7 sites during the current project (see Table 5.2), including 77 pieces of window glass, 1 piece of privacy glass, and 3 pieces of indeterminate glass. Each fragment of window glass was measured for thickness and recorded to the nearest hundredth of a millimeter using digital 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 in thickness is assumed to date to 1916 and was included in the calculations, because according to Roenke (1978:11), plate glass did not become widely or successfully produced in the United States until 1917.

Seventeen of the 77 pieces of recovered window glass fragments measured greater than 2.41 mm in thickness, and were therefore not subjected to analysis. Of the remaining pieces, thickness measurements were possible on a maximum of only 18 fragments from any single site, which is well below the reasonable sample size to accurately date the construction of buildings using the Moir formula. Because the sample size was below the reasonable threshold at any of the sites, the result of the formula was not reliable and is not presented here.

Nails

There are three stages recognized in the technological chronology of nails. The first stage is represented by the wrought nail, the primary type of construction fastener in the eighteenth and early nineteenth centuries. This nail type was followed by the machine-cut nail and the wire-drawn nail. The use of wrought nails ended around 1810 with the proliferation of square cut or machine-cut nail use (Genheimer 1987:91; Nelson 1968:8).

Jacob Perkins developed his first nail-cutting machine sometime between 1790 and 1792; however, it was much later when these machines were utilized in the nail industry (Phillips 1996). 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. Wire nails required the use of Bessemer steel, and until 1879, when an American firm began fabricating this steel type, the steel was imported from Norway. By 1886, the wire nail industry was able to produce a wide variety of pennyweights to compete with the cut nail companies (Davidson 2006:116). 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). Wire nails suitable for the construction of buildings were not present in North America until circa 1880. By the end of the nineteenth century, the production of wire nails in the United States greatly exceeded that of cut nails (Priess 1973). By the 1890s, the cut nail had been virtually replaced by the wire nail in the building construction industry (Davidson 2006:118).

A total of 64 nails were recovered during the project from 9 different locations. Of these, 1 was an indeterminate cut/wrought nail, 3 were cut nails, 17 were wire nails, and 43 were indeterminate nails or nail fragments that were heavily corroded and were of indeterminate manufacturing method. The nails recovered suggest activity in the area took place in the nineteenth to twentieth centuries with the latter end best represented, but with so many indeterminate fragments a specific period of activity is unclear.

Biological Group

Faunal and floral remains were assigned to this group. Only a single biological group artifact was recovered during the current project, a faunal tooth and root fragment from Site 16RI322. No specialized analyses were performed to determine the species of origin for the faunal tooth, and the artifact could not be assigned a specific date.

Domestic Group

Recovered artifacts included in the domestic group consisted of beverage cans, ceramics, container glass, glass tableware, and metal food containers (Table 5.3). The beverage can item was a fragment of an aluminum can pull tab that was dated to 1965–1985 based on its method of production (Busch 1981; Rock 1980, 1984, 1987).

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

Site/IF	Beverage Cans	Ceramics	Container Glass	Glass Tableware	Metal Food Containers	Total
16RI321			19	1		20
16RI322		9	52	3		64
16RI323		5	20	1		26
16RI324			9			9
16RI325		3	2			5
16RI326			7	1		8
16RI327		1	20	1		22
16RI328		1	5			6
16RI330	1	77	309	8	1	396
Total	1	96	443	15	1	556

Ceramics

The ceramic inventory consisted of a variety of refined and utilitarian wares dating from the nineteenth century through the twentieth century. A total of 96 ceramic sherds were recovered during the current project. The recovered ceramics were grouped into five major ware types: whiteware, ironstone, porcelain, stoneware, and unidentified. The single unidentified ceramic appears to be whiteware, but could not be confidently

classified. 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.

Whiteware

As a ware type, whiteware includes all refined earthenware that possesses a relatively nonvitreous, white to grayish white clay body. Undecorated areas on dishes exhibit a nearly pure 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 the earlier 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 Haggar 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.

Whiteware sherds represented the majority of the recovered ceramic assemblage, with 82 examples being collected. Decorative types observed on the whiteware sherds in this assemblage are summarized and defined in the following discussions.

Plain

This type includes vessels with no decoration. While some researchers, such as Lofstrom et al. (1982:10) and Wetherbee (1980), include molded designs with "plain" whiteware, for this analysis Majewski and O'Brien's (1987:153) recommendations are followed, meaning that molded vessels should be grouped on their own. Plain whiteware vessels became very popular following the Civil War and continued to increase 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—many of whom were white and middle class—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).

Plain whiteware sherds date from 1830 to the present (Majewski and O'Brien 1987:119). While many of these sherds may have come from plain vessels, it should be noted that many of these sherds may also be undecorated parts of decorated vessels. Of the whiteware fragments collected during the current project, 74 were plain whiteware.

Embossed/Molded Design

As transfer printing became popular on pearlware, molded designs had been 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 embossed/molded design wares recovered was defined as 1860 to the present. Four embossed/molded whiteware sherds were recovered. The designs on all of these small fragments could not be identified, but the molding appeared to be on or near the rim on most of the fragments.

Transfer Print

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). 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.

One distinguishing characteristic of these late transfer prints is a poor quality transfer print. 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). One transfer printed whiteware sherd was identified in the current assemblage, with a small segment of green line design being visible.

Slip decorated

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.

Three fragments of whiteware recovered from the project area displayed slip decoration: one had a dark olive green interior/exterior slip, one with a mint green slip, and one with a bright yellow slip.

Ironstone

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, however, such as Wetherbee (1980), refer to all nineteenth-century white-bodied wares 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 porcelain from east Asian sources, 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. The early ironstone, available commercially in the United States circa 1830, had a finer, denser paste (Majewski and O'Brien 1987:120). 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 heavier, harder paste and reflected the gray-white color of French porcelains. It was also less expensive (Majewski and O'Brien 1987:120).

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 towards thinner and lighter ironstones, heavy ironstone remained on the market and continues to be contemporarily popular in hotel/restaurant service (hence, this heavy, twentieth-century ironstone is sometimes called "hotelware"). Its production for home use essentially ceased by the second decade of the twentieth century (Lehner 1980:11).

One plain ironstone sherd was identified in the assemblage.

Porcelain

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 Haggar 1957:179). Among the more affluent households in Europe and North America, porcelain was a 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 large quantities in the twentieth century.

Five porcelain fragments were identified in the current assemblage. Four of the five pieces were from a single site, and all were undecorated body sherds.

Stoneware

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 had generally replaced coarse redware as the primary utilitarian ware used in American households. Stoneware is a semivitreous 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 C (2,192 to 2,282 degrees F) 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 (Ketchum 1971:11). 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); 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 clay slip. 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, since for the most part salt could not reach this portion of the vessels. However, by the 1830s, it was also used as an exterior glaze. Albany-slipped vessels may exhibit a lustrous tint, depending on the firing temperature (Ketchum 1971:51). Bristol slip, an opaque white glaze, 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). Bristol slip was commonly used throughout the Midwest and often served as the base for sponge decoration (Ketchum 1991:11).

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). The alkaline glaze is one of the most distinguishing characteristics of Southern stoneware and is not commonly found in other regions of the United States (Ketchum 1991:11). 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.

Seven fragments of stoneware vessels were identified in the assemblage. These included five salt glazed sherds, one slipped sherd, and one sherd displaying an indeterminate finish.

Container Glass

A total of 443 pieces of container glass were recovered during the current investigations. Research by Baugher-Perlin (1982), Jones and Sullivan (1985), and Toulouse (1971) was used to date glass containers. Glass color was the only attribute that could be used for dating those fragments that were not identifiable as to type of manufacture.

The approximate date of manufacture for bottles and bottle fragments recovered from the project area was established by determining 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 dates embossed on the bottle.

The lip on a bottle can be informative. A lipping tool, patented in the United States in 1856, 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 to the 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, 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 a beginning date of manufacture of 1903, most tooled-glass vessel sherds will be given an ending 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 manufacturing process can be roughly divided into three basic groups: free blown, blown in mold (BIM), and machine manufactured (ABM) vessels (Baugher-Perlin 1982:262–265). Fourteen pieces of ABM and 429 pieces of unidentified glass fragments were recovered during the current project.

Automatic Bottle Machine (ABM)

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.

The Individual Section machine was widely used starting in 1925 and by 1940 became the most widely used bottle manufacturing device (Jones and Sullivan 1985:39). This 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). Cup and post molds continued to be used in the ABM industry throughout most of the twentieth century. These were still formed similarly to the earlier BIM method and were not assigned mold-specific manufacturing dates.

Body types manufactured by the ABM method were similar to those earlier manufactured by the BIM process. Enameled labels, also referred to as "applied color labels" or ACLs, represented a permanent label that eventually replaced embossing. Initially, pigments were pressed through printing screens onto the bottle's surface. One color was applied at a time, and the bottles were then fired to create a permanent adhesion. Some of these early enameled label bottles also exhibit embossing. In the 1950s, an automatic printing machine was invented that would increase printing capacity. These machines used a thermoplastic wax that eliminated the need for drying time in between colors. This process also heated the medium as it was being added to the glass surface. Enameled labeling was popularized circa 1935 (Lindsey 2008). Paper labels were introduced to the bottle industry well before the creation of the automatic bottle machine; therefore, a specific date could not be applied to those bottles or glass sherds exhibiting this label type.

Finishes were formed differently on ABM bottles and jars than on BIM vessels. Unlike BIM vessels, where the finish is formed last, the finish on ABM bottles and jars is formed first. The automatic machines typically held the neck ring and finish before the bottle or jar was expanded to the desired size. The most obvious distinguishing characteristic on an ABM finish compared to a BIM finish is the ABM finishes exhibit machine mold seams that travel up the entire finish of the vessel. ABM vessels also exhibit a horizontal mold seam that circles the vessel neck just below the finish. ABM finishes contain another mold seam at the top of the finish, which encircles the vessel opening (Jones and Sullivan 1985; Lindsey 2008; Toulouse 1969).

Color

Several different glass colors were identified in the assemblage collected during the project. These included amber, amethyst, aqua, blue-green, green, light green, olive green, opaque white, cobalt, and colorless 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 the ABM (Lockhart 2006:53).

Although manganese was more difficult to obtain after World War I, and selenium was often less expensive, the improvement in technology was the major reason for the change. Selenium 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, 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 as milk glass, was produced with the addition of tin or zinc oxide and phosphates to the glass recipe. Opaque white glass was used for a variety of different bottle types, 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 (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 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 (Baugher-Perlin 1982:261). However, it should be noted that colorless 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).

Fourteen fragments of ABM-manufactured glass were identified in the assemblage. Colors represented in the ABM glass included 10 colorless, 1 opaque white, 1 amethyst, 1 aqua, and 1 light green.

Undiagnostic Container Glass

When no other diagnostic features were present, the color of the glass was noted, although there is some subjectivity inherent in color classification. The concern for the current study was primarily to note the presence of datable glass. A total of 429 undiagnostic container glass fragments were identified in the assemblage. Colors represented in this total included 287 colorless, 56 amber, 13 amethyst, 14 aqua, 10 blue-green, 4 cobalt, 10 green, 13 light green, 3 olive green, 11 opaque white fragments, and 8 listed as other.

Glass Tableware

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 predominantly 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, and 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, being 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 blown-in-mold 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.

From the late 1870s onward, the principal type of mold used appears to have been optic molding, although some contact molding was still used in glass tableware production (Jones 2000:157). Optic molding is a technique in which the glass is blown into a patterned mold before being transferred to a full-size undecorated mold and blown. This causes the pattern, usually consisting of panels, ribs, or circular protrusions, to be transferred to the interior of the object (Jones 2000:160). The major use of this technique in glass tableware dates from the 1880s into the twentieth century, when it was used primarily for drinking glasses and mugs.

Glass tableware was decorated in numerous ways. Decorative techniques included applied color, acid etching, painting, engraving, wheel etching, iridescent, heat treating, gilting, 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 generally rare.

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). Opaque blue, green, and yellow glasses were introduced in the 1870s (Jones 2000:147).

Fifteen fragments of glass tableware were identified in the assemblage. These pieces included 2 pattern molds made of opaque white glass and 13 undiagnostic fragments with 11 made of clear glass, 1 of light green glass, and 1 of green glass.

Metal Food Container

One metal pull tab fragment that may be from a metal food container was recovered. Little can be inferred from the small fragment although a twentieth-century date (or later) for the item is likely as mass manufacture of these items began in the late 1930s and the cans are still produced today.

Furnishings Group

The furnishings category includes artifacts usually associated with the home or building that are not elements of the actual construction. Examples of furnishings include

decorative elements, flooring, furniture, heating, lighting, and window and wall decorations. The three furnishings group items collected were small fragments of what appears to be thin colorless lamp chimney or light bulb glass.

Maintenance and Subsistence Group

The maintenance and subsistence group contains artifacts related to general maintenance activities. These artifacts are grouped into classes containing nonfood cans, nonfood containers, electrical, farming and gardening, stable and barn activities, general hardware, general tools, transportation, and fuel-related items, such as coal. The 12 artifacts recovered that were associated with this group included 2 electrical items (ceramic electrical insulators), 3 fuel items (cinder/slag), and 7 general hardware items (2 bolts, 2 pieces of wire, 1 piece of fencing, 1 staple, and 1 screw).

Transportation Group

This class of artifacts includes various parts associated with engines, automobiles, railroads, wagons, carriages, and other modes of transportation. The two transportation group artifacts identified during this analysis included one spark plug and one railroad spike.

Personal Group

The personal group includes artifacts assumed to have belonged to individuals. This category of artifacts includes health and grooming items, jewelry and beads, coins, music and art items, personal items, toys, and games. The three recovered personal artifacts included a milk glass cosmetic container, a plastic comb, and an opaque white glass bead.

Unidentified

This category contains artifacts that could not be identified beyond the material from which the artifact was made. Within the current assemblage, there were six material classes included within this group of artifacts. These material classes included glass, metal, ceramic, stone, plastic, and indeterminate.

Ninety-seven artifacts were classified as unidentified. These include 4 ceramic, 19 glass, 67 metal, 4 plastic, 1 piece of cut marble, and 2 artifacts whose material could not be identified.

Discussion

A total of 923 historic artifacts were recovered from the Holly Ridge Northeast tract during the current investigation. The material collected is discussed in detail above, and a brief discussion by site is provided below. A complete inventory of the recovered historic artifacts can be found in Appendix A, and a full discussion of each site is provided in the Results chapter.

Site 16RI321 Summary

The artifact assemblage for Site 16RI321 included 54 artifacts. The majority of recovered items were architectural group artifacts, including 22 brick fragments, 7 nails (2 cut nails, 1 wire nail, and 4 indeterminate), and 1 piece of window glass. Domestic group items included 19 pieces of undiagnostic container glass and 1 fragment of glass tableware. In addition, 1 indeterminate and 3 metal unidentified artifacts were recovered. Of the entire recovered assemblage only 3 nails displayed diagnostic features, and since both machine-cut and wire nails were recovered, the site could not be definitively assigned to any specific temporal period, only being broadly datable to the nineteenth and/or twentieth centuries.

A total of four unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than three are depicted within the site boundaries at any one time. One structure is depicted in the northern half of the site on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and three new structures are depicted within the site

boundaries (see Figures 3.2 and 3.3). Finally, on the 1987 Dunn, Louisiana, 7.5-minute series topographic quadrangle, none of the structures depicted within the site boundaries on earlier maps are present (USGS 1935, 1958, 1987b). None of the structures were extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI321 assemblage represents the remains of one or more of the four structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI321 was utilized as a residence.

Site 16RI322 Summary

The artifact assemblage for Site 16RI322 included 112 artifacts. The majority of the recovered artifacts were domestic group items, including 9 pieces of historic ceramic (1 ironstone, 6 whiteware, and 2 stoneware), 52 pieces of container glass, and 3 pieces of glass tableware. Architectural group items included 5 brick fragments, 1 possible asbestos tile fragment, 19 pieces of flat glass, and 8 nails (1 indeterminate cut/wrought and 7 indeterminate). In addition, 2 pieces of lamp chimney or light bulb glass, 1 railroad spike, 1 faunal tooth, and 11 unidentifiable items were recovered. The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, but the presence of 4 container glass fragments formed in an automatic bottling machine indicates that the site dates to the twentieth century, corresponding to the Industrial & Modern period. None of the other artifacts could be definitively assigned to any specific temporal period.

A total of seven unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than four are depicted within the site boundaries at any one time. One structure is depicted partially overlapping the site's western boundary on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and four new structures are depicted within the site boundaries (see Figures 3.2 and 3.3). Finally, on the 1987 Bee Bayou, Louisiana, 7.5-minute series topographic quadrangle, only one of the 1958 structures is still depicted, but two new structures are also depicted within the site boundaries (USGS 1935, 1958, 1987a). None of these structures were extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI322 assemblage represents the remains of one or more of the seven structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI322 was utilized as a residence.

Site 16RI323 Summary

The artifact assemblage for Site 16RI323 included 40 artifacts. The majority of artifacts were domestic group items, including 5 fragments of whiteware, 20 pieces of undiagnostic container glass, and 1 piece of undiagnostic glass tableware. The remaining artifacts included 3 brick fragments, 7 pieces of flat glass, 3 indeterminate nails, and 1 unidentified metal item. The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

A total of two unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than one is depicted within the site boundaries at any one time. One structure is depicted near the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and one new structure is depicted at the northwest edge of the site (see Figures 3.2 and 3.3). Finally, on the 1987 Dunn, Louisiana, 7.5-minute

series topographic quadrangle, Neither structure depicted within the site boundaries on earlier maps is present (USGS 1935, 1958, 1987b). Neither of the structures was extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI323 assemblage represents the remains of one or both of the two structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI323 was utilized as a residence.

Site 16RI324 Summary

The artifact assemblage for Site 16RI324 included 12 artifacts. The majority of artifacts were domestic group items, including 8 pieces of undiagnostic container glass and 1 milk glass canning jar lid fragment. The remaining artifacts included 1 piece of brick, 1 nail of an indeterminate type, and 1 unidentified metal artifact. The canning jar lid fragment could only be broadly dated to the late nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

Two structures are depicted at the site location on the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle (see Figure 3.3). These structures are no longer present on the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangle (USGS 1958, 1987b), and neither of the structures was extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI324 assemblage represents the remains of one or both of the structures depicted on the 1958 map. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI324 was utilized as a residence.

Site 16RI325 Summary

A total of 10 artifacts were recovered from Site 16RI325. The recovered items included 3 artifacts from the architectural group (1 piece of flat glass and 2 nails of indeterminate type), 5 artifacts from the domestic group (1 piece of porcelain, 1 stoneware fragment, 1 whiteware fragment and 2 undiagnostic container glass fragments), and 2 unidentified artifacts (1 ceramic and 1 metal). The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

One structure is depicted at the site location on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute and 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI325 assemblage represents the remains of the structure depicted on the 1935 map. Though the recovered assemblage was very limited, the preponderance of domestic artifacts indicates that the historic structure represented by Site 16RI325 was utilized as a residence.

Site 16RI326 Summary

The artifact assemblage for Site 16RI326 included 15 artifacts. The majority of these items were domestic group artifacts, including 7 undiagnostic pieces of container glass and 1 undiagnostic glass tableware fragment. The remaining artifacts included 2 brick fragments, 2 pieces of flat glass, 2 nails of indeterminate type, and 1 unidentified aluminum artifact. None of the recovered artifacts could be definitively assigned to any specific temporal period.

One structure is depicted roughly 25 m (82 ft) southwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS

topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI326 assemblage represents the remains of the structure depicted on the 1935 map. Though the recovered assemblage was very limited, the preponderance of domestic artifacts indicates that the historic structure represented by Site 16RI326 was utilized as a residence.

Site 16RI327 Summary

The artifact assemblage for Site 16RI327 included 28 artifacts. The majority of these items were domestic group artifacts, including 1 whiteware fragment, 20 pieces of container glass, and 1 undiagnostic glass tableware fragment. The remaining artifacts included 1 brick fragment, 1 piece of flat glass, and 4 unidentified artifacts (3 metal and 1 glass). The whiteware fragment could only be broadly dated to the nineteenth and/or twentieth centuries, but 3 container glass fragments formed in an automatic bottling machine dated the site to the twentieth century, corresponding to the Industrial & Modern period.

One structure is depicted roughly 50 m (164 ft) northwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI327 assemblage represents the remains of the structure depicted on the 1935 map. The high proportion of domestic artifacts indicates that the historic structure represented by Site 16RI327 was utilized as a residence.

Site 16RI328 Summary

The artifact assemblage for Site 16RI328 included seven artifacts. These items were all domestic group artifacts, and included one undecorated whiteware fragment, five pieces of undiagnostic container glass and one fragment of a glass cosmetic container. The whiteware fragment could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

One structure is depicted roughly 35 m (115 ft) northwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. While it is possible that the Site 16RI328 assemblage represents the remains of the structure depicted on the 1935 map, no architectural materials were recovered. Therefore, despite the presence of a small quantity of domestic artifacts, there is no strong indication that Site 16RI328 represents the remains of a historic residence, and the site function is unknown.

Site 16RI329 Summary

The artifact assemblage for Site 16RI329 included five artifacts. These materials consisted of two pieces of brick, two wire nails, and one fragment of a ceramic electrical insulator. The insulator and brick fragments could not be definitively assigned to any specific temporal period, but the presence of two wire nails dates the site to the late nineteenth and/or twentieth centuries, corresponding to the Industrial & Modern period.

One structure is depicted roughly 15 m (49 ft) east of the site datum on the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle (see Figure 3.3). This structure is no longer depicted on the 1987

Dunn, Louisiana, 7.5-minute series USGS topographic quadrangle (USGS 1958, 1987b), and the structure was no longer extant at the time of the survey. Since a small quantity of architectural materials were recovered, it is possible that the Site 16RI329 assemblage represents the remains of the structure depicted on the 1958 map. However, the almost complete lack of any other cultural material does not allow a confident interpretation of the assemblage, and the site function is unknown.

Site 16RI330 Summary

A total of 638 artifacts constitute the Site 16RI330 assemblage. The majority of recovered items were domestic group artifacts, including 4 pieces of porcelain, 68 whiteware fragments, 4 stoneware fragments, 1 piece of unidentified domestic ceramic, 309 pieces of container glass, 8 glass tableware fragments, 1 metal beverage can pull tab, and 1 metal food container fragment. Architectural group artifacts were the next most numerous type, these including 58 brick fragments, 1 piece of concrete, 2 pieces of mortar, 6 fragments of stoneware water pipe, 50 pieces of flat glass, and 38 nails (1 machine cut nail, 13 wire nails, and 24 indeterminate nails). In addition, 1 piece of lamp chimney or light bulb glass, 1 ceramic electrical insulator, 3 pieces of slag, 7 general hardware items (2 bolts, 1 screw, 1 fence staple, 2 pieces of wire, and 1 segment of barbed wire), 1 plastic comb, 1 glass bead, 1 spark plug, and 72 unidentified artifacts (3 ceramic, 14 glass, 50 metal, 3 plastic, 1 stone, and 1 indeterminate) were recovered. The majority of the recovered artifacts did not display any diagnostic features, and the historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries. However, the presence of 6 pieces of container glass formed in an automatic bottling machine, 1 beverage can pull tab, 13 wire nails, 1 plastic comb, and 1 spark plug date the site to the twentieth century, corresponding to the Industrial & Modern period.

A total of 19 unique structures are depicted within the site footprint on three different USGS topographic quadrangles, though no more than 12 are depicted within the site boundaries at any one time. Twelve structures are depicted along two unpaved roads in the site location on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, three of the structures from the 1935 map are still present and seven new structures are depicted along two roads, for a total of 10 structures depicted within the site area (see Figures 3.2 and 3.3). Finally, a total of six structures are depicted along two roads within the site boundaries on the 1987 Dunn, Louisiana, 7.5-minute series topographic quadrangle, five of which first appeared on the 1958 map and one of which was first depicted on the 1935 map (USGS 1935, 1958, 1987b). Google Earth aerial photographs indicate that only the easternmost of these structures (one that was first depicted on the 1958 map) was still present by 1998. This structure is still depicted in aerial views as late as 2012, but was no longer extant at the time of the survey. Only a concentration of fragments of dimensional lumber that were larger than typically observed within the site's surface scatter marked its location during delineation.

Since no structures other than the ones discussed above are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI330 assemblage represents the remains of several of the structures discussed above. The high proportion of domestic artifacts and the prevalence of this artifact type throughout the entire site footprint indicate that several of the historic structures represented by Site 16RI330 were utilized as residences.

Isolated Finds

The isolated finds recorded in the Holly Ridge Northeast tract consisted of a total of two artifacts collected in two discrete locations (IF 21 and IF 22). Table 5.4 provides a summary of these materials. A full discussion of the isolated finds is provided in Chapter 6 below.

Table 5.4. Summary of Isolated Find Data.

Isolated Find	Item	Total
IF 21		
	Unidentified Group	
	Metal	
	Iron / Steel	1
IF 22		
	Architectural Group	
	Nails	
	Wire Nail	1
Totals		2

Chapter 6. Results

The fieldwork portion of this project consisted of a combination of pedestrian survey and shovel testing. Surface visibility was generally excellent throughout the survey area, since the vast majority of the project area consisted of fallow agricultural fields with virtually 100 percent visibility. However, in those small portions of the survey area vegetated with secondary forest or cultivated in wheat, surface visibility was generally poor due to understory vegetation, grass/crop cover, and/or leaf litter. Field investigation resulted in the location of 10 new archaeological sites (16RI321–16RI330) and 2 isolated finds (IF 21–IF 22). In addition, the location of 1 archaeological site (16RI302) previously recorded in the project area was revisited, but the site could not be relocated. The results of the investigations at each of the sites and isolated finds are presented in this chapter.

Site 16RI302

Field Site Number: N/A
UTM Coordinates:
Site Center and Photo Location: 15N, N3592750 E629110 (NAD83)
Quadrangle Map: Bee Bayou, Louisiana, 7.5-minute
Elevation: 25 m (81 ft) AMSL
Components: historic
Specific Components: Industrial & Modern (1890–)
Site Type: unknown
Size: 26 m (85 ft) N–S x 26 m (85 ft) E–W
Distance/direction to nearest water: unnamed tributary of Cypress Creek, 50 m (164 ft) northwest
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: level
Vegetation: dense cultivated wheat roughly 1 m (3 ft) in height (agricultural field)
Ground surface visibility: virtually 0 percent; site located in densely-planted wheat
Recommended NRHP status: not eligible

Site Description

Site 16RI302 was originally recorded in January of 2014 during a pedestrian walkover of the current project area by R. Christopher Goodwin & Associates, Inc., personnel. The site was mapped as a roughly circular surface scatter of brick fragments and one fragment of colorless glass measuring roughly 26 m (85 ft) in diameter. Some of the brick fragments were stamped with manufacturer's marks. Approximately 20 m (66 ft) to the west of the site, in the woods located outside of the project area, trash or push piles were observed that were suggested to have possibly represented the remains of a structure associated with the site. No subsurface testing was conducted at the time of the initial visit, and additional survey including systematic surface collection and mapping of the site was recommended.

As revisited during the current project, the location of Site 16RI302 is situated in an agricultural field in north central Richland Parish, Louisiana, approximately 105 m (344 ft) east of LA 183 and 335 m (1,099 ft) south of US 80. The site lies in a generally level, slightly undulating agricultural field, roughly 50 m (164 ft) southeast of an unnamed tributary of Cypress Creek. The portion of the agricultural field containing the site was densely cultivated with wheat roughly 1 m (3 ft) in height at the time of the survey, resulting in negligible surface visibility. Possible push piles were also observed just inside the woods to the west of the site during the current visit, but were not examined closely since they were well outside the project area.

Site 16RI302 could not be relocated during the current survey. This result may have been due to a lack of subsurface deposits at this site coupled with the dense wheat cover in the area that completely eliminated surface visibility. None of the shovel tests excavated in the vicinity of the site were positive for cultural material.

Investigation Methods

One transect shovel test (73-5) was excavated within the previously recorded footprint of Site 16RI302 but was negative for cultural material. Following these negative results, a pedestrian survey was conducted at the site location. Surface visibility was virtually nonexistent due to the dense wheat growing at the site location, and no cultural material was observed on the surface in the site area.

Photographs were taken at the site location (Figure 6.1), and a locational data point was collected with a Trimble GeoXT GPS unit at the point where the photos were taken.

Depositional Context

Profiles observed in the vicinity of Site 16RI302 were generally similar to that of Gigger silt loam, which is mapped throughout the site area. The profile of transect shovel test 73-5 consisted of a brown (10YR 5/3) silt loam Ap horizon from 0 to 15 cm (0 to 6 in) below ground surface (bgs), overlying a yellowish brown (10YR 5/6) silty clay loam Bt1 horizon from 15 to 31 cm (6 to 12 in) bgs. The presence of a well-defined plow zone in the profiles of test 73-5 and all adjacent shovel tests indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

Site 16RI302 could not be relocated. This result may have been due to a lack of subsurface deposits at this site coupled with the dense wheat cover in the area that completely eliminated surface visibility. None of the shovel tests excavated in the vicinity of the site were positive for cultural material. The nearest positive shovel tests to Site 16RI302 during the current project are located at Site 16RI322, roughly 100 m (328 ft) to the south.

Figure 6.1. Overview of Site 16RI302 location, facing north.

Summary and National Register Evaluation

No historic structures are depicted at the location of Site 16RI302 on any of the available USGS topographic quadrangles. Therefore, despite the observation of a quantity of bricks and possible push piles at the site location in 2014, there is no strong indication that Site 16RI302 represents the remains of a historic structure, and the site function is unknown. No artifacts of any kind were recovered during the current project, and no features or intact cultural midden deposits were observed in the area of Site 16RI302.

The current negative investigations at Site 16RI302 indicate that this resource contains a low density of subsurface remains, if indeed any subsurface deposits are present at all. Additionally, both the current investigation and the initial 2014 site visit indicate that the site area has experienced significant disturbance from agricultural activities, and a comparison with the other sites recorded during this project indicates that any remaining deposits would retain little integrity. Because of these factors, Site 16RI302 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and the site is recommended not eligible for listing in the NRHP.

Site 16RI321

Field Site Number: HRNE-03
UTM Coordinates:
Grid Origin: 15N, N3592822 E629829 (NAD 83)
Site Center: 15N, N3592802 E629808 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 26 m (84 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: historic residence or residences
Size: 210 m (689 ft) N–S x 166 m (545 ft) E–W
Distance/direction to nearest water: Big Creek, 470 m (1,542 ft) northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and sideslopes of narrow linear rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI321 originally comprised two separate loci (HRNE-03 and HRNE-04) that were recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014. No subsurface testing was conducted during the initial visit, and the loci were not formally documented or delineated at that time. During the current project, the two loci were consolidated into a single site and initially designated in the field with the name of the larger original locus (HRNE-03).

The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 230 m (755 ft) south of US 80 and 825 m (2,707 ft) east of LA 183. The site lies in an open agricultural field on the top and sideslopes of a narrow linear rise, roughly 470 m (1,542 ft) southwest of Big Creek. The agricultural field was plowed and fallow at the time of the survey (Figure 6.2). Site 16RI321 was encountered through shovel testing and the observation of a surface artifact scatter.

Investigation Methods

Site 16RI321 was recorded through the excavation of five positive transect shovel tests (88-4, 89-2, 89-3, 89-4, and 90-6). Shovel Test 88-4 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals until three consecutive positive shovel tests were encountered and 20 m (66 ft) intervals were used thereafter.

Figure 6.2. Overview of Site 16RI321 from datum, facing north.

In total, 92 shovel tests were used to delineate the site boundaries, 22 of which were positive for cultural material and 70 of which were negative. Maximum site dimensions were 210 m (689 ft) north–south and 166 m (545 ft) east–west. Ground surface visibility was excellent, and a variable low- to high-density scatter of surface artifacts was also observed in the site area. This surface scatter was much denser in the northern half of the site than in the southern half. Large fragments of mortar and several complete bricks were observed on the surface in the site's northern half, while architectural artifacts were noticeably fewer and more fragmentary in the site's southern half. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI321 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.3).

Depositional Context

Profiles observed at Site 16RI321 were generally similar to that of Gilbert silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1020 E960, consisted of a brown (10YR 4/3) silt loam Ap horizon from 0 to 25 cm (0 to 10 in) bgs, overlying a grayish brown (10YR 5/2) silty clay loam Eg horizon from 25 to 40 cm (10 to 16 in) bgs. The Eg horizon also contained mottles of yellowish brown (10YR 5/8) silty clay loam. This profile was generally typical of the Gilbert soil series mapped in much of the site area, but Gigger and Dexter soils were also observed in several shovel tests. Artifacts were recovered from an average depth of 10 cm (4 in) bgs, with a maximum recovery depth of 30 cm (12 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of the majority of artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

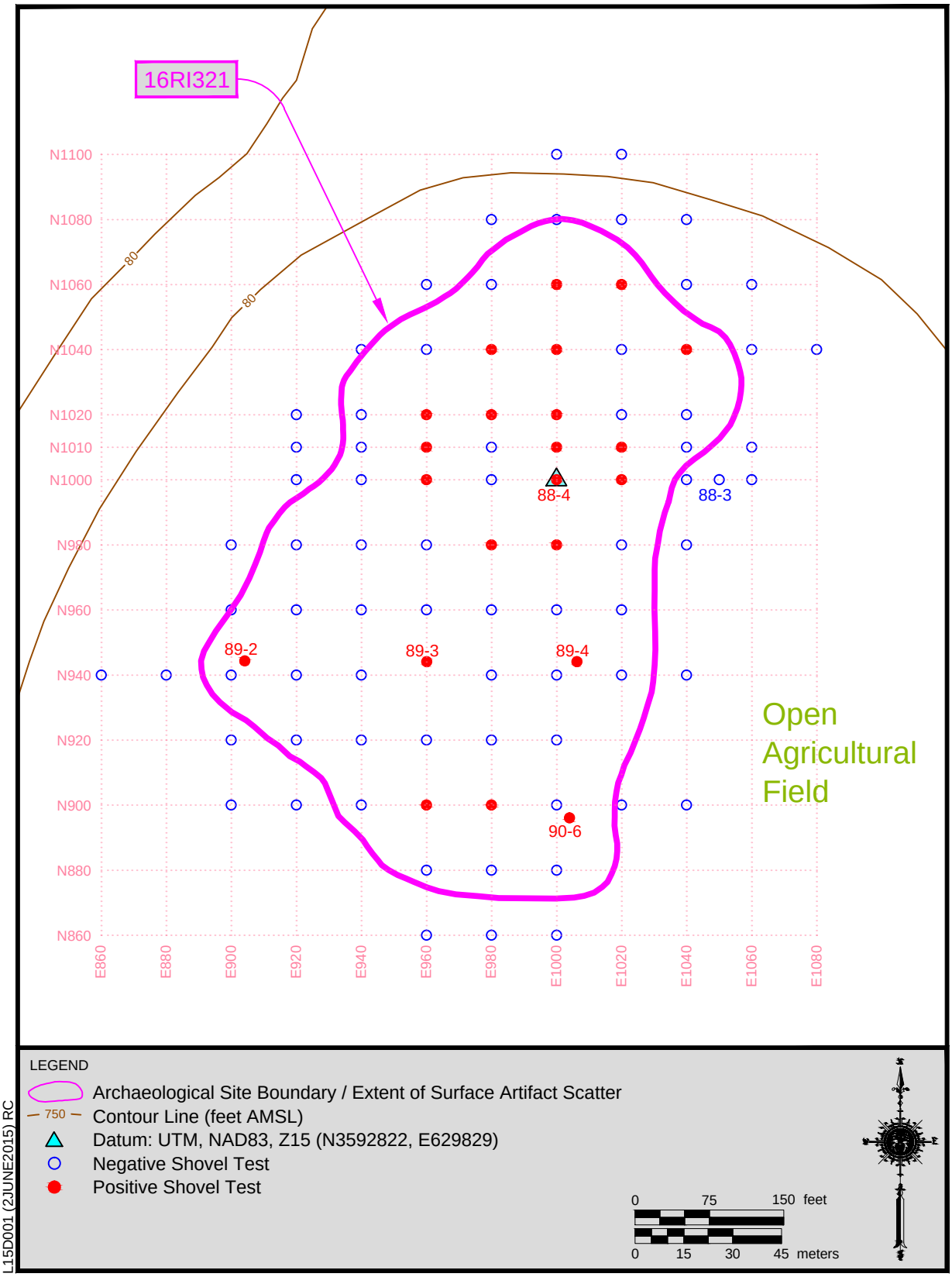

Figure 6.3. Schematic plan map of Site 16RI321.

Artifacts

The artifact assemblage for Site 16RI321 included 54 artifacts. The majority of recovered items were architectural group artifacts, including 22 brick fragments, 7 nails (2 cut nails, 1 wire nail, and 4 indeterminate), and 1 piece of window glass. Domestic group items included 19 pieces of undiagnostic container glass and 1 fragment of glass tableware. In addition, 1 indeterminate and 3 metal unidentified artifacts were recovered (Table 6.1). Of the entire recovered assemblage only 3 nails displayed diagnostic features, and since both machine-cut and wire nails were recovered the site could not be definitively assigned to any specific temporal period, only being broadly datable to the nineteenth and/or twentieth centuries.

A total of four unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than three are depicted within the site boundaries at any one time. One structure is depicted in the

Table 6.1. Site 16RI321 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI321	STP N1000 E1020	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI321	STP N1000 E1020	10-20 cm bgs	Architecture	Nails	Cut Nail: unspecified	1
16RI321	STP N1000 E1020	20-30 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N1000 E1020	20-30 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI321	STP N1000 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI321	STP N1010 E1000	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	3
16RI321	STP N1010 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI321	STP N1020 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI321	STP N1020 E1000	15-25 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N1020 E1000	15-25 cm bgs	Architecture	Nails	Wire Nail	1
16RI321	STP N1020 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N1020 E960	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI321	STP N1020 E980	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	5
16RI321	STP N1020 E980	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI321	STP N1040 E1000	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N1040 E1040	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI321	STP N1040 E1040	10-20 cm bgs	Domestic	Glass Tableware		1
16RI321	STP N1040 E980	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N1040 E980	10-20 cm bgs	Architecture	Nails	Cut Nail: unspecified	1
16RI321	STP N1060 E1000	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI321	STP N1060 E1020	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N900 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N900 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N980 E1000	5-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP N980 E1000	5-15 cm bgs	Architecture	Nails	Indeterminate	2
16RI321	STP N980 E1000	5-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	9
16RI321	STP N980 E980	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI321	STP TR 88-4	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI321	STP TR 88-4	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI321	STP TR 88-4	10-20 cm bgs	Unidentified	Indeterminate	1	1
16RI321	STP TR 89-2	10-20 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI321	STP TR 89-3	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI321	STP TR 89-4	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI321	STP TR 90-6	5-15 cm bgs	Unidentified	Metal	Iron / Steel	1
Total						54

northern half of the site on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and three new structures are depicted within the site boundaries (see Figures 3.2 and 3.3). Finally, on the 1987 Dunn, Louisiana, 7.5-minute series topographic quadrangle, none of the structures depicted within the site boundaries on earlier maps are present (USGS 1935, 1958, 1987b). None of the structures were extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI321 assemblage represents the remains of one or more of the four structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI321 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI321 likely represents the remains of a historic residence or residences dating to the nineteenth and/or twentieth centuries. Diagnostic artifacts were recovered, but no features or intact cultural midden deposits were observed at Site 16RI321.

Investigations at Site 16RI321 indicate that this resource contains a moderate density of subsurface remains compared with the other sites investigated in this study. However, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI321 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI321 is recommended not eligible for listing in the NRHP.

Site 16RI322

Field Site Number: HRNEPED04-01/04-02
UTM Coordinates:
Grid Origin: 15N, N3592506 E629045 (NAD 83)
Site Center: 15N, N3592546 E629055 (NAD 83)
Quadrangle Map: Bee Bayou, Louisiana, 7.5-minute
Elevation: 26 m (84 ft) AMSL
Components: historic
Specific Components: Industrial & Modern, 1890–
Site Type: historic residence or residences
Size: 250 m (820 ft) N–S x 115 m (377 ft) E–W
Distance/direction to nearest water: unnamed tributary of Cypress Creek, 90 m (295 ft) northwest
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: level
Vegetation: dense cultivated wheat roughly 1 m (3 ft) in height (agricultural field)
Ground surface visibility: virtually 0 percent; site located in densely-planted wheat
Recommended NRHP status: not eligible

Site Description

Site 16RI322 originally comprised two separate loci (HRNEPED04-01 and HRNEPED04-02) that were recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014. No subsurface testing was conducted during the initial visit, and the loci were not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 40 m (131 ft) east of LA 183 and 585 m (1,919 ft) south of US 80. The site lies in a generally level, slightly undulating agricultural field roughly 90 m (295 ft) southeast of an unnamed tributary of Cypress Creek. The portion of the agricultural field containing the site was planted with wheat roughly 1 m (3 ft) in height at the time of the survey, resulting in negligible surface

visibility (Figure 6.4). As a result of the poor visibility, no surface artifacts were observed and Site 16RI322 was encountered only through shovel testing.

Investigation Methods

Site 16RI322 was recorded through the excavation of four consecutive positive transect shovel tests (72-1, 72-2, 72-3, and 72-4). Shovel Test 72-3 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation began with shovel tests excavated at 20 m (66 ft) intervals, since more than three consecutive positive shovel tests had already been encountered, but the full grid was excavated with a combination of 10 m (33 ft) and 20 m (66 ft) interval shovel tests to more easily incorporate previously excavated positive shovel tests into the grid.

In total, 70 shovel tests were used to delineate the site boundaries, 28 of which were positive for cultural material, 41 of which were negative, and one of which could not be excavated due to standing water. Maximum site dimensions were 250 m (820 ft) north–south and 115 m (377 ft) east–west. The project area boundary forms a portion of the site's western and northern boundaries, but an unnamed tributary of Cypress Creek and LA 183 are immediately adjacent to the site to the north and west respectively, so the site is unlikely to extend much further in these directions. Ground surface visibility was negligible, so no surface artifacts were observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI322 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.5).

Figure 6.4. Overview of Site 16RI322 from datum, facing north.

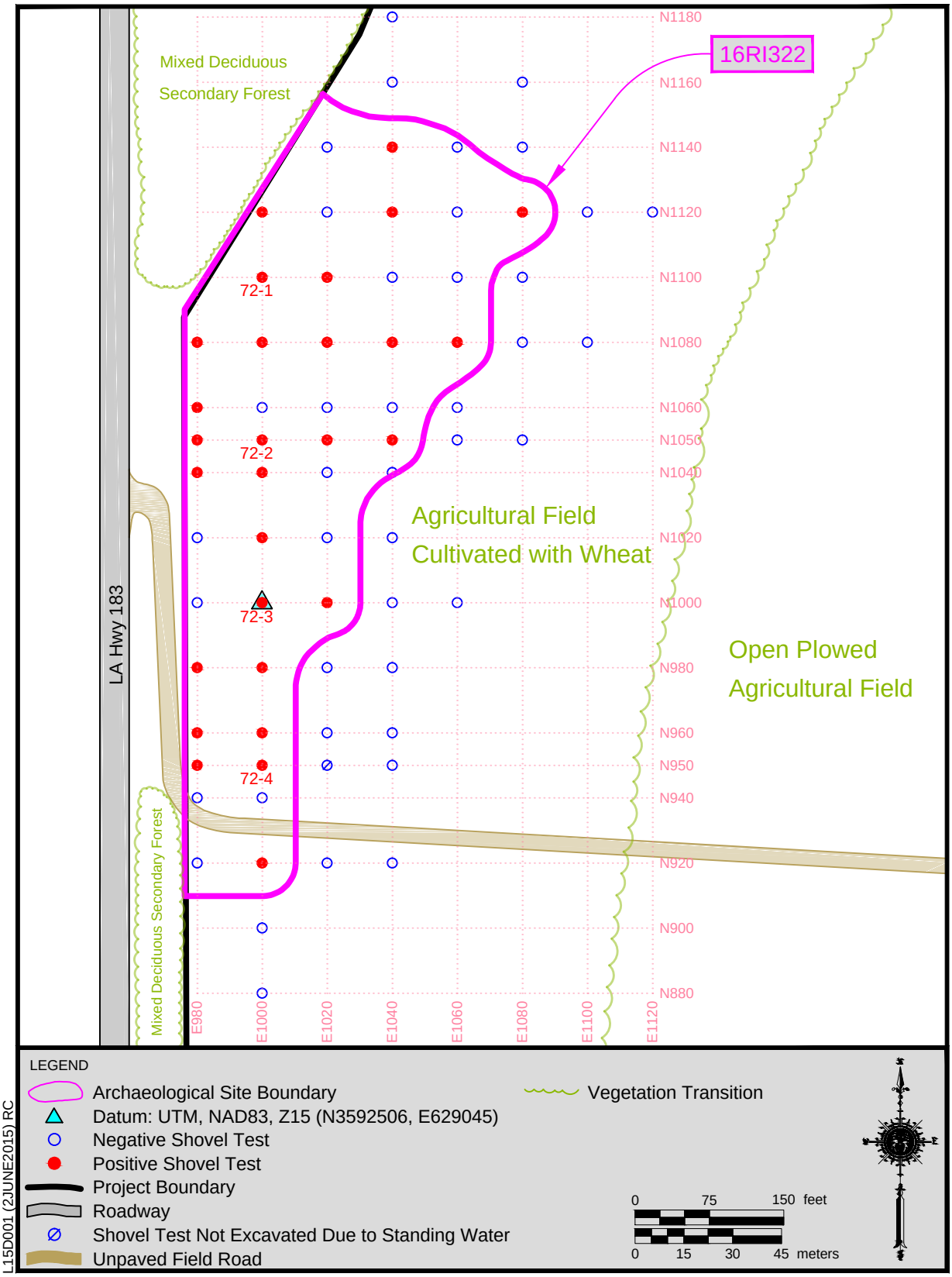

Figure 6.5. Schematic plan map of Site 16RI322.

Depositional Context

Profiles observed at Site 16RI322 were generally similar to that of Gilbert silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1080 E1040, consisted of a brown (10YR 5/3) silt loam Ap horizon from 0 to 15 cm (0 to 6 in) bgs, overlying a light gray (10YR 7/2) silty clay loam Eg horizon from 15 to 35 cm (6 to 14 in) bgs. The Eg horizon also contained mottles of brownish yellow (10YR 6/8) and yellowish brown (10YR 5/6) silty clay loam. This profile was generally typical of the Gilbert soil series mapped in much of the site area, but Gigger soils were also observed in several shovel tests. Artifacts were recovered from an average depth of 10 cm (4 in) bgs, with a maximum recovery depth of 25 cm (10 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of the majority of artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI322 included 112 artifacts. The majority of the recovered artifacts were domestic group items, including 9 pieces of historic ceramic (1 ironstone, 6 whiteware, and 2 stoneware), 52 pieces of container glass, and 3 pieces of glass tableware. Architectural group items included 5 brick fragments, 1 possible asbestos tile fragment, 19 pieces of flat glass, and 8 nails (1 indeterminate cut/wrought and 7 indeterminate). In addition, 2 pieces of lamp chimney or light bulb glass, 1 railroad spike, 1 faunal tooth, and 11 unidentifiable items were recovered (Table 6.2). The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, but the presence of 4 container glass fragments formed in an automatic bottling machine indicates that the site dates to the twentieth century, corresponding to the Industrial & Modern period. None of the other artifacts could be definitively assigned to any specific temporal period.

A total of seven unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than four are depicted within the site boundaries at any one time. One structure is depicted partially overlapping the site's western boundary on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and four new structures are depicted within the site boundaries (see Figures 3.2 and 3.3). Finally, on the 1987 Bee Bayou, Louisiana, 7.5-minute series topographic quadrangle, only one of the 1958 structures is still depicted, but two new structures are also depicted within the site boundaries (USGS 1935, 1958, 1987a). None of these structures were extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI322 assemblage represents the remains of one or more of the seven structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI322 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI322 likely represents the remains of a historic residence or residences dating to the twentieth century. Diagnostic artifacts were recovered, but no features or intact cultural midden deposits were observed at Site 16RI322.

Investigations at Site 16RI322 indicate that this resource contains a moderate to high density of subsurface remains compared with the other sites investigated in this study. However, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI322 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI322 is recommended not eligible for listing in the NRHP.

Table 6.2. Site 16RI322 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI322	STP N1000 E1020	0-15 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP N1000 E1020	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI322	STP N1020 E1000	0-5 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI322	STP N1040 E1000	0-17 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI322	STP N1040 E1000	0-17 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP N1040 E1000	0-17 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI322	STP N1040 E980	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI322	STP N1040 E980	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP N1040 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N1050 E1020	0-15 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI322	STP N1050 E1040	0-10 cm bgs	Architecture	Flat Glass	Indeterminate	1
16RI322	STP N1050 E980	10-20 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP N1050 E980	10-20 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP N1060 E980	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP N1080 E1000	0-14 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP N1080 E1000	0-14 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N1080 E1040	0-15 cm bgs	Domestic	Ceramics	Stoneware	1
16RI322	STP N1080 E1040	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI322	STP N1080 E1060	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI322	STP N1080 E1060	15-25 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI322	STP N1080 E1060	15-25 cm bgs	Unidentified	Glass	Curved	1
16RI322	STP N1080 E1060	15-25 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI322	STP N1080 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI322	STP N1080 E980	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP N1080 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI322	STP N1100 E1010	10-15 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP N1100 E1010	10-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI322	STP N1120 E1000	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP N1120 E1000	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI322	STP N1120 E1000	0-10 cm bgs	Domestic	Glass Tableware	Undiagnostic fragment	1
16RI322	STP N1120 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI322	STP N1120 E1040	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI322	STP N1120 E1040	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP N1120 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N1120 E1040	0-10 cm bgs	Transportation	Railroad	Railroad spike	1
16RI322	STP N1120 E1040	0-10 cm bgs	Unidentified	Glass	Indetermiate	1
16RI322	STP N1120 E1080	0-15 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI322	STP N1140 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI322	STP N1140 E1040	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI322	STP N920 E1000	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP N950 E980	0-15 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP N950 E980	0-15 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI322	STP N960 E1000	0-15 cm bgs	Architecture	Nails	Other	1
16RI322	STP N960 E1000	0-15 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP N960 E980	10-20 cm bgs	Domestic	Ceramics	Ironstone	1
16RI322	STP N960 E980	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N980 E1000	10-20 cm bgs	Architecture	Construction Material	Indeterminate	1
16RI322	STP N980 E1000	10-20 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI322	STP N980 E1000	10-20 cm bgs	Architecture	Nails	Indeterminate Cut / Wrought Nail	1
16RI322	STP N980 E1000	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI322	STP N980 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI322	STP N980 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N980 E980	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI322	STP N980 E980	15-25 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI322	STP N980 E980	15-25 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI322	STP N980 E980	15-25 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP N980 E980	15-25 cm bgs	Unidentified	Glass	Flat	1
16RI322	STP N980 E980	15-25 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI322	STP TR 72-1	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI322	STP TR 72-1	0-10 cm bgs	Architecture	Flat Glass	Privacy Glass	1
16RI322	STP TR 72-1	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP TR 72-1	0-10 cm bgs	Unidentified	Glass	Indetermiate	1
16RI322	STP TR 72-1	10-20 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP TR 72-1	10-20 cm bgs	Biological	Faunal Remains	Bone / tooth / claw	1
16RI322	STP TR 72-1	10-20 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI322	STP TR 72-1	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	10
16RI322	STP TR 72-1	10-20 cm bgs	Furnishings	Lighting	Indeterminate	2

Site	Unit #	Depth	Group	Class	Type	Total
16RI322	STP TR 72-2	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI322	STP TR 72-2	0-15 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI322	STP TR 72-3	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI322	STP TR 72-3	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI322	STP TR 72-3	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI322	STP TR 72-4	0-13 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI322	STP TR 72-4	0-13 cm bgs	Domestic	Ceramics	Stoneware	1
16RI322	STP TR 72-4	0-13 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI322	STP TR 72-4	0-13 cm bgs	Unidentified	Plastic	Modern	1
Total						112

Site 16RI323

Field Site Number: HRNE-05
UTM Coordinates:
Grid Origin: 15N, N3592823 E629982 (NAD 83)
Site Center: 15N, N3592803 E629982 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 24 m (79 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: historic residence or residences
Size: 107 m (351 ft) N–S x 107 m (351 ft) E–W
Distance/direction to nearest water: Big Creek, 380 m (1,247 ft) northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and east-facing slope of shallow rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI323 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 215 m (705 ft) south of US 80 and 980 m (3,215 ft) east of LA 183. The site lies at the northeast edge of an open agricultural field on the top and east-facing slope of a shallow rise, roughly 380 m (1,247 ft) southwest of Big Creek. The agricultural field was plowed and fallow at the time of the current survey (Figure 6.6). Site 16RI323 was encountered through shovel testing and the observation of a surface artifact scatter.

Investigation Methods

Site 16RI323 was recorded through the excavation of two positive transect shovel tests (88-1 and 89-7). Shovel Test 88-1 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals until three consecutive positive shovel tests were encountered and 20 m (66 ft) intervals were used thereafter.

In total, 41 shovel tests were used to delineate the site boundaries, 15 of which were positive for cultural material and 26 of which were negative. Maximum site dimensions were 107 m (351 ft) north–south and 107 m (351 ft) east–west. The project area boundary forms a portion of the site's northern and eastern boundaries, and the site may extend further in these directions. Ground surface visibility was excellent, and a low-density scatter of surface artifacts was also observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI323 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.7).

Figure 6.6. Overview of Site 16RI323 from datum, facing west.

Depositional Context

Profiles observed at Site 16RI323 were generally similar to that of Dexter silt loam, which is mapped throughout the site area. A typical profile, taken from shovel test N1010 E960, consisted of a dark yellowish brown (10YR 4/4) silt loam Ap horizon from 0 to 15 cm (0 to 6 in) bgs, overlying a dark brown (7.5YR 4/4) silty clay loam BA horizon from 15 to 35 cm (6 to 14 in) bgs. Artifacts were recovered from an average depth of 7 cm (3 in) bgs, with a maximum recovery depth of 23 cm (9 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of all artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI323 included 40 artifacts. The majority of artifacts were domestic group items, including 5 fragments of whiteware, 20 pieces of undiagnostic container glass, and 1 piece of undiagnostic glass tableware. The remaining artifacts included 3 brick fragments, 7 pieces of flat glass, 3 indeterminate nails, and 1 unidentified metal item (Table 6.3). The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

A total of two unique structures are depicted at the site location on different USGS topographic quadrangles, though no more than one is depicted within the site boundaries at any one time. One structure is depicted near the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, the structure depicted on the 1935 map is no longer present and one new structure is depicted at the northwest edge of the site (see Figures 3.2 and 3.3). Finally, on the 1987 Dunn, Louisiana, 7.5-minute series topographic quadrangle, neither of the

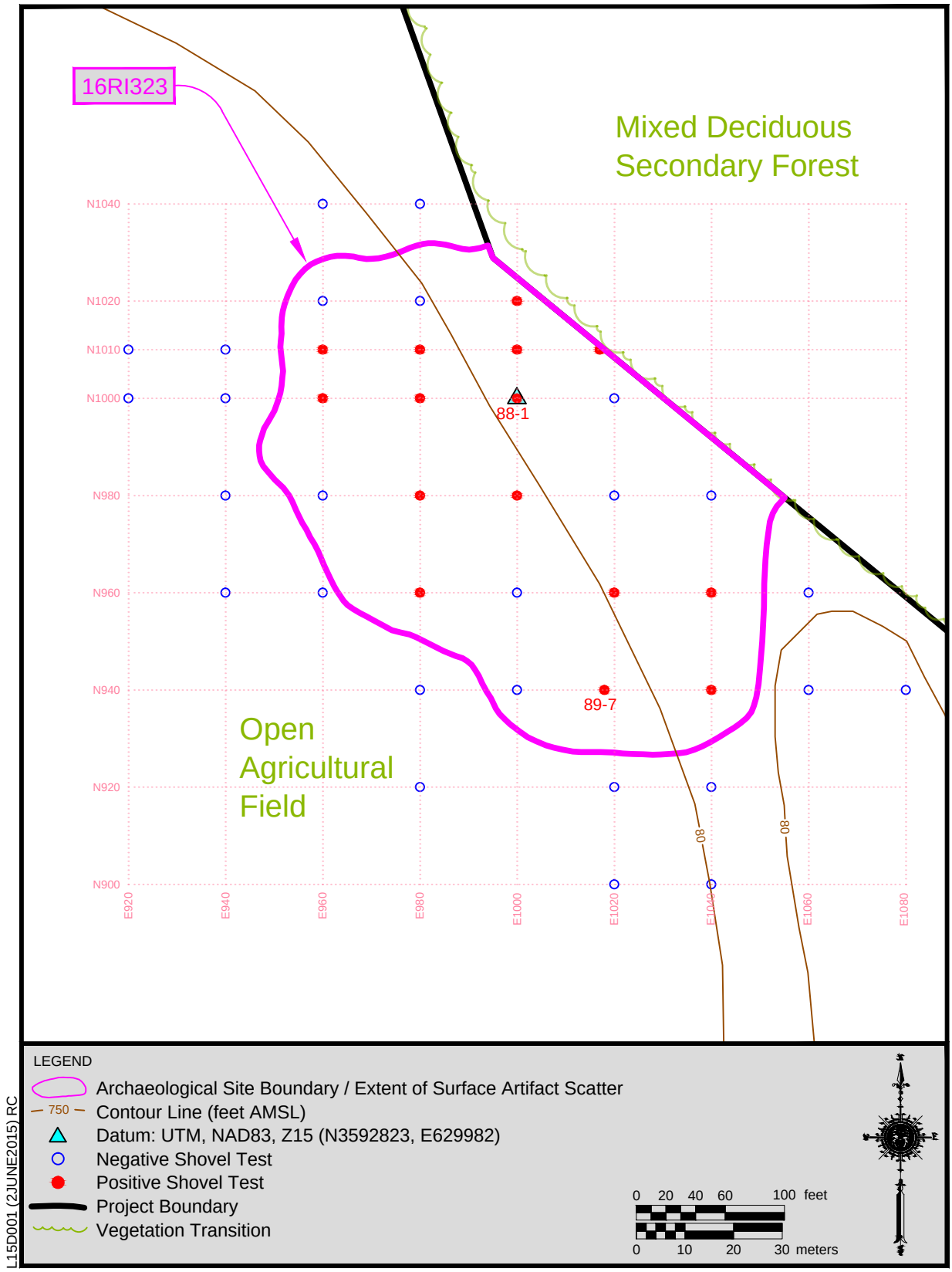

Figure 6.7. Schematic plan map of Site 16RI323.

Table 6.3. Site 16RI323 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI323	STP N1000 E980	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI323	STP N1000 E980	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI323	STP N1000 E980	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI323	STP N1000 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	6
16RI323	STP N1000 E980	0-10 cm bgs	Domestic	Glass Tableware	Undiagnostic fragment	1
16RI323	STP N1010 E1000	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI323	STP N1010 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI323	STP N1010 E1020	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI323	STP N1010 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI323	STP N1010 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI323	STP N1010 E980	13-23 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI323	STP N1010 E980	13-23 cm bgs	Architecture	Nails	Indeterminate	1
16RI323	STP N1010 E980	13-23 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI323	STP N1020 E1000	0-10 cm bgs	Architecture	Flat Glass	Window Glass	4
16RI323	STP N1020 E1000	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI323	STP N1020 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI323	STP N940 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI323	STP N940 E980	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI323	STP N960 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI323	STP N960 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI323	STP N980 E980	0-10 cm bgs	Domestic	Ceramics	Whiteware	2
16RI323	STP TR 88-1	10-20 cm bgs	Architecture	Nails	Indeterminate	1
16RI323	STP TR 88-1	10-20 cm bgs	Domestic	Ceramics	Whiteware	1
16RI323	STP TR 88-1	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI323	STP TR 89-7	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
Total						40

structures depicted within the site boundaries on earlier maps are present (USGS 1935, 1958, 1987b). Neither of the structures was extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI323 assemblage represents the remains of one or both of the two structures discussed above. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI323 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI323 likely represents the remains of a historic residence or residences dating to the nineteenth and/or twentieth centuries. No diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI323.

Investigations at Site 16RI323 indicate that this resource contains a moderate density of subsurface remains compared to the other sites investigated in this study. However, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI323 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI323 is recommended not eligible for listing in the NRHP.

Site 16RI324

Field Site Number: HRNE-06
UTM Coordinates:
Grid Origin and Site Center: 15N, N3592686 E629981 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (83 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: historic residence or residences
Size: 63 m (207 ft) N–S x 118 m (387 ft) E–W
Distance/direction to nearest water: Big Creek, 385 m (1,263 ft) east
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and east-facing slope of shallow rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI324 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc. personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 355 m (1,165 ft) south of US y 80 and 980 m (3,215 ft) east of LA 183. The site lies in an open agricultural field on the top and east-facing slope of a shallow rise, roughly 385 m (1,263 ft) west of Big Creek. The agricultural field was plowed and fallow at the time of the current survey (Figure 6.8). Site 16RI324 was encountered through shovel testing and the observation of a surface artifact scatter.

Investigation Methods

Site 16RI324 was recorded through the visual observation of a low-density surface scatter of historic artifacts during a pedestrian survey of the project area. One shovel test was excavated in the approximate center of the surface scatter, and when this test was positive

Figure 6.8. Overview of Site 16RI324 from datum, facing west.

a full shovel test delineation of the site was performed. The initial positive shovel test was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals until three consecutive positive shovel tests were encountered and 20 m (66 ft) intervals thereafter.

In total, 33 shovel tests were used to delineate the site boundaries, 7 of which were positive for cultural material and 26 of which were negative. Maximum site dimensions were 63 m (207 ft) north–south and 118 m (387 ft) east–west. Ground surface visibility was excellent, and a low-density scatter of surface artifacts was also observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI324 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.9).

Depositional Context

Profiles observed at Site 16RI324 were generally similar to that of Gilbert silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1010 E1000, consisted of a dark grayish brown (10YR 4/2) silt loam Ap horizon from 0 to 19 cm (0 to 7 in) bgs, overlying a light gray (10YR 7/2) silt loam Eg horizon from 19 to 35 cm (7 to 14 in) bgs. The Eg horizon also contained mottles of yellowish brown (10YR 5/4) silt loam. This profile was generally typical of the Gilbert soil series mapped in much of the site area, but Gigger soils were also occasionally observed. Artifacts were recovered from an average depth of 5 cm (2 in) bgs, with a maximum recovery depth of 10 cm (4 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of all artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI324 consisted of 12 artifacts. The majority of artifacts were domestic group items, including 8 pieces of undiagnostic container glass and 1 milk glass canning jar lid fragment. The remaining artifacts included 1 piece of brick, 1 nail of an indeterminate type, and 1 unidentified metal artifact (Table 6.4). The canning jar lid fragment could only be broadly dated to the late nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

Two structures are depicted at the site location on the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle (see Figure 3.3). These structures are no longer present on the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangle (USGS 1958, 1987b), and neither of the structures was extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI324 assemblage

Table 6.4. Site 16RI324 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI324	STP N1000 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI324	STP N1000 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI324	STP N1000 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI324	STP N1010 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI324	STP N1010 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI324	STP N990 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI324	STP N990 E980	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI324	STP N990 E980	0-10 cm bgs	Domestic	Container Closures	Home Canning Jars	1
16RI324	STP N990 E980	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
Total						12

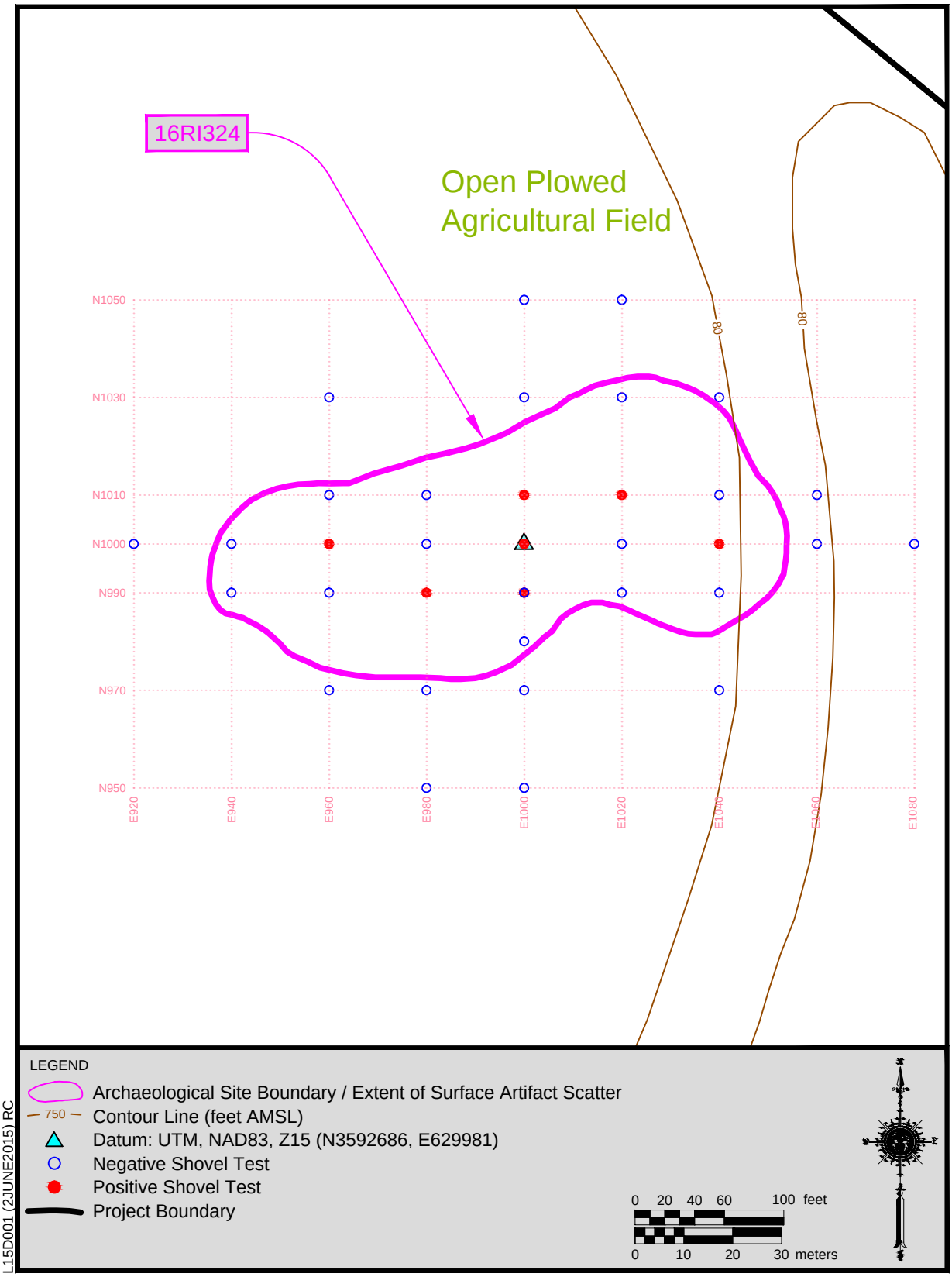

Figure 6.9. Schematic plan map of Site 16RI324.

represents the remains of one or both of the structures depicted on the 1958 map. The high proportion of domestic artifacts indicates that at least one of the historic structures represented by Site 16RI324 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI324 likely represents the remains of a historic residence or residences dating to the late nineteenth and/or twentieth centuries. No diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI324.

Investigations at Site 16RI324 indicate that this resource contains a low to moderate density of subsurface remains compared with the other sites investigated in this study. However, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI324 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI324 is recommended not eligible for listing in the NRHP.

Site 16RI325

Field Site Number: HRNE-07
UTM Coordinates:
Grid Origin: 15N, N3592150 E630056 (NAD 83)
Site Center: 15N, N3592165 E630056 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (82 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: historic residence
Size: 57 m (187 ft) N–S x 49 m (161 ft) E–W
Distance/direction to nearest water: Big Creek, 535 m (1,755 ft) east-northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: eastern edge of a shallow swale
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI325 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 1,060 m (3,478 ft) east of LA 183 and 315 m (1,033 ft) north of Interstate 20. The site lies in an open agricultural field at the eastern edge of a shallow swale, roughly 535 m (1,755 ft) west-southwest of Big Creek. The agricultural field was plowed and fallow at the time of the current survey (Figure 6.10). Site 16RI325 was encountered during shovel testing and by the observation of a surface artifact scatter.

Investigation Methods

Site 16RI325 was recorded through the excavation of one positive transect shovel test (101-8). This shovel test was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals.

In total, 19 shovel tests were used to delineate the site boundaries, 3 of which were positive for cultural material and 16 of which were negative. Maximum site dimensions were 57 m (187 ft) north–south and 49 m (161 ft) east–west. Ground surface visibility was excellent, and a low-density scatter of surface artifacts was also observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI325 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.11).

Figure 6.10. Overview of Site 16RI325 from datum, facing east.

Depositional Context

Profiles observed at Site 16RI325 were generally similar to that of Gilbert silt loam, which is mapped throughout the site area. A typical profile, taken from shovel test N1010 E1000, consisted of a dark brown (10YR 4/3) silt loam Ap horizon from 0 to 20 cm (0 to 8 in) bgs, overlying a gray (10YR 6/1) silt loam Eg horizon from 20 to 30 cm (8 to 12 in) bgs. The Eg horizon also contained mottles of yellowish brown (10YR 5/4) silt loam. Artifacts were recovered from an average depth of 3 cm (1 in) bgs, with a maximum recovery depth of 10 cm (4 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of all artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

A total of 10 artifacts were recovered from Site 16RI325. The recovered items included 3 artifacts from the architectural group (1 piece of flat glass and 2 nails of indeterminate type), 5 artifacts from the domestic group (1 piece of porcelain, 1 stoneware fragment, 1 whiteware fragment and 2 undiagnostic container glass fragments), and 2 unidentified artifacts (1 ceramic and 1 metal) (Table 6.5). The historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

One structure is depicted at the site location on the 1935 Baskinton, Louisiana 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute and 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is

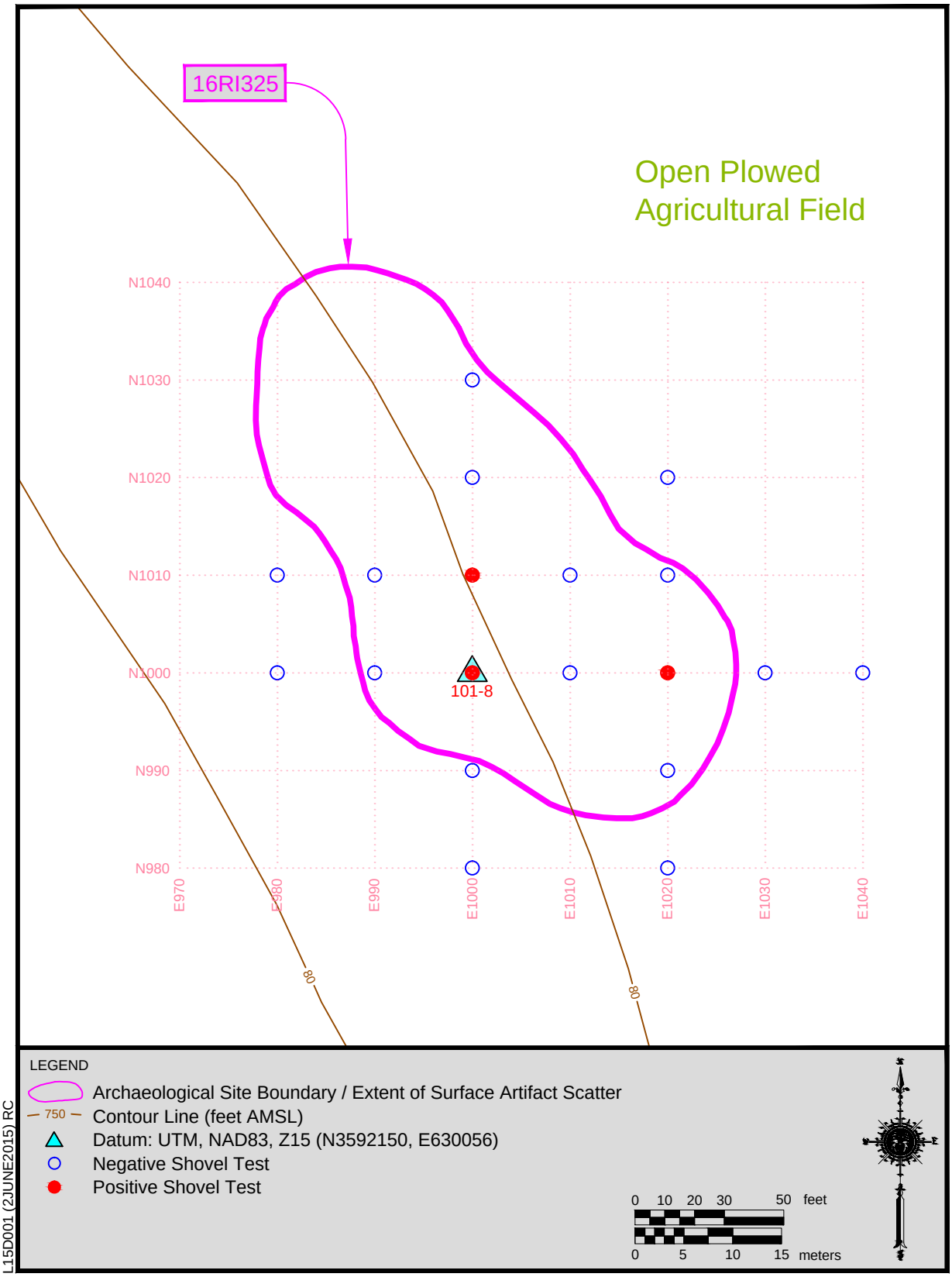

Figure 6.11. Schematic plan map of Site 16RI325.

Table 6.5. Site 16RI325 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI325	GSC w/in 25M of datum	0-0 Surface	Domestic	Ceramics	Porcelain: hard paste	1
16RI325	GSC w/in 25M of datum	0-0 Surface	Domestic	Ceramics	Stoneware	1
16RI325	GSC w/in 25M of datum	0-0 Surface	Domestic	Ceramics	Whiteware	1
16RI325	GSC w/in 25M of datum	0-0 Surface	Domestic	Container Glass	Undiagnostic container fragment	1
16RI325	GSC w/in 25M of datum	0-0 Surface	Unidentified	Ceramic	Porcelain	1
16RI325	STP N1000 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI325	STP N1010 E1000	0-10 cm bgs	Architecture	Nails	Indeterminate	2
16RI325	STP TR 101-8	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI325	STP TR 101-8	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
Total						10

most likely that the Site 16RI325 assemblage represents the remains of the structure depicted on the 1935 map. Though the recovered assemblage was very limited, the preponderance of domestic artifacts indicates that the historic structure represented by Site 16RI325 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI325 likely represents the remains of a historic residence dating to the nineteenth and/or twentieth centuries. No diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI325.

Investigations at Site 16RI325 indicate that this resource contains a low density of subsurface remains compared to the other sites investigated in this study. Additionally, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI325 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI325 is recommended not eligible for listing in the NRHP.

Site 16RI326

Field Site Number: HRNE-08
UTM Coordinates:
Grid Origin: 15N, N3592616 E630102 (NAD 83)
Site Center: 15N, N3592616 E630132 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (82 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: historic residence
Size: 78 m (256 ft) N–S x 89 m (292 ft) E–W
Distance/direction to nearest water: Big Creek, 270 m (886 ft) east-northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and east-facing slope of shallow rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI326 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 1,100 m (3,609 ft) east of LA 183 and 415 m (1,362 ft) south of US 80. The site lies in an open agricultural field on the top and east-facing slope of a shallow rise, roughly 270 m (886 ft) west-southwest of Big Creek. The agricultural field was plowed and fallow at the time of the survey (Figure 6.12). Site 16RI326 was encountered through shovel testing and the observation of a surface artifact scatter.

Figure 6.12. Overview of Site 16RI326 from datum, facing east.

Investigation Methods

Site 16RI326 was recorded through the excavation of two positive transect shovel tests (92-9 and 92-10). Shovel Test 92-9 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals until three consecutive positive shovel tests were encountered and 20 m (66 ft) intervals were used thereafter.

In total, 30 shovel tests were used to delineate the site boundaries, 8 of which were positive for cultural material and 22 of which were negative. Maximum site dimensions were 78 m (256 ft) north–south and 89 m (292 ft) east–west. The project area boundary forms the site's eastern boundary, but a low-lying area occupied by standing water was observed immediately adjacent to the project area boundary at the time of the survey, so the site may not extend much further in this direction. Ground surface visibility was excellent, and a low-density scatter of surface artifacts was also observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI326 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.13).

Depositional Context

Profiles observed at Site 16RI326 were generally similar to that of Gigger silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N980 E1000, consisted of a dark brown (10YR 4/3) silt loam Ap horizon from 0 to 15 cm (0 to 6 in) bgs, overlying a yellowish brown (10YR 5/6) silty clay loam Bt1 horizon from 15 to 25 cm (6 to 10 in) bgs. This profile was generally typical of the Gigger soil series mapped in much of the site area, but Gilbert soils were

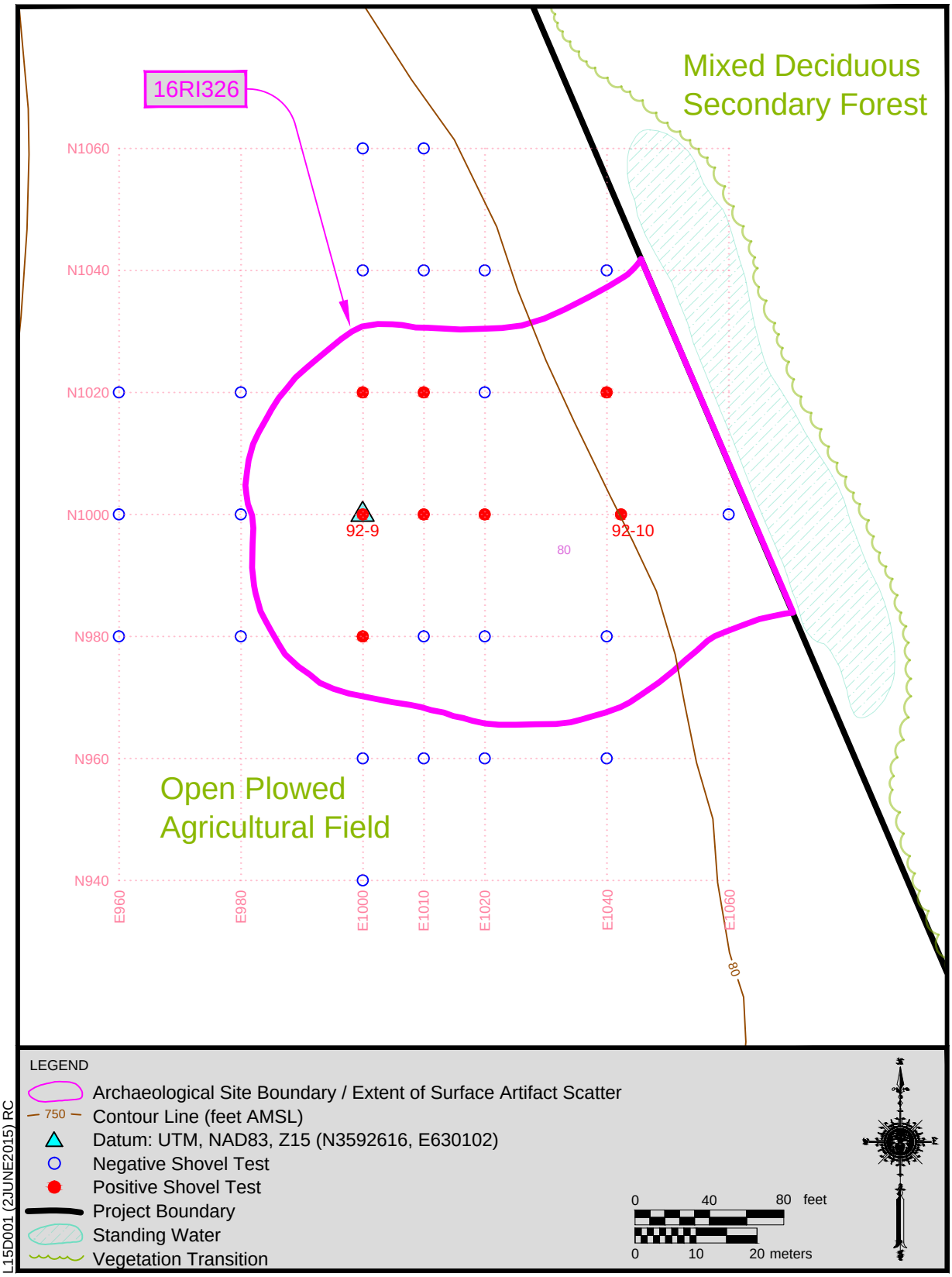

Figure 6.13. Schematic plan map of Site 16RI326.

also occasionally observed. Artifacts were recovered from an average depth of 5 cm (2 in) bgs, with a maximum recovery depth of 10 cm (4 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of all artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI326 included 15 artifacts. The majority of these items were domestic group artifacts, including 7 undiagnostic pieces of container glass and 1 undiagnostic glass tableware fragment. The remaining artifacts included 2 brick fragments, 2 pieces of flat glass, 2 nails of indeterminate type, and 1 unidentified aluminum artifact (Table 6.6). None of the recovered artifacts could be definitively assigned to any specific temporal period.

One structure is depicted roughly 25 m (82 ft) southwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI326 assemblage represents the remains of the structure depicted on the 1935 map. Though the recovered assemblage was very limited, the preponderance of domestic artifacts indicates that the historic structure represented by Site 16RI326 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI326 likely represents the remains of a historic residence of unknown date. No diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI326.

Investigations at Site 16RI326 indicate that this resource contains a low density of subsurface remains compared to the other sites investigated in this study. Additionally, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI326 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI326 is recommended not eligible for listing in the NRHP.

Table 6.6. Site 16RI326 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI326	STP N1000 E1010	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI326	STP N1000 E1010	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI326	STP N1000 E1010	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI326	STP N1000 E1020	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI326	STP N1020 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI326	STP N1020 E1010	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI326	STP N1020 E1010	0-10 cm bgs	Domestic	Glass Tableware	Undiagnostic fragment	1
16RI326	STP N1020 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI326	STP TR 92-10	5-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI326	STP TR 92-9	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI326	STP TR 92-9	0-10 cm bgs	Unidentified	Metal	Aluminum	1
Total						15

Site 16RI327

Field Site Number: HRNE-09
UTM Coordinates:
Grid Origin: 15N, N3592463 E630123 (NAD 83)
Site Center: 15N, N3592493 E630123 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (82 ft) AMSL
Components: historic
Specific Components: Industrial & Modern, 1890–
Site Type: historic residence
Size: 120 m (394 ft) N–S x 99 m (325 ft) E–W
Distance/direction to nearest water: Big Creek, 320 m (1,050 ft) northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and east-facing slope of shallow rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI327 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 1,120 m (3,675 ft) east of LA 183 and 570 m (1,870 ft) south of US 80. The site lies in an open agricultural field on the top and east-facing slope of a shallow rise, roughly 320 m (1,050 ft) southwest of Big Creek. The agricultural field was plowed and fallow at the time of the survey (Figure 6.14). Site 16RI327 was encountered through shovel testing and the observation of a surface artifact scatter.

Investigation Methods

Site 16RI327 was recorded through the excavation of two positive transect shovel tests (95-10 and 95-11). Shovel Test 95-10 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position

Figure 6.14. Overview of Site 16RI327 from datum, facing north.

relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals until three consecutive positive shovel tests were encountered and 20 m (66 ft) intervals were used thereafter.

In total, 38 shovel tests were used to delineate the site boundaries, 10 of which were positive for cultural material and 28 of which were negative. Maximum site dimensions were 120 m (394 ft) north–south and 99 m (325 ft) east–west. Ground surface visibility was excellent, and a moderately-dense scatter of surface artifacts was also observed in the site area. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI327 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.15).

Depositional Context

Profiles observed at Site 16RI327 were generally similar to that of Gilbert silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1020 E980, consisted of a grayish brown (10YR 5/2) silt loam Ap horizon from 0 to 20 cm (0 to 8 in) bgs, overlying a light gray (10YR 7/2) silty clay loam Eg horizon from 20 to 45 cm (8 to 18 in) bgs. This profile was generally typical of the Gilbert soil series mapped in much of the site area, but Gigger soils were also occasionally observed. Artifacts were recovered from an average depth of 8 cm (3 in) bgs, with a maximum recovery depth of 40 cm (16 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of the vast majority of artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI327 included 28 artifacts. The majority of these items were domestic group artifacts, including 1 whiteware fragment, 20 pieces of container glass, and 1 undiagnostic glass tableware fragment. The remaining artifacts included 1 brick fragment, 1 piece of flat glass, and 4 unidentified artifacts (3 metal and 1 glass) (Table 6.7). The whiteware fragment could only be broadly dated to the nineteenth and/or twentieth centuries, but 3 container glass fragments formed in an automatic bottling machine dated the site to the twentieth century, corresponding to the Industrial & Modern period.

Table 6.7. Site 16RI327 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI327	STP N1000 E1010	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	2
16RI327	STP N1000 E1010	0-10 cm bgs	Unidentified	Glass	Flat	1
16RI327	STP N1000 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI327	STP N1000 E980	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI327	STP N1000 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI327	STP N1000 E980	0-10 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI327	STP N1020 E1000	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI327	STP N1020 E1010	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI327	STP N1020 E1010	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI327	STP N1020 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI327	STP N1020 E980	5-15 cm bgs	Domestic	Ceramics	Whiteware	1
16RI327	STP N1020 E980	5-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI327	STP N1020 E980	5-15 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI327	STP N1040 E1010	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI327	STP TR 95-10	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI327	STP TR 95-10	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI327	STP TR 95-10	10-20 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI327	STP TR 95-10	20-30 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI327	STP TR 95-11	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI327	STP TR 95-11	30-40 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
Total						28

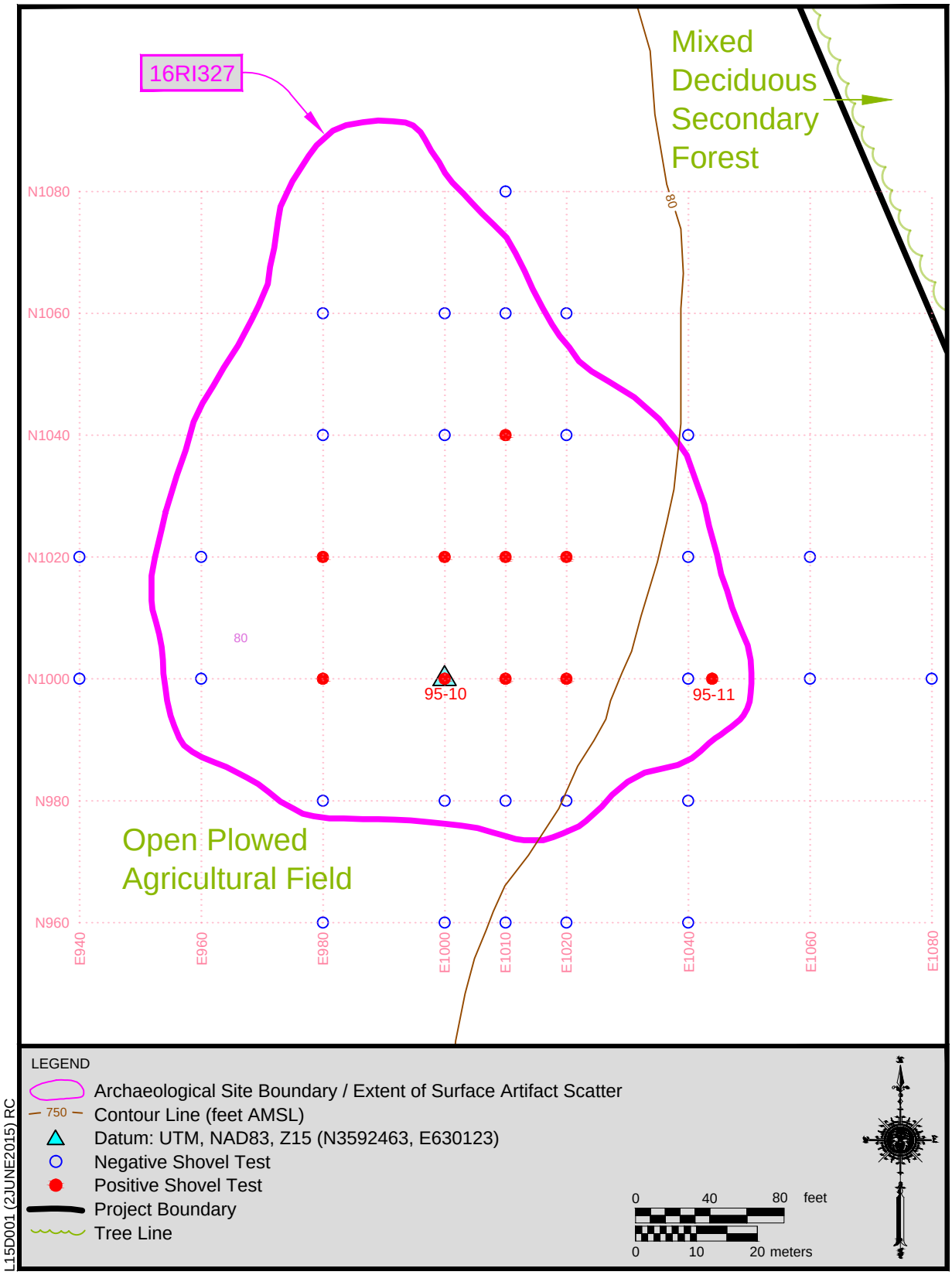

Figure 6.15. Schematic plan map of Site 16RI327.

One structure is depicted roughly 50 m (164 ft) northwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. Since no other structures are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI327 assemblage represents the remains of the structure depicted on the 1935 map. The high proportion of domestic artifacts indicates that the historic structure represented by Site 16RI327 was utilized as a residence.

Summary and National Register Evaluation

Site 16RI327 likely represents the remains of a historic residence dating to the twentieth century. Few diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI327.

Investigations at Site 16RI327 indicate that this resource contains a moderate density of subsurface remains compared with the other sites investigated in this study. However, the site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI327 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI327 is recommended not eligible for listing in the NRHP.

Site 16RI328

Field Site Number: L15D001-18
UTM Coordinates:
Grid Origin: 15N, N3592498 E629616 (NAD 83)
Site Center: 15N, N3592493 E629611 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 26 m (84 ft) AMSL
Components: historic
Specific Components: unknown historic
Site Type: unknown historic
Size: 36 m (118 ft) N–S x 33 m (108 ft) E–W
Distance/direction to nearest water: Big Creek, 770 m (2,526 ft) east-northeast; unnamed tributary of Cypress Creek, 610 m (2,001 ft) north-northwest
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: top and east-facing slope of shallow rise
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI328 is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 615 m (2,018 ft) east of LA 183 and 575 m (1,886 ft) south of US 80. The site lies in an open agricultural field on the top and east-facing slope of a shallow rise, roughly 610 m (2,001 ft) south-southeast of an unnamed tributary of Cypress Creek and 770 m (2,526 ft) west-southwest of Big Creek. The agricultural field was plowed and fallow at the time of the survey (Figure 6.16). Site 16RI328 was encountered through the visual observation of a surface artifact scatter.

Investigation Methods

Site 16RI328 was recorded through the visual observation of a low-density surface scatter of historic artifacts during a pedestrian survey of the project area. A representative sample of artifacts was collected from the surface scatter, and the site datum was defined as the collection point of the majority of these artifacts. The site datum was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals.

Figure 6.16. Overview of Site 16RI328 from datum, facing south.

In total, nine shovel tests were excavated to test for subsurface deposits at the site (these included eight delineation shovel tests and transect shovel test 83-2 that had previously been excavated within the boundaries of the surface scatter). All nine of these tests were negative for cultural material, and no subsurface deposits were located. Maximum site dimensions (defined by the limits of the surface artifact scatter) were 36 m (118 ft) north–south and 33 m (108 ft) east–west. Ground surface visibility was excellent. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI328 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.17).

Depositional Context

Profiles observed at Site 16RI328 were generally similar to that of Gilbert silt loam, which is mapped throughout the site area. A typical profile, taken from shovel test N1000 E980, consisted of a grayish brown (10YR 5/2) silt loam Ap horizon from 0 to 20 cm (0 to 8 in) bgs, overlying a light brownish gray (10YR 6/2) silt loam Eg horizon from 20 to 29 cm (8 to 11 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the complete lack of subsurface cultural material indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The artifact assemblage for Site 16RI328 included seven artifacts. These items were all domestic group artifacts, and included one undecorated whiteware fragment, five pieces of undiagnostic container glass and one fragment of a glass cosmetic container (Table 6.8). The whiteware fragment could only be broadly dated to the nineteenth and/or twentieth centuries, and none of the other artifacts could be definitively assigned to any specific temporal period.

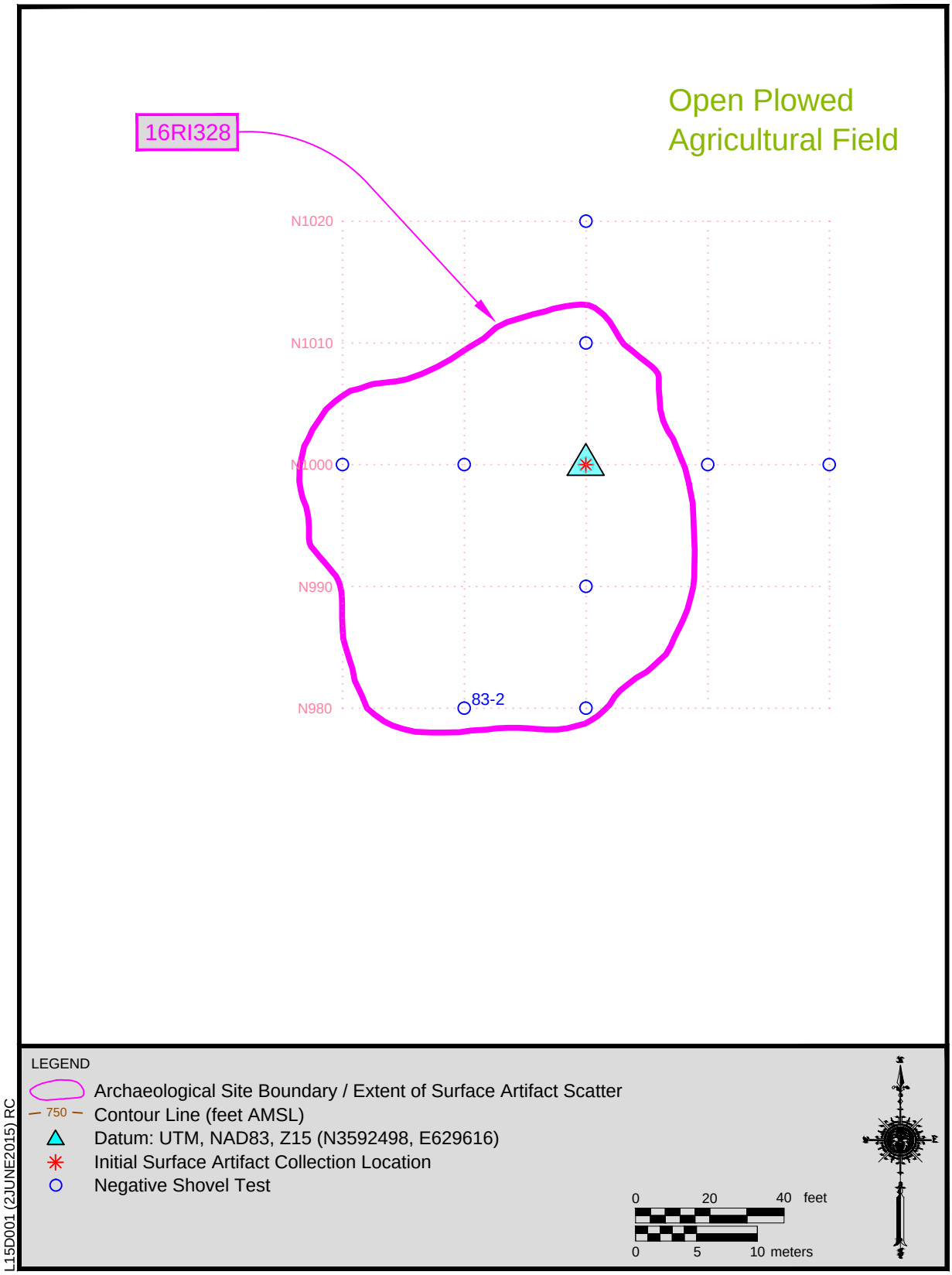

Figure 6.17. Schematic plan map of Site 16RI328.

Table 6.8. Site 16RI328 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI328	GSC	0-0 Surface	Domestic	Ceramics	Whiteware	1
16RI328	GSC	0-0 Surface	Domestic	Container Glass	Undiagnostic container fragment	3
16RI328	GSC	0-0 Surface	Personal	Health and Grooming	Cosmetic Container	1
16RI328	GSC NEAR TR 83-2	0-0 Surface	Domestic	Container Glass	Undiagnostic container fragment	2
Total						7

One structure is depicted roughly 35 m (115 ft) northwest of the site datum on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. This structure is no longer depicted on the 1958 Baskinton, Louisiana, 15-minute or the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangles (see Figures 3.2 and 3.3) (USGS 1935, 1958, 1987b), and the structure was no longer extant at the time of the survey. While it is possible that the Site 16RI328 assemblage represents the remains of the structure depicted on the 1935 map, no architectural materials were recovered. Therefore, despite the presence of a small quantity of domestic artifacts, there is no strong indication that Site 16RI328 represents the remains of a historic residence, and the site function is unknown.

Summary and National Register Evaluation

Site 16RI328 represents the location of unknown historic activities. No diagnostic artifacts were recovered, and no features or intact cultural midden deposits were observed at Site 16RI328.

Investigations at Site 16RI328 indicate that this resource contains no detectable subsurface cultural material. The site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI328 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI328 is recommended not eligible for listing in the NRHP.

Site 16RI329

Field Site Number: L15D001-19
UTM Coordinates:
Grid Origin: 15N, N3592562 E629764 (NAD 83)
Site Center: 15N, N3592567 E629769 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (83 ft) AMSL
Components: historic
Specific Components: Industrial & Modern 1890–
Site Type: unknown historic
Size: 43 m (141 ft) N–S x 41 m (135 ft) E–W
Distance/direction to nearest water: Big Creek, 615 m (2,018 ft) east-northeast
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: very gentle west-facing slope
Vegetation: none (fallow agricultural field)
Ground surface visibility: nearly 100 percent; site located in open agricultural field
Recommended NRHP status: not eligible

Site Description

Site 16RI329 is located in an agricultural field in north central Richland Parish, Louisiana. It is situated approximately 760 m (2,493 ft) east of LA 183 and 495 m (1,624 ft) south of US 80. The site lies in an open agricultural field on a very gentle west-facing slope, roughly 615 m (2,018 ft) west-southwest of Big Creek. The agricultural field was plowed and fallow at the time of the survey (Figure 6.18). Site 16RI329 was encountered through the visual observation of a surface artifact scatter.

Figure 6.18. Overview of Site 16RI329 from datum, facing north.

Investigation Methods

Site 16RI329 was recorded through the visual observation of a low-density surface scatter of historic artifacts during a pedestrian survey of the project area. The site datum was defined as Shovel Test 93-2, a negative transect shovel test that had previously been excavated within the boundaries of the surface scatter. This shovel test was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Delineation shovel tests were excavated at 10 m (33 ft) intervals.

In total, nine shovel tests were excavated to test for subsurface deposits at the site. All nine of these tests were negative for cultural material, and no subsurface deposits were located. Following the negative delineation results, a representative sample of artifacts was collected from the surface scatter. Maximum site dimensions (defined by the limits of the surface artifact scatter) were 43 m (141 ft) north–south and 41 m (135 ft) east–west. Ground surface visibility was excellent. Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI329 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.19).

Depositional Context

Profiles observed at Site 16RI329 were generally similar to that of Gigger silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1010 E1000, consisted of a dark brown (10YR 4/3) silt loam Ap horizon from 0 to 20 cm (0 to 8 in) bgs, overlying a strong brown (7.5YR 5/6) silt loam Bt1 horizon from 20 to 30 cm (8 to 12 in) bgs. This profile was generally typical of the Gigger soil series mapped in much of the site area, but Gilbert soils were also occasionally observed. The presence of a well-defined plow zone in the profiles of all tests and the complete lack of subsurface cultural material indicated that the entire site area had been significantly disturbed by agricultural activities.

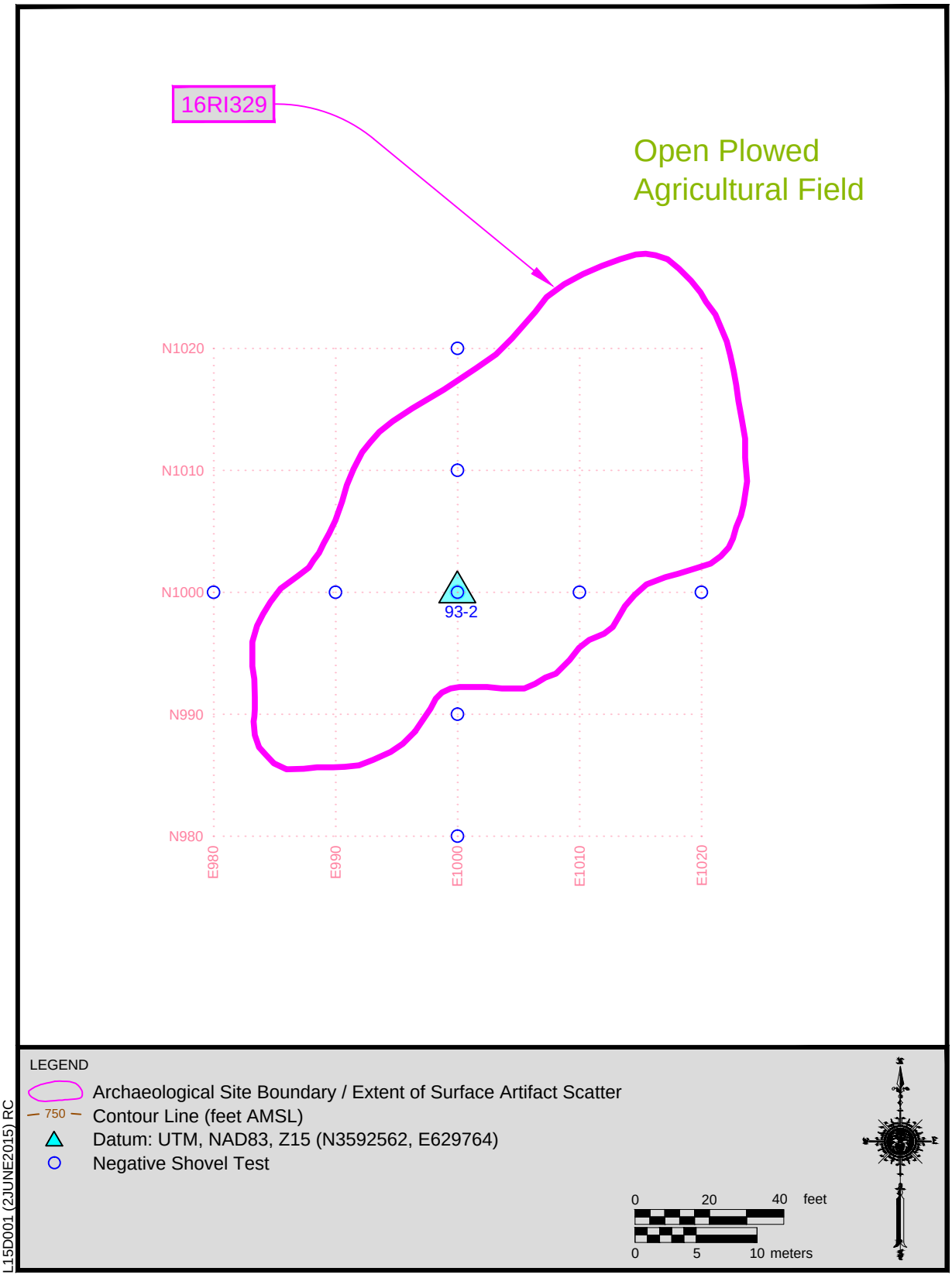

Figure 6.19. Schematic plan map of Site 16RI329.

Artifacts

The artifact assemblage for Site 16RI329 consisted of five artifacts. These materials consisted of two pieces of brick, two wire nails, and one fragment of a ceramic electrical insulator (Table 6.9). The insulator and brick fragments could not be definitively assigned to any specific temporal period, but the presence of two wire nails dates the site to the late nineteenth and/or twentieth centuries, corresponding to the Industrial & Modern period.

One structure is depicted roughly 15 m (49 ft) east of the site datum on the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle (see Figure 3.3). This structure is no longer depicted on the 1987 Dunn, Louisiana, 7.5-minute series USGS topographic quadrangle (USGS 1958, 1987b), and the structure was no longer extant at the time of the survey. Since a small quantity of architectural materials were recovered, it is possible that the Site 16RI329 assemblage represents the remains of the structure depicted on the 1958 map. However, the almost complete lack of any other cultural material does not allow a confident interpretation of the assemblage, and the site function is unknown.

Summary and National Register Evaluation

Site 16RI329 may represent the location of a historic structure dating to the late nineteenth and/or twentieth centuries, but the limited assemblage does not allow a confident interpretation of the site's function. No features or intact cultural midden deposits were observed at Site 16RI329.

Investigations at Site 16RI329 indicate that this resource contains no detectable subsurface cultural material. The site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI329 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI329 is recommended not eligible for listing in the NRHP.

Site 16RI330

Field Site Number: HRNEPED01-04
UTM Coordinates:
Grid Origin: 15N, N3592870 E629601 (NAD 83)
Site Center: 15N, N3592887 E629572 (NAD 83)
Quadrangle Map: Dunn, Louisiana, 7.5-minute
Elevation: 25 m (83 ft) AMSL
Components: historic
Specific Components: Industrial & Modern 1890–
Site Type: multiple historic residences
Size: 320 m (1,050 ft) N–S x 322 m (1,056 ft) E–W
Distance/direction to nearest water: Big Creek, 620 m (2,034 ft) northeast; unnamed tributary of Cypress Creek, 500 m (1,640 ft) west
Type and extent of previous disturbance: extensive disturbance from agricultural activities
Topography: level
Vegetation: none (fallow agricultural field), mixed deciduous secondary forest
Ground surface visibility: nearly 100 percent in open agricultural field; virtually 0 percent in secondary forest
Recommended NRHP status: not eligible

Table 6.9. Site 16RI329 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI329	GSC w/in 20M of datum	0-0 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI329	GSC w/in 20M of datum	0-0 cm bgs	Architecture	Nails	Wire Nail	2
16RI329	GSC w/in 20M of datum	0-0 cm bgs	Maintenance	Electrical	Insulator: ceramic	1
Total						5

Site Description

Site 16RI330 was originally recorded during a pedestrian walkover by R. Christopher Goodwin & Associates, Inc., personnel in 2014, but was not formally documented or delineated at that time. The site is located in an agricultural field in north central Richland Parish, Louisiana, with the datum situated approximately 595 m (1,952 ft) east of LA 183 and 200 m (656 ft) south of US 80. The site primarily lies in a generally level, slightly undulating agricultural field, roughly 500 m (1,640 ft) east of an unnamed tributary of Cypress Creek and 620 m (2,034 ft) southwest of Big Creek. While the vast majority of the site was occupied by an open agricultural field, a small portion at the northern boundary of the field was covered by a patch of mixed deciduous secondary forest with sparse to moderately-dense understory. The agricultural field was plowed and fallow at the time of the survey (Figure 6.20). Site 16RI330 was encountered through shovel testing and the observation of a surface artifact scatter.

Investigation Methods

Site 16RI330 was recorded through the excavation of five positive transect shovel tests (81-7, 82-8, 83-10, 83-12, and 84-5) and the observation of a very extensive surface scatter of historic artifacts. Shovel Test 83-10 was assigned an arbitrary coordinate of N1000 E1000, and all delineation shovel tests that were subsequently excavated at the site were assigned coordinates based on their position relative to this shovel test. Since the surface artifact scatter already visibly extended for several hundred meters even before delineation began, delineation shovel tests were excavated at 20 m (66 ft) intervals over the entire site area.

In total, 187 shovel tests were used to delineate the site boundaries, 96 of which were positive for cultural material, 87 of which were negative, and 4 of which could not be excavated due to their location on top of mechanical push piles. Maximum site dimensions were 320 m (1,050 ft) north–south

Figure 6.20. Overview of Site 16RI330 from datum, facing north.

and 322 m (1,056 ft) east–west. Ground surface visibility was excellent over all areas of the site except the small portion covered by forest; a variable moderate- to high-density scatter of surface artifacts was observed over the entire site footprint. In the eastern half of the site, a dark surface stain of very dark grayish brown (10YR 3/2) silt loam measuring roughly 100 m (328 ft) north–south and 80 m (262 ft) east–west was noted, but did not extend farther than 5–10 cm (2–4 in) bgs (see Figure 6.21). Locational data points collected with a Trimble GeoXT GPS unit at Site 16RI330 include the site datum (grid position N1000 E1000) and the site boundary. A site sketch map was drawn showing the placement of the shovel test positions in relation to physiographic features (Figure 6.21).

Depositional Context

Profiles observed at Site 16RI330 were generally similar to that of Gilbert silt loam, which is mapped in much of the site area. A typical profile, taken from shovel test N1080 E1000, consisted of a dark brown (10YR 4/3) silt loam Ap horizon from 0 to 22 cm (0 to 9 in) bgs, overlying a light gray (10YR 7/2) silt loam Eg horizon from 22 to 45 cm (9 to 18 in) bgs. The Eg horizon also contained mottles of yellowish brown (10YR 5/6) silt loam. This profile was generally typical of the Gilbert soil series mapped in much of the site area. Gigger soils were also frequently observed, and Perry soils were very occasionally noted. Artifacts were recovered from an average depth of 9 cm (4 in) bgs, with a maximum recovery depth of 40 cm (16 in) bgs. The presence of a well-defined plow zone in the profiles of all tests and the generally shallow recovery depth of the vast majority of artifacts indicated that the entire site area had been significantly disturbed by agricultural activities.

Artifacts

The Site 16RI330 assemblage consists of a total of 638 artifacts. The majority of recovered items were domestic group artifacts, including 4 pieces of porcelain, 68 whiteware fragments, 4 stoneware fragments, 1 piece of unidentified domestic ceramic, 309 pieces of container glass, 8 glass tableware fragments, 1 metal beverage can pull tab, and 1 metal food container fragment. Architectural group artifacts were the next most numerous type, including 58 brick fragments, 1 piece of concrete, 2 pieces of mortar, 6 fragments of stoneware water pipe, 50 pieces of flat glass, and 38 nails (1 machine-cut nail, 13 wire nails, and 24 indeterminate nails). In addition, 1 piece of lamp chimney or light bulb glass, 1 ceramic electrical insulator, 3 pieces of slag, 7 general hardware items (2 bolts, 1 screw, 1 fence staple, 2 pieces of wire, and 1 segment of barbed wire), 1 plastic comb, 1 glass bead, 1 spark plug, and 72 unidentified artifacts (3 ceramic, 14 glass, 50 metal, 3 plastic, 1 stone, and 1 indeterminate) were recovered (Table 6.10). The majority of the recovered artifacts did not display any diagnostic features, and the historic ceramic fragments could only be broadly dated to the nineteenth and/or twentieth centuries. However, the presence of 6 pieces of container glass formed in an automatic bottling machine, a beverage can pull tab, 13 wire nails, a plastic comb, and a spark plug date the site to the twentieth century, corresponding to the Industrial & Modern period.

A total of 19 unique structures are depicted within the site footprint on three different USGS topographic quadrangles, though no more than 12 are depicted within the site boundaries at any one time. Twelve structures are depicted along two unpaved roads in the site location on the 1935 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle. On the 1958 Baskinton, Louisiana, 15-minute series USGS topographic quadrangle, 3 of the structures from the 1935 map are still present and 7 new structures are depicted along two roads, for a total of 10 structures depicted within the site area (see Figures 3.2 and 3.3). Finally, a total of 6 structures are depicted along two roads within the site boundaries on the 1987 Dunn, Louisiana, 7.5-minute series topographic quadrangle, 5 of which first appeared on the 1958 map and 1 of which was first depicted on the 1935 map (USGS 1935, 1958, 1987b).

Table 6.10. Site 16RI330 Artifact Recovery by Provenience.

Site	Unit #	Depth	Group	Class	Type	Total
16RI330	STP N1000 E1020	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1000 E1020	0-10 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1000 E1020	0-10 cm bgs	Domestic	Container Glass		3
16RI330	STP N1000 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1000 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI330	STP N1000 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	12
16RI330	STP N1000 E1040	0-10 cm bgs	Unidentified	Ceramic	Porcelain	1
16RI330	STP N1000 E1060	0-10 cm bgs	Domestic	Ceramics	Unidentified ceramic	1
16RI330	STP N1000 E1060	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	5
16RI330	STP N1000 E880	0-20 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1000 E880	25-35 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1000 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1000 E900	0-10 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1000 E940	0-20 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1000 E940	0-20 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1000 E940	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	7
16RI330	STP N1000 E940	0-20 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI330	STP N1000 E940	0-20 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1000 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1000 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	9
16RI330	STP N1000 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1000 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1000 E980	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1000 E980	0-20 cm bgs	Unidentified	Glass	Flat	1
16RI330	STP N1020 E1000	0-10 cm bgs	Maintenance	Electrical	Insulator: ceramic	1
16RI330	STP N1020 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1020 E1020	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1020 E1040	0-10 cm bgs	Domestic	Ceramics	Stoneware	1
16RI330	STP N1020 E1040	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N1020 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1020 E1040	0-10 cm bgs	Unidentified	Ceramic	Porcelain	1
16RI330	STP N1020 E1040	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1020 E880	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1020 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1020 E920	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1020 E920	0-10 cm bgs	Domestic	Ceramics	Whiteware	2
16RI330	STP N1020 E920	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1020 E920	0-10 cm bgs	Domestic	Glass Tableware	Pattern mold	1
16RI330	STP N1020 E920	0-10 cm bgs	Personal	Health and Grooming	Comb	1
16RI330	STP N1020 E920	0-10 cm bgs	Unidentified	Glass	Amorphous	1
16RI330	STP N1020 E940	0-20 cm bgs	Architecture	Flat Glass	Window Glass	4
16RI330	STP N1020 E940	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	20
16RI330	STP N1020 E940	0-20 cm bgs	Maintenance	General Hardware	Screw	1
16RI330	STP N1020 E940	0-20 cm bgs	Unidentified	Glass	Indetermiate	1
16RI330	STP N1020 E940	0-20 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1020 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1020 E960	0-10 cm bgs	Domestic	Ceramics	Porcelain: hard paste	1
16RI330	STP N1020 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI330	STP N1020 E980	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1020 E980	0-10 cm bgs	Unidentified	Plastic	Indeterminate plastic	1
16RI330	STP N1040 E1060	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1040 E880	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1040 E880	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1040 E880	15-25 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1040 E880	15-25 cm bgs	Domestic	Ceramics	Porcelain: hard paste	1
16RI330	STP N1040 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1040 E940	0-15 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1040 E980	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	8
16RI330	STP N1040 E980	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1040 E980	0-15 cm bgs	Domestic	Glass Tableware	Undiagnostic fragment	1
16RI330	STP N1040 E980	0-15 cm bgs	Unidentified	Metal		1
16RI330	STP N1040 E980	15-25 cm bgs	Architecture	Construction Material	Brick (measure in inches)	4
16RI330	STP N1040 E980	15-25 cm bgs	Personal	Jewelry and Beads	Jewelry Insert / Cabachon	1
16RI330	STP N1060 E1020	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1060 E1020	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1060 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1060 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1

Site	Unit #	Depth	Group	Class	Type	Total
16RI330	STP N1060 E1040	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1060 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1060 E1060	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1060 E1060	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1060 E1080	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1060 E1080	0-10 cm bgs	Unidentified	Glass	Curved	1
16RI330	STP N1060 E1080	0-10 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1060 E880	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1060 E880	0-15 cm bgs	Unidentified	Indeterminate	1	1
16RI330	STP N1060 E900	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1060 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1060 E900	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1060 E920	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1060 E920	0-10 cm bgs	Domestic	Glass Tableware	Undiagnostic fragment	1
16RI330	STP N1060 E940	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI330	STP N1060 E940	0-15 cm bgs	Architecture	Nails	Indeterminate	2
16RI330	STP N1060 E940	0-15 cm bgs	Architecture	Nails	Wire Nail	2
16RI330	STP N1060 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	5
16RI330	STP N1060 E940	0-15 cm bgs	Maintenance	General Hardware	Wire	1
16RI330	STP N1060 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1060 E960	0-10 cm bgs	Architecture	Construction Material	Ceramic	1
16RI330	STP N1060 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1060 E960	0-10 cm bgs	Maintenance	Fuels	Cinder / Slag	1
16RI330	STP N1060 E960	0-10 cm bgs	Maintenance	General Hardware	Bolt	1
16RI330	STP N1060 E960	10-20 cm bgs	Architecture	Nails	Wire Nail	2
16RI330	STP N1060 E980	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1060 E980	10-20 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1060 E980	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1080 E1000	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E1000	0-10 cm bgs	Architecture	Construction Material	Mortar	2
16RI330	STP N1080 E1000	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1080 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1080 E1000	0-10 cm bgs	Unidentified	Glass	Amorphous	1
16RI330	STP N1080 E1000	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E1000	10-20 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1080 E1000	10-20 cm bgs	Domestic	Ceramics	Whiteware	45
16RI330	STP N1080 E1000	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	34
16RI330	STP N1080 E1000	10-20 cm bgs	Furnishings	Lighting	Indeterminate	1
16RI330	STP N1080 E1000	10-20 cm bgs	Unidentified	Glass	Indetermiate	1
16RI330	STP N1080 E1000	10-20 cm bgs	Unidentified	Metal	Iron / Steel	19
16RI330	STP N1080 E1020	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E1020	0-10 cm bgs	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	1
16RI330	STP N1080 E1020	0-10 cm bgs	Architecture	Flat Glass	Window Glass	4
16RI330	STP N1080 E1020	0-10 cm bgs	Architecture	Nails	Cut Nail: unspecified	1
16RI330	STP N1080 E1020	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N1080 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1080 E1040	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N1080 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1080 E1040	0-10 cm bgs	Maintenance	General Hardware	Fencing	1
16RI330	STP N1080 E1060	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1080 E1060	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1080 E1080	5-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E1080	5-15 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1080 E1080	5-15 cm bgs	Architecture	Nails	Indeterminate	3
16RI330	STP N1080 E1080	5-15 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1080 E1080	5-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	6
16RI330	STP N1080 E1100	5-15 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1080 E1100	5-15 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1080 E1100	5-15 cm bgs	Domestic	Ceramics	Whiteware	2
16RI330	STP N1080 E1100	5-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1080 E860	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1080 E880	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E880	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1080 E880	0-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	3
16RI330	STP N1080 E880	0-20 cm bgs	Architecture	Flat Glass	Indeterminate	1
16RI330	STP N1080 E880	0-20 cm bgs	Domestic	Beverage Cans	Ring pull only	1
16RI330	STP N1080 E880	0-20 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N1080 E880	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	5
16RI330	STP N1080 E880	0-20 cm bgs	Unidentified	Glass	Indetermiate	1

Site	Unit #	Depth	Group	Class	Type	Total
16RI330	STP N1080 E900	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N1080 E900	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1080 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N1080 E920	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N1080 E920	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	6
16RI330	STP N1080 E920	0-10 cm bgs	Maintenance	General Hardware	Bolt	1
16RI330	STP N1080 E920	0-10 cm bgs	Unidentified	Glass	Indetermiate	1
16RI330	STP N1080 E920	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1080 E940	0-17 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E940	0-17 cm bgs	Architecture	Nails	Indeterminate	2
16RI330	STP N1080 E940	0-17 cm bgs	Domestic	Ceramics	Stoneware	1
16RI330	STP N1080 E940	0-17 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N1080 E940	0-17 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N1080 E940	0-17 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	14
16RI330	STP N1080 E940	0-17 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI330	STP N1080 E940	0-17 cm bgs	Maintenance	Fuels	Cinder / Slag	1
16RI330	STP N1080 E940	0-17 cm bgs	Maintenance	General Hardware	Staple	1
16RI330	STP N1080 E940	0-17 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1080 E940	0-17 cm bgs	Unidentified	Plastic	Indeterminate plastic	1
16RI330	STP N1080 E980	10-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1080 E980	10-15 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1100 E1020	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1100 E1020	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N1100 E1020	0-10 cm bgs	Domestic	Metal Food Containers	Indeterminate / Fragment	1
16RI330	STP N1100 E1020	0-10 cm bgs	Unidentified	Metal	Indeterminate metal	1
16RI330	STP N1100 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1100 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1100 E860	10-20 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1100 E860	10-20 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1100 E880	15-25 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1100 E880	15-25 cm bgs	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	1
16RI330	STP N1100 E900	0-10 cm bgs	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	1
16RI330	STP N1100 E900	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N1100 E940	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	3
16RI330	STP N1100 E940	0-15 cm bgs	Architecture	Flat Glass	Window Glass	3
16RI330	STP N1100 E940	0-15 cm bgs	Architecture	Nails	Indeterminate	5
16RI330	STP N1100 E940	0-15 cm bgs	Architecture	Nails	Wire Nail	1
16RI330	STP N1100 E940	0-15 cm bgs	Domestic	Ceramics	Stoneware	2
16RI330	STP N1100 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N1100 E940	0-15 cm bgs	Unidentified	Glass	Indetermiate	1
16RI330	STP N1100 E940	0-15 cm bgs	Unidentified	Metal	Iron / Steel	4
16RI330	STP N1100 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI330	STP N1120 E1000	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1120 E1040	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1120 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	10
16RI330	STP N1120 E1040	0-10 cm bgs	Unidentified	Metal	Iron / Steel	2
16RI330	STP N1120 E1060	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N1120 E1060	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	8
16RI330	STP N1120 E900	0-10 cm bgs	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	1
16RI330	STP N1120 E920	0-0 Surface	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1120 E920	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1120 E920	10-20 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N1120 E920	10-20 cm bgs	Unidentified	Ceramic	Redware / coarse earthenware	1
16RI330	STP N1120 E940	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N1120 E940	0-15 cm bgs	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	1
16RI330	STP N1120 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N1120 E980	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N840 E940	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N840 E940	0-15 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N840 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N860 E880	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N860 E940	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N860 E940	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N860 E940	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N860 E960	10-20 cm bgs	Architecture	Construction Material	Brick (measure in inches)	4
16RI330	STP N860 E960	10-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N880 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N880 E940	0-15 cm bgs	Transportation	Motorized Vehicle	Spark plug	1
16RI330	STP N880 E960	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1

Site	Unit #	Depth	Group	Class	Type	Total
16RI330	STP N880 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N880 E960	0-10 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI330	STP N920 E940	0-15 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N920 E940	0-15 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N920 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N920 E960	0-10 cm bgs	Domestic	Ceramics	Whiteware	3
16RI330	STP N920 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N920 E960	0-10 cm bgs	Unidentified	Glass	Curved	1
16RI330	STP N940 E1000	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N940 E900	0-10 cm bgs	Architecture	Construction Material	Concrete	1
16RI330	STP N940 E900	0-10 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N940 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	5
16RI330	STP N940 E900	0-10 cm bgs	Unidentified	Glass	Curved	1
16RI330	STP N940 E940	0-20 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N940 E940	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N940 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N940 E960	0-10 cm bgs	Domestic	Ceramics	Porcelain: hard paste	1
16RI330	STP N940 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N940 E960	10-20 cm bgs	Architecture	Flat Glass	Window Glass	2
16RI330	STP N940 E960	10-20 cm bgs	Architecture	Nails	Wire Nail	2
16RI330	STP N940 E960	10-20 cm bgs	Domestic	Ceramics	Porcelain: hard paste	1
16RI330	STP N940 E960	10-20 cm bgs	Domestic	Container Glass		1
16RI330	STP N940 E960	10-20 cm bgs	Unidentified	Glass	Item / part	1
16RI330	STP N940 E960	10-20 cm bgs	Unidentified	Plastic	Indeterminate plastic	1
16RI330	STP N940 E980	0-10 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N940 E980	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N960 E1000	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N960 E860	0-10 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N960 E860	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N960 E860	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N960 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N960 E900	0-10 cm bgs	Domestic	Glass Tableware	Unidentified mold	1
16RI330	STP N960 E920	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N960 E920	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	2
16RI330	STP N960 E940	0-15 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N960 E940	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N960 E940	15-25 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N960 E940	15-25 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N960 E960	0-10 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N960 E960	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N960 E960	0-10 cm bgs	Domestic	Glass Tableware	Pattern mold	1
16RI330	STP N960 E960	0-10 cm bgs	Maintenance	General Hardware	Wire	1
16RI330	STP N960 E960	0-10 cm bgs	Unidentified	Glass	Curved	1
16RI330	STP N960 E980	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	2
16RI330	STP N960 E980	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N960 E980	25-35 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N980 E1040	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	4
16RI330	STP N980 E880	0-25 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N980 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP N980 E900	0-10 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N980 E920	10-20 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N980 E940	0-20 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP N980 E940	0-20 cm bgs	Domestic	Ceramics	Whiteware	1
16RI330	STP N980 E940	0-20 cm bgs	Domestic	Container Glass	Automatic Bottling Machine	1
16RI330	STP N980 E940	0-20 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	7
16RI330	STP N980 E940	0-20 cm bgs	Unidentified	Glass	Indetermiate	1
16RI330	STP N980 E940	0-20 cm bgs	Unidentified	Metal	Iron / Steel	1
16RI330	STP N980 E960	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP N980 E960	0-10 cm bgs	Domestic	Ceramics	Whiteware	2
16RI330	STP N980 E980	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP N980 E980	0-15 cm bgs	Architecture	Nails	Indeterminate	2
16RI330	STP N980 E980	0-15 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	7
16RI330	STP N980 E980	0-15 cm bgs	Maintenance	Fuels	Cinder / Slag	1
16RI330	STP N980 E980	15-25 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1
16RI330	STP N990 E900	0-10 cm bgs	Architecture	Flat Glass	Indeterminate	1
16RI330	STP N990 E900	0-10 cm bgs	Architecture	Flat Glass	Window Glass	3
16RI330	STP N990 E900	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	11
16RI330	STP N990 E900	0-10 cm bgs	Unidentified	Stone	Marble	1
16RI330	STP TR 81-7	0-10 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	1

Site	Unit #	Depth	Group	Class	Type	Total
16RI330	STP TR 82-8	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
16RI330	STP TR 83-10	20-40 cm bgs	Domestic	Container Glass	Undiagnostic container fragment	3
16RI330	STP TR 83-12	0-15 cm bgs	Architecture	Construction Material	Brick (measure in inches)	1
16RI330	STP TR 83-12	15-25 cm bgs	Architecture	Nails	Indeterminate	1
16RI330	STP TR 84-5	0-10 cm bgs	Architecture	Flat Glass	Window Glass	1
Total						638

Google Earth aerial photographs indicate that only the easternmost of these structures (one that was first depicted on the 1958 map) was still present by 1998. This structure is still depicted in aerial views as late as 2012, but was no longer extant at the time of the survey. Only a concentration of fragments of dimensional lumber that were larger than typically observed within the site's surface scatter marked its location during delineation.

Since no structures other than the ones discussed above are depicted or visible at the site location on any other quadrangles or aerial photographs, it is most likely that the Site 16RI330 assemblage represents the remains of several of the structures discussed above. The high proportion of domestic artifacts and the prevalence of this artifact type throughout the entire site footprint indicate that at least several of the historic structures represented by Site 16RI330 were utilized as residences.

Summary and National Register Evaluation

Site 16RI330 likely represents the remains of multiple historic residences dating to the twentieth century. Diagnostic artifacts were recovered, but no features or intact cultural midden deposits were observed at Site 16RI330.

Investigations at Site 16RI330 indicate that this resource contains a high density of subsurface remains compared to the other sites investigated in this study. However, despite its large size the entire site has experienced significant disturbance from agricultural activities and its deposits retain little integrity. Because of these factors, Site 16RI330 is thought to have a low potential to provide further information on the historic inhabitants of the region. No further work is recommended, and Site 16RI330 is recommended not eligible for listing in the NRHP.

Isolated Finds

A total of two isolated finds were recorded in the Holly Ridge Northeast tract as a result of this project. These are defined as archaeological resources that yielded four or fewer artifacts within an area no greater than 30-x-30 m (98-x-98 ft). The boundaries of isolated finds were defined using the same methodology as archaeological sites (see Chapter 4). Both of the isolated finds recorded during the current project are comprised of a single positive shovel test that each yielded a single historic artifact. A detailed overview of the cultural material recovered from the isolated finds is provided in Table 5.4 in Chapter 5, and provenience and summary information for both isolated finds is presented in Tables 6.11 and 6.12 below.

Table 6.11. Isolated Find Artifact Recovery by Provenience.

Site	Unit #	Historic Metal	Total Artifacts
IF 21	TR78, STP4	1	1
IF 22	TR84, STP10	1	1
Total		2	2

Table 6.12. Isolated Find Summary Data.

Site	Grid Origin	Easting	Northing	Specific Component	# pos stp
IF 21	TR78, STP4	629357	3592690	Unknown Historic	1
IF 22	TR84, STP10	629642	3592540	Historic Industrial & Modern 1890-	1

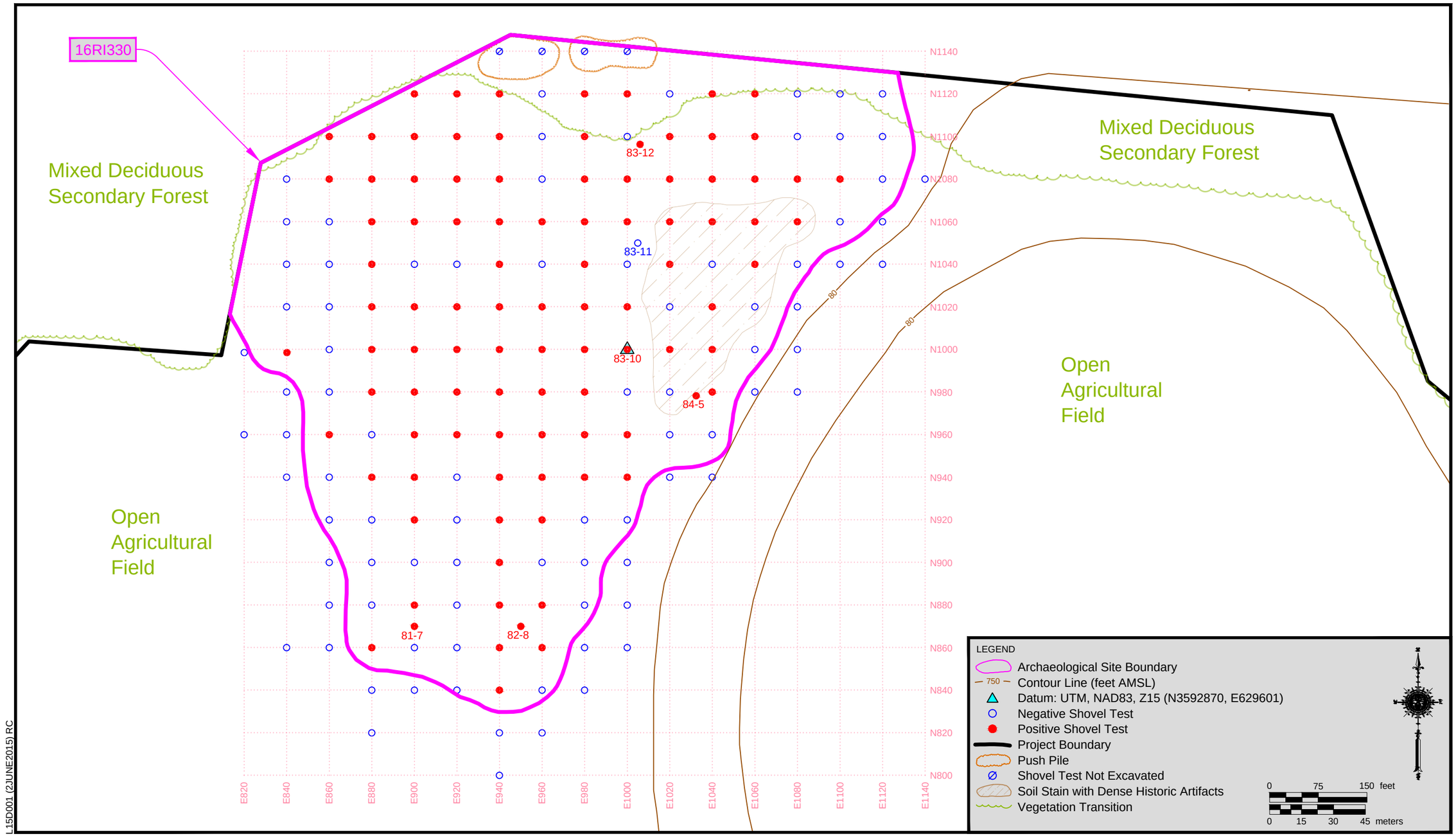

Figure 6.21. Schematic plan map of Site 16RI330.

Non-Site Localities

A stand of mixed deciduous secondary forest measuring roughly 450 m (1,476 ft) in length from east to west and 50 m (164 ft) in width at its widest point from north to south is located at the extreme northern edge of the project area, immediately south of the railroad line adjacent to US 80. Aside from an unpaved road and small segments of the tree lines along the perimeter of the survey area, this stand of forest is the only portion of the project area not covered by agricultural fields.

Two non-site localities were noted in the eastern half of this stand of forest, in the extreme northeast corner of the project area. Both of these localities consist of mechanical push piles containing out of context undiagnostic historic materials that do not qualify as archaeological sites. Non-Site Locality #1 measures roughly 15-x-5 m (49-x-16 ft) and is situated just north of negative shovel test 85-2. Non-Site Locality #2 measures approximately 30-x-15 m (98-x-49 ft) and is located just west of negative shovel test 85-5. Miscellaneous brick, mortar, concrete, and corrugated metal fragments were observed protruding from these push piles, none of which displayed any diagnostic features.

Chapter 7. Conclusions and Recommendations

CRA personnel completed a cultural resource file search and intensive field survey during the period extending from February 18 to April 27, 2015, as part of the Louisiana Economic Development certification process for the Holly Ridge Northeast property in Richland Parish, Louisiana. This property consisted of a single tract measuring approximately 110 ha (272 acres) in area and was located to the south of the community of Holly Ridge, Louisiana.

The records review consisted of a search of online files maintained by the Louisiana Office of Cultural Development, Division of Archaeology, correspondence with the project proponent regarding recently completed work on the property, and a review of historic maps to identify any cultural resources or cultural resource investigations previously documented in the area. The records review indicated that 6 cultural resource investigations (22-0091, 22-1183, 22-1703, 22-1835, 22-4252, and a reconnaissance survey), and 13 archaeological sites (16RI80, 16RI213, 16RI238–239, 16RI241–245, and 16RI302–16RI305) had been previously documented within a 1.6 km (1.0 mi) radius of the project area. In addition, the review of historic maps indicated that 55 structures were mapped within the project area, suggesting that historic cultural resources were likely to be found in the area.

Of the previous work in the area, one project, the reconnaissance survey, previously examined the current project area in a reconnaissance-level pedestrian survey. That work identified a number of field loci and documented one site in the project area (16RI302). As the reconnaissance survey was intended for planning purposes, no systematic subsurface investigation or site delineation was performed during that investigation.

The current field investigation consisted of a shovel test survey with screened 30-x-30 cm (12-x-12 in) shovel tests excavated at 30 or 50 m (98 or 164 ft) intervals, depending upon the probability of encountering cultural material, as outlined in the Louisiana Office of Cultural Development, Division of Archaeology guidelines. The entire project area was also visually inspected for cultural material during the shovel test survey. This work resulted in the recording of 10 new archaeological sites (16RI321–16RI330) and 2 isolated finds. The location of the site previously documented in the project area during the reconnaissance survey (16RI302) was revisited and examined, but no cultural material associated with this site could be located on the surface or in the shovel tests conducted at the location.

All of the cultural resources documented during this project, including the previously documented site and field loci, were investigated following the Louisiana Office of Cultural Development, Division of Archaeology guidelines,. Due to a high level of disturbance and lack of integrity, all 11 of the archaeological sites (16RI302 and 16RI321–330) and the 2 isolated finds documented within the investigated area have a low research potential. As a result, these sites are recommended as not eligible for listing in the NRHP, and no further work is recommended.

Based on the findings of the records review and cultural resource survey, no archaeological sites or historic properties listed in, or recommended eligible for listing in, the NRHP will be affected by the proposed development of the property. The area is considered cleared from a cultural resources perspective, and no additional management action is recommended.

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 construction activities in the project area, the SHPO should be notified immediately. If human skeletal material is discovered, the construction activities should cease, SHPO should be contacted immediately, and SHPO guidelines should be followed.

References Cited

Allen, Thurman E.
1993 *Soil Survey of Richland Parish, Louisiana.* U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.

Anderson, David G., and Glenn Hanson
1988 Early Archaic Settlement in the Southeastern United States: A Case Study from The Savannah River Basin. *American Antiquity* 53:262–286.

Anderson, David G., J.W. Joseph, Mary Beth Reed, and Steven D. Smith
1999 *JRTC and Fort Polk Historic Preservation Plan. Prehistory and History in Western Louisiana: A Technical Synthesis of Cultural Resource Investigations.* Southeast Archaeological Center, National Park Service, Tallahassee, Florida.

Anderson, David G., and Robert C. Mainfort, Jr.
2002 *The Woodland Southeast*. The University of Alabama Press, Tuscaloosa, Alabama.

Anderson, David G., and Kenneth E. Sassaman
1996 *The Paleoindian and Early Archaic Southeast.* The University of Alabama Press, Tuscaloosa, Alabama. Pp. 380–84.

Anderson, David G., and Steven D. Smith
2003 *Archaeology, History, and Predictive Modeling Research at Fort Polk, 1972–2002.* The University of Alabama Press, Tuscaloosa, Alabama. Pp. 349–399.

Ball, Donald B.
1984 Historic Artifact Patterning in the Ohio Valley. *Proceedings of the Symposium on Ohio Valley Urban and Historic Archaeology* II:24–36.

Barnes, James E.
1994 *An Archaeological Survey of the Proposed NorAm, Inc., 24" Gasline, FM-63, Richland and Franklin Parishes, Louisiana.* Arkansas Archeological Survey, Fayetteville, Arkansas.

Baugher-Perlin, Sherene
1982 Analyzing Glass Bottles for Chronology, Function, and Trade Networks. In *Archeology of Urban America*, edited by Roy S. Dickens, pp. 250–291. Academic Press, New York.

Bemrose, Geoffrey
1952 *Nineteenth Century English Pottery and Porcelain.* Pitman Publishing Corporation, New York.

Bense, Judith A.
1994 *Archaeology of the Southeastern United States: Paleoindian to World War I.* Academic Press. San Diego, California.

Billington, Dora M.
1962 *The Technique of Pottery.* Hearthside Press Inc., New York.

Boger, L. A.
1971 *The Dictionary of World Pottery and Porcelain*. Charles Scribner and Sons, New York.

Buckley, Francis
1934 Old English Glass. The Birmingham Glass Pinchers. *Glass* 11(May):187–188.

Busch, Jane
1981 An Introduction to the Tin Can. *Historical Archaeology* 15: 95–104.

Cameron, Elisabeth
1986 *Encyclopedia of Pottery and Porcelain, 1800–1960.* Facts on File Publications, New York.

Campbell, L. Janice, Prentice M. Thomas, Jr., and James H. Mathews
1987 *Archaeological Testing in the Birds Creek Drainage, Fort Polk Military Reservation, Vernon Parish, Louisiana.* New World Research Report of Investigations 154, Fort Walton Beach, Florida.

Campbell, L. Janice, and Carol S. Weed
1986 *Cultural Resources Investigations in the Proposed Multipurpose Range Complex Area, Fort Polk, Vernon Parish, Louisiana.* New World Research. Report of Investigations 85–6, Pollock, Louisiana. Submitted to Archaeological Services Branch, National Park Service, Southeast Regional Office, Atlanta, Georgia.

Carpentier, Donald and Jonathan Rickard
2001 Slip Decoration in the Age of Industrialization. In *Ceramics in America 2001*, edited by Robert Hunter, pp. 115–134. University Press of New England, Hanover, NH.

Chance, David H., and Jennifer V. Chance
1976 *Kanaka Village, Vancouver Barracks 1974.* Reports in Highway Archaeology, No. 3. Office of Public Archaeology, University of Washington, Seattle.

Claggett, Stephen R., and John S. Cable
1982 *The Haw River Sites: Archaeological Investigations at Two Stratified Sites in the North Carolina Piedmont.* Commonwealth Associates, Inc., Jackson, Michigan.

Cochran, Jennifer L.
2013 *An Intensive Phase I Cultural Resources Survey of 32 Pole Locations along Entergy's Proposed Oakridge to Dunn Transmission Right-of-Way, Morehouse and Richland Parishes, Louisiana (Negative Findings).* Horizon Environmental Services, Inc., Austin, Texas.

Collard, Elizabeth
1967 *Nineteenth-Century Pottery and Porcelain in Canada.* McGill University Press, Montreal, Canada.

Daigle, J.J., G.E. Griffith, J.M. Omernik, P.L. Faulkner, R.P. McCulloh, L.R. Handley, L.M. Smith, and S.S. Chapman
2006 *Ecoregions of Louisiana* (color poster with map, descriptive text, summary tables, and photographs). U.S. Geological Survey, Reston, Virginia.

Davidson, James M.
2006 Material Culture, Chronology, and Socioeconomics. In *Two Historic Cemeteries in Crawford County, Arkansas.* Robert C. Mainfort, Jr. and James M. Davidson, editors. Arkansas Archeological Survey Research Series No. 62, pp. 98–218.

Denker, Ellen, and Bert Denker
1982 *The Warner Collector's Guide to North American Pottery and Porcelain.* Warner Books, New York.

Dodd, Arthur Edward
1964 *Dictionary of Ceramics.* Philosophical Library Inc., New York.

Duffy, John
1978 Social Impact of Disease in the Late Nineteenth Century. In *Sickness and Health in America: Readings in the History of Medicine and Public Health*, edited by Judith Walzer Leavitt and Ronald L. Numbers, pp. 395–402. University of Wisconsin Press, Madison.

Earth Tech, Inc.
2002 *Final Integrated Cultural Resources Management Plan for Louisiana Army Ammunition Plant, Louisiana.* Prepared by Earth Tech, Inc. Colton, California.

Espenshade, Christopher T. and Paul Brockington
1987 *Archaeological Survey and Testing of the Proposed ANR Pipeline in Ouachita, Morehouse, and Richland Parishes, Louisiana.* Brockington and Associates, Atlanta, Georgia.

Faulkner, Charles H.
2000 *Historical Archaeology Laboratory Manual.* Department of Anthropology, University of Tennessee, Knoxville.

Fay, Robert P.
1986 *Archaeological Investigations at Liberty Hall, Frankfort, Kentucky.* Kentucky Heritage Council, Frankfort, Kentucky.

Fields, Ross C., Margaret A. Howard, Eloise F. Gadus, Jack M. Jackson, Martha Doty Freeman, and L. Wayne Klement
1989 *Survey and Testing Along Boone Creek, Louisiana Army Ammunition Plant, Webster Parish, Louisiana.* Prewitt and Associates, Inc.

Fike, Richard E.
1987 *The Bottle Book: A Comprehensive Guide to Historic, Embossed Medicine Bottles.* Peregrine Smith Books, Salt Lake City, Utah.

Flores, D.L.
1984 *Jefferson and Southwestern Expansion – The Freeman and Custis Accounts of the Red River Expedition of 1806.* University of Oklahoma Press, Norman.

Friedman, Lawrence J.
1970 *The White Savage: Racial Fantasies in the Postbellum South.* Prentice-Hall, Inc., Englewood Cliffs, New Jersey.

Gagliano, Sherwood M., and Hiram F. Gregory, Jr.
1965 A Preliminary Survey of Paleoindian Points from Louisiana. *Louisiana Studies* 4(1):62–77.

Gates, William C., Jr., and Dana E. Ormerod
1982 The East Liverpool Pottery District: Identification of Manufacturers and Marks. *Historical Archaeology* 16(1–2):1–358.

Genheimer, Robert A.
1987 *Archaeological Testing, Evaluation, and Final Mitigation Excavations at Covington's Riverfront Redevelopment Phase II Site, Kenton County, Kentucky.* Prepared by R. B. Archaeological Services, Covington, Kentucky, and Cultural Resource Analysts, Inc., Lexington, Kentucky. Submitted to the City of Covington, Kentucky.

Gibson, Jon L.
2010 Poverty Point Redux. In *Archaeology of Louisiana,* edited by Mark A. Rees. University of Louisiana Press, Baton Rouge.

Girard, Jeffrey S.
2000 *Regional Archaeology Program, Management Unit 1, Eleventh Annual Report.* Louisiana Division of Archaeology, Department of Culture, Recreation and Tourism. Baton Rouge.

2010 Caddo Communities of Northwest Louisiana. In *Archaeology of Louisiana.* Ed. Mark A. Rees. University of Louisiana Press, Baton Rouge.

2012 Settlement Patterns and Variation in Caddo Pottery Decoration: A Case Study of the Willow Chute Bayou Locality. In *The Archaeology of the Caddo,* pp. 239–287. Ed. Timothy K. Perttula and Chester P. Walker. University of Nebraska Press, Lincoln.

Godden, Geoffrey A.
1963 *British Pottery and Porcelain 1780–1850.* Baker, London, England.

1964 *An Illustrated Encyclopedia of British Pottery and Porcelain.* Bonanza Books, New York.

Goodyear, Albert C.
2006 Evidence of Pre-Clovis Sites in the Eastern United States. In, *Paleoamerican Origins: Beyond Clovis,* ed. Robson Bonnichsen, Bradley T. Lepper, Dennis J. Stanford, and Michael R. Waters, pp. 103–112. Texas A&M University Press, College Station.

Gregory, Hiram F., and H.K. Curry
1978 *Natchitoches Parish Cultural and historic Resources: Prehistory.* Natchitoches Parish Planning Commission, Natchitoches.

Hays, Christopher T., and Richard A. Weinstein
2010 Tchefuncte and Early Woodland. In *Archaeology of Louisiana,* edited by Mark A. Rees. University of Louisiana, Baton Rouge.

Hillman, Michael M.
1980 Archaeological Survey, Kisatchie National Forest, Summer 1979. Manuscript on file, Kisatchie National Forest, Pineville, Louisiana.

House, John H.
1972 *Archaeological Salvage in the Basin of Lake Rodemacher, Rapides Parish, Louisiana.* Gulf South Research Institute, Baton Rouge.

Hughes, Bernard, and Therle Hughes
1968 *The Collector's Encyclopedia of English Ceramics.* Abbey Library, London, England.

Husfloen, Kyle
1992 *Collector's Guide to American Pressed Glass 1825–1915.* Wallace-Homestead Book Company, Radnor, Pennsylvania.

Jennings, Thomas A.
2008 San Patrice: An Example of Late Paleoindian Adaptive Versatility in South Central North America. *American Antiquity* 73(3):539–559.

Johnson, David M.
1984a *Cultural Resources Survey on the Kisatchie National Forest, F.Y. 1983.* Kisatchie National Forest, Pineville, Louisiana.

1984b *Cultural Resources Survey on the Kisatchie National Forest, F.Y. 1984.* Kisatchie National Forest, Pineville, Louisiana.

Johnson, David M., James R. Morehead, Timothy Phillips, and James P. Whelan, Jr.
1986 *The Winnfield Tornado: Cultural Resources Survey and Predictive Modeling in the Kisatchie National Forest, Winn Parish, Louisiana.* Kisatchie National Forest, Pineville, Louisiana.

Jones, Olive
2000 A Guide to Dating Glass Tableware: 1800 to 1940. In *Studies in Material Culture,* edited by Karlis Karklins, pp.141–232. The Society for Historical Archaeology, Pennsylvania.

Jones, Olive, and Catherine Sullivan
1985 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass, and Closures.* Studies in Archaeology, Architecture and History. National Historic Parks and Sites Branch, Parks Canada.

Kelley, David B., Sally S. Victory, and Martha Doty Freeman
1988 *Archaeology in the Flatwoods: An Intensive Survey of Portions of the Louisiana Army Ammunition Plant, Bossier and Webster Parishes, Louisiana.* Coastal Environments, Inc., Baton Rouge.

Ketchum, William C., Jr
1971 *The Pottery and Porcelain Collector's Handbook: A Guide to Early American Ceramics from Maine to California.* Funk and Wagnalls, New York.

1983 *Pottery and Porcelain.* Alfred A. Knopf, New York.

1991 *American Stoneware*. Henry Holt and Company, Inc., New York.

Kornfeld, Marcel
2007 Are Paleoindians of the Great Plains and Rockies Subsistence Specialists? In, *Foragers of the Terminal Pleistocene in North America*. Ed. Walker, R.B. and Driskell, B.N., University of Nebraska Press, Lincoln, Nebraska, pp. 32–58.

Lange, Frederick W.
1974 A Report on Data Pertaining to the Caddo Treaty of July 1, 1835: The Historical and Anthropological Background and Aftermath. In *Caddoan Indians II.* Garland Publishing, Inc. New York.

Lee, Aubra L.
2010 Troyville and the Baytown Period. In *Archaeology of Louisiana,* edited by Mark A. Rees. University of Louisiana Press, Baton Rouge.

Lehner, Lois
1980 *Complete Book of American Kitchen and Dinner Wares*. Wallace-Homestead Books, Des Moines, Iowa.

Lewis, Griselda
1950 *English Pottery*. Pellegrini and Cudahy, New York.

Lindsey, Bill
2008 Historic Glass Bottle Identification and Information. Electronic document, http://www.sha.org/bottle/index.htm, accessed June 12, 2008.

Little, Wilfred L.
1969 *Staffordshire Blue: Underglaze Blue Transfer Printed Earthenware.* Crown Publishers, Inc., New York.

Lockhart, Bill
2006 The Color Purple: Dating Solarized Amethyst Container Glass. *Historical Archaeology* 40(2):45–56.

Lofstrom, Edward U., Jeffrey P. Tordoff, and Douglas C. George
1982 A Seriation of Historic Earthenwares in the Midwest, 1780–1870. *Minnesota Archaeologist* 41(1):3–29.

Louisiana Geological Survey
2008 Generalized Geology of Louisiana. http://www.lgs.lsu.edu/, accessed 24 October 2012.

McGahey, Samuel O.
2000 *Mississippi Projectile Point Guide.* Archaeological Report No. 31. Mississippi Department of Archives and History, Jackson.

McGimsey, Charles R.
2010 Marksville and Middle Woodland. In *Archaeology of Louisiana*, edited by Mark A. Rees. University of Louisiana Press, Baton Rouge.

Maggard, Greg J., and Kary L. Stackelbeck
2008 Paleoindian Period. In *The Archaeology of Kentucky: An Update*, Vol. 1, edited by David Pollack, pp. 109–192. State Historic Preservation Comprehensive Plan Report No. 3. Kentucky Heritage Council, Frankfort.

Majewski, Teresita, and Michael J. O'Brien
1984 *An Analysis of Historical Ceramics from the Central Salt River Valley of Northeast Missouri.* Publications in Archaeology, Number 3. American Archaeology Division, Department of Anthropology, University of Missouri, Columbia, Missouri.

1987 The Use and Misuse of Nineteenth-Century English and American Ceramics in Archaeological Analysis. In *Advances in Archaeological Method and Theory*, Volume 11, edited by Michael J. Schiffer, pp 97–209. Academic Press, New York.

Mankowitz, Wolf, and Reginald G. Haggar
1957 *The Concise Encyclopedia of English Pottery and Porcelain.* Hawthorne Books, New York.

Mann, Rob
2010 French Colonial Archaeology. In *Archaeology of Louisiana*, edited by Mark A. Rees. University of Louisiana Press, Baton Rouge.

Meltzer, David J.
2009 *First Peoples in a New World: Colonizing Ice Age America*. University of California Press, Berkeley.

Moir, Randall W.
1977 Window Glass: A Statistical Perspective. Manuscript on file, Archaeology Research Program, Southern Methodist University, Dallas, Texas.

1987 Socioeconomic and Chronometric Patterning of Window Glass. In *Historic Buildings, Material Culture, and People of the Prairie Margin*, edited by David H. Jurney and Randall W. Moir, pp. 73–81. Richland Creek Technical Series, Vol. V. Southern Methodist University, Dallas, Texas.

Neale, Gillian
2005 *Miller's Encyclopedia of British Transfer-printed Pottery Patterns: 1790–1930.* Sterling Publishing Co., Inc., New York.

Nelson, Lee H.
1968 *Nail Chronology as an Aid to Dating Old Buildings.* American Association for State and Local History, Technical Leaflet 15. American Association for State and Local History, Madison, Wisconsin.

Neuman, Robert W.
1984 *An Introduction to Louisiana Archaeology.* Louisiana State University Press, Baton Rouge.

Norman-Wilcox, Gregor
1978 Staffordshire in a Nutshell. In *English Pottery and Porcelain,* edited by P. Atterbury, pp. 166–170. Universe Books, New York.

Orser, Charles E.
1988 *The Material Basis of the Postbellum Tenant Plantation.* The University of Georgia Press, Athens, Georgia.

Perkinson, Phil
1971 North Carolina Fluted Points: Survey Report Number One. *Southern Indian Studies* 23:3–40.

Phillips, Maureen K.
1996 Mechanic Geniuses and Duckies Redux: Nail Makers and Their Machines. *APT Bulletin*, 27(1/2):47–56.

Phillips, Timothy P., and Charles G. Willingham
1990 *Cultural Resources Survey of the North Fort Polk Family Housing Area, Fort Polk, Vernon Parish, Louisiana.* Submitted to Headquarters, 5th Infantry Division, and fort Polk. Report on file with Division of Archaeology, Baton Rouge, Louisiana.

Price, G. R. Dennis and Lorraine Heartfield
1977 *A Cultural Resource Reconnaissance of Portions of Big and Big Colewa Creeks; Richland Parish, Louisiana.* Lorraine Heartfield Greene Research Institute, College of Pure and Applied Sciences, Northeast Louisiana University, Monroe, Louisiana.

Price, Cynthia R.
1981 Early to Mid-Nineteenth Century Refined Earthenwares. In *A Guide for Historical Archaeology in Illinois,* edited by Charles E. Orser, Jr., pp. 24–48. Mid-American Research Center Research Paper Number 1. Loyola University, Chicago.

Priess, Peter
1973 Wire Nails in North America. *Bulletin of the Association for Preservation Technology*, 5(4):87–92.

Pullin, Anne G.
1986 *Glass Signatures, Trademarks and Trade Names from the Seventeenth to the Twentieth Century.* Wallace-Homestead Book Company, Lombard, Illinois.

Raycraft, Don, and Carol Raycraft
1990 *Collector's Guide to Country Stoneware and Pottery, Second Series.* Collector Books, Paducah, Kentucky.

Rees, Mark A.
2010a Introduction. In *Archaeology of Louisiana*. Ed. Mark A. Rees. Louisiana State University Press, Baton Rouge.

2010b Paleoindian and Early Archaic. In *Archaeology of Louisiana*. Ed. Mark A. Rees. Louisiana State University Press, Baton Rouge.

2010c Plaquemine and Mississippian. In *Archaeology of Louisiana*. Ed. Mark A. Rees. Louisiana State University Press, Baton Rouge.

Revi, Albert C.
1964 *American Pressed Glass and Figure Bottles.* Thomas Nelson and Dons, New York.

Rock, James T.
1980 American Bottles: A Few Basics. Manuscript on file at the Klamath National Forest, Region B, United States Department of Agriculture.

1984 Cans in the Countryside. *Historical Archaeology* 18(2):97–111.

1987 A Brief Commentary on Cans. Manuscript on file at the Klamath National Forest, Region B, United States Department of Agriculture.

Roe, Lori M., and Timothy M. Schilling
2010 Coles Creek. In *Archaeology of Louisiana*, edited by Mark A. Rees. University of Louisiana Press, Baton Rouge.

Roenke, Karl G.
1978 *Flat Glass, Its Use as a Dating Tool for Nineteenth Century Archeological Sites in the Pacific Northwest and Elsewhere.* Northwest Anthropological Research Notes, Memoir No.4. Moscow, Idaho.

Samford, Patricia M.
1997 Response to a Market: Dating English Underglaze Transfer-Printed Wares. *Historical Archaeology* 31(2):1–30.

Saunders, Joe
1991 *Annual Report for Management Unit 2 Regional Archaeology Program.* Northeast Regional Archaeologist, Northeast Louisiana University, Monroe, Louisiana.

Saunders, Joe W.
2010 Middle Archaic and Watson Brake. In *Archaeology of Louisiana*. Ed. Mark A. Rees. University of Louisiana, Baton Rouge.

Schambach, F.F., and A.M. Early
1982 Southwest Arkansas. In *A State Plan for the Conservation of Archaeological Resources in Arkansas*. Ed., Hester A. Davis, pp. SW1–SW149. Research Series No. 21. Arkansas Archaeological Survey, Fayetteville.

Schambach, Frank B.
1982 The Archaeology of the Great Bend Region in Arkansas. In *Contributions to the Archeology of the Great Bend Region of the Red River Valley Southwest Arkansas*, Ed. F.F. Schambach and F. Rackerby. Research Series No. 22. Arkansas Archaeological Survey, Fayetteville.

1998 Pre-Caddoan Cultures and the Trans-Mississippi South. *Caddoan Archeology* Vol. II, No. 3:2–8.

Servello, A. Frank (editor)
1983 *U.S.L. Fort Polk Archaeological Survey and Cultural Resource Management Program.* 2 Volumes University of Southwestern Louisiana, Lafayette.

Smith, Lawson M., Joseph B. Dunbar, and Louis D. Britsch
1986 *Geomorpholigical Investigation of the Atchafalaya Basin, Area West, Atchafalaya Delta, and Terrebonne Marsh,* Vol. 1. Technical Report GL-86-3. Department of the Army Waterways Experimental Station, U.S. Army Corps of Engineers, Vicksburg District.

Smith, Steven D., Philip G. Rivet, Kathleen M. Byrd, and Nancy W. Hawkins
1983 *Louisiana's Comprehensive Archaeological Plan.* State of Louisiana, Department of Culture, Recreation and Tourism. Office of Cultural Development, Division of Archaeology.

Snyder, Jeffrey B.
2000 *Historical Staffordshire: American Patriots and Views.* 2nd. ed. Schiffer, Atglen, Pennsylvania.

South, Stanley
1977 *Method and Theory in Historical Archaeology.* Academic Press, New York.

Southern Publishing Company
1890 *Biographical and Historical Memoirs of Northwest Louisiana*. The Southern Publishing Company, Nashville, Tennessee.

Sprague, Roderick
1981 A Functional Classification for Artifacts from 19th and 20th Century Historical Sites. *North American Archaeologist* 2(3):251–261.

Stewart-Abernathy, Leslie C.
1986 *The Moser Farmstead, Independent But Not Isolated: The Archeology of a Late Nineteenth Century Ozark Farmstead.* Arkansas Archeological Survey Research Series No. 26, Fayetteville, Arkansas.

Suhm, Dee Ann, and Alex D. Krieger
1954 *An Introductory Handbook of Texas Archaeology.* Texas Archaeological Society, Austin.

Swann, Brenda M.
2002 Material Culture at Presidio Santa Maria de Galve (1698–1722): Combining the Historical and Archaeological Records. *Southeastern Archaeology* 21(1):64–78.

Swanton, J.R.
1946 *The Indians of the Southeastern United States*. BAE Bulletin 137. Bureau of American Ethnology, Smithsonian Institution, Washington, DC.

Thomas, Prentice M., Jr., James R. Morehead, Joseph Meyer, James H. Mathews, and L. Janice Campbell
1997 *Fort Polk 28: The Results of a Twenty-Eighth Program of Site Testing at Ten Sites, Fort Polk Military Reservation, Natchitoches and Vernon Parishes, Louisiana*. Prentice Thomas and Associates, Report of Investigations No. 340, Fort Walton Beach, Florida.

Thomas, Prentice M., Jr., Steven Shelly, L. Janice Campbell, Mark T. Swanson, Carol S. Weed, and John P. Lenzer
1982 *Cultural Resources Investigations at the Fort Polk Military Reservation, Vernon, Sabine, and Natchitoches Parishes, Louisiana.* New World Research, Report of Investigations 69, Pollock, Louisiana.

Toulouse, Julian H.
1969 A Primer on Mold Seams: Part 2. *Western Collector* 7(12):578–587.

1971 *Bottle Makers and Their Marks*. Thomas Nelson, New York.

Turner, Ellen Sue, and Thomas R. Hester
1993 *A Field Guide to Stone Artifacts of Texas Indians*, 2nd ed. Texas Monthly Press, Austin, Texas.

United States Department of Agriculture
2015 *Custom Soil Resource Report for Richland Parish, Louisiana.* U.S. Department of Agriculture, Natural Resources Conservation Service, Washington, D.C.

United States Geological Survey
1935 Baskinton, Louisiana USGS 15-minute series topographic quadrangle map.

1958 Baskinton, Louisiana USGS 15-minutes series topographic quadrangle map.

1987a Bee Bayou, Louisiana USGS 7.5-minute series topographic quadrangle map.

1987b Dunn, Louisiana USGS 7.5-minute series topographic quadrangle map.

Wagner, Mark, and Mary McCorvie
1992 *The Archeology of the Old Landmark. Nineteenth Century Taverns Along the St. Louis Vincennes Trace in Southern Illinois.* Illinois Department of Transportation and the Center for American Archeology, Kampsville, Illinois.

Wall, Bennet H.
2002 *Louisiana: A History (Fourth Edition).* Forum Press, Wheeling, Illinois.

Watkins, Lura Woodside
1930 *Cambridge Glass 1818 to 1888: The Story of the New England Glass Company*. Bramhall House, New York.

Webb, Clarence H.
1959 *The Belcher Mound: A Stratified Caddoan Site in Caddo Parish, Louisiana.* Society for American Archaeology Memoir 16, Salt Lake City, Utah.

1982 *The Poverty Point Culture*. Revised; originally published 1977. Geoscience and Man 17. Louisiana State University, Baton Rouge.

2000 *Stone Points and Tools of Northwestern Louisiana*. Special Publications of the Louisiana Archaeological Society, No. 1, 2nd ed. Lafayette.

Webb, Clarence H., and Hiram F. Gregory
1978 *The Caddo Indians of Louisiana.* 2nd ed.. Anthropological Study No. 2. Louisiana Archaeological Survey and Antiquities Commission, Department of Culture, Recreation and Tourism, Baton Rouge.

Webb, Clarence H., and Ralph McKinney
1975 Mounds Plantation (16CD12), Caddo Parish, Louisiana. *Louisiana Archaeology* 2:39-127.

Webb, Clarence H., Joel L. Shiner, and E. Wayne Roberts
1971 The John Pearce Site (16CD56): A San Patrice Site in Caddo Parish, Louisiana. *Bulletin of the Texas Archaeological Society* 42:1–49.

Wesler, Kit W.
1984 A Spatial Perspective on Artifact Group Patterning Within the Houselot. In *Proceedings of the Symposium on Ohio Valley Urban and Historic Archeology*, II:37–44.

Wessel, Terri Caruso, Sharon Rushing, Jeanne Binning, and Don Hunter
1993 *Cultural Resources Investigation of England Air Force Base, Louisiana.* Earth Technology Corporation, Coastal Environments, Inc. and Tetra Tech, Inc.

Wetherbee, Jean
1980 *A Look at White Ironstone*. Wallace-Homestead Book Company, Des Moines, Iowa.

Williams, S.
1974 The Aboriginal Location of the Kadohodacho and Related Tribes. In, *Caddoan Indians I*. pp. 281–330. Garland Publishing, Inc. New York.

Willingham, Charles G., and Timothy Phillips
1987 *Cultural Resources Surveys on the Kisatchie National Forest, Louisiana, FY 1985.* Kisatchie national Forest Report of Investigations No. 2, Kisatchie National Forest, Pineville, Louisiana.

Yodis, Elaine G., and Craig E. Colten,
2003 *Geography of Louisiana*. McGraw-Hill Primus Custom Publishing, 4th Edition.

Appendix A. Recovered Artifacts

Table A-1. Recovered Artifacts.

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	4.85		mm	Body	-					thick, moderately curved fragment
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	7.05		mm	Body	-					1 thick, moderately curved; 2 thin with very slight curve; 1 medium thick with slight curve
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.87		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, slightly curved fragment
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Domestic	Beverage Cans	Ring pull only	Tab	Other openning	1	0.25		mm	Body	-		1965	1985	Busch 1981; Rock 1980, 1984, 1987	aluminum can pull fragment
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.47		mm	Body	-					clear/colorless; shearded off on 1 side, can't determine if curved (container) or flat glass
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		3	1.41		mm	Body	-					small; 2 orange-red, 1 medium-red fragments
261	16RI330	STP N1080 E880	0-20 cm bgs	Historic	Architecture	Flat Glass	Indeterminate	Flat glass		1	1.71		mm	Body	-					thick fragment; has a slight black coloration?
262	16RI330	STP N1100 E880	15-25 cm bgs	Historic	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	Fittings / Hardware	Ceramic: earthenware	1	17.35		mm	Body	-					thick. Slight to moderately curved; coarse gray/brown earthenware with brown salt glaze
262	16RI330	STP N1100 E880	15-25 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	0.34		mm	Body	-					medium-red brick
263	16RI330	STP N960 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	8.58		mm	Body	-					medium thick fragment; 1 slightly curved (has embossed line decoration),1 moderately curved (seam)
263	16RI330	STP N960 E920	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	3.91		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, moderately curved fragment; no crazing present
264	16RI330	STP N980 E920	10-20 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Valve mark	Amethyst glass	1	27.89		mm	Base	-					very thick, sligtly curved fragment; pale solarized amethyst coloration
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	2.41		mm	Body with base	Plate	Place Setting	1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, flat fragment with maker's mark: (dark green) Homer Laughlin no crazing
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	1.13		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	meidum thick, mostly flat fragment; 1 surface eroded away
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Domestic	Glass Tableware	Pattern mold		Opaque white glass	1	1.88		mm	Body	-		1880		Jones 2000:157	thin to medium thick, moderately curved fragment; molded ridges on both sides
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	2.71		mm	Body	-					medium thick fragments: 2 have slight curve, 1 has moderate curve
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.33		mm	Body	-					very pale green coloration
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	2	13.31		mm	Body	-					possible nail shank fragments but thick corrosion build-up makes it too difficult to identify
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	2.28		mm	Body	-					medium-red fragment
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.26		mm	Body	-					colorless fragment
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.16		mm	Body	-					coloress fragment
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Unidentified	Glass	Flat		-	1	0.35		mm	Body	-					milk glass rim fragment; thin& flat; possible embossed or molded; design?Tableware or cosmetic cont?

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.79		mm	Body	-					meidum thick, moderate curve; seam present
219	16RI322	STP N980 E980	15-25 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	0.31		mm	Indeterminate part	-					slight curve? One surface sheared off
220	16RI322	STP N960 E980	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	5.01		mm	Body	-					thick, mostly flat fragment (panel bottle or rectangular?); embossed: "…HE N… TO…"
220	16RI322	STP N960 E980	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.25		mm	Body	-					medium thick, moderately curved fragment
220	16RI322	STP N960 E980	10-20 cm bgs	Historic	Domestic	Ceramics	Ironstone	Plain	-	1	2.53		mm	Footring with base	-		1830		Majewski and O'Brien 1987:122	thick, flat fragment; plate or platter? Shallow footring
221	16RI322	STP N960 E1000	0-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.85		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, moderately curved fragment
221	16RI322	STP N960 E1000	0-15 cm bgs	Historic	Architecture	Nails	Other		-	1	2.91		mm	Body	-					shank fragment; too corroded/deteriorated to determine type
222	16RI322	STP N980 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	7.01		mm	Body	-					light to medium red fragment with some large inclusions
222	16RI322	STP N980 E980	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	1	6.17		mm	Body	-					possible clinched nail but thick corrosion build-up makes it too diffcult to identify
222	16RI322	STP N980 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	1.78		mm	Lip with neck	-					medium thick, round vessel; external thread finish
222	16RI322	STP N980 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.86		mm	Body	-					one surface sheared off so thickness indeterminate; moderate curve
223	16RI322	STP N980 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	7.19		mm	Body	-					medium thick fragments with slight or moderate cruves; 1 fragment has stippling-like texture on ext
223	16RI322	STP N980 E1000	10-20 cm bgs	Historic	Architecture	Construction Material	Indeterminate			1	7.98		mm	Body	-					asbestos tile?; white material w L green surface on 1 side (smooth), grooves on other side (rough)
223	16RI322	STP N980 E1000	10-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	5.09		mm	Body	-					colorless fragments; thickeness: 2.22 and 2.27mm thick
224	16RI322	STP N1000 E1020	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	2.45		mm	Body	-					medium to thick fragment with moderate curve and slight stippled texture on exterior
224	16RI322	STP N1000 E1020	0-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.75		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin to medium thick, mostly flat fragment; slight, rounded indentation present at edge of fragment
225	16RI322	STP N1020 E1000	0-5 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	23.29		mm	Body	-					1 thin, moderately curved with molded ridge design; 2 thick fragments (1 slight,1 moderately curved)
226	16RI322	STP N1040 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.64		mm	Body	-					thin, very slightly curved fragment
226	16RI322	STP N1040 E980	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	8.39		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to determine type; >10d
226	16RI322	STP N1040 E980	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	3.29		mm	Body	-					colorless fragments; same thickness (2.24 mm)
227	16RI322	STP N1040 E1000	0-17 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	0.6		mm	Body	-					colorless fragments; same thickness (2.21mm)

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
227	16RI322	STP N1040 E1000	0-17 cm bgs	Historic	Domestic	Ceramics	Whiteware	Molded	-	1	1.11		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, slightly curved fragment with unidentified molded design around rim; possible plate
227	16RI322	STP N1040 E1000	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	2.48		mm	Body	-					2 medium thick, 1 thick fragment; all slightly curved
228	16RI322	TP N1050 E980	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	12.36		mm	Rim, body, base	Indeterminate utility vessel	Utility Vessel	1830		Majewski and O'Brien 1987:119; Smith 1983:119	very thick, strongly curved fragment; NO crazing present
228	16RI322	STP N1050 E980	10-20 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	4.04		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	round head and shank fragment; too corroded to determine type
223	16RI322	STP N980 E1000	10-20 cm bgs	Historic	Architecture	Nails	Indeterminate Cut / Wrought Nail		-	1	2.36		mm	Body	-		1700	1880	Nelson 1968	shank fragment. Too corroded to determine type
226	16RI322	STP N1040 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.93		mm	Body	-					thin to medium thick with slight to moderate curve and very slight stippling texture on exterior
334	16RI330	STP N1060 E1060	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.57		mm	Body	-					colorless fragment
335	16RI330	STP N1080 E1060	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	0.89		mm	Body	-					colorless fragments: 1.90 and 2.31 mm thick
335	16RI330	STP N1080 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	0.53		mm	Body	-					medium thick fragment with a slight to moderate curve; pale amethyst coloration
378	16RI324	STP N990 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.47		mm	Body	-					medium thick, moderately curved fragment
379	16RI324	STP N1000 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified		1	4.6		mm	Body	-					brown fragment
380	16RI324	STP N1000 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.63		mm	Body	-					medium thick, moderately curved
381	16RI324	STP N1000 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.76		mm	Indeterminate part	-					medium thick, slightly curved fragment
381	16RI324	STP N1000 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.7		mm	Lip with neck	-					external thread lip fragment; medium thickness with moderate curve
382	16RI324	STP N1010 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	2.63		mm	Indeterminate part	-					medium thick fragment (thickness tapers),very slightly curved fragment-square/rectangular body frag?
383	16RI324	STP N1010 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.48		mm	Indeterminate part	Other bottle/jar	Bottle - Jar				thin, very slightly curved fragment with embossed dot texture but too thin to be base stippling?
383	16RI324	STP N1010 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.51		mm	Body	-					medium thick, slightly curved fragment with etched lettering: "…ON…EEP"
383	16RI324	STP N1010 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.02		mm	Body	-					medium thick, moderately curved fragment with embossed dot design on part of fragment
384	16RI321	STP N900 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	130.4		mm	Body	-					fragment; medium-red interior with brown exterior surface
385	16RI321	STP N900 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	1.8		mm	Body	-					dark red fragment
386	16RI330	STP N1000 E900	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	2	5.79		mm	Body	-					

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
386	16RI330	STP N1000 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	2.59		mm	Indeterminate part	-					medium thick, slightly curved fragments; possible body or base fragments?
387	16RI327	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.92		mm	Body	-					medium thick fragment with moderate curve
387	16RI327	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	2.28		mm	Rim with body	-					medium thick fragment with slight to moderate curve; Line runs under/around rim
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Personal	Health and Grooming	Comb		Plastic: modern	1	1.27			Body	-					corner fragment; mottled beige and dark brown color; all but one bristle broken off
265	16RI330	STP N1020 E920	0-10 cm bgs	Historic	Unidentified	Glass	Amorphous		-	1	1.29		mm	Body	-					melted, misformed fragment; mostly clear with small reddish area on edge
266	16RI330	STP N1060 E920	0-10 cm bgs	Historic	Domestic	Glass Tableware	Undiagnostic fragment		Opaque green glass	1	7.39		mm	Body	-					thin to medium thick, moderately curved; seam foam green?
266	16RI330	STP N1060 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Olive green glass	1	9.76		mm	Body	-					very thick, moderately curved fragment
266	16RI330	STP N1060 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	1.3		mm	Body	-					medium to thick fragment with slight curve
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	5	20.65		mm	Body	-					2 thick (1 slightly curved, 1 moderately curved), 3 thin, moderately curved fragments
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	7.32		mm	Body	Soda / Mineral water	Bottle - Jar				thick, moderatley curved; Coca-Cola bottle; embossing partially eroded
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.23		mm	Body	-					opaque white; fragment sheared off on both sides, curved? Thickness unknown
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Item / part	1	104.71		mm	Body	-					medium thick, curved fragment; no other attributes observed
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Maintenance	General Hardware	Bolt		Iron / Steel	1	86.12		mm	Body	-					round, smooth head; shallow ridge; hexagonal nut just below head; approx 4" long
268	16RI330	STP N1120 E920	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	96.66		mm	Body	Soda / Mineral water	Bottle - Jar				very thick; seam; embossed: "Coca-Cola (1886 logo) Bottling Co. Monroe…6 1/2 F…"
269	16RI330	STP N1120 E920	10-20 cm bgs	Historic	Unidentified	Ceramic	Redware / coarse earthenware		Unspecified	1	25.18		mm	Body	-					14.55 mm thick, alakaline glaze on ext; dark red-brown slip int; water pipe or utilitarian vessel???
267	16RI330	STP N1080 E920	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass		-	2	2.56		mm	Body	-					2.11 & 2.13 mm thick; colorless fragments
269	16RI330	STP N1120 E920	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	5.29		mm	Body	-					dark red fragment
269	16RI330	STP N1120 E920	10-20 cm bgs	Historic	Architecture	Nails	Indeterminate	5d		1	7.29		mm	Body	-		1830	Majewski and O'Brien 1987:119; Smith 1983:119		too much corrosion build-up to determine type; head appears irregular but mostly round
270	16RI330	STP N940 E940	0-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	4.21		mm	Footring with base	-		1830	Majewski and O'Brien 1987:119; Smith 1983:119		medium thick, moderately curved fragment with medium-deep footring
270	16RI330	STP N940 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.97		mm	Body	-					medium thick fragment with moderate curve
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	0.6		mm	Cover / Lid	Canning jar	Bottle - Jar				Canning jar liner partial embossing present: "…N…" (Genuine Porcelain Lined Cap)
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	0.32		mm	Indeterminate part	-					blue, thin fragment with very slight curve
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	2.5		mm	Body	-		1830	Majewski and O'Brien 1987:119; Smith 1983:119		common head and shank fragment; too corroded to detemine nail type

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.12		mm	Body	-					very light green fragment; sheared off on both sides; can't determine thickness, curve &/or category
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	0.41		mm	Body	-					small fragment
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	0.45		mm	Body	-					small fragment
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Architecture	Nails	Wire Nail	50d	Clinched	1	26.53		mm	Body	-		1880		Nelson 1968	
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass		-	1	1.08		mm	Body	-					very pale aqua coloration
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.64		mm	Body	-					slight aqua colration
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.66		mm	Body	-					thin, slight to moderatley curved fragments
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	2.73		mm	Body	-					medium to thick fragment with moderate curve and molded ridge design
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	1	1.97		mm	Body	-					thin, moderately curved fragment; Kelly green
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.31		mm	Body	-					medium thick, slightly curved fragment
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	1.22		mm	Body	-					thin fragment; moderate to strongly curved; VERY pale aqua coloration
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	0.65		mm	Body	-					medium thick, moderately curved fragment with pale pink coloration
274	16RI330	STP N1000 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	0.33		mm	Body	-					thin, moderately curved fragment; blue coloration
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	9	14.5		mm	Body	-					5 fragments are medium thick with moderate curves; 4 fragments are thin with slight curves
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	4	4.54		mm	Body	-					3 medium thick w slight curve,plain;1 medium thick, moderately curved-embossed dot design on portion
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	5	5.17		mm	Body	-					1 medium thick, moderate curve; 1 thin-very slight curve; 3 medium thick-slight curve (1 has dots)
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	2	1.95		mm	Body	-					1 medium thick-slight curve; other pale, thin-moderate curve& embossed letters: "…LO…"
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass		-	2	0.64		mm	Body	-					1 has slight light green coloration (2.48 mm thick); the other colorless fragment (3.31 mm thick)
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	1.17		mm	Body	-					colorless fragments: 2.27 & 2.34 mm thick
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Maintenance	General Hardware	Screw	Wood Screw, Pointed Tip	Galvanized Iron	1	1.88		mm	Body	-					partial round head but broken off can't determine type; just over 1" long
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	2	1.24		mm	Body	-					too corroded to identify any attributes
275	16RI330	STP N1020 E940	0-20 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.23		mm	Body	-					very light green fragment; sheared off on both sides so can't determine thickness, curve,or category
336	16RI330	STP N1120 E1060	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.91		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin flat fragment; no crazing present but burn related affects on ext & interior of fragment
336	16RI330	STP N1120 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	2	3.73		mm	Body	-					thick fragment with slight to moderate curve
336	16RI330	STP N1120 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	6	5.17		mm	Body	-					1 thick-moderate curve; 1 medium thick-moderate curve; 4 medium thick w very slight to slight curves

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
337	16RI330	STP N1060 E1080	0-10 cm bgs	Historic	Unidentified	Glass	Curved		-	1	0.45		mm	Body	-					small milk glass fragment; sheared off-thickness/curved can't be determined; personl/domestic/other?
337	16RI330	STP N1060 E1080	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	2	4.21		mm	Body	-					possible nail fragments; too much corrosion build-up to indentify for sure though
337	16RI330	STP N1060 E1080	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.57		mm	Body	-					colorless fragment
337	16RI330	STP N1060 E1080	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.57		mm	Body	-					fragment with very slight aqua coloration
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.59		mm	Body	-					colorless fragment
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	1		mm	Body	-					colorless fragment
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	1.03		mm	Body	-					small, eroded fragment; orangey-red
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Architecture	Nails	Wire Nail		-	1	2.92		mm	Body	-		1880		Nelson 1968	common head; too corroded near tip end to determine if partial or complete/length
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Architecture	Nails	Indeterminate		-	3	6.76		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head and shank fragments; too corroded/deteriorated to determine types
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	2.06		mm	Lip with neck	-					thick, slightly curved fragment; large-mouthed external thread lip; thick thread fragment
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	3.11		mm	Body	-					thick, moderately curved fragment; pale to moderate solarized amethyst colration
338	16RI330	STP N1080 E1080	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	3.85		mm	Body	-					1 thick-slight curve;1 medium thick-moderate curve;1 sheared off but moderate curve;1 thin-mod curve
339	16RI330	STP N1080 E1100	5-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	2	1.54		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 thin, moderately curved fragment (no crazing); 1 medium thick, flat--body with base (with crazing)
339	16RI330	STP N1080 E1100	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	4.81		mm	Body	-					1 thick, moderate to strong curve; other medium thick-moderate curve w embossed line & dots design
339	16RI330	STP N1080 E1100	5-15 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	2.66		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head & shank fragment;too corroded to determine type or whether partial/complete; head broken off
339	16RI330	STP N1080 E1100	5-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	3.21		mm	Body	-					slight aqua coloration
339	16RI330	STP N1080 E1100	5-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.65		mm	Body	-					colorless fragment
340	16RI321	STP N980 E980	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	5.81		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head and shank fragment but too corroded to determine type
341	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Architecture	Nails	Indeterminate	20d	Clinched	1	16.61		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	too corroded to determine nail or head type
341	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.37		mm	Indeterminate part	-					medium thick,mostly flat fragment; base or body panel fragment?
341	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	5.75		mm	Body	-					medium thick, moderately curved fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
341	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	5.23		mm	Base	-					thick- moderate curve; edge of base where transitions to body; faint stippling around outside edge
142	16RI327	STP TR 95-10	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.79		mm	Indeterminate part	-					thick, slightly curved fragments(1 has a ridge on the exterior?)
143	16RI327	STP TR 95-10	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.2		mm	Indeterminate part	-					small, medium thick fragment with slight curve
143	16RI327	STP TR 95-10	10-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	2.22		mm	Body	-					possible nail but too much corrosion build-up to determine
144	16RI327	STP TR 95-10	20-30 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.48		mm	ody	-					medium thick fragment with strong curve
145	16RI327	STP TR 95-11	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	6.15		mm	Body	-					thick, slightly curved fragment; seam present
145	16RI327	STP TR 95-11	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	1	2.48		mm	Body	-					medium thick, moderately curved fragment
145	16RI327	STP TR 95-11	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	5.3		mm	Body	-					medium thick fragments; 1 slightly curved, the other moderately curved
146	16RI327	STP TR 95-11	30-40 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.32		mm	Body	-					thin, moderately curved fragment with embossed lettering or line design (could be a "v"?)
147	16RI325	STP TR 101-8	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	2.02		mm	Body	-					colorless fragment
147	16RI325	STP TR 101-8	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	3.95		mm	Body	-					rod like with large bulbous corrosion build-up in the middle
135	16RI321	STP TR 89-2	10-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	5.52		mm	Body	-					thin fragment, bent in multiple places
136	16RI321	STP TR 89-3	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified		2	1.45		mm	Body	-					small medium red fragments, each with 1 very smooth surface present
137	16RI321	STP TR 89-4	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	25.97		mm	Body	-					no attributes; sheet metal fragment?
138	16RI323	STP TR 89-7	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.41		mm	Indeterminate part	-					thick, slightly curved fragment, with textured surface on 1 side; concave base fragment?
138	16RI323	STP TR 89-7	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.74		mm	Body	-					medium thick, slighly curved fragment
242	16RI330	STP N980 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.43		mm	Body with base	-					thick fragment, flat on base, curved upward towards body
242	16RI330	STP N980 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.38		mm	Body	-					thin, slightly curved fragments
242	16RI330	STP N980 E900	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	1	6.86		mm	Body	-					could be nail shank but thick corrosion build-up makes identification indeterminate
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Architecture	Construction Material	Concrete	Fragment	-	1	65.05		mm	Body	-					flattened on one side, amorphous/eroded on other die
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	2	2.49		mm	Indeterminate part	-					thin, mostly flat fragments; 1 fragment has concentric circular ridges on 1 surface
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Cup bottom mold	Clear glass	1	15.83		mm	Base	-					medium to thick, flat base; stippling all over base & embossed: "60…5"
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.04		mm	Body	-					1 thin, 1 medium thick; both moderately curved fragments
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Unidentified	Glass	Curved		-	1	0.73		mm	Body	-					medium-green, slightly curved, thin; dotted line texture-looks like a bike relector?
243	16RI330	STP N940 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.66		mm	Indeterminate part	-					medium thick, moderate curve; stippling-like dotted texture on exterior

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
244	16RI330	STP N960 E860	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	6.51		mm	Footring with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, flat fragment; medium to deep footring; NO crazing present
244	16RI330	STP N960 E860	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.65		mm	Body	-					medium thick, stongly curved fragment
244	16RI330	STP N960 E860	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	1.24		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	small shank/tip fragment; too corroded to determine nail type
245	16RI330	STP N960 E900	0-10 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Light green glass	1	2.11		mm	Indeterminate part	-					thick, flat fragment with starbust cut design on exterior surface
245	16RI330	STP N960 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	5.73		mm	Body	-					medium thick, moderately curved fragments; 1 starts to curve toward base; stippling on body & base
245	16RI330	STP N960 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.29		mm	Body	-					meidum thick, moderately curved fragment
280	16RI330	STP N1120 E940	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	0.47		mm	Body	-					small brown fragment
281	16RI330	STP N860 E960	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		4	76.03		mm	Body	-					3 medium-red,1 orangey-red fragments
281	16RI330	STP N860 E960	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	6.69		mm	Body	-					small, rectangular vessel; med thick w 2 strong curves toward side panels;embossed near base: "14"
282	16RI330	STP N880 E960	0-10 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	2.81		mm	Rim with body	-					pie crust-like decorated rim, body slopes downward from rim like cake stand or other pedastaled item
282	16RI330	STP N880 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.8		mm	Body	-					slight aqua coloration
282	16RI330	STP N880 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.78		mm	Body	-					pale aqua coloration
282	16RI330	STP N880 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	2.53		mm	Body	-					medium-red fragment
283	16RI330	STP N1020 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	0.81		mm	Cover / Lid	Canning jar	Bottle - Jar				Canning jar liner; unidentified letter embossed on very edge-probably "Genuine Porcelain Liner…"
284	16RI330	STP N1060 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.71		mm	Base	-					very thick,mostly flat fragment;exterior surface has slight texture to it-use wear or manufactured?
284	16RI330	STP N1060 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.45		mm	Body	-					medium thick, slightly curved fragment
284	16RI330	STP N1060 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.15		mm	Body	-					medium thick, mostly flat fragment with indentation at edge-looks like square/rectangular bottle?
284	16RI330	STP N1060 E900	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	11.27		mm	Body	-					
284	16RI330	STP N1060 E900	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	2.57		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head & shank fragment; too corroded to determine nail/head type
285	16RI330	STP N1080 E900	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	2.14		mm	Body	-					colorless fragment
285	16RI330	STP N1080 E900	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate	12d	Indeterminate	1	17.6		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	straight nail; too corroded to determine nail/head type

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
285	16RI330	STP N1080 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	7.6		mm	Body	-					medium thick fragments with moderate curves
286	16RI330	STP N1100 E900	0-10 cm bgs	Historic	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	Fittings / Hardware	Ceramic: earthenware	1	21.78		mm	Body	-					14.71 mm thick; reddish-brown paste with unglazed interior and high gloss salt glaze on exterior
286	16RI330	STP N1100 E900	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	1	1.45		mm	Body	-					possible small nail shank fragment but too much corrosion build-up to identify with any certainty
322	16RI330	STP N1060 E1020	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	1.22		mm	Body	-					colorless fragments; 1.5 & 2.24 mm thick
322	16RI330	STP N1060 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	2.72		mm	Body	-					medium thick, moderately curved fragment; very pale solarized amethyst coloration
322	16RI330	STP N1060 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.68		mm	Base	-					most of fragment sheared off. Some subtle embossing barely visible on fragment
322	16RI330	STP N1060 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.22		mm	Body	-					medium thick, moderately curved fragment
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Indeterminate	Light green glass	1	5.64		mm	Lip with neck	Other bottle/jar	Bottle - Jar				Club Sauce Finish. Bottle likely held Worcestershire or other sauce; med thick, round vessel
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.46		mm	Body	-					thin to medium thick fragment with sligh tto moderate curve
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.59		mm	Body	-					thin, moderately curved fragment
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	Fittings / Hardware	Ceramic: earthenware	1	44.59		mm	Body	-					14.82 mm thick coarse redware:unglazed interior with dark brown slip on exterior-gloss mostly eroded
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Architecture	Nails	Cut Nail: unspecified	5d	Indeterminate	1	2.13		mm	Body	-		1800	1880	Nelson 1968	thin shank and crooked head
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	6.87		mm	Body	-					dark red/maroon fragment
323	16RI330	STP N1080 E1020	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		4	5.72		mm	Body	-					1 aqua fragment (2.30 mm thick); 3 colorless fragments, 2.09, 2.14, and 2.35 mm thick
324	16RI330	STP N1100 E1020	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	2.06		mm	Body	-					medium-red, very eroded fragment
324	16RI330	STP N1100 E1020	0-10 cm bgs	Historic	Unidentified	Metal	Indeterminate metal		Amorphous	1	3.68		mm	Body	-					melted, very amorphous; unidentified black metal, moderately heavy
324	16RI330	STP N1100 E1020	0-10 cm bgs	Historic	Domestic	Metal Food Containers	Indeterminate / Fragment	Aluminum, any type	-	1	0.28		mm	Other part	-					pull tab fragment?
324	16RI330	STP N1100 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	2.07		mm	Indeterminate part	-					medium thick, very slightly curved fragment-base?
324	16RI330	STP N1100 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.78		mm	Indeterminate part	-					medium thick, slightly curved fragment
325	16RI330	STP N980 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	1.66		mm	Body	-					medium thick fragments with slight to moderate curves
325	16RI330	STP N980 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.13		mm	Body	-					thin to medium thick fragment with moderate curve; embossed dots & lettering: "REFILL…"
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	2	2.77		mm	Body	-					1 medium to thick fragment w moderate curve; other is sheared off (thick, mod curve?)
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.38		mm	Body	-					very thin, slightly curved fragment
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	3		mm	Body	-					very thick, slightly curved fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	8	7.03		mm	Body	-					all moderately curved fragments with slight or moderate curves
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.64		mm	Body with base	-					medium thic fragments with strong curve where body meets base
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	2		mm	Body	-					medium thick, moderately curved fragment with molded ridge design (with gaps in between)
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	1.68		mm	Body	-					medium-red fragment; possibly burned?
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Maintenance	General Hardware	Staple	Fence Staple	Iron / Steel	1	4.36		mm	Body	-					complete
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Architecture	Nails	Indeterminate		-	2	4.08		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 head & shank fragment; 1 shank fragment; both too corroded to determine nail/head type
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Maintenance	Fuels	Cinder / Slag		-	1	0.15		mm	Body	-					coal slag fragment
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	2	2.37		mm	Body	-					no attributes
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel		-	4	2.47		mm	Body	-					2 flat thin, 2 amorphous
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		3	3.11		mm	Body	-					colorless fragments; (1) @ 2.11 mm, (2) 2.27mm thick
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		3	2.14		mm	Body	-					2 light red, 1 medium-red fragments
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	2.68		mm	Body	-					melted and misformed fragment; light green or clear glass?
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Architecture	Nails	Wire Nail	7d	Clinched	1	3.51		mm	Body	-		1880		Nelson 1968	
310	16RI330	STP N1060 E980	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	0.3		mm	Body	-					medium-red fragment
370	16RI328	GSC	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Cobalt glass	1	0.9		mm	Body	-					medium thick, moderately curved fragment
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Unidentified	Plastic	Indeterminate plastic		Item / part	1	0.24		mm	Body	-					black, flat, very thin fragment; embossed: "301-C-"
270	16RI330	STP N940 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	0.45		mm	Body	-					blue fragment; medium thick with moderately curved fragment
271	16RI330	STP N960 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.72		mm	Body	-					thin to medium thick, with slight to moderate curve
271	16RI330	STP N960 E940	0-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Slip decorated	-	1	0.27		mm	Indeterminate part	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, mostly eroded fragment; dark olive green ? slip on interior/exterior
272	16RI330	STP N960 E940	15-25 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	2.05		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, flat fragment
272	16RI330	STP N960 E940	15-25 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.56		mm	Body	-					medium thick, moderatley curved fragment
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	1.66		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, flat fragment
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	5	11.48		mm	Body	-					1 thin, very slight curve;1 thick w slight curve; 3 medium thick w moderate curves (1-molded ridge)

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
273	16RI330	STP N980 E940	0-20 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Owens mold	Clear glass	1	5.5		mm	Base	-					thick, mostly flat fragment with stippling and Owen's car present
341	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.38		mm	Lip with neck	-					thin, slightly curved fragment; external thread lip fragment
342	16RI321	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.14		mm	Indeterminate part	-					thin, slightly curved fragment
343	16RI321	STP N1000 E1020	10-20 cm bgs	Historic	Architecture	Nails	Cut Nail: unspecified	7d		1	10.92		mm	Body	-		1800	1880	Nelson 1968	head too corroded to determine type-probably common head; straight shank
343	16RI321	STP N1000 E1020	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		2	5.46		mm	Body	-					medium-red fragments
344	16RI321	STP N1010 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.59		mm	Indeterminate part	-					medium thick, slightly curved fragment
345	16RI321	STP N1010 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		3	17.47		mm	Body	-					1 dark red, 2 medium-red fragments
346	16RI321	STP N1000 E1020	20-30 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	9.01		mm	Body	-					medium-red fragment
346	16RI321	STP N1000 E1020	20-30 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	10.14		mm	Body	-					medium thick, moderate to strongly curved fragment with molded ridge design; Coca-Cola bottle?
347	16RI321	STP N1020 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	8.2		mm	Body	-					dark red fragment
347	16RI321	STP N1020 E960	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	3.47		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; to corroded to determine nail type
348	16RI321	STP N1020 E980	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		5	35.96		mm	Body	-					1 dark red, 3 medium-red, 1 orangey-red fragments
348	16RI321	STP N1020 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment		-	1	2.45		mm	Indeterminate part	-					medium thick, slightly curved (only on 1 side) fragment; base or body?
348	16RI321	STP N1020 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment		-	1	0.33		mm	Base	-					thin, slightly curved fragment with whittle mark band on portion of fragment
349	16RI321	STP N1020 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.18		mm	Indeterminate part	-					thin to medium thick fragment with slight curve
350	16RI321	STP N1020 E1000	15-25 cm bgs	Historic	Architecture	Nails	Wire Nail	20d	Pulled	1	20.56		mm	Body	-		1880		Nelson 1968	
350	16RI321	STP N1020 E1000	15-25 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	1.61		mm	Body	-					medium-red fragment
351	16RI321	STP N1040 E980	10-20 cm bgs	Historic	Architecture	Nails	Cut Nail: unspecified		-	1	5.48		mm	Body	-		1800	1880	Nelson 1968	pulled shank fragment
351	16RI321	STP N1040 E980	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	4.48		mm	Body	-					medium-red fragment; feel light-weight?
352	16RI321	STP N1040 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	22.65		mm	Body	-					medium-red fragment w black staining on smooth exterior sides and partiallly on corner of rough int
353	16RI321	STP N1040 E1040	10-20 cm bgs	Historic	Domestic	Glass Tableware			Clear unleaded glass	1	1.01		mm	Body	-					thin, moderately curved fragment; multiple ridgesall adjacent & touching; cup fragment?
353	16RI321	STP N1040 E1040	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.71		mm	Body	-					medium thick, moderately curved fragment
353	16RI321	STP N1040 E1040	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	1.08		mm	Indeterminate part	-					medium thick, very slightly curved; pale to moderate solarized amethyst coloration

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
354	16RI321	STP N1060 E1000	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.55		mm	Body	-					very pale aqua coloration
355	16RI321	STP N1060 E1020	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	7.19		mm	Body	-					orangey-red fragment
356	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	9.48		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to determine nail type
356	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	3.89		mm	Body	-					medium-red fragment
356	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	6.23		mm	Body	-					2 medium thick (1 very slightly curved, 1 moderately curved); 1 thin, moderately curved fragment
356	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1		mm	Lip with neck	-					medium thick, moderately curved external thread fragment
356	16RI321	STP N980 E1000	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	3.84		mm	Base	-					blue; thick, slightly curved fragment
276	16RI330	STP N1040 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.78		mm	Body	-					medium thick, moderately curved fragment
276	16RI330	STP N1040 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	3.4		mm	Body	-					medium thick fragments; 1 moderately curved, 2 slightly curved
276	16RI330	STP N1040 E940	0-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	2	5.12		mm	Body	-					1 somewhat round, 1 somewhat rod -like
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.74		mm	Indeterminate part	-					thin fragment with very strong curve
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Cobalt glass	1	0.42		mm	Body with base	-					medium thick, moderately curved fragment where base meets body
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	2.49		mm	Body	-					1 medium thick, slightly curved fragment; 2 thin fragments (1 slightly curved, 1 moderately curved)
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		2	6.85		mm	Body	-					medium-red fragment
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Architecture	Nails	Wire Nail	16d	Pulled	1	9.3		mm	Body	-		1880		Nelson 1968	
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Architecture	Nails	Wire Nail	7d	Pulled	1	3.5		mm	Body	-		1880		Nelson 1968	
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Architecture	Nails	Indeterminate		-	2	2.21		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragments; too corroded to determine nail type
277	16RI330	STP N1060 E940	0-15 cm bgs	Historic	Maintenance	General Hardware	Wire		Iron / Steel	1	2.52		mm	Body	-					bent fragment
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Ceramics	Whiteware	Slip decorated	-	1	1.33		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thick, moderately curved fragemnt with mint green slip
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Ceramics	Stoneware	Salt glazed exterior	-	1	0.33		mm	Body	-		1780	1925	Greer 1999; Ketchum 1983	brown paste and glaze on exterior; moderately curved; thickness can't be observed bc sheared off
278	16RI330	STP N1080 E940	0-17 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Owens mold	Clear glass	1	9.13		mm	Base	-					thick, slightly curved;stippling band around outer edge; Owen's IL maker's mark; embossed:"1"
020	16RI328	GSC NEAR TR 83-2	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	4.81		mm	Base	-					small, rectangular(medicine?); machine-made-valve mark; IL Glass Co. maker's mark; cup bottom mold
020	16RI328	GSC NEAR TR 83-2	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	6.8		mm	Body	-					thick, flat fragment (panel/rectangular); embossed: "...2…" & " …DE, L…"

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
019	16RI330	STP TR 83-10	20-40 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	2.51		mm	Body	-					1 thin, mostly flat w moderate curve near edge &mold seam;1 thick w slight curve & UID embossing
019	16RI330	STP TR 83-10	20-40 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	2.24		mm	Indeterminate part	-					sheared-off in multiple areas but appears to be from a thick vessel (near or part of base?)
138	16RI323	STP TR 89-7	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	1	1.01		mm	Body	-					thick, slightly curved fragment
139	16RI321	STP TR 90-6	5-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	65.49		mm	Body	-					fragment is curved
140	16RI326	STP TR 92-9	0-10 cm bgs	Historic	Unidentified	Metal	Aluminum		Flat: thin	1	0.68		mm	Body	-					very thin fragment; bent in multiple places
140	16RI326	STP TR 92-9	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	4.47		mm	Body	-					medium to thick fragment; mostly flat with strong curve towards side, seam present
140	16RI326	STP TR 92-9	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.44		mm	Body	-					meidum thick, slightly curved fragment
141	16RI326	STP TR 92-10	5-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.48		mm	Body	-					thick, slightly curved fragment
128	IF21	STP TR 78-4	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Item / part	1	124.1		mm	Body	-					thick rod, curved into a "U" shape
129	16RI330	STP TR 81-7	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.62		mm	Body with base	-					small round container with molded ridge design on body; stippling on base, embossed " 12…"
130	16RI330	STP TR 82-8	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.41		mm	Body	-					colorless fragment
131	16RI330	STP TR 84-5	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.65		mm	Body	-					colorless fragment (very slight aqua coloration?)
132	IF22	STP TR 84-10	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail		-	1	5.45		mm	Body	-		1880		Nelson 1968	comon head; straight shank (incomplete), >8d
133	16RI323	STP TR 88-1	10-20 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	1.96		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to determine type of nail
133	16RI323	STP TR 88-1	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	3.64		mm	Indeterminate part	-					medium thick, very slightly curved fragment; body or base?
133	16RI323	STP TR 88-1	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.54		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, moderately curved fragment
134	16RI321	STP TR 88-4	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	11.5		mm	Lip with neck	Indeterminate utility vessel	Utility Vessel				thick,large vessel with thich external thread finish; slight curve; molded ridge/hole in btw threads
134	16RI321	STP TR 88-4	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	6.69		mm	Body	-					medium-red fragment
134	16RI321	STP TR 88-4	10-20 cm bgs	Historic	Unidentified	Indeterminate	1	-	-	1	4.29		mm	Body	-					somewhat round, brown; looks like mud ball but holds together well unless wet???
254	16RI330	STP N1080 E860	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	0.89		mm	Lip with neck	-					medium thick, smoderatley curved fragment; bead lip fragment
254	16RI330	STP N1080 E860	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	3.32		mm	Body	-					thick, slightly curved fragment
254	16RI330	STP N1080 E860	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	1.46		mm	Body	-					thin to medium thick (thickness varies); mostly flat fragmennt side curve at edge
255	16RI330	STP N1100 E860	10-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	2	10.63		mm	Body	-					broken into 3 fragments (in lab); nails? Too mcuh corrosion build-up to identify
255	16RI330	STP N1100 E860	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail	40d	Pulled	1	30.92		mm	Body	-		1880		Nelson 1968	
256	16RI330	STP N980 E880	0-25 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.39		mm	Body	-					thin, slight to moderately curved fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
257	16RI330	STP N1000 E880	0-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	1.64		mm	Body	-					fragment; too much corrosion build-up to indentify any attributes
258	16RI330	STP N1000 E880	25-35 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	2.29		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head and shank fragment; too corroded to determine nail type or other attributes
259	16RI330	STP N1020 E880	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.15		mm	Body	-					thin, slightly curved fragment
260	16RI330	STP N1040 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.08		mm	Body	-					medium thick, slightly curved fragment
260	16RI330	STP N1040 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	0.34		mm	Indeterminate part	-					slightly curved fragment; 1 surface sheared off
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Architecture	Nails	Indeterminate		-	5	8.53		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 head, 4 shank fragments; all too corroded/deteriorated to determine nail/head type
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Domestic	Ceramics	Stoneware	Salt glazed exterior	-	2	1.79		mm	Body	-		1780	1925	Greer 1999; Ketchum 1983	thick fragments with light brown past and dark brown salt glaze; 1 surface missing on both
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	6.08		mm	Body	-					thick fragment with slight to moderate curve
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	1.67		mm	Indeterminate part	-					thick, slightly curved fragment
279	16RI330	STP N1100 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	2.51		mm	Base	-					thick, slightly curved fragment; post bottom mold?
280	16RI330	STP N1120 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	1.38		mm	Cover / Lid	Canning jar	Bottle - Jar				canning jar liner fragment
280	16RI330	STP N1120 E940	0-15 cm bgs	Historic	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	Fittings / Hardware	Ceramic: earthenware	1	7.18		mm	Body	-					brownish-red fragment;1 surface-dark brown-glaze looks almost alkaline or high gloss salt glaze
287	16RI330	STP N1120 E900	0-10 cm bgs	Historic	Architecture	Fittings and Hardware	Stoneware Water Pipe (weigh)	Fittings / Hardware	Ceramic: earthenware	1	19.17		mm	Body	-					13.53 mm thick; concave curve w interior salt glazed (somewhat dull brown) & unglazed exterior
288	16RI330	STP N840 E940	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	29.3		mm	Body	-					medium-red fragment
288	16RI330	STP N840 E940	0-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.33		mm	Body	-					colorless fragment
288	16RI330	STP N840 E940	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.92		mm	Body	-					medium to thick fragment with moderate curve; manufacture seam present
289	16RI330	STP N860 E940	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	1.81		mm	Indeterminate part	-					thick, moderately curved fragment
289	16RI330	STP N860 E940	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.3		mm	Body	-					medium thick, moderately curved fragment
289	16RI330	STP N860 E940	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.56		mm	Body	-					medium thick, moerately curved fragment
289	16RI330	STP N860 E940	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.2		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, mostly flat fragment
289	16RI330	STP N860 E940	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.77		mm	Body	-					colorless fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
290	16RI330	STP N880 E940	0-15 cm bgs	Historic	Transportation	Motorized Vehicle	Spark plug	-	-	1	40.31		mm	Body	-		1902		Wikipedia 2006	porcelain has green writing: "45 (one side) AC (other side)"; much corosion buildup on Fe components
291	16RI330	STP N920 E940	0-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	1.18		mm	Body	-					colorless fragment
291	16RI330	STP N920 E940	0-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.61		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin to medium thick fragment with slight curve
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.51		mm	Body	-					medium thick, slightly curved fragment
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.7		mm	Body	-					1 thin, 1 thick fragment; both moderately curved
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Molded	-	1	2.05		mm	Indeterminate part	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 surface eroded away/broken off; other side has unidentified molded design
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	2	1.26		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 thin, 1 moderately thick; both mostly flat
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	1.8		mm	Body	-					pale aqua coloration
292	16RI330	STP N920 E960	0-10 cm bgs	Historic	Unidentified	Glass	Curved		-	1	0.64		mm	Body	-					milk glass; thin to medium thick w slight curve; molded ridges on exterior
293	16RI330	STP N940 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Porcelain: hard paste	Undecorated	-	1	1.57		mm	Rim with body	-		1800		Faulkner 2000	medium thick, moderately curved fragment
293	16RI330	STP N940 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.87		mm	Body	-					medium thick, moderately curved fragment
293	16RI330	STP N940 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	1.39		mm	Body	-					colorless fragments; 2.24 & 2.26 mm thick
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Domestic	Ceramics	Porcelain: hard paste	Undecorated	-	1	1.57		mm	Body with base	-		1800		Faulkner 2000	medium thick, slightly curved fragment; line runs between body to rim junction
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Domestic	Container Glass		Fragment	Clear glass	1	0.87		mm	Body	-					thin to medium thick fragment with strong curve; 2 mold seams present
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Unidentified	Glass	Item / part		-	1	14.2		mm	Body	-					milk glass; misformed base fragment; oval shape; molded band above base; very thick fragment
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Unidentified	Plastic	Indeterminate plastic		Item / part	1	0.32		mm	Body	-					thin, flat yellowish plastic fragment; squared off breaks
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	5.55		mm	Body	-					very pale aqua coloration: 2.25 & 2.27 mm thick
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail	9d	Pulled	1	6.75		mm	Body	-		1880		Nelson 1968	
294	16RI330	STP N940 E960	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail	7d	Indeterminate	1	4.62		mm	Body	-		1880		Nelson 1968	straight nail
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Maintenance	General Hardware	Wire	-	Iron / Steel	1	6.52		mm	Body	-					poinnted on 1 end, broken off at other end; thin, curved fragment
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Unidentified	Glass	Curved		-	1	0.7		mm	Body	-					milk glass; medium thick, moderately curved fragment
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Domestic	Glass Tableware	Pattern mold		Opaque white glass	1	11.27		mm	Body with base	-		1880		Jones 2000:157	medium to thick, flat fragment with molded ridge design radiates out body-rim; other molded lines
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Transfer printed	-	1	0.71		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, flat fragment with partial, unidentified green line design transfer print; plate?
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	1.39		mm	Body	-					1 thin, 1 medium thick; both slightly curved fragment
295	16RI330	STP N960 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	1.48		mm	Body	-					medium thick, moderately curved fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
296	16RI330	STP N980 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Slip decorated	-	1	1.37		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, moderately curved fragment; bright yellow slip; plate fragment?
296	16RI330	STP N980 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Molded	-	1	1.42		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, moderately curved fragment with molded ridges on exterior
296	16RI330	STP N980 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	1.12		mm	Body	-					aqua color fragment
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail		-	1	8.75		mm	Body	-		1880		Nelson 1968	common head and shank fragment; straight
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	9.94		mm	Body	-					dark red fragment; possibly burned
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Furnishings	Lighting	Indeterminate		-	1	0.08		mm	Body	-					0.81 mm thick, colorless glass fragment with slight curve; lamp chimney?
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.05		mm	Body	-					small fragment; sheared off on both sides; can not determine thickness, curve, or category
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	2	1.38		mm	Body	-					possible nail shank fragments; too much corrosion build-up to idenify
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	17	13.19		mm	Body	-					
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	14	40.2		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	9 thin, slightly curved fragments; 5 medium thick (2 mostly flat, 3 moderately curved)
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	12	75.8		mm	Footring with base	Plate	Place Setting	1830		Majewski and O'Brien 1987:119; Smith 1983:119	3 thick, moderately curved; 2 thin, flat fragments;7 medium thick with slight to moderate curve
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	5	10.72		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 thick, 1 thin, 3 medium thick fragments; all moderately curved
326	16RI330	STP N1000 E1040	0-10 cm bgs	Historic	Unidentified	Ceramic	Porcelain		Unspecified	1	0.78		mm	Body	-					thick, strongly curved fragment; plain; domestic or Maintenance category?
326	16RI330	STP N1000 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		2	9.13		mm	Body	-					orangey-red fragments; very eroded
326	16RI330	STP N1000 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	9	5.69		mm	Body	-					small fragments; medium thick fragments with moderate curves (same vessel?)
326	16RI330	STP N1000 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	7.93		mm	Base	-					very thick, slightly curved fragment
326	16RI330	STP N1000 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	2	3.05		mm	Indeterminate part	-					1 medium thick, strongly curved fragment (shoulder?); the other is thick with slight curve
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Ceramics	Stoneware	Salt glazed exterior	-	1	6.28		mm	Body	-		1780	1925	Greer 1999; Ketchum 1983	thick,mod. curved;Dark gray paste/glaze:smooth on int,orange peel texture on ext; ext ridges
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Unidentified	Ceramic	Porcelain	Glazed exterior only	Item / part	1	14.79		mm	Body	-					VERY thick, mostly flat base that curves up towards body at edge of fragment; interior unglazed?
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	1.18		mm	Body	-					
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	2	1.05		mm	Body	-					1 thin fragment with slight curve and the other thick with moderate curve

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	2.8		mm	Body with base	Plate	Place Setting	1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, flat fragment
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	2.62		mm	Base	-					machine-made : concentric stippling lines on base; medium thick with slight curve
327	16RI330	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	4.29		mm	Body	-					medium thick fragment with moderate curve
328	16RI330	STP N1060 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	1.79		mm	Body	-					medium thick fragment with moderate curve
328	16RI330	STP N1060 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Other color	1	3.39		mm	Base	-					thick, very slightly curved fragment; Mostly clear but has a faint black coloration?
328	16RI330	STP N1060 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.32		mm	Indeterminate part	-					thin, very slightly curved fragment
328	16RI330	STP N1060 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	8.27		mm	Body	-					brownish-red fragment woth sandy mortar on 1 side
387	16RI327	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.85		mm	Indeterminate part	-					medium thick fragment (thickness varies/tapers) with very slight curve
387	16RI327	STP N1000 E980	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.71		mm	Body	-					colorless fragment
388	16RI327	STP N1000 E1010	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Indeterminate	Clear glass	1	13.75	16.75	mm	Lip with neck	-					10.5 mm bore diamete;lip/neck 32.81 mm long before outward curve to body; 2nd ridge near lower neck
388	16RI327	STP N1000 E1010	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Owens mold	Clear glass	1	1.75		mm	Body with base	-					medium thick, slightly curved fragment; Owen's scar present
388	16RI327	STP N1000 E1010	0-10 cm bgs	Historic	Unidentified	Glass	Flat		-	1	30		mm	Body	-					Light green, very thick (7.45 mm), flat fragment; Stove glass? Very large container glass base?
389	16RI327	STP N1000 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.21		mm	Body	-					medium thick fragment with moderate curve
390	16RI327	STP N1020 E980	5-15 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	19.02		mm	Footring with base	Plate	Place Setting	1830		Majewski and O'Brien 1987:119; Smith 1983:119	thick fragment with deep/wide footring; mostly flat
390	16RI327	STP N1020 E980	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	0.79		mm	Body	-					very thin, moderately curved fragment
390	16RI327	STP N1020 E980	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Olive green glass	1	0.51		mm	Body	-					thin, moderately curved fragment; seam present; medium-olive coloration
390	16RI327	STP N1020 E980	5-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.65		mm	Body	-					medium thick fragment with moderate to strong curve and embossed line design
390	16RI327	STP N1020 E980	5-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	8.58		mm	Body	-					
391	16RI327	STP N1020 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Cup bottom mold	Clear glass	1	2.24		mm	Body with base	-					medium thick;stippling around outside edge of body has embossed line design
392	16RI327	STP N1020 E1010	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	3.01		mm	Body	-					medium thick frragment with moderate curve
392	16RI327	STP N1020 E1010	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	11.41		mm	Body	-					
393	16RI327	STP N1020 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	1	1.57		mm	Body	-					medium thick fragment with moderate curve
394	16RI327	STP N1040 E1010	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	4.23		mm	Body	-					light brown fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
395	16RI325	STP N1000 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.08		mm	Base	-					medium thick (varies), mostly flat fragment
030	16RI322	STP TR 72-4	0-13 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.36		mm	Body	-					colorless fragment
030	16RI322	STP TR 72-4	0-13 cm bgs	Historic	Unidentified	Plastic	Modern		-	1	0.08		mm	Body	-		1930		Meikle 1995	thin, flat fragment; 1 side white, other side brown(stained?)
030	16RI322	STP TR 72-4	0-13 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.98		mm	Body	-					thin, moderately curved fragment
030	16RI322	STP TR 72-4	0-13 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.63		mm	Indeterminate part	-					medium thick, moderateky curved fragment
030	16RI322	STP TR 72-4	0-13 cm bgs	Historic	Domestic	Ceramics	Stoneware	Indeterminate exterior	-	1	0.3		mm	Indeterminate part	-		1780	1925	Greer 1999; Ketchum 1983	medium thick, flat fragment; dull surface on both sides; cream paste and surfaces
029	16RI322	STP TR 72-3	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	5.48		mm	Lip with neck	-					round vessel; external thread finish
029	16RI322	STP TR 72-3	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	2.4		mm	Body	-					1 thin, 2 medium to thick fragments; all with slight curves
029	16RI322	STP TR 72-3	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.97		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thic, flat fragment; plate?
029	16RI322	STP TR 72-3	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	3.4		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	head and shank fragment; too corroded to determine nail/head type
028	16RI322	STP TR 72-2	0-15 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	0.42		mm	Body	-					thin, slightly curved fragment withadjacent raised diamond deisgn
028	16RI322	STP TR 72-2	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	0.33		mm	Indeterminate part	-					thin fragment with slight curve
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	8	11.46		mm	Body	-					7-thin, 1-thick fragments (1 is burned); all have slight curves
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	2	1.77		mm	Body	-					medium thick, slightly curved fragment
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Owens mold	Clear glass	1	5.57		mm	Base	-					Owen's-Illinois maker's mark (double stamped); embossed numbers" 12,10, 5; small, round vessel
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Furnishings	Lighting	Indeterminate		-	2	0.33		mm	Body	-					clear lamp chimney or bulb fragments
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	1.13		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to detemine type
026	16RI322	STP TR 72-1	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: vitrified		1	161.69		mm	Body	-					large medium to dark red and brown brick fragment with dark gray vitrification on one surface
026	16RI322	STP TR 72-1	0-10 cm bgs	Historic	Architecture	Flat Glass	Privacy Glass	0.86 - 2.41 mm thick		1	0.87		mm	Body	-					colorless glass with textured (squiggles) surface
026	16RI322	STP TR 72-1	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	1.16		mm	Body	-					colorless fragment
026	16RI322	STP TR 72-1	0-10 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.08		mm	Body	-					small opaque white glass fragment; thin sliver, mostly sheared-off;
018	16RI330	STP TR 83-12	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	0.71		mm	Body	-					medium-red fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
017	16RI330	STP TR 83-12	15-25 cm bgs	Historic	Architecture	Nails	Indeterminate	10d		1	11.45		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	straight, complete nail but too corroded to see head/nail type
027	16RI322	STP TR 72-1	10-20 cm bgs	Historic	Biological	Faunal Remains	Bone / tooth / claw	-	-	1	0.53		mm	Body	-					faunal tooth and root fragment
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	14	32.94		mm	Body with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	1 thick, 7 medium thick, 6 thin fragments; all mostly flat
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Aqua glass	1	1.44		mm	Base	-					medium thick, very slightly curved fragment
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.47		mm	Body	-					thin, moderately curved fragment
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	4	36.34		mm	Body	-					thick fragments with moderate curves; medium solarized amethyst coloration
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	5.5		mm	Lip with neck	-					medium thick, moderatley curved fragments; external thread finish fragments
318	16RI330	STP N1080 E1000	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	26	62.75		mm	Body	-					2 med/mod curves-embossed letters/line;3 thin,mod curve 6 thick(3 slight/3mod curve);15med, sl-mod
319	16RI330	STP N1120 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	23.26		mm	Body	-					orangey-red fragment with 2 connecting, smoothed sides
320	16RI330	STP N1000 E1020	0-10 cm bgs	Historic	Architecture	Nails	Wire Nail	30d	Pulled	1	23.42		mm	Body	-		1880		Nelson 1968	
320	16RI330	STP N1000 E1020	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	5.71		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to determine nail type
320	16RI330	STP N1000 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.57		mm	Body	-					medium thick, moderately curved fragment
320	16RI330	STP N1000 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	1.18		mm	Indeterminate part	-					medium thick, slightly curved fragment;very pale solarized amethyst coloration
320	16RI330	STP N1000 E1020	0-10 cm bgs	Historic	Domestic	Container Glass		Fragment	Clear glass	3	2.22		mm	Indeterminate part	-					medium thick, slightly curved fragment
321	16RI330	STP N1020 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Blue-green glass	1	2.31		mm	Body	-					medium to thick fragment with moderate curve
321	16RI330	STP N1020 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	1.73		mm	Body	-					medium thick fragment with moderate curve; very apale solarized amethyst coloration
321	16RI330	STP N1020 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	10.81		mm	Base	-					thick fragment; round vessels; 1 cup bottom mold with stippling, 1 post bottom mold
321	16RI330	STP N1020 E1020	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	1	10.38		mm	Body	-					thick, strongly curved at 1 end; too much corrosion build-up to identify
322	16RI330	STP N1060 E1020	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	4.73		mm	Body	-					medium-red fragment
328	16RI330	STP N1060 E1040	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.31		mm	Body	-					very light green fragment
329	16RI330	STP N1080 E1040	0-10 cm bgs	Historic	Maintenance	General Hardware	Fencing	Barbed	Iron / Steel	1	5.57		mm	Body	-					much corrosion build-up but 1 barb prong sticks out from corrosion mass
329	16RI330	STP N1080 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	2.46		mm	Body	-					1 thin, 1 medium thick fragments , both with moderate curves

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
329	16RI330	STP N1080 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Indeterminate	Clear glass	1	1.55		mm	Lip with neck	-					medium thick fragment with moderate to stong curved; round vessel; seam runs around top of finish
330	16RI330	STP N1100 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Olive green glass	1	0.46		mm	Body	-					medium thick, slightly curved fragment; dark olive
330	16RI330	STP N1100 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	4.52		mm	Body	-					orangey-red fragment
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	6.88		mm	Body	-					light to medium-red fragment
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	2	92.81	8.82	mm	Body	-					1 long fragment with strong, rounded bend; other is a straight fragment; rebar?
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	7	2.49		mm	Body	-					small fragments; thin to medium thick fragments with slight to moderate curves
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	0.76		mm	Lip with neck	-					patent lip fragment? Medium thick with slight curve
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	1.17		mm	Body	-					medium thick with slight curve
331	16RI330	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.76		mm	Lip with neck	-					partial external thread lip fragment; medium thick with moderate to stong, rounded curve
332	16RI330	STP N1000 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	3.04		mm	Body	-					medium thick fragments with moderate curves
332	16RI330	STP N1000 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.28		mm	Body	-					medium thick fragment with moderate curve
332	16RI330	STP N1000 E1060	0-10 cm bgs	Historic	Domestic	Ceramics	Unidentified ceramic		-	1	1.77		mm	Body with base	-					yellowed/aged whiteware? Does not look like creamware; thin, flat fragment;2 lines on edge of frag?
333	16RI330	STP N1040 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	6.08		mm	Body	-					medium thick fragments with moderate curves
334	16RI330	STP N1060 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	3.68		mm	Body	-					medium thick fragments; 2 have slight curves, 1 has moderate curve
334	16RI330	STP N1060 E1060	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amethyst glass	1	0.31		mm	Body	-					thin, slightly curved fragment
396	16RI325	STP N1010 E1000	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	2	5.27		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragments; too corroded to determine nail type
397	16RI325	GSC w/in 25M of datum	0-0 Surface	Historic	Unidentified	Ceramic	Porcelain		Item / part	1	10.29		mm	Body	-					very thick, flat fragment; plain; could be domestic or maintenance?
397	16RI325	GSC w/in 25M of datum	0-0 Surface	Historic	Domestic	Ceramics	Stoneware	Slipped exterior	-	1	4.84		mm	Body	-		1780	1925	Greer 1999; Ketchum 1983	medium thick;gray paste; blue slip on exterior, grayish interior surface-translucent glaze w crazing
397	16RI325	GSC w/in 25M of datum	0-0 Surface	Historic	Domestic	Ceramics	Whiteware	Molded	-	1	4.48		mm	Rim, body, base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	thin, flat; undulating rim shape with molded floral & line decoration on top surface, near rim
397	16RI325	GSC w/in 25M of datum	0-0 Surface	Historic	Domestic	Ceramics	Porcelain: hard paste	Undecorated	-	1	1.29		mm	Indeterminate part	-		1800		Faulkner 2000	medium thick fragment with two strong curves
397	16RI325	GSC w/in 25M of datum	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.63		mm	Indeterminate part	-					medium thick, slightly curved fragment with embossed dot texture; body decoration or base stippling?

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
297	16RI330	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	5	4.6		mm	Body	-					slightly curved, one piece thinker than others likely separate vessel
297	16RI330	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	2	2.1		mm	Body	-					slightly curved just below average thickness
297	16RI330	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Cobalt glass	1	2.2		mm	Body	-					slightly curved, average thickness
297	16RI330	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Aqua glass	1	1.9		mm	Body	-					slightly curved, average thickness
297	16RI330	STP N1000 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick	-	1	0.8	2.46	mm	Body	-					Aqua in color
298	16RI330	STP N1020 E960	0-10 cm bgs	Historic	Domestic	Ceramics	Porcelain: hard paste	Undecorated	-	1	1		mm	Body	-		1800		Faulkner 2000	appears to be part of a container with a raised ridge on the outer surface, moderately curved
298	16RI330	STP N1020 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	2.2		mm	Body	-					small interior fragment 2.5YR 6/6 light red in color
299	16RI330	STP N1060 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Aqua glass	1	3.1		mm	Body	Soda / Mineral water	Bottle - Jar				"of" embossed on shard, likely part of a Coke bottle
299	16RI330	STP N1060 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified	-	1	2.7		mm	Body	-					Interior texture consistent with pressed exterior
299	16RI330	STP N1060 E960	0-10 cm bgs	Historic	Architecture	Construction Material	Ceramic	Stoneware water pipe	-	1	1.9		mm	Body	-					standard brown glaze, redware interior
299	16RI330	STP N1060 E960	0-10 cm bgs	Historic	Maintenance	General Hardware	Bolt	Carriage	Iron / Steel	1	52.8	11.36	mm	Body	-					68.16mm long,
217	16RI322	STP N920 E1000	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	9.56		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment only; >12d
218	16RI322	STP N950 E980	0-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.51		mm	Body	-					colorless fragment
218	16RI322	STP N950 E980	0-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thick	1	21.36		mm	Body	-					no attributes
229	16RI322	STP N1050 E1020	0-15 cm bgs	Historic	Domestic	Glass Tableware	Unidentified mold		Clear unleaded glass	1	1.91		mm	Body	-					thick, slightly curved fragment with wide ridges that touch each other. Reddish stain?
230	16RI322	STP N1050 E1040	0-10 cm bgs	Historic	Architecture	Flat Glass	Indeterminate	Flat glass		1	7.85		mm	Body	-					very thick (5.70 mm); slight aqua coloration
231	16RI322	STP N1060 E980	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	1.83		mm	Body	-					VERY loght green coloration
232	16RI322	STP N1100 E1010	10-15 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		1	0.78		mm	Body	-					colorless fragment
232	16RI322	STP N1100 E1010	10-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.67		mm	Body	-					medium thick fragment with stong curve
233	16RI322	STP N1080 E1060	15-25 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Indeterminate	Aqua glass	1	0.2		mm	Base	-					sheared off fragment; stippling present
233	16RI322	STP N1080 E1060	15-25 cm bgs	Historic	Unidentified	Glass	Curved		-	1	0.84		mm	Body	-					milk glass rim fragment with slight curve; medium thick; cosmetic or container glass?
233	16RI322	STP N1080 E1060	15-25 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	0.91		mm	Body	-					no attributes
234	16RI322	STP N1080 E1060	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	9.18		mm	Base	-					embossed: "…las 53 …86" The "las" appears to be the cursive Duraglas maker's mark (1940 to 1963)
234	16RI322	STP N1080 E1060	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.08		mm	Base	-					medium thick, flat fragment
234	16RI322	STP N1080 E1060	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.35		mm	Body	-					medium thick fragment with strong curve
235	16RI322	STP N1080 E1040	0-15 cm bgs	Historic	Domestic	Ceramics	Stoneware	Other exterior	-	1	7.89		mm	Body	-		1780	1925	Greer 1999; Ketchum 1983	thick, slight to moderately curved fragment. Paste and both surfaces off-white; glazed ext and int

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
235	16RI322	STP N1080 E1040	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.68		mm	Body	-					thin, slightly curved fragment
236	16RI322	STP N1080 E1000	0-14 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	6.25		mm	Body	-					thick, moderatly curved fragment with textured dot exterior; other is medium thick w moderate curve
236	16RI322	STP N1080 E1000	0-14 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.49		mm	Body	-					colorless fragment
237	16RI322	STP N1080 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified		1	82.42		mm	Body	-					light to medium-red fragment with 2 sides present
237	16RI322	STP N1080 E980	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	2.83		mm	Footring with base	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	medium thick, moderately curved fragment; medium shallow footring; possible plate?
237	16RI322	STP N1080 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	2.21		mm	Body	-					medium thick, modertely curved fragment; whittle-make like texture on exterior
237	16RI322	STP N1080 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.98		mm	Indeterminate part	-					thin, moderately curved fragment; possibly melted at some point?
237	16RI322	STP N1080 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	0.45		mm	Body	-					moderately to strongly curved; onse surface sheared off so can not determine thickness
238	16RI322	STP N1120 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Cup bottom mold	Clear glass	1	4.95		mm	Body with base	-					medium thick; round vessel; large stippling marks around outer portion of base; body at obtuse angle
238	16RI322	STP N1120 E1000	0-10 cm bgs	Historic	Domestic	Glass Tableware	Undiagnostic fragment		Clear unleaded glass	1	1.34		mm	Rim with body	-					medium fragment, slightly rounded (could be a drinking glass); indentation with tiny lines under it
238	16RI322	STP N1120 E1000	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	0.77		mm	Body	-					colorless fragment
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	0.74		mm	Body	-					small orangey-red fragment
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	2.68		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank fragment; too corroded to determine type
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	1.24		mm	Body	-					colorless fragments; thickness: 2.30 & 2.13 mm
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Transportation	Railroad	Railroad spike	-	-	1	122.29		mm	Body	-		1764		Wikipedia 2006	approx. 5 inches long (complete)
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Unidentified	Glass	Indetermiate		-	1	0.67		mm	Body	-					sheared off on both surfaces; colorless
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.38		mm	Body	-					thin, slightly curved fragment
239	16RI322	STP N1120 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.79		mm	Indeterminate part	-					slight curved, likely thick fragment-sheared off on 1 surface; molded line design?
240	16RI330	STP N860 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.16		mm	Indeterminate part	-					strongly curved fragment, sheared off on 1 surface--possible neck fragment?
241	16RI330	STP N880 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Light green glass	1	6.99		mm	Body	Soda / Mineral water	Bottle - Jar				thick, moderately to strongly curved; Coca-Cola; Embossed: "…TERE… L. OZS" (Registered Trademark)
241	16RI330	STP N880 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	0.29		mm	Indeterminate part	-					small, irregually shaped fragment; sheared off; slightly curved
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	4	22.88		mm	Indeterminate part	-					all melted and malformed fragments

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Green glass	2	3.3		mm	Body	-					1 thick, slightly curved-possibly melted; 1 thin with slight curve
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	1.76		mm	Body	-					thin, moderately curved fragment
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	2.71		mm	Lip with neck	-					large mouthed external thread finish; round-possible canning jar?
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	3	2.65		mm	Body	-					thin, slightly curved fragments
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Unidentified	Stone	Marble		Cut / modified	1	0.86		mm	Body	-					polished on 1 surface-flat; rough/eroded on other; white with orange vein running through;
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Architecture	Flat Glass	Indeterminate	Flat glass		1	0.45		mm	Body	-					thick (4.87 mm), light green fragment
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick		1	1.87		mm	Body	-					colorless fragment
246	16RI330	STP N990 E900	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick		2	1.57		mm	Body	-					colorless fragments; thickness: 2.12 & 2.36mm
247	16RI330	STP N1000 E980	0-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	2	0.64		mm	Body	-					medium thick fragments with slight curves
247	16RI330	STP N1000 E980	0-20 cm bgs	Historic	Unidentified	Glass	Flat		-	1	0.05		mm	Body	-					very thin, flat glass fragment with a yellowish color/stain
248	16RI330	STP N1040 E880	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	11.95		mm	Body	-					light red fragment; 1 flat surface has gray coloration
249	16RI330	STP N1040 E880	15-25 cm bgs	Historic	Architecture	Nails	Wire Nail		-	1	3.81		mm	Body	-		1880		Nelson 1968	shank fragment
249	16RI330	STP N1040 E880	15-25 cm bgs	Historic	Domestic	Ceramics	Porcelain: hard paste	Undecorated	-	1	1.37		mm	Body with base	-		1800		Faulkner 2000	thin, flat fragment; poor quality?
250	16RI330	STP N1060 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Opaque white glass	1	1.74		mm	Body	-					medium thick, moderately curved fragment
250	16RI330	STP N1060 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	1.31		mm	Body	-					medium thick, moderately curved fragment
250	16RI330	STP N1060 E880	0-15 cm bgs	Historic	Unidentified	Indeterminate	1	-	-	1	0.32		mm	Body	-					possible redware or stone fragment?triangular shape, surface darker and more luster
251	16RI330	STP N1080 E880	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified		1	5.67		mm	Body	-					brownish-red fragment
251	16RI330	STP N1080 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	4.4		mm	Base	-					medium thick, base slightly concave; large stipple marks around outer edge; embossed "68"
251	16RI330	STP N1080 E880	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Clear glass	1	4.96		mm	Indeterminate part	-					thick slightly curved fragment; edge rounded, smooth; main body of frag has dotted texture
252	16RI322	STP N1120 E1080	0-15 cm bgs	Historic	Domestic	Container Glass	Automatic Bottling Machine	Indeterminate	Clear glass	1	4.67		mm	Lip with neck	-					small-mounthed bottle; seam all the way through finish; thick ring around lip and below ext thread
253	16RI322	STP N1140 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Amber glass	1	0.7		mm	Body	-					thin to medium thick with slight curve
253	16RI322	STP N1140 E1040	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Rod	1	3.85		mm	Body	-					multiple curves; nail? Thick corrosion build-up makes it difficult to identify
307	16RI330	STP N1020 E980	0-10 cm bgs	Historic	Unidentified	Plastic	Indeterminate plastic		-	1	0.8		mm	Body	-					possible part of a phonograph record
308	16RI330	STP N1040 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Aqua glass	1	1		mm	Body	-					slight curve, average thickness
308	16RI330	STP N1040 E980	0-15 cm bgs	Historic	Domestic	Glass Tableware	Undiagnostic fragment	Unidentified glass container	Clear glass	1	4		mm	Body	-					mostly flat but noticeable increase in thickness towards one end
308	16RI330	STP N1040 E980	0-15 cm bgs	Historic	Unidentified	Metal		Unspecified iron / steel	Rod	1	27.6		mm	Body	-					thin bent rod, possible a handle fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
308	16RI330	STP N1040 E980	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	8	19.3		mm	Body	-					interior fragments, non-friable
309	16RI330	STP N1040 E980	15-25 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	4	9.5		mm	Body	-					interior fragments, non-friable
309	16RI330	STP N1040 E980	15-25 cm bgs	Historic	Personal	Jewelry and Beads	Jewelry Insert / Cabachon	-	Glass	1	0.4			Body	-					corrosion from attachment point present
310	16RI330	STP N1060 E980	10-20 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick	-	1	0.5		mm	Body	-					
310	16RI330	STP N1060 E980	10-20 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Opaque white glass	1	6.9		mm	Body	Other bottle/jar	Bottle - Jar				two pieces fit together
311	16RI330	STP N1080 E980	10-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	1.2		mm	Body	-					Interior fragment, non-friable, light red
311	16RI330	STP N1080 E980	10-15 cm bgs	Historic	Unidentified	Metal	Iron / Steel			1	2.6		mm	Body	-					curved like a hook
312	16RI330	STP N1100 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	2	3.4		mm	Body	-					interior fragments, non-friable
313	16RI330	STP N1120 E980	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.8		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	slight curve with average thickness, light crazing in the glaze
314	16RI330	STP N960 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	2.2		mm	Body	Other bottle/jar	Bottle - Jar				average curve, average thickness
315	16RI330	STP N940 E1000	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	1	0.9		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	short fragment
316	16RI330	STP N1020 E1000	0-10 cm bgs	Historic	Maintenance	Electrical	Insulator: ceramic	-	-	1	5.2		mm	Body	-		1892		Berge 1980:156	small interior variety, fragment
317	16RI330	STP N1080 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Mortar	Fragment	-	2	8.5		mm	Body	-					white mortar
317	16RI330	STP N1080 E1000	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick	-	1	0.9		mm	Body	-					4.59mm, lip of glass aroud the outer edge of one corner, clear
317	16RI330	STP N1080 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	10.8		mm	Body	-					interior fragment, non-friable
317	16RI330	STP N1080 E1000	0-10 cm bgs	Historic	Unidentified	Glass	Amorphous	Glass	-	1	1.9		mm	Body	-					indeterminate surface due to broken and slightly melted surface
317	16RI330	STP N1080 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	0.7		mm	Body	-					slight curve, moderately thin
357	16RI321	STP N1000 E960	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	2		mm	Body	Miscellaneous bottle	Bottle - Jar				deep curve, average thickness
358	16RI323	STP N940 E1040	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified	-	1	45.9		mm	Body	-					pressed on 2 sides, mortar present on one
359	16RI323	STP N940 E980	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Flat: thin	1	0.8		mm	Body	-					possible nail fragment but too small for positive id
360	16RI323	STP N960 E1020	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	5.5		mm	Body	Miscellaneous bottle	Bottle - Jar				thicker than average, interior rounded corner, 2 straight edges on exterior
361	16RI323	STP N960 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	0.6		mm	Body	-					slight curve, average thickness
362	16RI323	STP N980 E980	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	2	2.4		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	Average thickness, sloping portion of vessel

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.9		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	Rim sherd, thinner vessel
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	1	3	5.11	mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	Only shank, possible a 30d or 40d nail
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	3		mm	Body	Miscellaneous bottle	Bottle - Jar				"W FOR" embossed on shard, average thickness, average curve
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Glass Tableware	Undiagnostic fragment	Unidentified glass container	Clear glass	1	3.6		mm	Body	-					flat on back with a worn area with raised ridges on front
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	5	3.5		mm	Body	Other bottle/jar	Bottle - Jar				average thickness, slight curve
363	16RI323	STP N1000 E980	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick	-	1	0.5	2.32	mm	Body	-					clear glass
364	16RI323	STP N1010 E960	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick	-	1	0.4	2.23	mm	Body	-					clear glass
365	16RI323	STP N1010 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	2	0.9		mm	Body	-					thin with very slight curve
366	16RI323	STP N1010 E980	13-23 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	1.8		mm	Body	-					interior fragment, light red in color
366	16RI323	STP N1010 E980	13-23 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	0.7		mm	Body	Miscellaneous bottle	Bottle - Jar				slightly thinner than average, slight curve
366	16RI323	STP N1010 E980	13-23 cm bgs	Historic	Architecture	Nails	Indeterminate		-	1	1.5		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	Only fragment of the shank remaining
367	16RI323	STP N1010 E1000	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	2.6		mm	Body	-					Interior fragment, red in color
367	16RI323	STP N1010 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	3	6.4		mm	Body	Miscellaneous bottle	Bottle - Jar				slight to moderate curve with average thickness, with one with a raised embossed ring?
368	16RI323	STP N1010 E1020	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick	-	1	0.9	2.25	mm	Body	-					clear glass
369	16RI323	STP N1020 E1000	0-10 cm bgs	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	0.4		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	
369	16RI323	STP N1020 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	2	2.3		mm	Body	Miscellaneous bottle	Bottle - Jar				average thickness, 1 slightly curved, 1 deeply curved
369	16RI323	STP N1020 E1000	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick	-	4	1.8	2.25	mm	Body	-					clearglass, 1 shard hazy
370	16RI328	GSC	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Fragment	Cobalt glass	1	7.3		mm	Body	Medicine	Bottle - Jar				"ORUB" most likely Vicks Vaporub. Invented 1894
370	16RI328	GSC	0-0 Surface	Historic	Domestic	Ceramics	Whiteware	Plain	-	1	5.2		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	Plate rim
370	16RI328	GSC	0-0 Surface	Historic	Personal	Health and Grooming	Cosmetic Container		Glass	1	35.4	42.94	mm	Body	-					Milk glass "MUM MFG. C" "PHILA. PA."

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
370	16RI328	GSC	0-0 Surface	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	6.4		mm	Body	Miscellaneous bottle	Bottle - Jar				possible snuff bottle
371	16RI329	GSC w/in 20M of datum	0-0 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified	-	1	8.7		mm	Body	-					3 pressed corners, non-friable, light red
371	16RI329	GSC w/in 20M of datum	0-0 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	7		mm	Body	-					interior fragment, non-friable, red
371	16RI329	GSC w/in 20M of datum	0-0 cm bgs	Historic	Maintenance	Electrical	Insulator: ceramic	-	-	1	62.1		mm	Body	-		1892		Berge 1980:156	"KNOX KNO…" Two piece with metal connector
371	16RI329	GSC w/in 20M of datum	0-0 cm bgs	Historic	Architecture	Nails	Wire Nail	16d	Indeterminate	2	9.7	5.6	mm	Body	-		1880		Nelson 1968	nail head corroded off
372	16RI326	STP N1000 E1010	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	0.8		mm	Body	-					slight curve, slightly thin
372	16RI326	STP N1000 E1010	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	1	1.8	4.66	mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	shank only
372	16RI326	STP N1000 E1010	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	2	35.1		mm	Body	-					brown patina on red brown
372	16RI326	STP N1000 E1010	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Aqua glass	1	0.05		mm	Body	-					slight curve, slightly thin
373	16RI326	STP N1000 E1020	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	0.86 - 2.41 mm thick	-	1	0.8	2.25	mm	Body	-					clear glass
373	16RI326	STP N1000 E1020	0-10 cm bgs	Historic	Architecture	Flat Glass	Window Glass	>2.41 mm thick	-	1	1.3	2.56	mm	Body	-					clear glass
374	16RI326	STP N1020 E1000	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	2.3		mm	Body	Other bottle/jar	Bottle - Jar				average thickness, moderate curve
375	16RI326	STP N1020 E1010	0-10 cm bgs	Historic	Domestic	Glass Tableware	Undiagnostic fragment	Other glass container	Clear glass	1	1.5		mm	Body	-					Drinking glass rim, average thickness, slight curve
375	16RI326	STP N1020 E1010	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	1	2.1	6.65	mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	possible a 16d or 20d wire nail but too short and corroded for determination
376	16RI326	STP N1020 E1040	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	4.1		mm	Body	Soda / Mineral water	Bottle - Jar				average thickness, average curve, surface is textured like an orange
377	16RI324	STP N990 E980	0-10 cm bgs	Historic	Domestic	Container Closures	Home Canning Jars	Glass lid for top seal Mason	-	1	2		mm	Body	-					Milk glass "D M"
377	16RI324	STP N990 E980	0-10 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	1	4.7	7.33	mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	nail broken and heavily corroded
377	16RI324	STP N990 E980	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel	Unspecified iron / steel	Item / part	1	100.6		mm	Body	-					part of a fitting or equipment latch
299	16RI330	STP N1060 E960	0-10 cm bgs	Historic	Maintenance	Fuels	Cinder / Slag		-	1	16.1		mm	Body	-					
300	16RI330	STP N1060 E960	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail	20d		1	9	4.82	mm	Body	-		1880		Nelson 1968	straight
300	16RI330	STP N1060 E960	10-20 cm bgs	Historic	Architecture	Nails	Wire Nail		-	1	5	4.29	mm	Body	-		1880		Nelson 1968	bent slightly
301	16RI330	STP N940 E980	0-10 cm bgs	Historic	Unidentified	Metal	Iron / Steel		Amorphous	1	0.8		mm	Body	-					slightly curved
301	16RI330	STP N940 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	1.9		mm	Body	-					interior fragment
302	16RI330	STP N960 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	3	1.8		mm	Body	-					embossed ridge on one shard, remainder plain
302	16RI330	STP N960 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	6.4		mm	Body	-					base fragment

Bag	Site	Unit #	Dep	General Item	1	2	3	4	5	Count	Weight	Diameter	Unit Mea	Vessel Part	Vessel Type	Function	tMin	tMax	tRef	Comments
302	16RI330	STP N960 E980	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Machine made brick: non-vitrified	-	1	8.1		mm	Body	-					corner with 2 sides flat, 1 slightly rough
302	16RI330	STP N960 E980	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified		1	5.5		mm	Body	-					
303	16RI330	STP N960 E980	25-35 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	3	7		mm	Body	Miscellaneous bottle	Bottle - Jar				one with a deep curve and a two with a slight curve
304	16RI330	STP N980 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Aqua glass	3	6.6		mm	Body	Soda / Mineral water	Bottle - Jar				Mostly like shards of a Coke bottle
304	16RI330	STP N980 E980	0-15 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	4	2.9		mm	Body	-					slightly curved, average thickness
304	16RI330	STP N980 E980	0-15 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	12.7		mm	Body	-					interior portion of brick, uniform light red color
304	16RI330	STP N980 E980	0-15 cm bgs	Historic	Architecture	Nails	Indeterminate		Indeterminate	2	13.1		mm	Body	-		1830		Majewski and O'Brien 1987:119; Smith 1983:119	two heavily corroded nail fragments
304	16RI330	STP N980 E980	0-15 cm bgs	Historic	Maintenance	Fuels	Cinder / Slag	-	-	1	4.6		mm	Body	-					
305	16RI330	STP N980 E980	15-25 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	0.5		mm	Body	Other bottle/jar	Bottle - Jar				deep curve, average thickness
306	16RI330	STP N1000 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	2	1.2		mm	Body	Other bottle/jar	Bottle - Jar				slight curved, with average thickness
306	16RI330	STP N1000 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	1	4		mm	Body	-					interior fragment, non-friable
307	16RI330	STP N1020 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Clear glass	1	3.5		mm	Body	Other bottle/jar	Bottle - Jar				thick with slight curve
307	16RI330	STP N1020 E980	0-10 cm bgs	Historic	Architecture	Construction Material	Brick (measure in inches)	Indeterminate brick: non-vitrified	-	2	4		mm	Body	-					non-friable, interior fragments, light red
307	16RI330	STP N1020 E980	0-10 cm bgs	Historic	Domestic	Container Glass	Undiagnostic container fragment	Unidentified glass container	Amber glass	1	1.8		mm	Body	-					very slightly curved, average thickness