

**PHASE I ARCHAEOLOGICAL INVESTIGATION
OF THE GREENFIELD DEVELOPMENT
ON ROBERT BROTHERS' FARM IN
ST. JOHN THE BAPTIST PARISH, LOUISIANA**

**Prepared for:
Greenfield Exports, LLC**

**Prepared by:
Renee Erickson, M.A., RPA
Gulf South Research Corporation**



December 2020

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8081 Innovation Park Dr.
Baton Rouge, LA 70820



PURCHASE ORDER NO. 20200721-001
GSRC PROJECT NO. 80976002

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Bretton M. Somers, PhD, RPA
Principal Investigator

December 2020

ABSTRACT

Gulf South Research Corporation (GSRC) personnel conducted an intensive Phase I archaeological survey of the proposed development area for a grain transfer facility on the Robert Brothers' Farm in Wallace, St. John the Baptist Parish, Louisiana. GSRC conducted the investigation on behalf of Ramboll US Consulting, Inc. (Ramboll) for Greenfield Exports, LLC under Section 106 of the National Historic Preservation Act (NHPA) 54 U.S.C. § 306108 and its implementing regulations. The project is subject to Federal Department of the Army Permitting under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act as well as State of Louisiana Coastal Use Permitting. Therefore, a USACE/LDNR Joint Permit Application was filed on November 6, 2020 seeking authorization under these authorities. LDNR assigned the action Coastal Use Permit Number P20201021 and deemed the application administratively complete on December 16, 2020. USACE routing and analyst/permit number assignment is currently pending.

There were two objectives of this investigation with the first objective determining the presence and/or absence of archaeological resources in the proposed project area through an intensive Phase I archaeological survey combining pedestrian surface inspection with shovel test pits (STPs) along transects using both high and low probability predictive models. The second objective consisted of an architectural survey to determine the potential for adverse effects to historic standing structures within the project viewshed as a result of above ground components of the proposed grain transfer facility.

The project area encompasses 264 acres of planted fields, wooded areas, and the Mississippi River levee. Approximately 115 acres were previously surveyed utilizing current Louisiana Division of Archaeology and Historic Preservation fieldwork standards or approved for projects since 2007 and therefore not included in the survey. An additional 56 acres were covered with standing sugar cane crops which prevented investigation, further reducing the number of acres surveyed. Although these 56 acres were not surveyed in their entirety, shovel tests were excavated judiciously on the edges of planted areas and spaces in between where possible. In total 91 acres were surveyed. A total of 457 shovel test pits (STPs) were excavated. Two sites (16SJB73 and 16SJB74), 286 isolated finds, two modern trash dumps, and one modern bottle dump were newly recorded during the survey.

No features were recorded for site 16SJB73 and the site does not possess any integrity, therefore further archaeological investigations are not recommended. The features for site 16SJB74 are of questionable integrity and possibly represent the remains of a structure common to the area for sugar cane farming and agricultural practices in the nineteenth century. Future research is needed to determine the function and purpose of the intact features, and therefore, this investigation recommends 16SJB74 be considered undetermined for the NRHP. Construction of the proposed project is not anticipated to have any adverse effects on this site, as project work is located well away from the site. If archaeological material not related to the located sites (16SJB73 or 16SJB74) is inadvertently discovered during the project construction, all work in that location should cease until a qualified archaeologist can examine and evaluate the nature of the uncovered remains.

The architectural survey consisted of an aboveground/architectural review of 125 known resources within the area of potential effect (APE) to assess if there was the potential for effects on aboveground/architectural historic resources. GSRC personnel accessed the LHSSS to determine what previously recorded historic resources were located within the APE, as well as the NRHP online map. No new above ground resources were identified during this investigation and no potential adverse visual elements were noted.

With submission of the final report, all records, photographs, and field notes will be curated with the State of Louisiana, Department of Culture, Recreation, and Tourism, Office of Cultural Development, Division of Archaeology. This material will be housed in the facility located at 1835 North Third Street, in Baton Rouge, Louisiana, 70802.

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ACKNOWLEDGMENTS

GSRC would like to thank Ramboll US Consulting, Inc. for the opportunity to conduct the current investigation. Additionally, GSRC thanks Dr. Bretton Somers Ph.D., RPA, who served as principal investigator and project manager, and Renee Erickson M.A., RPA who served as the director for the project. The field archaeologists included Phillip Ashlock Ph.D., Eve Carter, Victoria Ingalls Ph.D., and Mark Kudron. Ashlee Taylor, M.A., RPA performed the laboratory analysis, Erin Edwards conducted the visual impact survey, GIS analysts Christy Guempel and Marcela Guillot prepared graphics, and Ticia Bullion was responsible for report production.

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1.0 INTRODUCTION

Gulf South Research Corporation (GSRC) conducted an intensive Phase I survey of a proposed grain transfer facility on the Robert Brothers' Farm, in Wallace, St. John the Baptist Parish, Louisiana (Figures 1.1, 1.2, and 1.3). This investigation was conducted on behalf of the Ramboll US Consulting, Inc. for Greenfield Exports LLC, in compliance with Section 106 of the National Historic Preservation Act (NHPA), the Secretary of Interior's Guidelines for Local Surveys: A Basis for Preservation Planning (*National Register Bulletin* Number 24), and in accordance with directives, standards and guidelines of the Louisiana Division of Archaeology (LDOA). The project is subject to Federal Department of the Army Permitting under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act as well as State of Louisiana Coastal Use Permitting. Therefore, a USACE/LDNR Joint Permit Application was filed on November 6, 2020 seeking authorization under these authorities. LDNR assigned the action Coastal Use Permit Number P20201021 and deemed the application administratively complete on December 16, 2020. USACE routing and analyst/permit number assignment is currently pending.

This investigation was conducted by professional archaeologists meeting the qualifications specified in the Secretary of the Interior's Professional Qualification Standards (*Federal Register*, Vol. 48, No. 190, Thursday, September 29, 1983, pp. 44738-44739). Dr. Bretton Somers served as the principal investigator for this investigation and is a Registered Professional Archaeologist. This research was conducted in accordance with the professional and ethical standards of the Register of Professional Archaeologists.

The Area of Potential Effect (APE) for direct impacts from the proposed project contains two components including an 80-acre development area and a 184-acre rail spur, totaling 264 acres (Figures 1.4). The APE also includes any indirect impacts that may occur to the viewshed for any historic standing structures within the line of sight of the project. The 80-acre APE for the development area includes the necessary area for construction of the grain export terminal, supporting utilities and infrastructure, as well as temporary construction impact areas for the lay down of material, parking of construction equipment, and maneuvering of construction equipment. The 184-acre APE for the rail spur includes a 400 ft corridor connecting the development area with the existing Union Pacific Railroad to the south (Figures 1.5). Approximately 115 acres of the project area have been previously surveyed utilizing current Louisiana Division of Archaeology and Historic Preservation fieldwork standards, or were approved for projects since 2007, and 56 acres were covered with standing sugar cane which prevented direct investigation, reducing the number of acres within the APE to be surveyed to 91 acres.

The Phase I survey was performed from September 17, 2020 through September 29, 2020, and was conducted by GSRC archaeologists Eve Carter, and Mark Kudron, with assistance from Phillip Ashlock Ph.D. and Victoria Ingalls Ph.D. Renee Erickson, MA, RPA served as director for the project.



- Legend**
- Proposed Project
 - Survey Area
 - Previously Surveyed

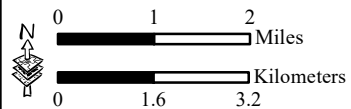


Figure 1.1. Vicinity map showing project area.



- Legend**
- Proposed Project
 - Survey Areas**
 - Low Probability
 - High Probability
 - Previously Surveyed

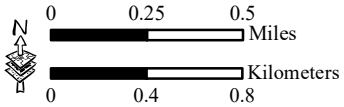


Figure 1.2. Map of project area adapted from the 2015 Lucher, Louisiana USGS 7.5' series topographic quadrangle.



Legend

— Proposed Project

Survey Areas

Low Probability

High Probability

Previously Surveyed

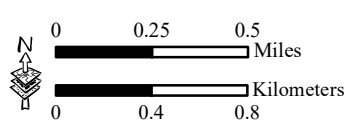


Figure 1.3. Map of project area adapted from 2019 aerial.

K:\Projects\80976002_Rambol_Robert_Bros_Property\GIS\Cultural_Report\Figure 1.3 Project Area Map.mxd



Figure 1.4. Aerial view of the project area, facing southeast.



Figure 1.5. Union Pacific Railroad, view to the northeast from unimproved road.

This report follows the *Division of Archaeology and Historic Preservation September 2018 Report Standards for Cultural Resource Investigations* as recommended by the Louisiana Office of Cultural Development. Chapter 1 provides an introduction to the proposed undertaking and includes a description and background for the project. Chapter 2 includes a description of the environmental setting of the project area and a land use history. Chapter 3 includes a summary of previous research including previously conducted investigations and sites recorded within 1.0 miles of the project area. Chapter 4 describes the methods of the investigation. Chapter 5 details the results of the field investigations. Chapter 6 provides a summary and recommendations for the project.

2.0 LAND USE HISTORY

The proposed Greenfield Louisiana Terminal project is located in St. John the Baptist Parish, Louisiana, approximately 52 miles northwest of New Orleans and 46 miles southeast of Baton Rouge on the west bank of the Mississippi River and north of Lac des Allemands. The project area is ecologically complex, situated on natural levees and back swamps of the Mississippi River. The project area is located in the Mississippi Alluvial Plain, an ecoregion that stretches from southern Louisiana to southern Illinois. The local area is predominately low and flat, with very little change in elevation.

GEOMORPHOLOGY

The project area is located in the south-central region of the Mississippi River Delta Plain. The location is within an area that consists of alluvium which accumulated approximately 12,000 years ago. During the Holocene, rising sea levels forced the consolidation of multiple channels into a single winding stream which became the Mississippi River (Gagliano 1984). The alluvium consisted of the accumulation of sandy to clayey fluvial deposits (Louisiana Geological Survey 2003).

The fluvial geomorphological processes of the Mississippi River have a major influence on the natural setting of the project area. Placement of prehistoric and historic occupations occurred as a result of the formation of the river channel and its tributaries and distributaries. The accumulation of sediment which formed natural levees and collapse of the levees resulting in the formation of crevasses also contributed to land use decisions (Gagliano 1984). The geomorphological features within the project area include the Mississippi River Meander Belt 1 (Hm1) which contains point bar deposits of the Mississippi River buried by a thin layer of overbank sediments, the Natural Levee Meander Belt 1 (Hml1) made up of deposits of the natural levees, and the Crevasse Complex of Meander Belt 1 (Hmc1) formed from a crevasse channel and splay deposits (LGS 2003) (Figure 2.1).

SOILS

The US Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), Web Soil Survey (2020) indicates that there are four soil series in the project area (Figure 2.2). The Gramercy series comprises most of the northern portion of the project area. The majority of the southern region of the project area is Schriever series soils. Canebrake soils are also found in the area (Table 2.1).

The Canebrake series consists of very deep, level to gently undulating, somewhat poorly drained mineral soils that are moderately to slowly permeable. These soils formed in loamy and clayey alluvium. They are found on high and intermediate positions on natural levees and deltaic fans of the Mississippi River and its distributaries. Slopes range from 0 to 3 percent. The typical pedon for the Canebrake series soils consist of an A or AP horizon from 0 to 58 centimeters below ground surface (cmbgs) consisting of a dark grayish brown (2.5YR 4/2) silt loam with a weak fine granular structure. Below the first horizon is a Bg or BC horizon from 58 to 200 cmbgs

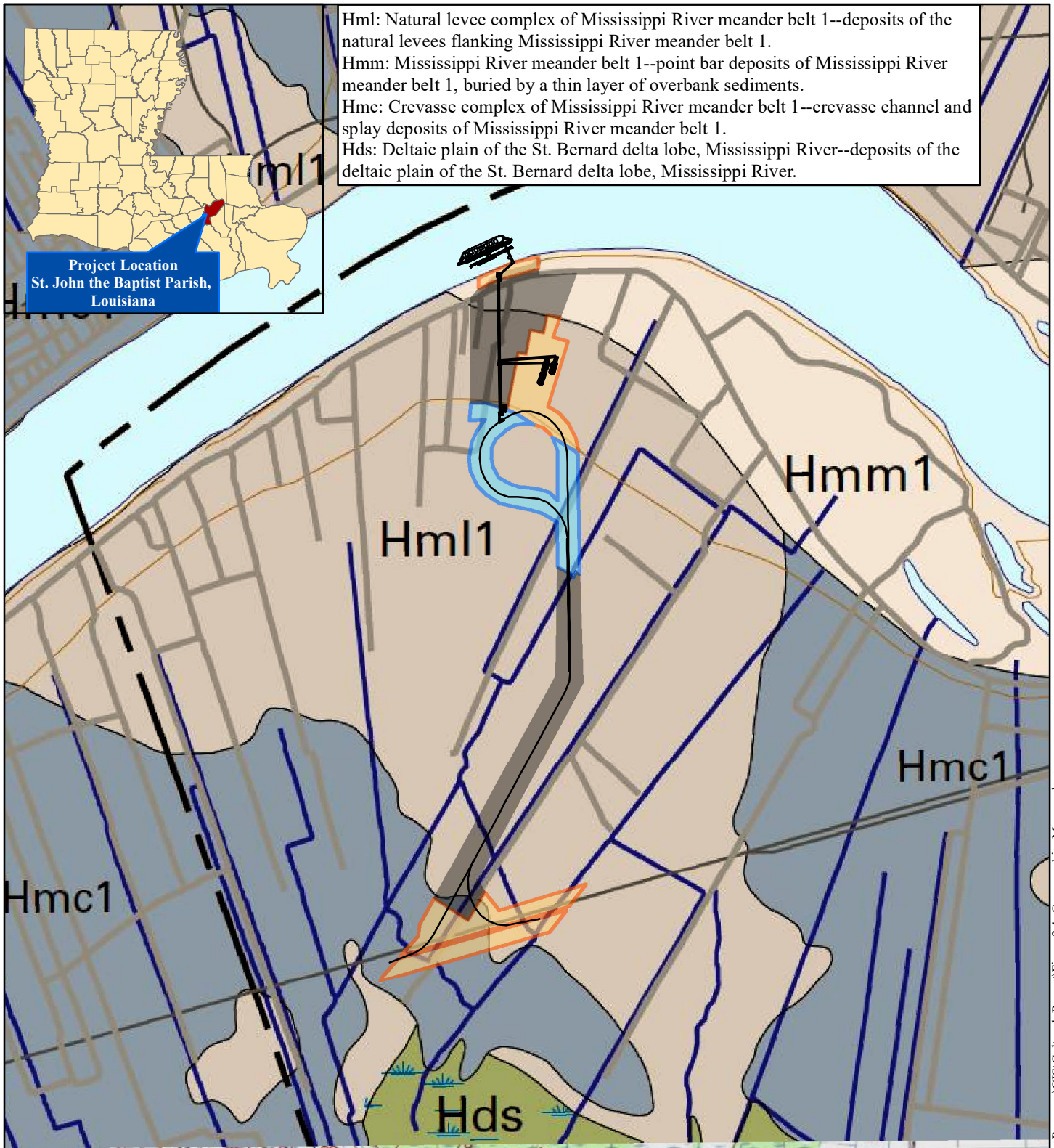
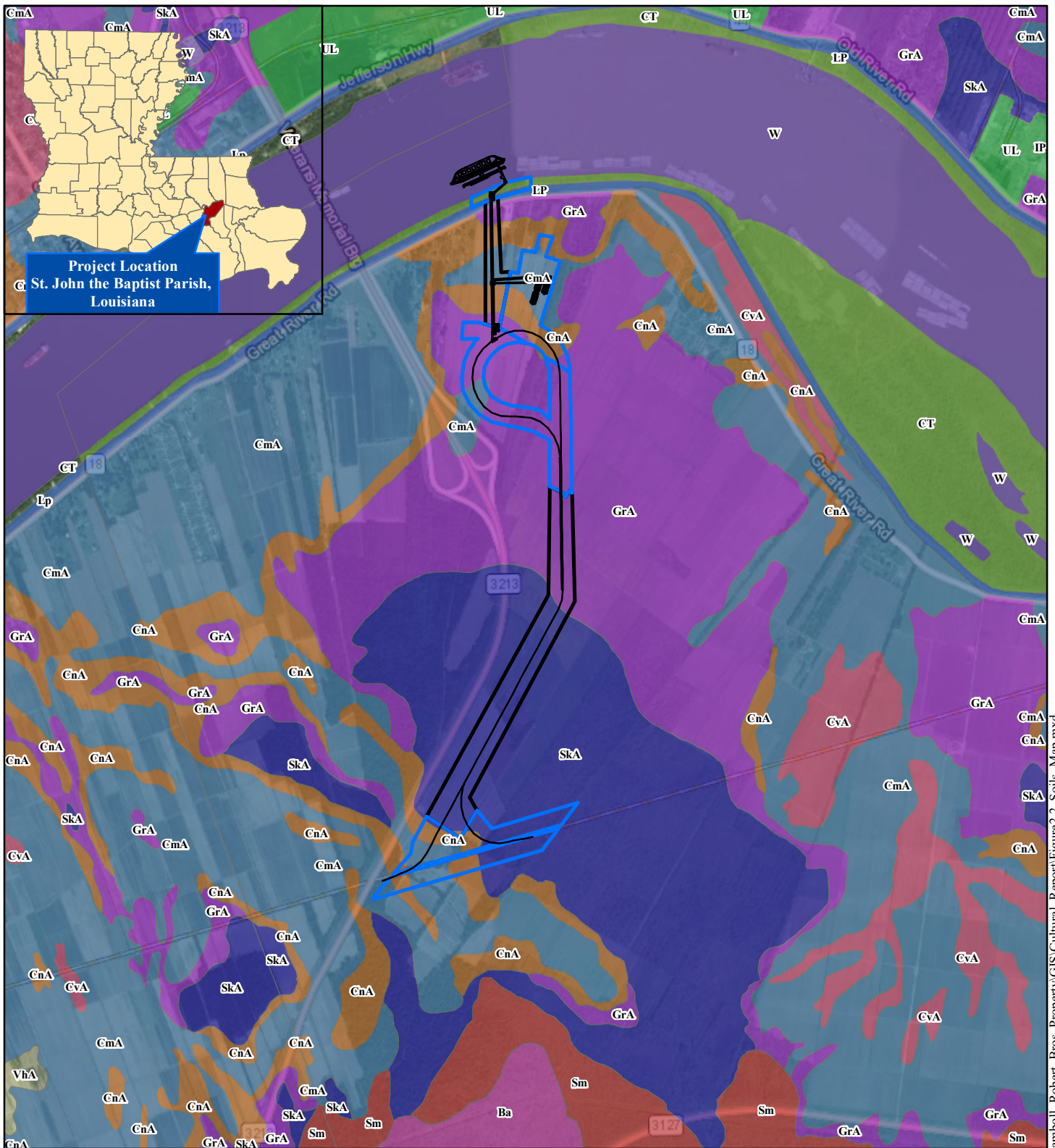


Figure 2.1. Map of geomorphological features in the project area.



Legend — Proposed Project ■ Survey Areas ■ Previously Surveyed Soil Data Ba, Barbary soils, 0 to 1 percent slopes, frequently flooded CT, Caneienne and Carville soils, gently undulating, frequently flooded CmA, Caneienne silt loam, 0 to 1 percent slopes SkA, Schriever clay, 0 to 1 percent slopes CnA, Caneienne silty clay loam, 0 to 1 percent slopes CvA, Carville silt loam, 0 to 1 percent slopes GrA, Gramercy silty clay, 0 to 1 percent slopes Sm, Schriever clay, 0 to 1 percent slopes, frequently flooded LP, Levees-Borrow pits complex, 0 to 25 percent slopes IP, Industrial waste pits UL, Urban and built up land W, Water		<p>0 0.25 0.5 Miles 0 0.4 0.8 Kilometers</p>	<p>GSRC November 2020</p>
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Figure 2.2. Map of soils in the project area.

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consisting of grayish brown (2.5Y 5/2) silt loam with a weak medium subangular blocky structure (USDA 2013a).

Table 2.1. Soils in the Project Area.

Map Unit Symbol	Map Unit Name	Typical Profile	Parent Material
CmA	Cancienne silty loam, 0 to 1 percent slopes	<i>Ap</i> - 0 to 58 cm: silt loam <i>Bg</i> - 58 to 170 cm: silty clay loam <i>BCg</i> - 170 to 203 cm: silty clay loam	Silty alluvium
CnA	Cancienne silty clay loam, 0 to 1 percent slopes	<i>Ap</i> - 0 to 17 cm: silty clay loam <i>Bg</i> - 17 to 109 cm: silty clay loam <i>2BCg</i> - 109 to 200 cm: silty clay loam	Silty alluvium
CT	Cancienne and Carville soils, gently undulating, frequently flooded	<i>A, Ap</i> - 0 to 25 cm: silty clay loam <i>Bg</i> - 25 to 53 cm: silt loam <i>Bw, C</i> - 53 to 203 cm: stratified very fine sandy loam to silty clay	Silty alluvium
GrA	Gramercy silty clay, 0 to 1 percent slopes	<i>Ap</i> - 0 to 27 cm: silty clay <i>Bssg</i> - 27 to 106 cm: silty clay <i>Bg</i> - 106 to 121 cm: silty clay <i>Ab</i> - 121 to 203 cm: silty clay loam	Clayey alluvium
SkA	Schriever clay, 0 to 1 percent slopes	<i>Ap</i> - 0 to 20 cm: clay <i>Bssg1</i> - 20 to 99 cm: clay <i>Bssg2</i> - 99 to 203 cm: clay	Clayey alluvium

Source: U.S. Department of Agriculture, Natural Resources Conservation Service, n.d.

The Gramercy series consists of deep poorly drained soils that formed in clay over fine-silty alluvium. These soils are located on alluvial flats and on the lower sections of natural levees on the alluvial plain of the Mississippi River and its tributaries. The slope is usually less than 0.5 percent but can be as great as 3 percent. The typical pedon for Gramercy series soil has an Ap horizon from 0 to 27 cmbgs consisting of very dark gray (10YR 3/1) silty clay with weak fine subangular blocky structure. The A horizon is followed by a Bssg horizon from 27 to 106 cmbgs consisting of gray (10YR 5/1) silty clay with a moderate medium prismatic structure parting to moderate medium angular blocky structure. Below the Bssg horizons is a Bg or Bgb horizon from 106 to 112 cmbgs consisting of gray (10YR 5/1) silty clay with a moderate medium angular blocky structure (USDA 2018a).

The Schriever series were formed in clayey alluvium and consists of very deep, poorly drained soils. These soils are found in the lower parts of natural levees and in back swamp positions on the lower Mississippi River alluvial plain. The slope ranges from less than 1 percent up to 3 percent. The typical pedon for Schriever series soils has an A horizon from 0 to 10 cmbgs consisting of a dark gray (10YR 4/1) clay that has a weak medium angular blocky structure with a fine roots present in the matrix. This layer is followed by a Bg horizon from 10 to 38 cmbgs consisting of gray (10YR 5/1) clay with weak medium angular blocky structure. The Bg horizon is followed by a Bssg horizon from 38 to 203 cmbgs consisting of gray (2.5Y 5/1) clay moderate medium prismatic parting to moderate medium subangular blocky structure (USDA 2018b).

FLORA

Prior to modern development, hardwoods including cottonwood (*Populous deltoids*), sweet gum (*Liquidamber ssp*), sycamore (*Platinus occidentalis*), and willow (*Salix nigra*) dominated the natural levee ridges that were frequently flooded. A few locations still contain the mixed hardwood forests. Areas of less frequent flooding support hickory (*Carya cordiformis* and *Carya alba*), magnolia (*Magnolia spp.*), oak (*Quercus virginiana*), pecan (*Carya pecan*), and sweet gum (*Liquidambar styraciflua*) (Kniffen and Hilliard 1988:79). Baldcypress (*Taxodium distichum*), red maple (*Acer rubrum*), and tupelo or black gum (*Nyssa aquatica*) dominate the backswamp areas. Cultivated land currently encompasses most of the project area including crops of sugar cane.

FAUNA

The availability of water and hardwood timber result in an abundance of fauna within the region. Mammals commonly found in the area include deer (*Odocoileus virginianus*), fox (*Urocyon spp.*), rabbit (*Sylvagus spp.*), raccoon (*Procyon lotor*), opossum (*Didelphus virginiana*), skunk (*Mephitis mephitis*), and squirrel (*Sciurus spp.*). Migratory and residential species of birds including egrets, herons, and migratory ducks inhabit the backswamp lakes, river channels, and tributary streams. Water turkeys (*Anhinga anhinga*) and Woodducks (*Aix sponsa*) remain along the bayous year-round. The waterways and flooded backswamps host a large numbers of alligators (*Alligator mississippiensis*), fish, snakes, and turtles (Kniffen and Hillard 1988).

CLIMATE

The climate in the project area is greatly influenced by the Gulf of Mexico resulting in warm, humid, subtropical weather. Summer temperatures average over 90 degrees, and winters tend to be mild with an average temperature of 54 degrees, and little to no snowfall. The humidity is usually high, averaging around 88 percent. Precipitation averages around 64 inches annually, with frequent thunderstorms and occasional hurricanes making landfall resulting in flooding (Muse 2009).

OVERVIEW OF LAND USE

This section will discuss the cultural history of the area. Since no prehistoric cultural material was recovered during any of the investigations, the cultural sequence presented will focus on the Historic period.

In 1539, Hernando DeSoto began exploring the southeastern United States (Clayton et al 1993). A second wave of Europeans came in the late 1600s as explorers and missionaries. Most notably was Robert Cavalier de la Salle who explored the Mississippi River. Pierre Le Moyne d'Iberville led another expedition in 1699 along the Mississippi and cleared the way for European settlement. Acadians expelled from Nova Scotia and German settlers fleeing poverty were some of the first Europeans to established permanent colonies in St. John the Baptist Parish in the early 1700s. The east and west banks of the Mississippi became known as the Acadian and German Coasts, respectively.

The movement and flooding of the Mississippi River resulted in fertile land adjacent to the waterway. Settlers were successful in their crop production and distributed produce to neighboring settlements along the river. In mid 1700s, Jesuit priests brought sugar cane to the region and planters began developing sugar production processes for commercial distribution (Rehder 1971). Several plantations in St. John the Baptist Parish became successful producers of sugar cane.

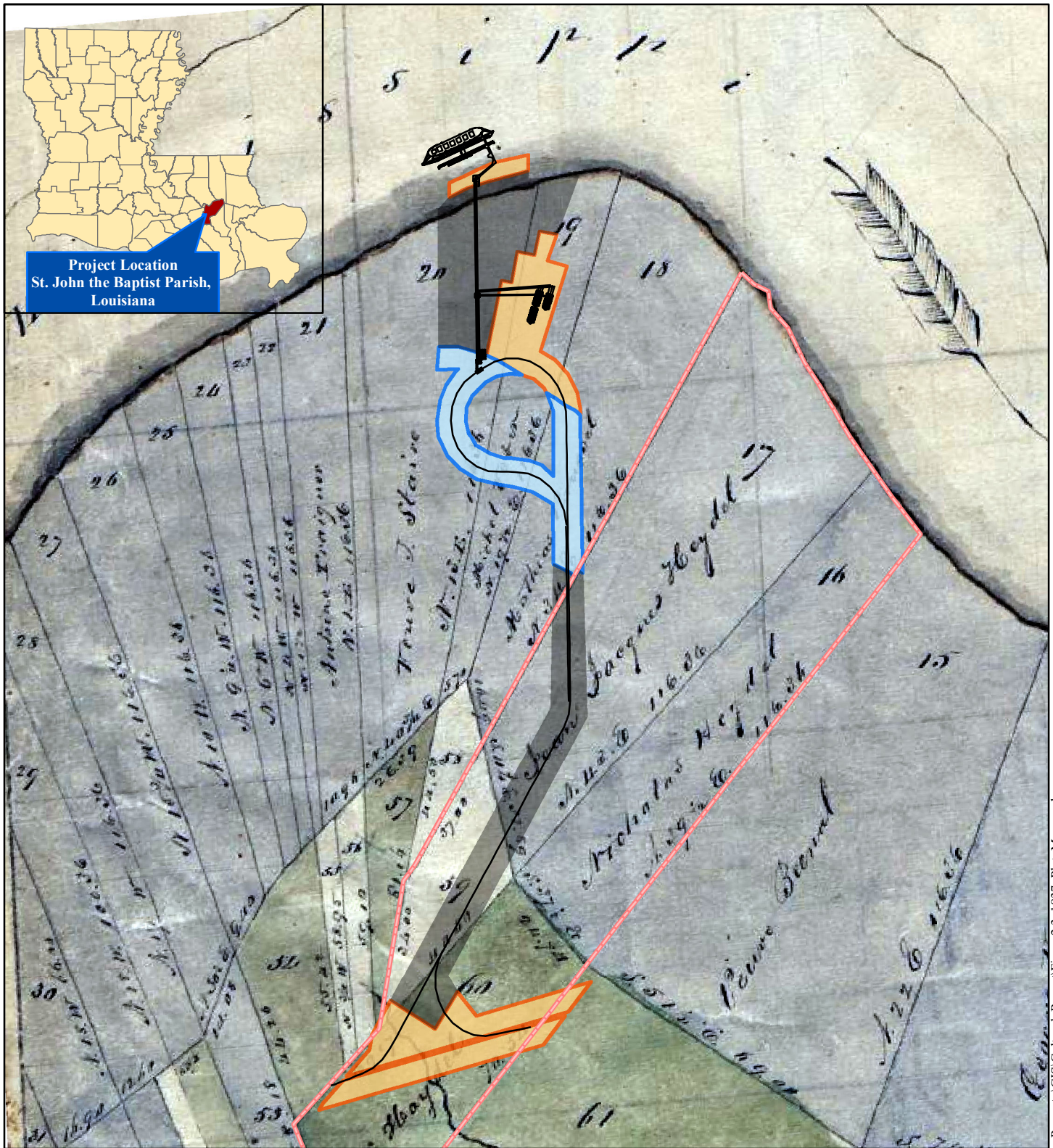
Early sugar cane production in the region was performed using horsepower to extract cane juice through wooden rollers. Advancements in steam powered engines resulted in more efficient means of sugar production with less reliance on livestock. Mills included multiple structural components including a cane crusher, boiler, chimney, and mechanical elements. Prior to the Civil War, many plantations maintained their own cane processing centers.

Economic stress from the Civil War and Reconstruction resulted in a reorganization of land and production (Goodwin 1989). Plantation property changed hands but many continued to produce sugar cane until the turn of the nineteenth century. Primary crops may then have switched to rice (Bouchereau 1868). During the first half of the twentieth century, the plantations continued to produce rice, sugar cane, and cattle. Another commercial crop, soybeans, was introduced later (Hunter 1991).

During the nineteenth century railroads began expanding across the region. The Sabine and Galveston Bay Railroad and Lumber Company was established in 1856 (Melvin 1996). Construction commenced on the rail line in 1858 on the outskirts of Houston with anticipated expansion to New Orleans. The name of the company was changed in 1859 to the Texas and New Orleans Railroad Company. Work continued on the railroad until events of the Civil War ceased construction. The line to New Orleans was finally completed and service from Houston to New Orleans began in 1880. Southern Pacific Railroad Company purchased the railroad in 1881 (Williams n.d). The railroad passed through multiple companies and ultimately merged with the Union Pacific Railroad in the 1990s (Yenne 1996). The railway system contributed to the growth and development of the region.

The proposed project area includes 85 acres of land that was formerly part of the Whitney Plantation. According to the Southeastern District of Louisiana Surveyor Generals' map, Jean Jacques Haydel Sr. owned Section 59 of Township 12 South, Range 18 East of the Southeastern District of Louisiana in 1786. Then in 1831, his son, Jean Jacques Haydel Jr, claimed the land in Section 17 which became the Whitney Plantation (Figure 2.3).

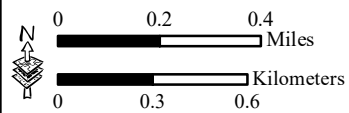
Jean Jacques Haydel was married to Marie Magdaleine Bozonier Marmillion and had eight children. The 1810 census indicates that he owned 56 slaves. Early descriptions of the plantation include the main house, slave houses, kitchen, storehouses, hen houses, rice mill, and additional buildings. The plantation yielded some of the largest crops of sugar cane in the region (*Louisiana Planter and Sugar Manufacture* 1892) with its highest yield in 1850 (Champomier 1850-1859). The family continued to own the plantation until 1866 at which time it was purchased by George Johnson from New York, who continued agricultural production on the property (Hunter 1991). Between 1880 and 1946, the plantation was owned by Pierre Edouard St. Martin, Théophile Perret, and later generations of their families. In 1946 it was acquired by Alfred Mason Barnes of



Legend

- Proposed Project
- Former Whitney Plantation Property Boundary
- Previously Surveyed
- Survey Areas
- Low Probability
- High Probability

Note: The 1837 historical topographic map has not been accurately georeferenced and therefore results in the slight misrepresentation of the survey area.



November 2020

Figure 2.3. Map of proposed project and survey area on 1837 plat map.

New Orleans who sold it to the Formosa Chemicals and Fiber Corporation in 1990. Formosa planned to build a \$700 million plant for manufacturing rayon in 1991. As part of the Formosa purchase the land including Whitney Plantation was surveyed for cultural resources by Coastal Environments, Inc (CEI) Hunter 1991). The Whitney Plantation was recorded as a site 16SJB11 and recommended as potentially eligible for the NRHP. The Whitney Plantation was subsequently nominated and listed on the NRHP in 1992. The portion of the Whitney Plantation found to be eligible and listed on the NRHP includes a 40 acre portion of the original property encompassing the main housing and operations center of the plantation and is located approximately 0.35 miles to the east of the current project area. In 1999, troubled by the way plantations have been romanticized by modern generations, New Orleans-based attorney John Cummings purchased 1,700 acres of land, a portion of which included the NRHP Listed Whitney Plantation property. John Cummings has restored portions of the property as a museum dedicated to telling the story of slavery. Portions of the property outside of the 40-acre NRHP-listed Whitney Plantation and determined to be not contributing to the NRHP significance of Whitney Plantation have been sold off to outside interests including the Robert Brothers Farm, LLC.

Robert Brothers Farm, LLC (Robert Brothers Farm or Robert Bros.) is a group of six individual limited liability companies, managed under a single entity own the subject property separate from the parcel now maintained as the previously mentioned museum and Whitney Plantation. The subject site for this project has been used for agricultural purposes since development. Since 2006, the group managed under Robert Bros. has owned the site and leased the site for agricultural and industrial purposes.

3.0 PREVIOUS INVESTIGATIONS

GSRC conducted a search of previous archaeological surveys and recorded archaeological sites within a 1 mile radius of the proposed survey area (Figure 3.1). The investigation included a search of records on file at the LDOA, the Division of Historic Preservation in Baton Rouge, and the Louisiana Cultural Resources Map online database. Site files, relevant maps, NRHP listed properties, state or other national historic landmarks, historical markers, and cemeteries were examined.

The records search indicated a total of 34 previously recorded archaeological sites and ten previously conducted archaeological investigations identified within 1 mile of the APE (Tables 3.1, 3.2). Previously recorded archaeological sites within 1 mile of the APE consist of both prehistoric and historic sites. The prehistoric sites include sites with undecorated ceramics, suggesting a habitation area, and historic sites that are related to the plantations dating to the late eighteenth and early nineteenth centuries. One of the previously recorded archaeological sites, 16SJB56, and five Louisiana Historic Resource Inventory (LHRI) properties overlap the current APE. Site 16SJB56 is located in the northern section of the project area along Louisiana Highway 18 and is a probable house site.

The National Park Service prepared a cultural resources survey (22-0918) of the Mississippi River in 1984 for the U.S. Army Corp of Engineers. The comprehensive study provides a research design to facilitate future investigations, a guide for identification, description, and evaluation of cultural resources along the Mississippi River, and a plan for undertaking future projects that may affect cultural resources. The review includes a history of the development and maintenance system for the levees, as well as improvements in the navigation of the Mississippi through removal of underwater impediments. The investigation recorded 163 archaeological sites within the survey area four of which are within a one-mile radius of the current investigation (Table 3.3). Construction of the levee system began in the early 1700s and maintenance continues to the present (NPS 1984).

In 1987, R. Christopher Goodwin & Associates conducted a survey (22-1219) which examined multiple levee and revetment construction areas along the Mississippi River prior to the enlargement of the landside, straddle, and riverside of the levees. Nine construction areas were part of the proposed project including the Vacherie levee. The survey suggested that the excavation of riverside borrow pits and corridor cleaning as part of the revetment construction, would result in adverse impacts on any cultural resources within 3 meters of levee project area. Additional impacts would occur from the clearing of vegetation and grading for the construction of the revetments. Further deep testing was recommended due to the high silt deposition and high probability of buried cultural remains. Survey methodologies included 20 meter pedestrian transects augmented by systematic shovel testing at 50 meter intervals. The Vacherie Reach Survey resulted in the documentation of site 16SJB40 (Shuman et al. 1996).

Figure 3.1 deleted per R.S. 41:1609

**Table 3.1. Previously Recorded Archaeological Resources Recorded
within 1 mile of the Area of Potential Effect.**

Number	Site Type/Name	Designation/Eligibility
16SJB9	Historic – Mialaret House Site	Undetermined
16SJB11	Historic – Whitney Plantation Historic District	National Register of Historic Places
16SJB16	Historic – Woodville Cemetery	Ineligible
16SJB18	Historic – Zeringue House	Undetermined
16SJB19	Historic – Hymek Site	Undetermined
16SJB20	Historic – Schexnayder House	Undetermined
16SJB23	Historic – Willow Grove Store	Undetermined
16SJB26	Historic – Pratt Lane	Undetermined
16SJB39	Historic – Industrial Housing	Ineligible
16SJB40	Historic – Vacherie 87-1	Ineligible
16SJB42	Historic – Ambrose Haydel Habitation	Undetermined
16SJB43	Historic – Whitney Quarters and Mill Complex	Undetermined
16SJB44	Historic – Mialaret Quarters	Undetermined
16SJB45	Historic	Undetermined
16SJB46	Historic	Ineligible
16SJB47	Historic	Undetermined
16SJB48	Historic	Undetermined
16SJB49	Historic	Undetermined
16SJB50	Prehistoric/Historic	Undetermined
16SJB51	Historic – Second Whitney Quarters	Undetermined
16SJB52	Historic	Undetermined
16SJB53	Prehistoric/Historic	Undetermined
16SJB54	Historic	Ineligible
16SJB55	Historic – P.A. St. Martin House Site	National Register of Historic Places
16SJB56	Historic	Undetermined
16SJB57	Historic – Mialaret Mill Site	Ineligible
16SJB63	Historic – Evergreen Plantation	National Register of Historic Places
16SJB68	Prehistoric/Historic – Angelina Plantation	Undetermined
16SJB19	Historic – Golden Grove	Undetermined
16SJB44	Historic – Angelina 4	Undetermined
16SJB45	Historic – Angelina 5	Undetermined
16SJ112	Historic	Undetermined
16SJ113	Historic	Undetermined
16SJ114	Historic	Undetermined

**Table 3.2. Previously Conducted Archaeological Investigations Recorded
within 1 Mile of the Survey Area.**

Report Number	Title	Investigation Type	Sites Recorded
22-0918	Mississippi River Cultural Resources Survey: A Comprehensive Study/ Army Corps of Engineers, Southeast/Southwest Team, National Park Service, Denver Service Center	Desktop Review	See Table 3.2
22-1077	Cultural Resources Survey of the Angelina Revetment Item, St. James Parish, Louisiana	Survey	16SJ41, 16SJ42, 16SJ43, 16SJ44, 16SJ46, 16SJ47, 16SJ48
22-1219	Cultural Resources Survey of St. John the Baptist, St. Charles, and Jefferson Parishes Construction Items/ Army Corps of Engineers, New Orleans District (USACE-New Orleans)	Survey	16SJB28, 16SJB29, 16SJB30, 16SJB31, 16SJB32, 16SJB35, 16SJB36, 16SJB37, 16SJB39, 16SJB40, 16SC55, 16SC56, 16SC57, 16SC58, 16SC59, 16SC60, 16SC61, 16SC62, 16SC63, 16SC64, 16JE141
22-1589	Whitney Plantation: Archaeology on the German Coast	Survey	16SJB9, 16SJB11, 16SJB41, 16SJB42, 16SJB43, 16SJB44, 16SJB45, 16SJB47, 16SJB48, 16SJB49, 16SJB55, 16SJB56
22-3840	Phase I Cultural Resources Survey of a 19.184 ac (7.764 Hectare) Tract on Whitney Plantation, St. John The Baptist Parish, Louisiana	Survey	16SJB 11, 16SJB14, 16SJB15, 16SJB16, 16SJB18, 16SJB22, 16SJB29, 16SJB41, 16SJB42, 16SJB43, 16SJB50, 16SJB52, 16SJB53, 16SJB56, 16SJB63
22-3895	Individual Environmental Report Contractor-Furnished Borrow Material #8 Jefferson, Terrebonne, and St. John The Baptist Parishes, Louisiana/ U.S. Army Corps of Engineers, Mississippi Valley Division, New Orleans District (USACE-CEMVN)	Desktop Review	NA
22-4173	Phase I Cultural Resources Survey Of The Grammercy Bridge West Approach, Route La 3213, St. John The Baptist Parish, Louisiana/Louisiana Department of Transportation and Development (DOTD)	Survey	16SJB62, 16SJB63
22-4288	A Phase I Cultural-Resource Survey Within the Former Angelina Plantation, St. John the Baptist Parish, Louisiana	Survey	16SJB68
22-4690	Phase II Archaeological Testing and Evaluation of Locus a Within The Angelina Plantation (16SJB68) in Mt. Airy, St. John The Baptist Parish, Louisiana	Survey	16SJB68
22-6092	A Phase I Cultural Resources Survey for the Proposed Rain CII Carbon LLC Project Near Gramercy in St. James Parish, Louisiana	Survey	16SJ112, 16SJ113, 16SJ114

Table 3.3. Sites Discussed in Mississippi River Cultural Resources Survey (22-0918).

16AN3	16PL37	16PL100	16SC25
16AN18	16PL47	16PL101	16SC47
16AN20	16PL48	16PL102	16SJ5
16AN21	16PL49	16PL103	16SJ6
16AN22	16PL50	16PL104	16SJ11
16AN30	16PL51	16PL105	16SJ13
16AN36	16PL53	16PL106	16SJ14
16EBR17	16PL54	16PL107	16SJ17
16EBR24	16PL55	16PL108	16SJ22
16EBR41	16PL56	16PL109	16SJ24
16EBR55	16PL61	16PL110	16SJ26
16EBR58	16PL64	16PL111	16SJ28
16EBR59	16PL65	16PL112	16SJ30
16IV11	16PL66	16PL113	16SJ31
16IV27	16PL67	16PL114	16SJ32
16IV39	16PL68	16PL115	16SJ33
16IV126	16PL69	16PL116	16SJ34
16IV129	16PL70	16PL117	16SJ36
16IV130	16PL71	16PL118	16SJ37
16IV131	16PL72	16PL119	16SJB13
16IV135	16PL73	16PL120	16SJB18
16IV136	16PL77	16PL121	16SJB19
16IV138	16PL78	16PL122	16SJB20
16IV140	16PL79	16SB101	16SJB22
16IV141	16PL80	16SB104	16SJB23
16JE136	16PL82	16SB105	16SJB24
16JE137	16PL83	16SB106	16SJB25
16JE139	16PL84	16SB122	16SJB27
16JE140	16PL85	16SB123	16WBR8
16JE141	16PL86	16SC18	16WBR10
16JE142	16PL87	16SC19	16WF25
16OR90	16PL94	16SC20	16WF26
16PL12	16PL98	16SC21	16WF37
16PL35	16PL99	16SC24	16WF38

Coastal Environments, Inc. (CEI) conducted a cultural resources survey (22-1589) in 1991 of 1,800 acres near the Whitney Plantation in St. John the Baptist Parish, Louisiana. The survey resulted in the documentation of nineteen archaeological sites and the evaluation of eight standing structures. The survey area was divided into low, medium, and high probability areas.

Low probability areas consisted of the backslope of the natural levee. Areas identified as medium probability included land between the north side of River Road and the modern levee, in addition to a segment along a former bayou course. High probability areas consisted of higher portions of the levee where there would have been a concentration of prehistoric and historic settlements. The CEI survey of the high probability areas meets current state archaeological standards, specifically 10 meter transects and shovel tests at 30-meter intervals. A total of eleven sites were determined to be potentially eligible for inclusion on the National Register of Historic Places (Hunter et al. 1991).

R. Christopher Goodwin & Associates, Inc. conducted a cultural resources survey (22-1077) in 1986 of the Angelina Revetment Item, St. James Parish, Louisiana. The investigation was conducted prior to revetment construction along the Mississippi River and included a 200 – 300 foot corridor adjacent to the edge of the bank. A total of eight archaeological sites were identified during the survey. None of the sites were determined to be significant and therefore, no further work was recommended (Goodwin et al. 1986).

In 2010, Surveys Unlimited Research Associates, Inc. (SURA) conducted a Phase I Cultural Resource Survey (22-3840) for a proposed earth-mining operation by Robert Brothers Farm. The survey area was located on the Whitney Plantation in St. John the Baptist Parish and included 19.184 acres. SURA performed a pedestrian survey and excavated 28 shovel tests at 30 meter intervals. The survey did not recover any cultural material and no further work was recommended (Shuman 2012).

The United States Army Corp of Engineers Mississippi Valley Division, New Orleans District (CEMVD), compiled a report (22-3895) in 2011 to assess the effects of potential borrow sites in multiple locations including the Robert Brothers' Farm. Based on background research of previous cultural resource investigations, no cultural resources were likely to be encountered during the proposed actions of borrow excavations on the Robert Brothers' Farm (USACE 2011).

In 2012, CEI conducted a cultural resources survey (22-4173) on behalf of the State of Louisiana, Department of Transportation and Development (DOTD) for the construction of the Gramercy Bridge West Approach project in St. John the Baptist Parish. The area investigated included 47.3 acres of land adjacent to Route 3213, south of Wallace. CEI excavated 164 shovel tests at 30 meter intervals in the APE and recorded no new cultural resources or standing structures. No further work was recommended (Wells et al. 2013).

TerraXplorations, Inc. conducted a Phase I Cultural-Resource Survey (22-4288) in 2013 for Burk-Kleinpeter, Inc. and Bulk Terminals Group, Inc. within the Former Angelina Plantation in St. John the Baptist Parish. The survey was located between U.S. Highway 61 and the Mississippi River East Bank, in Mt. Airy and included approximately 431 acres. The project area was recorded as archeological site (16SJB68) with one loci recommended for possible eligibility for the National Register of Historic Places (Glass and Jackson 2013).

In 2014 TerraXplorations, Inc. conducted a Phase II testing and evaluation (22-4690) of a portion of the Angelina Plantation for Pin Oak Holding, LLC. Development of the area was to include a full service marine and land terminal for the purpose of receiving, offloading, and storing liquid commodities. The Phase II testing resulted in the discovery of intact deposits and cultural features associated with the plantation. The southern portion of the area was recommended for disturbance avoidance or mitigation if not possible (Glass and Jackson 2014).

TerraXplorations, Inc. conducted a Phase I cultural resources survey (22-6092) in 2018 for the proposed Rain CII Carbon LLC Project near Gramercy in St. James Parish, Louisiana. The survey included 10.38 acres and resulted in the documentation of three sites within the boundaries of the Historic Golden Grove Plantation. The sites were determined to be ineligible for inclusion in the National Register of Historic Places and no further work was recommended (Jackson et al. 2018).

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4.0 METHODOLOGY

ARCHAEOLOGICAL SITE SURVEY METHODS

Prior to conducting field work on this project, an archival records search was performed using the *Louisiana Cultural Resources Map* maintained by the Louisiana Division of Archaeology (LDOA). All previously conducted archaeological investigations, archaeological sites, National Register of Historic Places (NRHP)-listed properties, Louisiana Historic Resources Inventory (LHRI), and the Office of Cultural Development Standing Structures and Districts Map within a 1-mile search radius were reviewed. This information was used to identify any resources that may be affected by the proposed project. Multiple maps were also reviewed including the Lucher, LA (2015) 7.5-minute topographic quadrangle to determine the topography of the area; the *Ponchatoula and New Orleans 30 x 60 Minute Geologic Quadrangle 2002* to determine the geology of the area; and aerial photographs dating from 1998 to present, in addition to historic maps from 1892, 1946, 1954, 1962, and 1998 to interpret land use. Light Detection and Ranging (LiDAR) was also reviewed to determine if anomalies are present that required targeted investigation.

Per the *Louisiana Office of Cultural Development Division of Archaeology and Historic Preservation Fieldwork Guidelines for Cultural Resource Investigations* dated September 2018, survey strategies must consider factors such as proximity to streams, topographic elevations, slopes, and roads, among other considerations, when determining high and low probabilities for cultural resources. Criteria that the LDOA considers for defining high probability areas include, but are not limited to:

- Within 100 or 200 m of a small to moderate streams and bayous, depending upon the size of the watercourse, and including the entire natural levee. The major rivers (Mississippi, Red, Ouachita, Calcasieu, etc.) are not included within these criteria;
- Along the major rivers, the entire natural levee as defined by topographic lines is high probability;
- Along the Mississippi River, areas of crevasse splay deposits that extend well beyond the natural levee are considered high probability;
- The 200 m of a topographically high surface adjacent to and overlooking a topographically lower area (e.g., Macon Ridge, Pleistocene terraces along Red, Sabine, and Calcasieu Rivers, etc.);
- The presence of previously recorded sites in an area is often sufficient to indicate survey at a high probability level; and
- Within 100 m of historic roads and railroads.

For the purpose of this survey, both the high-probability and low-probability models were used given the proximity to the Mississippi River and the Union Pacific railroad. High probability areas included transects and shovel test pits (STPs) spaced at 30 meter intervals and areas with low probabilities included transects and STPs spaced at 50 meter intervals. The project area was divided into four survey areas based on geographic placement and probabilities; the Shoreline, Development Area, Railroad Loop, and Railroad Tie-in. The Shoreline is situated north of the levee and is a high probability area due to proximity to the Mississippi River. The Development

Survey Area is located in the northern portion of the project and is a high probability area due to its location north of the topographic line defining the natural levee. The Railroad Loop Survey Area is south of the topographic line and therefore a low probability area. The Railroad Tie-in Survey Area is located along an historic rail line and thus considered high probability.

All STPs excavated measured 30 x 30 cm in size to their terminal depths. All STPs were excavated to the subsoil, the water table, or to a depth of 50 cmbgs, whichever came first. All STPs were excavated in arbitrary 10-cm levels. All excavated soils were screened utilizing hand box screens with ¼-inch mesh. Any artifacts recovered from the excavated STPs were recorded, bagged, and reported utilizing the arbitrary 10-cm levels. The size, depth, and contents of all STPs excavated were recorded. Profiles of STPs excavated were recorded utilizing the *Munsell Soil Color Chart* to describe the strata and soil colors. Soil horizons and strata were described using standard scientific terms. All cultural features found in excavated STPs were recorded in plan and profile, as appropriate, along with other pertinent information regarding the feature, including dimensions, depth, orientations, and possible associations. Justifications for shovel tests that could not be excavated to a minimum depth of 50 cm below ground surface, usually due to some inundation, were recorded. All information recorded during the excavation of STPs was documented on standardized shovel test forms prepared for the project.

Photographic data of the general survey area was also collected. Photographs were taken utilizing a digital camera with a minimum of 8 megapixels of resolution. Images submitted were submitted in JPEG or TIFF format at 300 dots per inch or greater resolution. Images of poor quality were not submitted if there were other images of superior quality available. Sufficient photographs were taken at each archaeological site to record the significant information describing the site. A survey photo log was maintained for the duration of the study. The survey photo log was sequentially numbered and included the cardinal directions of the image, the subject, and the date the image was taken.

LABORATORY METHODS

Laboratory analysis of the recovered artifacts from project area was initiated on-site by archaeological field technicians. In the field, the archaeologists recorded provenience information, including the northing/easting coordinates of excavations, depth of deposit, soil color and texture (silt, loam, clay, etc.), and surrounding environment (vegetation and topography). Upon recovery, artifacts were assigned field specimen log (FSL) numbers. The recovered artifacts were returned to the GSRC facilities in Baton Rouge where they were analyzed by laboratory technicians. Laboratory analysis began by double-checking the artifacts with the FSL log and provenience documentation. The artifacts were then cleaned with water and brushing. The artifacts were then sorted (by type) and a detailed description (material, form, color/décor, diagnostic attributes, etc.) was noted. Finally, the materials were labeled and repackaged, maintaining continuum with provenience documentation from the field, in accordance with guidelines set forth by the LDOA of the Louisiana State Historic Preservation Office (SHPO).

The typology utilized in this analysis, using current methods and terminology, was implemented to provide a basic descriptive and temporal data set. The materials were classified into a number of type categories that are presented in the artifact inventory tables (Appendix A), and include asbestos, brick, ceramic, coal, conglomerate, faunal, flora, glass, metal, mortar, plaster, slag, stone, synthetic, and unidentified. Artifacts were identified through comparative sources included, but were not limited to, the Maryland Archaeological Conservation Lab (2012), the Florida Museum of Natural History Historical Archaeology Type Collection (2020), Jay Edwards and Tom Wells “Historic Louisiana Nails” (1993), Bill Lindsey and the Society for Historical Archaeology’s Historic Glass Bottle Identification (2020), and Ivor Noël Hume (1969).

Faunal remains were identified to the lowest possible taxonomic category. The analysis of shell involved the initial classification of the artifacts by type (e.g., clothing). Shells were categorized by species and condition.

All artifacts not retained by landowners and all records, photographs, and field notes will be curated with the State of Louisiana, Department of Culture, Recreation, and Tourism, Office of Cultural Development, Division of Archaeology. All materials and artifacts were labeled, packaged, and documented according to the *Louisiana Division of Archaeology Curation Policies and Procedures* (2020). This material will be housed in the facility located in the Galvez Building, Room B-023, 602 North Fifth Street, in Baton Rouge, Louisiana, 70802.

STANDING STRUCTURE SURVEY METHODS

Aboveground/architectural surveys were conducted for each of the previously known resources in the APE to assess if there was the potential for effects on aboveground/architectural historic resources. GSRC personnel consulted the Louisiana Historic Standing Structures Survey (LHSS) map online to determine what previously recorded historic resources were located within the APE. Additionally, GSRC utilized the Google Earth “street view” feature to assess the current conditions of the known resources, The NRHP online map to review nearby listed resources, and used NETR-Online historic aerials as needed. The west bank of the Mississippi was the only bank reviewed, as the levees are substantial and high enough that the other side of the River cannot be seen from the resources or the project area and they will not be affected. GSRC completed the following:

- Identified non-archaeological, historic-age resources that could be potentially eligible for listing in the NRHP within the APE.
- Noted major physical attributes and design characteristics of each identified historic resource.
- Noted changes and alterations that may affect any of the aspects of integrity of each identified resource.
- Evaluated historic age buildings for inclusion in the NRHP.

To be eligible, a historic-age resource must meet at least one of the four National Register Criteria, and it must retain sufficient integrity to convey its significance. The resource should not only reflect or be associated with any of the principal themes, patterns, and/or events discussed in the historic context, it must also be significant within the framework of the context. NRHP evaluations considered each historic resource on an individual basis and as a contributing element within a district that meets the criteria for inclusion in the NRHP. When assessing each historic-age resource on an individual basis, the NRHP evaluation considered the significance of any known historic associations with important events, trends, or individuals of the past (Criterion A or B), design and/or physical attributes (Criterion C), or its research potential (Criterion D). A historic-age resource that is significant for its historical associations does not need to retain its integrity to such a high degree as one that is significant for its design or physical attributes; nonetheless, the resource must still be easily recognizable to the period in which it achieved significance and be able to convey its significance as an NRHP-eligible resource.

Concentrations of historic resources may lack distinction on an individual basis, but collectively may constitute a noteworthy grouping that is separate and distinct from its surroundings. In such a situation, the collection of resources may be eligible for inclusion in the NRHP as a historic district. To be eligible, the majority of the resources must have been built within the time frame in which the district achieved significance (period of significance). The historic character and overall integrity of the potential district are determined by the degree to which physical changes to the historic-age resources, as well as the construction of modern infill (outside the period of significance) and/or the demolition of historic-age resources, affect the potential district's ability to evoke a sense of the past. To be eligible for inclusion in the NRHP, the district must be significant within the framework of the context developed for the reconnaissance-level survey, and it must retain sufficient integrity to convey that significance.

Built resources in the area include large and small farms and houses, barns and sheds, oil and chemical plants, a new modern freeway (Highway 3213 - Veteran's Memorial Highway), and vast amounts of agricultural land and infrastructure. There are currently two resources that are listed in the NRHP within the project APE; Evergreen Plantation (NRHP Reference No. 91001386), a National Historic Landmark, and Whitney Plantation (NRHP Reference No. 92001566), a National Register Listed Historic District. Additionally, the APE includes a portion of the River Road Cultural District, an area used to spark community revitalization based on cultural activity through tax incentives, technical assistance, and resources.

5.0 RESULTS OF THE SURVEY

The Phase I intensive archaeological survey included 91 acres of which approximately 70 acres were considered in high probability areas and about 21 acres in low probability areas. The project area was divided into four survey areas based on geographic placement and probabilities; the Shoreline, Development Area, Railroad Loop, and Railroad Tie-in (Figure 5.1). A total of 457 STPs were excavated across the entire survey area, among these 38 STPs were positive for cultural material. Two archaeological sites (16SJB73 and 16SJB74), two modern trash dumps, and 286 isolated finds were recorded.

The STPs were pre-plotted at 30-m intervals in high probability areas and 50-m intervals in low probability areas within the APE. The project area was comprised of standing sugar cane crops, rows of young plants, and seasonally inundated forested wetlands (Figures 5.2-5.4). Some of the area was inundated at the time of survey and therefore pedestrian survey and shovel testing was limited to areas of dry ground. Additionally, the standing sugar cane crop limited investigation of certain areas (Figure 5.5) resulting in judgmental shovel tests being placed in areas that were accessible. Overall ground visibility varied from excellent to poor across the APE and ranged from 0 percent in high growth and wooded areas (Figure 5.6) to 90 percent in fields with young plants (Figure 5.7). Soils varied between the distinct regions across the project area.

SHORELINE SURVEY

The Shoreline Survey Area measured 6 acres and was situated north of the levee and is in a high probability area due to its proximity to the Mississippi River (Figure 5.8 and 5.9). A pedestrian survey was conducted with shovel tests placed at 30 meter intervals along transects running parallel to the levee (Figure 5.10). Water levels of the river prevented the investigation of the northern transect of shovel tests. Surface visibility was moderately low due to the presence of ground cover vegetation. These soils were mottled and consisted of dark grayish brown (10YR 4/3) silt loam from 0 to 20 cmbgs to grayish brown (10YR 6/2) and brown (10YR 5/4) clay from 20 to 50 cmbgs (Figure 5.11).

A total of 25 shovel tests were excavated along 2 transects. Four STPs were positive for historic and modern artifacts (n=282) in disturbed contexts including various types of glass, metal, ceramics, faunal remains, and synthetic items. No prehistoric artifacts were recovered. A trash scatter of modern and historic artifacts was observed on the surface (Figure 5.12). The distribution of surface and subsurface historic and modern artifacts in disturbed contexts were interpreted as the result of secondary deposition from the erosional and depositional processes of the river and not considered in situ. No delineation of the positive STPs was conducted.



Project Location
St. John the Baptist Parish,
Louisiana

Legend
 — Proposed Project
Survey Areas
 ■ Low Probability
 ■ High Probability
 ■ Previously Surveyed

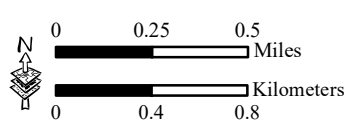


Figure 5.1 Map of the four survey areas based on geographic placement and probabilities; Shoreline, Development Area, Railroad Loop, and Railroad Tie-in adapted from 2019 aerial.

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Figure 5.2. Overview of project area showing two track between standing cane crops.



Figure 5.3. Overview of the Development Area Survey showing young cane field with Wallace water treatment in the distance, facing north.



Figure 5.4. Overview of project area showing inundation, facing south.



Figure 5.5. Overview of standing cane crops.



Figure 5.6. Overview of the wooded portion of the Railroad Tie-in survey area, facing southeast.



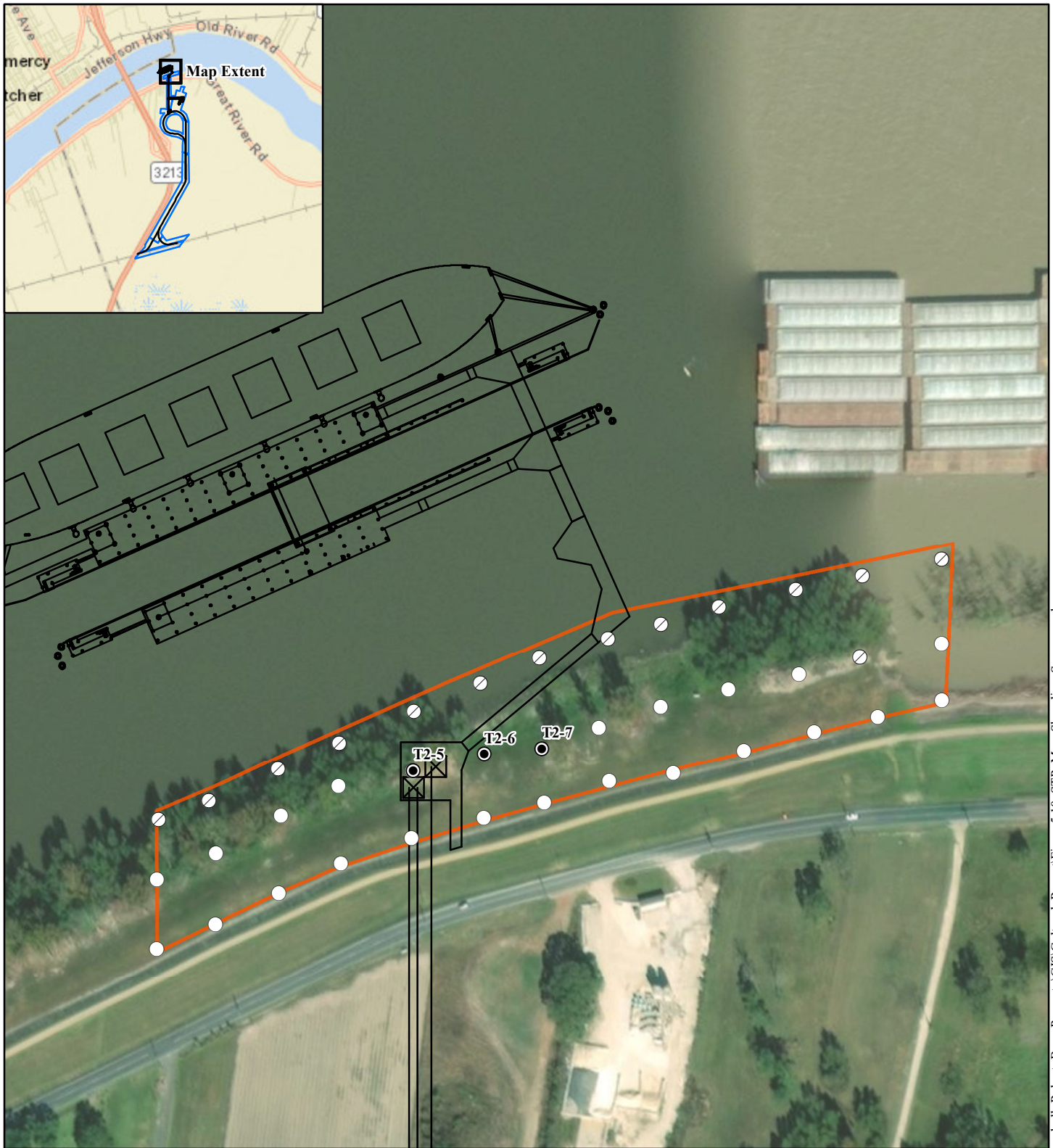
Figure 5.7. Overview of young plants in Railroad Tie-in Survey area, facing southeast.



Figure 5.8. Shoreline survey area, view to the east.



Figure 5.9. Shoreline survey area, view to the west, (Veterans Memorial Bridge in background).



Legend

- Transect STP - Not Excavated
 - Transect STP - Negative
 - Transect STP - Positive
 - Proposed Project
- Survey Areas**
- High Probability

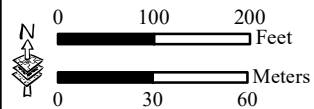


Figure 5.10. Map of the shovel tests excavated during the Shoreline Survey area adapted from 2019 aerial.

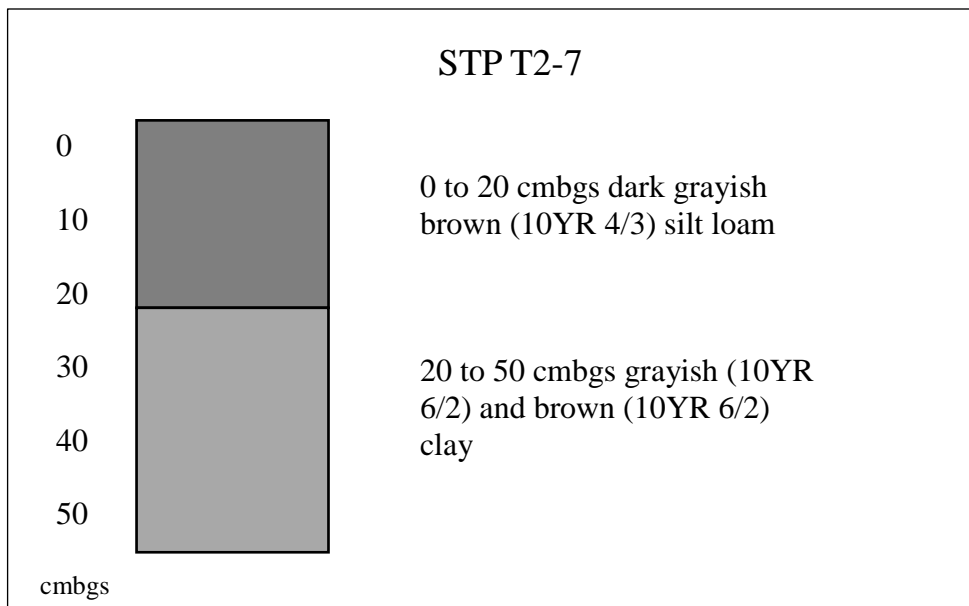


Figure 5.11. Typical shovel test profile from Shoreline Survey Area.



Figure 5.12. Overview of historic and modern artifact surface scatter in Shoreline Survey.

Levee Trash Scatter

Located between shovel tests T2-5 through T2-7 is a mix of modern and historic artifacts scatter. The Levee Trash Scatter is a surficial artifact scatter, measuring 10 m by 60 m, which has been deposited overtime from flooding of the Mississippi River. This artifact scatter largely consists of modern bottle glass. Diagnostic bottles include a bottle base from the Glass Containers Corporation (ca. 1967-1980s) (Lockhart et al. 2015; Whitten 2020b); a Brockway Glass Company bottle base (1940s-1988) (Lindsey 2020c; Whitten 2020a); Alexander H. Kerr & Company bottle base fragment (1944-1992) (Whitten 2020a); a Gulfport Glass Company bottle (1960) (Toulouse 1971); an Owens Illinois Bottle base that dates to either 1958, 1968, or 1978 (Lockhart and Hoenig 2015); a Duraglas Owens Illinois bottle (1958) (Lockhart and Hoenig) (Figure 5.13a); a possible Underwood Glass Company bottle (ca. 1956-1978) (Whitten 2020a); and a Universal Glass Products liquor bottle base (ca. 1960- ca. 1979) (Lockhart et al. 2019) (Figure 5.13b). Other artifacts include asbestos tile (ca. 1900-1980s) (Meissner and Cox 2006; Taylor and Vila n.d.), a spoon, and ceramic & mortar tile, and a semi-porcelain ceramic with a flow blue transferware (ca. 1820-1915) (Isa 2017) (Figure 5.14). Overall, the deposits appear to date from the 1960s-present. No artifacts were collected.



Figure 5.13. Artifacts from levee trash scatter a) Duraglas Owens Illinois bottle base, b) Universal Glass Products liquor bottle base.

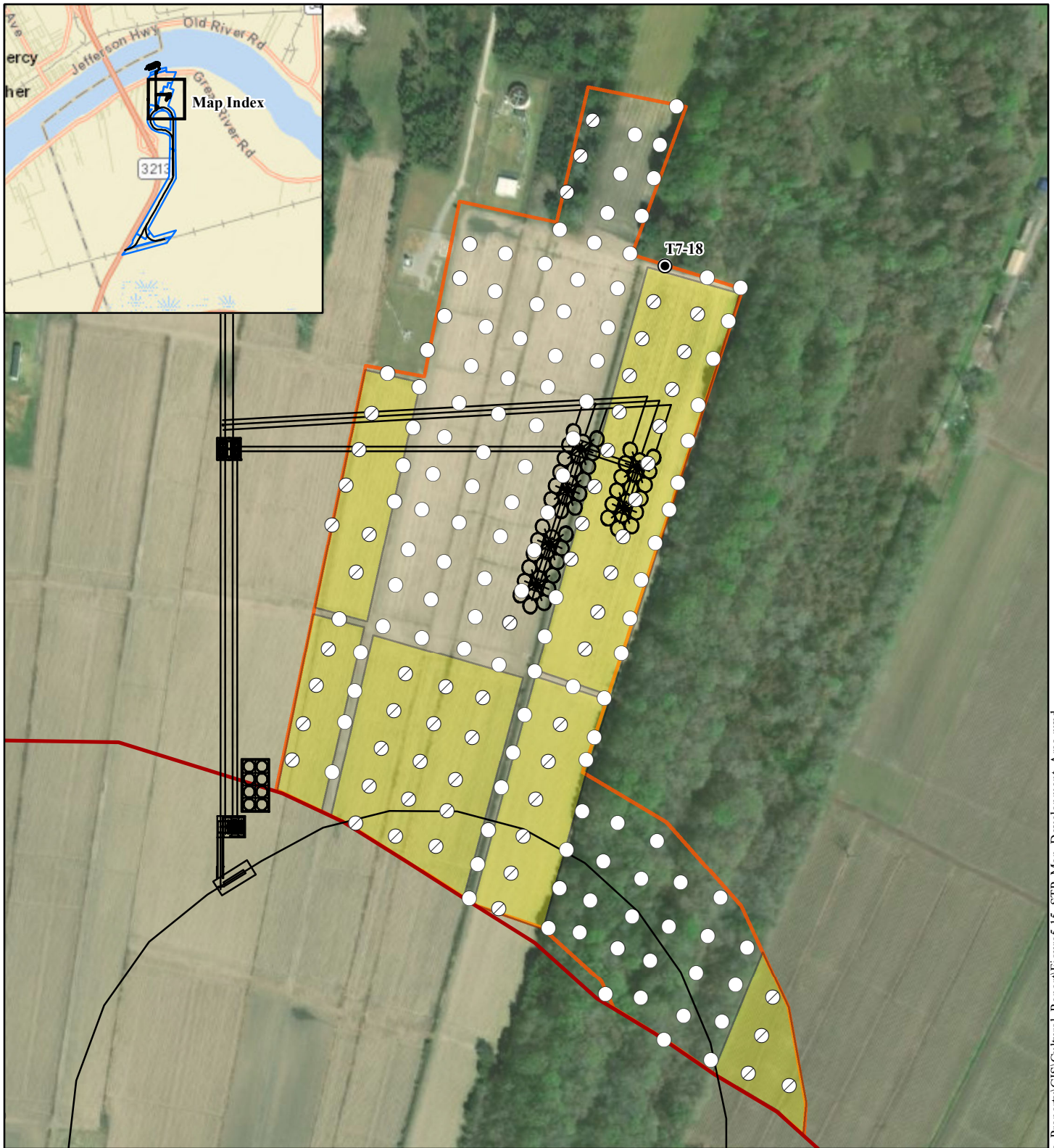


Figure 5.14. Semi-porcelain ceramic with a flow blue transferware from levee trash scatter.

DEVELOPMENT AREA SURVEY

The Development Survey Area measures 37 acres and is located in the northern portion of the overall project area. The area is high probability due to its location north of the topographic line defining the natural levee. The pedestrian survey was conducted with shovel tests placed at 30 meter intervals along transects running parallel to the tree line. Standing sugar cane crops prohibited transect coverage of up to 17 acres (Figure 5.15) resulting in the adjustment of pre plotted shovel tests to more accessible areas in order to provide additional coverage. A total of 118 shovel tests covering 20 acres were excavated resulting in 1 positive test for historic artifacts. No prehistoric artifacts were recovered. One isolated find (FS44) was recorded.

The soils in the Development Survey of the project area were dark grayish brown (2.5YR 4/2) silt loam from 0 to 50 cmbgs (Figure 5.16). The vegetation in this portion of the survey area consisted of standing sugar cane crops, rows of young plants, and a forested section consisting of mixed hardwoods. Surface visibility in the wooded area was poor due to the understory and leaf litter.



Legend

- Transect STP - Not Excavated
- Transect STP - Negative
- Transect STP - Positive
- Proposed Project
- Topographic Line
- Standing Crops
- Survey Areas
- High Probability

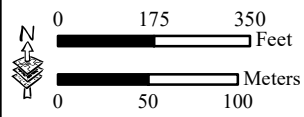


Figure 5.15. Map of shovel tests in the Development Survey Area.

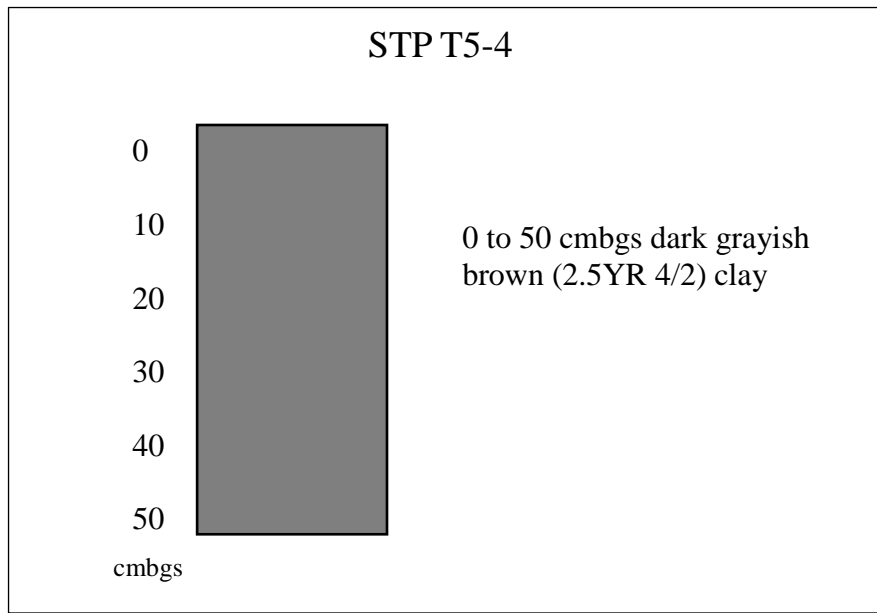


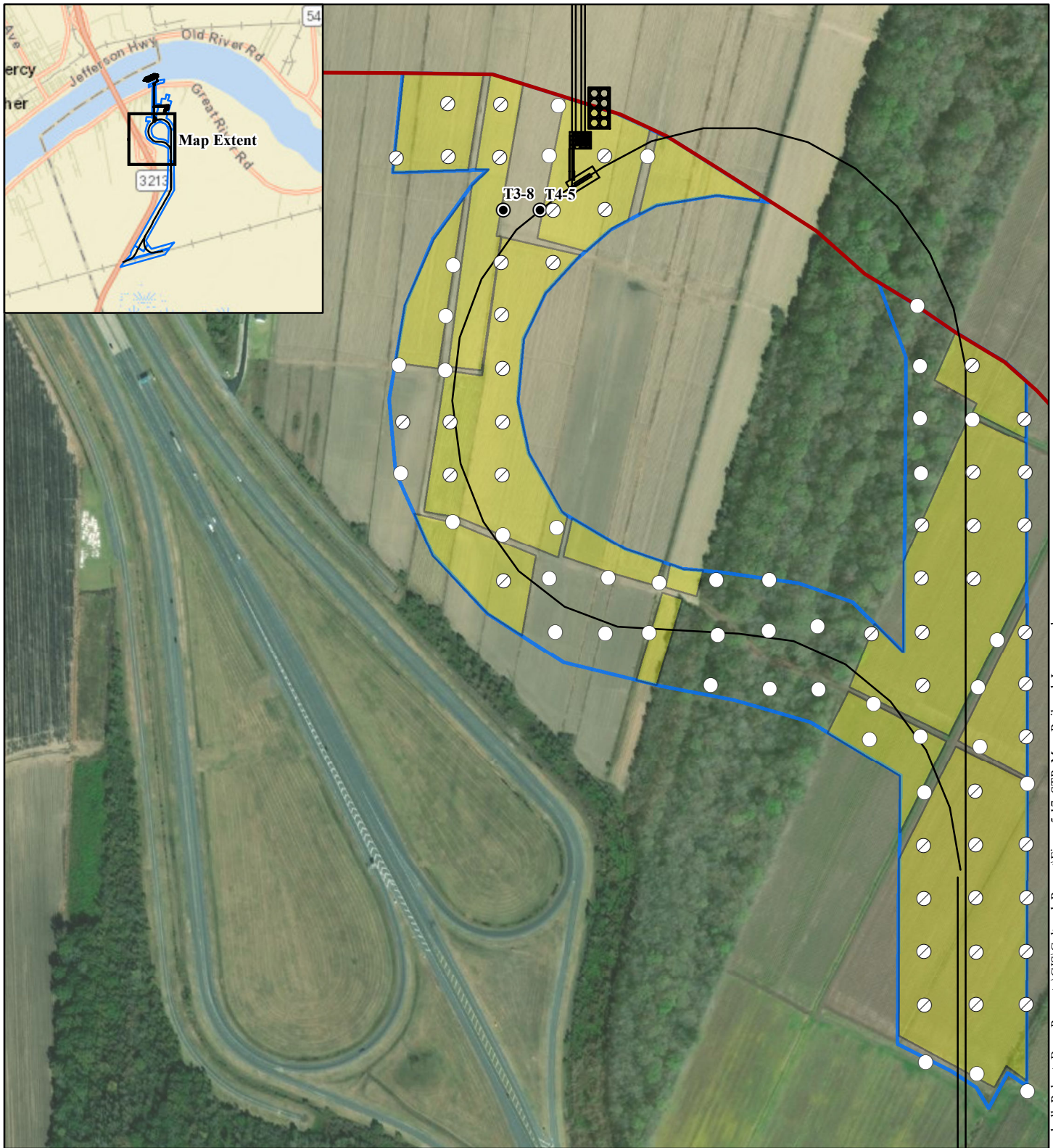
Figure 5.16. Typical shovel test profile from Development Survey Area.

RAILROAD LOOP SURVEY

The Railroad Loop Survey Area measures 54 acres and is south of the topographic line and therefore a low probability area. The pedestrian survey was conducted with shovel tests placed at 50 meter intervals along transects running parallel to the proposed railroad tracks (Figure 5.17). Standing sugar cane crops limited access to only 21 acres within this area, resulting in the adjustment of pre plotted shovel tests to more accessible areas in order to provide optimal coverage.

A total of 93 shovel tests were excavated, including 41 STPs along 13 transects. One site (16SJB73) was recorded requiring an additional 52 shovel tests. The survey resulted in 21 positive tests for historic artifacts from the site delineation and two STPs along transects within the site. No prehistoric artifacts were recovered. One modern bottle dump and two trash scatters were recorded with no artifact collection.

The soils in the Railroad Loop Survey area were dark gray (10YR 4/2) silty clay 0 to 50 cmbgs (Figure 5.18). The vegetation in this portion of the survey area consisted of standing sugar cane crops, fields of young plants, and a forested section consisting of mixed hardwoods in the back swamp. Surface visibility in the wooded area was poor due to the understory and leaf litter.



Legend

- ⊙ Transect STP - Not Excavated
- Transect STP - Negative
- Transect STP - Positive
- Proposed Project
- Topographic Line

- Standing Crops
- Survey Areas
- Low Probability

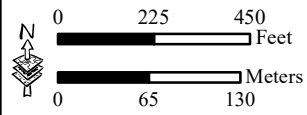


Figure 5.17. Map of shovel tests in the Railroad Loop Survey Area.

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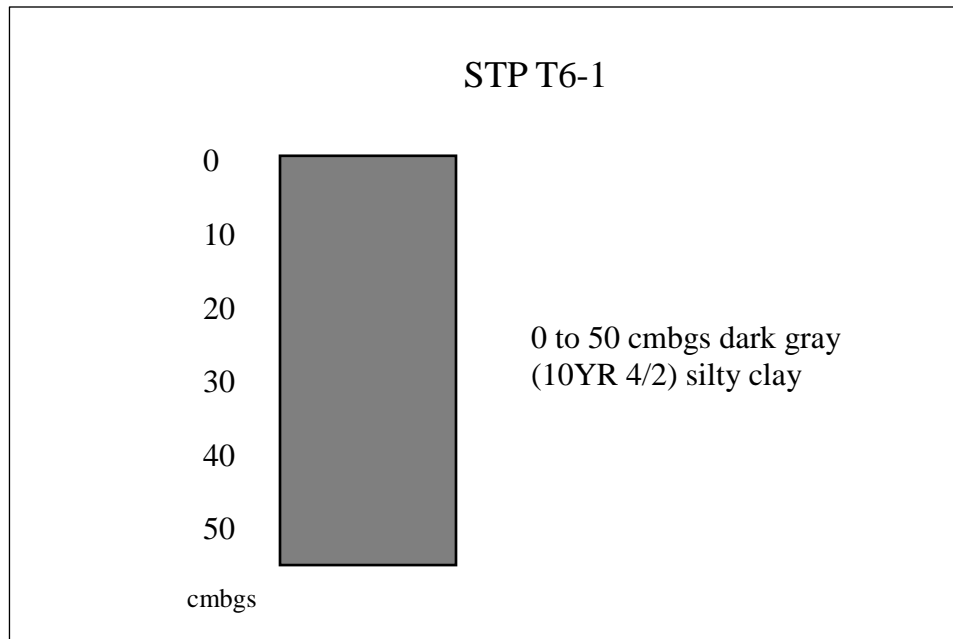


Figure 5.18. Typical shovel test profile from Railroad Loop Survey Area.

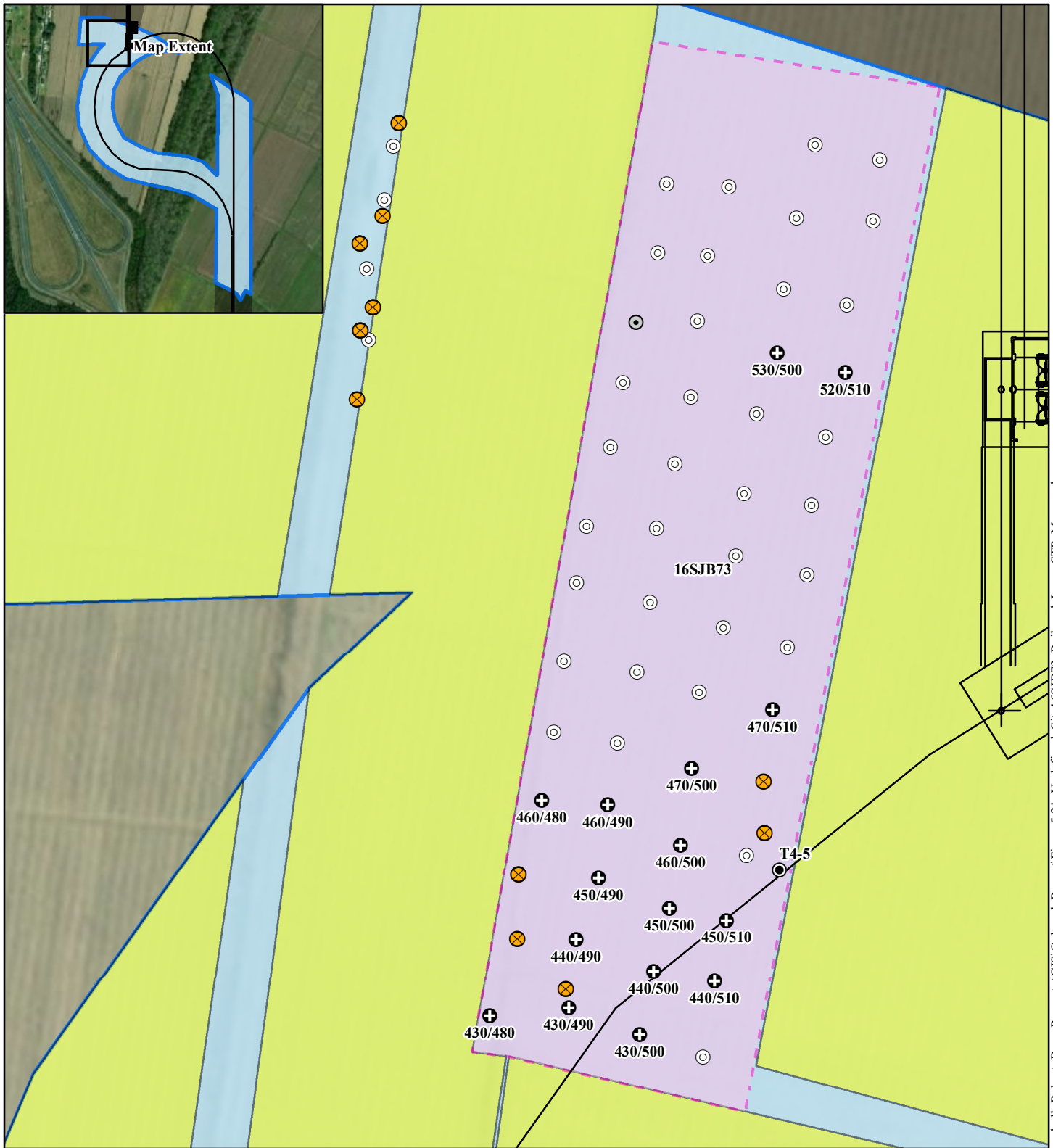
Site 16SJB73

Site 16SJB73 represents an historic site dating to the late nineteenth to early twentieth century in an area measuring 143 m by 37 m. The site is located in the northwestern portion of the project area (Figure 5.19). The 1892 Mount Airy USGS 1:62500 Topographic Quadrangle indicates a structure in close proximity to the site (Figure 5.20).

A 10-meter grid of shovel tests was placed over an artifact scatter to determine the presence of subsurface artifacts and attempt to delineate the site (Figure 5.21), after brick rubble was observed on the surface along Transect 3 in the Railroad Loop survey area (Figure 5.22). A total of 59 shovel tests were placed at 10 meter intervals centered in the middle of the surface scatter. There were 16 shovel tests which tested positive for cultural deposits recovered between 0 – 40 cmbgs. The highest concentration of positive shovel tests was in the southern portion of the surface scatter. The boundaries of the site are undefined due to the edges of standing sugar cane crops and limits of the project boundary. Additional surface artifacts were also observed outside the project boundary.

Figure 5.19 deleted per R.S. 41:1609.

Figure 5.20 deleted per R.S. 41:1609.



Legend

- ⊗ Surface Find
- ⊙ Delineation STP - Not Excavated
- ⊖ Delineation STP - Negative
- ⊕ Delineation STP - Positive
- Transect STP - Positive
- Proposed Project
- ⬜ Undefined Site 16SJB73 Boundary
- ⬜ Standing Crops
- Survey Areas**
- ⬜ Low Probability
- ⬜ Previously Surveyed

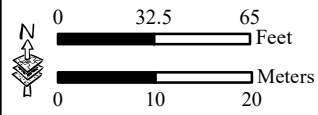


Figure 5.21. Map of shovel tests excavated at Site 16SJB73 in Railroad Loop Survey Area.

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Figure 5.22. View of portion of brick scatter, view to the north from southwest corner of Site 16SJB73.

The artifact recovered consist of a representative sample of brick fragments (n=237), brick/metal fragment (n=1), glass (n=20), ceramics, (n=5), slag (n=2), mortar (n=3), metal (n=1), coal (n=1), conglomerate (n=1), flora (n=32), faunal (n=1), and unidentified (n=1). Diagnostic artifacts include plain whiteware sherds (n=3) ca. 1830-present Florida Museum of Natural History (FLMNH 2020), light blue transfer print whiteware (n=1) ca. 1830s-1867 (FLMNH 2020; Samford 1997), hand painted whiteware (n=1) ca. 1830s-present (FLMNH 2020), amber glass (n=1) ca. 1860s-present (Lindsey 2020a), 7-Up green glass bottle base with stippling (n=2) ca. 1940s-present (Lindsey 2020a), aquamarine glass ca. 1800-1920s (Lindsey 2020a), milk glass (n=1) ca. 1746-present (Noël Hume 1969), olive glass lip with blob finish (n=1) ca. 1830s-1900 (Lindsey 2020a; Lindsey 2020c; Waslekov et al. 2000:154), a colorless “Ball” jar base (n=1) ca. 1960-present (Lockhart et al. 2013), lime mortar (n=1) ca. pre 1930s (Figuereo 2019:90; Sidler 2020), and cement mortar ca. 1871-present (Sidler 2020).

Site 16SJB73 is a discontinuous scatter of non-diagnostic architectural debris and an associated, light scattering of domestic artifacts. The artifacts were found mixed in the upper 40 cmbgs in the plow zone and there is no indication that they are associated with a distinct intact cultural lens or midden deposit. The architectural debris, consisting of brick (n=237) and window glass (n=1), represent 78% of the recovered artifacts. However, no associated features were located that would suggest a structure was present. The nearest known documentation of a structure is depicted on the 1892 Mount Airy USGS 1:62500 Topographic Quadrangle. The site appears to be heavily disturbed from agricultural activity and does not contain any significant association or information potential. Site 16SJB73 does not contain any further information potential or contain any significant association that would make it eligible under Criteria A, B, C, or D of the NRHP. As a result, this investigation recommends 16SJB73 ineligible for the NRHP and no further work is recommended at the site.

Modern Bottle Dump 1

Modern Bottle Dump 1 (Figure 5.23) is a surficial scatter measuring 5 m by 5 m. Diagnostic bottles included a Big Shot beverage bottle (ca. 1938-present) (Paterson 2017) from an unknown bottle company; a Big Shot bottle from the Brockway Glass Company (1980) (Figure 5.24a); a jar from the Glass Containers Corporation (ca. 1967-1980s) (Lockhart et al. 2015; Whitten 2020b); an Alexander H. Kerr & Company bottle (ca. 1982) (Whitten 2020a) (Figure 5.24b); and a Gulfport Glass Company bottle (ca. 1955-1970s) (Toulouse 1971).



Figure 5.23. View of Modern Bottle Dump, facing east.



Figure 5.24. Artifacts from modern bottle dump a) Big Shot bottle from the Brockway Glass Company, and b) Alexander H. Kerr & Company bottle.

Several bottles that were not able to be identified had stippling on the base which indicates a date after the 1940s (Lindsey 2020d). Other artifacts included an iron bar. Overall, the scatter appears to have a post-1980s to present period of deposition and is likely the results of off-road dumping, as the location is just off to the side of a cane field access road. No artifacts were collected.

Modern Bottle Dump 1 does not contain any significant association or information potential to be recommended eligible under Criteria A, B, C, or D of the NRHP. This investigation recommends Modern Bottle Dump 1 ineligible for the NRHP and no further work is recommended at the site.

Modern Trash Scatter 1

Modern Trash Scatter 1 (Figure 5.25) is a surficial artifact scatter measuring 10 m by 10 m. Included in the scatter was an oven, corrugated tin roofing, and piping. Overall, the scatter appears to have a post-1980s period of deposition and is likely the result of a single dumping incident, as the location is just off to the side of a cane field access road. No artifacts were collected.

Modern Trash Scatter 1 does not contain any significant association or information potential to be recommended eligible under Criteria A, B, C, or D of the NRHP. This investigation recommends Modern Trash Scatter 1 ineligible for the NRHP and no further work is recommended at the site.



Figure 5.25. View of Modern Trash Dump 1, facing south.

Modern Trash Scatter 2

Modern Trash Scatter 2 (Figure 5.26) is a surficial artifact scatter measuring 10 m by 10 m. Included in the scatter were an oven, concrete blocks, chain link fencing, a box television, a digital radio boombox, a large metal box, and tubing. Overall, the scatter appears to have a post-1980s period of deposition and is likely the result of off-road dumping, as the location is just off to the side of a cane field access road. No artifacts were collected.

Modern Trash Scatter 2 does not contain any significant association or information potential to be recommended eligible under Criteria A, B, C, or D of the NRHP. This investigation recommends Modern Trash Scatter 2 ineligible for the NRHP and no further work is recommended at the site.



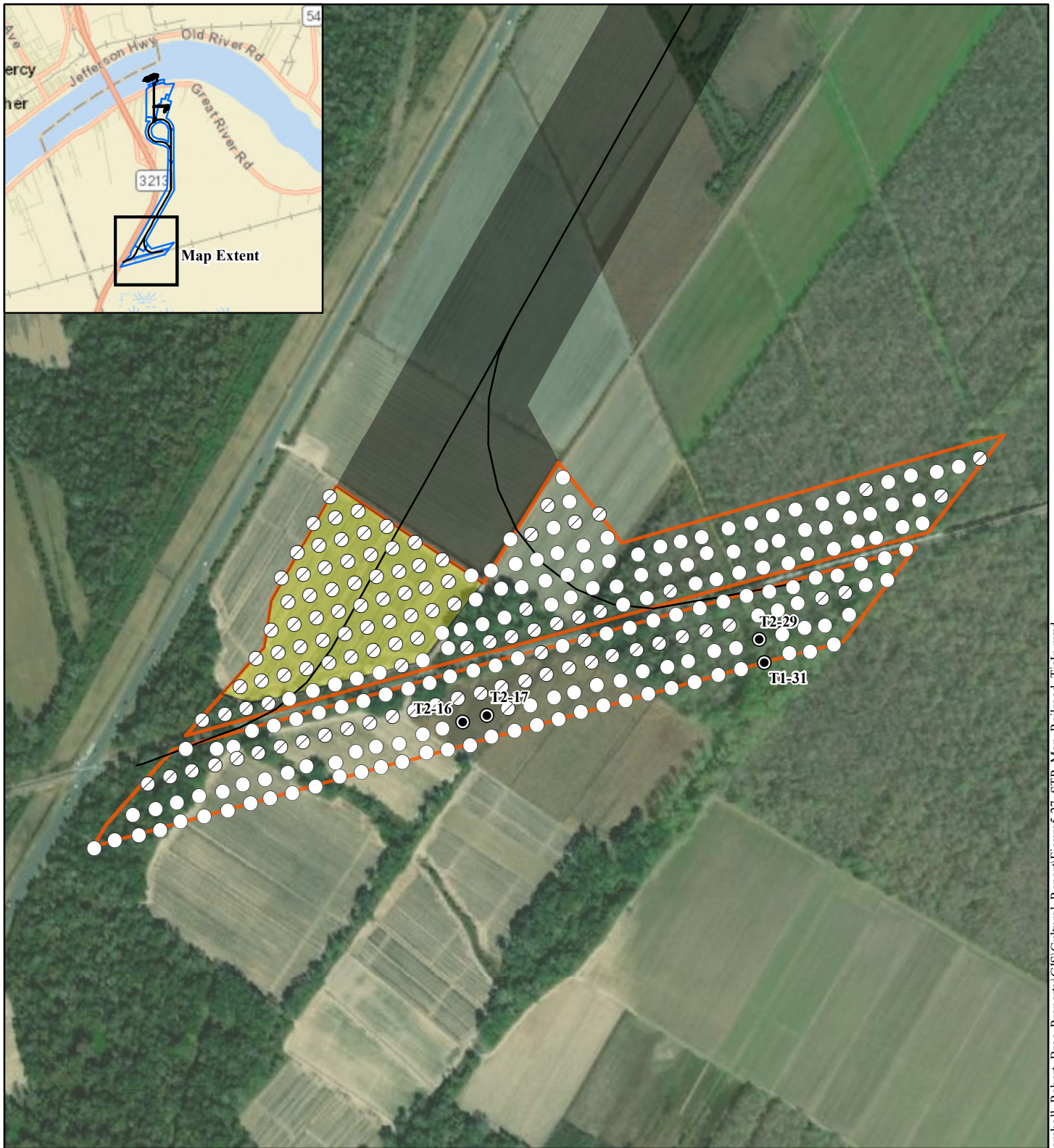
Figure 5.26. View of Modern Trash Dump 2, facing northwest.

RAILROAD TIE-IN SURVEY

The Railroad Tie-in Survey Area measures 56 acres and is located along the Union Pacific historic rail line (Figure 5.27) which is considered high probability. The pedestrian survey was conducted with shovel tests placed at 30 meter intervals along transects running parallel to the railroad tracks. Standing sugar cane crops reduced transect coverage of approximately 12 acres in the northwest portion of the Railroad Tie-In area. A total of 44 acres were surveyed in the Railroad Tie-In area.

A total of 220 shovel tests were excavated, including 198 STPs along 11 transects. One site (16SJB74) was recorded resulting in an additional 22 shovel tests required. The survey resulted in 13 positive tests for historic artifacts from both transects and the site delineation. No prehistoric artifacts were recovered. Three isolated finds were collected (FS1, FS2, and FS3). FS1 was recovered from the surface between shovel tests.

The soils in the Railroad Tie-in Survey area were generally very deep and very clayey, ranging from dark grayish brown (10YR 4/2) silt loam 0 – 10 cmbgs to dark gray (10YR 4/1) clay 10 – 50 cmbgs (Figure 5.28). The vegetation in this portion of the survey area consisted of standing sugar cane crops, fields of young plants, and a forested section consisting of mixed hardwoods in the back swamp. Surface visibility in the wooded area was poor due to the understory and leaf litter.



Legend

- | | |
|--|--|
| <ul style="list-style-type: none"> ⊗ Transect STP - Not Excavated ○ Transect STP - Negative ● Transect STP - Positive — Proposed Project ■ Standing Crops | <p>Survey Areas</p> <ul style="list-style-type: none"> ▭ High Probability ▭ Previously Surveyed |
|--|--|

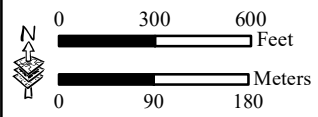


Figure 5.27. Map of shovel tests in the Railroad Tie-in Survey Area.

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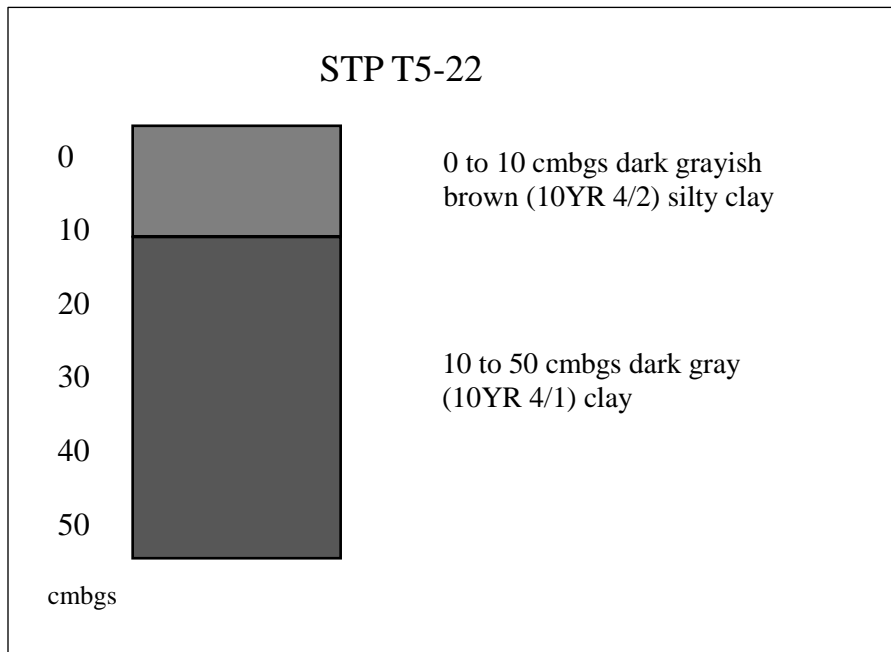


Figure 5.28. Typical shovel test profile from Railroad Tie-in Survey Area.

Site 16SJB74

Site 16SJB74 site is located in the southeastern portion of the Railroad Tie-in Survey area and measures approximately 0.3 acres (Figure 5.29). The site represents an historic industrial site dating to the late nineteenth to early twentieth century. The site was discovered while conducting the pedestrian and shovel test survey along Transect 1. The site consists of four intact brick features, a depression, and a surface scatter of brick rubble.

The site is positioned in a densely wooded area approximately 100 meters south of the railroad line. Two ditches containing standing water intersect on the east side of the site. According to the 1892 USGS map (Figure 5.30), the ditch running southwest from the levee road was once a road between adjacent properties.

The initial site boundary was delineated from a surface scatter of brick rubble. A 10-meter grid of shovel tests was placed over the artifact scatter to determine the presence of subsurface artifacts and attempt to further delineate the site (Figure 5.31). A total of 28 SPTs were excavated resulting in 9 STPs positive for cultural deposits. The positive shovel tests were all located northwest of the brick features. Shovel testing revealed two stratigraphic layers consisting of dark gray (10YR 4/2) clay above a layer of gray (10YR 5/1) clay (Figure 5.32).

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Figure 5.30 deleted per R.S. 41:1609.

Figure 5.31 deleted per R.S. 41:1609.

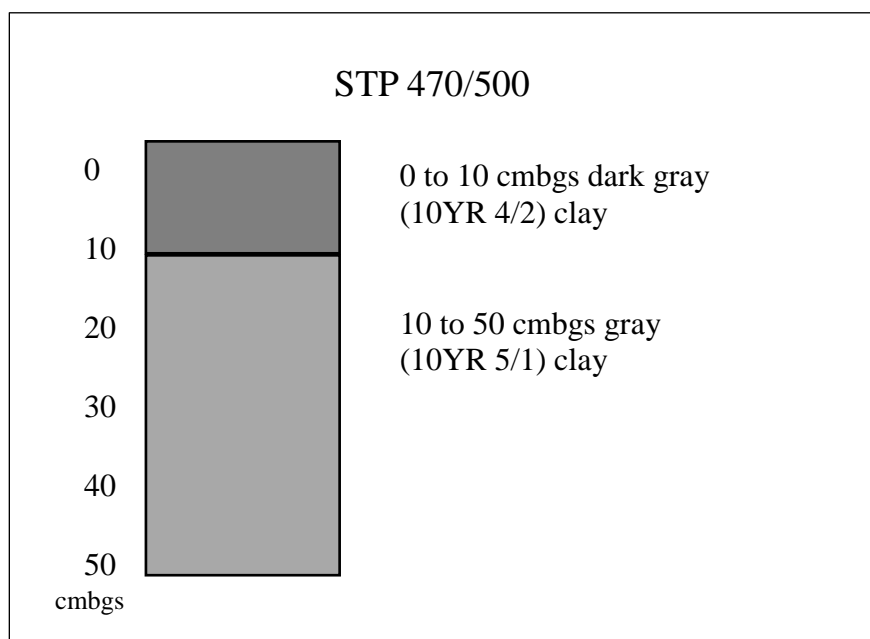


Figure 5.32. Typical shovel test profile from site 16SJB74.

Features within the site include three brick structures (Features A, B, and C) (Figure 5.33), a brick floor (Feature D) (Figure 5.34), and a large depression (Feature E) (Figure 5.35). Features A, B and C run parallel to each other and the brick floor. Feature A (Figure 5.36) is the largest of the three measuring 1.2 m x 8 m x 1.25 m. At the base of the feature on the east side there are two cavities from missing brick (Feature 5.37). There is a 1 m space between Feature A and Feature B (Figure 5.38). Feature B (Figure 5.39a) is only 50 cm wide, but is the same height, where the brick are still intact as Feature A. The northern edge of the feature has fallen but was presumably the same length as Feature A at one time. The space between Feature B and Feature C is 135 cm (Figure 5.40). Feature C (Figure 5.41) is also 50 cm wide, but only 90 cm high at its most intact point. The northern portion of the feature has also fallen but may have extended out to the same length as features A and B. All three of the features have three thick metal rods protruding out of the top of the brick. Some of the rods still possess large square nuts (Figure 5.39b). Feature D is a brick floor located to the west of Feature A. The feature is longer than Features A, B, and C, and measures 2.35 m x 12.50 m. Feature E is a large depression measuring 5 m x 5 m. The depression is approximately 9 m to the west of Feature A and possesses a segment of stacked bricks on the eastern wall.

The artifacts included in the positive shovel tests consisted of brick fragments and one modern shotgun shell. Surface artifacts collected included a sample of slag and large square nut with a possible portion of a bolt inside the threading (Figure 5.42). A sample of mortar was collected from Feature C and testing determined lime composition which dates prior to the 1930s. Additional artifacts observed but not collected include four large iron fragments including a beam measuring 180 cm x 10 cm x 5 cm (Figures 5.43 – 5.45b). The beam is located on the northeastern edge of Feature D, parallel to the edge of the brick foundation. No domestic artifacts were observed or collected at the site.



Figure 5.33. View of southern edges of features A, B, and C of site 16SJB74, facing east.



Figure 5.34. View of southern portion of feature D, facing northwest.



Figure 5.35. View of Feature E, view to north.



Figure 5.36. View of southern edge of feature A, facing northeast.



Figure 5.37. View of one of three spaces in feature A, facing northwest.



Figure 5.38. View of area between features A and B, facing northeast.



a



b

Figure 5.39. Features from Site 16SJB74 in Railroad Tie-in Survey area a) View of southern edge of feature B, facing north, and b) Iron rod extending out of feature B.



Figure 5.40. View of area between features B and C, facing northeast.



Figure 5.41. View of southern portion of Feature C, facing northeast.



Figure 5.42. Slag (A), large square nut with a possible portion of a bolt inside the threading (B), mortar sample (C) from Site 16SBJ74 in Railroad Tie-in Survey area.



Figure 5.43. Large iron beam from Site 16SBJ74 in Railroad Tie-in Survey Area (not recovered).



a



b

Figure 5.44. Two views of iron mechanical fragment from Site 16SJB in Railroad Tie-in Survey Area (not recovered) a) plan view, and b) side view.



Figure 5.45. Artifacts from Site 16SJB in Railroad Tie-in Survey area (not recovered) a) iron sheet fragment with two holes, and b) iron rod fragment.

The site does not appear on any historic maps of the location. Two ditches containing standing water intersect on the east side of the site, and according to the 1892 USGS map, the ditch running southwest from the levee road was once a road between adjacent properties. Historically the land was used for growing and processing sugar cane, and the robust remains suggest manufacturing elements associated with this process. The features are of questionable integrity and represent the remains of a possible structure common to the area for sugar cane farming and agricultural practices in the nineteenth century. The site requires future research to determine the function and purpose of the intact features. As a result, this investigation recommends 16SJB74 be considered undetermined for the NRHP.

STANDING STRUCTURE SURVEY

Aboveground/architectural reviews were conducted in the APE for each of the 125 known resources to assess if there was the potential for effects on aboveground/architectural historic resources (Appendix B). GSRC personnel accessed the LHSSS to determine what previously recorded historic resources were located within the APE, as well as the NRHP online map (Figure 5.46). No new above ground resources were identified during this investigation.



Figure 5.46. Map of LHRI standing structures within the vicinity of the project.

PREVIOUSLY KNOWN RESOURCES AND RECOMMENDATIONS:

LHSS 48-00221 through 48-00229: Evergreen Plantation was added to the NRHP as a National Historic Landmark in September of 1991 under Criteria A and C, with a period of significance of 1832-1930 showing significance in the areas of agriculture and architecture (NRHP Reference No. 91001386). The NRHP nomination forms states “Essentially Evergreen is composed of the main house and its dependencies in a fairly confined area and a double row of slave cabins well to the rear. The layout of the former is rigidly symmetrical. On each side of the main house is a garconniere [guest house] and pigeonnier. To the rear, on axis with the ‘big house,’ is a Greek Revival privy. On each side of the rear yard are matching small buildings of undocumented use (known now as a guest house and kitchen). To the rear and side is an impressive Spanish moss laden oak allée about 1300 feet in length. The double row of twenty-two cabins begins about half way along the allée. To the rear of the cabins are three barns and a large shed from the late nineteenth/early twentieth century. Historically the principal crop at Evergreen during the period of significance was sugarcane, although rice was also grown. The acreage is still planted in cane, with cane fields to either side of the cabins seemingly extending to the horizon....Evergreen Plantation is significant in the history of American agriculture as one of the largest and most intact plantation complexes in the South. It enjoys particular distinction among this select group because fully four-fifths of the buildings are antebellum and because of the survival of the double row of twenty-two slave cabins. National significance has been chosen because the plantation system represents a significant chapter in the history of American agriculture.”

Evergreen is located approximately one mile to the east of the project area, and the entire complex is surrounded by mature live oak trees that block the view of the agricultural fields from the complex, as well as stands of trees separating the property from the project area. As such, the project will not constitute as an adverse visual element.

LHSS 48-00230 through 48-00235, 48-00237, and 48-01106: Whitney Plantation was added to the NRHP as a Historic District in November of 1992 under Criteria A, C, and D, with a period of significance of 1750-1942, with areas of significance in Agriculture, Archaeology, Architecture, and Art (NRHP Reference No. 92001566). The NRHP nomination forms states “Plantation on the west bank of the Mississippi River on what is believed to be the River's longest remaining agrarian stretch between Baton Rouge and New Orleans. Sugarcane and rice were the principal crops during the historic period, and Whitney's fields are still planted in cane. The district includes three archaeological sites, a large raised Creole plantation house which features elaborate Federal woodwork and superior decorative wall and ceiling murals, and a series of domestic and agricultural dependencies. Among these structures are a rare pigeonnier and plantation store and the last French Creole barn known to survive in Louisiana. Contributing elements range in date from c.1750 to the fifty year cutoff. Fourteen of the district's twenty-seven buildings are noncontributing.

Although some of the plantation's historic dependencies have been destroyed and the non-contributing rate is high, the district easily retains its National Register eligibility. Although numerous, the non-contributing elements have minimal visual impact.”

Whitney Plantation is located approximately 0.30 miles northeast of the project area. The eastern portion of the project area consists of a forested area approximately 600 feet wide and extends the length of the property, about a mile long. This stand of trees provides a visual screen between the Historic District and the project area. As such, the project will not constitute as an adverse visual element.

LHSS 48-00236, 48-00238 through 48-00254, 48-00274 and 48-00275: Various residential buildings around Evergreen and Whitney plantations on Highway 18 and connecting side-streets will have a view of the project area. The buildings were constructed 1888 to 1935, and all exhibit varying degrees of integrity and condition. None of these buildings suggest significance on the level of being listed in the NRHP. As the buildings were all constructed into an agricultural and industrial setting, the proposed project will not constitute as an adverse visual element.

LHSS 48-00255 through 48-00273: Various residential buildings around Evergreen and Whitney plantations on Highway 18 and connecting side-streets will not have a view of the project area due to stands of mature trees. The buildings were constructed 1888 to 1933, and all exhibit varying degrees of integrity and condition. None of these buildings suggest significance on the level of being listed in the NRHP. As the buildings were all constructed into an agricultural setting and they will not be able to see the project area, the proposed project will not constitute as an adverse visual element.

LHSS 48-00276 through 48-00295 and 48-01115: Various residential buildings to the northwest of the project area will not have a view of the project area, and the residential streets they are on are heavily lined with Live Oak Trees. The buildings were constructed 1880 to 1933, and all exhibit varying degrees of integrity and condition. None of these buildings suggest significance on the level of being listed in the NRHP. As the buildings were all constructed into an agricultural and industrial setting and they will not be able to see the project area, the proposed project will not constitute as an adverse visual element.

LHSS 48-00296 through 48-01097: Various residential buildings to the west of the project area and on the other side of Highway 3213 will not have a view of the project area, and the streets they are on are heavily lined with Live Oak Trees. The buildings were constructed 1880 to 1933, and all exhibit varying degrees of integrity and condition. None of these buildings suggest significance on the level of being listed in the NRHP. As the buildings were all constructed on the other side of a modern highway and into an agricultural and industrial setting, they will not be able to see the project area and the proposed project will not constitute as an adverse visual element.

LHSS 48-01109 and 48-01111: These two LHSS numbers represent archaeological areas that are not close to the project area. As such, the project will not constitute as an adverse visual element.

6.0 SUMMARY AND RECOMMENDATIONS

Gulf South Research Corporation (GSRC) conducted an intensive Phase I archaeological survey of the proposed development area for a grain transfer facility on the Robert Brothers' Farm in Wallace, St. John the Baptist Parish, Louisiana. A total 457 shovel test pits were excavated in the 93 acres surveyed. Areas of high probability were surveyed at 30 m intervals, and low probability areas were surveyed at 50 m intervals. As a result, two sites (16SJB73 and 16SJB74), two modern trash dumps, and 286 isolated finds were recorded.

Site 16SJB73 consists of a moderate historic artifact scatter concentrated in an area measuring 143 m by 37 m. Additional artifacts were observed outside the APE. The location of the scatter coincides with a structure that appears on the 1892 topographic map. The artifact recovered consist of a representative sample of brick fragments (n=237), brick/metal fragment (n=1), glass (n=20), ceramics, (n=5), slag (n=2), mortar (n=3), metal (n=1), coal (n=1), conglomerate (n=1), flora (n=32), faunal (n=1), and unidentified (n=1). Diagnostic artifacts include plain whiteware sherds (n=3) ca. 1830-present Florida Museum of Natural History (FLMNH 2020), light blue transfer print whiteware (n=1) ca. 1830s-1867 (FLMNH 2020; Samford 1997), hand painted whiteware (n=1) ca. 1830s-present (FLMNH 2020), amber glass (n=1) ca. 1860s-present (Lindsey 2020a), 7-Up green glass bottle base with stippling (n=2) ca. 1940s-present (Lindsey 2020a), aquamarine glass ca. 1800-1920s (Lindsey 2020a), milk glass (n=1) ca. 1746-present (Noël Hume 1969), olive glass lip with blob finish (n=1) ca. 1830s-1900 (Lindsey 2020a; Lindsey 2020c; Waslekov et al. 2000:154), a colorless "Ball" jar base (n=1) ca. 1960-present (Lockhart et al. 2013), lime mortar (n=1) ca. pre 1930s (Figueroa 2019:90; Sidler 2020), and cement mortar ca. 1871-present (Sidler 2020). Diagnostic artifacts recovered suggest a potential production date range spanning ca. 1800 through present. 16SJB73 could potentially be the remains of a structure based the historic topo map, a trash dump, or a combination of both. The artifacts were recovered from both the surface and the upper 40 cm of the plow zone. The site appears to be heavily disturbed from agricultural activity and does not contain any significant association or information potential. This investigation recommends 16SJB73 ineligible for the NRHP and no further work is recommended at the site.

Site 16SJB74 represents the remnants of an historic structure consisting of three partial brick features, a brick foundation, and a moderately sized depression. Artifacts recovered from the site were almost exclusively brick. No domestic items were observed. The artifacts include a sample of brick (n=3), lime mortar (n=1), slag (n=1), and a modern shotgun shell (n=1). Artifacts observed but not collected include large iron fragments. The structure does not appear on any historic maps of the location. Two ditches containing standing water intersect on the east side of the site, and according to the 1892 USGS map, the ditch running southwest from the levee road was once a road between adjacent properties. Historically the land was used for growing and processing sugar cane, and the robust remains suggest manufacturing elements associated with this process. Future research is needed to determine the function and purpose of the intact features, and therefore, this investigation recommends 16SJB74 be considered undetermined for the NRHP.

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APPENDIX A
ARTIFACT INVENTORY

Catalog #	FS #	Site #	Temp Site/Location	Feature	Transect #	STP	Level cmbgs	Recovery Date	Artifact Classification	Type	Material	Form	Décor	Color	Count	Weight (grams)	Additional	Possible Age	Maker	Reference
	13		RR Loop Site		Outside APE		Surface	9/25/2020	Ceramic	Whiteware		Rim			1	4.1		ca. 1830s-present		FLMNH 2020
	13		RR Loop Site		Outside APE		Surface	9/25/2020	Glass			Curved		Cobalt	1	0.3		ca. Late 1700s-present		Tibbets 2015
	13		RR Loop Site		Outside APE		Surface	9/25/2020	Glass			Curved		Colorless	1	1.3				
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass			Curved		Amber	2	2.5		ca. 1860s-present		Lindsey 2020a
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass			Curved	Pressed design	Amber	1	2.5	Likely bottle glass	ca. 1860s-present		Lindsey 2020a
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass			Curved		Colorless	5	4.2				
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass	Vessel		Curved	unknown design	Colorless	1	2.1	machine-made; possible base fragment	ca. 1905-present (likely modern)		Lindsey 2020b
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass			Curved		Aquamarine	1	0.3		ca. 1800-1920s		Lindsey 2020a
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Glass			Curved		7-Up Green	1	1.9		ca. 1900-present		Lindsey 2020a
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Ceramic	Whiteware		Rim	light blue transer print, unknown design		1	2.4		1830-1867		FLMNH 2020; Samford 1997
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Ceramic	Whiteware					1	1.5		ca. 1830s-present		FLMNH 2020
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Brick						1	0.3				
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Slag						1	9.9				
	14		RR Loop Site		Between 2/3		Surface	9/25/2020	Coal						1	0.4				
	15		RR Loop Site		3	8	Surface	9/25/2020	Brick						1	90.6	multiple inclusions			
	16		RR Loop Site			N460 E510	Surface	9/27/2020	Glass	Vessel		Lip		Olive-Green	1	11.2	Blob Finish	1830s-1900		Lindsey 2020a; Lindsey 2020c; Waslekov et al. 2000:154
	17		RR Loop Site			N440 E490	0-10	9/27/2020	Brick						6	58.5				
	18		RR Loop Site			N440 E490	10-20	9/27/2020	Brick						6	4.5				
	19		RR Loop Site			N430 E490	0-10	9/27/2020	Brick						7	34.2				
	20		RR Loop Site			N430 E490	10-20	9/27/2020	Unidentified	Rock/Slag					1	13.1	possibly slag or rock			
	20		RR Loop Site			N430 E490	10-20	9/27/2020	Faunal	Bone		UID			1	0.9	mammal			
	20		RR Loop Site			N430 E490	10-20	9/27/2020	Brick						3	13.7				
	21		RR Loop Site			N430 E490	10-20	9/27/2020	Flora	Wood			Burned		27	8.4				
	22		RR Loop Site		4	5	0-10	9/27/2020	Brick						1	1.4				
	23		RR Loop Site		4	5	10-20	9/27/2020	Brick						2	0.8				
	24		RR Loop Site		4	5	20-30	9/27/2020	Brick						1	4.6				
	25		RR Loop Site			N460 E480	0-10	9/27/2020	Brick						5	72.4				
	26		RR Loop Site			N460 E480	20-30	9/27/2020	Brick						3	4.2				
	27		RR Loop Site			N460 E500	0-10	9/27/2020	Brick						3	19.4				
	27		RR Loop Site			N460 E500	0-10	9/27/2020	Metal	Unidentified Object	Iron				1	23.9	Curved bar?			
	28		RR Loop Site			N460 E500	10-20	9/27/2020	Brick						4	12.5				
	29		RR Loop Site			N460 E500	20-30	9/27/2020	Brick						5	11.5				
	30		RR Loop Site		3	8	0-10	9/27/2020	Glass			Curved		Amber	1	1.2		ca. 1860s-present		Lindsey 2020a
	31		RR Loop Site		3	8	0-40	9/27/2020	Brick						35	609.2	Sample			
	32		RR Loop Site			N450 E490	0-10	9/27/2020	Flora	Wood			Burned		5	2.4				
	33		RR Loop Site			N450 E490	10-20	9/27/2020	Brick						8	59.6				
	34		RR Loop Site			N530 E500	0-10	9/27/2020	Brick						2	5.9				
	35		RR Loop Site			N440 E480	0-10	9/27/2020	Brick						6	40.6				
	36		RR Loop Site			N540 E450	Surface	9/27/2020	Glass	Safety		Flat		Colorless	1	4.6		ca. 1915-present		Miller et al. 2000
	36		RR Loop Site			N540 E450	Surface	9/27/2020	Glass	Window		Flat		Colorless	1	1.4				
	36		RR Loop Site			N540 E450	Surface	9/27/2020	Glass			Curved		7-Up Green	1	0.2		ca. 1900-present		Lindsey 2020a
	36		RR Loop Site			N540 E450	Surface	9/27/2020	Slag						1	1.3				
	37		RR Loop Site			N440 E500	10-20	9/27/2020	Ceramic	Whiteware					1	4.6				
	55		RR Loop Site			N440 E500	0-40	9/27/2020	Brick						13	5.5				
	38		RR Loop Site			N430 E480	0-40	9/27/2020	Brick						18	15.3	sample			
	38		RR Loop Site			N430 E480	0-40	9/27/2020	Brick & Metal		Brick & Iron				1	1.5	Iron embedded in brick			
	39		RR Loop Site			N510 E450	Surface	9/27/2020	Glass					Milk Glass	1	0.3	possibly part of a jar seal	ca. 1746-present		Noël Hume 1969
	40		RR Loop Site			N450 E500	0-10	9/27/2020	Brick						22	21.7				
	40		RR Loop Site			N450 E500	0-10	9/27/2020	Conglomerate						1	11.5				
	54		RR Loop Site			N430 E500	0-10	9/27/2020	Brick						20	44.5				
	54		RR Loop Site			N430 E500	0-10	9/27/2020	Mortar		Lime				2	1.1		Pre 1930s (but potentially prior to 1820 and the manufacture of the first natural cement)		Figuerco 2019-90; Sidler 2020
	54		RR Loop Site			N430 E500	0-10	9/27/2020	Mortar		Cement				1	4.1		ca. 1871-present		Sidler 2020
	41		RR Loop Site			N460 E490	0-10	9/27/2020	Brick						1	2.3				
	42		RR Loop Site			N530 E450	0-20	9/27/2020	Glass	Vessel		Base	embossed "Ball 7.3"	Colorless	1	3.9		ca. 1960-present	Ball	Lockhart et al. 2013
	44		RR Loop Site			N430 E510	0-10	9/28/2020	Brick						16	15.1				
	45		RR Loop Site			N460 E510	0-10	9/28/2020	Brick						2	9.4				
	45		RR Loop Site			N460 E510	0-10	9/28/2020	Brick				Glazed		1	6.1				
	46		RR Loop Site			N450 E510	10-20	9/28/2020	Brick						9	27.6				
	47		RR Loop Site			N450 E510	20-30	9/28/2020	Brick						26	17.7				
	48		RR Loop Site			N450 E510	30-40	9/28/2020	Brick						7	5.8				
	49		RR Loop Site			N470 E510	0-10	9/28/2020	Ceramic	Whiteware			Hand painted over glaze		1	1.6		ca. 1830s-present		FLMNH 2020
	49		RR Loop Site			N470 E510	0-10	9/28/2020	Brick						1	0.6				
	50		RR Loop Site			N520 E510	0-10	9/28/2020	Brick						2	7.5				

APPENDIX B
LOUISIANA HISTORIC STANDING STRUCTURES SURVEY

LASHPO #	Description	Listed in NRHP?	Extant?	Visible from site?
05-00241	Dr. John Lemoine House (Long Pine) – ca 1856	No	Yes	Yes
48-00221	Evergreen Plantation Barn – ca. 1930	NHL contributing	Yes	No
48-00222	Evergreen Plantation quarters – ca 1835 (garconniere)	NHL- contributing	Yes	No
48-00223	Evergreen Plantation Main House - ca 1832	NHL (#91001386)	Yes	No
48-00224	Evergreen Plantation quarters – ca 1835	NHL contributing	Yes	No
48-00225	Evergreen Plantation kitchen – ca 1835	NHL contributing	Yes	No
48-00226	Evergreen Plantation quarters – ca 1835 (garconniere)	NHL contributing	Yes	No
48-00227	Residential house at Evergreen Plantation - ca 1830 (Overseers House)	NHL contributing	Yes	No
48-00228	Shotgun house at Evergreen Plantation – ca 1910	NHL contributing	Yes	No
48-00229	Residential house at Evergreen Plantation - ca 1900	NHL contributing	Yes	No
48-00230	Whitney Plantation Clerk’s House – ca 1930	NRHD contributing	Yes	No
48-00231	Whitney Plantation Managers House – ca 1915	NRHD contributing	Yes	No
48-00232	Whitney Plantation store – ca 1925	NRHD contributing	Yes	No
48-00233	Whitney Plantation Main House – ca 1820	NRHD (#92001566)	Yes	No
48-00234	Whitney Plantation commercial building – ca 1890	NRHD contributing	Yes	Yes
48-00235	Whitney Plantation Overseer’s House – ca 1900	NRHD contributing	Yes	No
48-00236	Residential building near Whitney Plantation – ca 1910	No	Yes	Yes
48-00237	Mialaret House at Whitney Plantation – ca 1890	NRHD contributing	Yes	No
48-00238	Residential building near Whitney Plantation – ca 1890 (ruin)	N/A	No	N/A
48-00239	Residential building near Whitney Plantation – ca 1890 (ruin)	N/A	No	N/A
48-00240	Morning Star Baptist Church Hall – ca 1888	No	Yes	Yes
48-00241	Residential building ca 1888	No	Yes	Yes
48-00242	Residential building ca 1900	No	Yes	Yes
48-00243	Residential building ca 1915	No	Yes	Yes
48-00244	Residential building ca 1890	No	Yes	Yes
48-00245	Residential building ca 1927	No	Yes	Yes
48-00246	Residential building ca 1928	No	Yes	Yes
48-00247	Residential building ca 1920	No	Yes	Yes
48-00248	Residential building ca 1910 (ruin)	No	No	N/A
48-00249	Residential building ca 1933	No	Yes	Yes

LASHPO #	Description	Listed in NRHP?	Extant?	Visible from site?
48-00250	Residential building ca 1935	No	Yes	Yes
48-00251	Residential building ca 1890	No	Yes	Yes
48-00252	Residential building ca 1880	No	Yes	Yes
48-00253	Residential building ca 1910	No	Yes	Yes
48-00254	Residential building ca 1875 (being torn down)	No	No	N/A
48-00255	Residential building ca 1880	No	Yes	No
48-00256	Residential building ca 1909	No	Yes	No
48-00257	Residential building ca 1910	No	Yes	No
48-00258	Residential building ca 1920	No	Yes	No
48-00259	Residential building ca 1910	No	Yes	No
48-00260	Residential building ca 1910	No	Yes	No
48-00261	Residential building ca 1910	No	Yes	No
48-00262	Residential building ca 1910	No	Yes	No
48-00263	Residential building ca 1925	No	Yes	No
48-00264	Residential building ca 1933	No	Yes	No
48-00265	Residential building ca 1908	No	Yes	No
48-00266	Residential building ca 1910	No	Yes	No
48-00267	Residential building ca 1930	No	Yes	No
48-00268	Residential building ca 1925	No	Yes	No
48-00269	Residential building ca 1928	No	Yes	No
48-00270	Residential building ca 1888	No	Yes	No
48-00271	Residential building ca 1920	No	Yes	No
48-00272	Residential building ca 1920	No	Yes	No
48-00273	Residential building ca 1900	No	Yes	No
48-00274	Residential building ca 1890	No	Yes	Yes
48-00275	Residential building ca 1915	No	Yes	Yes
48-00276	Residential building ca. 1925	No	Yes	No
48-00277	Residential building ca. 1932	No	Yes	No
48-00278	Residential building ca. 1929	No	Yes	No
48-00279	Residential building ca. 1929	No	Yes	No
48-00280	Residential building (ruin) ca. 1900	No	Yes	No
48-00281	Residential building ca. 1880	No	Yes	No
48-00282	Social Hall (Charity Hall) ca 1933	No	Yes	No
48-00283	Residential building ca. 1930	No	Yes	No
48-00284	Residential building ca. 1925	No	Yes	No
48-00285	Residential building ca. 1910	No	Yes	No
48-00286	Residential building (ruin) ca. 1900	No	No	No
48-00287	Residential building ca. 1890	No	Yes	No
48-00288	Residential building ca. 1910	No	Yes	No
48-00289	Residential building ca. 1920	No	Yes	No

LASHPO #	Description	Listed in NRHP?	Extant?	Visible from site?
48-00290	Residential building ca. 1900	No	Yes	No
48-00291	Residential building ca 1910	No	Yes	No
48-00292	Residential building ca 1928	No	Yes	No
48-00293	Residential building ca 1920	No	Yes	No
48-00294	Residential building ca 1920	No	Yes	No
48-00295	Residential building ca 1925	No	Yes	No
48-00296	Residential building ca 1930	No	Yes	No
48-00297	Residential building ca 1933	No	Yes	No
48-00298	Residential building ca 1915	No	Yes	No
48-00299	Residential building ca 1933	No	No	N/A
48-00300	Residential building ca 1890	No	Yes	No
48-00301	Residential building ca 1900	No	Yes	No
48-00302	Residential building ca 1910	No	Yes	No
48-00303	Residential building ca 1900	No	Yes	No
48-00304	Residential building ca 1933	No	Yes	No
48-00305	Residential building ca 1925	No	Yes	No
48-00306	Residential building ca 1920	No	Yes	No
48-00307	Residential building ca 1933	No	Yes	No
48-00308	Residential building ca 1933	No	Yes	No
48-00309	Residential building ca 1870	No	Yes	No
48-00310	Residential building ca 1920	No	Yes	No
48-00311	Residential building ca 1920	No	Yes	No
48-00312	Residential building ca 1920	No	Yes	No
48-00313	Residential building ca 1910	No	Yes	No
48-00314	Residential building ca 1905	No	Yes	No
48-00315	Residential/Commercial building ca 1910	No	Yes	No
48-00316	Residential building ca 1933	No	Yes	No
48-00317	Residential building ca 1925 (moved)	No	Yes	No
48-00318	Residential building ca 1925	No	Yes	No
48-00319	Residential building ca 1880	No	Yes	No
48-00320	Residential building ca 1925	No	Yes	No
48-00321	Residential building ca 1920	No	Yes	No
48-00322	Residential building ca 1912	No	Yes	No
48-00323	Residential building ca 1915	No	Yes	No
48-00324	Residential building ca 1933	No	Yes	No
48-00325	Residential building ca 1933	No	Yes	No
48-00326	Residential building ca 1908	No	Yes	No
48-00327	Residential building ca 1927	No	Yes	No
48-00328	Residential building ca 1928	No	Yes	No
48-00329	J.J. Reine Plantation Main House ca. 1898	No	Yes	No

LASHPO #	Description	Listed in NRHP?	Extant?	Visible from site?
48-00330	Residential building ca 1895	No	Yes	No
48-00331	Residential building ca 1930	No	Yes	No
48-00332	Elvina Plantation Main House ca. 1898	No	Yes	No
48-00333	Elvina Plantation quarters – ca 1933 (moved)	No	Yes	No
48-00334	Residential building ca 1910	No	Yes	No
48-00335	Residential building ca 1920	No	Yes	No
48-00336	Residential building ca 1930	No	Yes	No
48-00337	Residential building ca 1900	No	Yes	No
48-00338	Residential building ca 1880	No	Yes	No
48-00339	Residential building ca 1925	No	Yes	No
48-01097	Residential building ca 1880	No	Yes	No
48-01106	Whitney Plantation Main House ca. 1800	Yes	Yes	No
48-01109	Willow Grove Store	Arch site 16SJB23	No	N/A
48-01111	Zeringue House	Arch site 16SJB18	No	N/A
48-01115	Residential building ca 1880	No	Yes	No

**APPENDIX C
SITE FORMS**

State of Louisiana Site Record Form

Update

Site Name: Turn around site

State Site No.: 16SJB73

Other Site Designations:

Project/Field Site No.: Robert Brothers' Farm site in Railroad Loop survey

Parish: St. John the Baptist

UTM Coordinates:

Zone: 15

Easting: 725331

Northing: 3325342

Datum: WGS 84

Site Condition (select all that apply)

Present Use:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Agricultural | <input type="checkbox"/> Pasture |
| <input type="checkbox"/> Sylvicultural | <input type="checkbox"/> Residential |
| <input type="checkbox"/> Wooded | <input type="checkbox"/> Urban |
| <input type="checkbox"/> Fallow | <input type="checkbox"/> Heavy Construction |
| <input type="checkbox"/> Open Field | <input type="checkbox"/> Light Construction |
| <input type="checkbox"/> Yard/Lawn | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Paved | <input type="checkbox"/> Other (please explain below) |

Other Conditions:

- | | |
|---|---|
| <input type="checkbox"/> Inundated | <input type="checkbox"/> Shoreline Erosion |
| <input type="checkbox"/> Heavy Erosion | <input type="checkbox"/> Clear-Cut |
| <input type="checkbox"/> Light Erosion | <input type="checkbox"/> Modern Trash Dump |
| <input type="checkbox"/> Roads or Trails | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Transmission Lines | <input type="checkbox"/> Spoil Bank |
| <input type="checkbox"/> Submerged | <input type="checkbox"/> Other (please explain below) |

Surface Visibility: 81-100%

Site Condition and Setting Narrative: The site is located less than a kilometer south of the Mississippi River, in a field of young sugar cane plants surrounded by standing crops. The nearest recorded site is 16SJB57, the Mialaret Mill Site to the east.

Site Investigation (select all that apply)

Nature of Investigation: CRM Phase I

Fully Delineated? No
Artifacts Collected? Yes

Investigation Method(s): **Surface Collection:** Controlled Uncontrolled
Shovel Testing: Systematic Judgmental

Test Units **Trenches**
 Excavation Units **Augering**
 Remote Sensing **Coring**

Site Dimensions: 142 m x 36 m

Site Investigation Narrative: Survey methods of investigation included pedestrian survey and systematic shovel testing at 50 meter intervals. The site was identified by artifacts visible on the surface. A total of 59 shovel tests were placed at 10 meter intervals in a grid pattern centered in the middle of the surface scatter. A total of 16 shovel tests were positive for cultural deposits which were recovered between 0-10 cm. The highest concentration of positive shovel tests was in the southern portion of the surface scatter. The boundaries of the site are undefined due to the edges of standing sugar cane crops and limits of the project boundary. Additional surface artifacts were also observed outside the project boundary. A representative sample of artifacts was collected. No features were identified.

State of Louisiana Site Record Form (contd)

Site Name: Turn around site

State Site No.: 16SJB73

Site Description (select all that apply)

If form is an update, select only characteristics that apply to current visit.

Site Characteristics:

Pre-Contact

Post-Contact

Both

- Artifact Scatter
- Single Artifact
- Shipwreck
- Mound(s)

- Earthwork(s)
- Midden
- Shell Midden
- Cemetery

- Standing Structure
- Historic Ruin(s)
- Military
- Destroyed

Cultural Affiliation:

- Pre-Contact (unknown)
- Paleo-Indian
- Archaic (unknown)
- Early Archaic
- Middle Archaic
- Late Archaic
- Post-Archaic (UID pottery present)
- Poverty Point
- Woodland (unknown)

- Tchefuncte
- Marksville
- Issaquena
- Baytown
- Troyville
- Coles Creek
- Plaquemine
- Mississippian
- Caddo (unknown)

- Caddo - Early
- Caddo - Middle
- Caddo - Late
- Post-Contact (unknown)
- Historic Exploration 1541-1803
- Antebellum 1803-1860
- War and Aftermath 1860-1890
- Industrial & Modern 1890-1945
- Post-WWII 1945-

Site Function:

- Pre-Contact (unknown)
- Post-Contact (unknown)
- Chipping Station
- Habitation
- Extraction Locale
- Ceremonial Center
- Hamlet/Village

- Farmstead
- Plantation
- Residence
- Urban
- Watercraft
- Hist. Transport
- Cemetery (Mort.)

- Commercial/Service Cen.
- Institution (Rel. & Ed.)
- Governmental
- Industrial
- Dump
- Military

Description of Material (collected and observed):

- Pottery (American Indian)
- Chipped Stone
- Ground Stone
- Projectile Points
- Fire Cracked Rock
- Shell
- Poverty Point Object (s)
- Baked Clay/Earth Items
- Worked Bone/shell

- Human Bone/Teeth
- Unmodified Bone (faunal)
- Floral Remains
- Wood
- Charcoal
- Rubber/Plastic
- Farm Equipment
- Glass
- Metal

- Construction Mat'l (brick, mortar, cement, wattle/daub)
- Personal Items (jewelry, clothing, personal care)
- Toys (dolls, marbles, tea sets)
- Recreation Items (dice, musical instruments, dominoes, smoking)
- Pottery (Non-American Indian)

Artifact Description Narrative: High density of brick rubble observed on surface. Additional surface and subsurface artifacts include blue transferware, whiteware, flat and vessel glass, coal, and slag.

State of Louisiana Site Record Form (contd)

Site Name: Turn around site

State Site No.: 16SJB73

Curation

Collection Type: Artifacts and Associated Records

Permanent Disposition of Artifacts: LA DOA Curation Repository

Permanent Disposition of Records: LA DOA Curation Repository

Additional Information:

Records

Date: 10/23/20

Form Completed By: Renee Erickson

Contractor/Organization Name and Contact Info: Gulf South Research Corporation
8081 Innovation Park Drive
Baton Rouge, LA 70820
225-757-8088

Owner/Tenant Address or Contact Info: DONALD TECH, LLC. & ET ALS

Informant Address Or Contact Info: Pete Graffagnino
5423 Highway 44
Gonzales LA 70737

Report Title: Phase I Archaeological Investigation Of The Greenfield Development On Robert Brothers' Farm In St. John The Baptist Parish, Louisiana

Report Number:

Additional References: *Whitney Plantation: Archaeology on the German Coast, Cultural Resources Investigations in St. John the Baptist Parish, Louisiana.* Coastal Environments, Inc. Submitted to Walk, Haydel, & Associates, Inc. on behalf of Formosa Plastics Corporation of Louisiana. 22-1589

Phase I Cultural Resources Survey of the Grammercy Bridge West Approach, Route LA 3213, St. John the Baptist Parish, Louisiana: A Negative Finding Report. Coastal Environments, Inc. Submitted to the Louisiana Department of Transportation and Development, Baton Rouge, Louisiana. 22-4173

Individual Environmental Report Contractor-Furnished Borrow Material #8 Jefferson, Terrebonne, and St. John The Baptist Parishes, Louisiana. U.S. Army Corps of Engineers (USACE) Mississippi Valley Division, New Orleans District (CEMVN), New Orleans, Louisiana. 22-3895

Instructions for reaching Site: The site is located off of LA 18, approximately 1 mile east of the intersection with the Veterans' Memorial Bridge in Wallace.

State of Louisiana Narrative Continuation Page

Site Name: Turn around site

State Site No.: 16SJB73

Use this section to elaborate on details from earlier sections, if needed, so that the level of investigation, types (not necessarily numbers) of artifacts recovered, site delineation, site conditions and future threats are clearly understood. Describe representative soils profiles (including Munsell designations) and artifact/feature depths. If methodological changes were necessary due to ground conditions, this is where justification should be provided. If any special circumstances apply, they should be discussed here as well. Updates should include a short description of previous work/interpretations. ***If this investigation was a Phase II or III, the author should provide a more in-depth discussion regarding field methods, results, and interpretation than is expected from a survey.***

Site 16SJB73 represents an historic site dating to the late 19th to early 20th century. The site is located in the northwestern portion of the project area. The 1892 Mount Airy USGS 1:62500 Topographic Quadrangle indicates a structure in close proximity to the site. The site was initially detected from a surface scatter of brick rubble through visual inspection along Transect 3 in the Railroad Loop survey area. A 10 meter grid of shovel tests was placed over the artifact scatter to determine the presence of subsurface artifacts and attempt to delineate the site. A total of 59 shovel tests were placed at 10 meter intervals centered in the middle of the surface scatter. The soils were dark gray (10YR 4/2) silty clay 0 to 50 cmbgs. There were 16 shovel tests which tested positive for cultural deposits and were recovered between 0-10 cm. The highest concentration of positive shovel tests was in the southern portion of the surface scatter. The boundaries of the site are undefined due to the edges of standing sugar cane crops and limits of the project boundary. Additional surface artifacts were also observed outside the project boundary.

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State of Louisiana Photograph Page

Site Name: Turn around site

State Site No.: 16SJB73

Site Overview Photograph

Date of Photograph: 9/25/2020

Direction: East



State of Louisiana Photograph Page

Site Name: Turn around site

State Site No.: 16SJB73

Date of Photograph: 9/25/2020

Description: View of cane field containing historic artifact scatter, facing north



State of Louisiana Site Record Form

Update

Site Name: Cane Mill Site

State Site No.: 16SJB74

Other Site Designations:

Project/Field Site No.: Robert Brothers' Farm site in Railroad Tie-in survey

Parish: St. John the Baptist

UTM Coordinates:

Zone: 15

Easting: 725548

Northing: 3322360

Datum: WGS 84

Site Condition (select all that apply)

Present Use:

- | | |
|--|---|
| <input type="checkbox"/> Agricultural | <input type="checkbox"/> Pasture |
| <input type="checkbox"/> Sylvicultural | <input type="checkbox"/> Residential |
| <input checked="" type="checkbox"/> Wooded | <input type="checkbox"/> Urban |
| <input type="checkbox"/> Fallow | <input type="checkbox"/> Heavy Construction |
| <input type="checkbox"/> Open Field | <input type="checkbox"/> Light Construction |
| <input type="checkbox"/> Yard/Lawn | <input type="checkbox"/> Industrial |
| <input type="checkbox"/> Paved | <input type="checkbox"/> Other (please explain below) |

Other Conditions:

- | | |
|---|---|
| <input type="checkbox"/> Inundated | <input type="checkbox"/> Shoreline Erosion |
| <input type="checkbox"/> Heavy Erosion | <input type="checkbox"/> Clear-Cut |
| <input type="checkbox"/> Light Erosion | <input type="checkbox"/> Modern Trash Dump |
| <input type="checkbox"/> Roads or Trails | <input type="checkbox"/> Dredged |
| <input type="checkbox"/> Transmission Lines | <input type="checkbox"/> Spoil Bank |
| <input type="checkbox"/> Submerged | <input type="checkbox"/> Other (please explain below) |

Surface Visibility: 0-20%

Site Condition and Setting Narrative: The site is positioned in a densely wooded area approximately 500 meters from a former bayou course to the west and 100 meters south of the railroad line. Two irrigation ditches containing standing water intersect on the east side of the site.

Site Investigation (select all that apply)

Nature of Investigation: CRM Phase I

Fully Delineated? No

Artifacts Collected? Yes

Investigation Method(s): Surface Collection: Controlled Uncontrolled
Shovel Testing: Systematic Judgmental

Test Units Trenches
 Excavation Units Augering
 Remote Sensing Coring

Site Dimensions: 42 m x 37 m

Site Investigation Narrative: Survey methods of investigation included pedestrian survey and systematic shovel testing at 30 meter intervals. The site was identified by a depression, four brick features, and artifacts visible on the surface. The brick features consisted of three parallel short brick wall like structures and a brick floor. A total of 28 shovel tests were placed at 10 meter intervals in a grid pattern centered in the middle of the surface scatter. A total of 9 shovel tests were positive for cultural deposits which were recovered between 0-10 cm. A representative sample of artifacts was collected. STPs revealed two stratigraphic layers consisting of dark gray (10YR 4/2) clay above a layer of gray (10YR 5/1) clay. Shovel testing was limited on the northeast portion of the site due to an irrigation canal. The highest concentration of positive shovel tests was northwest of the brick features.

State of Louisiana Site Record Form (contd)

Site Name: Cane Mill Site

State Site No.: 16SJB74

Site Description (select all that apply)

If form is an update, select only characteristics that apply to current visit.

Site Characteristics:

Pre-Contact

Post-Contact

Both

- Artifact Scatter
- Single Artifact
- Shipwreck
- Mound(s)

- Earthwork(s)
- Midden
- Shell Midden
- Cemetery

- Standing Structure
- Historic Ruin(s)
- Military
- Destroyed

Cultural Affiliation:

- Pre-Contact (unknown)
- Paleo-Indian
- Archaic (unknown)
- Early Archaic
- Middle Archaic
- Late Archaic
- Post-Archaic (UID pottery present)
- Poverty Point
- Woodland (unknown)

- Tchefuncte
- Marksville
- Issaquena
- Baytown
- Troyville
- Coles Creek
- Plaquemine
- Mississippian
- Caddo (unknown)

- Caddo - Early
- Caddo - Middle
- Caddo - Late
- Post-Contact (unknown)
- Historic Exploration 1541-1803
- Antebellum 1803-1860
- War and Aftermath 1860-1890
- Industrial & Modern 1890-1945
- Post-WWII 1945-

Site Function:

- Pre-Contact (unknown)
- Post-Contact (unknown)
- Chipping Station
- Habitation
- Extraction Locale
- Ceremonial Center
- Hamlet/Village

- Farmstead
- Plantation
- Residence
- Urban
- Watercraft
- Hist. Transport
- Cemetery (Mort.)

- Commercial/Service Cen.
- Institution (Rel. & Ed.)
- Governmental
- Industrial
- Dump
- Military

Description of Material (collected and observed):

- Pottery (American Indian)
- Chipped Stone
- Ground Stone
- Projectile Points
- Fire Cracked Rock
- Shell
- Poverty Point Object (s)
- Baked Clay/Earth Items
- Worked Bone/shell

- Human Bone/Teeth
- Unmodified Bone (faunal)
- Floral Remains
- Wood
- Charcoal
- Rubber/Plastic
- Farm Equipment
- Glass
- Metal

- Construction Mat'l (brick, mortar, cement, wattle/daub)
- Personal Items (jewelry, clothing, personal care)
- Toys (dolls, marbles, tea sets)
- Recreation Items (dice, musical instruments, dominoes, smoking)
- Pottery (Non-American Indian)

Artifact Description Narrative: The artifacts included in the positive shovel tests consisted of brick fragments and one modern shotgun shell. Surface artifacts collected included a sample of slag and large square nut with a possible portion of a bolt inside the threading. Additional artifacts observed but not collected include four large iron fragments including a beam measuring 180cm x 10cm x 5cm.

State of Louisiana Site Record Form (contd)

Site Name: Cane Mill Site

State Site No.: 16SJB74

Curation

Collection Type: Artifacts and Associated Records

Permanent Disposition of Artifacts: LA DOA Curation Repository

Permanent Disposition of Records: LA DOA Curation Repository

Additional Information:

Records

Date: 10/23/20

Form Completed By: Renee Erickson

Contractor/Organization Name and Contact Info: Gulf South Research Corporation
8081 Innovation Park Drive
Baton Rouge, LA 70820
225-757-8088

Owner/Tenant Address or Contact Info: DONALD TECH, LLC. & ET ALS

Informant Address Or Contact Info: Pete Graffagnino
5423 Highway 44
Gonzales LA 70737

Report Title: Phase I Archaeological Investigation Of The Greenfield Development On Robert Brothers' Farm In St. John The Baptist Parish, Louisiana

Report Number:

Additional References: *Whitney Plantation: Archaeology on the German Coast, Cultural Resources Investigations in St. John the Baptist Parish, Louisiana.* Coastal Environments, Inc. Submitted to Walk, Haydel, & Associates, Inc. on behalf of Formosa Plastics Corporation of Louisiana. 22-1589

Phase I Cultural Resources Survey of the Grammercy Bridge West Approach, Route LA 3213, St. John the Baptist Parish, Louisiana: A Negative Finding Report. Coastal Environments, Inc. Submitted to the Louisiana Department of Transportation and Development, Baton Rouge, Louisiana. 22-4173

Individual Environmental Report Contractor-Furnished Borrow Material #8 Jefferson, Terrebonne, and St. John The Baptist Parishes, Louisiana. U.S. Army Corps of Engineers (USACE) Mississippi Valley Division, New Orleans District (CEMVN), New Orleans, Louisiana. 22-3895

Instructions for reaching Site: The site is located off of LA 18, approximately 1 mile east of the intersection with the Veterans' Memorial Bridge in Wallace.

State of Louisiana Narrative Continuation Page

Site Name: Cane Mill Site

State Site No.: 16SJB74

Use this section to elaborate on details from earlier sections, if needed, so that the level of investigation, types (not necessarily numbers) of artifacts recovered, site delineation, site conditions and future threats are clearly understood. Describe representative soils profiles (including Munsell designations) and artifact/feature depths. If methodological changes were necessary due to ground conditions, this is where justification should be provided. If any special circumstances apply, they should be discussed here as well. Updates should include a short description of previous work/interpretations. ***If this investigation was a Phase II or III, the author should provide a more in-depth discussion regarding field methods, results, and interpretation than is expected from a survey.***

Site 16SJB74 site is located in the southeastern portion of the Railroad Tie-in Survey area and measures approximately .3 acres. The site represents an historic industrial site dating to the late nineteenth to early twentieth century. The site was discovered while conducting the pedestrian and shovel test survey along transects. The site consists of four brick features, a depression, and a surface scatter of brick rubble. The site is positioned in a densely wooded area approximately 100 meters south of the railroad line. Two ditches containing standing water intersect on the east side of the site. According to the 1892 USGS map, the ditch running southwest from the levee road was once a road between adjacent properties. Historic topographic maps provide no indication of a structure in the area and historic aerials show the area inundated with trees as early as 1952 obstructing the view of any structures.

The initial site boundary was delineated from a surface scatter of brick rubble. A 10-meter grid of shovel tests was placed over the artifact scatter to determine the presence of subsurface artifacts and attempt to further delineate the site. A total of 28 SPTs were excavated resulting in 9 STPs positive for cultural deposits. The positive shovel tests were all located northwest of the brick features. Shovel testing revealed two stratigraphic layers consisting of dark gray (10YR 4/2) clay 0 to 10 cmbgs above a layer of gray (10YR 5/1) clay 10 to 50 cmbgs.

Features within the site include three brick structures (Features A, B, and C), a brick floor (Feature D), and a large depression (Feature E). Features A, B and C run parallel to each other and the brick floor. Feature A is the largest of the three measuring 1.2 m x 8 m x 1.25 m. At the base of the feature on the east side there are two cavities from missing brick. There is a 1 m space between Feature A and Feature B. Feature B is only 50 cm wide, but is the same height, where the brick are still intact as Feature A. The northern edge of the feature has fallen but was presumably the same length as Feature A at one time. The space between Feature B and Feature C is 1.35 m. Feature C is also 50 cm wide, but only 90 cm high at its most intact point. The northern portion of the feature has also fallen but may have extended out to the same length as features A and B. All three of the features have three thick metal rods protruding out of the top of the brick. Some of the rods still possess large square nuts. Feature D is a brick floor located to the west of Feature A. The feature is longer than Features A, B, and C, and measures 2.35 m x 12.5 m. Feature E is a large depression measuring 5 m x 5 m.

The depression is approximately 9 m to the west of Feature A and possesses a segment of stacked bricks on the eastern wall. The artifacts included in the positive shovel tests consisted of brick fragments and one modern shotgun shell. Surface artifacts collected included a sample of slag and large square nut with a possible portion of a bolt inside the threading. A sample of mortar was collected from Feature C and testing determined lime composition which dates prior to the 1930s. Additional artifacts observed but not collected include four large iron fragments including a beam measuring 1.8 m x 1 m x .05 m. The beam is located on the northeastern edge of Feature D, parallel to the edge of the brick foundation. No domestic artifacts were observed or collected at the site.

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State of Louisiana Map Page

Site Name: Cane Mill Site

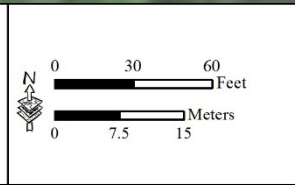
State Site No.: 16SJB74

Aerial Photograph with Site Boundaries

Date of Aerial Photograph: 1/23/2019



Legend	
⊖	Delineation STP - Negative
⊕	Delineation STP - Positive
○	Transect STP - Negative
●	Transect STP - Positive
⊗	Surface Find
□	Surface Features
▭	Site 16SJB74 Boundary
⊞	Surface Scatter
▭	Survey Areas
▭	Survey Area Boundary



Map showing shovel tests excavated in Site 16SJB74.

\\GSRC-FS01\Projects\Projects\80976002_Ramboil_Robert_Bros_Property\GIS\Site_Forms\Site_16SJB74_Railroad_Liveln_STP_Map.mxd

State of Louisiana Map Page

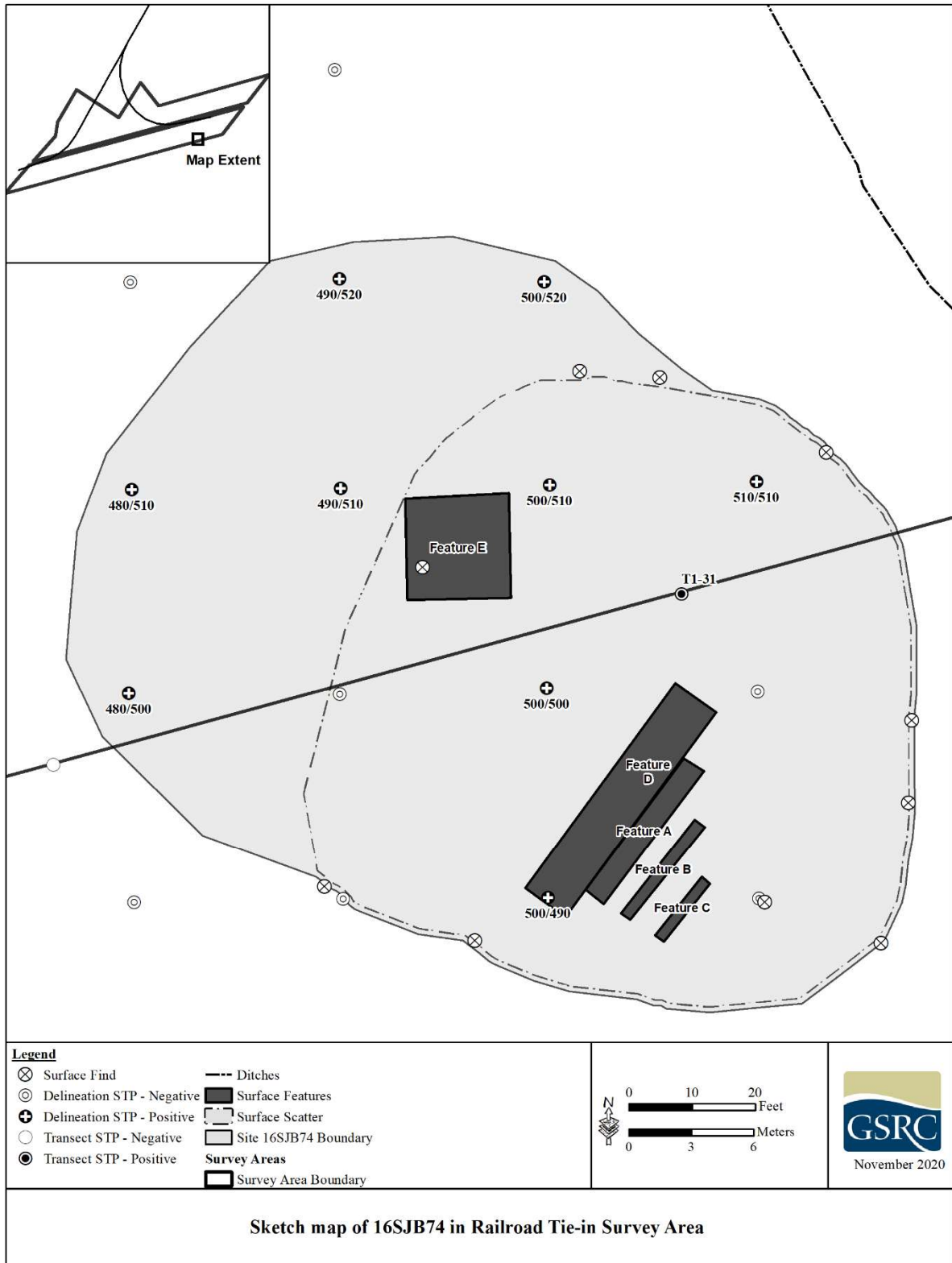
Site Name: Cane Mill Site

State Site No.: 16SJB74

Site Sketch Map

Drawn By: Marcela Guillot

Date: 10/27/2020



State of Louisiana Photograph Page

Site Name: Cane Mill Site

State Site No.: 16SJB74

Site Overview Photograph

Date of Photograph: 9/28/2020

Direction: west



State of Louisiana Photograph Page

Site Name: Cane Mill Site

State Site No.: 16SJB74

Date of Photograph: 9/25/2020

Description: View of southern edges of features A, B, and C, facing north

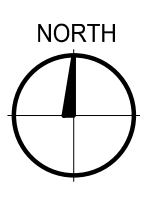
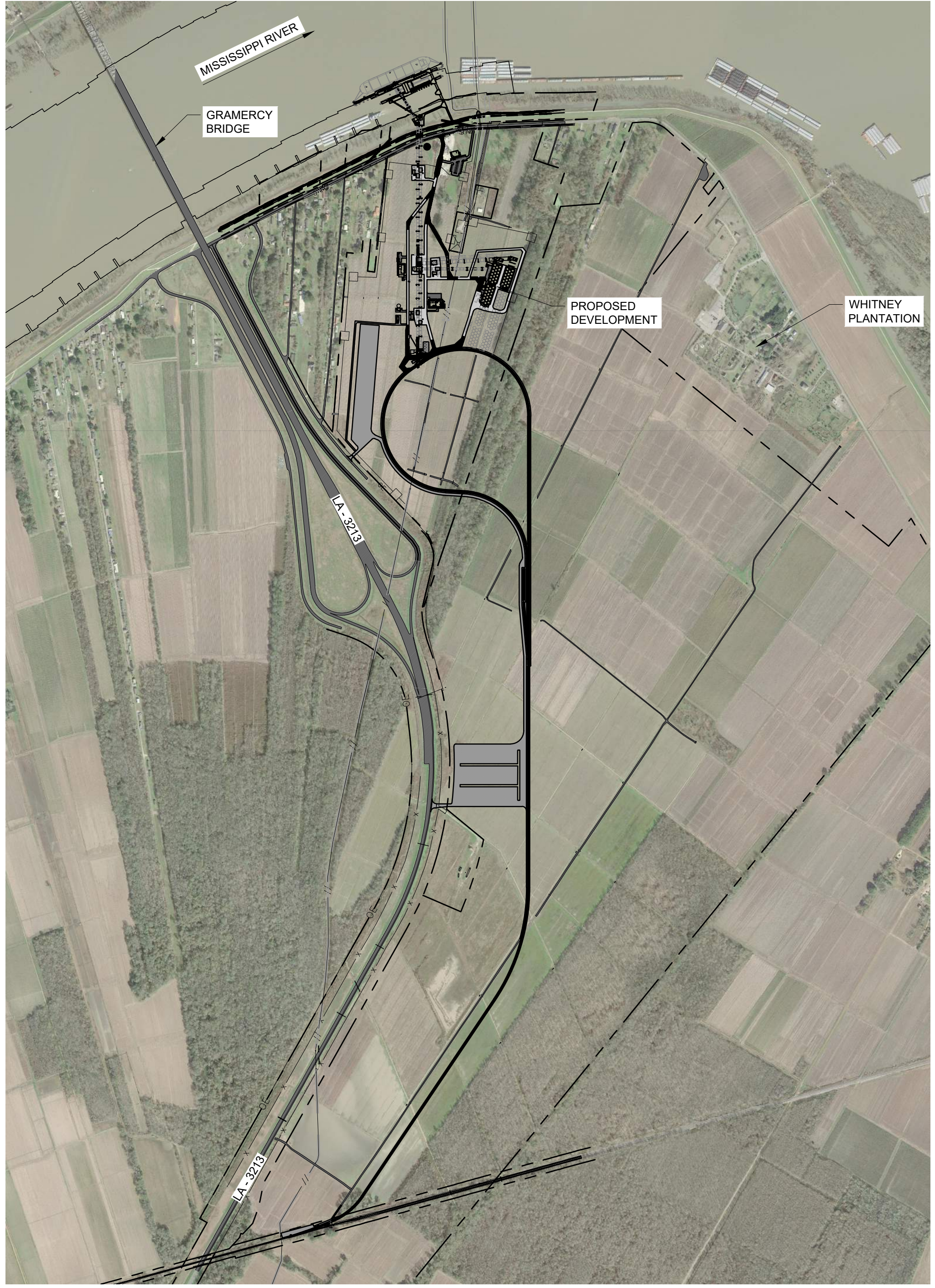


Date of Photograph: 9/25/2020

Description: View of southern edges of feature D, facing northeast

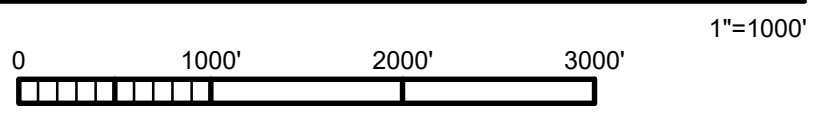


APPENDIX D
SITE PLANS



1
EX068

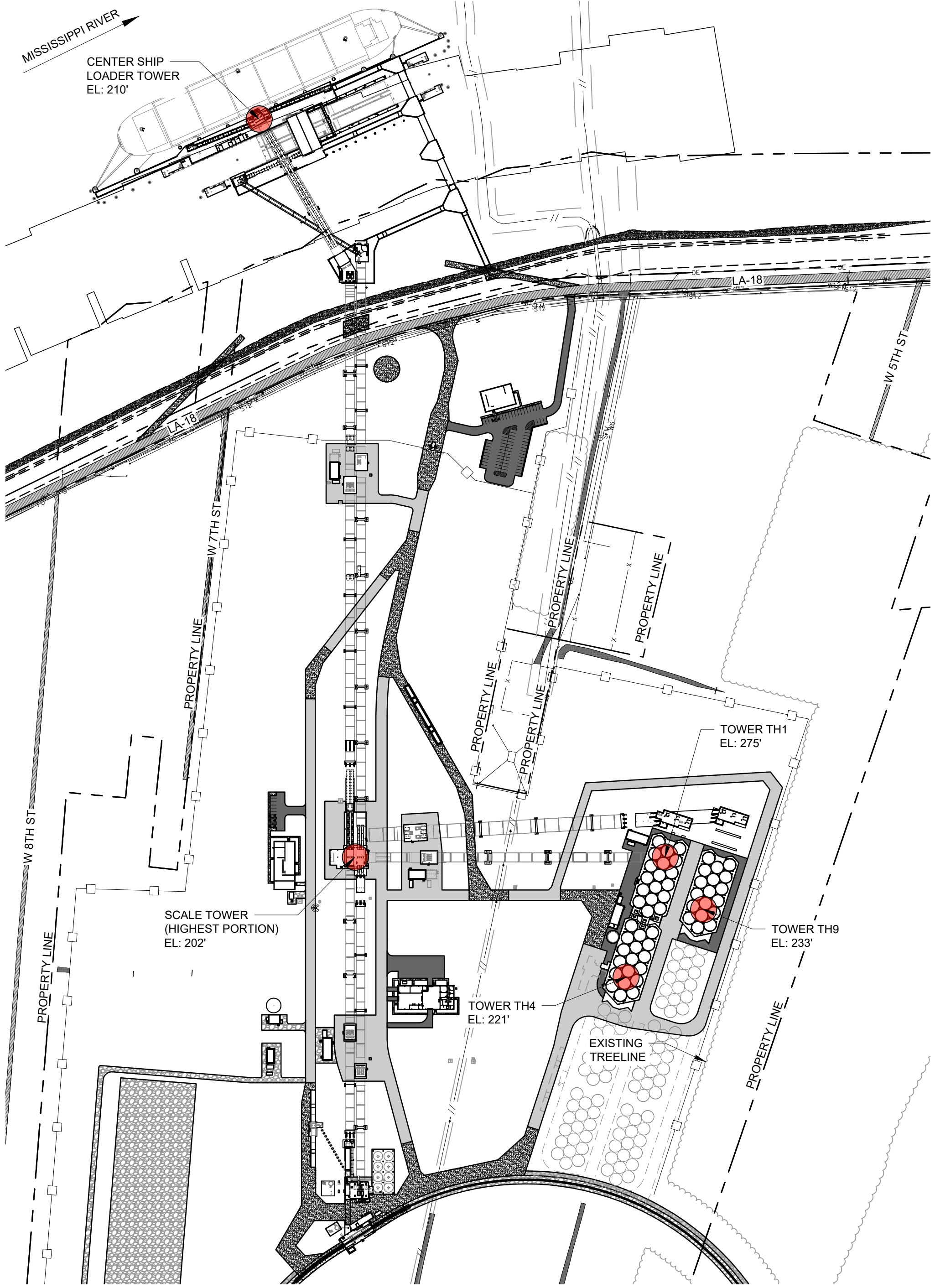
OVERALL SITE PLAN



SITE STRUCTURE HEIGHT EXHIBIT
WALLACE, LA



PROJECT: 200290
12/17/2020



MISSISSIPPI RIVER

CENTER SHIP
LOADER TOWER
EL: 210'

LA-18

W 5TH ST

LA-18

W 7TH ST

W 8TH ST

SCALE TOWER
(HIGHEST PORTION)
EL: 202'

TOWER TH1
EL: 275'

TOWER TH9
EL: 233'

TOWER TH4
EL: 221'

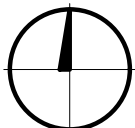
EXISTING
TREELINE

SITE STRUCTURE HEIGHT EXHIBIT
WALLACE, LA



PROJECT: 200290
12/17/2020

NORTH



2
EX068

ENLARGED SITE PLAN



1"=250'