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of Engineers
New Orleans District

SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATIONS OF LOWER BAYOU TECHE, ST. MARY PARISH, LOUISIANA

August 1991

FINAL REPORT

R. Christopher Goodwin & Associates, Inc.
5824 Plauche Street
New Orleans, LA 70123

PREPARED FOR:

U.S. Army Corps of Engineers
New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

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			Bosler	Luckland Plantation	Prehistoric archeology	Zenor

19. ABSTRACT *(Continue on reverse if necessary and identify by block number)*

This report presents the results of survey and archeological testing of six areas along Lower Bayou Teche, in St. Mary Parish, Louisiana. This project was conducted for the U.S. Army Corps of Engineers, New Orleans District, prior to planned dredging of the lower five miles of Bayou Teche. This report forms an addendum to Goodwin, Hinks et al. 1991.

The objectives of this study were to evaluate portions of three previously identified archeological sites (Goodwin, Hinks et al. 1991), and to survey three additional areas (Areas A-C), consisting of approximately 88 ac, for archeological resources. During field investigations, Moro Plantation (16SMY73) and the western portions of Luckland Plantation (16SMY71) and Avalon Plantation (16SMY70) were investigated through intensive shovel testing and excavation of test units and backhoe trenches. During testing, one previously unidentified prehistoric site, Bosler (16SMY77), was located within the confines of Moro Plantation (16SMY73). Survey of Areas A-C identified part of Avalon Plantation in Area A; a portion of Moro Plantation in Area B; and, the Bourg site (16SMY78) in Area C.

Data collected during this study indicate that the portions of Moro Plantation, Avalon Plantation, and the Bourg site located within project areas do not possess the quality of significance. The Bosler site appears to possess the quality of significance as defined by the National Register of Historic Places criteria; avoidance of the site is recommended. Luckland Plantation, including the project area portion, also appears to possess the quality of significance as defined by National Register of Historic Places criteria. The portion of the site east of Station 179+25 should be avoided. That portion between Stations 169+00 and 179+25 will not be adversely impacted by carefully controlled placement of dredged material over it. Finally, the portion of Avalon Plantation between Stations 137+30 and 152+35 appears to possess the quality of significance; that area should be avoided.

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DEPARTMENT OF THE ARMY
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NEW ORLEANS. LOUISIANA 70160-0267

REPLY TO
ATTENTION OF

July 17, 1991

Planning Division
Environmental Analysis Branch

To The Reader:

This cultural resources effort was designed, funded, and guided by the U.S. Army Corps of Engineers, New Orleans District as part of our cultural resources management program.

We concur with the findings and recommendations contained in this report. Because of the acquisition of new disposal areas (cited as areas A, B, and C in the report), we are able to avoid impacts to all three National Register-eligible properties in the project area. In addition, we will advise our Contractor to perform no work in the area of the Atchafalaya Basin Site (16SMY10). Therefore, no further archeological investigations are planned.

Michael E. Stout
Technical Representative

Van T. Button
Authorized Representative
of the Contracting Officer

R. H. Schroeder, Jr.
Chief, Planning Division

SUPPLEMENTAL ARCHEOLOGICAL INVESTIGATIONS OF LOWER BAYOU TECHE ST. MARY PARISH, LOUISIANA

FINAL REPORT

By

R. Christopher Goodwin, Ph.D.
Principal Investigator

With

Stephen Hinks, William P. Athens,
Jennifer A. Cohen, Ralph Draughon, Jr., and Paul Heinrich

R. Christopher Goodwin & Associates, Inc.
5824 Plauche Street
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For

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P.O. Box 60267
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We would like to express our gratitude to those individuals and organizations who gave their time and effort to assist us in the research and production of this report. Mr. Michael Stout, COTR, prepared the Scope of Services, and provided valuable advice throughout the project. Mr. Van Tries Button served as COR. Mrs. Maria Guarisco, Mrs. Ara May deGravelles Hall, Mr. Charles LaViolette, and Mr. Paul Accardo, Sr., all provided information concerning first half twentieth century Luckland and Avalon Plantations. We also thank the staffs of the Louisiana Division of Archaeology, and the Louisiana collection at the Howard-Tilton Memorial Library, Tulane University, for their assistance.

At R. Christopher Goodwin & Associates, Inc., William P. Athens served as Project Manager. Stephen Hinks supervised field investigations, while archeological assistants included James A. Green, Jr., David Courington, Charlotte Donald, James M. Wojtala, Paul V. Heinrich, and Laural Myers. Shirley J. Rambeau prepared the graphic materials. Christine Herman produced the report.

CHAPTER I

INTRODUCTION

Introduction

This report presents the results of supplemental archeological investigations along Lower Bayou Teche, in St. Mary Parish, Louisiana (Figure 1). The fieldwork was conducted from March through May 1991 by R. Christopher Goodwin & Associates, Inc., for the U.S. Army Corps of Engineers, New Orleans District, pursuant to Delivery Order 03 of Contract DACW29-90-D-0018, and to Modification 001 to that delivery order.

The current investigation is the third cultural resources study associated with the Corps of Engineers' planned 1991 maintenance dredging of the lower 8 km (5 mi) of Bayou Teche. The first study assessed proposed dredged material disposal areas along both banks of Bayou Teche for cultural resources (Goodwin, Hinks et al. 1991). Seven sites (16SMY67 through 16SMY73) were identified. Two of the sites, Luckland Plantation (16SMY71), and Avalon Plantation (16SMY70), were determined to possess the quality of significance as defined by the National Register of Historic Places criteria. A third site, Moro Plantation (16SMY73), was evaluated as potentially significant. Three of the remaining sites, Calumet (16SMY67), Bethel I (16SMY68), and Zenor (16SMY72) did not possess the quality of significance as defined by National Register of Historic Places criteria. The final site, Bethel II (16SMY69), was not evaluated since the potentially significant portions of the site lay outside the project area.

In conjunction with the terrestrial study, a magnetometer survey of the lower 8 km (5 mi) of Bayou Teche was performed (Goodwin, Hinks et al. 1991). During survey, 62 riverine magnetic anomalies were located. Additional testing was recommended at eight potentially significant anomalies within and near the planned dredging corridor; these included Anomaly Nos. 8, 13, 24a, 29, 30, 31, 33, and 58.

During November 1990, testing and assessment of the eight previously identified magnetic anomalies were conducted within Bayou Teche (Goodwin, Athens et al. 1991). Seven of these anomalies were not cultural resources; therefore, no additional testing was recommended. The eighth anomaly, Anomaly No. 23/24 Complex (16SMY76), formed an archeological site comprised of two sunken vessels, possibly barges, and bridge remains. This potentially significant site lay outside the direct impact area; additional testing was recommended only if the site became threatened by future design modifications.

Current investigations included examination of the previously identified Moro Plantation (16SMY73), and the western portions of Luckland Plantation (16SMY71) and Avalon Plantation (16SMY70) (Figure 1). Testing was designed to evaluate Moro Plantation applying the National Register of Historic Places criteria (36 CFR 60.4[a-d]), and to define more precisely the extent of the significant eligible portions of Luckland and Avalon Plantations. An evaluation of the potential impact of dredged material disposal on archeological sites also was conducted.

Three previously unsurveyed parcels also were tested for cultural resources. During survey, additional data were collected concerning the previously recorded Moro Plantation (16SMY73), Luckland Plantation (16SMY71), and Avalon Plantation (16SMY70). Two unrecorded sites, Bosler (16SMY77) and Bourg (16SMY78), were located during this survey effort. Approximately 132 ac (53.4 ha) were surveyed during the current investigations.

This report functions as an addendum to the initial report (Goodwin, Hinks et al. 1991). As such, data pertaining to regional geology and geomorphology, previous investigations, and the prehistoric setting, have not been included in this volume except where necessary to explain the results of the current

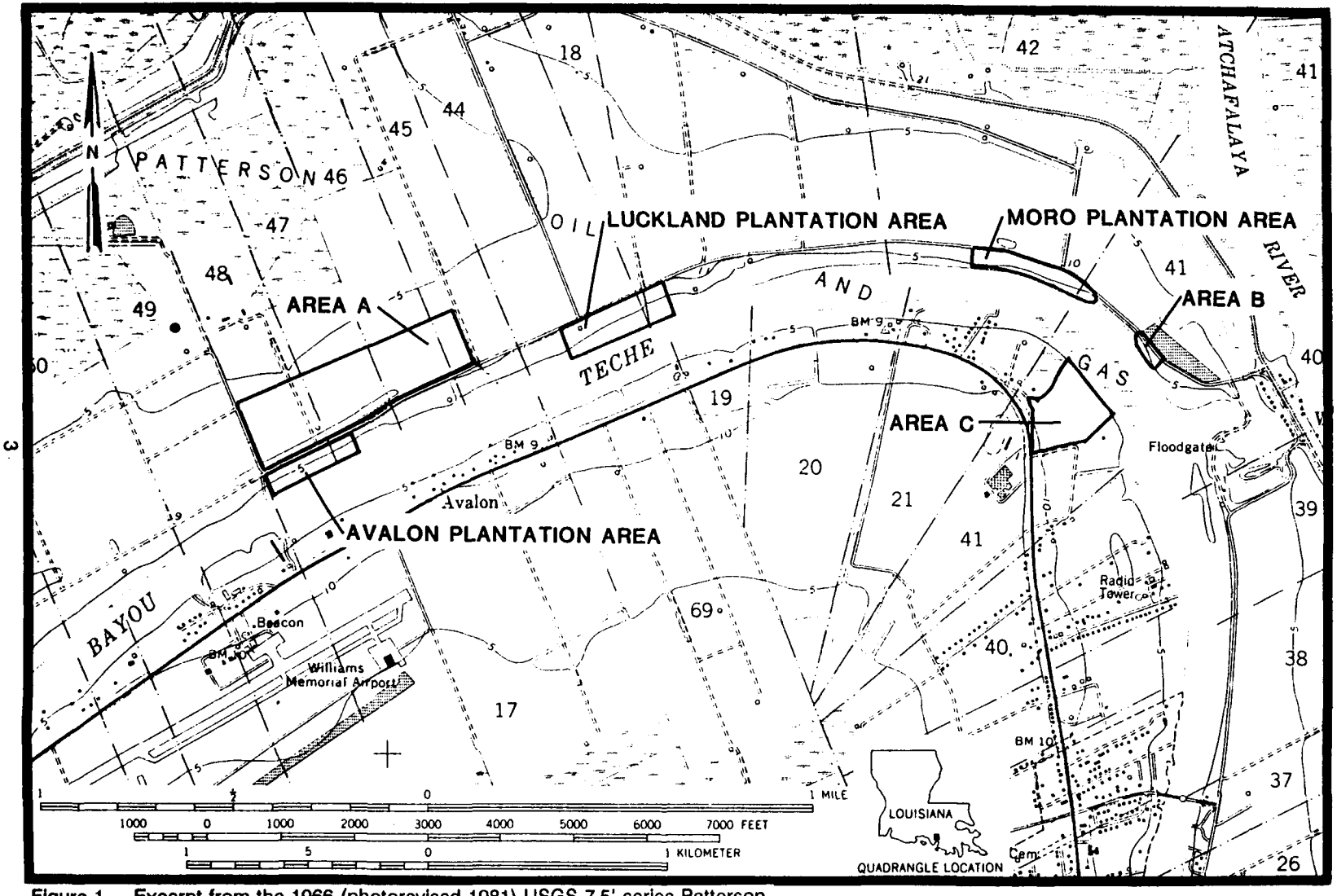


Figure 1. Excerpt from the 1966 (photorevised 1981) USGS 7.5' series Patterson, Louisiana topographic quadrangle, showing the project areas

investigations. A summary of the regional geomorphology is presented below to provide a context for discussion of site formation processes at Bosier (16SMY77), a prehistoric site with buried archeological deposits. In addition, the historic setting focuses on specific project area properties; data pertaining to the historic setting, and to the overall project area are contained elsewhere (Goodwin, Hinks et al. 1991; Goodwin, Athens et al. 1991; Goodwin, Poplin et al. 1988).

Regional Geomorphology

As noted previously (Goodwin, Hinks et al. 1991), two main geomorphic surfaces form the landscape within the immediate vicinity of the current project area (Figure 2). They are relict natural levees of the Mississippi River, i.e., the "Outer Natural Levee," and the relict natural levees of the Red River, called the "Middle Natural Levee." The meander belt with which they are associated cuts through the partially submerged delta plain of the abandoned Teche Delta. The geomorphological development of the project area is presented in Goodwin, Hinks et al. (1991).

Middle Natural Levee

The Middle Natural Levee is a very narrow, gently sloping, and relict natural levee. It is a geomorphic surface that occupies a 50 to 150 m wide strip between the inner bank of Bayou Teche and the Outer Natural Levee (Figures 2 and 3). Along portions of Bayou Teche within Moro plantation, a low and narrow, but distinct, natural levee ridge occurs sporadically on this surface. The Middle Natural Levee is inset into and topographically lower than the adjacent Outer Natural Levee. The elevation of the Middle Natural Levee varies between the level of Bayou Teche and just over two m above sea level. This geomorphic surface is associated with the Buxin-Portland-Perry soil association (Gould and Morgan 1962; Morgan 1976).

The Middle Natural Levee is underlain by reddish-colored natural levee and overbank sediments deposited by the Red River when it occupied Bayou Teche after it had been abandoned by the Mississippi River. These sediments consist of strong brown, reddish brown, to yellowish brown sandy loam, silt, silt loam, silty clay, and clay. These overbank deposits and underlying point bar sediments are over five m thick within the center of the abandoned channel of the Red River course. Against the Outer Natural Levee, the Red River sediments quickly thin and pinch out along the edge of the abandoned channel of the older Mississippi River course. This alluvium has a distinctive red color; it is derived from the Permian redbeds of Oklahoma and northeastern Texas (Gould and Morgan 1962; Morgan 1976).

Outer Natural Levee

The Outer Natural Levee is a relict, very broad, and very gently sloping, natural levee composed of gray to brown silts and clays. Within the project area, the Outer Natural Levee forms a geomorphic surface that occupies a broad, 0.4 to 1.6 km wide strip along both sides of Bayou Teche (Figures 2 and 3). The Outer Natural Levee forms the highest portion of the landscape within the adjacent coastal plain, except for a few local areas, e.g. Belle Isle, uplifted by underlying salt domes. The crests of some parts of the Outer Natural Levee are as high as 5 m above sea level. The Outer Natural Levee consists of overbank sediments deposited by an abandoned course of the Mississippi River (Fisk 1952; Gould and Morgan 1962).

The sediments of the Mississippi River underlie the Outer Natural Levee. These sediments consist of grayish brown to olive gray sandy loam, silt, silt loam, silty clay, and clay. The soil associations associated with the Outer Natural Levee consist of the Baldwin, Cypremont, Iberia, and Jeanerette soil series. These deposits are over 8 m thick beneath the center of the Outer Natural Levee. These sediments

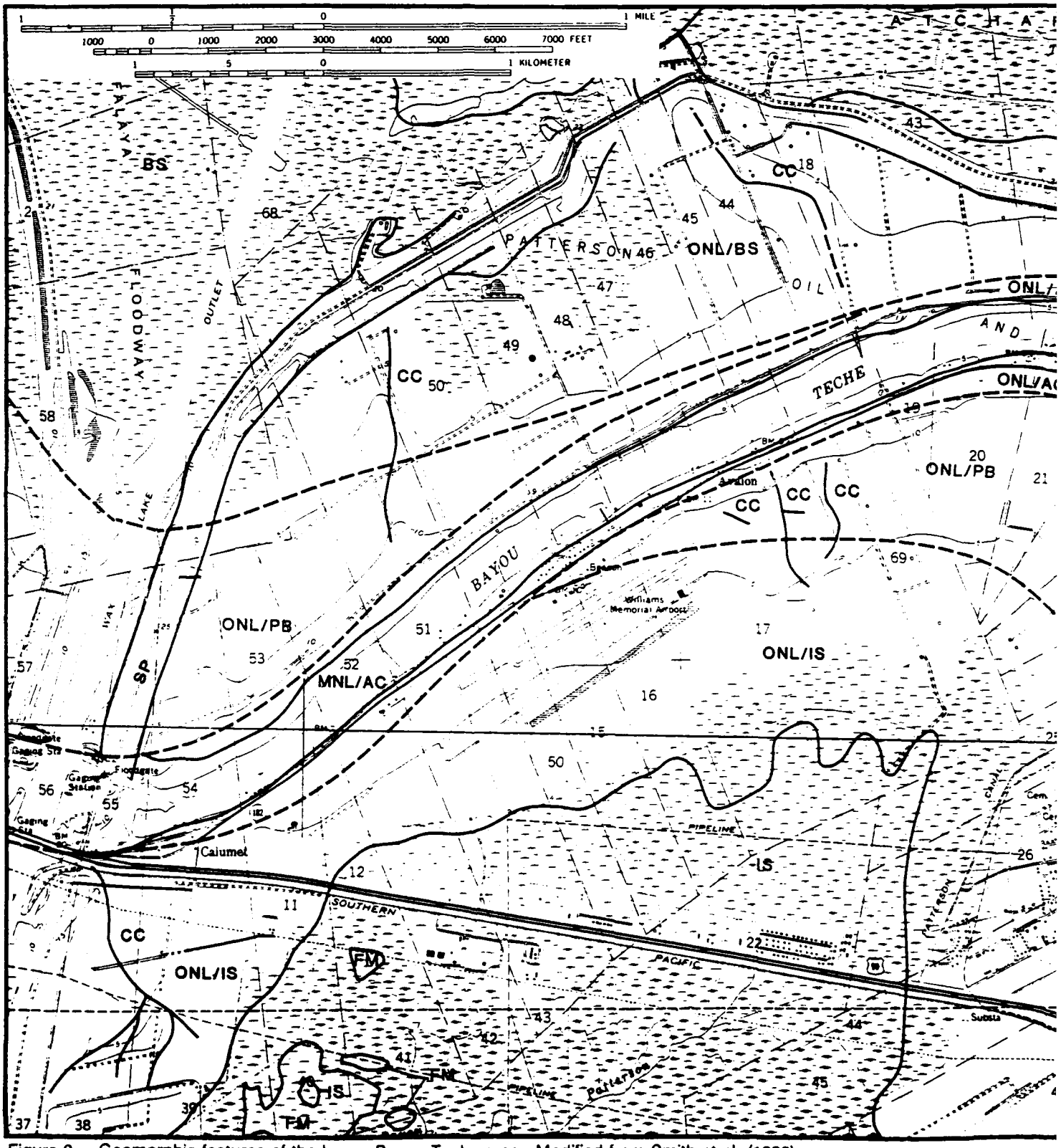
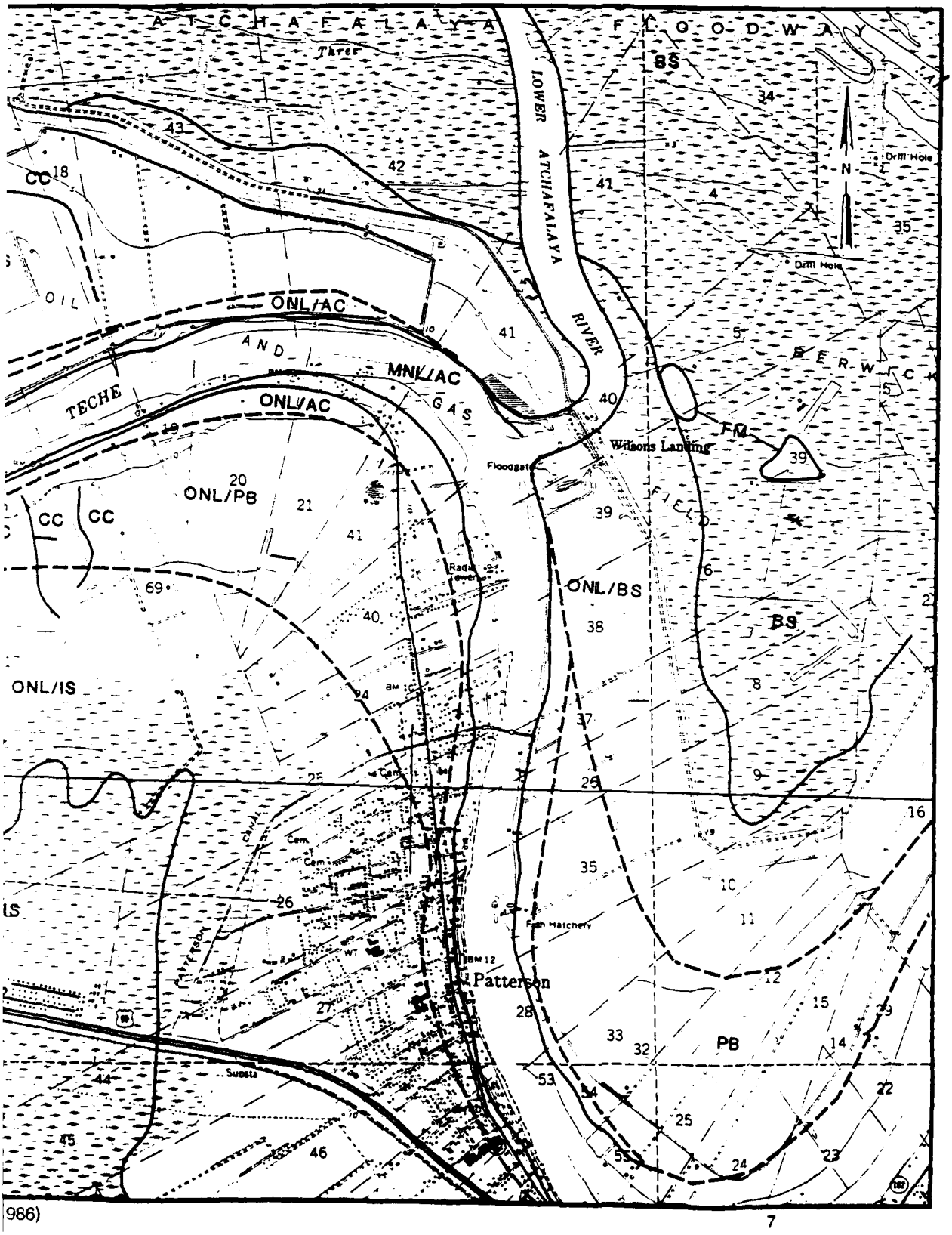


Figure 2. Geomorphic features of the Lower Bayou Teche area. Modified from Smith et al. (1986)



LEGEND

— — —	Contact between terrains
———	Contact between underlying sedimentary facies
cc	Crevasse channel
BS	Backswamp
FM	Fresh marsh
IS	Island swamp
MNL	Middle natural levee
MNL/AC	Middle natural levee overlying abandoned channel
ONL	Outer natural levee
ONL/AC	Outer natural levee overlying abandoned channel
ONL/BC	Outer natural levee overlying backswamp
ONL/IS	Outer natural levee overlying inland swamp
ONL/PB	Outer natural levee overlying point bar
SP	Spoil land

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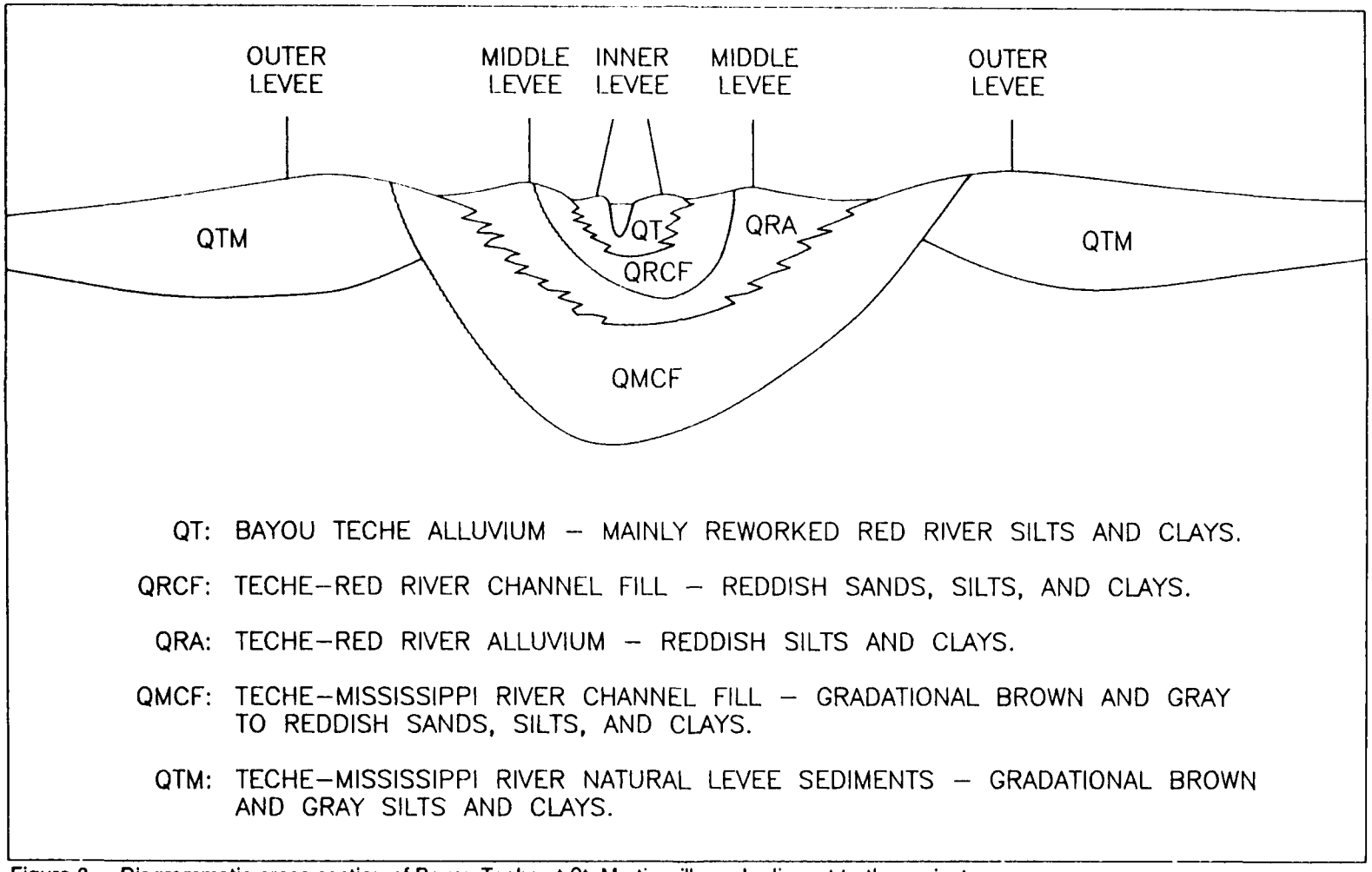


Figure 3. Diagrammatic cross-section of Bayou Teche at St. Martinsville and adjacent to the project area showing the relationships between natural levees and the deposits of the Mississippi River, the Red River and Bayou Teche. Modified from Gould and Morgan (1962)

interfinger and pinch out within the fine-grained and organically-rich sediments of the adjacent marsh and swamps (Smith et al. 1986).

Development of Bayou Teche

According to Saucier (1974) and Saucier and Snead (1989), Bayou Teche occupies the abandoned course of an ancient Mississippi River meander belt called "Meander Belt No. 3." This meander belt developed about 6000 years B.P. and was abandoned by the Mississippi River about 4500 years B.P. as a result of an abrupt diversion of the Mississippi River in the Memphis area (Autin et al. 1991).

The period of time that the Red River continued to flow down the Bayou Teche channel after the Mississippi River abandoned this channel has been a subject of considerable debate. Previous investigators, such as Fisk (1947), Saucier (1974), and Lenzer (1977), suggest that the Red River diverted from Bayou Teche to its present course through Moncla Gap at dates ranging from 500 to 2400 B.P. Archeological work conducted in the Moncla Gap area by Pearson (1986) showed that this diversion occurred between 2000 and 1800 years B.P. However, the recovery of Marksville period artifacts in shell midden deposits interbedded with reddish silts (McIntire 1958:63-64), indicates the Red River was active until at least 1600 years B.P. (Weinstein and Kelley 1991:33).

Lenzer (1977) stated that the full discharge of the Red River occupied Bayou Teche. However, had the full discharge of the Red River flowed down Bayou Teche from 3400 to 2000 B.P., it would have modified the previous Mississippi River channel noticeably because of the smaller, but still substantial, discharge of the Red River. Study of aerial photography and geological cross-sections, e.g. Gould and Morgan (1962), demonstrate that the Red River passively filled the lower part of the Bayou Teche course of the Mississippi River without significantly modifying either the cross-section of its channel or the morphology of its meanders (Figure 3). The lack of modification to the abandoned Mississippi River channel demonstrates that only small, either transitory or partial discharges, of the Red River flowed down Bayou Teche and deposited the reddish brown alluvium now found along the banks of Bayou Teche (Goodwin, Hinks et al. 1991).

An explanation for the lack of substantial Red River discharge through Bayou Teche is uncertain. The partial diversion of the discharge of the ancient Red River by the Vermillion River noted by Van Lopik (1955) incompletely explains this low discharge. Possibly, both Pearson (1986) and McIntire (1958) interpreted their sedimentological and archeological data correctly. If so, then the low rate of discharge down Bayou Teche reflects the primary discharge of flow by the Red River through Moncla Gap; the transitory, partial discharge, may represent flood water flowing down the Teche.

Organization of the Report

The historic setting of the project area is discussed in Chapter II. This chapter emphasizes the historic development of Moro, Luckland, and Avalon Plantations, along with the west (right descending) bank of the project area situated near the mouth of the Teche. Field methods are reviewed in Chapter III, while results of the field investigations are discussed in Chapter IV. Laboratory analysis of recovered artifacts is contained in Chapter V; summary and management recommendations are presented in Chapter VI.

CHAPTER II

A HISTORICAL PERSPECTIVE ON THE PROJECT AREA

Introduction

The consolidation of plantations along the lower Teche was a dominant trend in American private enterprise during the late nineteenth and early twentieth centuries. Since sugar cultivation required expensive machinery, producers with capital held an economic advantage over their less affluent competitors, and consolidation almost inevitably occurred. During this period, consolidation of sugar production was a recurring theme throughout the project area.

In the antebellum sugar industry, there were very few centrally located mills or refineries. Consequently, every cane plantation had its own sugar house and operated as a factory as well as a farm. At the time of the Federal advance on of the Teche in 1863, six plantations operated within the present project area, each with its own sugar house (Figures 4 and 5). This antebellum system changed as sugar cultivators slowly recovered from the armed conflict of 1861; about 1880, several capitalists in the project area began developing large sugar factories and acquiring (by lease or purchase) more and more canefields. By the time of America's entrance into World War I, Oscar Zenor had emerged as the proprietor of the entire project area; he processed cane from his fields at a central factory located at Avalon Plantation (Figures 4 and 5). Soon after the Armistice, in 1923, even the processing plant at Avalon closed, and canegrowers in the project area transported their crops elsewhere to be converted to sugar.

The Project Area in the Civil War Era 1862 - 1869

Antebellum sugar culture on the lower Teche culminated in the extraordinarily large yield of 1862, the year before the Federal invasion of the Teche. In April of the following year, Federal troops led by General Nathaniel Banks encountered stubborn Confederate opposition under the direction of General Richard Taylor within the project area. Although the Federal forces had naval support, the Confederates were able to neutralize its effect by extensive use of obstructions in the Teche. The project area suffered almost as much damage from the Confederate defense as it did from the invading enemy. During the military struggle, several buildings on the left descending bank of the Teche, in or very near the project area, were destroyed, including: Alfred Fuselier's residence on what was to become Avalon Plantation; at least one unidentified building on Mrs. Meade's Lower Tract (the nucleus of the postbellum Luckland Plantation); and, two sugar houses, owned by Thomas Wilcoxson and Richard Lynch, on lands that were to become Moro Plantation after the war.

As a result of the war, the established planters lost their considerable investment in bondage and found themselves without either capital or labor. War had severely disrupted both the transportation system and the market for sugar. The antebellum entrepreneurs found themselves without influence in state and national affairs; they even lost control of the political system in St. Mary Parish. Several planter's sons in the neighborhood were killed in the conflict, including Florian Cornay, a cannoneer and Confederate hero. The planters and plantations along the Lower Teche suffered much in the war and were slow to recover. Not until the 1880s, did the sugargrowers of the Teche equal their output on the eve of enemy occupation.

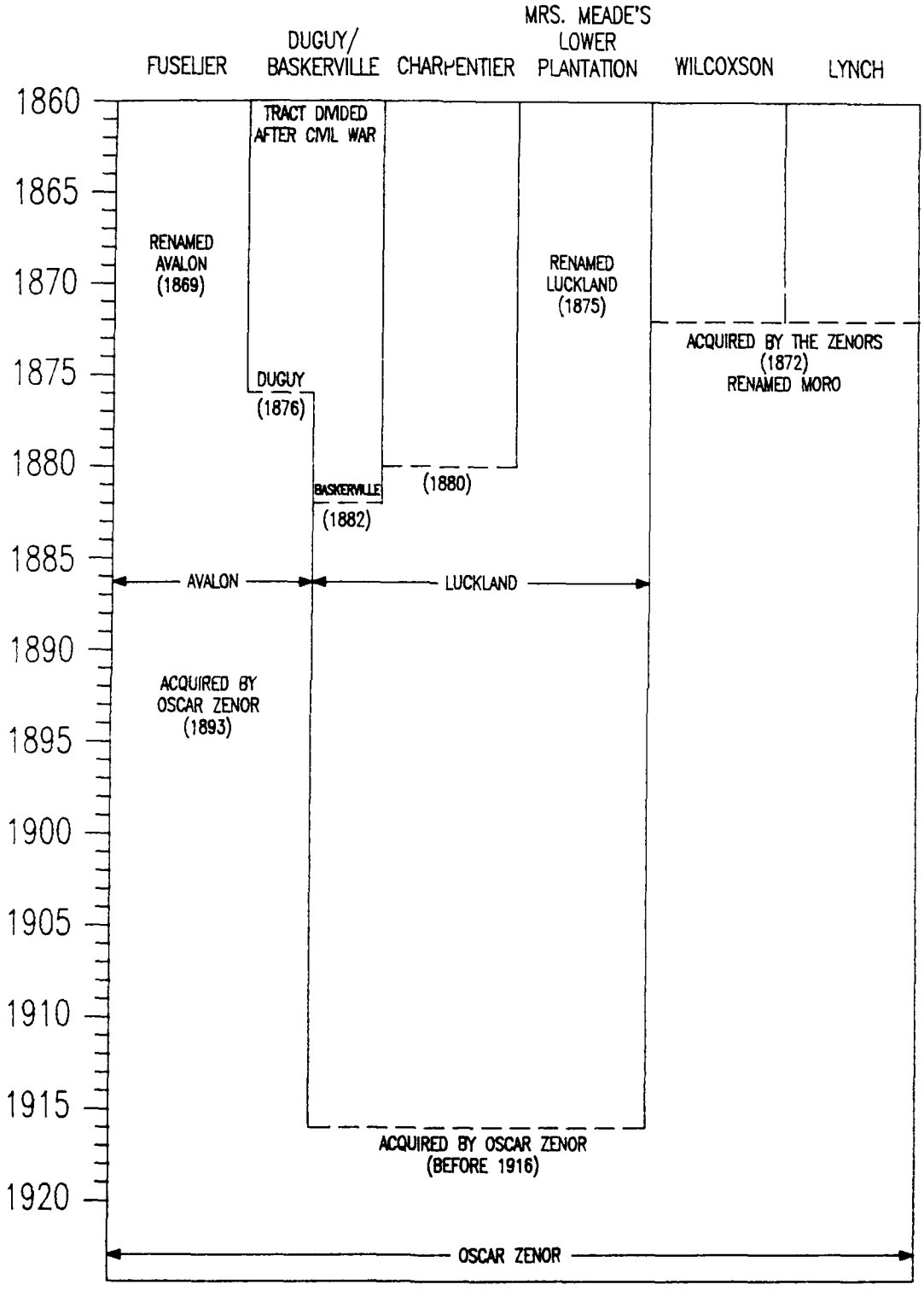


Figure 4. Consolidation of Plantations in the Project Area, 1862-1920

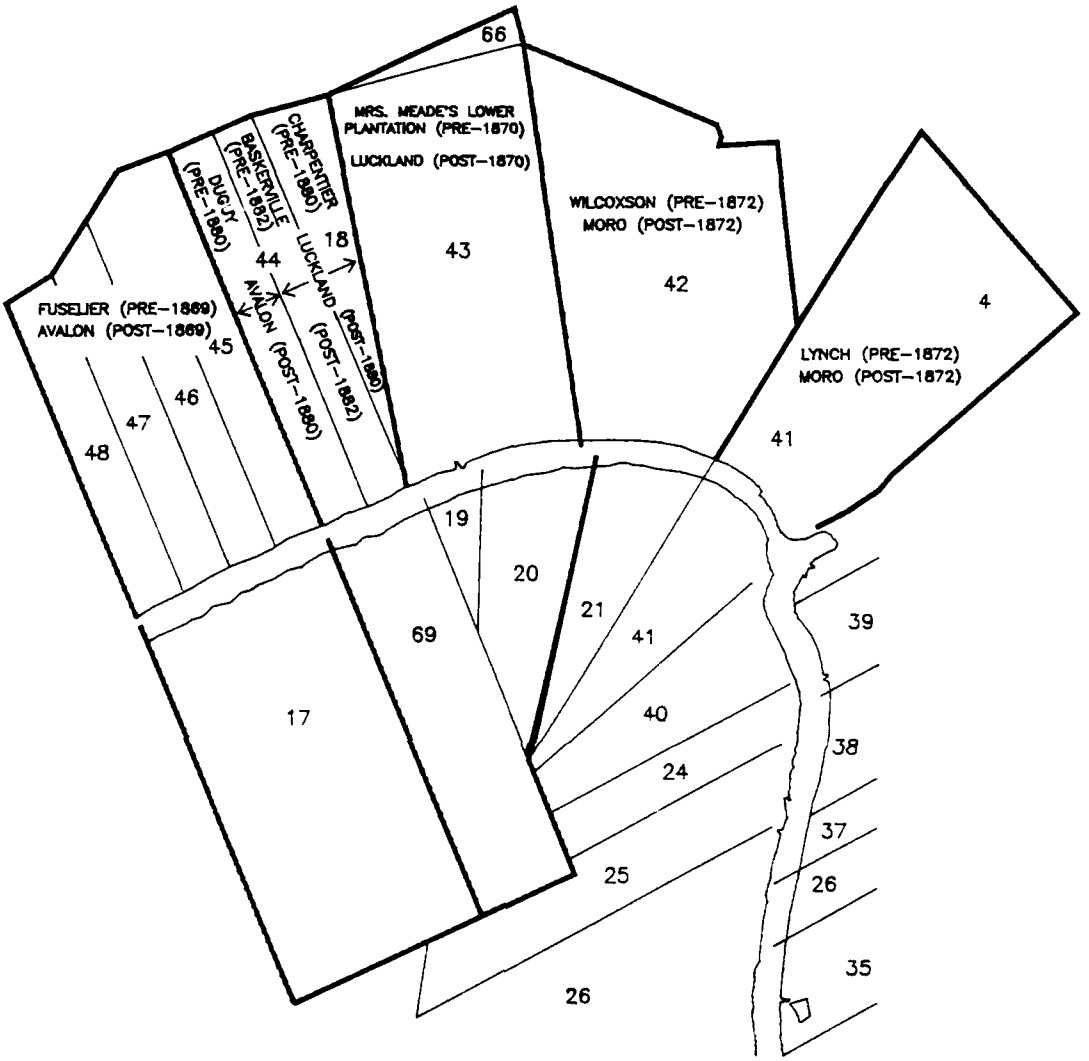


Figure 5. Location of Plantations in the Project Area

The Project Area 1869 - 1880

In 1869, when the annual chronicle of sugar production, *Statement of the Sugar Crop*, resumed publication it listed only one planter operating in the project area, Dr. Henry J. Sanders, a native Louisianan who retained enough capital to give up medicine and enter the sugar industry. Destined to become one of the major producers of sugar in St. Mary Parish, Sanders typified the postbellum planter, in that he was a newcomer to the project area, and he brought with him fresh capital. The antebellum planters, despite their attempts, never succeeded in re-establishing the prosperity seen throughout the project area before the Civil War.

Avalon Plantation 1869 - 1880

By 1870, the *Statement of the Sugar Crop* chronicled more economic activity in the project area. The leading antebellum planter along the Lower Teche, Pinckney C. Bethel, assumed the proprietorship of Alfred A. Fuselier's former plantation, which emerged after the war as Avalon Plantation. A wooden sugar house with steam and kettles stood at Avalon (Bouchereau 1870:67), but it is unclear whether this structure survived the Civil War intact. Howell's chart of Bayou Teche depicts this sugar house on the left bank of the bayou (Figure 6). Bethel's output in that year is difficult to assess since he combined his operations at Avalon with the other properties he supervised. Although Bethel had been one of the largest and most affluent sugar planters in antebellum Louisiana, he was far less successful in the postbellum era.

In 1871, Joseph H. Acklen acquired Avalon Plantation. A newcomer to the area, he was an affluent young Tennessean who had not participated in the Civil War. He made no agricultural innovations at Avalon, but he added to its acreage by acquiring adjoining property on the left descending bank of the Teche and across the bayou on the right bank (Figures 4 and 5). He utilized the same wooden sugar house at Avalon without modification.

Although Acklen revived agricultural production at Avalon, he is best known as a political leader during Reconstruction. As a Democrat and a spokesman for the native white Louisianan, he successfully contested the Republican candidate for Congress in 1878 and won a seat in the House of Representatives. At that time, he gave up planting in the project area (Conrad 1988:4). Successive proprietors modified the Avalon sugar house, but they used the same wooden structure for many years to come.

Luckland Plantation 1869 - 1880

In 1869, Dr. Henry Sanders acquired Mrs. David Meade's lower plantation on the left bank of the Teche. He used the brick, slate-roofed sugar house that is depicted in Howell's chart of the Teche in 1870 (Figure 6). The chart incorrectly spells the doctor's name as "Saunders." Besides the sugar house, which may have been the same antebellum structure Mrs. Meade had used, Howell's chart also showed a landing and the Sanders' dwelling house upstream from the sugar house and on the left bank. Both landing and dwelling appear to be in the present project area. Sanders probably constructed the house or converted an overseer's cottage; Mrs. Meade, however, did not reside on her lower holdings. About 1875, Dr. Sanders gave his plantation the name of Luckland. Absorbing several smaller properties on both the right and left bank of the Teche (Figures 4 and 5), the doctor had become by 1880 the preeminent sugar producer in the project area.

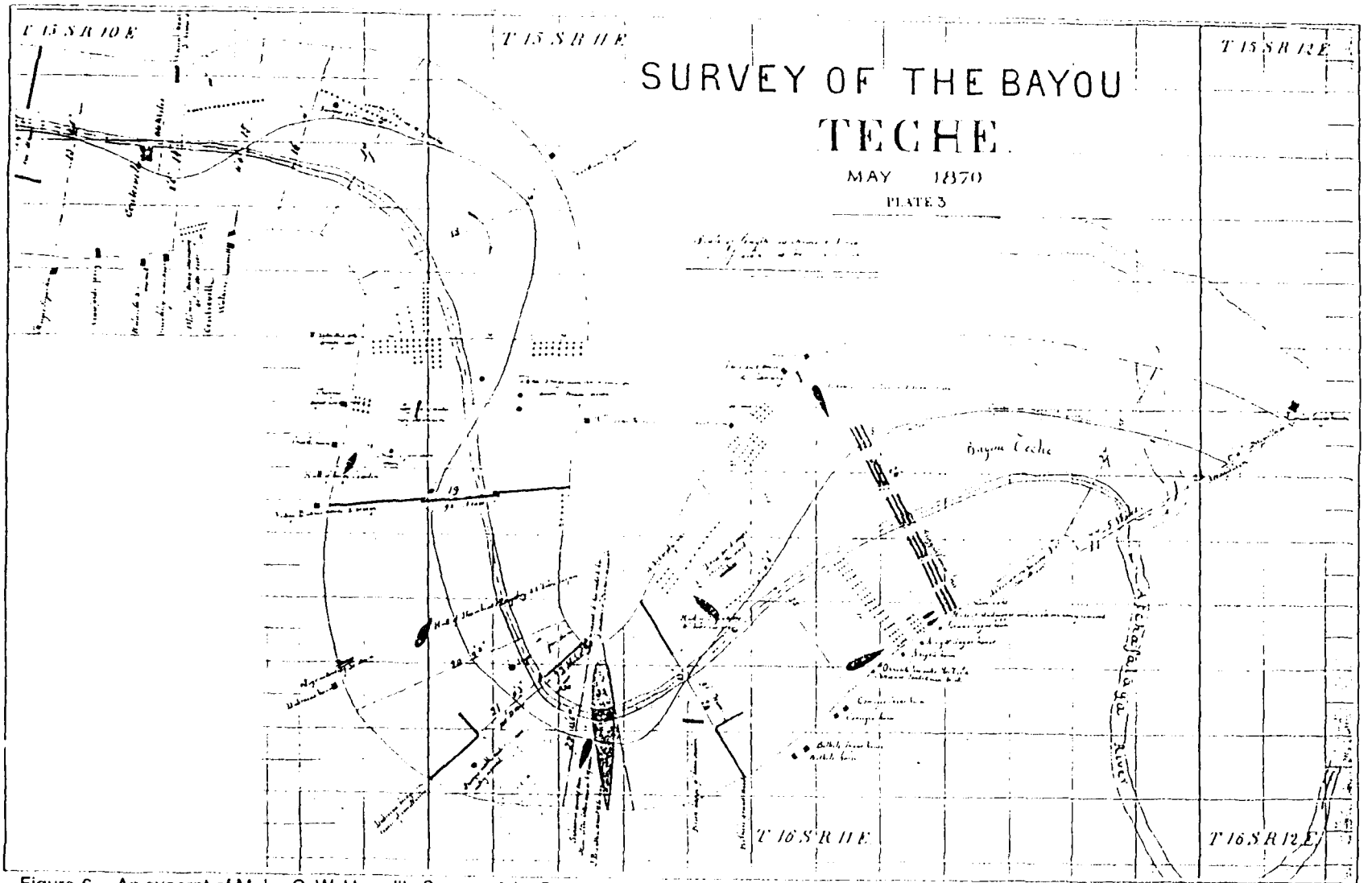


Figure 6. An excerpt of Major C. W. Howell's *Survey of the Bayou Teche*, 1870, Plate 3, (Cartographic Division, National Archives, Records Group 77, Civil Works Map File, M 137-1).

Moro Plantation 1869 - 1880

The antebellum plantations of Thomas Wilcoxson and Richard Lynch suffered severe damage as a result of the battle of Bisland. The conflict destroyed the sugar houses of both plantations; Wilcoxson's residence burned to the ground. By 1870, Richard Lynch's heirs rebuilt the wooden sugar house at Lynch's Point. The structure, which used steam and kettles, is depicted in Howell's chart of that year (Figure 6). Shortly thereafter, Thomas Wilcoxson replaced his destroyed sugar house with a new wooden structure that utilized horse power; he produced 93 hogsheads of sugar in 1871 (Bouchereau 1871:54). Neither Wilcoxson nor Lynch's heirs were able to obtain a yield anywhere near their prewar production. Consequently, in 1872, G. G. Zenor was able to acquire Wilcoxson's and Lynch's property, which he then combined into an enterprise he named Moro Plantation.

The Zenor family originated in Kentucky and migrated to the Natchez region where G. G. Zenor was born; they were destined to become the preeminent planters of the project area. After helping his father plant in Concordia Parish, Louisiana, Zenor moved to his wife's home, St. Mary Parish, in 1868. He too was a newcomer to the postbellum project area; he also seemed to possess capital. G. G. Zenor had three sons: Webb, Oscar, and George (Perrin 1891:388).

In 1873, the rebuilt wooden sugar house at Wilcoxson's former holdings, the upper part of Moro Plantation, burned again (Bouchereau 1874:70). After this loss, the Zenors used the sugar house at Lynch's Point, on the lower part of Moro Plantation, until 1880 when they transferred sugar production from their fields to River Side, a Zenor family holding located below the project area on the Atchafalaya River near Patterson, Louisiana.

The Project Area 1880 - 1917

The period from 1880 to 1917, America's entrance into World War I, was a period of extensive consolidation (Figures 4 and 5). By 1880, sugar plantations had recovered from the Civil War; the annual chronicle, *Statement of the Sugar Crop,* no longer felt it necessary to compare each yearly crop with the bountiful pre-invasion yield of 1862.

This was not, however, an era of uninterrupted prosperity; several disasters occurred. A severe flood in May 1882 inundated the vicinity, destroyed the crops, forced the black laborers to flee from their cabins, and left at least one planter's house in 11 inches of standing water (Marquette 1940:537). No more specific details regarding the extent of damage to the project area survive, but it seems probable that the flood weakened already fragile structures such as cabins and outbuildings located in the vicinity. Another severe flood occurred in 1912. An additional problem was plant disease, particularly mosaic, which swept through the canefields with devastating effect, especially in the early twentieth century.

Avalon Plantation 1880 - 1917

After his election to Congress in 1878, Joseph Acklen sold his property; it eventually came into the hands of John Henderson, who was proprietor during the flood of 1882. He had no yield during that season (Bouchereau 1883:13). Henderson produced refined sugar in the 1880s but not until 1893 did Avalon assume its position of leadership in the project area. In that year, the plantation was acquired by Oscar and Webb Zenor, G. G. Zenor's sons (Bouchereau 1894:8). They listed the size of Avalon as 1,300 acres (Glass 1898:75). About 1,000 acres were planted in cane (Gilmore 1917:38-40). Converting the sugar house to double effects, vacuum pans, and centrifugals, the Zenors made Avalon a leading factory for the manufacture of sugar, often producing more than 3,000,000 pounds annually, a major operation in Louisiana. They enlarged the basic, possibly antebellum, wooden structure of the sugar house with masonry additions

and continued to use it until the World War. In 1917, the year of America's entry into the world conflict, Oscar Zenor produced almost 6,000,000 pounds of sugar at Avalon Plantation.

Luckland Plantation 1880 - 1917

Dr. Henry Sanders created Luckland Plantation from the nucleus of Mrs. Meade's lower holdings. He continued to add to the tract, purchasing the former Baskerville plantation in 1882. The flood of that year seems to have put the Baskerville tract out of business, but Sanders somehow managed to produce 64 hogsheads of sugar from Luckland Plantation (Bouchereau 1883:13). In 1886, Sanders consolidated sugar manufacture into one factory on Luckland Plantation's left bank and remodelled the brick, possibly antebellum sugar house by adding wooden additions. He modified the machinery to include steam kettles, vacuum pans, and centrifugals (Bouchereau 1887:8). By 1895, he had constructed (probably in the same location) a new sugar house of wood and iron and converted his machinery to double effects, vacuum pans, and centrifugals. In that year, he manufactured more than 3,000,000 pounds of sugar, which placed Luckland in the category of a major sugar processor in the state (Bouchereau 1896:8). Luckland Plantation at the time consisted of only 572 acres (Glass 1898:73).

Dr. Sanders died early in the twentieth century. His family thereafter leased Luckland Plantation, but it never prospered as it did under the doctor's leadership. By 1912, it produced less than 2,000,000 pounds of sugar. This was far less than its competitors. In that year, Avalon, the enterprise of the Zenors, produced almost 4,000,000 pounds; Shadyside, a corporate giant up the bayou (and outside the project area), manufactured 8,500,000 pounds. In the age of big business, it was clear that Luckland could not continue to compete. By 1917, the Zenors had acquired Luckland, shut down the processing plant, and transferred operations to Avalon. With the acquisition of Luckland, Oscar Zenor became the proprietor of the entire project area.

Moro Plantation 1880 - 1917

The Zenor family created Moro Plantation from the Wilcoxson and Lynch holdings. Until 1885, planting at Moro occupied both the right and left descending banks of the Teche. Thereafter, the Zenors planted only on the left bank. The Wilcoxson and Lynch tracts extended across the bayou, but the Zenors appear to have sold all the right bank property by 1893. An official map of St. Mary Parish (1893) indicated a number of small proprietors occupying the right bank of the former Wilcoxson and Lynch holdings. In 1898, Moro Plantation itself consisted of 295 acres (Glass 1898:75).

In 1880, the Zenors transferred sugar production of the cane from Moro's fields to River Side, their plantation below the project area on the Atchafalaya River near Patterson. In the 1880s, the family used the sugar house at Moro intermittently. In 1893, however, when the family acquired Avalon Plantation, the Zenors abandoned sugar production at Moro altogether; thereafter, it was never the site of processing. The annual *Statement of the Sugar Crop* continued to list the wooden sugar house at Moro until 1901, which seems to indicate that it remained a standing structure, although not in use. Nevertheless, Moro Plantation remained a source of cane for the Zenor family's various enterprises.

The Project Area in the World War and its Aftermath 1917 - 1944

Just before World War I, a Democratic administration in Washington D.C., that of Woodrow Wilson, abolished the tariff which protected the Louisiana sugar industry from international competition, but the onset of world conflict appeared to inaugurate a new golden age in the canefields of Louisiana. In 1916, on the eve of America's entry into world war, Louisiana's sugar planters harvested an unusually large crop of cane,

the international conflict promoted higher prices for sugar, and future prospects seemed bright. As a result of the war, Congress restored the protective tariff. Unfortunately for the Louisiana planter, the Wilson administration imposed wartime price controls that limited the profits of the sugar industry.

The wartime economy also provided workers an alternative to labor in the canefields -- better paying jobs in an urban environment. The planter found the costs of labor to be rising and the work force more unstable. This situation did not bode well for the future.

At the Armistice, when the federal government removed wartime price controls, the price of sugar sky-rocketed upward for a few months, but the world market for sugar was in complete chaos. Soon the price of sugar collapsed and caught planters, manufacturers, and bankers by surprise. Louisiana canegrowers and sugar manufacturers entered the 1920s in a severe economic depression from which many of them would not recover.

The economic decline actually increased the tendency toward consolidation of sugar factories. At the same time, however, the canegrowers' woes, especially their labor problems, resulted in the breakup of the large cane plantations. Even though the processing plants increased in size, the agricultural units became smaller (Sitterson 1953:343-360).

Avalon Plantation 1917 - 1944

A map of Avalon, dated August 28, 1920, depicts the plantation at the zenith of its success as a processing center for sugar. Avalon at this time had about 1000 acres planted in cane (Gilmore 1917:38-40). The waterfront of the plantation appeared to be more like a tiny village than a plantation. A bridge stretched across Bayou Teche, and extensive wharfage stood along the bayou with three piers leading to and from various points of the processing plant.

Avalon Sugar Company, Incorporated, owned at this time a sternwheel steamboat, the *Peri*, built in Berwick, Louisiana in 1893. The vessel measured 102 feet in length, 25.5 feet in width, and had a 4 foot depth of hull. In 1916, a crew of 16 manned the steamboat; its homeport was Morgan City (Bureau of Navigation 1914). Oscar Zenor eventually sold the *Peri* when hard times came (Guarisco Interview 1990).

According to the map of 1920, Avalon Plantation contained about 34 structures (Figure 7). Besides the sugar factory, there were warehouses, sheds, storehouses, quarters for the workers, and a plantation store. Unfortunately for the Zenors, however, the collapse of sugar prices in 1920 severely affected operations at their plantation. Although Oscar Zenor had manufactured almost 6,000,000 pounds of sugar in 1917 at Avalon, the plantation had ceased to manufacture sugar by 1923.

An aerial photograph taken by the Corps of Engineers shows Avalon Plantation in 1930 (Figure 8), a decade after the map of 1920. Cane growers and sugar manufacturers had experienced economic difficulties during the 1920s, and the worldwide economic depression that began in October 1929 multiplied their problems. Nevertheless, a comparison of the aerial photograph of 1930 with the map of 1920 shows that many of the structures at Avalon survived the ten year period. Only one structure seems to have disappeared, an oblong building that stood in the bend of the road where it turns to the right after crossing the bridge across the bayou. The bridge itself remained intact; the photograph shows its swinging gate open to allow vessels an avenue to pass through. The extensive wharfage has, however, disappeared. Where three piers once served as arteries of the processing plant, only one pier remained. The busy area between the sugar factory and the bayou appears to have fallen into disuse with the closing of the factory in 1923.

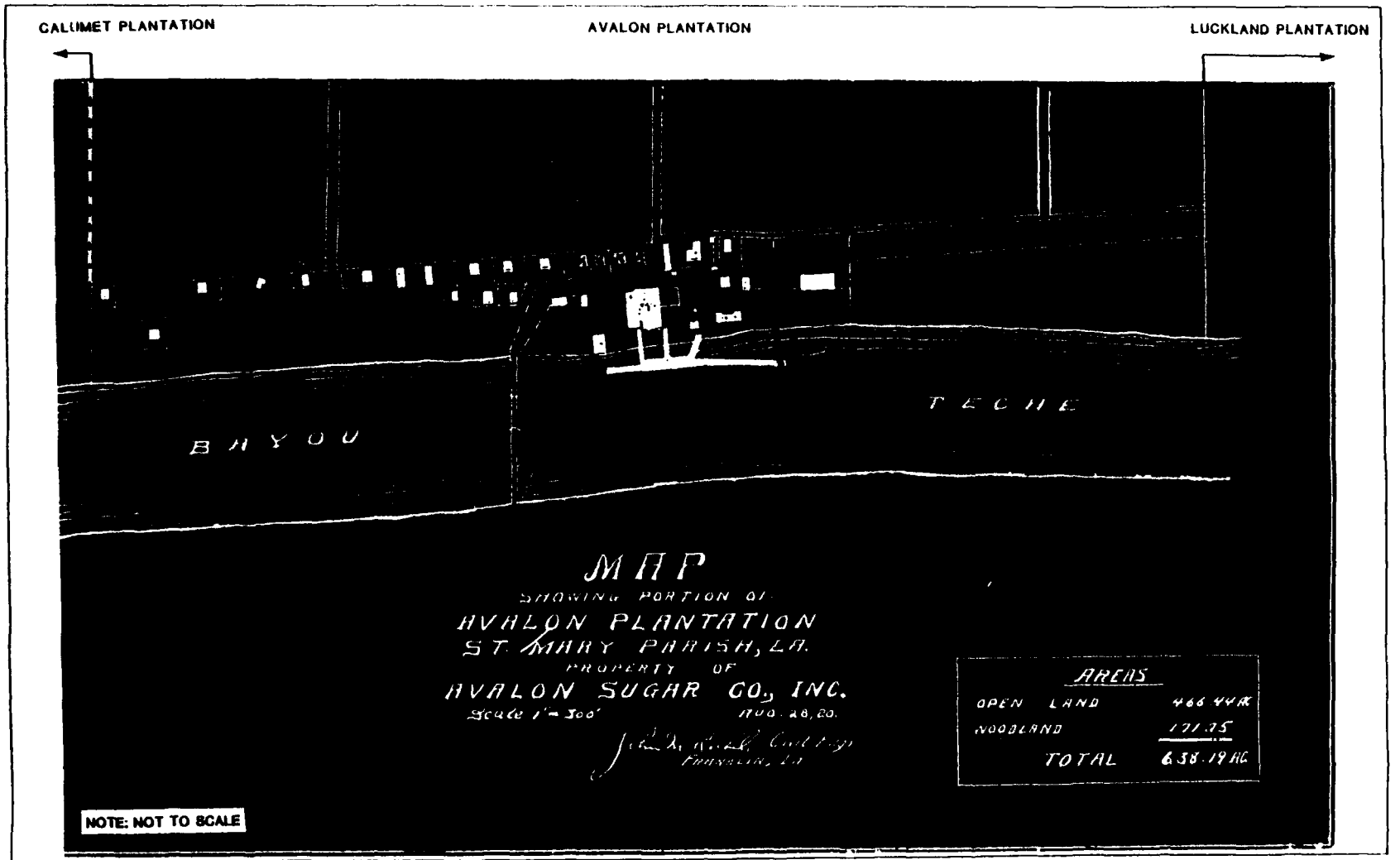


Figure 7. *Map showing portion of Avalon Plantation, St. Mary Parish, LA., property of Avalon Sugar Co., Inc.*, 1920 (St. Mary Parish Courthouse, Clerk of Court Office, Map Book 1).

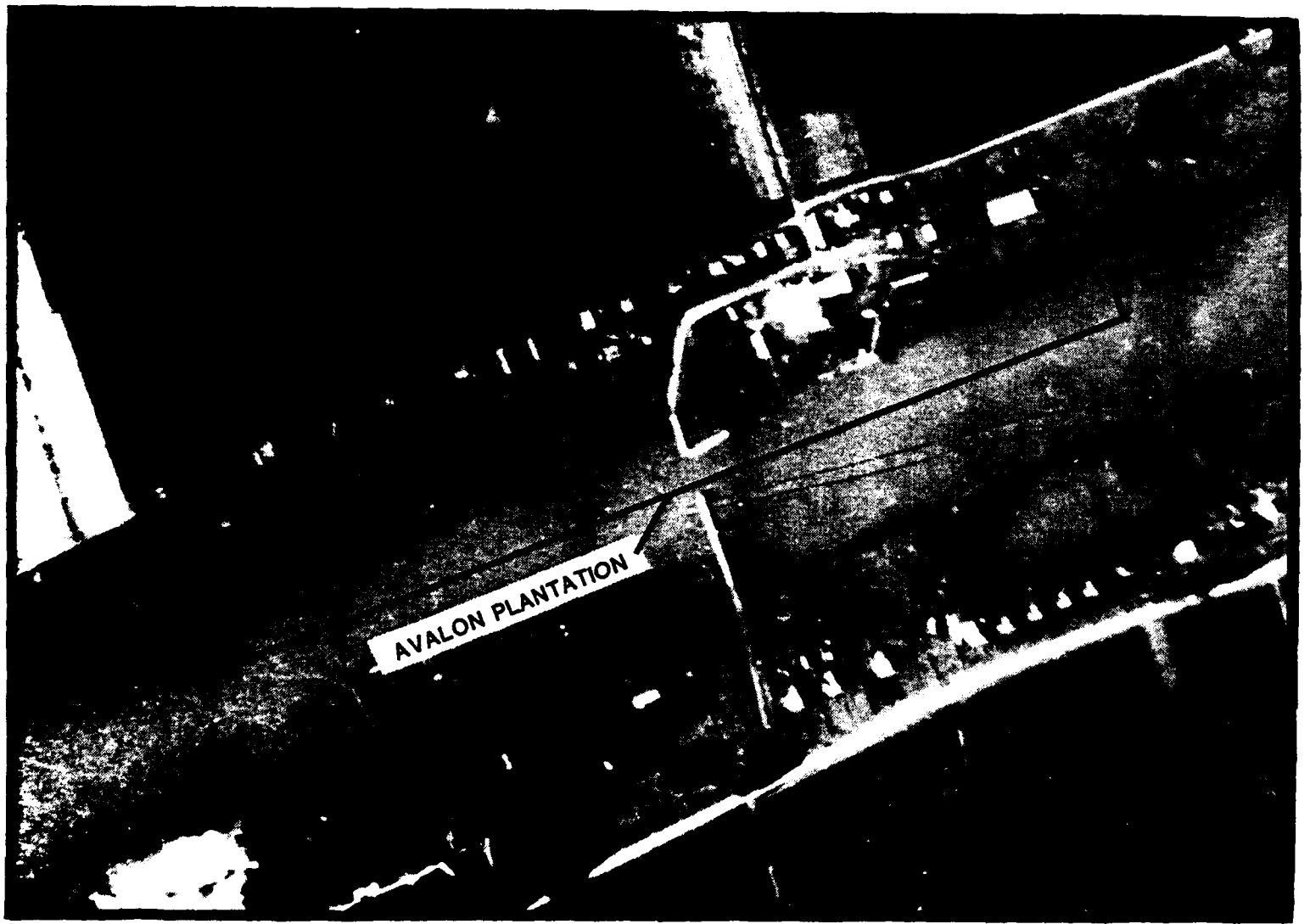


Figure 8. An excerpt, showing Avalon Plantation, from Corps of Engineers' aerial photograph, Bayou Teche, 1930

In 1944, towards the close of World War II, the Corps of Engineers took another aerial photograph that showed Avalon Plantation (Figure 9). Dramatic changes had taken place. The bridge across the Teche had vanished, and so had the row of structures, probably workers' cabins, that stood along the road paralleling the bayou. The sugar factory had disappeared, the wharfage and piers apparently rotted and washed away, and the waterfront was receding into brush and undergrowth. Of the approximately 34 structures of 1920, only four remained in 1944. Some of the formerly cultivated fields found away from the river appeared to be returning to their natural state.

Luckland Plantation 1917 - 1944

Just before American entry into the First World War, the Zenors acquired Luckland Plantation from the heirs of Dr. Henry Sanders. The new owners shut down Luckland's sugar processing plant and transferred its operations to Avalon.

The plantation felt the effects of the collapse of the price of sugar in the postwar world, and the depression of 1929 compounded Luckland's troubles. The Corps of Engineers' aerial photograph of 1930 depicts the plantation (Figure 10). A bridge still spanned the Teche that year, and the wood and iron sugar house Dr. Sanders built in 1895 remained. The sugar house became a syrup factory, producing a brown granulation that was then shipped to a refinery outside the project area to be made into white sugar (La Violette Interview 1991; Accardo Interview 1991). The aerial photograph indicates little activity around the former sugar factory, but the fields of cane appear to be carefully maintained. A total of about 30 structures still were evident; most appeared to be workers' cabins situated along the natural levee.

The aerial photograph of 1930 shows the landing and a slip of water just visible slightly upstream of the bridge. Their general appearance indicates that they have begun to deteriorate. A comparison of Howell's chart of 1870 (Figure 6) with the 1930 photograph (Figure 10) shows the sugar house and the landing much closer together in the twentieth century. This might be expected since Dr. Sanders, after 1880, became involved in processing sugar not only from his own fields but also from those of his neighbors.

Howell's chart of 1870 depicted Dr. Sanders' residence upstream of the sugar house and closer to the left descending bank of the bayou (Figure 6). In the photograph of 1930 (Figure 10), a structure situated in a clump of trees and upstream from the landing may be the dwelling Dr. Sanders occupied in 1870 or a replacement at the same site. A current lessee of the Luckland project area remembers a large, seven room house on the crest of the natural levee in the approximate location (La Violette Interview 1991). The building stood within the present project area.

By 1944, most of Luckland Plantation's structures and the bridge across the Teche had been swept away (Figure 11). Oscar Zenor died in 1942 (Hall Interview 1991). That same year the sugar house at Luckland had been taken down and sold for scrap metal (La Violette Interview 1991). At sites where buildings once stood, the earth showed evidence of dredging or bulldozing. Only about four structures remained. One of these was the building in a clump of trees upstream from the landing, possibly Dr. Sanders' dwelling of 1870. The landing had disappeared, and the slip where boats once tied up appears to be choked with weeds. Every aspect of the plantation gave testimony to abandonment and neglect.

Moro Plantation 1917 - 1944

Moro Plantation, the earliest acquisition of the Zenors in the project area, ceased to manufacture sugar by 1893. It remained a cane plantation that supported sugar factories owned by the Zenors but located elsewhere. After World War I, Moro Plantation shared the general decline in the Zenor family's fortunes in canegrowing and sugar manufacture.

Figure 9. An excerpt, showing Avalon Plantation, from Corps of Engineers' aerial photograph, Bayou Teche, 1944

Figure 10. An excerpt, showing Luckland Plantation, from Corps of Engineers' aerial photograph, Bayou Teche, 1930


LUCKLAND PLANTATION

Figure 11. An excerpt, showing Luckland Plantation, from Corps of Engineers' aerial photograph, Bayou Teche, 1944

An aerial photograph, taken by the Corps of Engineers, shows Moro Plantation in 1930, just after a worldwide depression capped a decade of trouble in the canefields (Figure 12). Although slightly blurred, the photograph indicates about 16 structures on the plantation. Most are smaller than their counterparts at Luckland and Avalon Plantations. The buildings appear to be workers' cabins, situated along the natural levee. Since Moro's operations were confined to the left descending bank of the Teche, no bridge existed across the bayou. A small landing appears to be in evidence, but it could not accommodate any large vessels. Moro had not served as a processing center for sugar in the twentieth century. No structure clearly identifiable as a sugar house can be seen in the photograph. The canefields, however, are neatly bordered and give evidence of careful cultivation.

An aerial photograph of 1944 shows Moro Plantation as a desolate, uninhabited area (Figure 13). Not a single building remained standing. The workers' cabins have been razed; their former sites have been dredged. The landing is overgrown with weeds and underbrush. Trees grew along the waterfront, particularly in the area of Lynch's Point. Even the fields seem less carefully maintained.

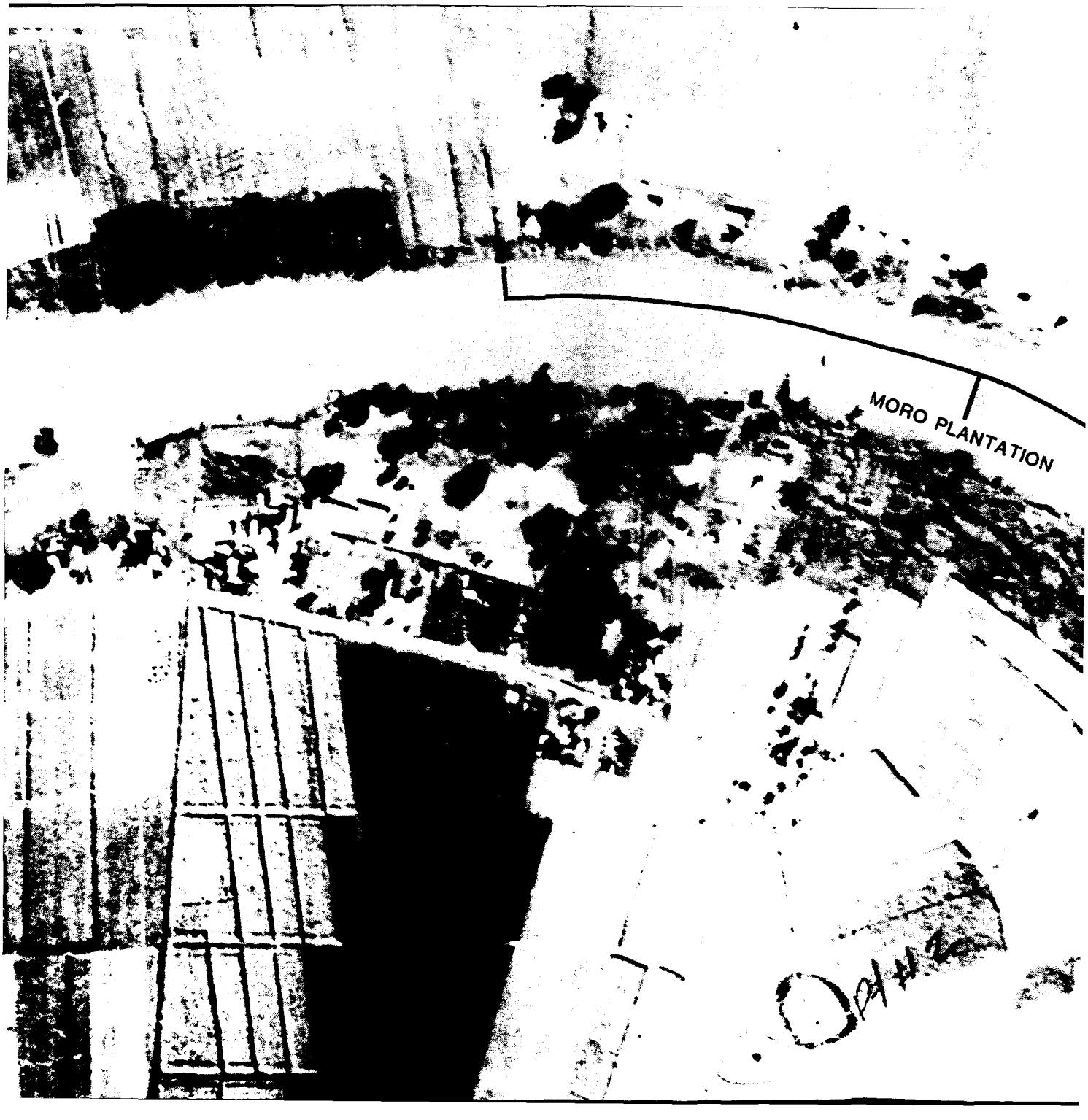
The Bourg Farm ca. 1880 - 1944

This narrative deals separately with the Bourg farm since it is outside the perimeter of the enterprises of the Zenor family. The farm is situated in Section 41 on the right descending bank of the Teche; it once was part of Richard Lynch's antebellum plantation. When G. G. Zenor acquired the Lynch holdings in 1872, he incorporated the acreage into Moro Plantation. Nevertheless, the Zenors soon began to dispose of the former Lynch property on the right bank. By 1885, the Zenors planted Moro on the left bank only (Bouchereau 1886:11). The right bank of Lynch's former plantation was taken over by small farmers who planted cane but did not process it. At no time did the *Statement of the Sugar Crop* list a sugar factory at the site. By 1893, the official map of St. Mary Parish listed the occupants of the right bank of Section 41 as A. Bourg and E. Bourg (Figure 14).

Like many small farmers the Bourgs are difficult to trace. Because the large planter left more evidence of his work, he may occupy more than his fair share of the historical accounts of the period. A. and E. Bourg were probably Alce and Edmund Bourg, brothers born in 1848 and 1855, the children of a widow who described herself in the census of 1860 as a planter. She had real estate valued in that year at only $4,000.00. Her personal property was worth $7,000.00, indicating that she owned a few slaves (Businelle 1986:38).

The Bourg holdings on the right bank included a small landing. Sometime, probably early in the twentieth century, a house was erected on the site. This dwelling is depicted in an aerial photograph taken by the Corps of Engineers in 1930 (Figure 12). No workers' cabins are evident on the farm; the only other structure appears to be some kind of barn or shed.

Another Corps of Engineers' aerial photograph shows the Bourg farm near the close of World War II (Figure 13). The house still stands, but the acreage in cultivation has diminished, and the farm has the appearance of neglect. The landing is still present, but no other structure is visible.


MORO PLANTATION

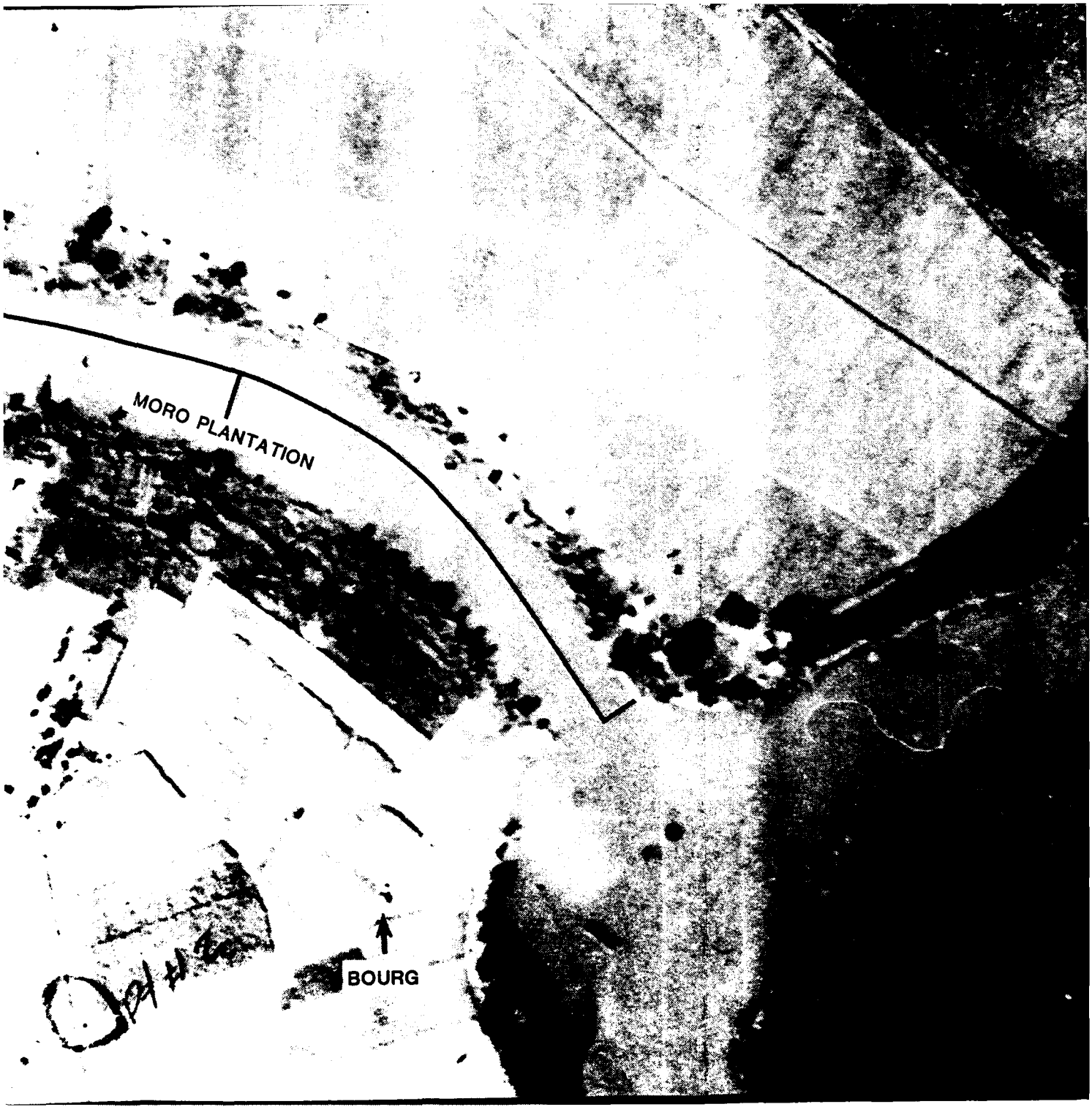

MORO PLANTATION
BOURG

Figure 13. An excerpt, showing Moro Plantation and the Bourg Farm, from Corps of Engineers' aerial photograph, Bayou Teche, 1944

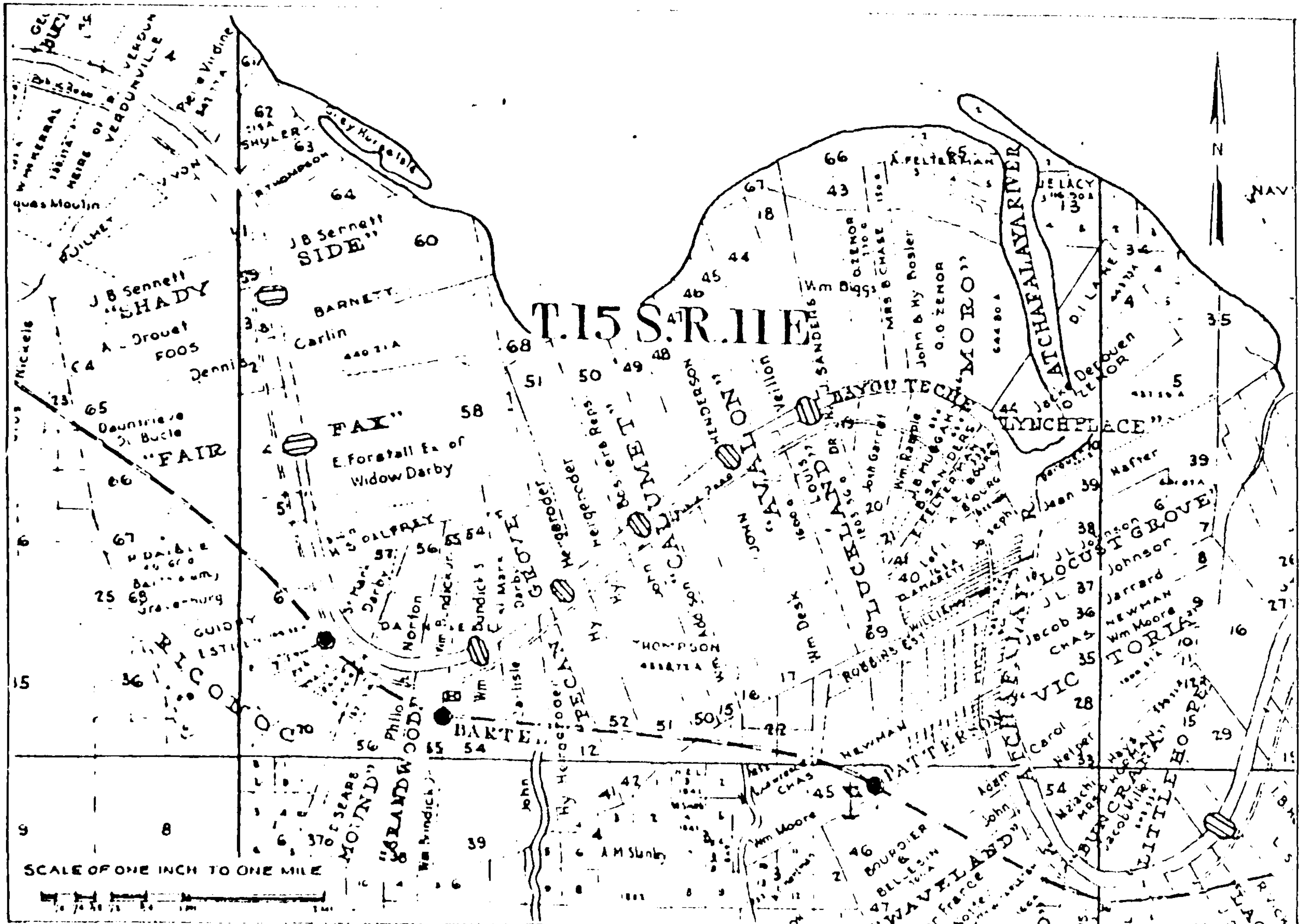


Figure 14 Excerpt from F. H. Waddill, *Official Map of the Parish of St. Mary, Louisiana and Portion of Adjoining Parishes*, 1893 (National Archives, Cartographic Division)

CHAPTER III

FIELD METHODS

Archeological field investigations were conducted in six project areas (Figure 1). Investigations consisted of evaluatory testing at three site areas identified during the 1990 field investigations (Goodwin, Hinks et al. 1991): Moro Plantation (16SMY73); the western portions of Luckland Plantation (16SMY71); Avalon Plantation (16SMY70); and, testing in three areas that had not been surveyed for cultural resources prior to the current investigation. Field methods utilized during survey and testing are discussed below.

Site Testing within the Previously Assessed 1990 Survey Areas

The three previously identified project areas were assessed through shovel testing, limited auger testing, excavating of test units and backhoe trenches, and mapping. Survey transects, spaced at 10 m intervals, were established within each project area. An "A" suffix was added to the transect designation to differentiate between 1990 and 1991 survey transects. Shovel tests were excavated at 20 m intervals along each transect; shovel tests placed along adjacent transects were offset. Each shovel test measured 30 cm in diameter, and each was excavated to sterile subsoil or until water was encountered. Shovel test fill was screened through 0.6 cm (0.25 in) wire mesh to ensure artifact recovery. Clays and excessively wet soils were hand-sifted for artifacts. Each shovel test was backfilled immediately upon completion of the archeological recordation process. Some test locations were not excavated because of standing water or extensive disturbance.

Following shovel testing at each of the three project areas, a more intensive program was initiated to define better the nature of nine artifact concentrations identified during the initial shovel test sequence. A datum was established at each concentration, and shovel tests were excavated at 5 m intervals along rays extending out from datum in each cardinal direction. In addition, each concentration was probed to gather supplemental data about the area's subsurface deposits. A sketch of each concentration was prepared; these subsequently were incorporated into the overall site plan.

A total of eight 1 x 2 m excavation units were placed on a north-south or east-west axis within each project area. Unit placement was based on data collected during shovel testing and surface reconnaissance, on probing, and on historic photographs and plans. Each unit was excavated following the overall natural stratigraphy of the site area; 10 cm levels were excavated within strata to provide more precise vertical control. Excavated soils were screened through 0.6 cm (0.25 in) wire mesh to ensure artifact recovery. The stratigraphic soil profile of each unit then was recorded utilizing Munsell Soil Color Charts and a textural triangle. All units were photographed, mapped and immediately backfilled upon completion of the archeological recordation process.

One prehistoric archeological site, Bosler (16SMY77), was identified within the limits of historic Moro Plantation (16SMY73). Additional testing conducted at this site included excavation of 20 auger tests, and one 50 cm^2 unit. The stratigraphic soil profile of each auger test was recorded. In addition, the relative surface elevation of each auger test was recorded using a transit tied to an arbitrary site datum. The unit was excavated by natural stratigraphy in a manner similar to that previously described above. A 2 liter soil sample, for flotation, was collected from each 10 cm level falling above the subsoil.

Seven trenches were excavated and two areas were scraped using a backhoe during the course of this fieldwork. These excavations were designed to locate archeological deposits and in situ features. The trenches were excavated with a 46 cm (18 in) bucket and they extended into sterile subsoil. Each

trench was examined carefully for archeological deposits and features; a stratigraphic soil profile of each trench then was drawn. All trenches were photographed. Two areas were scraped using a backhoe; these areas were placed behind a house location on Luckland Plantation in an attempt to expose features such as a well, privy, or fenceline. No features were located within these areas. All backhoe excavations were filled following completion of the recordation process.

Finally, site plans were prepared for these three project areas. At Moro Plantation, the plan was based on pacing, and use of a compass and a 50 m tape. At Luckland Plantation and Avalon Plantation, transit maps were prepared depicting each project area; the map was tied to the plantation sugar house remains. In addition, bisections of the natural levee at both Luckland and Avalon were prepared. At Luckland Plantation, these bisections crossed the southwest corner of each excavation unit. At Avalon, the bisection line was placed a short distance west of the one excavated unit.

Investigations within Previously Unsurveyed Areas

In accordance with Modification 001 to the Scope of Services, three previously unsurveyed areas were investigated for cultural resources. These areas were designated Areas A, B, and C (Figure 1). They were investigated through a visual reconnaissance supplemented with systematic subsurface testing placed along linear survey transects. Within Areas A and C, shovel tests were placed at 50 m intervals along transects spaced 20 m apart; shovel tests along adjacent transects were offset. Within Area B, shovel tests were placed at 20 m intervals along either side of Zenor Road; additional shovel tests were excavated at a previously unidentified brick concentration. Area A transects were oriented along a $155^{\circ}/335^{\circ}$ axis; Area C transects extended along an $81^{\circ}/261^{\circ}$ axis. The two transects placed within Area B were oriented parallel to Zenor Road. Each shovel test measured approximately 30 cm in diameter, and each extended into culturally sterile subsoil. Where possible, excavated soils were screened through 0.6 cm (0.25 in) wire mesh. The majority of the soils, however, were wet, plastic soils; these soils were hand-sifted to ensure artifact recovery. Observed artifacts were described and left in place; a sample of diagnostic artifacts, however, was collected from each site. Stratigraphic soil profiles of all shovel tests were drawn, and each shovel test was backfilled upon completion of the archeological recordation process. Shovel tests were not excavated in areas containing standing water. Finally, eight systematically placed auger tests, each at least 1 m deep, were excavated and recorded within Area B.

Portions of three archeological sites were located within these three survey areas. Area A contained part of Avalon Plantation (16SMY70); a portion of Moro Plantation (16SMY73) was located within Area B; and, Bourg (16SMY78), an historic house site, extended into Area C. Data pertaining to each site was recorded on the project maps. Plan drawings also were prepared of Bourg (16SMY78) and that portion of Moro Plantation falling within Area B. Finally, the plan of Area B also included the location of a previously identified prehistoric four-mound ceremonial center, Atchafalaya Basin (16SMY10), which was situated at the mouth of Bayou Teche. The site lies approximately 160 m southeast of Area B. Photographs were taken of all three areas prior to completion of fieldwork.

CHAPTER IV

RESULTS OF THE FIELD INVESTIGATIONS

Introduction

Archeological investigations were conducted at six areas along Lower Bayou Teche (Figure 1). Additional testing was conducted within three areas where archeological sites were identified during the 1990 investigations (Goodwin, Hinks et al. 1991). These sites included Moro Plantation (16SMY73), and the western portions of Luckland Plantation (16SMY71) and Avalon Plantation (16SMY70) as defined by the 1990 field work. A previously unidentified prehistoric site, Bosler (16SMY77), was located within Moro Plantation. Field work at Moro Plantation and Bosler was designed to evaluate their quality of significance, while Luckland Plantation and Avalon Plantation testing was designed to define more tightly the boundaries of the portions of the sites that possess the quality of significance.

The three remaining areas, Areas A, B, and C, were investigated for archeological resources through intensive pedestrian survey augmented with systematic shovel testing; auger tests also were placed in Area B. Portions of three previously recorded archeological sites extend into these three areas: Area A contained a portion of Avalon Plantation (16SMY70); part of Moro Plantation (16SMY73) was located in Area B; and, sheet refuse from Bourg (16SMY78) was identified in Area C. Results of the field investigations for all six project areas are discussed below.

Moro Plantation (16SMY73)

During initial site testing at Moro Plantation (16SMY73), five survey transects, designated Transects 1A through 5A, were placed across the site (Figure 15). A total of 84 shovel tests were excavated. Based on surface reconnaissance and data collected during shovel testing, seven locations were selected for additional shovel testing. These included four concentrations of brick and other artifacts (Locations 1, 2, 6, and 7); containing a buried coal cinder deposit (Location 3); an in situ arrangement of vertical iron bars, pipes, and brick rubble and shell (Location 4); and, a prehistoric site (Location 5). An additional 111 shovel tests were placed within these seven areas.

Based on discussions with the Louisiana Division of Archaeology, the prehistoric site (Bosler 16SMY77) was assigned a separate state archeological site number, even though it was within the boundaries of the larger historic Moro Plantation (16SMY73). This site distinction was designed to simplify and to clarify resource management considerations. Archeological investigations at these two sites are discussed below. An additional component of Moro Plantation was identified within Area B, located approximately 350 m to the southeast; the significance of that component is presented later in this chapter.

During survey, six historic artifact concentrations (Locations 1 - 4, 6, and 7) were identified, shovel tested, and probed within the confines of Moro Plantation, as defined during the 1990 excavations (Goodwin, Hinks et al. 1991). Additional testing at Moro Plantation included excavation of two backhoe trenches and two 1 x 2 m units. Backhoe trenches were placed in Locations 2 and 6, while units were excavated in Locations 4 and 7 (Figure 15). Each location is discussed in turn below.

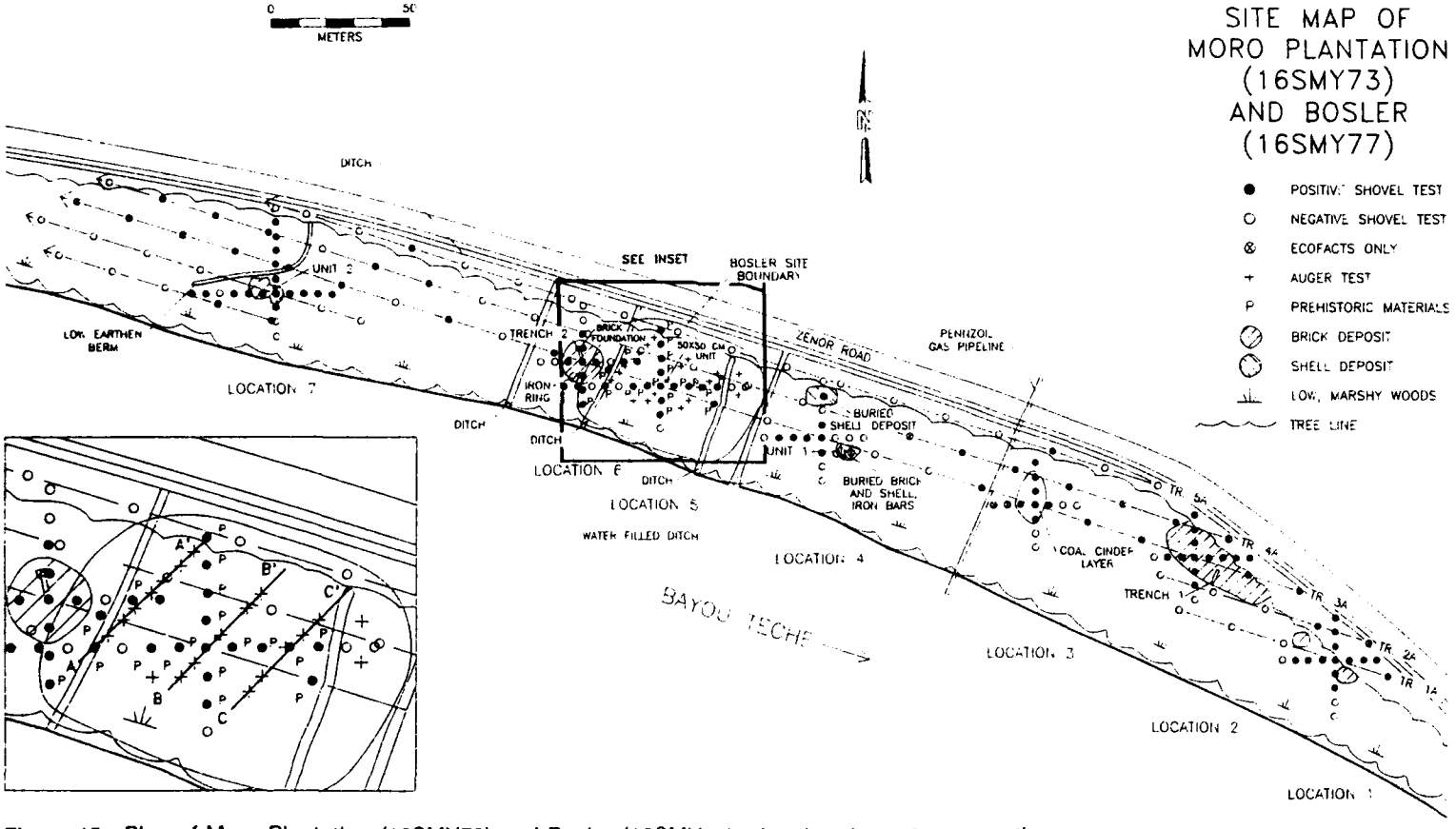


Figure 15. Plan of Moro Plantation (16SMY73) and Bosler (16SMY77), showing the 1991 excavations

Location 1

Location 1 consisted of two small concentrations of bricks and brick fragments located at the southwestern edge of a small rise, adjacent to the Zenor Road right-of-way (Figure 15). A total of 19 shovel tests were placed in the vicinity of Location 1; 14 of these contained historic artifacts, while an additional shovel test contained only shell and road gravel. Observed and recovered artifacts and ecofacts included whiteware, bottle glass, cut nails, an iron bolt, brick fragments, shell, coal, and road gravel. The majority of the positive shovel tests contained only brick, or brick and shell. No intact cultural deposits were observed in any of the shovel tests. In addition, probing in and around the two brick concentrations indicated a random distribution. The location and morphology of these concentrations suggested that the deposits lacked archeological integrity. No additional testing was conducted in Location 1.

Location 2

Location 2, a 45 m long concentration of brick and debris, was situated a short distance northwest of Location 1, and adjacent to the Zenor Road right-of-way (Figure 15). This concentration exhibited an irregular ground surface; the eroded southern edge was approximately 25-35 cm higher than the ground surface to the immediate south. Several animal burrows extended into the concentration, suggesting the brick and soil deposits were not tightly compacted. Observed brick included stiff-mud bricks and a few fire bricks; one partial fire brick was branded "...P. & Co." Machine-made bottle glass, iron stove fragments, a deteriorated enamelware pan, whiteware, and a nearly buried gallon paint can also were observed.

Twenty-four shovel tests were excavated at Location 2; 16 of these were positive; an additional shovel test contained only shell fragments. Artifacts and ecofacts observed and recovered during shovel testing included porcelain, whiteware, bottle glass, a porcelain button, cut nails, brass grommets, a plow blade, iron wire, plastic, brick, coal, charcoal, shell, and gravel. These artifacts generally dated from the early to mid-twentieth century. Neither shovel testing nor extensive probing of the concentration indicated the presence of in situ features.

One backhoe trench, Trench 1, was placed in the Location 2 brick concentration. This trench extended from the center of the concentration to its southern edge (Figure 15). It contained two soil strata. Stratum I consisted of 17-30 cm of 10YR 3/3 dark brown clay loam, mixed with brick, whiteware, bottle glass, iron fragments, and oyster shell. Stratum II extended 15-27 cm beneath Stratum I, and contained 10YR 5/4 yellowish brown clay loam; no cultural materials were observed within Stratum II. No evidence of in situ deposits was located within Trench 1.

Based on field observations at Location 2, the brick concentration consisted of mixed deposits. The morphology of the deposits in relation to the existing road, the dearth of observed or probed in situ brick, the presence of numerous animal burrows, and the presence of a nearly buried gallon paint can all indicate that the brick deposits observed and tested at Location 2 apparently were pushed to the area, possibly with a bulldozer during construction of Zenor Road. No evidence of in situ deposits was observed; rather the deposits lack archeological integrity.

Location 3

Location 3 consisted of a 10 cm thick, buried, packed coal cinder layer situated approximately 45 m west of Location 2 (Figure 15). Fifteen shovel tests were placed within Location 3; nine of these were positive. Two additional shovel tests contained shell fragments. Shovel testing defined coal cinder deposit as approximately 17 x 8 m in area, and buried beneath 10-23 cm of topsoil. Other than coal cinders, the only materials observed in shovel tests placed in Location 3 were brick and shell fragments. This paucity

of artifactual materials suggests that the cinders were brought to the area and discarded. No additional testing was conducted within Location 3.

Location 4

Location 4 comprised a nearly rectangular arrangement of five vertical iron bars and pipes situated approximately 60 m west of Location 3 (Figure 15). It was tested through a combination of shovel testing, probing, and excavation. Twenty-one shovel tests were excavated in the vicinity of Location 4; seven of these were positive, while an additional shovel test contained only shell fragments. Observed and recovered artifacts and ecofacts included nails, brick fragments, cinders, and shell. During testing, a brick and shell deposit, buried under 5-15 cm of topsoil mixed with shell, was located at the northern end of the location, and adjacent to the Zenor Road right-of-way. Probing suggests that this deposit covers an area approximately 6 x 10 m in size. No diagnostic artifacts were recovered from it; its function remains unclear.

The observed surface remains at Location 4 consisted of five vertical iron objects (Nos. 1-5), a shallow ditch, and a scattering of brick and shell situated on the upper proximal slope of the Bayou Teche natural levee (Figure 16). The iron objects included a sugar house burner plate (No. 1), two driven iron pipes (Nos. 2 and 3), and two iron bars (Nos. 4 and 5). They formed two nearly parallel sides of an incomplete rectangle which overlapped the northern edge of the shallow ditch. Probing and shovel testing indicated that the area between four of the objects (Nos. 1, 2, 4, and 5), and extending to approximately 1 m beyond the objects, contained considerable packed brick rubble. A narrow alignment of brick fragments also extended along the northern edge of the shallow ditch, to approximately 5-6 m west of Burner Plate No. 1. A deposit of packed *Rangia* shell, capped with a thin layer of topsoil, extended towards the east approximately 5-6 m from Pipe No. 2 and Bar No. 5. This shell was less concentrated along the perimeter of the deposit. No artifacts were recovered from a shovel test placed within the shell deposit.

The 125 cm long burner plate probably was obtained from the Moro Plantation sugar house. As mentioned previously in Chapter II, the sugar house remained in operation until 1889, and appears in sugar and rice reports until 1901. This suggests that the Location 4 feature was formed no earlier than the 1890s, and probably not until the early 1900s.

Unit 1 was excavated within the iron object arrangement to understand better and to assess the range of the archeological deposits. The sugar house burner plate (No. 1) served as the southwestern corner of this north-south oriented unit. This placed the unit between Object Nos. 1 and 2 to the south, and Nos. 4 and 5 to the north (Figure 16). The excavated unit contained four soil strata (Figure 17). Stratum I consisted of a 20-25 cm thick deposit of 10YR 3/3 dark brown silt containing packed brick rubble. Most of this rubble consisted of brick fragments and partial bricks, including several varieties of branded fire brick. Recovered materials included ceramic sherds, bottle glass fragments, nails, bone, and a sample of branded bricks. Most of the bricks and brick fragments, along with the coal, slag, shell, and mortar, were discarded. Recovered artifacts generally dated from the late nineteenth through the early twentieth century.

Stratum II consisted of up to 14 cm of 7.5YR 4/4 dark brown silt loam. This deposit was thicker in the northwestern portion of the unit, where it extended to the edge of a largely filled shallow ditch. Along the eastern side of the unit, Stratum II pinched out north of the ditch (Figure 17). Small brick and shell fragments were observed in the upper portion of the stratum; the bottom of the stratum was culturally sterile. None of Stratum II extended into the shallow ditch.

Stratum III consisted of 10YR 5/4 yellowish brown silt loam. This stratum consisted of culturally sterile, undisturbed natural deposits. An auger test placed in the northern portion of the unit extended into Stratum IV, a 10YR 5/3 brown silt loam mottled with 10YR 5/6 yellowish brown silt. No artifacts were located within Strata III or IV.

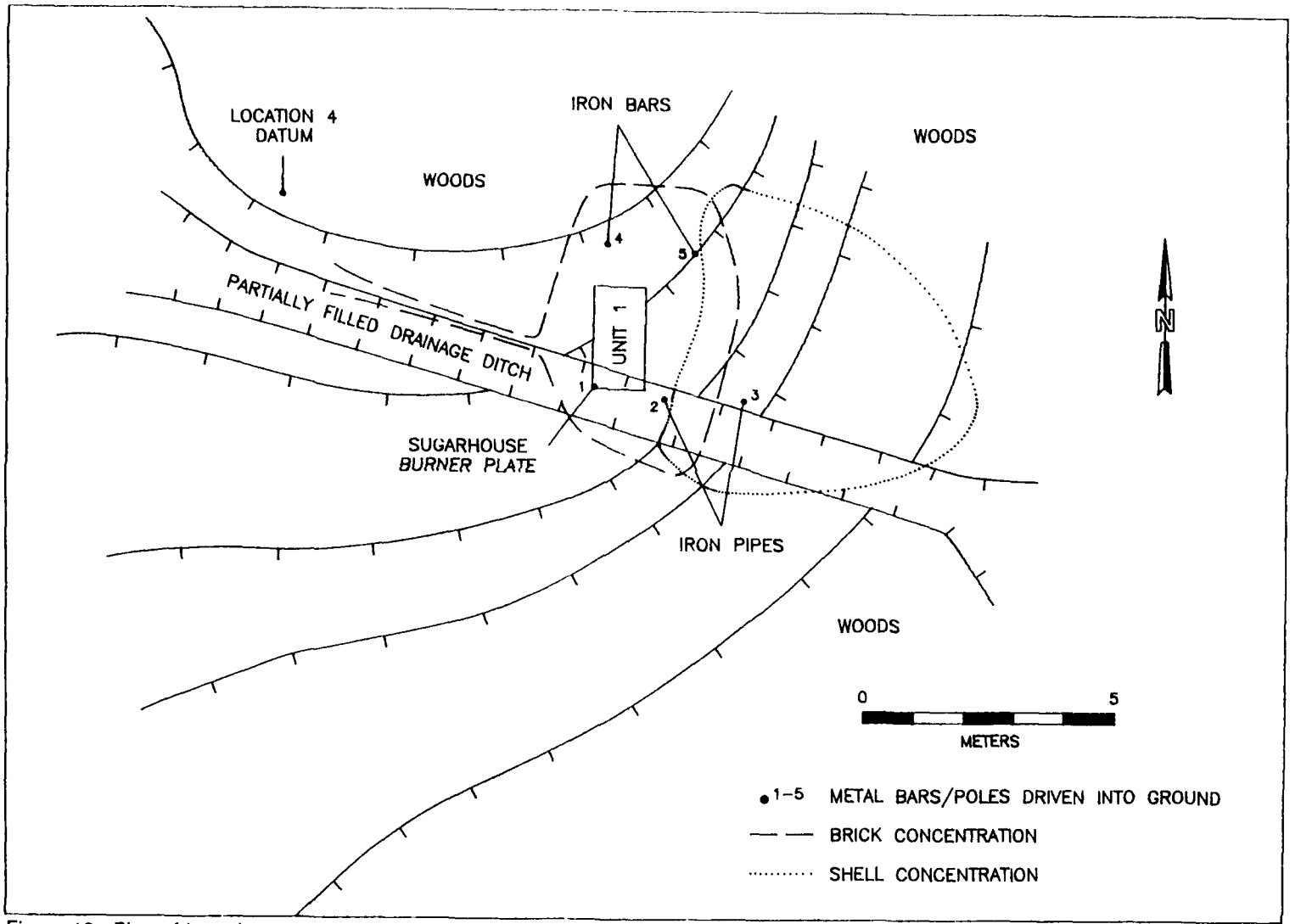
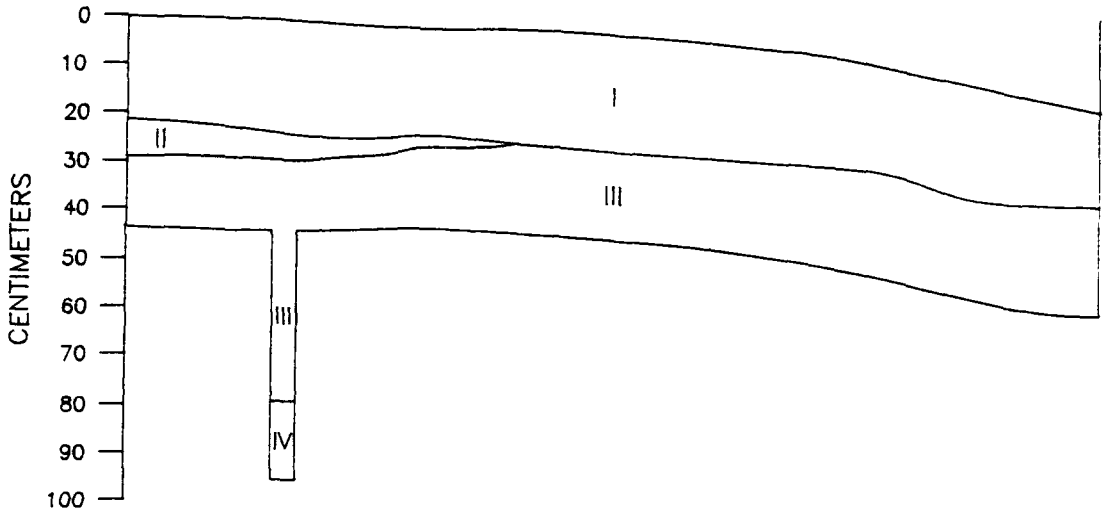


Figure 16. Plan of Location 4 at Moro Plantation (16SMY73), showing observed features and Unit 1



I: 10YR 3/3 DARK BROWN SILT, WITH PACKED BRICK RUBBLE.

II: 7.5YR 4/4 DARK BROWN SILT LOAM.

III: 10YR 5/4 YELLOWISH BROWN SILT LOAM.

IV: 10YR 5/3 BROWN SILT LOAM MOTTLED WITH 10YR 5/6 YELLOWISH BROWN SILT.

Figure 17. Stratigraphic profile of the east wall of Unit 1 at Moro Plantation (16SMY73)

Collected data suggest the remains at Location 4 served as a base/foundation for plantation machinery (e.g., a boiler or a pump). The 20-25 cm thick tightly packed brick rubble was not the in situ remains of a collapsed structure, but rather it represents rubble placed in the area to form a solid base. The vertical iron bars, pipes, and burner plate probably acted as anchors for securing machinery or as a platform. The packed shell extending eastward from Pipe No. 2 and Bar No. 5 formed a light-duty support area, possibly serving as a work area for individuals tending the machinery. The relationship of the shallow ditch to other observed remains is unclear.

Finally, the remains at Location 4 may be associated with the coal cinder deposit situated at Location 3. Evidence of burning was observed at Location 4, including the presence of coal, coal cinders, and slag. If the machinery operated at Location 4 included a burner, then the waste material produced by its operation may have been discarded in the fairly low, wet Location 3 area.

Location 6

Location 6 is situated approximately 90 m west of Location 4, at the western edge of the prehistoric site, Bosler (16SMY77) (Figure 15). During survey, a concentration of brick was observed at this location; a 1.4 m diameter iron ring set in the ground also was identified. A total of 25 shovel tests were placed around Location 6; 13 of these contained historic materials, including whiteware, bottle glass, nails, cut bone, brick, and shell. A few prehistoric materials associated with Bosler (16SMY77) also were recovered.

One backhoe trench, Trench 2, was placed within Location 6, approximately 6 m north of the iron ring, and cutting across the western edge of a raised area. The northern end of the trench exposed the western side of a small brick foundation (Figure 18). This 126 cm square, five brick course high, stiff-mud brick foundation was oriented with the bayou. The unbricked rectangular interior of the foundation measured 61 x 88 cm. Artifacts observed and recovered from the trench within and around the foundation included whiteware, bottle glass, nails, stiff-mud bricks and brick fragments, and shell. These artifacts generally dated from the late nineteenth and early twentieth century, and are contemporaneous with most of the historic artifacts recovered from the site.

The backhoe trench contained two strata. Stratum I consisted of 10-30 cm of 10YR 3/3 dark brown silt. The brick foundation, and all observed and recovered artifacts, were confined to this stratum. The underlying 7.5YR 4/6 strong brown clay loam consisted of culturally undisturbed Red River deposits.

The function of the foundation at Location 4 is unknown; however it probably is associated with the large iron ring located 5 m to the south. During the 1990 excavations, a similar small foundation was tested at Zenor (16SMY72), approximately 900 m to the west (Goodwin, Hinks et al. 1991). That foundation tentatively was identified as the remains of a pumphouse-like structure. However, those excavations demonstrated that these types of small, isolated foundations were associated with only moderate quantities of cultural material and often provide only limited data concerning the historic use and development of a site. No additional testing was conducted at Location 6.

Location 7

Location 7 lies approximately 110 m west of Location 6, near the western end of Moro Plantation (16SMY73) (Figure 15). It consists of an irregular 7 x 12 m brick concentration located immediately south of a low, curved earthen berm. Of the 30 shovel tests placed in the Location 7 vicinity, 21 contained historic artifacts, while shell fragments were noted in one other test. Artifacts and ecofacts observed and collected included whiteware, stoneware, a porcelain button, bottle glass, nails, a spike, various pieces of iron, brick, coal, and shell. These generally dated from the early to mid-twentieth century.

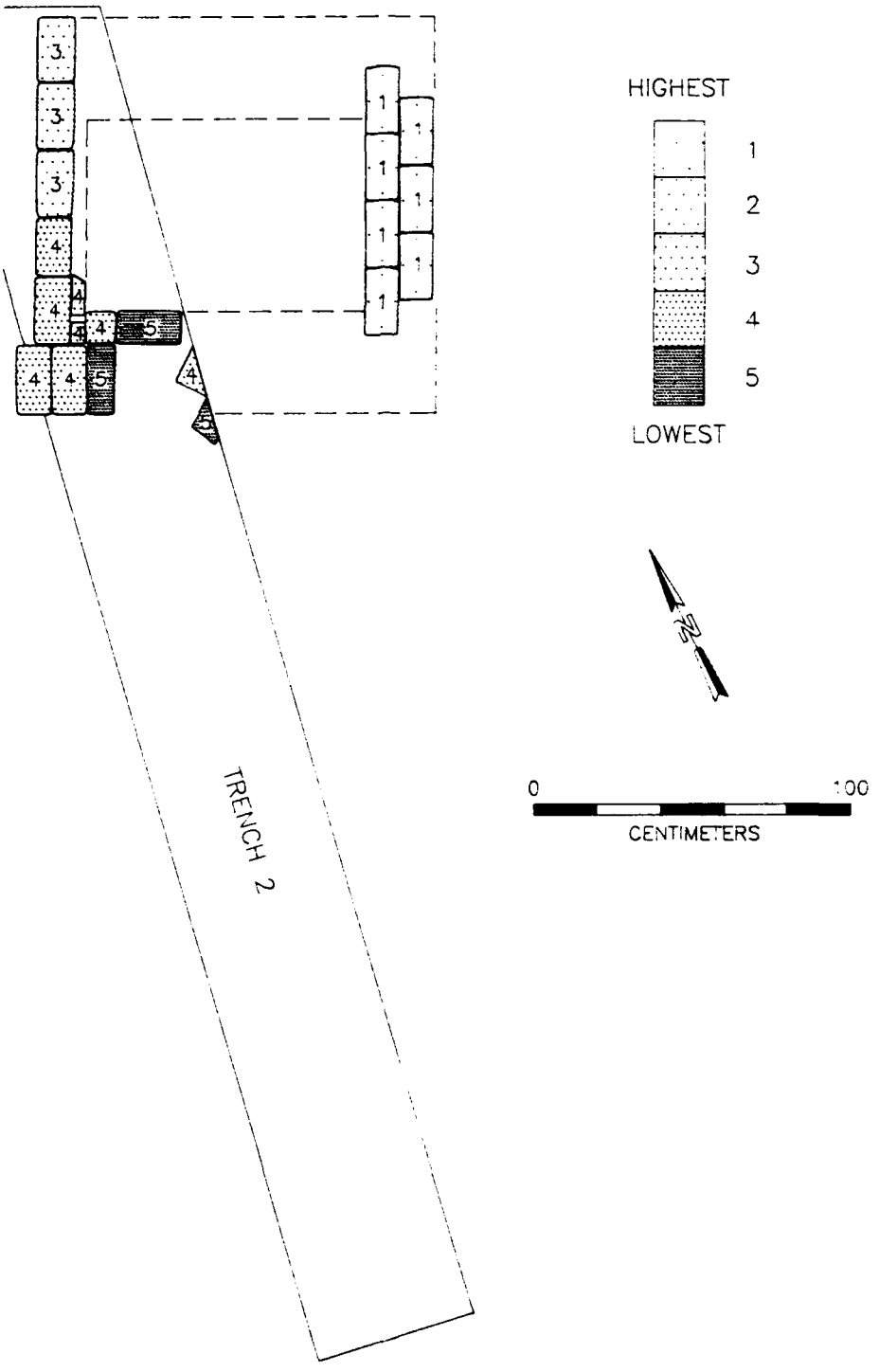


Figure 18. Plan of Trench 2 at Moro Plantation (16SMY73)

One 1 x 2 m excavation unit, Unit 2, was placed within Location 7. Placement of this unit was based on the observed concentration of brick and artifacts, and on the results of probing. The excavated unit contained three strata. Stratum I consisted of a 15-20 cm thick 10YR 2/2 very dark brown silt loam. Numerous cultural materials were observed and recovered from the stratum, and included plain and transfer printed whiteware, redware, yelloware, bottle glass, nails, spikes, iron fragments, brick rubble, some glazed brick, oyster and clam shell, coal, and charcoal. Several probable plow scars were observed extending into the top of Stratum II, suggesting that surface deposits were disturbed.

Stratum II consisted of a 12-15 cm thick layer of 7.5YR 4/4 brown silt loam. Only a small number of artifacts were located in this stratum, including whiteware, bottle glass, and iron fragments. This stratum acted as an interface between the topsoil and the culturally sterile subsoil. Stratum III, a 5YR 4/6 yellowish red silty clay, did not contain any evidence of artifacts or cultural disturbances. No in situ remains were located in the unit.

The observed low earthen berm extends eastward from 20 m west of the brick concentration to 5 m east of it. From there, it curves to the north, terminating at the edge of the Zenor Road right-of-way, 25 m northeast of the brick concentration (Figure 15). This berm apparently is associated with the early twentieth century agricultural use of the property. A 1930 Corps of Engineers aerial photograph of the property depicts agricultural fields south of Zenor Road extending west from Location 7 (Figure 12). The berm observed within Location 7 probably represents a small field levee.

The small size of the brick concentration, and the moderate amount of brick present, suggest the brick was associated with a small construction as opposed to a tenement. Its placement immediately south of the low earthen berm suggest that the area was associated with plantation agriculture. However, insufficient data have survived to positively identify the historic function of this feature.

Summary

Archeological testing of the historic archeological deposits at Moro Plantation (16SMY73) indicate that portions of the site, such as Locations 1, 2, and apparently 7, lack archeological integrity. Location 3, the coal cinder deposit, consists of little more than dumped cinders mixed with brick and shell. Location 4 contains in situ iron bars and pipes, brick rubble, and shell. However, the archeological deposits have been recorded, and little more could be learned about the location from additional excavation. Location 6 contains a small in situ brick foundation and an iron ring. The plan of the brick foundation was recorded. Location 7 consists of a brick deposit containing a moderate quantity of artifacts; no evidence of in situ features other than a probable field levee was observed. Data collected at Moro Plantation indicates that a portion of the site possessed archeological integrity. However, since the recorded site contains only a rather small portion of the historic plantation, the few in situ features and deposits observed are in relative isolation, and better preserved similar plantation remains are located at nearby Luckland and Avalon plantations (16SMY71 and 16SMY70), the historic deposits within the examined portion of Moro Plantation lack substantive research potential. Archeological investigations at one additional brick concentration associated with Moro Plantation are discussed with Area B.

Bosler (16SMY77)

Field Work

Bosler (16SMY77), a newly identified prehistoric site within Moro Plantation, encompassed Location 5, and a portion of Location 6 (Figure 15). It was located during the initial 1991 shovel testing of Moro Plantation, at which time prehistoric pottery and faunal remains were recovered from three consecutive

shovel tests placed along Transect 3A. Over 50 pottery fragments and several bone fragments were recovered from the central shovel test, Shovel Test 13. Additional shovel tests were placed in the site area to determine better the site's extent. Datum was established at Transect 3A, Shovel Test 13; this datum was designated N100, E100. A series of shovel tests were excavated in the cardinal directions at 5 m intervals. Of the 20 additional shovel tests placed along these transects, 13 contained prehistoric cultural materials. Also, two of the shovel tests excavated during examination of Location 6 contained prehistoric artifacts. Based on the observed distribution of prehistoric materials, the site extends from the Zenor Road right-of-way south 40 m to the bayou, and from a water-filled ditch west 60 m into Location 6 (Figure 15).

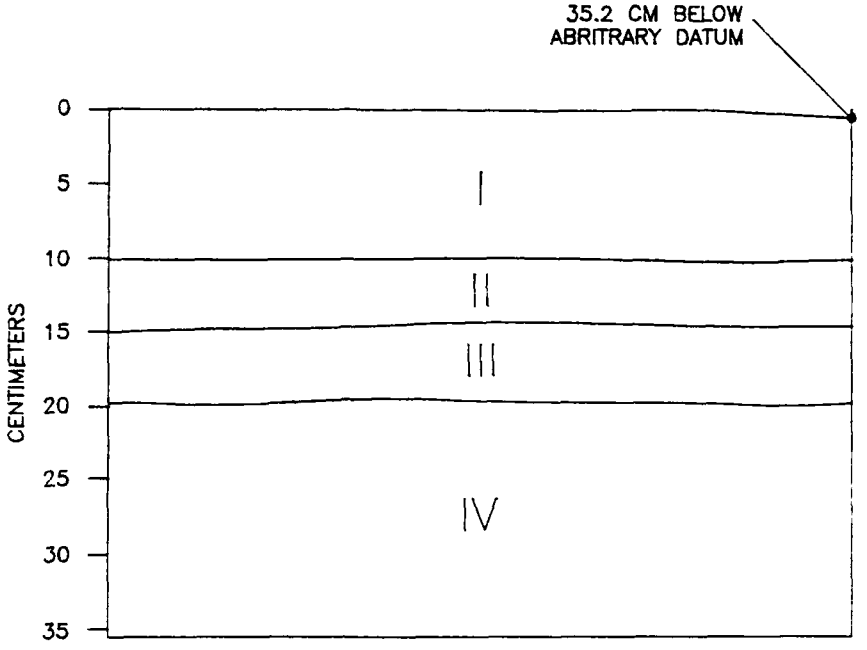
Two shovel tests excavated during testing of Location 6 documented buried prehistoric deposits within this location. These included shovel tests at 15 m and 20 m east of the Location 6 datum. The stratigraphic profile at Shovel Test 15 m east contained 12 cm of 10YR 4/2 dark grayish brown silt loam overlying 23 cm of 5YR 3/4 dark reddish brown silt loam. The bottom excavated stratum, between 35-65 cm, consisted of 10YR 2/2 very dark brown loam; the bottom of the third stratum was not reached. This stratum contained a moderate amount of faunal material, including gar scales, small fish vertebra, and some burned bone. While no prehistoric materials were recovered from Shovel Test 20 m east, it exhibited a similar stratigraphic profile, suggesting the presence of buried deposits similar to those observed 5 m to the west.

A total of 20 auger tests were excavated within Bosler to understand better the vertical extent of the site, and various site formation processes. The relative surface elevation of each auger test was recorded using a transit to facilitate a more complete interpretation of the collected auger test data. These auger tests, which are discussed below, were used to understand better the site's geomorphological formation.

One 50 x 50 cm unit was excavated within the central portion of the site, at grid coordinates N102, E102. It contained four natural strata (Figure 19); a 1-2 liter bag of soil was collected from each stratum for flotation. Stratum I consisted of a 10 cm layer of 10YR 3/3 dark brown silt. It contained a small quantity of brick fragments, coal cinders, and prehistoric sherds. The second stratum, 10-14 cm below ground surface, consisted of 10YR 4/4 dark yellowish brown silt loam. Historic materials were observed and recovered from the stratum, including whiteware, brick, and slag; however, the majority of the material consisted of prehistoric sherds and faunal remains. Stratum III, 14-19 cm below ground surface, consisted of 10YR 4/4 dark yellowish brown silt loam mottled with 10YR 3/3 dark brown loam. Numerous small bones, and limited numbers of pottery fragments, were located in the stratum. This stratum consisted of undisturbed midden deposits. Stratum IV extended 19-35 cm below ground surface. It contained 7.5YR 4/6 strong brown loam grading into 5YR 4/4 reddish brown clay loam. No cultural materials were observed in the stratum.

Site Geomorphology

The Bosler site (16SMY77) lies adjacent to the left descending bank of Bayou Teche. Within the immediate area of Bosler, the Middle Natural Levee consists of a 40 to 50 m wide surface that slopes gently downward from the Outer Natural Levee to Bayou Teche. This geomorphic surface ranges in elevation generally from 1 to 2 m above mean sea level (Goodwin, Hinks et al. 1991). Within the area of the site, the Middle Natural Levee is a heavily wooded and generally featureless geomorphic surface. Within the site, it lacks the low, narrow, but distinct ridge that characterizes the Middle Natural Levee along Bayou Teche between Patterson and the Wax Lake Outlet. However, the dense vegetation, recent human modification, and overbank sediments from Bayou Teche over the last few thousand years probably obscured this ridge within the area of Bosler. Topographic profiles of Cross-Sections A and B indicate that an indistinct low narrow ridge might occupy the southern portion of this site (Figures 20 and 21). However, topographic mapping of the site is needed to determine the presence of the natural levee ridge.



I: 10YR 3/3 DARK BROWN SILT.

II: 10YR 4/4 DARK YELLOWISH BROWN SILT LOAM.

III: 10YR 4/4 DARK YELLOWISH BROWN SILT LOAM MOTTLED WITH 10YR 3/3 DARK BROWN LOAM.

IV: 7.5YR 4/6 STRONG BROWN LOAM GRADING INTO 5YR 4/4 REDDISH BROWN CLAY LOAM.

Figure 19. Stratigraphic profile of the south wall of Unit N102. E102 at Bosler (16SMY77)

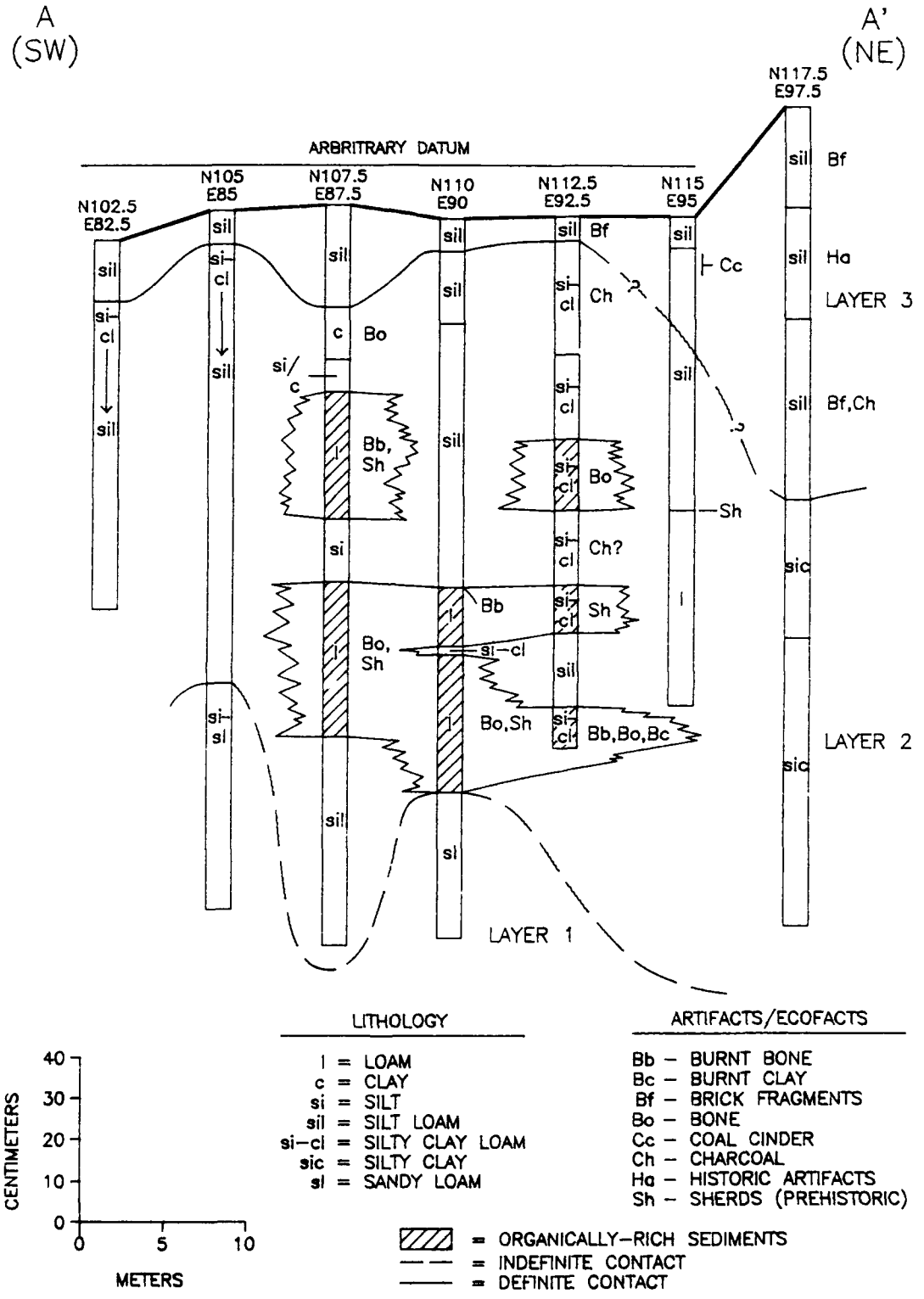


Figure 20. Cross-section across west end of Bosler site (16SMY77)

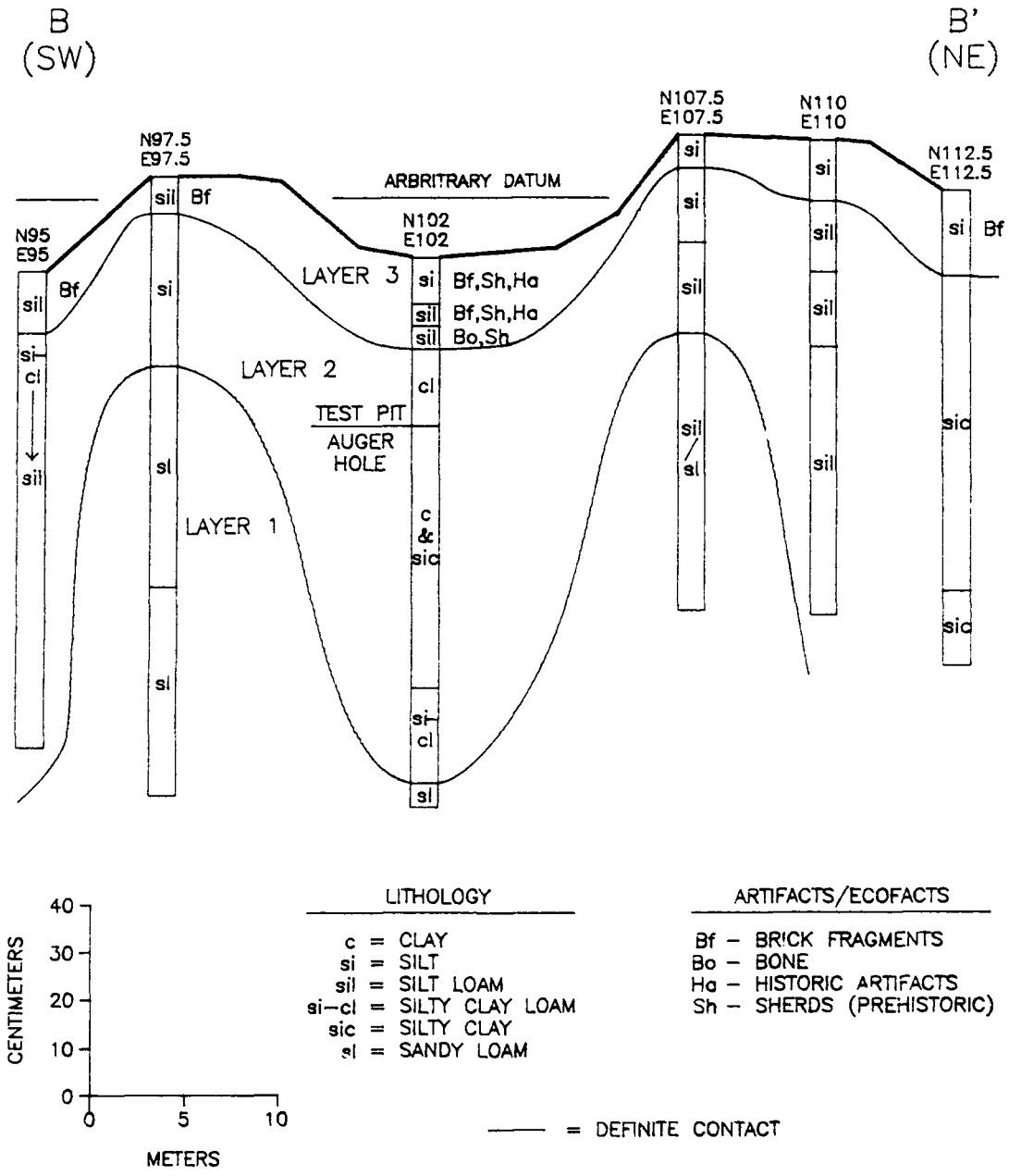


Figure 21. Cross-section across middle of Bosler site (16SMY77)

Site Stratigraphy

In order to determine the stratigraphy and character of the fluvial and archeological deposits at Bosler, 2-in Dutch augers were used to excavate 20 auger tests. For each auger test, the texture, color, and the thickness of the fluvial sediments penetrated were described along with associated archeological remains. Because of sample disturbance by the hand augers, data concerning sedimentary and pedogenic structures could not be recovered.

The auger holes were arranged using the established grid system. The transects were oriented perpendicular to Bayou Teche in order to produce cross sections that cut at right angles across the depositional fabric of the natural levee deposits in and on which the archeological deposits occur. Such an orientation would produce the maximum amount of information concerning the character, stratigraphy, and origin of both fluvial and archeological deposits.

The 20 auger holes at Bosler penetrated a heterogeneous variety of fluvial and archeological deposits. The fluvial sediments encountered range in texture from sandy loam to clay. The color of these sediments varied from black (10YR 3/1) to brown (10YR 4/3) and strong brown (7.5YR 5/8). Analysis of the currently available data indicated that well-defined layers or paleosols that can be used as key beds are lacking. However, the sediments at this site could be differentiated into three general stratigraphic units on the basis of their general lithology. They were informally labeled Layers 1, 2, and 3.

Layer 1. Scattered auger holes within all of the transects penetrated only the upper portion of Layer 1 within Bosler (Figures 20, 21, and 22). Layer 1 consists of sandy loam of an unknown thickness which generally was recorded as "sandy silt" or "sandy silt loam." Layer 1 varies in color from dark brown (7.5YR 4/4) and brown (7.5YR 5/4) to grayish brown (10YR 5/2) and dark brown (10YR 4/3). The scanty auger hole data indicates that Layer 1 is relatively homogeneous. Layer 1 apparently underlies all of the Middle Natural Levee, except for the northern edge of this geomorphic surfaces (Figures 20, 21, and 22).

The upper edge of Layer 1 appears to undulate considerably. For example, in Cross-Section A, the upper surface of Layer 1 varies by about 90 cm over a distance of 28 m and varies by about 40 cm over a distance of 14 m in Cross-Section B (Figures 20 and 21). The contact between Layer 1 and 2 appears to be gradational.

Layer 2. Layer 2 consists of a heterogeneous assemblage of silty, clayey, and organically-rich sediments. Nearest Bayou Teche, Layer 2 consists entirely of a thin bed of silty clay loam that grades downward into a thicker bed of silt loam (Figures 20 and 21). Further away from Bayou Teche within Cross-Section A (Figure 20), Layer 2 consists of randomly interbedded and interfingering beds of clayey sediments, e.g. clay, silty clay, silty clay loam, and silty sediments, primarily silt loam with some silt. However, within Cross-Section B, the clayey sediments are associated with stratigraphically low parts of the undulating Layer 1-Layer 2 contact (Figure 21).

Within Cross-Section A, lenses of organically-rich sediments occur at well-defined levels within the base and middle of Layer 2. These sediments consist of organically-rich loam and silty clay loam that yielded separately or in combination either bone, burnt bone, burnt clay, pottery sherds, or burnt clay (Figure 20). The "greasy" character of the organic material and the association of abundant ecofacts and prehistoric artifacts demonstrate that these organically-rich sediments are archeological deposits.

The color of the sediments that compose Layer 2 vary greatly. Adjacent to Bayou Teche, Layer 2 consists of both clayey and silty sediments that exhibit only 7.5YR hues. However, away from Bayou Teche, the proportion of beds within Layer 2 exhibiting 10YR hues increases with distance from Bayou Teche (Figures 20 and 21). The organically rich sediments are all black. However, there is a general lack of any observable correlation between color and lithology bed.

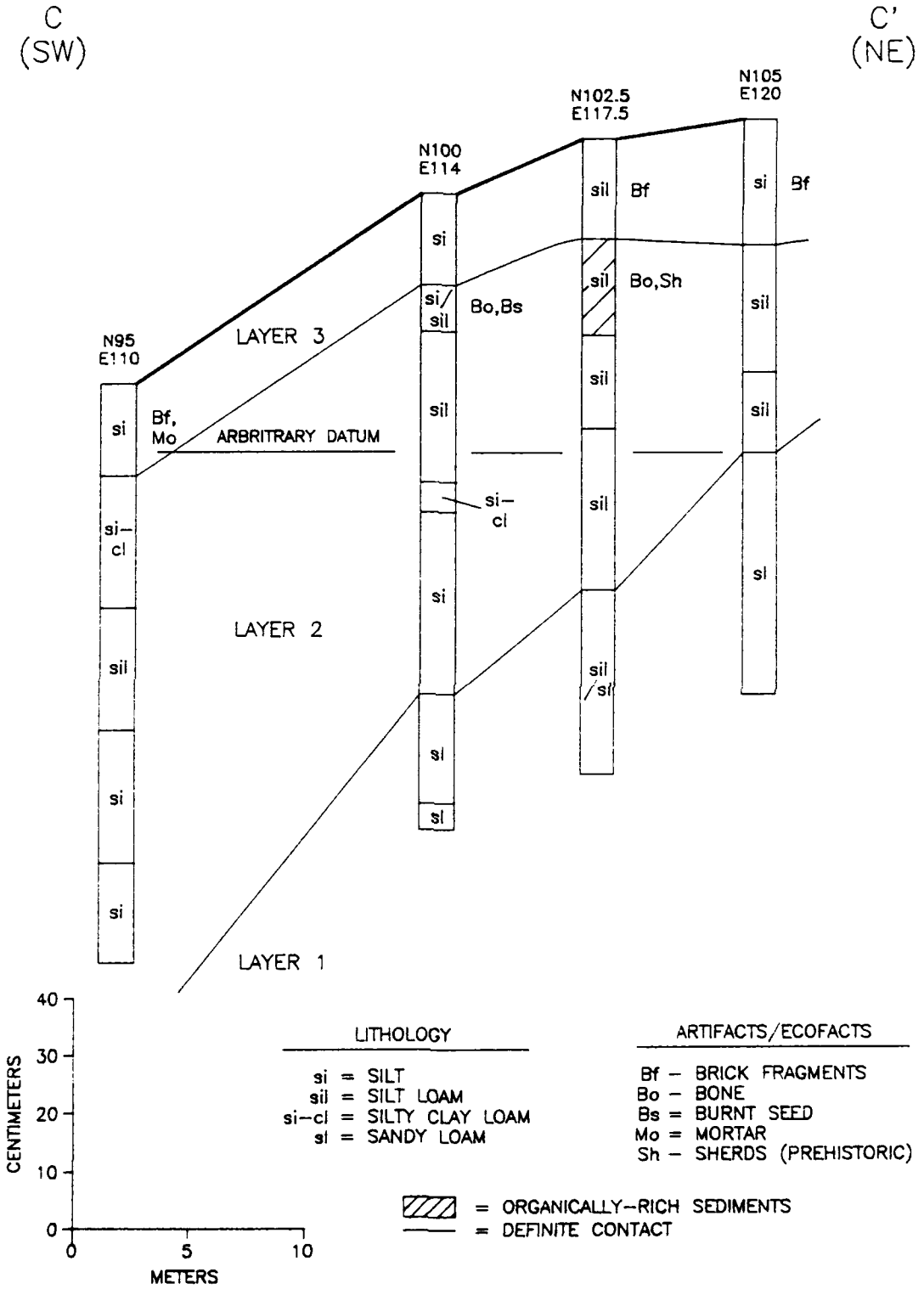


Figure 22. Cross-section across eastern end of Bosler site (16SMY77)

The thickness of Layer 2 is variable (Figures 20, 21, and 22). It varies from over 140 cm thick in Cross-Section A to around 35 cm thick in Cross Section B. An examination of the available data indicates that the thickness of Layer 2 reflects the undulating topography of Layer 1 on which it accumulated. Only in the northernmost auger hole of Cross-Section A, has historic disturbance significantly altered the thickness of Layer 2.

Layer 3. Layer 3 consists of a thin blanket of silt and silt loam that forms the modern surface at Bosler. It consists of silt and silt loam which ranges in color from dark brown (10YR 3/3) to very dark grayish brown (10YR 3/2) and varies in thickness from less than 10 to 25 cm. Only in auger hole N117.5, E97.5, is layer 3 as thick as 50 cm (Figures 20, 21, and 22).

Layer 3 typically contains abundant artifacts. Frequently, it contains historic artifacts, e.g. brick and mortar fragments, throughout its entire thickness. However, in a test unit, a few auger holes and several shovel tests, the lower part of this layer was found to contain an intact prehistoric component. In one auger hole, the prehistoric artifacts were associated with "greasy" organically-rich sediments and bone (Figures 21 and 22).

Interpretations

Despite the rather incomplete nature of the available lithologic and stratigraphic data, tentative interpretations can be made regarding the origin of these deposits. Layer 1 is tentatively interpreted to be upper point bar facies deposited by the Red River when it occupied Bayou Teche. Layer 2 consists of natural levee and overbank sediments which later buried the point bar sediments. These sediments probably accumulated while Bayou Teche was still occupied by the Red River. Layer 3 apparently represents the profile of the Modern Soil. It is likely that the upper part of the Modern Soil contains overbank sediments deposited by Bayou Teche after the abandonment of the Red River.

The stratigraphic position, associated landforms, and lithology of Layer 3 indicate that it consists of upper point bar deposits of the Red River. The texture and its position beneath natural levee deposits are consistent with such an origin (Russ 1975; Walker 1984). The undulating contact between Layers 3 and 2 might represent the ridge and swale topography commonly associated with point bar deposits. Its strong brown coloration indicates that it was deposited by the Red River. The surface morphology and lithology of Layer 2 is consistent with natural levee and overbank sediments (Russ 1975; Walker 1984). The strong brown silt loams that form Layer 2 adjacent to Bayou Teche represent natural levee sediments. The color of these sediments indicate an active Red River.

The mixed clayey and silty sediments which form Layer 2 away from Bayou Teche probably accumulated in an narrow, low swale formed by the crest of the aggrading Middle Natural Levee and the Outer Natural Levee. The clayey sediments may have accumulated in isolated swales and ponds within this narrow overbank area. The silty sediments probably represent sediment spread throughout the overbank area during past flood events. The reason why sediments with 7.5YR and 10YR hues are mixed in this distal portion of Layer 2 is unclear. Possibly, the 10YR hues represent sediment eroded from and washed in from the adjacent Outer Natural Levee or colors altered by either pedogenetic or diagenetic processes.

Unfortunately, both the confidence and degree of interpretation is severely limited by the subsurface data available concerning the stratigraphy and lithology of the sediments within Bosler. Before precise reconstructions and definite identifications can be made of depositional environments and history, additional data pertaining to the structure and fabric of the sediments needs to be obtained.

Summary of Geomorphological Data

The sediments that form the Middle Natural Levee consist of fluvial sediments deposited by the Red River. Layer 2 consists of sediments deposited within natural levee or other overbank environments. Organically-rich lenses of loam and silty clay loam represent archeological deposits. The overbank environment in which Layer 2 accumulated appears favorable for the accumulation and preservation of in situ archeological deposits.

Finally, the archeological deposits that lie buried within sediments deposited by the Red River when it occupied Bayou Teche potentially provide an excellent opportunity to date the flow of the Red River down the Teche, and to determine how active the Red River was during that flow. For example, the time when the Red River diverted its course from Bayou Teche to its present course through Moncla Gap is unsettled, e.g. Weinstein and Kelley (1990). If Marksville period artifacts do occur within the lower midden at this site, the ideas of both Pearson (1986) and McIntire (1958) concerning the evolution of Bayou Teche may need to be significantly revised. Also, how much flow of the Red River actually discharged through this segment of Bayou Teche is uncertain. Detailed geomorphological studies conducted in addition to any archeological research at this site could provide solid evidence concerning the geomorphological evolution of Bayou Teche.

Summary

While there was some mixing of historic materials in the topsoil (Layer 3), overall, Bosler possesses good archeological integrity. Cultural deposits in the east half of the site extended to a depth of 20-30 cm below ground surface. In portions of the western half of the site, however, prehistoric cultural deposits containing black earth midden, bone, and pottery extend to a depth of 1.4 m. These deep midden deposits generally were capped by a series of alluvial deposits. These buried deposits have the potential to provide important information about the formation of Bayou Teche, and early prehistoric habitation of the region. Based on the quantity of cultural materials present, the excellent faunal preservation, the good archeological integrity exhibited at the site, and the presence of in situ buried cultural deposits within the Red River alluvial deposits, this Marksville through Mississippian prehistoric site possesses the quality of significance, as defined by National Register of Historic Places criteria.

Luckland Plantation (16SMY71)

Archeological testing within Luckland Plantation was performed within the western portion of the site (Figures 1, 23, and 24). Initial shovel testing at Luckland Plantation was conducted along eight survey transects, Transects 1A through 8A; 156 shovel tests were excavated along these transects. Based on field observations and the results of shovel testing, additional shovel tests were placed at one location near the east end of the site. Location 1 consisted of a brick concentration situated on a small rise, located between three large historic live oak trees. A total of 29 additional shovel tests were excavated at Location 1; all of these contained cultural material, reflecting the widespread distribution of cultural material across the site. Observed and collected artifacts and ecofacts included porcelain, stoneware, whiteware, bottle glass, window glass, a glass bead, nails, iron fragments, brick, bone, shell, roofing slate, and slag. One shovel test, located 25 m west of datum, contained a kitchen midden deposit filled with ceramic sherds, glass fragments, and bone (Figure 23).

Five 1 x 2 m excavation units were placed within Luckland Plantation; each within the vicinity of a structure location. Their placement was based on several factors. The 1930 Corps of Engineers aerial photograph of the plantation depicts plantation structures, and their relationship to various landscape

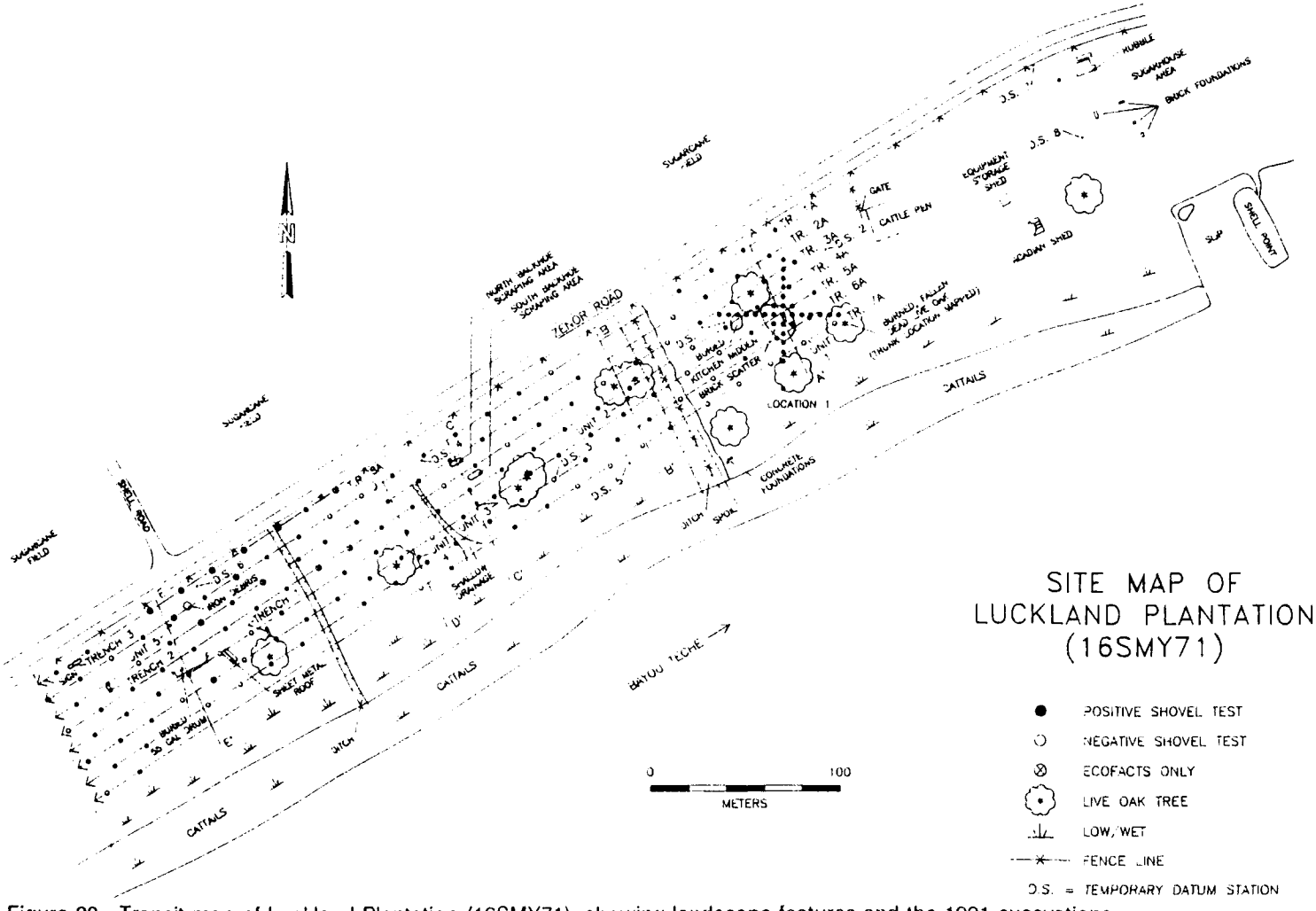
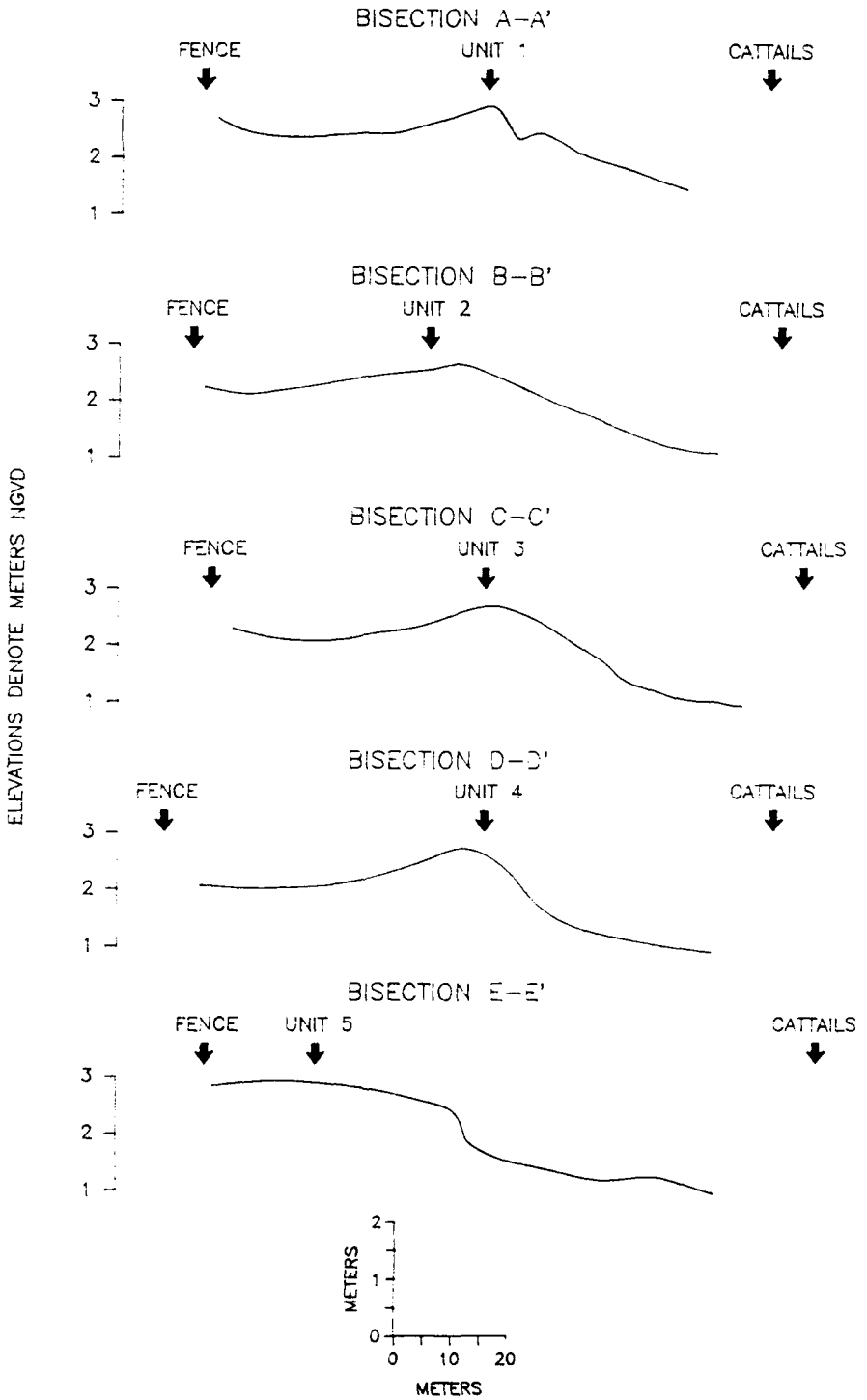


Figure 23. Transit map of Luckland Plantation (16SMY71), showing landscape features and the 1991 excavations



NOTE: PLACEMENT OF THESE BISECTIONS IS DEPICTED ON THE TRANSIT MAP OF LUCKLAND PLANTATION (16SMY71).

Figure 24. Surface elevation profiles along Bisections A-A' through E-E' at Luckland Plantation (16SMY71)

features such as large live oak trees and ditches (Figure 10). Through comparison of these photographed features with the modern landscape, the locations of historic plantation structures could be estimated.

Another factor considered during placement of units was data collected during initial shovel testing across the Luckland project area. A few of the shovel tests contained evidence of structural remains, such as thick topsoil deposits with brick rubble, numerous construction related artifacts, or the presence of considerable mortar. In addition, a few apparent in situ bricks were observed within Location 1. Finally, the ground surface was probed in the vicinity of each planned unit in order to locate intact subsurface features such as foundations. Data collected from these five units are summarized below.

Unit 1

Unit 1 was placed at the crest of the natural levee, over brick observed within Location 1 at Luckland Plantation (Figures 23 and 24). The unit was located in the vicinity of a house observed on the 1930 aerial photograph (Figure 10). The unit was excavated in six strata, on either side of an in situ U-shaped brick foundation (Figures 25 and 26). Stratum I, a 10YR 3/3 dark brown silt loam, comprised the topsoil overlying the unit. It contained a moderate quantity of artifacts, including whiteware and other ceramic sherds, bottle glass, nails, porcelain buttons, brick, mortar, shell, and charcoal. The upper portion of the surviving foundation was exposed at the bottom of the stratum, indicating Stratum I was deposited following the destruction of a house associated with the foundation.

Stratum II represents a fill deposit confined to the interior of the foundation (Figure 26). It was excavated in five levels overlying culturally undisturbed subsoil. The stratum consisted of 10YR 3/3 dark brown silt grading into 10YR 4/3 dark brown silt loam. It was packed with considerable brick rubble, along with numerous artifacts and ecofacts, including: porcelain, whiteware, stoneware, various bottle glass, window glass, porcelain buttons, numerous nails, iron fragments, brick, mortar, bone, shell, and charcoal. The artifacts generally date from the late nineteenth through early twentieth century. The large quantity of brick rubble, along with the many nails recovered from the fill, suggest the deposit was formed during the destruction of the house. The base of the stratum was irregular, apparently because of animal burrowing prior to destruction of the house. The underlying Stratum VI subsoil was not excavated because of obstructions caused by the interior foundation area.

Strata III through V were located around the exterior (north and east sides) of the foundation. Stratum III consisted of packed brick and mortar rubble in a 10YR 3/3 dark brown silt matrix. It was confined to the east central edge of the unit, adjacent to the exterior wall. Because of the narrowness of the area between the foundation and the edge of the unit, only a portion of the stratum was excavated.

Stratum IV, a 10YR 5/3 brown silt loam, formed the main stratum surrounding the foundation (Figure 26). It contained a moderate quantity of artifacts, including ceramic sherds, bottle glass, nails, iron fragments, brick, mortar, bone, and charcoal. Other than in the northwest corner of the unit, this stratum rested on culturally sterile subsoil. The stratum apparently formed the ground surface prior to destruction of the house.

Stratum V was located in the northwest corner of the unit, underlying a portion of Stratum IV (Figure 26). This loosely compacted 10YR 4/3 dark brown loam mixed with 10YR 5/3 brown loam contained only a moderate quantity of artifacts and ecofacts, including some brick and shell. Its morphology and consistency suggest a filled rodent burrow. Strata II, portions of IV, and V rested on Stratum VI, a 10YR 5/3 brown silt loam mottled with 10YR 5/6 yellowish brown silt loam. Other than a few small artifacts pressed into the top of the stratum, Stratum VI did not contain cultural materials. The recorded brick foundation rested on this stratum. Based on its morphology, the foundation may form the base of a fireplace.

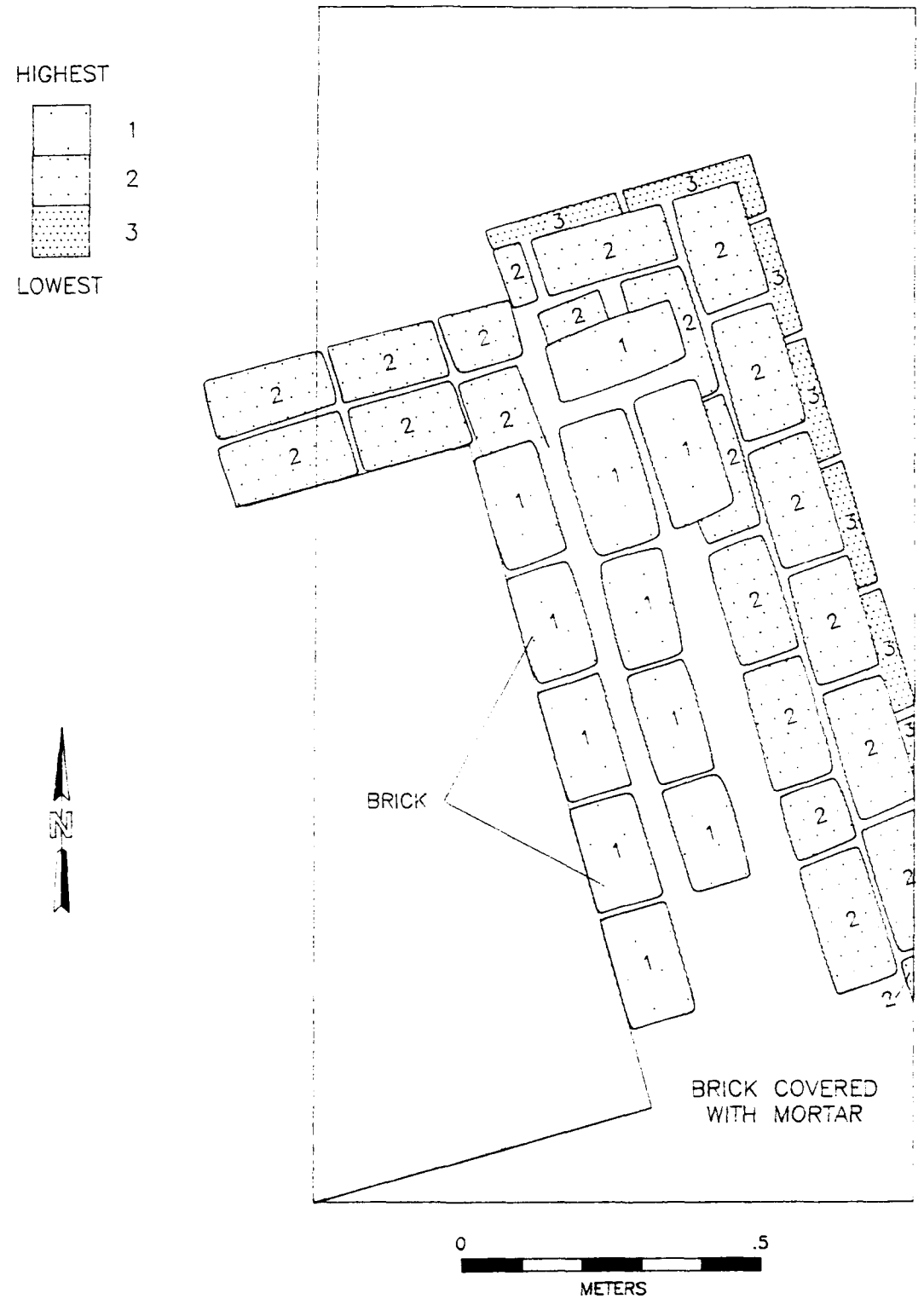
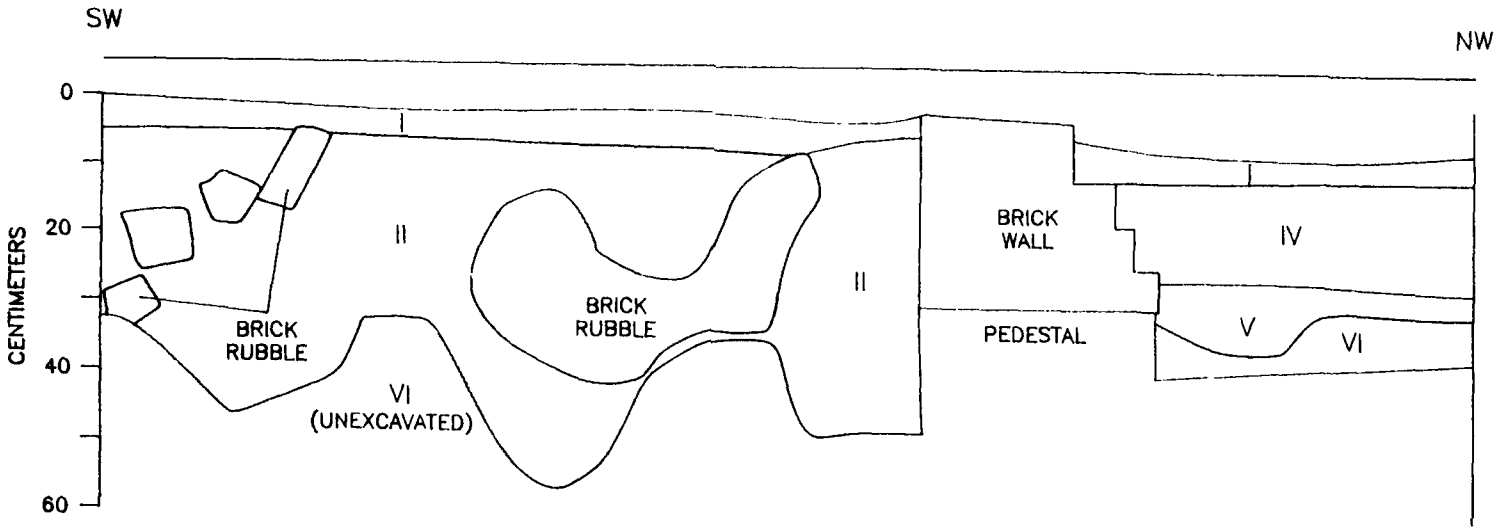


Figure 25. Plan of Unit 1 at Luckland Plantation (16SMY71)



I: 10YR 3/3 DARK BROWN SILT LOAM.

II: 10YR 3/3 DARK BROWN SILT GRADING INTO 10YR 4/3 DARK BROWN SILT LOAM.

IV: 10YR 5/3 BROWN SILT LOAM.

V: 10YR 4/3 DARK BROWN LOAM MIXED WITH 10YR 5/3 BROWN LOAM.

VI: 10YR 5/3 BROWN SILT LOAM MOTTLED WITH 10YR 5/6 YELLOWISH BROWN SILT LOAM.

Figure 26. Stratigraphic profile of the west wall of Unit 1 at Luckland Plantation (16SMY71)

Unit 2

Unit 2 was placed at a house location situated a short distance west of a deep drainage ditch, and south of two large live oak trees. It was situated a short distance north of the crest of the natural levee (Figures 23 and 24). The unit was in the immediate vicinity of a tenement shown on the 1930 aerial photograph of the plantation (Figure 10); this aerial also showed two live oak trees, and a drainage ditch. Probing of the area indicated the area contained a concentration of brick, suggesting the presence of foundation remains.

The unit was excavated in four levels containing two natural strata. Stratum I consisted of 12-19 cm of 10YR 4/2 dark grayish brown silt loam. Considerable brick rubble was located in the level, along with numerous artifacts, including whiteware, stoneware, a ginger beer bottle fragment, bottle glass, window glass, nails, spikes, bone, a button, and iron fragments. While no intact features were located in the stratum, the concentration of brick rubble and artifacts reflects the proximity of the destroyed tenement.

The underlying 13-20 cm thick Stratum II was comprised of 10YR 5/3 brown clay loam mottled with 10YR 5/8 yellowish brown clay loam. A moderate number of artifacts were located in the upper 6 cm of the stratum, forming the interface between Strata I and II. These artifacts included whiteware, bottle glass, nails, an iron chain, and a button. In addition, a few tiny brick fragments were observed in the southern third of the unit below the interface zone. The base of Stratum II rested on culturally sterile 10YR 5/2 grayish brown clay mottled with 10YR 5/8 yellowish brown clay loam. This unexcavated stratum consisted of Mississippi River deposits placed in the area during formation of the Teche delta lobe.

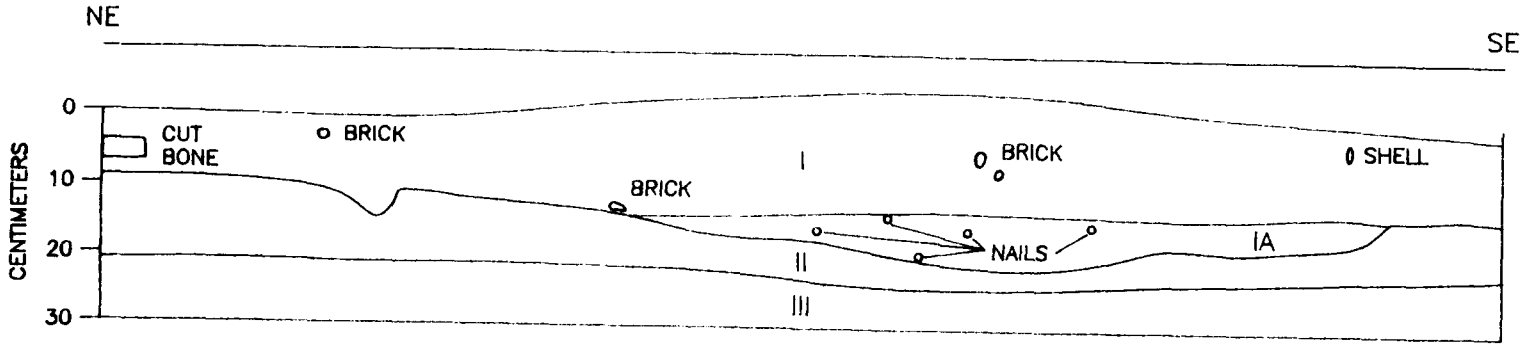
No in situ features were located within Unit 2. However, the dense concentration of brick rubble and artifacts reflects the destruction debris associated with a late nineteenth and early twentieth century tenement. Since the structure without a doubt was built on brick piers, rather few foundational remains associated with the house were anticipated, other than a few piers and a possible fireplace base. The excavated unit reflects the nature of the house destruction remains anticipated for the area.

Unit 3

Unit 3 was placed nearly 100 m southwest of Unit 2, on a slight rise at the crest of the natural levee, a short distance east of a shallow drainage (Figures 23 and 24). Its placement west of three live oak trees corresponds well with a tenement depicted on the 1930 aerial photograph (Figure 10). In addition, considerable brick rubble and mortar were located within Transect 5A, Shovel Test 11, situated just a few meters east of the unit.

The unit contained three strata and one substratum (Figure 27). Stratum I consisted of 10YR 4/2 dark grayish brown silt. Numerous artifacts and ecofacts were observed and recovered from the stratum, including porcelain, whiteware, stoneware, bottle glass, glass bottle stoppers, window glass, glass beads, buttons, nails, iron fragments, a bullet, cut and unmodified bone, fish scales, brick and mortar, shell, coal, slag, and charcoal. Stratum IA, a lens of 10YR 3/3 dark brown silt mixed with ash and charcoal, was recorded at the base of Stratum I, within the east central portion of the unit. It contained artifacts similar to those recovered from the rest of Stratum I, except for a somewhat higher concentration of nails. The ash, charcoal, and numerous nails indicate this lens is a deposit of burned building debris formed once the house was destroyed. Most of the remaining construction debris was deposited in the overlying, contemporaneous Stratum I.

Stratum II contained 10YR 5/3 brown silt loam mottled with 10YR 4/2 dark brown silt. A light to moderate quantity of artifacts were located within the upper half of the stratum, forming the interface zone between Strata I and II. No evidence of features was observed in the stratum. The underlying Stratum III



I: 10YR 4/2 DARK GRAYISH BROWN SILT.

IA: 10YR 3/3 DARK BROWN SILT WITH CHARCOAL AND ASH.

II: 10YR 5/3 BROWN SILT LOAM MOTTLED WITH 10YR 4/2 DARK BROWN SILT.

III: 10YR 5/3 BROWN CLAY LOAM MOTTLED WITH 7.5YR 5/8 STRONG BROWN LOAM.

Figure 27. Stratigraphic profile of the east wall of Unit 3 at Luckland Plantation (16SMY71)

consisted of 10YR 5/3 brown clay loam mottled with 7.5YR 5/8 strong brown loam. No cultural materials or disturbances were located within the stratum.

Overall, Unit 3 was similar to Unit 2, containing a large quantity of artifacts, including brick and mortar rubble. Unit 3 also exhibited a lens with nails, charcoal, and ash. While neither unit contained in situ foundation remains, both apparently were located very close to, or within, the former structure areas. Observed deposits at both units appeared intact, with little post-destruction disturbance other than minor leveling of the ground surface. The integrity of deposits at both units appears sufficient to indicate that study of artifact distribution in these areas could provide important information about tenant habitation of former house loci.

Unit 4

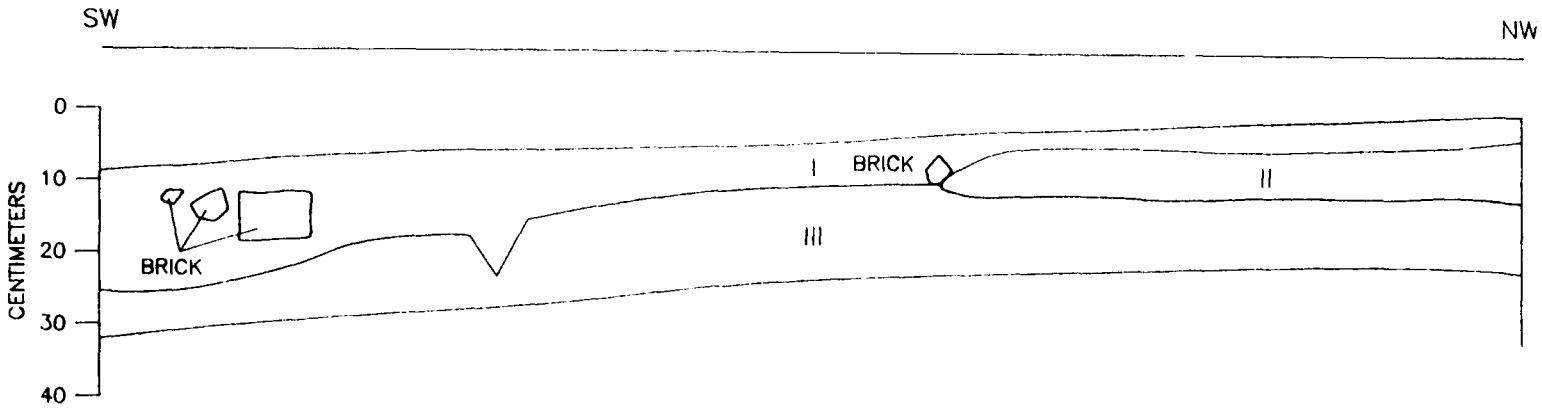
Unit 4 was placed 40 m west of Unit 3, near the crest of the natural levee, and a short distance west of the previously mentioned shallow drainage (Figures 23 and 24). Its placement was based on examination of the 1930 Corps of Engineers aerial photograph of the plantation (Figure 10), and probing. Three strata were located within Unit 4 (Figure 28). Stratum I consisted of 10YR 4/3 dark brown silt loam. Redware; whiteware; various types of bottle glass such as machine made, tooled lips, and turn paste molded; table glass; window glass; lamp glass; a porcelain button; wire and cut nails; tacks; iron fragments; .22 cartridges; a glass bead; brick; and, slag were recovered from the stratum. There was considerable localized rodent disturbance within the southwestern quarter of the unit.

Stratum II, a 10YR 5/4 yellowish brown silt, was confined to the north half of the unit (Figure 28). Porcelain, porcellaneous gray stoneware, redware, whiteware, a glass bead, various glass bottle fragments, amethyst glass, wire and cut nails, and cinders were collected from the stratum. Observed materials included brick, shell, coal, and slag. A lower density of artifacts was noted for Stratum II. Stratum II rested on Stratum III, a 7.5YR 4/6 strong brown *silt loam subsoil*. Other than material recovered from within the disturbed area near the southwest corner of the unit, no cultural materials were observed in Stratum III.

No in situ foundation remains were located within Unit 4. However, the soil strata suggest that the unit straddled the edge of a historic house location. Stratum II was confined to the north half of the unit. In addition, the artifact distribution varied between Strata I and II, with a substantially lower artifact density observed within Stratum II. It is probable that the former tenement overlapped the Unit 4 location, with an exterior wall extending along the south edge of Stratum II. This would place Stratum II within the confines of the structure. This interpretation is supported by the location of the unit at the south edge of the crest of the natural levee (Figure 24). If the structure originally extended south from the southern edge of Stratum II, then it would have overlain the sloping face of the natural levee. However, if the structure extended northward from the south edge of Stratum II, covering that stratum, then the house would have been centered on the nearly level crest of the natural levee. Additional testing in the area would be necessary to verify the exact placement of the structure.

Unit 5

Unit 5 was placed nearly 140 m west of Unit 4, in the vicinity of a former tenement. A nearly 20 m long built up area containing a buried 55 gallon drum was located approximately 20 m south of the unit. The unit overlapped a very low rise in the terrain with an apparent right angle, and the appearance of a possible buried foundation. Probing of the packed soils in the vicinity of the unit also suggested the presence of brick.



I: 10YR 4/3 DARK BROWN SILT LOAM.

II: 10YR 5/4 YELLOWISH BROWN SILT.

III: 7.5YR 4/6 STRONG BROWN SILT LOAM.

Figure 28. Stratigraphic profile of the west wall of Unit 4 at Luckland Plantation (16SMY71)

Three strata were excavated within Unit 5. Stratum I consisted of 10YR 3/2 dark grayish brown loam. It was a 4-7 cm thick topsoil deposit containing some brick and shell. The underlying 9-12 cm thick Stratum II contained 10YR 3/3 dark brown clay loam. The upper half of the stratum included several modern objects, including a large piece of sheet plastic, and a rubber O-ring. An amber bottle glass fragment, a wire nail, a 12 gauge shotgun shell base, and a piece of barbed wire also were recovered from the stratum. No evidence of features or intact historic (i.e., non-modern) deposits was observed in the stratum.

Stratum III was an 18-20 cm thick deposit of 10YR 4/3 brown clay loam mottled with 10YR 4/6 dark yellowish brown silt. A few artifacts were recovered from the upper 4 cm of the stratum, including yelloware, bottle glass, five cut nails, a bullet casing, and an iron nut. A limited amount of brick and shell also was observed. The remainder of the stratum was sterile.

The paucity of cultural materials, and the dearth of in situ features indicate that Unit 5 was not placed in the immediate vicinity of a tenement, and the low, observed rise in the terrain over which the unit was placed was not associated with any structures. The house depicted on the 1930 aerial photograph of the plantation (Figure 10) apparently was located 10-15 m to the south, close to the built up area.

Backhoe Trenches

Three backhoe trenches were placed towards the western end of Luckland Plantation, in the vicinity of three previously standing structures. Their placement was based on observed house locations on the 1930 aerial photograph of the plantation (Figure 10). However, the photograph lacked fixed visual reference points for the western portion of the plantation; therefore, estimated placement of historic standing structures was less precise than within the rest of the Luckland project area. These backhoe trenches are described below.

Trench 1. Backhoe Trench 1 was placed near the crest of the natural levee approximately 55 m southeast of Unit 5 (Figure 23). This 4.9 m long trench was excavated along a 336° orientation. Two strata were located in the trench. Stratum I consisted of a 6-10 cm thick deposit of 10YR 3/3 dark brown silt loam. Approximately 30 cm of the underlying Stratum II was exposed in the backhoe trench. This 10YR 6/3 pale brown silt loam was heavily mottled with 7.5YR 4/6 strong brown silt loam. Very few artifacts were recovered from the trench backdirt, including porcelain, pearlware, a piece of machine made bottle glass, and a cut nail. These artifacts apparently originated from Stratum I. Other than a few small brick fragments observed in the interface zone between Strata I and II, Stratum II exhibited no evidence of cultural disturbances. No features or evidence of structural remains were observed in the trench.

Trench 2. Backhoe Trench 2 was excavated on a level area approximately 45 m west of Unit 5 (Figure 23). This 5.1 m long trench was placed on a 330° orientation. It exhibited a similar stratigraphic soil profile to that observed in Trench 1. The upper 10-14 cm of Stratum I contained 10YR 3/3 dark brown silt loam. The underlying Stratum II was excavated to a depth of 30 cm below the base of Stratum I. It contained 10YR 4/3 dark brown silty clay loam with 10YR 5/8 to 10YR 5/6 yellowish brown mottles. The few artifacts recovered from the trench included porcelain, whiteware, and a cut nail. These also originated from Stratum I; there was no evidence of cultural materials or disturbances within Stratum II. No features were observed within the trench, and the paucity of artifactual material indicated the trench was not located in the immediate vicinity of a former structure.

Trench 3. Backhoe Trench 3 was situated near the west corner of the Luckland project area, approximately 8 m south of the fence which aligns Zenor Road (Figure 23). This 9 m long trench was placed on a 60° orientation. It contained two stratigraphic soil strata. The 13-18 cm thick Stratum I was a 10YR 3/3 dark brown silt loam, from which a few artifacts were observed and collected. The underlying 20-

24 cm thick Stratum II contained 10YR 4/3 dark brown clay loam with 10YR 5/6 yellowish brown mottles. Other than a piece of bottle glass and a few small brick fragments in the interface zone between the two strata, no evidence of cultural materials was observed in Stratum II. Artifacts recovered from the trench included porcelain, stoneware, whiteware, bottle glass, and a cut nail. As with Trenches 1 and 2, no features or evidence of structural remains were located within Trench 3.

Backhoe Scraping Areas

Two proximate areas were selected for scraping with a backhoe. These approximately 3 m wide and 8 m long areas were situated 15 m north and 25 m northwest of Unit 3, between the unit and Zenor Road (Figure 23). They were placed behind the house which originally stood near Unit 3; according to local informants, these houses at Luckland faced the bayou (Mrs. Ara May deGravelles Hall, personal communication 1991; Mr. Paul Accardo, Sr., personal communication 1991). The scraping was designed to expose the tops of features such as wells, privies, or other small dependencies. The two areas were designated the North Backhoe Scraping Area, and the South Backhoe Scraping Area. A sample of observed artifacts was collected from each area. Artifacts collected from the North Backhoe Scraping Area included brown stoneware, whiteware, various bottle glass, stemware, and part of a pocket watch. South Backhoe Scraping Area artifacts included brown stoneware, pearlware, whiteware, bottle glass, table glass, and depression glass. Some brick and shell also were observed in both areas. However, no evidence of any archeological features was observed within either backhoe scraping area.

Summary

Archeological testing at Luckland Plantation consisted of the excavation of 185 shovel tests, five excavation units, and three backhoe trenches. Two areas also were scraped with a backhoe in an attempt to expose archeological features. Based on collected data, the archeological deposits at Luckland Plantation include some foundation remains, a located kitchen midden, and landscape features. The bulk of the deposits, however, consist of fairly intact destruction debris and sheet refuse within and surrounding the historic house locations. These deposits are comprised primarily of kitchen debris (such as ceramics, glass, and bone) and architectural artifacts (mostly brick and nails). The project area apparently has not been plowed since at least before the Civil War, and, overall, the subsurface deposits possess good archeological integrity. In addition, their study would contribute important information concerning the entire Luckland Plantation domestic, agricultural, and industrial complex. The tested archeological deposits possess the quality of significance; they, along with the rest of Luckland Plantation (16SMY71), are recommended as eligible for inclusion on the National Register.

Avalon Plantation (16SMY70)

Initial shovel testing at Avalon Plantation was conducted along six survey transects in the western portion of the site; 85 shovel tests were excavated along these transects (Figures 1 and 29). Data obtained during survey, along with examination of a 1920 plan (Figure 7) and a 1930 aerial photograph of the plantation (Figure 8), indicated that within the current project area, all of the historic structures except for one aligned the road. In addition, when the modern Zenor Road was constructed, that portion in the Avalon Plantation project area was shifted approximately 20-25 m to the southeast, cutting through, or immediately southeast of the house locations which aligned the old road. This interpretation was based on examination of cultural materials on either side of the existing Zenor Road, and comparison of the historic depictions of the plantation with modern maps. Therefore, only one house location in the current Avalon Plantation project area apparently has survived. Additional field investigations south of Zenor Road were directed towards locating and assessing the house location, in the vicinity of Location 1.

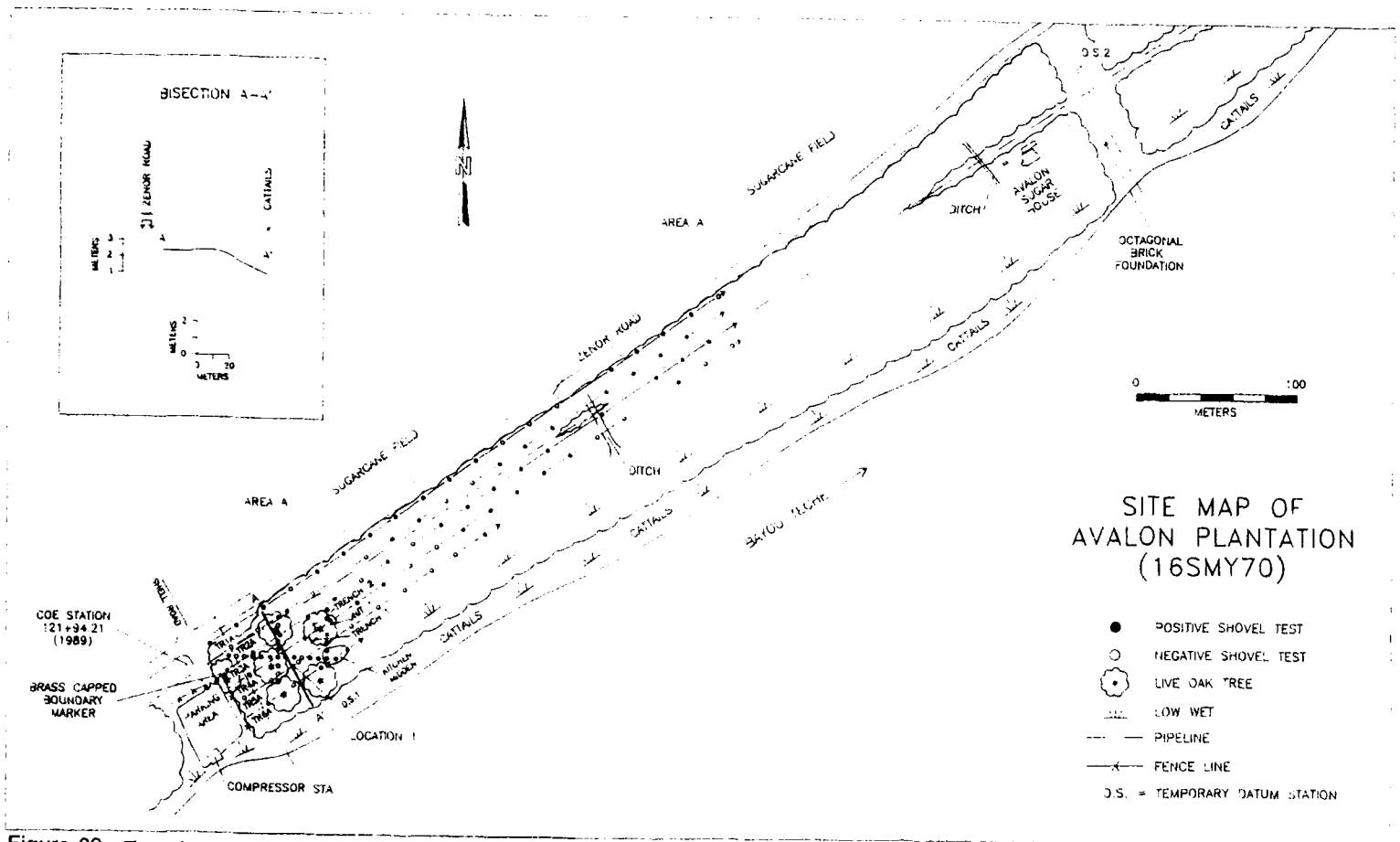


Figure 29. Transit map of Avalon Plantation (16SMY70), showing landscape features and the 1991 excavations

A total of 26 additional shovel tests were placed at Location 1. Of these shovel tests, eighteen contained cultural materials, including whiteware, various bottle glass, table glass, lamp glass, cut nails, spikes, iron fragments, brick, coal, and shell. Three of the shovel tests penetrated a kitchen midden located near the base of the natural levee, approximately 15 m southeast of a medium sited live oak tree situated on a small rise. Examination of the 1920 plantation plan and the 1930 aerial photograph indicated that the surviving house location within the Avalon Plantation project area apparently was situated in the vicinity of that rise. In addition, shovel testing indicated a somewhat higher quantity of artifacts near the rise than elsewhere in the area. Therefore, subsequent testing, including excavation of two backhoe trenches and one unit, focused on the raised area around the live oak tree. The trenches were excavated before the unit in an attempt to locate features or artifact deposits. These excavations are discussed below.

Trench 1

Backhoe Trench 1 at Avalon Plantation was situated towards the western edge of the small rise, approximately 6 m southwest of the live oak tree (Figure 29). This 4 m long trench, which was placed on a 55° orientation, contained two strata. Stratum I consisted of 10YR 3/3 dark brown silt loam. It was 17 cm thick at the eastern end of the unit, where the trench cut into the small rise. The stratum thinned gradually towards the west, with the western portion of the stratum 5-6 cm thick. Bottle glass, bone, and some bricks and brick fragments were observed and collected from the stratum. The four or five observed whole bricks were randomly mixed in the eastern half of Stratum I. A cut nail was recorded at the interface zone between Strata I and II.

Stratum II contained 7.5YR 4/6 strong brown clay loam. Between 12-32 cm of the stratum was exposed in the trench. Other than a few small brick fragments in the upper 4 cm, no cultural materials were observed in the stratum. No evidence of in situ features was located in the trench. In addition, only a small number of artifacts were observed and recovered from the trench, suggesting it was not located in the immediate vicinity of a domestic structure.

Trench 2

Backhoe Trench 2 at Avalon Plantation was situated approximately 3 m northwest of a live oak tree situated on the previously mentioned small rise (Figure 29). This 4.5 m long trench was oriented at 336°. The two excavated strata were very similar to those observed within Trench 1. Stratum I was a 10-22 cm thick deposit of 10YR 3/3 dark brown silt loam which contained a sparse quantity of whiteware, bottle glass, iron fragments, brick, and coal. The underlying 25-30 cm thick Stratum II contained 7.5YR 4/6 strong brown clay loam. No cultural materials were observed in this lower stratum. No evidence of archeological features or artifact concentrations was observed in Trench 2.

Unit 1

Unit 1 was placed towards the eastern side of the small rise, approximately 8 m east of the live oak tree (Figure 29). The unit was excavated in three strata. Stratum I, the topsoil, consisted of 10YR 3/2 very dark grayish brown silt loam. This 4-7 cm thick stratum contained a sparse quantity of artifacts and ecofacts, including whiteware, stoneware, bottle glass, window glass, a nail and an iron fragment, brick fragments, coal, and coal cinders. It rested on the 8-12 cm thick Stratum II, a 10YR 4/2 dark grayish brown silt loam mottled with 7.5YR 4/6 strong brown clay loam. This stratum, which contained a thin scatter of whiteware, bottle glass, a nail, brick, coal, and charcoal, formed an interface zone between the topsoil and the culturally sterile subsoil. The 15-18 cm thick Stratum III consisted of 7.5YR 4/6 strong brown clay loam;

no artifacts were observed in the stratum. The dearth of archeological features, and the sparse quantity of artifacts present, mirror the results observed in Trenches 1 and 2.

Summary

Based on data collected at Avalon Plantation, all of the historic plantation structure areas except for one were destroyed or removed from the project area south of Zenor Road by a mid to late twentieth century realignment of that road. Archeological testing in the vicinity of the one remaining location failed to locate in situ structural deposits, or large quantities of sheet refuse, except for a kitchen midden situated near the base of the natural levee. Since the kitchen midden is isolated from other located in situ features and deposits, its contextual integrity is compromised. Because of the extensive modern disturbance that has occurred to the area, the portion of the site tested under the current investigation lacks archeological integrity and substantive research potential.

Area A

Area A consisted of approximately 65 ac of previously unsurveyed cane fields situated north of Zenor Road, and adjacent to the previously surveyed Avalon Plantation (16SMY70) (Figure 1). During survey, a total of 342 shovel tests were excavated within the area (Figure 30). Of the 28 shovel tests which contained cultural materials, 20 contained only brick fragments, occasionally mixed with ecofacts. Whiteware; ironstone; buff bodied stoneware; amethyst, aqua, and clear bottle glass; a cut nail; iron fragments; and, barbed wire also were observed in the shovel tests. An additional six shovel tests contained shell and gravel. Most of the positive shovel tests were clustered along the southern edge of Area A, within 40 m of Zenor Road, adjacent to the previously identified Avalon Plantation site (16SMY70). No in situ features or soil deposits were located in any of the shovel tests.

During survey of Area A, numerous historic artifacts were observed on the ground surface. Most of these were located within 40 m of Zenor Road, from the west end of Area A east to the vicinity of the Avalon Plantation sugar house. This distribution reflects the results of the shovel testing. These primarily late nineteenth and early twentieth century artifacts included whiteware (plain, flow blue, transfer printed); yelloware (banded, plain, mocha); ironstone; ginger beer bottle fragments; buff bodied stoneware; porcelain; American gray stoneware; table glass; many types of bottle glass; window glass; a porcelain button; zinc canning jar lid fragments; iron fragments; cut nails; spikes; a brass lid; bone; and, brick, including firebrick. A very thin scatter of contemporaneous and modern artifacts also was observed throughout the surveyed field.

The archeological remains in Area A are part of Avalon Plantation (16SMY70). As mentioned earlier, during the early twentieth century, numerous houses aligned the south side of Zenor Road (Figures 7 and 8). However, the existing Zenor Road was shifted an estimated 20-25 m to the southeast, placing the road over, or immediately southeast of many of the Avalon Plantation structures. The artifacts located in Area A are debris associated with those structures. Since the houses were built on brick piers, and the survey area has been plowed repeatedly, it is improbable that any in situ deposits associated with the houses have survived in the field. While some subsurface features such as postholes for fencelines may occur in the field, larger features such as wells or privies probably are situated between the house locations and the bayou, possibly in the modern road or in the edge of the woods southeast of the road. Because of modern road construction and cultivational disturbances, the Avalon Plantation archeological deposits located in Area A lack archeological integrity and substantive research potential.

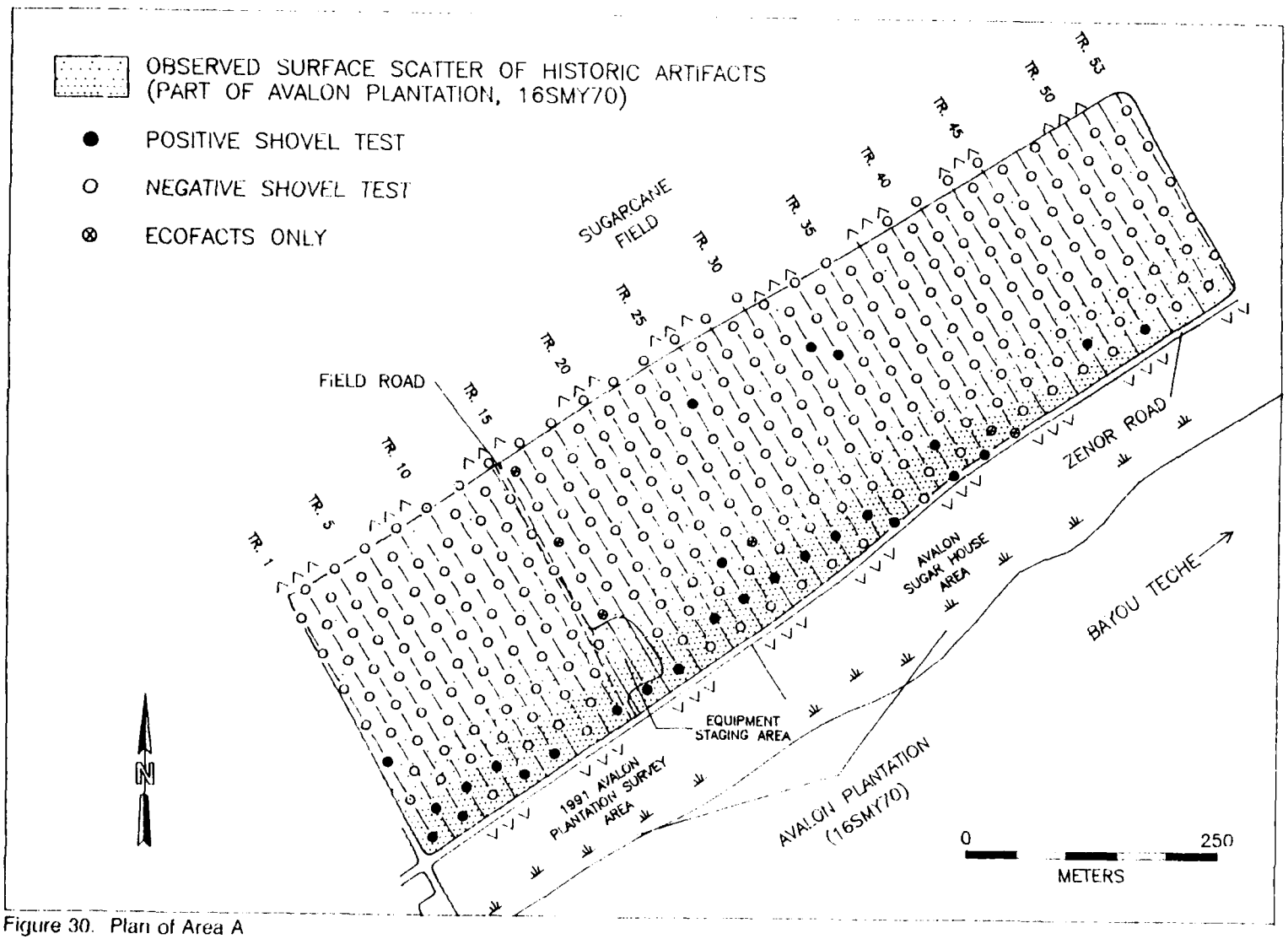


Figure 30. Plan of Area A

Area B

Area B consists of a 35 by 180 m parcel situated between Bayou Teche and a large water-filled borrow pit, situated a short distance northwest of Atchafalaya Basin (16SMY10), a large prehistoric mound complex. It is bisected by Zenor Road (Figure 1). Intensive subsurface investigations in Area B were designed, in part, to ascertain whether or not any prehistoric deposits associated with Atchafalaya Basin (16SMY10) extended into the project area. Two survey transects were placed within the project area, one on either side of Zenor Road (Figure 31). While shovel tests throughout most of the area were excavated at 20 m intervals, shovel tests within one located brick concentration were placed at 5 m intervals. During survey, a total of 27 shovel tests and eight auger tests were excavated along these transects. Nineteen of these shovel tests contained historic materials, including brick, porcelain, whiteware, bottle glass, cut and wire nails, a spike, mortar, shell, and gravel. These materials generally dated from the early to mid-twentieth century. Excavated auger tests provided no evidence of buried cultural deposits. No prehistoric materials were located during investigations in Area B.

The historic archeological deposits located in Area B are associated with a previously unrecorded portion of Moro Plantation (16SMY73). The portion of Moro Plantation identified during the 1990 survey (Goodwin, Hinks et al. 1991), and tested during the current investigations is located approximately 350 m to the northwest; that portion was discussed earlier in this chapter. The deposits located in Area B consisted of a thin scatter of artifacts, primarily brick fragments, and one brick concentration. This 35 m long brick concentration was located southwest of Zenor Road, extending from the Zenor Road right-of-way to Bayou Teche. It contained a moderate to dense concentration of soft-mud brick, along with whiteware, porcelain, a porcellaneous child's teapot lid, a porcelain button, various bottles and bottle glass, cut nails, a spike, charcoal, and shell. No in situ brick was observed on the ground surface or within subsurface tests.

The Area B brick concentration appeared morphologically similar to the mixed brick deposits at Locations 1 and 2 within the northwestern portion of Moro Plantation. Field observations and subsurface testing in Area B indicated the observed brick concentration was disturbed extensively; the brick deposit apparently was pushed to its current location by heavy machinery during construction of the existing Zenor Road.

The observed deposits throughout the remaining portion of Area B also were disturbed extensively. Zenor Road passes through the central half of the area, and a modern borrow pit forms the north boundary; this leaves only approximately 7-13 m of potentially undisturbed deposits on either side of the road. Several of the excavated shovel tests were mixed with shell and road gravel, reflecting road construction disturbance. In addition, the archeological context of any intact deposits which may have survived has been compromised by the surrounding road construction and borrow pit excavation disturbances. Based on the area's low archeological integrity and limited research potential, the archeological deposits within Area B do not possess the quality of significance as defined by National Register of Historical Places criteria.

Area C

Area C was situated in lawn, grassy fields, and a cane field on the west bank of Bayou Teche, near its mouth (Figure 1). The northwest third of the parcel has been developed during the past two years, with the construction of a modern house a short distance northeast of the project area, a shell lane, a pond, a horse corral, and a partially built small barn (Figure 32). The area northwest of the shell lane is lawn, while southwest of the lane is an overgrown grassy field. A sugarcane field is located within the southeast portion of the project area.

During survey, a total of 95 shovel tests were excavated within the 21.7 ac area. Sixteen of these shovel tests contained cultural materials, including brick, whiteware, bottle glass, a bolt, and iron fragments,

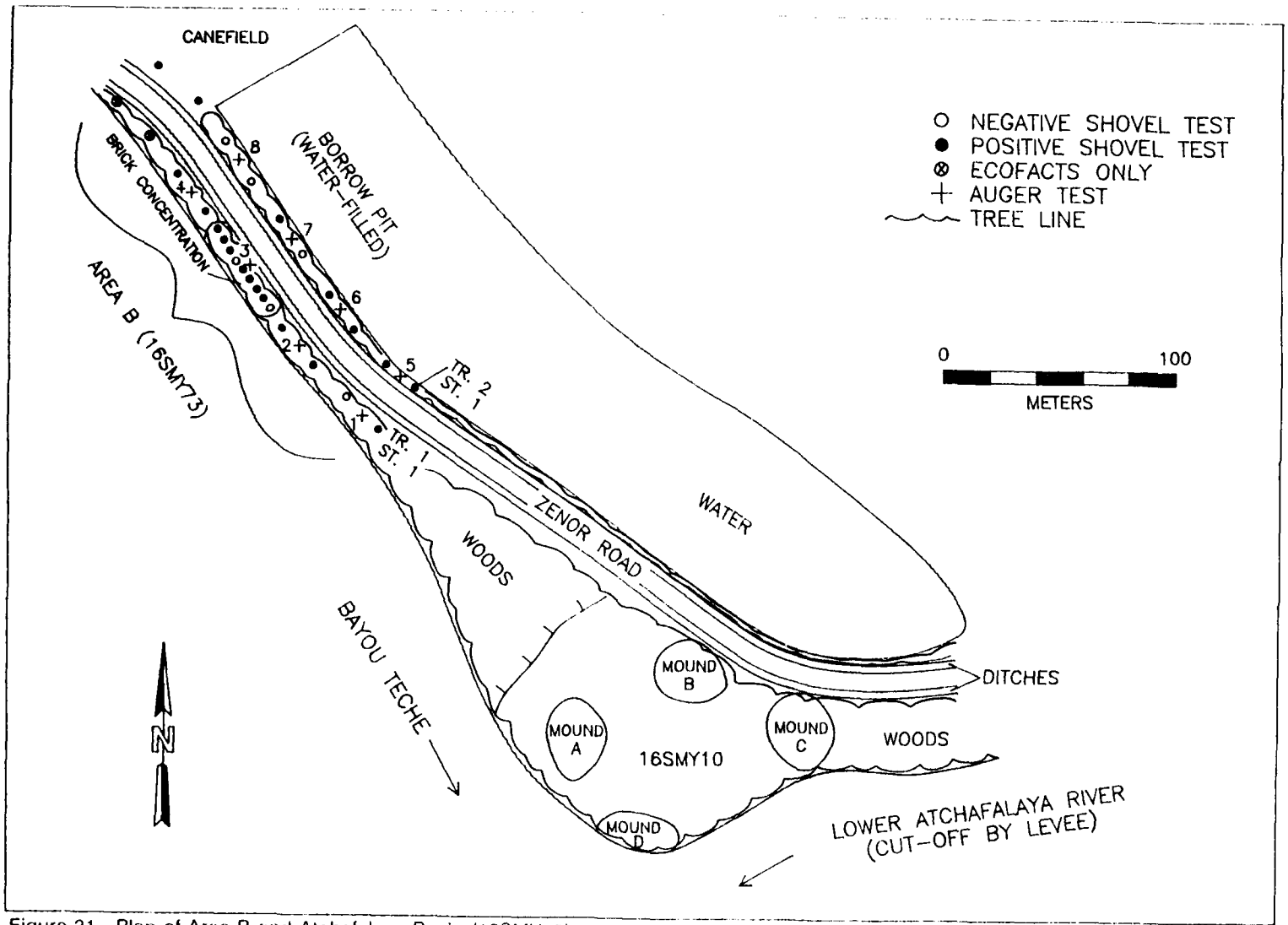


Figure 31. Plan of Area B and Atchafalaya Basin (16SMY10)

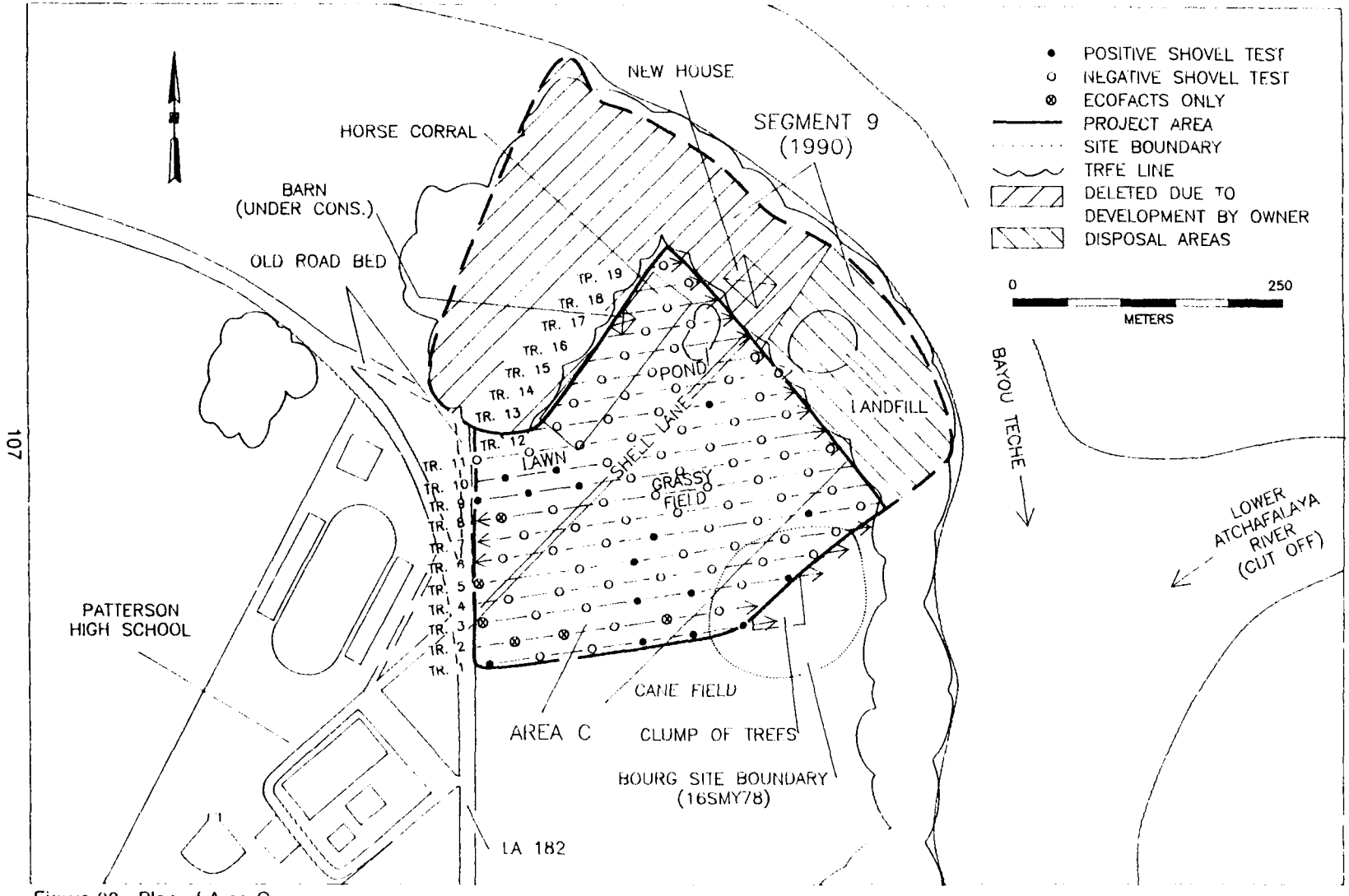


Figure 32. Plan of Area C

shell, and road gravel. Six additional shovel tests contained only ecofacts (shell and gravel). One modern artifact scatter, and one archeological site were located during survey. The artifact scatter was located southwest of the horse corral, in the vicinity of Transect 9, Shovel Test 2. Modern artifacts were observed in five shovel tests in that area, including modern soda bottle glass and other bottle glass, a piece of whiteware, a nail, brick, and shell. These artifacts are associated with several ca. 1920s - 1980s structures which stood in the area. Evidence of these structures also was observed during the 1990 archeological survey of the adjacent Segment 9 (Goodwin, Hinks et al. 1991). Because of the recency of the observed artifacts, no state archeological site number was requested for these deposits.

During survey, the Bourg site (16SMY78) was identified at the southeast edge of the project area (Figure 32). This 130-150 m diameter site is centered in a clump of trees and undergrowth; materials associated with the site extend into the surrounding sugarcane field (Figure 33). A field road, which forms the southeastern project boundary, passes along the north edge of the clump of trees; a 50-60 cm deep drainage ditch cuts through the cane field at the south edge of the trees. A large pile of construction and household debris extended along the south edge of the clump of trees.

The approximate boundaries of the Bourg site were defined through examination of the ground surface within the cane field. At that time, observed artifact types were recorded, and a sample of diagnostic artifacts was collected. A greater concentration of artifacts was observed east of the clump of trees, and towards the bayou; this distribution may reflect refuse disposal patterns. Whiteware types observed at the site included plain; blue banded; brown banded; unscalloped, lightly embossed shell-edged blue; transfer-printed blue, dark blue, and gray; dipped; and, light green and burgundy hand-painted. Ginger beer bottle fragments, and gray salt glazed stoneware also were noted. A wide variety of glass artifacts were observed, including numerous colors of bottle glass; amethyst glass; embossed glass; panel medicine; tooled lips; applied lips; a string rim; a cracked-off and ground mouth; and, pressed glass, including Daisy pattern. Other artifacts and ecofacts within the site consisted of nails; spikes; a porcelain button; an upper set of dentures; bone, including cut bone; slate; brick; and, shell. These artifacts generally date from the postbellum into the 1970s or 1980s, with the majority of the artifacts dating from the ca. 1890s - 1930s.

The Bourg site was owned by the Bourg family in the 1890s (Figure 14). The 1930 aerial photograph depicts the house and a possible second structure in the central portion of the site, along with a possible structure southeast of the field road, between the main house location and the bayou. The field road continued northeastward to a dock-like landing at the mouth of the Teche (Figure 12). The 1944 Corps of Engineers aerial photograph depicts one structure in the middle of the site, along with a possible structure between that house and the bayou. The landing also is shown, along with two small structures situated northwest of the field road, near the northeast end of the project area. USGS topographic quadrangles as recent as the 1966 (photorevised 1981) 7.5' series Patterson, Louisiana quadrangle depict one structure at Bourg (Figure 1). Based on photographic, cartographic, and archeological evidence, the residence at Bourg (16SMY78) was established by the late nineteenth century. By 1930, a small structure may have stood adjacent to the main house, while another outbuilding possibly was located 50-60 m northeast of the main house. A landing also was established. By 1944, the possible structure adjacent to the main house no longer was standing, and two small buildings were located an estimated 125 m northeast of the house, north of the field road, near the modern woods adjacent to the bayou. The main house remained standing as late as the 1970s or 1980s, at which time it was destroyed. Debris from the house was pushed into a pile towards the south end of the clump of trees.

Collected data indicate that while sheet refuse from the site extends into the fields surrounding the clump of trees, any surviving subsurface features, such as structural remains, apparently would be located south and east of the field road which forms the project area boundary. The possible exception would be the two small unidentified dependencies depicted on the 1944 aerial photograph towards the east edge of the project area. Within the project area, archeological deposits are comprised of a moderate quantity of sheet refuse in a mixed plowzone context. Because of the low archeological integrity of the project area

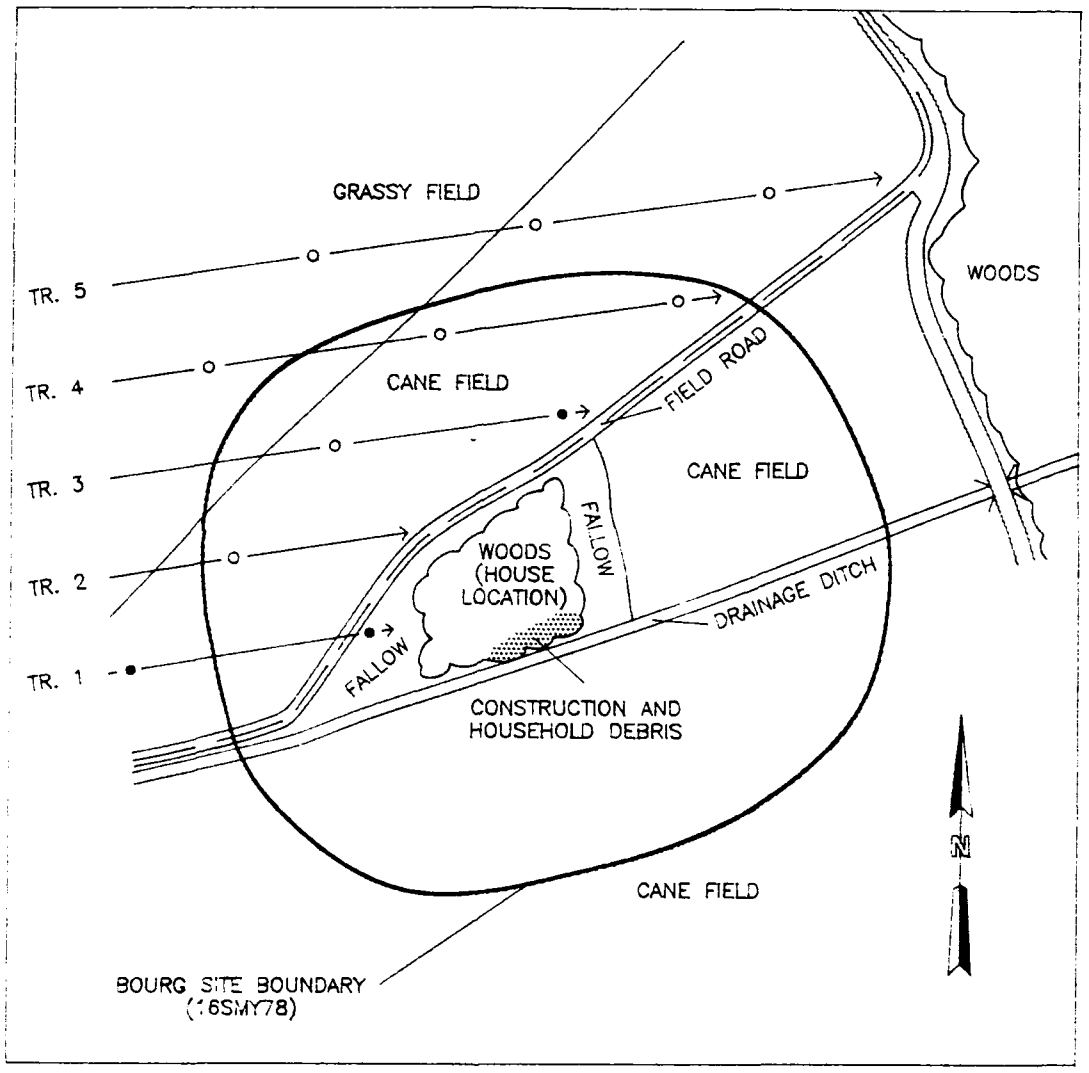


Figure 33. Plan of the Bourg site (16SMY78)

deposits, the dearth of anticipated archeological features in the area, and the low research potential of the field deposits, the portion of the site within the current project area does not possess the quality of significance as defined by National Register of Historical Places criteria.

Summary

Archeological survey and testing was conducted at six areas along Bayou Teche: Moro Plantation, including Bosler; Luckland Plantation; Avalon Plantation; and, Areas A-C. Reconnaissance, shovel testing, and the excavation of units and backhoe trenches at the historic Moro Plantation (16SMY73) indicated portions of the site were disturbed considerably, and other portions lacked substantive research potential. During the survey at Moro, the prehistoric Bosler site (16SMY77) was identified and recorded. Testing at Bosler included shovel and auger testing, and excavation of a 50 cm^2 unit. This testing demonstrated that the site included buried deposits extending to a depth of at least 1.4 m. These deposits exhibited good overall archeological integrity. In addition, the buried deposits may contain important data concerning Red River occupation of the Teche channel, as well as early human settlement along the Teche.

Investigations at Luckland Plantation (16SMY71) included shovel testing, transit mapping, the excavation of five units and three backhoe trenches, and the scraping of two areas in an attempt to locate features. These investigations demonstrated the good overall archeological integrity of the Luckland project area. Study of sheet refuse distribution patterns could provide valuable data concerning living conditions of South Louisiana tenant farmers.

The project area portion of Avalon Plantation (16SMY70) was shovel tested and transit mapped, and two backhoe trenches and one unit were placed in it. Investigations demonstrated that the existing Zenor Road passes over or immediately southeast of most of the plantation houses in the western portion of Avalon, compromising the archeological integrity of the associated cultural resources. Also, little evidence was observed of the one intact house location. Based on the lack of identified features or widespread in situ sheet midden deposits, the project area portion of Avalon Plantation possesses low research potential.

Areas A, B, and C were previously untested survey areas. Intensive pedestrian survey and systematic shovel testing was conducted in all three areas; auger tests also were excavated within Area B. Area A contained disturbed sheet refuse deposits at the north edge of Avalon Plantation (16SMY70). Area B included a brick concentration associated with Moro Plantation (16SMY73). A previously unrecorded site, Bourg (16SMY78), was located at the eastern edge of Area C. The archeological deposits within all three areas lacked archeological integrity and research potential. Chapter V discusses artifacts recovered from all six survey areas.

CHAPTER V

LABORATORY ANALYSIS

Introduction

During supplemental archeological investigations along Lower Bayou Teche, in St. Mary Parish, artifacts were recovered from Moro (16SMY73), Luckland (16SMY71), and Avalon (16SMY70) Plantations as well as from two new sites, the prehistoric Bosler Site (16SMY77), and the historic Bourg Site (16SMY78). Remains recovered from Moro Plantation included 756 historic artifacts, 24 cinders, 12 coal and coal slag fragments, 1 unidentified stone, 5 shells, and 22 animal bones. Five of the 756 historic Moro artifacts were collected from Area B. Artifacts from the Bosler site recovery included 256 prehistoric ceramic sherds, 3 fired clay fragments, and 85 animal bones. Collected materials from Luckland Plantation included 3,389 historic artifacts, 2 prehistoric ceramic sherds, 331 animal bones, 20 shells, 2 seeds, 1 charcoal fragment; and 35 cinders, coal and coal slag, and stone fragments. Recovered remains from Avalon Plantation included 202 historic artifacts, 1 prehistoric ceramic sherd, 5 cinder and coal fragments, 1 piece of charcoal, 11 animal bones, and 1 shell. Three of the 202 Avalon historic artifacts and the single prehistoric sherd were collected from Area A. Lastly, 10 historic artifacts were recovered from the Bourg site.

All materials collected during these supplemental investigations were processed similarly to those recovered during initial testing (Goodwin, Hinks et al. 1991). The materials were washed and sorted by material category, encoded into a computerized site catalog organized by material **category**, **functional group** based on behavioral activity groups established by South (1977), and diagnostic levels **type** and **subtype** (Goodwin, Hinks et al. 1991). Attribute data was recorded for whole and partial bricks, including length, width, thickness, Munsell color designations, Mohs test hardness values, presence or absence of glaze or mortar, and brick brands. Brick forms and functions were obtained from Gurcke (1987). Prehistoric ceramic sherds were analyzed using types established by Phillips (1970), and were sorted by temper, portion of vessel, and surface finish. Animal bones were identified by skeletal element and species. When the species could not be identified, bones were grouped into descriptive categories i.e., large and small mammal, fish, bird, and turtle. Large mammals include cow, horse, pig, sheep, goat, and deer; small mammals include mice, rats, squirrels, raccoons, opossums, and armadillos. In some instances, the determination between large (squirrel, large rat) or small (mice, small rat) rodent was made.

Moro Planation (16SMY73)

Artifacts and other materials were recovered along Transects 1A - 5A, and within Locations 1 - 2, 4 - 7, and Area B (Tables 1 and 2). These collections are discussed by area below.

Transects 1A - 5A

Shovel testing along Transects 1A - 5A produced 59 historic artifacts (Table 1) including 13 ceramic sherds, 17 glass fragments, and 29 metal objects. Two cinders also were collected. Ceramic artifacts included 2 undecorated hard porcelain sherds, and 11 whiteware sherds, 6 were plain, the remaining consisting of one example each of annular (Figure 34), flow blue, blue hand-painted, polychrome hand-painted, and transfer-printed wares. Glass artifacts included 3 blown-in-mold fragments, 1 pharmaceutical bottle tooled lip fragment, 3 window glass fragments, and 10 unidentified bottle sherds. Metal artifacts included 6 cut, 2 wire, and 6 unidentified nail fragments, 2 iron bars, 1 bolt, 1 plow part, 1 spike, 1 clothing eyelet/rivet, 1 horseshoe with embedded nail fragments, and 8 unidentified cast iron objects.

Table 1. Material Recovered during Surface Collection and Auger and Shovel Testing at Site 16SMY73, Moro Plantation

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
PORCELAIN														
Undecorated, hard			1						1			2		
Undecorated, soft			1					1						
Toy teapot cap/lid, embossed													1	
Stoneware														
Domestic Brown														
Salt-glazed on buff											1			
Alkaline-glazed on buff			1											
Pearlware														
Plain											1			
Whiteware														
Plain		2	22	1			1	1	5		5	6		
Annular												1		
Decalcomania									1					
Flow blue		1										1		
Blue hand-painted									1			1		
Polychrome hand-painted												1		

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Scalloped rim, impressed straight lines									1					
Sponged			1											
Transfer-printed											1	1		
Molded							1		2					
Unidentified decoration			1								1			
IRONSTONE														
White, undecorated	1													2
Transfer-printed with hand-painting									1					
Yelloware														
Annular			1											1
Buff-bodied Earthenware														
Banded	1													
Jackfield-like Earthenware														
Teapot fragment											1			
CONSTRUCTION MATERIALS														
Brick fragments			1				8				1			
Mortar							1							

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
WOOD														
Bottle cork fragment													1	
GLASS														
Blown-In-Mold														
Amber				1							1			
Aqua			2	1					2			1		
Amethyst			2											
Colorless, embossed		1		2										
Food/medicine bottle, colorless									1					
Colorless		4	1	2					1			2		
Panel bottle fragment, amethyst			1											
Panel bottle fragment, aqua			1											
Panel bottle fragment, colorless									1					
Panel bottle fragment, very pale light green/aqua/ gray									2					

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Very pale light green/aqua/ gray									1					
Very pale light green/aqua/ gray, embossed									1					
Dark green, embossed		1												
Light green									1					
Turn Paste Mold														
Dark green	1													
Olive					1									
Post Bottom Mold														
Brown, embossed										1				
Tooled Lip														
Amethyst (whole bottle)													1	
Aqua, beer bottle fragment, crown finish				1										
Colorless, pharmaceutical bottle fragment												1		

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Machine-made Bottle Glass														
Amber, embossed (whole bottle)	1													
Colorless, embossed			1	1									1	1
Colorless, embossed (whole bottle)													1	
Colorless	1													4
Very pale light green/aqua/ gray, embossed									1					
Light green, embossed	1													
Lamp Glass														
Colorless									5					
Table Glassware														
Amethyst				1										
Unidentified		1												
Milk Glass														
Lid liner fragment									1					
Button			1								1			
Window Glass									9			3		

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Molded-Technique Unknown														
Amethyst			1											
Opaque blue			1											
Unidentified Bottle Glass														
Amber		1	1						2			1		
Amethyst			9						1		2			
Aqua		1	4						2		1	1		
Opaque blue			1											
Cobalt blue												1		
Colorless		4	4						8			1		
Light green			1								2	1		
Green		1	2									1		
Dark green											3			
Milk glass			1									1		
Olive			1	1							3	3		
Very pale light green/aqua/ gray			1						2					
METAL														
Barbed wire		1							1					
Bolt												1		
Clothing eyelet/rivet			1									1		

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Construction iron rivet			1											
Iron bar												2		
Iron wire (not barbed)		1												
Horseshoe with embedded horseshoe nail fragments												1		
Plow part												1		
Safety pin									1					
Spike											1	1		
Spoon (large)										1				
Nails														
Cut		1	11						3		5	6		
Wire		1	11			4	1		3			2		
Unidentified			9				1					6		
Unidentified Cast Iron Object			2				1				1	8		
Unidentified Metal Object				1			3		1		4			
STONE														
Cinder							22					2		
Coal Slag							1		1					

Table 1, continued

MATERIAL TYPE	L.1 & 2 SURF. COLLECT	L.1 S.Ts.	L.2 S.Ts.	L.2 SURF. COLLECT	L.4 SURF. COLLECT	L.4 S.Ts.	L.5 S.Ts.	L.5 AUGER TESTS	L.6 BRICK SCATTER S.Ts.	L.7 BRICK SCATTER SURF. COLLECT	L.7 BRICK SCATTER S.Ts.	TR. 1A - 5A S.Ts.	AREA B SURF. COLLECT	UNIT 2 SURFACE
Other														
Unidentified plastic object			1											
TOTAL	6	21	100	12	1	4	40	2	63	2	35	61	5	8

Table 2. Material Recovered from Trenches and Units Excavated at Site 16SMY73, Moro Plantation

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
CERAMIC MATERIALS							
Porcelain							
Undecorated, hard	1						
Molded, hard				1			
Transfer-printed, hard	1						
Undecorated, soft			1				
Stoneware							
Domestic Brown							
Salt-glazed and Albany slipped				1			
Albany slipped on buff	1						
Colored glaze on buff	1						
Buff-bodied industrial stoneware (ginger beer)				2			
Unidentified stoneware				1			
Domestic Gray							
Salt-glazed and Albany slipped				1			
Salt-glazed, undecorated				3	1		
Albany slipped				1			
Lead-glazed				4			
Whiteware							
Plain	7	4	2	41	4		
Annular				3			
Blue hand-painted			2				
Polychrome hand-painted				1			

Table 2, continued

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
Flow blue					1		
Transfer-printed				8	1		
Unidentified shell-edged				1			
Molded	2	1		1			
Whiteware/Ironstone							
Plain				5			
Polychrome hand-painted					1		
Ironstone							
White, undecorated	2		2	2	2		
Annular				1			
Molded				1			
Yelloware							
Plain				6			
Annular					2		
Mocha				2	1		
Unidentified decoration				1			
Redware							
Clear-glazed				3			
Buff-bodied Earthenware							
Sponged	1						

Table 2, continued

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
Stoneware Drainage Pipe							
Fragments			17				
CONSTRUCTION MATERIALS							
Firebrick, whole			2				
Firebrick, partial			4				
Brick waster fragment				1			
Brick fragment				7			1
Concrete			1				
Roofing slate							1
GLASS							
Blown-In-Mold							
Amber bitters bottle fragment, embossed				1			
Amber bitters bottle fragment				1			
Amethyst, embossed	1						
Amethyst				1			
Aqua, embossed							
Aqua, mason jar fragment	2						
Aqua			2	3			
Colorless, embossed		1	1	1			
Colorless			7				
Milk glass					1		
Panel bottle fragment			2	1			

Table 2, continued

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
Turn Paste Mold							
Olive	2						
Light green		1					
Dark green				4			
Post Bottom Mold							
Amber, embossed				1			
Tooled Bottle Lip							
Amber				1			
Machine-made Bottle Glass							
Amethyst		1					
Aqua, embossed		1					
Aqua, mason jar fragment		1					
Aqua		1	2				
Colorless		3	3				
Depression Glass							
Green milk glass		1					
Turquoise milk glass	1						
Lamp Glass							
Colorless		1	1	1			
Table Glassware							
Colorless		1					
Punch bowl/candy dish fragment, colorless			1				

Table 2, continued

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
Unidentified		1					
Molded Technique Unknown							
Amethyst				1			
Milk glass				1			
Melted Glass							
Amber				1	1		
Aqua				3			
Colorless				1	1		
Milk glass				1			
Very pale light green/gray/aqua				1			
Unidentified				4			
Unidentified Bottle Glass							
Amber		1	3	1			
Amethyst			8				
Aqua		2	12	7	2		
Colorless	1	1	11	1			
Green		1	3				
Dark green				11			
Milk glass				2			
Olive				3			
Very pale light green/aqua/gray				2			

Table 2, continued

MATERIAL TYPE	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II	UNIT N102, E102 (50 x 50 cm) STR. I	UNIT N102, E102 (50 x 50 cm) STR. II
METAL							
Bolt				1			
Button		1					
.22 Winchester rimfire cartridge case						1	1
Iron eye						1	
Iron wire (not barbed)			4				
Cast iron store part				2			
Spike		1	1	2			
Nails							
Cut			12	32	1		
Wire	1	1	37		1		
Unidentified Metal Object							
Brass object			3				
Cast iron			3				
Unidentified	1		1	6	1		
Stone							
School slate				1			
Coal			2				5
Coal slag							3
Unidentified stone				1			
TOTAL	**25**	**26**	**150**	**198**	**21**	**2**	**11**

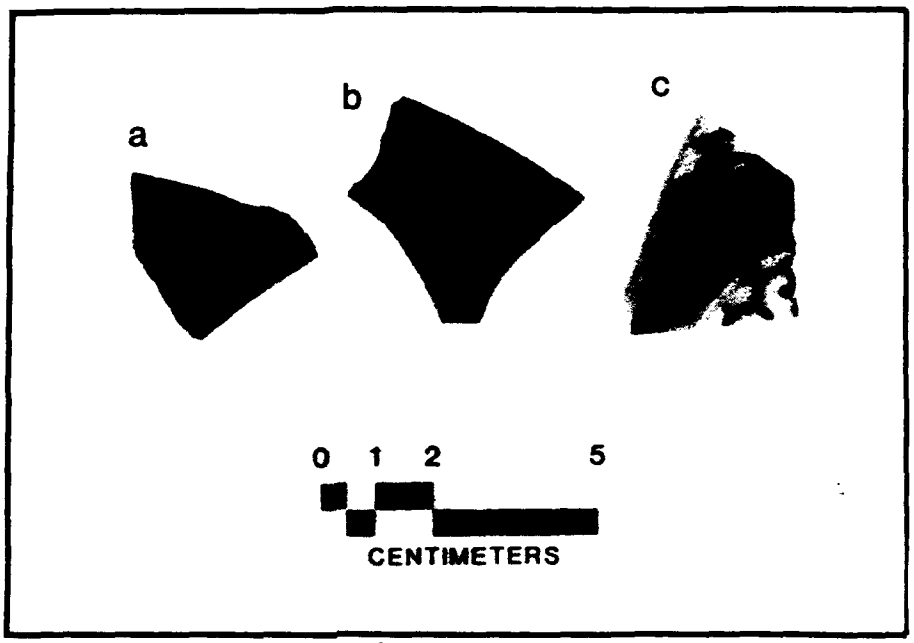


Figure 34. Selected ceramic sherds from 16SMY73, Moro Plantation: (a) annular whiteware (Transect 3A, Shovel Test 21; (b) mocha yelloware (Unit 2, Stratum I); (c) transfer-printed hard porcelain (Trench 1 Backdirt).

Diagnostic artifacts (Table 3) include plain whiteware (1820 - 1900+), and annular (1820 - 1890), flow blue (post 1840), and transfer-printed (post 1820) whitewares. Tooled bottle lips date from the 1820s to the 1920s, whereas cut nails were most popular from 1815 to 1890. Wire nails postdate 1890. The shovel tests covered the Moro Plantation survey area, and these diagnostic recovered artifacts generally reflect the postbellum and twentieth century nature of the site.

Location 1

Shovel testing at Location 1 produced 21 historic artifacts (Table 1), including 3 whiteware sherds (2 plain and 1 flow blue), 6 blown-in-mold glass fragments, including 2 unidentified embossed fragments, 1 table glassware sherd, 7 pieces of unidentified bottle glass, and 4 metal artifacts, including barbed wire, iron wire, 1 cut nail, and a single wire nail. Diagnostic artifacts include the plain (1820 - 1900+) and flow blue (post 1840) whiteware sherds and the cut (1815 - 1890) and wire (post 1890) nail fragments. Two small brick concentrations were located within this area; however, they appear to lack archeological integrity (Chapter IV).

Locations 1 and 2

Surface collection in these two areas produced 6 artifacts, including 1 undecorated white ironstone sherd, 1 buff-bodied banded earthenware fragment, 1 turn-paste mold glass bottle base, and 2 machine-made glass fragments and 1 machine-made bottle (Table 1). Two of the three machine-made glass fragments were embossed, and the amber bottle was identified with a mark used by William Franzen & Son, Milwaukee, Wisconsin, from 1900 to 1929 (Table 4). The other embossment was a light green glass fragment and read "Gates/contents 7 Fl. oz./FRANKLIN, LA." Diagnostic artifacts include an ironstone sherd (post 1845), a turn paste glass mold (1870s - 1920s), and machine-made glass (post 1920). These diagnostic artifacts along with the identified embossment date from the late nineteenth and twentieth centuries.

Location 2

A total of 137 historic artifacts, 3 animal bones and 1 shell were recovered from surface collection, shovel testing, and trench excavation at Location 2 (Tables 1, 2, and 5). Only 12 artifacts and 1 unidentified shell were recovered during surface collection, including 1 piece of plain whiteware, 6 blown-in-mold glass fragments (including 2 unidentified embossed sherds), 1 tooled beer bottle lip (crown finish), 1 identified embossed machine-made glass fragment, 1 amethyst table glassware sherd, 1 piece of unidentified bottle glass, and 1 unidentified metal object. The embossment observed on the machine-made glass fragment -- the letter "I" within a diamond -- postdates 1915, and belongs to the Illinois Glass Co., Alton, Illinois (Table 4). Other diagnostic artifacts include plain whiteware (1820 - 1900+), amethyst glass (ca. 1875 - 1920), and the tooled bottle lip. Tooled bottle lips date from the 1820s to the 1920s, while crown finishes postdate 1892; therefore, this particular bottle lip dates from 1892 to ca. 1920s.

Shovel testing recovered 100 historic artifacts and 3 animal bones (Table 1). Animal bones included 1 large mammal long bone, 1 fish spine fragment, and 1 unidentified bone. The large mammal long bone displayed evidence of butchering. Historic artifacts included 24 whiteware sherds (22 plain, 1 sponged, and 1 unidentified decoration), 2 plain porcelain sherds, 1 alkaline-glazed domestic brown stoneware sherd, 1 annular yelloware fragment, 1 brick fragment, 1 milk glass button, 7 blown-in-mold glass fragments, 1 piece of identified embossed machine-made glass fruit jar fragment, 2 molded-technique-unknown glass sherds, 25 unidentified bottle glass fragments, 31 nail fragments (11 cut, 11 wire, and 9 unidentified), 1 metal clothing eyelet/rivet, 1 iron construction rivet, and 2 unidentified cast iron objects. Several fragments of amethyst-

Table 3. Chronology of Ceramic Types, Glass Types, and Nails from within the Survey Area

MATERIAL TYPE	USE POPULARITY DATE RANGE	MEAN	SOURCE
CERAMIC WARE AND DECORATION			
Porcelain			
Button	post 1840		Hinks 1988
Porcellaneous ware	post 1880		Worthy 1982
Stoneware			
Domestic Brown			
Albany slipped	1810 - 1900	1855	Goodwin, Yakubik, and Gendel 1984
Domestic Gray			
Salt-glazed, undecorated	1790 - 1910	1850	Ketchum 1971
Alkaline-glazed	1800 - 1920	1860	Ketchum 1971
Albany slipped	1810 - 1900	1855	Goodwin, Yakubik, and Gendel 1984
Industrial Stoneware			
Buff-bodied (*ginger beer*)	1850 - 1900	1875	Ketchum 1971
Pearlware			
Plain	1780 - 1830	1805	South 1977
Whiteware			
Plain	1820 - 1900+		South 1977
Dipped/annular	1820 - 1890	1855	Ramsay 1947; South 1977
Flow blue	post 1840		G. Miller, personal communication 1988
Transfer-printed	post 1820		G. Miller, personal communication 1989
Sponged	ca. 1850s - 1920s		G. Miller, personal communication 1988
Whiteware/Ironstone			
Plain	1813 - 1900+		Goodwin, Yakubik, and Gendel 1984

Table 3, continued

MATERIAL TYPE	USE POPULARITY DATE RANGE	MEAN	SOURCE
Ironstone			
White, undecorated	post 1845		G. Miller, personal communication 1989
Gray, undecorated	post 1845		G. Miller, personal communication 1989
Yelloware			
Plain	1830 - 1900	1865	Ramsay 1947
Dipped/annular	1830 - 1900	1865	Ramsay 1947
Rockingham/Bennington glaze	1830 - 1900	1865	Ramsay 1947
Ginger beer	1830 - 1900	1865	Ramsay 1947
DECORATIVE TECHNIQUES			
Pearlware and Whiteware			
Decalcomania	post 1880		Pittman 1987
Scalloped rim, impressed straight lines	1795 - 1840		Miller n.d.
Unscalloped, impressed rim	1825 - 1891		Miller n.d.
Unscalloped, unmolded	1850 - 1897		Miller n.d.
Unidentified edge type	1780 - 1897		Miller n.d.
DIAGNOSTIC GLASS ATTRIBUTES			
3 piece shoulder height mold	1820s - 1920s		Jones and Sullivan 1985
Post bottom mold	ca. 1850 - present		Jones and Sullivan 1985
Turn paste mold	1870s - 1920s		Jones and Sullivan 1985
Lip, fire-polished	ca. 1880		Munsey 1970
Lip, tooled	1820s - 1920s		Jones and Sullivan 1985
Crown finish	post 1892		Jones and Sullivan 1985
Machine-made bottle	post 1920		Jones and Sullivan 1985
Amethyst color	ca. 1875 - 1920		Jones and Sullivan 1985
NAILS			
Cut	1815 - 1890	1853	Nelson 1968
Wire	post 1890		Nelson 1968

Table 4. Identified Ceramic or Glass Artifact Manufacturer/Brands Recovered During Survey

PROVENIENCE	OBSERVED MARK	MANUFACTURER/BRAND	DATE OF OBSERVED MARK	SOURCE
CERAMIC ARTIFACTS				
16SMY71 Luckland Plantation				
Transect 4A Shovel Test 11	"BAKER & C[o]" "ENGLAN[D]"	(W) Baker & Co. (Ltd.) Fenton, Staffordshire Potteries	1893 - 1928	Godden 1964:51
South Backhoe Scrape near Unit 3, Backdirt	"[BA]KER & [Co]" "ENGL[AND]"	(W) Baker & Co. (Ltd.) Fenton, Staffordshire Potteries	1893 - 1928	Godden 1964:51
Location 1 Shovel Test W25M	"[STO]NE [CHINA]" "[ED]WARD [CLARKE]" "[BU]RSLEM, [ENGLAND]"	Edward Clark (& Co.) Churchyard Works, Burslem, England	ca. 1880 - 1887	Godden 1964:147
Unit 2 Str. I	"DA[VENPORT]" "3" (with part of an anchor) "GRANITE"	Davenport Longport, Staffordshire Potteries	ca. 1830s	Godden 1964:189
Unit 2 Str. I	"...M...." "EDWARD C[LARKE]" "TUNSTA[LL]"	Edward Clark (& Co.) Phoenix Works, Tunstall, England	ca. 1865 - 1877	Godden 1964:147
Trench 3 Backdirt	"S[EMI-GRANI]TE" (shield with cross sword emblem in middle) "THE D.E. MCN.P.CO" "LIVERPOOL"	D. E. McNicol Pottery Co. East Liverpool, OH, U.S.A.	1892 - ca. 1920s	Lehner 1988:290-291
North Scrape Area Backdirt	"WEDGW[OOD]" "ENG[LAND]"	Unidentified Wedgwood pottery	post 1891	Godden 1964:659

Table 4, continued

PROVENIENCE	OBSERVED MARK	MANUFACTURER/BRAND	DATE OF OBSERVED MARK	SOURCE
16SMY73 Moro Plantation				
Trench 2 Backdirt	"[HOMER] [LAU]GHLI[N]" "[EMP[RESS" "[Z]N"	Homer Laughlin China Co. Newell, West Virginia	ca. 1900	Lehner 1988:245-248
GLASS ARTIFACTS				
16SMY71 Luckland Plantation				
Transect 3A Shovel Test 2	"...TICHENOR'...."	Dr. G. H. Tichnor's Antiseptic Refrigerant Dr. G. H. Tichenor Antiseptic Co. New Orleans, Louisiana	post 1883	Fike 1987:183
Transect 3A Shovel Test 9	Horizontal diamond observed	Diamond Glass Co. Royersford, Pennsylvania	post 1924	Toulouse 1971:550
Unit 1 Str. I	"[WOR]CEST[ERSHIRE] [SAUCE]" "[LEE] & PERRINS"	Lea & Perrins Worcestershire Sauce	---	Cleveland 1988:90; Yount 1967:56
Unit 2 Str. I	Letter "O" in a square observed	Owens Bottle Co. Toledo, Ohio	post 1919	Peterson 1985:49
Unit 2 Str. II	Letter "O" in a square observed	Owens Bottle Co. Toledo, Ohio	post 1919	Peterson 1985:49
Unit 3 Str. I	Letter "C" superimposed with letter "B" "CHATTANOOGA T...."	CB Co., Chattanooga, Tennessee	---	Yount 1967:32
Unit 3 Str. I	"...[L]EMP" "[S]T. Louis"	Falstaff Lemp St. Louis, Missouri	---	Yount 1967:32

Table 4, continued

PROVENIENCE	OBSERVED MARK	MANUFACTURER/BRAND	DATE OF OBSERVED MARK	SOURCE
Unit 3 Str. I	"[FOL]EY'S" "[HONE]Y AND TAR"	Foley's Honey and Tar Foley & Co. Chicago, Illinois	post 1899	Fike 1987:59; Cleveland 1988:142
South Backhoe Scrape near Unit 3, Backdirt	"AB" "B 1"	Adolphus Busch Glass Manufacturing Co. Belleville, Illinois; St. Louis, Missouri	1886 - 1928	Toulouse 1971:26
16SMY73 Moro Plantation				
Surface Collection Location 1 and 2	"WF&S" "MIL...."	William Franzen & Son Milwaukee, Wisconsin	1900 - 1929	Toulouse 1971:536
Surface Collection Location 2 Brick Scatter	Letter "I" within a diamond	Illinois Glass Co. Alton, Illinois	post 1915	Peterson 1985:41
Surface Collection Location 7 Brick Scatter	"Rochester, N.Y."	Warner's Safe Cure Co. Rochester, New York	ca. 1879 - 1944	Fike 1987:107
Surface Collection Area B	Letter "O" in a square observed	Owens Bottle Co. Toledo, Ohio	post 1919	Peterson 1985:49
Surface Collection Area B	Letter "A" inside letter "H"	Hazel - Atlas Glass Co. Wheeling, West Virginia	1920 - 1964	Toulouse 1971:239

Table 4, continued

PROVENIENCE	OBSERVED MARK	MANUFACTURER/BRAND	DATE OF OBSERVED MARK	SOURCE
Location 2 S.T. E20M	"...KERR GLAS[S]...." "...PAT.6...." "1915" "...[O]KLA...."	Kerr Glass Manufacturing Co. Sand Springs, Oklahoma	post 1915	Toulouse 1971:306-308
Location 6 S.T. N5M	"L.G."	Liberty Glass Co. Sapulpa, Oklahoma	1924 - 1946	Toulouse 1971:321
Trench 1 Backdirt	"[CH]ESEBROU[GH]"	Chesebrough Mfg. Co.	1880 - 1955	Fike 1987:56
16SMY78 Bourg				
Surface Collection	Part of pitchfork observed	Pluto Water America's Physic	---	Yount 1967:16

Table 5. Faunal Material Recovered from Site 16SMY73, Moro Plantation

DESCRIPTION	LOCATION 2 SURFACE COLLECTION	LOCATION 2 SHOVEL TESTS	LOCATION 5 SHOVEL TESTS	LOCATION 6 SHOVEL TESTS	LOCATION 7 SHOVEL TEST	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II
MAMMALS								
***Bos taurus* (Cow)**								
Humerus							1	
Tibia							1	
Femur							1	
Unidentified long bone						1	1	
Unidentified bone							1	
***Odocoileus virginianus* (Deer)**								
Phalange(s)				1				
Tooth/teeth				1				
Unidentified long bone				1	1			
Unidentified Large Mammal								
Tooth/teeth						1		
Unidentified long bone		1				2	2	
FISH								
***Lepisosteus* sp. (Gar)**								
Scale				1				
Unidentified Fish								
Unidentified fish spine fragment		1						
Mollusca								
Rangia cuneata (fresh water clam)						1		1
Crassostrea virginica (oyster)			1					

Table 5, continued

DESCRIPTION	LOCATION 2 SURFACE COLLECTION	LOCATION 2 SHOVEL TESTS	LOCATION 5 SHOVEL TESTS	LOCATION 6 SHOVEL TESTS	LOCATION 7 SHOVEL TEST	UNIT 1 STR. I	UNIT 2 STR. I	UNIT 2 STR. II
Snail			1					
Unidentified shell	1							
UNKNOWN								
Unidentified tooth/teeth							1	
Unidentified bone		1		1			1	
TOTAL	1	3	2	5	1	5	9	1

colored bottle glass were among the unidentified and blown-in-mold glass examples (Table 1). The machine-made glass embossment postdates 1915, and belongs to the Kerr Glass Manufacturing Co., Sand Springs, Oklahoma. Other diagnostic artifacts include plain (1820 - 1900+) and sponged (ca. 1850s - 1920s) whiteware, annular yelloware (1830-1900), amethyst colored glass (ca. 1875 - 1920), and machine-made bottle glass, which has a use popularity date of post 1920. However, the use of machine-made glass began ca. 1903 (Jones and Sullivan 1985:38), and therefore, the embossed machine-made fruit jar fragment recovered could predate 1920.

Of the 25 artifacts collected from Trench 1 (Table 2), 16 were ceramic sherds, including 7 plain and 2 molded whiteware fragments, 2 white, undecorated ironstone sherds, 2 pieces of domestic brown stoneware, 2 hard porcelain sherds (1 transfer-printed [Figure 34], 1 plain), and 1 sponged buff-bodied earthenware. Glass remains included 3 blown-in-mold fragments, 2 turn-paste bases, 1 piece of depression glass, and 1 unidentified bottle glass sherd. Metal artifacts consisted of a single wire nail and an unidentified metal object. Diagnostic artifacts include Albany slipped domestic brown stoneware sherds (1810 - 1900), plain whiteware (1820 - 1900+), turn paste glass molds (1870s - 1920s), and wire nails (post 1890). The three blown-in-mold glass sherds included one amethyst colored glass sherd with an embossment of the Chesebrough Mfg. Co. The mark dates from 1880 to 1955 (Table 4).

The diagnostic artifacts collected from Location 2 generally date from the late nineteenth and early to mid-twentieth centuries. A brick concentration was located in this area; however, no in situ deposits were discovered in Trench 1. It appears that the brick concentration was formed during construction of Zenor Road (Chapter IV).

Location 4

A total of four wire nails were collected during shovel testing at Location 4, and a single turn paste glass base was recovered from the surface (Table 1). Excavation of Unit 1 (Chapter IV), produced 148 historic artifacts, 2 coal fragments, 4 animal bones, and 1 shell, all located within Stratum I (Tables 2 and 5). Historic artifacts included 2 plain and 2 blue hand-painted whiteware sherds, 1 piece of porcelain, and 2 undecorated, white ironstone fragments. Also recovered were 17 stoneware drainage pipe fragments, 4 partial (Figures 35 and 36) and 2 whole firebricks (Table 6), and 1 piece of concrete. Glass included 12 blown-in-mold fragments, 5 machine-made pieces, 1 sherd of lamp glass, 1 piece of table glassware, and 37 unidentified bottle fragments, including 8 amethyst-colored fragments (Table 2). A single piece of colorless blown-in-mold glass displayed the unidentified embossment "LAY DICKS & .../NEW ORLEAN...." Metal artifacts included 37 wire and 12 cut nail fragments, 1 spike, 4 pieces of iron wire, and 7 unidentified metal objects. Two coal fragments also were collected. The four bone fragments included 1 butchered/sawn cow long bone, 2 large mammal long bones, and 1 large mammal tooth. A single *Rangia cuneata* shell also was collected (Table 5).

Diagnostic artifacts from Location 4 include plain whiteware (1820 - 1900+), white, undecorated ironstone (post 1845), machine-made glass (post 1920), cut nails (1815 - 1890), and wire nails (post 1890). Diagnostic artifacts date from the late nineteenth and early twentieth centuries. The artifacts recovered from Unit 1, Stratum I came from a packed brick rubble deposit possibly placed there to serve as a part of a foundation for plantation machinery (Chapter IV).

Location 5

A total of 24 historic artifacts, 22 cinders, 5 coal fragments, 4 pieces of coal slag, and 2 shells were recovered during shovel and auger testing, and excavation of 1 50 x 50 cm unit within Location 5 at Moro Plantation (Tables 1, 2, and 5). Auger tests produced 1 plain whiteware sherd and 1 undecorated soft

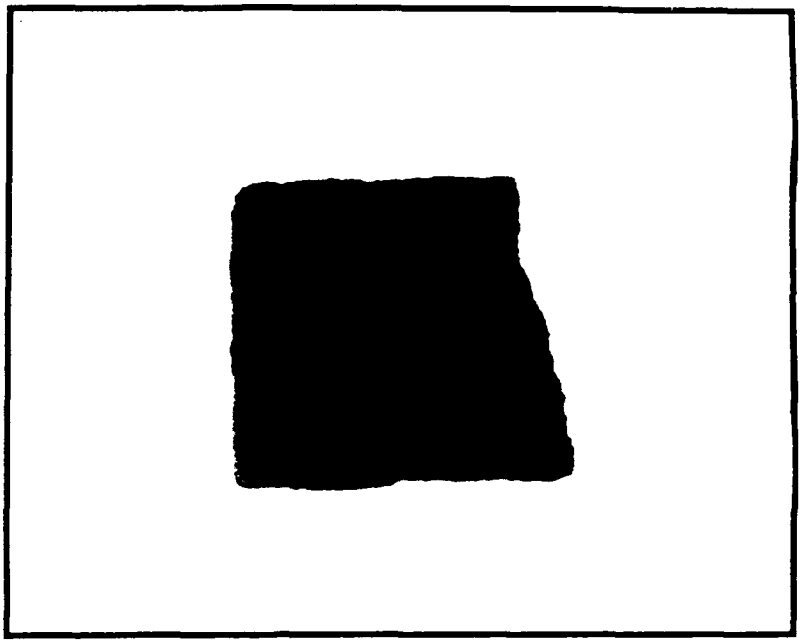


Figure 35. From 16SMY73, Moro Plantation, Unit 1, Stratum I: Partial firebrick measuring 15.0 cm wide and 6.0 cm thick, and branded "T A & [SONS]".

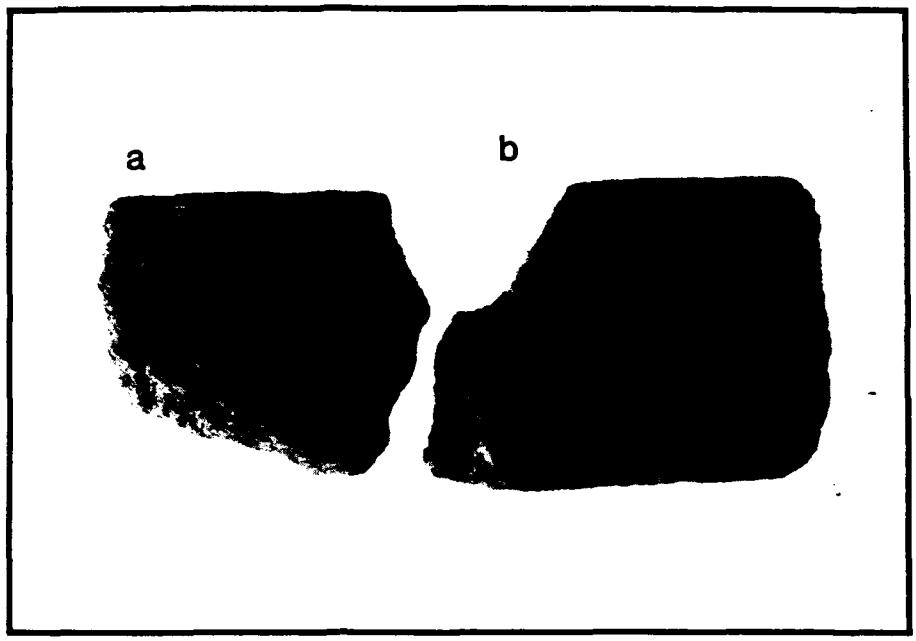


Figure 36. From 16MSY73, Moro Plantation, Unit 1, Stratum I: (a) partial firebrick (6.0 cm thick) branded "J. EL[LIOTT]"; (b) partial firebrick (15.0 cm wide and 6.0 cm thick) branded "[J.] ELLIOT[T]".

Table 6. Bricks Recovered by Site within the Survey Area

BRICK NO.	LENGTH (cm)	WIDTH (cm)	THICKNESS (cm)	MUNSELL	HARDNESS (MOHS SCALE)	GLAZING	MORTAR	BRICK BRAND	COMMENTS
16SMY71 Luckland Plantation									
1	20.0	8.5	5.0	10YR 4/2 Dark grayish brown	5	Present	---	"J.S."	Firebrick
2	---	---	5.3	5YR 6/6 Reddish yellow	1.5	---	---	---	Soft-mud brick
3	---	9.8	5.5	5YR 5/4 Reddish brown	3	Present	---	---	Soft-mud brick
16SMY73 Moro Plantation									
4	---	11.0	6.0	10R 4/3 Weak red	5	---	---	---	Firebrick; has yellow clay inclusions
5	---	15.0	6.0	10YR 6/6 Brownish yellow	3	---	---	"[J.] ELLIOT[T]"	Firebrick
6	---	---	6.0	5YR 7/4 Pink	4	---	Present	"J. EL[LIOTT]"	Firebrick
7	21.0	10.0	6.0	7.5YR 4/2 Brown	5	---	---	"S.P. & Co."	Firebrick
8	21.5	10.0	6.0	7.5YR 6/2 Pinkish gray	4	---	Present	"T. A. & SONS"	Firebrick
9	---	15.0	6.0	7.5YR 7/4 Pink	4	---	Present	"T A & [SONS]"	Firebrick

porcelain sherd. No prehistoric remains were recovered within these two auger tests. Shovel testing produced 2 whiteware fragments (1 plain, 1 molded), 8 brick fragments, 1 piece of mortar, 1 single wire nail, 1 unidentified nail fragment, 4 unidentified metal objects, 1 oyster shell, and 1 snail shell. Cinder fragments (n=22) and 1 piece of coal slag also were collected during shovel testing. Of the above listed shovel test artifacts, 8 brick fragments, the single piece of mortar, and 7 of the 22 cinder fragments were accompanied by prehistoric artifacts recovered from the Bosler Site (16SMY77). Likewise, the 5 historic artifacts, 5 coal fragments, and 3 pieces of coal slag collected from Strata I and II, Unit N102, E102 (50 x 50cm) also contained prehistoric artifacts (Table 2). Stratum I contained 1 .22 Winchester rimfire cartridge case, and 1 iron eye. Stratum II contained 1 brick fragment, 1 piece of roofing slate, and another .22 Winchester rimfire cartridge case, 5 coal fragments, and 3 coal pieces of slag (Table 2). These prehistoric and historic components will be discussed further within the Bosler Site section.

Location 6

Shovel testing and trench excavation produced 88 historic artifacts, 1 piece of coal slag and 5 animal bones (Tables 1, 2, and 5). Artifacts recovered from shovel tests included 1 hard, undecorated porcelain fragment, 1 transfer-printed and hand-painted ironstone sherd, and 10 whiteware sherds (5 plain, 1 decalcomania, 1 blue hand-painted, 1 shell-edged, and 2 molded). Glass artifacts included 10 blown-in-mold fragments including 1 with an unidentified embossment, 1 identified embossed machine-made glass fragment, 5 pieces of lamp glass, 9 window glass fragments, 1 milk glass lid liner fragment, and 15 pieces of unidentified bottle glass, including 1 that was amethyst-colored. Metal artifacts included 1 barbed wire fragment, 1 safety pin, 3 cut and 3 wire nail fragments, and 1 unidentified metal object. A single piece of coal slag also was collected during shovel testing. Animal bones collected from shovel tests included 2 deer bones (1 very burned (ashed) phalange, and 1 butcher/sawn long bone), 1 deer tooth, 1 gar scale, and 1 unidentified bone. The machine-made glass embossment was attributed to Liberty Glass Co., Sapulpa, Oklahoma, and was used from 1924 to 1946 (Table 4). Other diagnostic artifacts include plain (1820 - 1900+) whiteware, machine-made glass (post 1920), amethyst-colored glass (ca. 1875 - 1920), milk glass lid liners (post 1869, Jones and Sullivan 1985), and cut (1815 - 1890) and wire (post 1890) nails. Decalcomania decorative technique postdates 1880, while the shell-edged decoration of a scalloped rim with impressed straight lines was popular on both pearlware and whiteware from 1795 to 1840 (whiteware beginning in 1820).

Artifacts recovered from Trench 2 were located around and within a small brick foundation (Chapter IV). Artifacts collected included 5 whiteware sherds (4 plain, 1 molded), 1 blown-in-mold glass fragment with an unidentified embossment, 1 turn-paste mold glass base, 7 pieces of machine-made glass (including 1 amethyst-colored), 1 depression glass fragment, 1 lamp glass fragment, 2 pieces of table glassware, and 5 unidentified bottle glass fragments. Metal artifacts included 1 button, 1 spike, and 1 wire nail. A manufacturer's mark was observed on 1 of the 4 plain whiteware sherds. The stamp was one used by Homer Laughlin China Co., Newell, West Virginia, and dates from ca. 1900 (Table 4). Other diagnostic artifacts include plain whiteware (1820 - 1900+), turn-paste glass molds (1870s - 1920s), machine-made glass (post 1920), amethyst-colored glass (ca. 1875 - 1920), and wire nails (post 1890). The manufacturer's date for machine-made glass is post 1903 (Jones and Sullivan), and amethyst-colored glass dates from ca. 1875 - 1920; therefore, amethyst-colored machine-made glass dates from ca. 1903 to 1920. Artifacts from Trench 2 generally date from the late nineteenth and early twentieth centuries. The function of the brick foundation is unknown (Chapter IV).

Location 7

Recovered materials from surface collection, shovel testing, and unit excavation at Location 7, a brick concentration situated near an earthen berm (Chapter IV) included 263 historic artifacts, 1 unidentified

stone, 9 animal bones, and 1 shell (Tables 1, 2, and 5). Surface collection yielded 1 brown, identified embossed post bottom mold glass base, and 1 large spoon. The glass base was identified as a bottle coming from Warner's Safe Cure Co., Rochester, New York. The embossment dates from ca. 1879 to 1944 (Table 4).

Shovel testing produced 35 artifacts, including 1 salt-glazed domestic brown stoneware, 1 plain pearlware sherd, 7 pieces of whiteware (5 plain, 1 transfer-printed, and 1 unidentified decoration), 1 Jackfield-like earthenware teapot fragment, and 1 brick fragment. Glass artifacts included 1 blown-in-mold fragment, 1 milk glass button, and 11 piece of unidentified bottle glass, including 1 amethyst-colored piece. Collected metal included 1 spike, 5 cut nails, and 5 unidentified metal objects. Diagnostic artifacts include plain pearlware (1780 - 1830), plain (1820 - 1900+), and transfer-printed (post 1820) whiteware, amethyst-colored glass (ca. 1875 - 1920), and cut nails (1815 - 1890). The teapot fragment resembled Jackfield earthenware, but was not early refined earthenware.

Unit 2 surface collection yielded 8 artifacts, including 2 white, undecorated ironstone sherds, 1 annular yelloware sherd, and 5 machine-made glass sherds. Stratum I produced 197 historic artifacts, 1 unidentified stone, and 9 animal bones. Artifacts included 13 stoneware fragments, 5 plain whiteware/ironstone sherds, 4 pieces of plain and decorated ironstone, 6 plain yelloware and 3 decorated yelloware sherds (Figure 34), 3 clear-glazed redware sherds, 1 hard porcelain fragment, and 55 whiteware sherds including plain (n=41), transfer-printed (n=8), annular (n=3), polychrome hand-painted (n=1), unidentified shell-edged (n=1), and molded (n=1). Also collected were 8 brick fragments, including 1 brick waster, 8 blown-in-mold glass fragments (including 1 amethyst-colored), 4 turn-paste mold glass fragments, 1 post bottom mold glass fragment, 1 tooled glass bottle lip, 1 piece of lamp glass, 2 molded-technique-unknown glass fragments, 11 pieces of melted glass, and 27 unidentified bottle glass fragments. Metal collected included 32 cut nails, 2 cast iron stove parts, 2 spikes, 1 bolt, and 6 unidentified metal objects. A single school slate fragment also was collected, as well as 1 unidentified stone. Recovered animal bone included 5 cow remains, 2 large mammal long bones, 1 unidentified tooth, and 1 unidentified bone (Table 4). Three of the five cow remains had evidence of butchering/sawing (humerus femur, and long bone).

Diagnostic ceramic artifacts from Unit 2, Stratum I include Albany slipped domestic brown or gray stoneware (1810 - 1900), salt-glazed undecorated domestic gray stoneware (1790 - 1910), and buff-bodied (ginger beer) industrial stoneware (1850 - 1900). Diagnostic whiteware types include plain, annular, transfer-printed, and unidentified shell-edged (1780 - 1897 for pearlware and whiteware). Whiteware/ironstone dates from 1813 to 1900+, and white, undecorated ironstone postdates 1845. Both plain and dipped/annular yelloware date from 1830 to 1900. Diagnostic glass artifacts include turn paste molds (1870s - 1920s), post bottom molds (ca. 1850 - present), and tooled bottle lips (1820s - 1920s). Amethyst-colored glass (ca. 1875-1920) also was present. Diagnostic metal included cut nails (1815 - 1890). Stratum I artifacts generally date from the late nineteenth and early twentieth century; however, the Stratum may be disturbed -- plow scars were noted and extended into the top of Stratum II (Chapter IV).

Unit 2, Stratum II produced 21 historic artifacts and 1 *Rangia cuneata* shell. Artifacts included 1 undecorated salt-glazed domestic gray stoneware sherd, 6 whiteware sherds (4 plain, 1 flow blue, 1 transfer-printed), 1 polychrome hand-painted whiteware/ironstone sherd, 2 undecorated, white ironstone fragments, and 3 dipped/annular yelloware sherds. Glass fragments included 1 blown-in-mold fragment, 2 melted fragments, and 2 unidentified bottle fragments. Nail fragments, 1 cut and 1 wire, also were collected, as well as 1 unidentified metal object. Stratum II artifacts also generally date from the late nineteenth and early twentieth century.

The earthen berm may be associated with early twentieth century agricultural use, and Location 7 brick deposits also may be related to this function (Chapter IV).

Area B

A total of 5 historic artifacts were surface collected from Moro Plantation, Area B (Table 1). These five included 1 porcellaneous ware toy teapot lid/cap, 1 amethyst-colored bottle with a tooled bottle lip with 1 cork stopper fragment still intact (Figure 37), 1 colorless, embossed machine-made bottle fragment, and 1 colorless, embossed machine-made bottle (Table 4). The embossed fragment displayed a mark used by Owens Bottle Co., Toledo, Ohio, and postdates 1919 (Table 4). The second mark, observed on the whole bottle, dates from 1920 to 1964, and was used by Hazel-Atlas Glass Co., Wheeling, West Virginia (Table 4).

Artifacts observed on the surface of Area B included plain whiteware, porcelain, soft-mud brick, a porcelain button, a tooled glass bottle lip, a panel medicine bottle with a tooled lip, machine-made glass, amber, colorless, and amethyst-colored bottle glass, a spike, and cut nails. Also observed were charcoal, shell, and mortar fragments.

Artifacts observed during shovel testing in Area B included 1 plain whiteware sherd, 11 brown bottle glass fragments, 7 colorless glass fragments (including 1 embossed sherd), 1 cut nail, 1 cut spike, and a single wire nail.

Diagnostic observed and collected artifacts included porcelain buttons (post 1840), porcellaneous ware (post 1880), plain whiteware (1820 - 1900+), tooled glass bottle lips (1820s - 1920s), machine-made glass (manufacturer's date of ca. post 1903, use popularity date of post 1920), amethyst-colored glass (ca. 1875 - 1920), and cut (1815 - 1890) and wire (post 1890) nails. The two identified embossments also are diagnostic. The surface collected amethyst-colored tooled bottle lip with the cork closure dates from ca. 1875 to 1920. The observed and collected artifacts from Area B generally date from the late nineteenth and early to mid-twentieth centuries. However, Area B deposits have been disturbed extensively by the construction of Zenor Road and borrowing activities (Chapter IV).

Bosler Site (16SMY77)

The Bosler Site is a prehistoric site located within Location 5 and part of Location 6 of Moro Plantation (16SMY73). Bosler may be related to the Atchafalaya Basin Site (16SMY10), a Coles Creek and Plaquemine ceremonial center.

A total of 256 prehistoric sherds, 3 fired clay fragments, and 85 animal bones were recovered during surface collection, shovel and auger testing, and excavation of 1 50 x 50 cm unit (Tables 7 and 8). Additionally, 3 1-2 liter soil samples were taken from each stratum of the unit for flotation. The 4 1-liter floated samples produced evidence of charcoal, bone fragments, and floral remains.

All of the sherds were grog-tempered, except for the sand-tempered Baytown Plain *var. Thomas*, and the shell-tempered Bell Plain and Mississippi Plain. In addition, 4 Baytown Plain *var. Addis* sherds tempered with bone/grit, and 1 unidentified incised sherd with grit/grog tempering were recovered. The fired clay fragments were untempered.

Prehistoric Ceramic Chronology

The ceramic types recovered from the Bosler site span prehistory from Marksville to Mississippian times. Marksville types include Baytown Plain *var. Thomas* (Marksville and possibly later) and Marksville Stamped *var. Troyville* (Middle to Late Marksville). Evansville Punctated *var. Evansville* dates from Marksville through Baytown and Coles Creek times. Baytown types include Quafalorma Red and White *var. Quafalorma*. Baytown Plain *var. Troyville* are associated with Troyville culture and possibly later, while

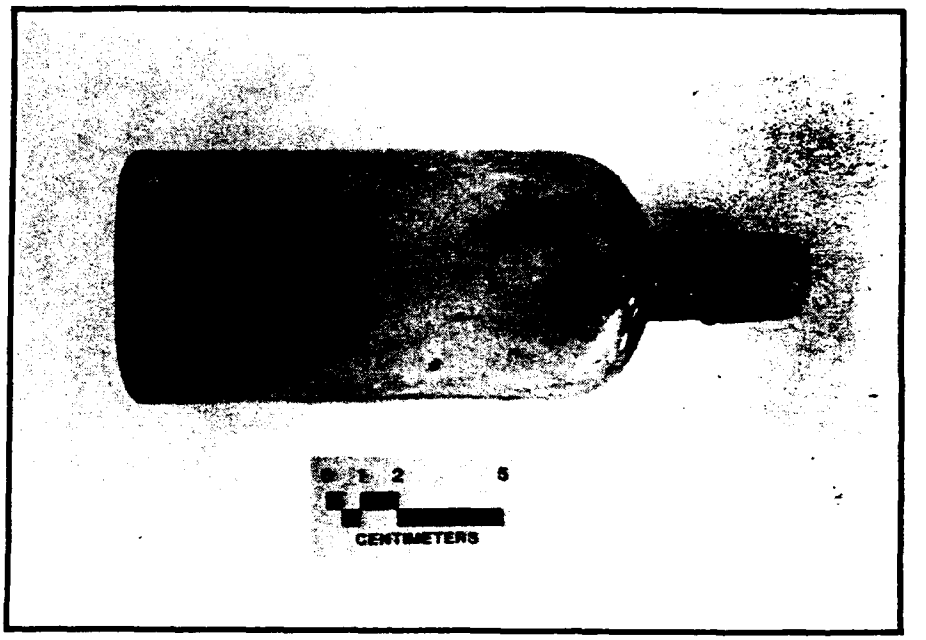


Figure 37. From 16SMY73, Moro Plantation, Area B Surface Collection: Amethyst-colored bottle with tooled lip.

Table 7. Prehistoric Ceramic Artifacts Recovered from Site 16SMY77, the Bosler Site

CERAMIC TYPE	SURFACE COLLECTION	SHOVEL TESTS	AUGER TESTS	UNIT (50 x 50 cm) N102, E102 Str. I	UNIT (50 x 50 cm) N102, E102 Str. II	UNIT (50 x 50 cm) N102, E102 Str. III
Baytown Plain *var. Thomas*		5	1			
Baytown Plain *var. Troyville*		1			2	1
Baytown Plain *var. Valley Park*		16			11	
Baytown Plain *var. Percy Creek*	1	2				
Baytown Plain *var. Addis*		33	3	2	7	
Baytown Plain *var. unspecified*		40	3	1	13	1
Marksville Stamped *var. Troyville*		1				
Evansville Punctated *var. Evansville*		1				
Quafalorma Red and White *var. Quafalorma*		2				
Evansville Punctated *var. Rhinehart*		1				
Evansville Punctated *var. unspecified*		1				
Coles Creek Incised *var. unspecified*		1				
Plaquemine Brushed *var. Plaquemine*		1				
Bell Plain *var. St. Catherine*		2				
Mississippi Plain *var. Pocahontas*		1				
Unidentified Brushed/Punctated		1				
Unidentified Stamped		3				
Unidentified Incised		4			2	
Unidentified Punctated					1	

Table 7, continued

CERAMIC TYPE	SURFACE COLLECTION	SHOVEL TESTS	AUGER TESTS	UNIT (50 x 50 cm) N102, E102 Str. I	UNIT (50 x 50 cm) N102, E102 Str. II	UNIT (50 x 50 cm) N102, E102 Str. III
Unidentified Plain		17			1	
Fired Clay		1			2	
Eroded Sherds		44	4	4	19	2
TOTAL	**1**	**178**	**11**	**7**	**58**	**4**

Table 8. Faunal Material Recovered from Site 16SMY77, the Bosler Site

DESCRIPTION	LOCATION 5 SHOVEL TESTS	LOCATION 6 SHOVEL TEST 15 m EAST	TRANSECT 3A SHOVEL TESTS	AUGER TESTS	UNIT N102, E102 (50 x 50 cm)	
					STR. II	STR. III
MAMMALS						
***Odocoilous virginianus* (Deer)**						
Tarsal(s)	1					
Metatarsal(s)	1					
Phalange(s)						1
Rodent						
Large rodent mandible	1					
Large rodent mandible with teeth	1		1			
Large rodent tooth/teeth	5					
Small rodent rib	1					
Rodent tooth/teeth					1	
Unidentified Small Mammal						
Unidentified long bone				5		
Unidentified bone	12					
Unidentified Large Mammal						
Unidentified long bone	8		1			
Unidentified bone	1		1			

Table 8, continued

DESCRIPTION	LOCATION 5 SHOVEL TESTS	LOCATION 6 SHOVEL TEST 15 m EAST	TRANSECT 3A SHOVEL TESTS	AUGER TESTS	UNIT N102, E102 (50 x 50 cm)	
					STR. II	STR. III
BIRDS						
***Meleagris gallopavo* (Turkey)**						
Unidentified long bone			1			
TURTLE						
Shell	4					
FISH						
***Lepisosteus* sp. (Gar)**						
Scale	1			1		5
Unidentified Fish						
Unidentified spine fragment				4		
Unidentified rib		1				
Unidentified vertebra/vertebrae	2		2	6	1	2
Unidentified bone	2					1
UNKNOWN						
Unidentified bone				1	8	2
TOTAL	40	1	6	17	10	11

Baytown Plain *vars. Percy Creek,* and *Valley Park*; Evansville Punctated *var. Rhinehart*, and Coles Creek Incised date from the Coles Creek period. Mississippian types include Baytown Plain *var. Addis*, Plaquemine Brushed *var. Plaquemine,* (Mississippian and Contact periods), Bell Plain *var. St. Catherine* (terminal Mississippian), and Mississippi Plain *var. Pocahontas* (terminal Mississippian and Contact periods).

Surface Collection and Shovel Testing

A single Baytown Plain *var. Percy Creek* sherd was collected from the surface. Shovel testing produced 177 prehistoric sherds, 1 fired clay fragment, and 46 animal bones. Over half (n=97) of the sherds were Baytown Plain varieties, including *vars. Thomas* (n=5), *Troyville* (n=1), *Valley Park* (n=16), *Percy Creek* (n=2), *Addis* (n=33), and *unspecified (n=40).* Decorated ceramic types included Marksville Stamped *var. Troyville* (n=1), 1 sherd each of Evansville Punctated *vars. Evansville, Rhinehart,* and *unspecified*, 2 Quafalorma Red and White *var. Quafalorma,* and 1 sherd each of Coles Creek Incised *var. unspecified* and Plaquemine Brushed *var. Plaquemine.* A single sherd of Mississippi Plain *var. Pocahontas* was identified, as well as 2 fragments of Bell Plain *var. St. Catherine.* Unidentified plain (n=17), stamped (n=3), incised (n=4), brushed/punctated (n=1), and eroded sherds (n=44) complete the shovel test ceramic assemblage (Table 7). Of the unidentified stamped and incised sherds recovered, French Fork Incised *var. Wilzone*, (n=1) (Baytown period), Indian Bay Stamped *var. unspecified* (n=1) (Marksville period), and Alligator Incised *var. Oxbow* (n=1) (Baytown period) appear to be likely candidates.

Of the 46 animal bones collected during shovel testing in Location 5 and along Transect 3A, 34 (73.9 per cent) were mammal remains. Mammal bones included 2 deer, 9 rodent bones and teeth, 12 unidentified small mammal bones, and 11 unidentified large mammal bones (Table 8). Turtle shell (n=4) made up 8.7 per cent of the shovel test collection while 15.2 per cent were fish bones (n=7), and included 1 gar scale. A single turkey long bone (2.2 per cent) completed the shovel test collection from Location 5 and Transect 3A. One unidentified fish rib was recovered from Shovel Test 15m East in Location 6.

Some Location 5 Moro Plantation historic materials recovered during shovel testing were found mixed in with the prehistoric deposits at Bosler. These artifacts included 8 brick fragments, 1 mortar fragment, 2 unidentified metal objects, and 24 pieces of cinder (Table 1; Location 5, Moro Plantation).

Only 1 Baytown Plain *var. Percy Creek* sherd was collected from the surface; it dates from the Coles Creek period. Of the 108 sherds representing identified types recovered during shovel testing, only 7 (6.5 per cent) sherds (Baytown Plain *var. Thomas,* Marksville Stamped, Evansville Punctated *var. Evansville*) potentially date from Marksville times. Baytown/Troyville types are represented by only 3 sherds (2.8 per cent) (Quafalorma Red and White and Baytown Plain *var. Troyville*). Coles Creek types (Baytown Plain *vars. Valley Park, Percy Creek*, Evansville Punctated *var. Rhinehart*, Coles Creek Incised) are represented by 20 sherds (18.5 per cent). Mississippian types (Bell Plain, Mississippi Plain, Plaquemine Brushed, Baytown Plain *var. Addis*) are represented by 37 (34.3 per cent). The remaining 37.9 per cent, or 41 sherds consist of Baytown Plain *var. unspecified* and Evansville Punctated *var. unspecified.* Coles Creek and Mississippian type sherds dominate the shovel test collection.

Auger Testing

A total of 11 prehistoric sherds and 17 animal bones were recovered during auger testing (Table 7 and 8). Three Baytown Plain *var. Addis* sherds were recovered from Layer 3, the modern surface. Layer 2 produced 1 Baytown Plain *var. Thomas*, 3 Baytown Plain *var. unspecified*, and 4 eroded sherds. Layer 3 contained 1 unidentified bone fragment; all of the other faunal material originated from Layer 2 and included 5 burned small mammal long bones, 1 gar scale, and 10 fish bones.

Although the frequency of sherds is low, the ceramic integrity appears to be intact: the Mississippian period sherds were found within Layer 3 (Baytown Plain *var. Addis)*, whereas the older, Marksville period sherd (Baytown Plain *var. Thomas*) was located within Layer 2.

Unit (50 x 50 cm) N102, E102

A total 67 prehistoric ceramic sherds, 2 fired clay fragments, and 21 pieces of animal bones were collected from 3 Strata within Unit N102, E102 (Tables 7 and 8). Stratum I materials included 2 Baytown Plain *var. Addis*, 1 Baytown Plain *var. unspecified*, and four eroded fragments. No animal bone was collected from this Stratum. Two historic artifacts associated with Moro Plantation (16SMY73) also were collected, an iron eye and a single .22 Winchester rimfire cartridge case (Table 2).

Stratum II produced 33 Baytown Plain type sherds, including *vars. Troyville* (n=2), *Valley Park* (n=11), *Addis* (n=7), and *unspecified* (n=13). Two pieces of fired clay, possibly daub, were collected. The remaining 23 sherds consisted of either unidentified plain (n=1), incised (n=2), or punctated (n=1) fragments; or, sherds with eroded surfaces (n=19). Bone fragments included 1 rodent tooth, 1 fish vertebra, and 8 unidentified burned bones. Also recovered from Stratum II were 11 materials associated with Moro Plantation, i.e., 1 brick fragment, 1 roofing slate, a single .22 Winchester rimfire cartridge case, 5 coal fragments, and 3 pieces of coal slag (Table 2).

Stratum III produced only 4 sherds, 1 each of Baytown Plain *vars. Troyville* and *unspecified*; and, 2 eroded fragments. Bone fragments included 1 deer phalange, 5 gar scales, 3 fish bones, and 2 unidentified bones. No historic materials from Moro Plantation were recovered from within Stratum III at Bosler.

Although there was some mixing of historic materials with prehistoric materials in Layer 3, Strata I - II, Stratum III had no mixing; overall, the deposits possess good archeological integrity (Chapter IV). Identified types from Strata I - III include 11 Coles Creek (Baytown Plain *var. Valley Park*) and 9 Mississippian period sherds (Baytown Plain *var. Addis*); 3 Baytown Plain *var. Troyville* sherds date from Troyville times. The remaining 44 sherds were undiagnostic.

Avalon Plantation (16SMY70)

A total of 202 historic artifacts, 1 prehistoric ceramic sherd, 11 animal bones, 1 oyster shell, 1 charcoal fragment, and 5 coal and cinder fragments were recovered from the western portion of Avalon Plantation during surface collection, shovel testing, and unit and trench excavation (Tables 9 and 10). Each area is discussed below.

Transects 1A - 4A; 6A, Shovel Tests

During the initial shovel testing, a total of 65 historic artifacts, 2 cinders, and 1 piece of coals were recovered (Table 9). Also collected was 1 oyster shell (Table 10). Historic artifacts included 17 ceramic sherds (4 porcelain sherds, 1 Albany slipped domestic brown stoneware sherd, 11 plain whiteware sherds, 1 lead-glazed buff-bodied earthenware sherd), 3 brick fragments, 1 hand-blown dark green glass fragment, 8 blown-in-mold glass fragments (including 2 amethyst-colored), 1 machine-made extract panel bottle fragment, a single piece of window glass, and 15 sherds of unidentified bottle glass (3 of which were amethyst-colored). Metal artifacts included 4 cut and 5 wire nails, 2 unidentified nail fragments, 1 nut, 1 spike, a piece of sheet metal, and 5 unidentified metal objects. Diagnostic artifacts included Albany slipped stoneware (1810 - 1900), plain whiteware (1820 - 1900+), machine-made glass (post 1920), amethyst-colored

Table 9. Material Recovered from Site 16SMY70, Avalon Plantation

MATERIAL TYPE	LOCATION 1 SURFACE COLLECTION	AREA A SURFACE COLLECTION	LOCATION 1 SHOVEL TESTS	TRANSECTS 1A - 4A; 6A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT
CERAMIC MATERIALS								
Prehistoric sherd, *Baytown Plain* var. Addis		1						
Porcelain								
Undecorated, soft				2				
Undecorated, hard				1		1		
Molded, hard				1				
Bisque doll head fragment							1	
Stoneware								
Albany Slipped on Buff				1	1			
Whiteware								
Plain			7	11	4	9	2	2
Transfer-printed					1			1
Annular					1			
Ironstone								
White, undecorated						1		
Yellowware								
Rockingham/ Bennington, molded		1						
Buff-bodied Earthenware								
Lead-glazed				1				
Ceramic Electrical Insulator	1							

Table 9, continued

MATERIAL TYPE	LOCATION 1 SURFACE COLLECTION	AREA A SURFACE COLLECTION	LOCATION 1 SHOVEL TESTS	TRANSECTS 1A - 4A; 6A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT
CONSTRUCTION MATERIALS								
Brick fragment				3				
WOOD								
Charcoal			1					
GLASS								
Hand-Blown								
Dark green				1				
Blown-In-Mold								
Amber				2				
Amethyst				2	1	1		
Aqua			1	1		1		
Cobalt blue					1			
Colorless			1	2		2		
Light green				1				
Whiskey flask, molded, black		1						
Tooled Bottle Lip								
Aqua			1				1	
Machine-made Bottle Glass								
Extract panel bottle fragment				1				
Depression Glass								
Pink								1

Table 9, continued

MATERIAL TYPE	LOCATION 1 SURFACE COLLECTION	AREA A SURFACE COLLECTION	LOCATION 1 SHOVEL TESTS	TRANSECTS 1A - 4A; 6A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT
Lamp Glass								
Colorless			1		1			
Table Glassware								
Amethyst					1			
Colorless						1		
Milk glass			1					
Window Glass				1	3	2		
Milk Glass Button			1				1	
Unidentified Bottle Glass								
Amber				1		1		
Amethyst			1	3				
Aqua			2		3	5		
Blue					1			
Cobalt Blue			1		1	1		
Colorless			3	7	6	4		
Green			1			1		
Light green			3					
Olive			1	1	2	2	1	1
Very pale light green/aqua/gray				3				

Table 9, continued

MATERIAL TYPE	LOCATION 1 SURFACE COLLECTION	AREA A SURFACE COLLECTION	LOCATION 1 SHOVEL TESTS	TRANSECTS 1A - 4A; 6A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	TRENCH 1 BACKDIRT	TRENCH 2 BACKDIRT
METAL								
Bullet (.44 or .45)		1						
Hook								1
Iron button			1					
Iron wire (not barbed)			1					
Nut				1				
Sheet metal				1				
Spike			2	1		1		
Washer					1			
Watch part								1
Nails								
Wire			4	4	2	3		
Cut			3	5				
Unidentified			9	2				
Unidentified Metal Object			8	5	1			
STONE								
Cinder				2				
Coal			1	1	1			
TOTAL	**1**	**4**	**55**	**68**	**32**	**36**	**6**	**7**

Table 10. Faunal Material Recovered from Site 16SMY70, Avalon Plantation

DESCRIPTION	LOCATION 1 SHOVEL TESTS	TRANSECT 3A SHOVEL TEST	TRENCH 1 BACKDIRT
MAMMALS			
***Odocoilous virginianus* (Deer)**			
Calcaneus	1		
Tarsal(s)	4		
Metatarsal(s)	1		
Large Mammal			-
Unidentified long bone	3		1
Unidentified bone	1		
MOLLUSCA			
Crassostrea virginica (oyster)		1	
TOTAL	**10**	**1**	**1**

glass (ca. 1875 - 1920), and cut (1815 - 1890) and wire (post 1890) nails. The artifacts generally date from the late nineteenth and early twentieth century. However, the archeological integrity of the site has been compromised by modern road building (Chapter IV).

Location 1 Surface Collection and Shovel Tests

Location 1 was situated in the area of the one historic tenement house not disturbed during relocation of Zenor Road (Chapter IV). Surface collecting produced only one recovered artifact: a ceramic electrical insulator (Table 9). Shovel testing produced a total of 53 historic artifacts, 1 piece of wood charcoal, and 1 coal fragment (Table 9). Ten animal bones also were collected (Table 10). Historic artifacts included 7 plain whiteware sherds, 2 blown-in-mold glass fragments, 1 tooled bottle lip (1820s - 1920s), 1 lamp glass sherd, 1 piece of table glassware, 1 milk glass button, and 12 unidentified bottle glass fragments (1 of which was amethyst-colored). Metal artifacts included 1 iron button, 1 piece of iron wire, 2 spikes, 16 nail fragments (4 cut, 3 wire, and 9 unidentified), and 8 unidentified metal objects. Collected faunal material consisted of 6 deer bones, 3 very burned (ashed) and butchered/sawn large mammal long bones, and 1 charred, unidentified large mammal bone.

Diagnostic artifacts collected from the surface and during the shovel testing of Location 1 date from the late nineteenth and twentieth centuries. A kitchen midden was located during testing of this area. Trench and unit excavation took place near this area to assess the distribution of features or deposits related to the house structure (Chapter IV).

Trenches 1 and 2

Backdirt from the excavation of Trench 1 produced 6 historic artifacts and 1 large mammal bone. Artifacts included 1 bisque doll head fragment, 2 plain whiteware sherds, 1 tooled glass bottle lip, 1 milk glass button, and 1 unidentified bottle glass fragment.

Artifacts recovered during the excavation of Trench 2 included 2 plain and 1 transfer-printed whiteware sherd (post 1820) sherds, 1 piece of depression glass, 1 unidentified bottle glass fragment, 1 watch part, and 1 hook. Although artifacts from these excavations included personal items, e.g., doll and watch parts, and a button, evidence of the domestic structures was not encountered.

Unit 1

A total of 31 materials were recovered from Unit 1, Stratum I. These materials included 31 historic artifacts and 1 coal fragment (Table 9). Historic artifacts included 1 Albany slipped domestic brown stoneware sherd, 6 whiteware fragments (4 plain, 1 transfer-printed, and 1 annular), 2 blown-in-mold glass fragments (including 1 amethyst-colored fragment), 1 lamp glass fragment, 1 amethyst-colored table glassware fragment, 3 pieces of window glass, 13 unidentified pieces of bottle glass, 2 wire nails, 1 washer, and 1 unidentified metal object.

Artifacts collected from Stratum II, Unit 1 included 9 plain whiteware sherds, 1 undecorated hard porcelain sherd, 1 undecorated white ironstone fragment, 4 blown-in-mold fragments (including 1 amethyst-colored sherd), 2 window glass fragments, 1 fragment of table glassware, 14 pieces of unidentified bottle glass, 3 wire nails, and 1 spike.

Diagnostic artifacts from both strata date from the late nineteenth and twentieth centuries. Modern construction activities apparently have disturbed severely the archeological integrity of the area surrounding Unit 1 (Chapter IV).

Area A

Area A, a part of Avalon Plantation, is located within an extensively plowed sugarcane field (Chapter IV). Artifacts observed and collected from this area can be associated with the row of houses that existed along Zenor Road during the early twentieth century. The houses were moved or subsequently destroyed during modern road construction; the associated sheet refuse was disturbed further by plowing.

Four artifacts were recovered during surface collecting (Table 9). These included 1 Baytown Plain *var. Addis* sherd, 1 Rockingham/Bennington glazed yelloware sherd, 1 whiskey flask fragment, and 1 bullet.

Observed, but not collected, surface ceramic artifacts included lead-glazed, salt-glazed, and Albany slipped buff-bodied stonewares, a ginger beer bottle, dipped/annular yelloware, plain and banded ironstone, an overglaze transfer-printed porcelain teacup, whiteware (plain, flow blue, and transfer-printed), salt-glazed domestic gray stoneware, and porcellaneous caster wheels. Observed glass artifacts included amethyst table glassware, soda bottle fragments, an applied bottle lip with a string rim, tooled bottle lips, panel medicine bottle fragments, pickle bottle fragments, blown-in-mold medicine glass, embossed clear and amber bottle glass, a canning jar fragment, unidentified bottle glass, including amethyst-colored examples, and a machine-made bottle glass fragment with an embossment used by Owens Bottle Co., Wheeling, West Virginia. The embossment was a letter "O" inside a square; it postdates 1919 (Peterson 1985:49). Also observed on the surface was 1 milk glass button, 1 branded firebrick, 1 zinc canning jar lid fragment, and fragments of brick, coal, shell, gravel, unidentifiable iron fragments, cut nails, spikes, a brass lid, and bone fragments.

Artifacts observed during shovel testing in Area A included 5 whiteware sherds, 1 salt-glazed domestic brown stoneware sherd, 1 ironstone sherd, 5 unidentified bottle glass fragments, including 2 pieces of amethyst-colored glass, 1 machine-made bottle glass fragment, 1 cut nail, 1 barbed wire fragment, and 2 unidentified iron artifacts.

Diagnostic artifacts include Albany slipped stoneware (1810 - 1900), salt-glazed, undecorated domestic gray stoneware (1790 - 1910), plain (1820 - 1900+), flow blue (post 1840), and transfer-printed (post 1820) whiteware, undecorated white ironstone (post 1845), and porcellaneous ware (post 1880). Diagnostic glass remains included tooled bottle lips (1820s - 1920s), amethyst-colored glass (ca. 1875 - 1920), and machine-made glass (post 1920; manufacturer date of ca. post 1903). Cut nails were in use from 1815 to 1890. Wire nails became the standard after 1890.

Diagnostic artifacts from Area A date from the late nineteenth and early twentieth centuries. However, despite the wide range of artifact types collected and observed, Area A lacks archeological integrity (Chapter IV).

Luckland Plantation (16SMY71)

A total of 3,389 historic artifacts, 2 prehistoric ceramic sherds, 331 animal bones, 20 shells, 2 seeds, 1 charcoal fragment, 5 cinders, 6 coal and 19 coal-slag fragments, 2 unidentified stones, and 2 chert pebbles and 1 quartz pebble were recovered during surface collection, shovel testing, unit and trench excavation, and backhoe scraping within the Luckland Plantation project area (Tables 11 - 15). The unit excavations

Table 11. Material Recovered during Surface Collection and Shovel Testing at Site 16SMY71, Luckland Plantation

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
CERAMIC MATERIALS			
Prehistoric sherd, eroded, grog-tempered			1
Porcelain			
Undecorated, soft		1	6
Undecorated, hard	1	13	4
Molded, hard		1	
Unidentified decoration, hard		1	
Toy teacup part			1
Doll part		1	
Stoneware			
Domestic Brown			
Lead-glazed and Albany slipped		2	
Albany slipped on buff			1
Exterior colored glaze, interior colored slip		1	
Domestic Gray			
Alkaline glaze and Albany slipped		1	
Colored glaze		1	1
Whiteware			
Plain		41	68
Annular	1	1	2
Common cable	1	2	
Colored glaze			1
Decalcomania		1	
Embossed patterns			1
Flow blue		2	1
Transfer-printed			5

Table 11, continued

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
Willow transfer-printed	1	2	
Molded		2	
Unscalloped, unmolded rim		1	
Unidentified decoration		1	
Whiteware/Ironstone			
Plain		4	
Ironstone			
White, undecorated		2	
Gray, undecorated			1
Yelloware			
Plain		1	
Annular		1	
Rockingham/Bennington			1
Buff-bodied Earthenware			
Eroded, unidentified		2	
CONSTRUCTION MATERIALS			
Firebrick whole	1		
Soft-mud brick, partial		2	
Brick fragments		7	1
Mortar		1	
Roofing slate			4
FLORA			
Unidentified seed		1	
FAUNAL			
Bone button		1	

Table 11, continued

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
GLASS			
Blown-in-Mold			
Amethyst		7	
Amethyst, embossed		1	
Amber		1	1
Aqua		3	
Aqua, embossed		4	
Aqua, frosted		1	
Cobalt blue			1
Colorless		3	5
Dark green		2	
Green		1	
Milk glass		1	
Very pale light green/aqua/gray		2	
Tooled Bottle Lip			
Amethyst whiskey bottle			1
Dark green	1		
Olive		1	
Turn Paste Mold			
Dark green		1	
Machine-made Bottle Glass			
Amethyst		1	1
Colorless			15
Colorless, embossed			11
Dark green			1

Table 11, continued

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
Depression Glass			
Blue			1
Cobalt blue		1	
Pink			1
Table Glassware			
Amethyst			4
Milk glass			2
Tumber fragment		1	
Pressed Glass			
Milk glass		1	
Pharmaceutical Glass			
Opaque			1
Melted Glass			
Colorless			1
Plate Glass		1	
Window Glass		1	9
Milk Glass			
Lid liner		1	
Globe fragment		1	1
Button/holder snap-on		1	
Lamp Glass			
Amethyst		1	
Colorless			2
Unidentified Bottle Glass			
Amethyst		26	11
Amber		10	4
Aqua		13	23

Table 11, continued

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
Colorless		24	49
Milk glass		3	
Dark green	1	6	1
Light green		1	1
Olive		13	1
Opaque			3
Very pale light green/aqua/gray		5	1
METAL			
Barbed wire		9	
Bolt		2	1
Cast iron bank part		1	
Handle			1
Hook			1
Lid		2	
Nut		1	
Pipe			2
Punch		1	
Skillet/pot part		4	
Stove part		4	
Spike		5	1
Percussion ball			1
Slag		3	
Nails			
Cut		33	16
Wire		15	22
Unidentified		11	27
Unidentified cast iron object		1	

Table 11, continued

MATERIAL TYPE	SURFACE COLLECTION	TRANSECTS 1A - 7A SHOVEL TESTS	LOCATION 1 BRICK SCATTER SHOVEL TESTS
Unidentified metal object		10	8
STONE			
Cinder		3	
Coal		2	
Coal slag			7
School slate		1	3
TOTAL	7	344	341

Table 12. Faunal Material Recovered from Site 16SMY71, Luckland Plantation

DESCRIPTION	LOC. 1 SHOVEL TESTS	TRANSECTS 4A - 5A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	UNIT 1 STR. IV	UNIT 1 STR. V	UNIT 1 STR. VI	UNIT 2 STR. I	UNIT 2 STR. II	UNIT 3 STR. I	UNIT 3 STR. II	UNIT 4 STR. I	UNIT 4 STR. II
MAMMALS													
***Bos taurus* (Cow)**													
Tarsal(s)				1									
***Sus scrofa* (Pig)**													
Tibia				1									
Unidentified rib bone			2	1									
Unidentified long bone		2											
Mandible with teeth				1									
***Odocoileus virginianus* (Deer)**													
Humerus			1		1					1			
Tibia					1								
Phalange(s)								1					
Metacarpal(s)										1			
Thoracic vertebra				1									
Unidentified rib											1		
Unidentified long bone		2											
Tooth/teeth								1					
***Procyon lotor* (Raccoon)**													
Tooth/teeth										1			
Large Rodent													
Humerus				2									
Femur				1									

Table 12, continued

DESCRIPTION	LOC. 1 SHOVEL TESTS	TRANSECTS 4A - 5A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	UNIT 1 STR. IV	UNIT 1 STR. V	UNIT 1 STR. VI	UNIT 2 STR. I	UNIT 2 STR. II	UNIT 3 STR. I	UNIT 3 STR. II	UNIT 4 STR. I	UNIT 4 STR. II
Pelvis				1									
Tooth/teeth										1			
Rodent													
Skull				1									
Mandible with teeth				3									
Tooth/teeth			1										
Ulna				2									
Atlas vertebra				1									
Unidentified vertebra/vertebrae				1									
Unidentified long bone					1							1	
Large Mammal													
Unidentified skull fragment				18						1			
Mandible					2								
Tooth/teeth										2			
Scapula				1									
Unidentified rib	1			6						2			
Lumbar vertebra				1									
Thoracic vertebra				1									
Unidentified vertebra/vertebrae				12									
Phalange(s)				1									
Unidentified long bone	4	1	1	2		1		5		26	4	6	3

Table 12, continued

DESCRIPTION	LOC. 1 SHOVEL TESTS	TRANSECTS 4A - 5A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	UNIT 1 STR. IV	UNIT 1 STR. V	UNIT 1 STR. VI	UNIT 2 STR. I	UNIT 2 STR. II	UNIT 3 STR. I	UNIT 3 STR. II	UNIT 4 STR. I	UNIT 4 STR. II
Unidentified bone				1	7						1	1	
Small Mammal													
Mandible				2									
Mandible with teeth				1									
Maxilla										1			
Radius				1									
Scapula				5									
Unidentified rib				10									
Thoracic vertebra				1									
Tibia				2									
Metacarpal(s)										1			
Pelvis				5									
Unidentified long bone				21	4								
Unidentified bone				12									
BIRDS													
***Meleagris gallopavo* (Turkey)**													
Pelvis				1									
Unidentified long bone				9	2		1						
Unidentified Bird													
Unidentified rib					1								
Unidentified long bone				14	19	1				1	1		
Egg shell					3								

Table 12, continued

DESCRIPTION	LOC. 1 SHOVEL TESTS	TRANSECTS 4A - 5A SHOVEL TESTS	UNIT 1 STR. I	UNIT 1 STR. II	UNIT 1 STR. IV	UNIT 1 STR. V	UNIT 1 STR. VI	UNIT 2 STR. I	UNIT 2 STR. II	UNIT 3 STR. I	UNIT 3 STR. II	UNIT 4 STR. I	UNIT 4 STR. II
Turtle (unidentified)													
Scapula			1		1								
FISH													
***Lepisosteus* sp. (Gar)**													
Skull fragment										4			
Scale								1	2	12	1	1	
Catfish (unidentified)													
Unidentified vertebra/vertebrae				2									
Fish (unidentified)													
Unidentified spine fragment				1						1			
Unidentified vertebra/vertebrae										4			
Unidentified bone										14			
MOLLUSCA													
Rangia cuneata **(freshwater clam)**			1	4									
Crassostrea virginica **(oyster)**	2									1		1	
Unidentified crab claw				2						2			
Unidentified marine shell				1						6			
Unidentified bone	1		1	2	8	1			1	5	1		
TOTAL	**8**	**5**	**8**	**156**	**50**	**3**	**1**	**8**	**3**	**87**	**9**	**10**	**3**

Table 13. Material Recovered from Unit 1 at 16SMY71, Luckland Plantation

MATERIAL TYPE	STR. I	STR. II	STR. III	STR. IV	STR. V	STR. VI
CERAMIC MATERIALS						
Porcelain						
Undecorated, hard		1				
Overglaze transfer-printed, hard teacup		1				
Transfer printed, hard		4				
Undecorated, soft		1				
Toy teapot fragment				1		
Toy dish fragment		1				
Stoneware						
Domestic Brown						
Exterior colored glaze/interior colored slip		1				
Whiteware						
Plain	1	4	3	5		
Blue hand-painted with black banded rim				1		
Transfer-printed		1				
Whiteware/Ironstone						
Plain	1	1				
Ironstone						
White, undecorated		1				
Buff-bodied Earthenware						
Albany slipped		1				
Unidentified Earthenware	1					
Earthenware Marble					1	
CONSTRUCTION MATERIALS						
Brick fragment	1			3		
Cement	1					
Concrete	1					

Table 13, *continued*

MATERIAL TYPE	STR. I	STR. II	STR. III	STR. IV	STR. V	STR. VI
Mortar		4		4		
Roofing slate		1		2		
WOOD						
Charcoal		1				
FAUNAL						
Bone button	1					-
SHELL						
Button		2		3		
GLASS						
Blown-in-mold						
Aqua, embossed	1					
Aqua		1				
Colorless		1		5		
Very pale light green/aqua/gray	1					
Pressed Glass				1		
Black Glass Jewelry Part				1		
Milk Glass Button	1	2		1		
Black Glass Button				1		
Blue and White Marble				1		
Window Glass	6	13				
Melted Glass						
Light green				1		
Unidentified Bottle Glass						
Amethyst		2				
Amber	1	1				
Aqua	1			7		
Colorless	6	8		13	4	
Light green		4				

Table 13, continued

MATERIAL TYPE	STR. I	STR. II	STR. III	STR. IV	STR. V	STR. VI
Dark green	1	1				
Milk glass	4			1		
Olive				1	2	
Opaque		1				
Pink		1				
Very pale light green/aqua/gray		1		1		-
METAL						
Aluminum foil		1				
Barbed wire	1					
Brass ring fragment		1				
Button		1				
Cotter pin		1				
Eyelet/rivet				1		
Hinge				1		
Lead fastener				1		
Jewelry part			1			
Nut		1				
.22 rimfire Remington casing		1				
.22 rimfire long rifle Winchester casing		1				
Safety razor				1		
Screw	1					
Shoe part, boot lace ring				1		
Slag		2				
Spike		1				
Cut tack				1		
Washer		1				
Metal welfare tax token		1				

Table 13, continued

MATERIAL TYPE	STR. I	STR. II	STR. III	STR. IV	STR. V	STR. VI
Nails						
Cut	21	52		60	3	
Wire	9	32		8	2	
Unidentified					1	3
Unidentified metal object		7		12	3	
STONE						
Cinder				1		
Coal				1		
Graphite battery pin				1		
Carbon battery core		1				
Pencil graphite				1		
TOTAL	**61**	**165**	**4**	**143**	**16**	**3**

Table 14. Material Recovered from Units 2 - 5 at Site 16SMY71, Luckland Plantation

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
CERAMIC MATERIALS								
Prehistoric sherd, Baytown Plain var. unspecified			1					
Porcelain								
Undecorated, hard	2		2		2			
Molded, hard		3						
Decalcomania, hard	1							-
Underglaze hand-painted, hard					2			
Undecorated, soft	4	1	2	1	6	1		
Molded, soft	1	1	1					
Transfer-printed, soft			1					
Porcellaneous ware	2		6			2		
Porcelain button		1		1	6			
Porcelain figurine			1					
Bisque figurine				1				
Toy dish					1			
Doll part					2			
Stoneware								
Domestic Brown								
Albany slip on buff	2		3					
Domestic Gray								
Salt-glazed and Albany slipped	1							
Albany slipped						1		
Unglazed			1					
Industrial stoneware buff-bodied with bristol glaze	1							
Pearlware								
Plain	1				2			
Whiteware								
Plain	39	12	47		31	6		
Annular	5	1	3		3			

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Blue hand-painted			1		2			
Polychrome hand-painted	1							
Flow blue	3		1		1			
Transfer-printed		1	1					
Willow transfer-printed	9		1					
Stenciled	1	2						-
Unscalloped, impressed rim	1							
Molded	1		2					
Whiteware/Ironstone								
Plain	6							
Ironstone								
White, undecorated	3		7					
Yellowware								
Plain	5	2						
Annular	2	2						
Rockingham/Bennington glaze			1					1
Ginger beer bottle fragment	1							
Redware								
Clear-glazed						1		
Brown-glazed					1			
Unglazed			1					
Buff-bodied Earthenware								
Colored glaze		1						
Earthenware Marble	1							
Ceramic Electrical Insulator	1				1			
Tobacco Pipe Fragment					1			
Unidentified Earthenware								
Eroded		1						

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
CONSTRUCTION MATERIALS								
Brick fragments					2			
Roofing slate	2				4			
FAUNAL								
Bone button			1		1			
Bone toothbrush					1			-
Shoe leather		1						
SHELL								
Button			6					
FLORAL								
Unidentified seed	1							
GLASS								
Blown-in-Mold								
Amber	1	4						
Amber, embossed	1							
Amethyst	7	5	3			2		
Amethyst, pharmaceutical, graduated	1							
Aqua	9		2		4			
Aqua, embossed	2		5					
Blue			1					
Colorless	14	1	26	4	6			
Colorless, panel bottle fragment		1						
Colorless, embossed			1	1				
Dark green		1						
Milk glass, embossed	1							
Tooled Lip								
Amber, whiskey bottle	1							
Aqua, food container	1							
Aqua					1			

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Light green, food container	1							
Colorless					1			
Olive					1			
Fire-polished Lip								
Amber			1					
Colorless			1					
Cracked-off and Fire-polished Lip with String Rim								
Olive					1			
Applied Lip								
Olive	3							
Rounded String Rim								
Aqua	1							
Turn Paste Mold								
Olive					1			
Machine-made Bottle Glass								
Amber					1			
Amber, medicine bottle, embossed		1						
Amethyst	1	1	4					
Amethyst, embossed		1						
Aqua	1				3			
Aqua, crown finish	1							
Aqua, molded	1							
Cobalt blue	1							
Colorless	6	1	6					
Colorless, embossed								
Light green		1						
Panel bottle fragment	1							
Depression Glass								
Aqua			1					

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Table Glassware								
Amethyst, tumbler fragment		1	1					
Amethyst, pressed	2							
Colorless	1		4		2			
Colorless, stemware fragment	1							
Colorless, pressed, bowl/dish		1						
Colorless pressed		1						
Milk glass			1					
Milk glass bowl/dish		1						
Opaque blue					1			
Unidentified fragment					1			
Lamp Glass								
Colorless	2	3	54	2	21			
Aqua	1							
Milk glass, light globe			1					
Melted Glass								
Aqua	1							
Colorless			1					
Window Glass	1		1	1	1			
Green Bead						1		
Orange Bead			1					
Black Bead					1			
Milk Glass								
Button			4					
Lid liner			1					
Glass Stopper (not ground)								
Amethyst			3					
Colorless								

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Molded Technique Unknown								
Dark green		2						
Unidentified Bottle Glass								
Amber	22	3	2		9		1	1
Amethyst	20	6	50	5	9	2		
Aqua	26	10	29		18			1
Blue			3	1				
Brown	5		5					
Dark green	8				1	1		
Green	4	6			6			
Light green		1	2		2	1		
Cobalt blue	1							
Colorless	25		111	1	43	5		2
Olive	28	20	11		26	3		2
Opaque		3			6	3		
Pink milk glass			1					
Milk glass	1		5					
Very pale light green/aqua/gray	1		1					
METAL								
Barbed wire	1						1	
Bolt	1		2		4			
Bullet			1					
Button (brass)	1		1					
Ring (brass)	1							
Ruler end (brass)				1				
Buckle			1					
Brass and inlaid shell button				1				
Chain		2	7		1			
Cosmetic cap - gild brass inlaid with shell			1					

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Construction hardware, unidentified			1					
Eyelet/rivet	1							
Fastener	1							
Gas/plumbing fixture	1							
Handle			1					
Iron button			2					
Iron horse bridle part							1	
Iron ring		1						
Iron swivel		1						
Iron wire (not barbed)	2							
Jewelry part, bee/fly-shaped					1			
Metal and ceramic caster			1					
Nut			2					1
Safety pin			2					
Shovel part			1					
Sheet metal fragments			6					
Shutter hook			1					
Spike	1	1						
Staple			1					
Stove part	1							
Suspender part	2							
Slag				3	2			
Tack	2		2		5			
Tag	1							
.22 rimfire long rifle Remington cartridge casing	1							
.22 rimfire long rifle cartridge casing					1			
.22 center fire bullet					1			
Shotgun shell center fire casing								1

Table 14, continued

MATERIAL TYPE	UNIT 2		UNIT 3		UNIT 4		UNIT 5	
	STR. I	STR. II	STR. I	STR. II	STR. I	STR. II	STR. II	STR. III
Shotgun shell center fire casing, Winchester No. 12							1	
.44 Winchester center fire casing					1			
.36 percussion ball					1			
Nails								
Cut	59	46	64	7	10	4		-
Wire	70	42	359	32	20	3	1	5
Unidentified		1	77		69			
Watch part			2					
Unidentified Metal Object								
Brass					1			
Cast iron	12		17		6			
Lead			2					
Unidentified	30	7	103		12	1		
STONE								
Chert pebble	2							
Cinder						1		
Coal	1		2					
Coal slag	4		3	1	4			
Quartz pebble				1				
Unidentified stone object		1	1					
Unidentified stone	1							
Other								
Bakelite gasket/washer			1					
Electrical tape	1							
Rubber machinery sealer (modern)							1	
Plastic paper sheet							1	
TOTAL	**499**	**206**	**1097**	**64**	**374**	**38**	**7**	**14**

Table 15. Material Recovered from Trenches and Scrape Areas at Site 16SMY71, Luckland Plantation

MATERIAL TYPE	TRENCH 1	TRENCH 2	TRENCH 3	NORTH BACKHOE SCRAPE AREA BACKDIRT	SOUTH BACKHOE SCRAPE AREA BACKDIRT
CERAMIC MATERIALS					
Porcelain					
Undecorated, soft	1				
Undecorated, hard		1			
Molded, hard			1		
Stoneware					
Domestic Brown					
Alkaline-glazed on buff					1
Albany slipped on buff				1	1
Salt-glazed, undecorated			1		
Salt-glazed and Albany slipped					1
Pearlware					
Undecorated handle					1
Whiteware					
Plain	2	1	4	1	2
Annular			1		1
GLASS					
Blown-in-Mold					
Amethyst				1	
Aqua					1
Aqua, embossed					1
Tooled Lip					
Amethyst				2	
Post-Bottom Mold					
Aqua, embossed					1

Table 15, continued

MATERIAL TYPE	TRENCH 1	TRENCH 2	TRENCH 3	NORTH BACKHOE SCRAPE AREA BACKDIRT	SOUTH BACKHOE SCRAPE AREA BACKDIRT
Machine-made Bottle Glass					
Amber	1				
Depression Glass					
Aqua					2
Table Glassware					
Aqua					1
Molded stemware fragment				1	
Unidentified					1
Perfume/Cosmetic Bottle Fragment					
Milk glass					2
Melted Glass					
Aqua			1		
Unidentified Bottle Glass					
Amethyst				1	
Colorless			1		
Olive			1	1	
METAL					
Watch part				1	
Cut nail	1	1	1		
Unidentified cast iron object				1	
STONE					
Unidentified stone		1			
TOTAL	**5**	**4**	**11**	**10**	**16**

were placed in areas where historic tenement remains potentially existed; the recovered assemblage supports this association. Recovered materials are discussed by provenience below.

Surface Collection and Shovel Testing

A total of 7 artifacts were collected from the surface of Luckland Plantation (Table 11). These included 3 whiteware sherds (1 annular, 1 common cable, and 1 willow transfer-printed sherd), 1 piece of hard porcelain, 1 whole firebrick (Table 6), 1 tooled glass bottle lip, and 1 piece of unidentified bottle glass.

Shovel testing within Transects 1A - 7A produced a variety of late nineteenth and twentieth century historic artifacts (n=338) (Table 11). Also collected were 5 animal bones, 3 cinders, 2 pieces of coal, and 1 seed (Table 11 and 12). Ceramic artifacts included 17 porcelain fragments; 5 stoneware sherds; 53 whiteware sherds; 4 whiteware/ironstone sherds; 2 white, undecorated ironstone fragments; 2 yelloware sherds; and, finally 2 buff-bodied earthenware sherds. Whiteware types consisted of plain (n=41), and decorated and molded examples (n=12). Decorated types included annular, common cable, decalcomania, flow blue, willow transfer-printed, and unscalloped, unmolded shell-edged whiteware (Table 11). One plain whiteware sherd displayed the maker's mark of (W) Baker & Co. (Ltd), which dates from 1893 to 1928 (Table 4, Figure 38). Construction materials recovered during shovel testing consisted of 2 partial soft-mud bricks (Table 6), 7 brick fragments, and 1 mortar fragment.

Glass artifacts included 26 blown-in-mold fragments (including 8 amethyst-colored), 1 tooled bottle lip, 1 turn-paste mold fragment, 1 amethyst-colored machine-made whiskey bottle top, 1 fragment of depression glass, 1 tumbler fragment, 1 pressed glass sherd, 1 piece of lamp glass, 1 milk glass lid liner, 1 milk glass button/holder, 1 fragment each of plate, window, and globe glass; and, 101 pieces of unidentified bottle glass (including 26 amethyst-colored). Identified glass embossments included 1 blown-in-mold aqua fragment from Dr. G. H. Tichnor's Antiseptic Co., New Orleans, Louisiana, post dating 1883; and, 1 amethyst blown-in-mold sherd displaying a mark from the Diamond Glass Co., Royersford Pennsylvania, post dating 1924 (Table 4).

A variety of metal artifacts were recovered (n=102), including barbed wire, bolts, lids, a nut, a punch, skillet/pot parts, stove parts, spikes, slag, cut nails (n=33), wire nails (n=15), unidentified nails (n=11), unidentified metal objects (n=11), and a small, cast iron bank part (Table 11). A single school slate fragment also was collected. One bone button and one unidentified seed also were collected. Bone artifacts included 2 pig, 2 deer, and 1 very burned (ashed) large mammal long bone (Table 12).

Shovel testing at Location 1, a brick concentration and kitchen midden deposit, produced 333 historic artifacts, 1 eroded, grog-tempered prehistoric sherd, 7 coal slag fragments, 6 animal bones, and 2 shells. Historic artifacts generally dated from the late nineteenth and twentieth centuries, and included 10 porcelain sherds; 1 toy teacup part; 2 stoneware sherds; 1 gray, undecorated ironstone fragment; 1 Rockingham/Bennington yelloware sherd; 68 plain whiteware sherds; and, 10 decorated whiteware sherds. Decorated patterns included embossed, annular, colored glaze, flow blue, and transfer-printed wares (Table 11). One plain whiteware sherd exhibited a mark used by Edward Clark (& Co.), dating from ca. 1880 - 1887 (Table 4, Figure 38).

Recovered construction materials included 4 pieces of roofing slate and 1 brick fragment. In addition, a variety of glass artifacts were recovered. These included 7 blown-in-mold glass fragments, 1 amethyst-colored tooled whiskey bottle lip, 28 machine-made glass fragments, 2 sherds of depression glass, 6 table glassware fragments, 1 pharmaceutical glass sherd, 1 piece of melted glass, 2 lamp glass fragments, 9 pieces of window glass and 1 milk glass globe fragment; 94 fragments of unidentified bottle glass also were recovered. One of the depression glass fragments, a blue fragment exhibited an "Aunt Polly" pattern; this pattern dates from the late 1920s (Florence 1990:14).

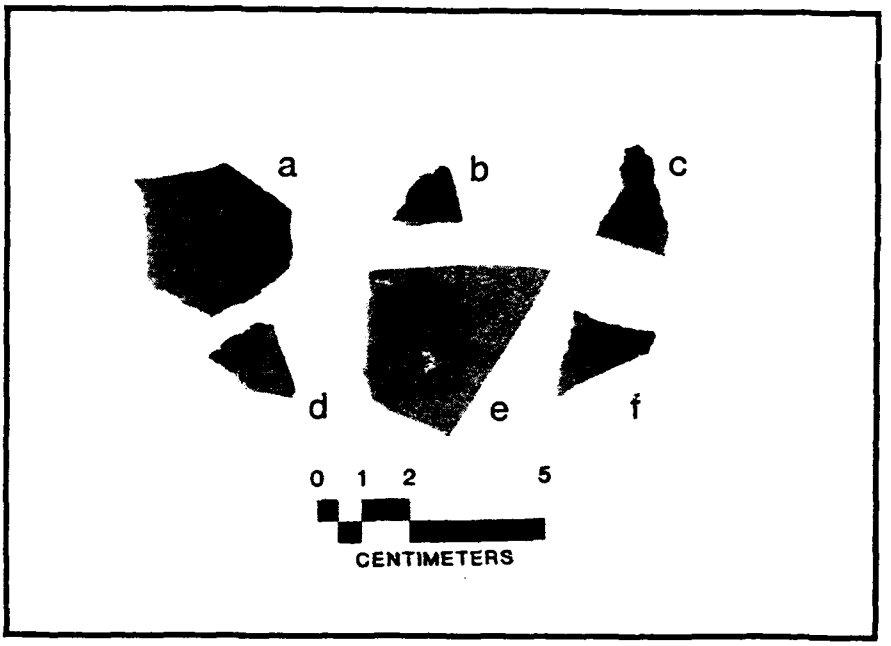


Figure 38. Selected plain whiteware sherds stamped with manufacturer/brand marks recovered from 16SMY71, Luckland Plantation: (a) "WEDGW[WOOD]/ENG[LAND]", (North Scrape Area Backdirt); (b) "[STO]NE [CHINA]/[ED]WARD [CLARKE]/ [BU]RSLEM, [ENGLAND]" (Location 1, Shovel Test W25 M); (c) "[BA]KER & [Co]/ENGL[AND]" (South Backhoe Scrape near Unit 3, Backdirt); (d) "...M..../EDWARD C[LARKE]/TUNSTA[LL]" (Unit 2, Stratum I); (e) "S[EMI-GRANI]TE/THE D.E. MCN.P.CO/LIVERPOOL" (Trench 3 Backdirt); (f) "BAKER & C[o]/ENGL[AND]" (Transect 4A, Shovel Test 11).

Metal artifacts included 65 nails (16 cut, 22 wire, and 27 unidentified), 8 unidentified metal objects, 1 bolt, 1 handle, 1 hook, 2 pipes, 1 spike, and 1 percussion ball. Three school slate fragments also were collected. Recovered animal bones included 1 very burned (ashed) large mammal rib, 4 large mammal long bones, and 1 unidentified bone. Two oyster shells also were collected (Table 12).

Unit 1

Unit 1 was excavated within the vicinity of a historic house that contained in situ brick foundation remains (Chapter IV). Stratum I produced 61 historic artifacts, 1 *Rangia cuneata* shell, and 7 animal bones (Tables 12 and 13). Historic artifacts included a variety of kitchen, construction, and personal items. Collected material included 1 plain whiteware sherd (1820 - 1900+), 1 whiteware/ironstone sherd (1813 - 1900+), 1 unidentified earthenware fragment, 3 pieces construction materials (brick, cement, and concrete fragments), 1 bone button, 2 blown-in-mold glass fragments, 1 milk glass button, 6 window glass fragments, 13 unidentified window glass fragments, 1 piece of barbed wire, 1 screw, and 30 nail fragments (21 cut and 9 wire). An embossment for Lea & Perrins Worcestershire Sauce was observed on one of the blown-in-mold glass fragments (Table 4). Recovered bone included pig, deer, 1 rodent tooth, unidentified large mammal bone, and turtle (Table 12). Stratum I was deposited following the destruction of the associated structure (Chapter IV).

Stratum II produced 164 historic artifacts, 1 wood charcoal fragment, 149 animal bones, and 7 shells (Tables 12 and 13). Over half of the historic remains were nail fragments (52 cut, and 32 wire). Other artifacts were primarily kitchen types, construction, and personal items. These materials included 8 porcelain sherds, including 1 porcelain teacup (Figure 39), 1 stoneware sherd, 4 plain and 1 transfer-printed (post 1820) whiteware sherds. In addition, 1 piece of whiteware/ironstone (1813 - 1900+), 1 ironstone (post 1845) sherd, and 1 Albany slipped earthenware sherd were recovered. Four mortar fragments, 1 piece of roofing slate, as well as 2 shell buttons also were recovered.

Glass artifacts consisted of 2 blown-in-mold sherds, 2 milk glass buttons, 13 window glass sherds, and 19 pieces of unidentified bottle glass, including amethyst-colored glass (ca. 1875 - 1920).

In addition to the previously documented nail fragments, collected metal artifacts included aluminum foil, a brass ring fragment, 1 button, 1 cotter pin, 1 nut, 2 .22 rimfire casings, 2 slag fragments, 1 spike, 7 unidentified metal objects, 1 washer, and 1 metal welfare tax token. Welfare tokens were used to pay sales tax, and came in various tax amounts (Dorothy Guillory, personal communication 1991). One side of the token may have read "TOKEN/LOUISIANA 1 PUBLIC WELFARE TAX". One carbon battery core also was collected.

Faunal material recovered during excavation included cow, pig, deer, large rodent, rodent, large mammal, small mammal, turkey, bird, fish, and 2 pieces of unidentified bone (Table 12). One pig rib displayed cut marks, while 1 large mammal long bone was charred; another was butchered/sawn. Also collected were *Rangia cuneata* shells, crab claws, and 1 unidentified shell. Stratum II represents a fill deposit located in the interior of the foundation and may have been formed when the house was destroyed (Chapter IV).

Only 4 historic artifacts were collected from Stratum III. The recovered materials included: 3 plain whiteware sherds, and 1 metal jewelry part. However, Stratum IV produced 141 historic artifacts, 1 cinder, 1 coal fragment, and 50 bones. Historic artifacts included 1 toy teapot fragment, 6 whiteware sherds, 3 shell buttons, and 9 pieces of construction material (brick and mortar fragments, roofing slate). Glass artifacts included 5 blown-in-mold sherds, 1 pressed glass fragment, 1 black glass jewelry part, 2 glass buttons, 1 marble, 1 melted glass fragment, and 23 pieces of unidentified bottle glass.

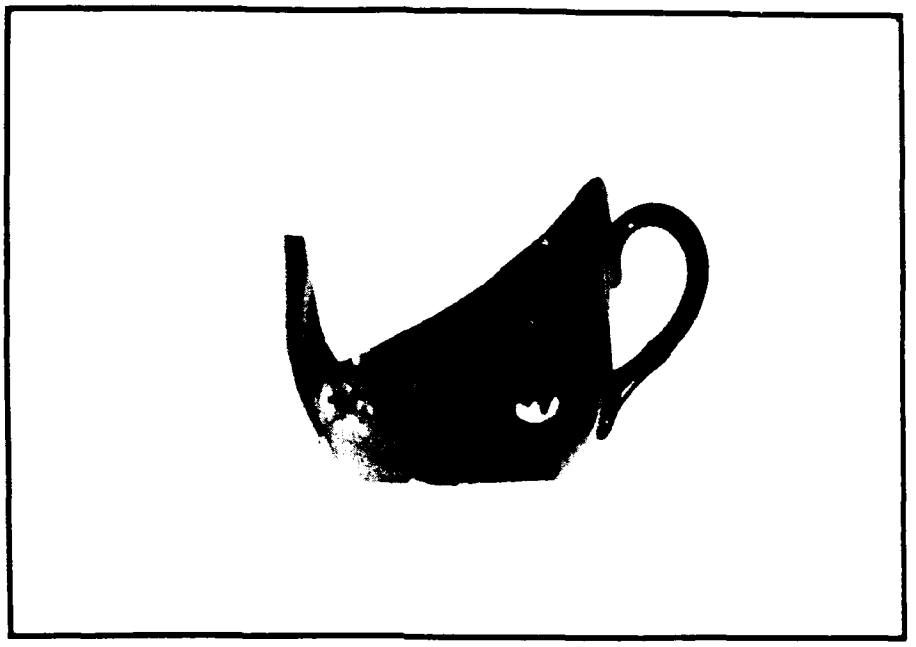


Figure 39. From 16SMY71, Luckland Plantation, Unit 1, Stratum II: Hard porcelain teacup (6.8 cm high, 7.7 cm wide) with overglaze transfer-printing.

Metal artifacts included 60 cut and 8 wire nails, 1 cut tack, 1 eyelet/rivet, 1 hinge, 1 lead fastener, 1 safety razor, 1 shoe part, and 12 unidentified metal objects. A single graphite battery pin also was collected, as well as 1 pencil graphite fragment.

Faunal and material recovered during the excavation of Stratum IV included deer, rodent, large mammal, small mammal, turkey, unidentified bird, and bird eggshell, turtle, and 8 unidentified bone fragments (Table 12). Stratum IV represents the ground surface before the house was destroyed (Chapter IV).

A total of 16 historic artifacts and 3 animal bones were collected from Stratum V. These included 1 earthenware marble, 6 pieces of unidentified bottle glass, 6 nails (3 cut, 2 wire, and 1 unidentified), and 3 unidentified metal objects. Recovered animal bone included large mammal, bird, and unidentified bone. Stratum V appears to be a filled rodent borrow (Chapter IV).

Stratum VI produced 3 unidentified nail fragments and 1 turkey bone. The brick foundation was located on Stratum VI (Chapter IV).

Artifacts recovered from Unit 1 generally dated from the late nineteenth and twentieth centuries. The variety of artifacts recovered included mostly construction, kitchen, and personal items; functions clearly compatible with house remains.

Unit 2

Unit 2 also was placed in association with a historic tenement house. The integrity of the unit also appears to be intact (Chapter IV). Strata I and II produced a total of 698 historic artifacts, 11 animal bones, 1 seed, 4 coal slag fragments, 1 piece of coal, 2 chert pebbles, and 1 unidentified stone (Tables 12 and 14).

Stratum I yielded 490 historic artifacts, 8 animal bones, 1 unidentified seed, 2 chert pebbles, 4 coal slag fragments, 1 piece of coal, and 1 unidentified stone. Of the 490 artifacts recovered, 129 were nail fragments. These included 70 wire and 59 cut examples. Also collected were 42 unidentified metal object fragments, 1 plastic electrical tape fragment, 1 piece of barbed wire, 2 iron wire fragments, 1 spike, 1 stove part, 1 gas/plumbing fixture, 2 tacks, 1 bolt, 1 brass button, 1 brass ring, 1 tag, 2 suspender parts, 1 eyelet, 1 fastener, and 1 .22 rimfire cartridge casing.

Glass artifacts included 36 blown-in-mold bottle glass fragments (including 8 pieces of amethyst-colored glass), 3 tooled bottle lips (1820s - 1920s), 3 applied lips, 1 rounded string rim (Figure 40), 12 pieces of machine-made bottle glass (post 1920), 4 table glassware sherds, 3 lamp glass fragments, 1 piece of melted glass, 1 piece of window glass, and 141 sherds of unidentified bottle glass. One of the colorless blown-in-mold fragments had the embossment used by Owens Bottle Co.; this mark postdates 1919 (Table 4). One piece of machine-made glass was amethyst-colored (ca. 1903 - 1920).

Also collected were 2 pieces of roofing slate; 1 ceramic insulator; 1 earthenware marble; 8 yelloware sherds (1830 - 1900); (plain, annular, and 1 ginger beer bottle fragment); 3 white, undecorated ironstone sherds (post 1845); 6 whiteware/ironstone fragments (1813 - 1900+); 1 plain pearlware fragment (1780 - 1830); 2 porcellaneous ware sherds (post 1880); 8 porcelain sherds; 1 industrial stoneware fragment; 3 Albany slipped stoneware fragments (1810 - 1900); 39 plain whiteware sherds; 1 molded whiteware sherd; 20 decorated whiteware sherds including annular (1820 - 1890); polychrome hand-painted, flow blue (post 1840), transfer-printed (post 1820) and willow transfer-printed, stenciled, and unscalloped, impressed shell-edged ware. One of the plain whiteware sherds exhibited the maker's mark used by Davenport, Longport, Staffordshire Potteries. The mark may date from the ca. 1830s (Table 4). Another maker's mark also was

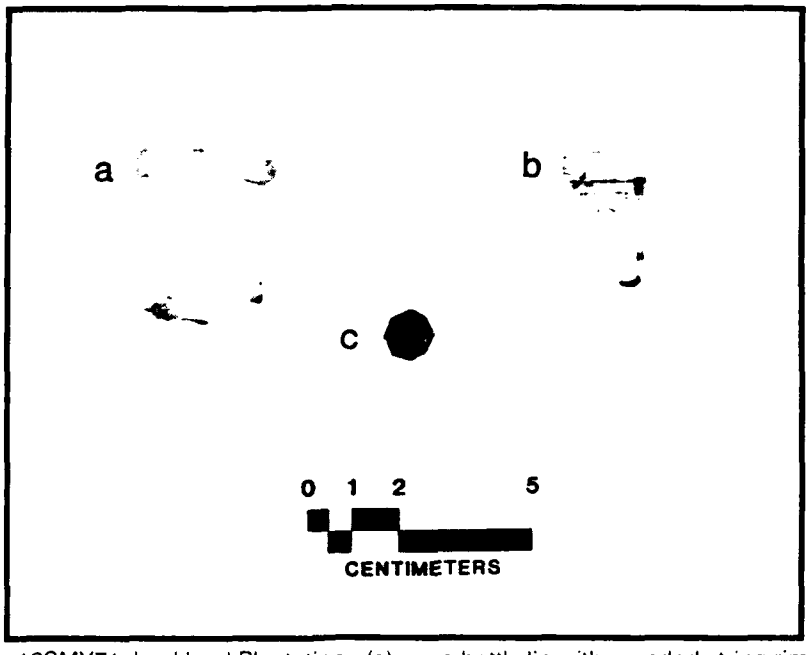


Figure 40. From 16SMY71, Luckland Plantation: (a) aqua bottle lip with rounded string rim (Unit 2, Stratum I); (b) clear fire-polished bottle lip; and (c) orange glass bead (Unit 3, Stratum I).

observed on a plain whiteware sherd, the mark of Edward Clark (& Co.), Phoenix Works, Tunstall, England (Figure 38). This mark dates form ca. 1865 to 1877 (Table 4).

Collected faunal material included deer, large mammal, and gar. Artifacts from Stratum I generally date from the late nineteenth and twentieth centuries; several of the artifacts date from a slightly earlier period (pearlware, Davenport maker's marked whiteware).

Stratum II produced 206 historic artifacts, 2 gar scales, and 1 unidentified bone. Of the 206 artifacts collected, 89 were nail fragments and included 46 cut, 42 wire, and 1 unidentified nail fragment. Other metal artifacts included 7 unidentified metal object fragments, 1 cut spike, 1 iron swivel, 1 iron ring, and 2 chain fragments. One unidentified stone object also was recovered.

Glass artifacts included 12 blown-in-mold fragments (including amethyst-colored glass), 5 machine-made glass sherds including 2 amethyst-colored (ca. 1903 - 1920), 4 table glassware fragments, 3 pieces of lamp glass, 2 molded-technique-unknown sherds, and 49 pieces of unidentified bottle glass. One blown-in-mold glass fragment displayed the Owens Bottle Co. embossment (post 1919; Table 4).

A single piece of shoe leather, 5 porcelain sherds, 4 yelloware sherds (1830 - 1900), 1 buff-bodied earthenware, 1 unidentified eroded earthenware, 1 porcelain button (post 1840), and 16 pieces of whiteware including 12 plain, 1 annular (1820 - 1890), 1 transfer-printed (post 1820), and 2 stenciled patterns were recovered. Stratum II artifacts generally date from the late nineteenth and twentieth centuries.

Unit 3

Unit 3 is located in the vicinity of an historic tenement house and appears to have intact archeological integrity (Chapter IV). Strata I and II yielded 1,153 historic artifacts, 1 prehistoric ceramic sherd, 87 animal bones, 9 shells, 4 pieces of coal slag, 2 coal fragments, 1 quartz pebble (Tables 12 and 14).

Stratum I produced 1,091 historic artifacts, 1 Baytown Plain *var. unspecified* sherd, 3 coal slag fragments, 2 pieces of coal, 9 shell fragments, and 78 animal bones. Of the 1,091 historic artifacts collected, 500 were nail fragments. These included 359 wire, 64 cut, and 77 unidentified examples. Unidentified metal fragments also comprised a major portion of the recovery (n = 122). Other metal artifacts included 2 safety pins, 1 cosmetic cap made of gilt brass inlaid with shell, 3 buttons, 1 buckle, and 2 watch parts, all personal items. One bullet also was recovered.

Furniture and construction metal also was collected. This included 1 metal and ceramic caster, 1 handle, 1 shutter hook, 1 staple, 2 tacks, 2 bolts, 1 shovel part, 1 construction hardware fragment, 2 nuts, 7 chain link fragments, and 6 pieces of sheet metal.

A total of 220 unidentified bottle glass fragments were collected, including 50 amethyst-colored pieces. In addition, 38 pieces of blown-in-mold glass, 2 fire-polished lips (ca. 1880) (Figure 40), 10 pieces of machine-made glass (post 1920) including 4 amethyst-colored fragments (ca. 1903 - 1920), 1 piece of depression glass, 6 table glassware sherds, 55 pieces of lamp glass, 1 piece each of melted glass and window glass, 1 orange glass bead (Figure 40), 4 milk glass buttons, 1 milk glass lid liner (post 1869, Jones and Sullivan 1985) and 3 amethyst-colored glass stoppers were recovered. Three aqua blown-in-mold glass fragments had identified embossments; however, only 1 fragment was diagnostic (Foley's Honey and Tar, which postdates 1899) (Table 4). The other two were from the CB Co., Chatanooga, Tennessee, and Falstaff Lemp, St. Louis, Missouri respectively. Also collected were 6 shell buttons and 1 bone button, and 13 pieces of porcelain, including 6 porcellaneous ware sherds (post 1880), and 1 porcelain figurine fragment. Also recovered were 3 Albany slipped brown stoneware sherds (1810 - 1900), 1 unglazed gray stoneware sherd, 47 plain whiteware sherds, 3 annular (1820 - 1890), 1 blue hand-painted whiteware sherd, 1 sherd each of

flow blue (post 1840), transfer-printed (post 1820), and willow transfer-printed decoration. In addition, 2 molded whiteware sherds, 7 undecorated white ironstone sherds (post 1845), 1 Rockingham/Bennington glazed yelloware sherd (1830 - 1900), and 1 redware sherd were recovered. One bakelite gasket/washer also was collected.

Bone remains included deer, raccoon, large rodent, large mammal, small mammal, bird, gar, unidentified fish, and unidentified bones. Recovered shell included 6 unidentified marine fragments, 2 crab claws, and 1 oyster shell. The artifacts from Stratum I generally date from the late nineteenth and early twentieth century.

Stratum II produced a smaller quantity of historic artifacts (n=62). A single coal slag fragment, 1 quartz pebble, and 9 animal bones also were recovered. Artifacts included 39 nail fragments (32 wire and 7 cut), 1 brass ruler end, 1 brass and inlaid shell button, and 3 slag fragments. Recovered glass included 5 blown-in-mold fragments including 1 with an unidentified embossment, 7 unidentified bottle glass fragments, 2 lamp glass sherds, and 1 piece of window glass. Among the unidentified bottle fragments were 5 amethyst-colored pieces. Three pieces of porcelain also were collected, including 1 button, 1 bisque figurine, and 1 undecorated soft sherd. Collected bone included 1 deer rib, 5 large mammal bones, 1 bird bone, 1 gar scale, and 1 unidentified bone.

Unit 4

A total of 407 historic artifacts, 4 coal slag fragments, 1 cinder, 12 animal bones, and 1 shell were recovered from Strata I and II of Unit 4 (Table 12 and 14). Unit 4 is located near the edge of an historic tenement house (Chapter IV). Stratum I produced 370 historic artifacts, 4 coal slag fragments, 9 bone fragments, and 1 oyster shell. Artifacts included 10 porcelain fragments, 6 porcelain buttons (post 1840), 1 porcelain toy dish part, and 2 porcelain doll parts, 2 plain pearlware sherds (1780 - 1830), 31 plain whiteware sherds, and 6 decorated whiteware sherds. Decorated types included 3 annular (1820 - 1890), 2 blue hand-painted, and 1 flow blue (post 1840) sherds. In addition, 1 redware sherd, 1 ceramic electrical insulator, and 1 tobacco pipe fragment were recovered.

Construction materials included 4 pieces of roofing slate, and 2 brick fragments. Two personal bone items were collected, a bone button and a bone toothbrush fragment.

Glass artifacts included 10 blown-in-mold fragments, 3 tooled bottle lips (1820s - 1920s), 1 cracked-off and fire-polished (ca. 1880) lip with a string rim, 1 turn paste mold (1870s - 1920s), 4 machine-made bottle glass fragments (post 1920), 4 table glassware sherds, 21 lamp glass fragments, 1 piece of window glass, 1 black glass bead, and 120 pieces of unidentified bottle glass, including several pressed amethyst-colored glass fragments (Table 14).

Recovered metal artifacts included 4 bolts, 1 chain, 1 jewelry part shaped like a bee (possibly in imitation of the Napoleonic imperial bee) or fly, 5 tacks, 2 slag fragments, 1 .22 rimfire cartridge casing, 1 .44 Winchester centerfire casing, 1 .36 percussion ball, 1 .22 centerfire bullet, as well as 69 unidentified nails, 20 wire nails, and 10 cut nails. The .44 Winchester centerfire casing postdates 1873 (Traister 1989). A total of 19 unidentified metal objects were recovered. Artifacts from Stratum I date from the late nineteenth and twentieth centuries, however, several earlier artifact types, e.g., pearlware, were collected.

Bone remains included rodent, butchered/sawn large mammal remains, and gar. A single oyster shell also was collected (Table 12).

Stratum II produced 37 historic artifacts, 1 cinder, and 3 charred large mammal long bones. Historic artifacts included 1 soft porcelain sherd, 2 porcellaneous ware fragments (post 1880), 1 Albany slipped

domestic gray stoneware sherd (1810 - 1900), 6 plain whiteware sherds, 1 piece of redware, 2 amethyst-colored blown-in-mold glass fragments, 1 green glass bead, 15 unidentified bottle glass fragments (including 2 amethyst-colored), 4 cut and 3 wire nail fragments, and 1 unidentified metal object. Stratum II artifacts date from the late nineteenth and twentieth centuries.

Unit 5

Excavation of Unit 5 took place in the vicinity of a former tenement house; however, the structure was not located (Chapter IV). No artifacts were recovered from Stratum I. Stratum II yielded 7 historic and modern artifacts (Table 14) including a rubber machinery sealer, a piece of plastic paper sheeting, 1 wire nail (post 1890), 1 shotgun centerfire casing, 1 iron horse bridle part, 1 piece of barbed wire, and a fragment of unidentified bottle glass. Stratum III produced 14 artifacts including 1 sherd of Rockingham/Bennington glazed yelloware (1830 - 1900), 6 unidentified bottle glass sherds, 1 metal nut, a shotgun shell centerfire casing, and 5 wire nails.

Trenches and Backhoe Scrape Areas

Backhoe trenches were placed, like unit excavations, in areas where potential historic tenement dwellings existed. Backhoe Scrape Areas were performed in order to expose associated features (Chapter IV).

Trench 1 excavation did not reveal any features or structural remains. Five artifacts collected from Stratum I included 1 piece of undecorated porcelain, 2 plain whiteware sherds (1820 - 1900+), 1 machine-made glass fragment (post 1920), and 1 cut nail (1815 - 1890) (Table 15).

Likewise, Trench 2 excavations failed to reveal features or structures. Three artifacts were collected from Stratum I including 1 undecorated hard porcelain sherd, 1 piece of plain whiteware, and 1 cut nail. One unidentified stone also was recovered (Table 15).

Trench 3 also did not uncover structural remains or features. Artifacts recovered from Stratum I included 1 molded porcelain sherd, 1 salt-glazed domestic brown stoneware, 4 plain whiteware sherds, 1 annular whiteware sherd (1820 - 1890), 1 melted glass fragment, 2 unidentified bottle glass sherds, and 1 cut nail fragment (Table 15). A maker's mark was observed on 1 of the plain whiteware sherds; it belonged to D.E. McNicol Pottery Co., East Liverpool, OH, and dates from 1892 to ca. 1920s (Table 4, Figure 38).

The two backhoe scraping areas were excavated in order to expose features behind Unit 3 (Chapter IV). However, no features were discovered. Artifacts collected from the North Backhoe Scrape Area backdirt included 1 Albany slipped brown stoneware sherd (1810 - 1900), 1 plain whiteware sherd, 1 amethyst-colored whiskey bottle blown-in-mold glass fragment, 2 amethyst-colored tooled bottle lips (ca. 1875 - 1920) (Figure 41), 1 table glassware fragment, 2 unidentified bottle glass sherds, 1 watch part, and 1 unidentified cast iron object. An unidentified Wedgwood pottery mark was observed on the single plain whiteware sherd (Table 4, Figure 38).

Artifacts recovered from the South Backhoe Scrape Area included 3 stoneware fragments (including 2 that were Albany slipped), 1 plain pearlware handle (1780 - 1830), 2 plain and 1 annular whiteware fragments, 2 pieces of blown-in-mold glass, 2 pieces of depression glass, 2 table glassware fragments, 2 perfume/cosmetic bottle fragments, and 1 post-bottom mold embossed with a mark of Adolphus Busch Glass Manufacturing Co. (1886 - 1928) (Table 4). One of the plain whiteware sherds displayed a maker's

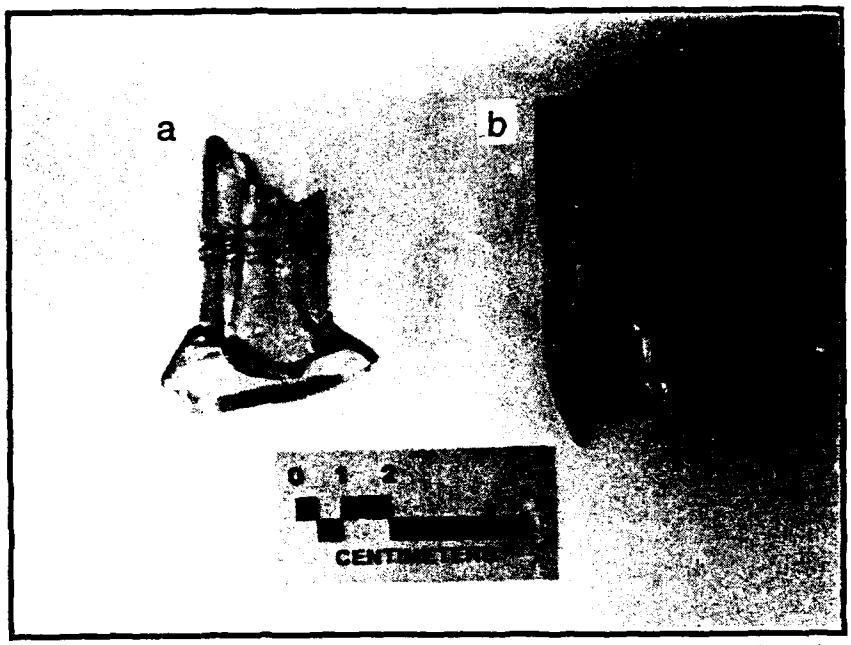


Figure 41. From 16SMY71 Luckland Plantation, North Backhoe Scrape Area Backdirt: (a) and (b) amethyst-colored tooled bottle lips.

mark used by (W) Baker & Co. (Ltd.), Fenton, Staffordshire Potteries. The mark dates from 1893 to 1928 (Table 4, Figure 38)

Summary

The material collected from Luckland Plantation generally dated from the late nineteenth and early twentieth centuries. Recovered artifacts include those expected for domestic residences, with construction materials, glass, and ceramic artifacts comprising the majority of the assemblages.

The Bourg Site (16SMY78)

A total of 10 artifacts were recovered from the surface of the Bourg Site, a former house site located within Area C. Recovered artifacts included 1 porcelain button (post 1840), 1 molded soft porcelain handle, 1 sponged whiteware sherd (ca. 1850s - 1920s), 2 blown-in-mold glass fragments, 1 non-machine made bottle glass base, 1 amethyst-colored pressed table glassware fragment, a single fragment from a 3 piece shoulder height mold (1820s - 1920s), 1 hand-blown glass fragment, and 1 brass gas/plumbing fixture. One of the blown-in-mold glass fragments retained part of an embossment for Pluto Water (Table 4).

A variety of ceramic and glass artifacts also were observed across the surface of the site. These included plain and decorated whiteware, yelloware, Albany slipped, and salt-glazed stoneware, amethyst-colored glass, tooled bottle lips, applied bottle lips, string rims, a cracked-off and ground bottle lip, pressed glass, brick, shell, spikes, nails, slate, bone, and a set of dentures (Chapter IV). Artifacts from the Bourg site generally date from postbellum times through the 1970s or 1980s; most date from the late nineteenth and early twentieth centuries (Chapter IV).

Artifacts observed within shovel tests in Area C included 1 whiteware sherd, 1 whiteware sherd with a colored glaze, 2 bolts, 1 unidentified metal object, 7 pieces of machine-made glass (post 1920), 1 machine-made crown finish soda bottle lip, 2 unidentified bottle glass fragments, and 1 nail fragment. These artifacts are characteristic of the artifact scatter associated with former house site located within Area C (Chapter IV).

CHAPTER VI

SUMMARY AND RECOMMENDATIONS

Summary

During field investigations, data were collected on five archeological sites within the six survey areas. These five sites included Moro Plantation (16SMY73), Bosler (16SMY77), Luckland Plantation (16SMY71), Avalon Plantation (16SMY70), and Bourg (16SMY78). Each of these sites is summarized and evaluated below.

Moro Plantation (16SMY73)

Moro Plantation (16SMY73) consists of the remains of a postbellum and first half twentieth century plantation situated on the east (left descending) bank of Bayou Teche, near its mouth. Tenements and dependencies, and possibly agricultural structures, historically extended through, and northeast of, the Moro Plantation and Area B project areas. Most of these structures were situated near the crest of the natural levee. Following the collapse of the sugar industry during the 1920s and 1930s, structures at Moro Plantation were moved or destroyed.

Within the upriver Moro Plantation project area and Area B, seven concentrations of historic materials were observed. Three of these, including Locations 1 and 2 in Moro Plantation, and a location within Area B, were comprised of brick concentrations adjacent to the Zenor Road right-of-way. All three contained mixed archeological deposits that apparently were pushed to the areas during road construction. Location 3 consisted of a coal cinder deposit; no artifacts other than coal cinders, brick fragments, and shell were observed within it. Location 4 contained five vertical iron bars and pipes surrounded by packed brick rubble, with packed shell abutting the east side of the brick rubble. Location 4 is interpreted to be the foundation support for early twentieth century plantation machinery. Location 6 contained a 1.26 m square brick foundation and a large iron ring. Finally, Location 7 was a brick concentration; no evidence of in situ features other than an apparent agricultural field levee was found at that location.

Portions of the Moro Plantation have been damaged extensively by modern activities, including road construction and excavation of a large borrow pit. Features and deposits located during these investigations were in relative isolation, and consisted of deposits that were recorded adequately during this study. These included the Location 3 coal cinder deposit; the iron bars and pipes, deposits at Location 4; the small foundation and iron ring at Location 6; and, the field levee in Location 7. Overall, the project area portion of the site lacks substantive research potential. In addition, better preserved examples of contemporaneous, similar plantations are situated west of this site at Luckland Plantation (16SMY71) and Avalon Plantation (16SMY70). Because of the site's compromised archeological integrity, and its low research potential, the site does not possess the quality of significance as defined by the National Register of Historic Places criteria (36 CFR 60.4). No additional archeological work at the historic Moro Plantation (16SMY73), including Area B, is recommended.

Bosler (16SMY77)

Bosler (16SMY77) is a Marksville through Mississippian archeological site situated within the confines of the historic Moro Plantation. During survey and testing, moderate to dense concentrations of prehistoric pottery and faunal remains were recovered from the site area. A black earth midden extended across the

surface of the site. Within the western portion of the site, a buried midden deposit containing pottery and bone also was identified, extending to a depth of at least 1.4 m below ground surface. This buried midden was capped with apparent in situ Red River natural levee deposits. While surface deposits contained a scatter of historic debris associated with Moro Plantation (16SMY73), the site in general possessed good archeological integrity.

The research potential of the Bosler site is good. The site is situated approximately 0.8 km northwest of Atchafalaya Basin (16SMY10), the four-mound Coles Creek through Plaquemine ceremonial center situated at the mouth of the Teche. Without a doubt, the contemporaneous Bosler site was a satellite hamlet or campsite associated with 16SMY10. In addition, the buried midden deposit may contain data concerning early settlement along the Teche, during formation of the Red River portion of the natural levee. These data could refine current interpretations concerning the formation of all prehistoric settlement along Bayou Teche.

The entire project area, including Bosler (16SMY77), is situated near the southeastern end of Management Unit III, as defined by *Louisiana's Comprehensive Archaeological Plan* (Smith et al. 1983). Four of the 17 important archeological themes identified for the unit relate to the site. These themes include: Prehistoric Adaptation to the Changing Deltas, Prehistoric Coastal Subsistence and Settlement Patterns, Prehistoric Adaptation to the Alluvial Valley, and Culture History. Further excavations at Bosler could address a number of research topics identified in the archeological plan. Among others, these include the following combined topics: (1) to define the range of dates and phases for Marksville through Mississippian cultures; (2) to define the range and variation of the artifact assemblage associated with Marksville through Mississippian cultures; (3) to define the subsistence systems for the Marksville through Mississippian cultures; (4) to better understand the settlement systems associated with Marksville through Mississippian cultures, including functional variation of sites; (5) to examine the relationship of Marksville through Mississippian cultures to surrounding contemporaneous cultures; and, (6) to examine the relationship between Plaquemine and Mississippian cultures (Smith et al. 1983). In addition, the relationship between formation of Bayou Teche and early prehistoric settlement of the region could be examined.

Additional research conducted at Bosler could provide important information concerning identified research topics. The excellent faunal preservation, and anticipated floral preservation, would enable reconstruction of subsistence patterns at the site. Examination of the site's function, and its relationship to 16SMY10, would provide data concerning settlement patterns, and how satellite communities interacted with nearby ceremonial centers. Excavations would provide information about nonceremonial habitation sites, which often have been neglected by archeologists. Also, the buried deposits probably contain data concerning prehistoric adaptation to the changing Teche delta. Based on the archeological integrity of the Bosler site, and the site's clear research potential, the site possesses the quality of significance, as defined by the National Register of Historic Places criteria (36 CFR 60.4).

Luckland (16SMY71)

The Luckland Plantation (16SMY71) project area is situated west of the site's landing and industrial area. During the 1990 survey, the site was demonstrated to possess the quality of significance, as defined by the National Register of Historic Places criteria. The current investigations were designed to delineate more precisely the boundaries of the National Register eligible portion of the site within the project area.

During the postbellum and early twentieth century, a number of tenements stood in the Luckland project area, near the crest of the natural levee. As with Moro Plantation, these structures were moved or razed during the 1930s - 1940s, reflecting the decline in the sugar industry. Since that time, the property has been used as pasture. There is no historical or archeological evidence that the area has been plowed since the Civil War.

Several historic landscape features and surface archeological remains were observed in the project area. These features and remains included several very old live oak trees, a large ditch, a brick scatter (Location 1), two concrete foundation mounts, and a squared-off filled area extending southward from the crest of the natural levee. With the exception of the filled area, all of these are situated in the eastern 140 m of the project area.

During field investigations, shovel tests, five test units, three backhoe trenches, and two backhoe scraping areas were excavated across the project area. Shovel testing demonstrated the widespread distribution of cultural materials throughout the natural levee portion of the project area, including a kitchen midden Location 1, west of Unit 1. Test units were placed in the vicinities of five historic tenements. The apparent base of a fireplace was located in Unit 1. Large quantities of artifacts, including construction debris, were observed and recovered from Units 2 and 3. Unit 4 exhibited a stratigraphic sequence that indicated the unit straddled the exterior wall of a structure. No features, and only a moderate quantity of artifacts were located in Unit 5 and the three backhoe trenches, suggesting they was placed away from historic tenement locations. The two backhoe scraping areas were positioned north of a tenement in an attempt to locate features such as wells or privies; none was located.

Archeological testing at Luckland verified that the site possessed archeological integrity. Therefore, it is anticipated that studies of refuse deposits would provide important information concerning lifestyles of postbellum and early twentieth century tenant farmers and their families. Three subsurface features were observed within excavations (the foundation, the kitchen midden, and the soil feature in Unit 4); however, only an estimated 0.2 per cent of the project area was excavated, precluding an accurate prediction of the quantity of subsurface features present.

Archeological deposits situated within Luckland Plantation (16SMY71) are associated with three important archeological themes identified in *Louisiana's Comprehensive Archaeological Plan*. These themes include: Ethnic Enclaves--The Blacks, Acadians, Germans, and Other Immigrants; Plantation Archaeology; and, Culture History (Smith et al. 1983). Several identified research topics could be studied through additional excavations at Luckland Plantation: (1) examination of the postwar and twentieth century plantation, including changes which occurred as a result of the change in labor status; (2) examination of the rise of tenancy in postwar Louisiana; (3) examination of industrial sites such as sugar houses; (4) investigation of ethnic enclaves; and, (5) examination of the changes in material culture of Louisianians resulting from technological advances in the late nineteenth and early twentieth centuries (Smith et al. 1983).

Additional investigations at Luckland Plantation would provide further information concerning the identified research topics. Study of the sugar house remains may provide information about postbellum and early twentieth century sugar production. Material culture patterns of plantation tenants could be studied around the tenement locations. Comparison of materials between the overseer's house (possibly at Location 1) and smaller tenements to the west could reveal socio-economic distinctions within a plantation community. In addition, examination of similarities and differences between Luckland Plantation archeological deposits and the contemporaneous Avalon Plantation remains to the immediate west could provide intra-plantation comparative data.

The current field investigations reaffirm the 1990 evaluation that Luckland Plantation (16SMY71), including the project area, possesses the quality of significance as defined by National Register of Historic Places criteria. The site has both archeological integrity and research potential. Few postbellum and early twentieth century plantation complexes in the area have survived with the degree of preservation exhibited at Luckland, and none has been studied extensively. While the portion of the site around the landing contains data primarily pertaining to the agricultural, industrial, and riverine components of the site, the project area portion of the site contains information on the lifestyles and living conditions of tenant farmers and their families. Through study of each aspect, a more complete understanding can be obtained about plantation economies in the Bayou Teche region.

Avalon Plantation (16SMY70)

Avalon Plantation (16SMY70) consists of the postbellum and early twentieth century remains of the east bank portion of a sugar plantation. Archeological deposits are similar to those observed at the contemporaneous Luckland Plantation (16SMY71): plantation sugar house remains, various dependencies, a landing, and tenements. The 1990 study evaluated the site as possessing the quality of significance as defined by National Register of Historic Places criteria (Goodwin, Hinks et al. 1991).

Current field investigations consisted of intensive pedestrian survey, shovel testing, transit mapping, and the excavation of two backhoe trenches and one unit. This testing was conducted within the western portion of the previously identified Avalon Plantation, south of Zenor Road. In addition, plowzone deposits associated with Avalon Plantation were identified within Area A, in the sugarcane fields north of Zenor Road. During this study, no features other than a kitchen midden were located in the Avalon Plantation survey area, including Area A. Rather, it was verified that within the survey area, the modern Zenor Road has been relocated approximately 20-25 m southeast of its historic location. This resulted in placement of the road across, or immediately southeast of, the historic tenement locations. Archeological deposits such as features and sheet refuse were disturbed extensively by this road construction. Also, deposits northwest of Zenor Road are mixed by repeated plowing of the sugarcane fields. Because of the poor archeological integrity of the archeological deposits associated with the tenements, that portion of Avalon Plantation within the current study area lacks substantive research potential; it does not possess the quality of significance, as defined by the National Register of Historic Places criteria. This evaluation does not alter the 1990 evaluation concerning the remaining eastern portion of the site.

Bourg (16SMY78)

Bourg (16SMY78) consists of the postbellum and twentieth century remains of a domestic residence located on the west bank of Bayou Teche, at its mouth. During survey, a variety of ceramic sherds, glass fragments, nails, iron fragments, brick, and other artifacts were located in a sugarcane field at the eastern edge of Area C (Figures 32 and 33). However, the majority of the site, including the house location and anticipated subsurface remains, was situated outside the project area. The sheet refuse deposits within the project area lack archeological integrity. Those deposits located east of the house site, outside the project area, possess a higher artifact density. In addition, domestic archeological remains similar to Bourg are common in the area. Because of its low integrity and research potential, the portion of Bourg (16SMY78) within Area C does not possess the quality of significance. While the remaining portion of Bourg probably is not a significant cultural resource, it has not been evaluated.

Recommendations

During supplemental archeological investigations of lower Bayou Teche, five archeological sites were examined within six survey areas. The current project area portions of three of these sites do not possess the quality of significance, as defined by the National Register of Historic Places criteria. These sites consist of the historic resources at Moro Plantation (16SMY73), including Area B; Avalon Plantation (16SMY70), including portions of Area A; and Bourg (16SMY78), located at the eastern edge of Area C. In addition, the remaining portions of Areas A-C did not contain potentially significant cultural resources. Except for the Bosler site location in Moro Plantation, no additional archeological testing is recommended within the surveyed portions of the three sites, and at Areas A-C; planned dredge disposal activities will not affect significant cultural resources in these locations. Both Bosler (16SMY77) and Luckland Plantation (16SMY71), including the project area portion, possess the quality of significance, as defined by National Register of Historic Places criteria of significance; both sites may be eligible for inclusion on the National Register.

Placement of dredged material across Bosler and Luckland Plantation would affect the sites differently. At Bosler, the prehistoric archeological resources include pottery, faunal and floral remains, and evidence of charcoal. Over the past hundreds of years, these materials have established a virtual equilibrium with their microenvironment, where deterioration occurs at a very slow pace. Any substantive change to this microenvironment, including placement of dredged material over the site, would alter the microenvironment, and would damage fragile resources that are preserved. Placement of dredged material over the site would result, at minimum, in increased compression of the archeological deposits, and increased moisture. As noted by Thorne (1989:2), compression would accelerate decay of faunal and floral materials, shell, pottery, charcoal, and archeological features. While increased water content in the site deposits could enhance preservation of faunal and floral remains, it would accelerate deterioration of charcoal, features, and pottery. Charcoal located in the site is critical for absolute dating of deposits. In addition, of the 259 ceramic sherds recovered from the site, 73, or 28.2 per cent, were eroded beyond identification; increased moisture would advance the rate at which these materials are eroding. Since placement of dredged materials across the site clearly would adversely impact archeological resources within the site, avoidance of the entire site area is recommended. Activities associated with dredging of the Teche should circumvent the entire area from Zenor Road to Bayou Teche, between Stations 232+75 and 236+00. No heavy machinery should be permitted to cross over the site.

Archeological resources at Luckland Plantation differ substantially from those at Bosler. The site is much larger than Bosler, and includes a variety of functional classes of resources, including sugar house and other industrial remains, agricultural remains, landing and bridge remains, possible submerged vessels, and large to small house remains. The 1991 project area portion of the site contains archeological deposits associated with six or seven tenements and dependencies, and a small structure near the mouth of a ditch. While the 1930 aerial photograph (Figure 10) indicates that the house at the eastern end of the project area, at Unit 1, is larger than the others, the remaining tenements all appear similar in size and basic structure. Units 2, 3, and 4 were situated in the immediate vicinities of three of these smaller tenements. With the exception of a few personal items, artifact assemblages from these units were very similar to each other, probably reflecting similar living conditions and lifestyles at the different houses.

Placement of dredged material across the Luckland Plantation project area would impact the eastern portion differently than the western portion. The eastern portion of the project area, east of Station 179+25, contains a variety of landscape features and surface archeological deposits, including historic live oak trees, an historic ditch and an adjacent small concrete foundation, and a large brick scatter with in situ foundation remains at ground surface (Location 1). In addition, that area is close to the central industrial portion of the site, with its wide assortment of landscape features and foundation remains. Placement of dredged material over this eastern portion of the project area would adversely impact the site's integrity of setting and feeling, and to an extent association (36 CFR 60.4).

The western portion of the project area, between Stations 169+00 and 179+25, exhibits only one historic landscape feature, a filled area south of Unit 5 (Figure 23). Its location and elevation were recorded. Although several live oak trees are located in this western portion of the project area, most of these twentieth century trees postdate historic occupation of the property. Placement of dredged material on that portion of the site would not substantially alter its integrity of setting, feeling, and association.

Distribution of hydraulic dredged material across the western portion of the site would place that portion of the site's artifacts and ecofacts into a continual very moist to wet anaerobic microenvironment. Artifacts and ecofacts observed and recovered from the project area primarily consist of ceramic sherds, glass, iron objects and other metal, brick, faunal remains, charcoal, and some floral remains. Overall, these materials are more durable than the prehistoric artifacts at Bosler. Placement of 0.6 to 0.8 m of dredged material across the area will not substantially affect the glass, ceramic materials, and brick, which form the majority of the assemblage. Thorne (1989:2) notes that in general wet anaerobic conditions enhance preservation of fauna, flora, and shell, and accelerate deterioration of metal artifact, soil features, and

charcoal. Over 10 per cent of the Luckland assemblage was comprised of bone; these faunal remains contain important data concerning dietary habits at Luckland. A number of bones show evidence of butchering techniques that could provide information concerning cuts of meat utilized by tenant farmers and their families. Analysis of Luckland Plantation dietary habits largely is dependent on preservation of these remains.

Preservation of metal artifacts would be affected by placement of dredged material over them. These artifacts currently are within a harsh alternating wet-dry microenvironment, in which the artifacts are subjected to the stress of repeated wetting and drying. Alteration of the microenvironment to continually moist and wet anaerobic conditions would force the artifacts to reestablish equilibrium with their microenvironment, but ultimately would stabilize the deterioration processes. While some metal artifacts would be adversely affected, the overall impact would be minimal. Accelerated decay of charcoal at the site would not alter the data contained within the site, since the charcoal is not needed to date the site.

Since dredged material would alter, to some extent, soil chemistry, soil features would be affected. The composition and color of these features may be modified, making identification more difficult. Features such as foundation remains would not be affected.

Carefully controlled placement of dredged material over the western portion of Luckland Plantation, between Stations 169+00 and 179+25, would not adversely affect the site. Only one landscape feature, an area of fill, would be covered by the dredged material. Preservation of many of the cultural materials in the area would be enhanced or not affected by burial, while the overall adverse impact to metal artifacts would be minimal. A small tenement location situated a short distance east of Station 179+00 would be preserved uncovered. Since the artifact assemblage from its vicinity is very similar to that observed around the five or six tenements to the west, differential preservation of materials between the two areas would be complementary. In other words, the bone artifacts would be preserved better in deposits underlying the dredged material, while the metal artifacts may be somewhat better preserved in the area not covered with dredged material. The result is that controlled placement of dredged material over the project area west of Station 179+25 would not adversely affect the site.

If dredged material is placed across the western portion of Luckland Plantation (16SMY71), then extreme care must be taken to ensure that archeological deposits are not damaged during its placement. Construction of containment dikes should not impact subsurface deposits, and materials used in construction of these dikes should not be obtained from the site area. Heavy machinery should avoid the project area east of Station 179+25. The discharge of dredged material into the area must not scour in situ archeological deposits, particularly deposits along the crest of the natural levee in the vicinity of the tenements, and care should be taken to ensure that water flow back into Bayou Teche will not erode the topsoil deposits. Finally, the covered site area should be monitored on a regular basis to evaluate the effect of dredged material on the covered resources. If physical damage to the subsurface deposits cannot be controlled, then the area should be avoided, or data recovery excavations should be conducted.

In summary, the project area portions of Moro Plantation (16SMY73), Avalon Plantation (16SMY70), and Bourg (16SMY78), along with the remaining portions of Areas A-C, do not possess the quality of significance, as defined by National Register of Historic Places criteria; no additional testing in these areas is recommended. The prehistoric Bosler site (16SMY77), situated within the confines of Moro Plantation, along with the project area portion of Luckland Plantation, possess the quality of significance, and appear to be eligible for inclusion on the National Register of Historic Places. Complete avoidance of Bosler is recommended; if it cannot be avoided, archeological data recovery should be undertaken prior to any construction. The Luckland Plantation project area between Stations 179+25 and 201+25 should be avoided. However, carefully controlled placement of dredged material over the western end of the site, between Stations 169+00 and 179+25, will not adversely impact cultural resources at the site. If subsurface

archeological deposits would be damaged substantially during placement of dredged material over the area, than the area should be avoided or data recovery excavations should be conducted prior to dredging.

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PERSONAL COMMUNICATIONS

Accardo Interview
1991 March 29. Interview with Paul Accardo, Sr., who as a young man hauled cane to the sugar houses of Luckland and Avalon Plantations.

Guarisco Interview
1990 April 25. Interview with Maria Guarisco, granddaughter of Oscar Zenor and present proprietress of Avalon Plantation.

Hall Interview
1991 April 26. Interview with Ara May de Gravelles Hall, granddaughter of Oscar Zenor and present proprietress of Luckland Plantation.

La Violette Interview
1991 March 19. Interview with Charles La Violette, who (like his father before him) leases the Luckland project area to graze his cattle.

Dorothy Guillory, 1991

George L. Miller, 1988, 1989

APPENDIX I

SCOPE OF SERVICES

CELMN-PD-RA 15 February 1991

SCOPE OF SERVICES
Supplemental Archeological
Investigations of Lower Bayou Teche,
St. Mary Parish, Louisiana

1. Introduction. These investigations are required to supplement previous archeological and historical research of Lower Bayou Teche. The required work includes additional testing of three plantation sites (Moro, Avalon and Luckland) documented in the draft report entitled Historical and Archeological Investigations of Fort Bisland and Lower Bayou Teche, St. Mary Parish, Louisiana. The cited report was prepared in 1990 by R. Christopher Goodwin and Associates under contract to this office. The goal of this additional work is to attempt to reduce the extent of "no work" areas around these historic sites.

2. Study Area. The study area consists of selected portions of the construction rights-of-way as shown on the project maps entitled Bayou Teche Maintenance Dredging B/L sta. 4+00 to B/L sta. 264+00, St. Mary Parish, LA (File No. H-16-30845). The specific study areas are defined below:

a. Moro Plantation (16SMY73) - that portion of the site located within the project right-of-way.

b. Luckland Plantation (16SMY 71) - the western flank of the site between stations 163+65 and 184+85.

c. Avalon Plantation (16SMY70) - the western flank of the site between stations 122+50 and 137+30.

3. General Nature of the Work. The study will consist of archeological testing of three plantation sites, data analysis and report preparation.

4. Study Requirements. The study will be conducted utilizing current professional standards and guidelines including, but not limited to:

- the National Park Service's draft standards entitled, "How to Apply the National Register Criteria for Evaluation," dated June 1, 1982;

- the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation as published in the Federal Register on September 29, 1983;

- Louisiana's Comprehensive Archeological Plan dated October 1, 1983;

- The Advisory Council on Historic Preservation's regulation 36 CFR Part 800 entitled, "Protection of Historic Properties."

The study will be conducted in two phases: Archeological Testing, and Data Analysis and Report Preparation.

A. Phase 1. Archeological Testing. Within one week of award of the delivery order, the Contractor shall initiate the fieldwork. The Contractor shall perform additional archeological investigations of the Moro Plantation site (16SMY73), and the western portions of Luckland (16SMY71) and Avalon (16SMY70) Plantation sites. The purpose of testing the Moro Plantation site is to determine if in situ features are present, and determine their archeological research value. The purpose of testing the western flanks of the Luckland and Avalon Plantation sites is to define and assess the significance and sensitivity of the archeological deposits in those portions of the sites.

The field methods will be designed to supplement the earlier archeological investigations of these three sites. This will consist of pedestrian survey with transects of 10 meter spacing and shovel testing at 20 meter intervals along transects, tighter interval shovel tests to locate features, mechanical excavation of trenches, and the hand excavation of 1 X 2 meter units. The fieldwork will be complete enough to prepare detailed site maps for all three areas investigated.

B. Phase 2. Data Analyses and Report Preparation. All data will be analyzed using currently acceptable scientific methodology. The Contractor shall catalog all artifacts, samples, specimens, photographs, drawings, etc., utilizing the format currently employed by the Louisiana State Archeologist. The catalog system will include site and provenience designations.

All three plantation sites will be evaluated against the National Register criteria contained in Title 36 CFR Part 60.4 and within the framework of the historic setting to assess the potential eligibility for inclusion in the National Register. The Contractor will classify each site, and portions of sites, as either eligible for inclusion in the National Register or not eligible. The Contractor shall fully support his recommendations regarding significance; including discussion of important research topics and how they could be addressed through additional research.

For any of the three study areas recommended as eligible for the National Register, the Contractor shall carefully define the minimum "no work area" necessary to avoid project impact to the site(s). In addition, the Contractor shall consider the potential of placing dredged material on the site(s). The sensitivity of the site(s) to impacts from such disposal will be analyzed. The Contractor shall

make detailed recommendations for what further archeological research would be required, if any, prior to site burial.

The analyses will be fully documented. Methodologies and assumptions employed will be explained and justified. Inferential statements and conclusions will be supported by statistics where possible. Additional requirements for the draft report are contained in Section 5 of this Scope of Services.

5. Reports. Six copies of the draft report integrating both phases of this investigation will be submitted to the COR for review and comment within 8 weeks after delivery order award. Along with the draft reports, the Contractor shall submit three copies of the National Register Registration Forms for each site recommended as eligible for inclusion in the National Register. This documentation will contain all of the data required by NPS National Register Bulletin 16: Guidelines for Completing National Register of Historic Places Forms.

The written report shall follow the format set forth in MIL-STD-847A with the following exceptions: (1) separate, soft, durable, wrap-around covers will be used instead of self covers; (2) page size shall be 8-1/2 x 11 inches with 1-inch margins; (3) the reference format of American Antiquity will be used. Spelling shall be in accordance with the U.S. Government Printing Office Style Manual dated January 1973.

The COR will provide all review comments to the Contractor within 6 weeks after receipt of the draft reports (14 weeks after work item award). Upon receipt of the review comments on the draft report, the Contractor shall incorporate or resolve all comments and submit one preliminary copy of the final report to the COR within 4 weeks (18 weeks after work item award). Upon approval of the preliminary final report by the COR, the Contractor will submit 30 copies and one reproducible master copy of the final report to the COR within 21 weeks after work item award. The Contractor will also provide computer disk(s) of the text of the final report in Microsoft Word or other approved format, and copies of all CAD or GIS files generated by this study.

Included as an appendix to the Final Report will be a complete and accurate listing of cultural material and associated documentation recovered and/or generated. In order to preclude vandalism, the final report shall not contain specific locations of archeological sites. Site specific information, including one set of project maps accurately delineating site locations, site forms, black and white photographs and maps, shall be included in an appendix separate from the main report.