Exhibit GG. Lake Charles Regional Airport Site Phase I Cultural Resources Assessment Report





Lake Charles Regional Airport Site Phase I Cultural Resources Assessment Report

A PHASE I CULTURAL RESOURCES SURVEY FOR THE Lake Charles Regional Airport Expansion in Calcasieu Parish, Louisiana

DRAFT REPORT

Prepared by TERRAXPLORATIONS, INC.

Prepared for SWLA ECONOMIC DEVELOPMENT ALLIANCE



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ABSTRACT

From February 28 through March 2 of 2018, TerraXplorations, Inc. (TerraX) of Mobile, Alabama performed a cultural resources survey for the Lake Charles Regional Airport expansion located south of Lake Charles in Calcasieu Parish, Louisiana. The Phase I survey was performed by Matthew Sumrall, Kelsey Johnson, Lucinda Freeman, Wade Tidwell, and Chris Rivers, with Paul D. Jackson and Kelsey Johnson serving as Principal Investigators. This is in support of the Louisiana Economic Development (LED) Site Certification process. Total acreage for this project is 156 acres (63 hectares). The investigation identified one cultural resource (Site 16CU97) within the project area. This twentieth century site represents a small artifact scatter that is not eligible for the National Register of Historic Places. Accordingly, no further archaeological studies are recommended for the proposed Lake Charles Regional Airport expansion project.

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CHAPTER 1 INTRODUCTION

TerraXplorations, Inc. (TerraX) of Mobile, Alabama was contracted by SWLA Economic Development Alliance of Lake Charles, Louisiana to conduct a cultural resources survey for the proposed Lake Charles Regional Airport expansion in Calcasieu Parish, Louisiana. The Phase I survey was performed from February 28 to March 2, 2018 by Kelsey Johnson, Matthew Sumrall, Chris Rivers, Lucinda Freeman, and Wade Tidwell. Paul D. Jackson and Kelsey Johnson served as Principal Investigators. The purpose of this study was to determine if any prehistoric or historic properties exist within the limits of the project area, and if so, to document and assess each based on the National Register of Historic Places (NRHP) criteria. This is in support of the Louisiana Economic Development (LED) Site Certification process.

The project area lies east of the existing airport facilities, west of Highway 385 (Gulf Highway), and south of W. Gauthier Road (Figure 1.1). Total acreage for this project is 156 acres (63 hectares). The project area is found within Section 6, Township 11 South, Range 8 West as seen on the 1994 Lake Charles, Louisiana USGS 7.5' series topographic quadrangle (Figure 1.2).

The project area was located in a grassy field east of the Lake Charles Regional Airport. Most of the smaller portion on the western side of the project area was inside the airport fence and the field crew had to be accompanied by the head of public safety and security while performing excavations. The crew was not allowed within 150 m of the main runway and 90 m of the branch that extended over the north side of the project area for safety and security reasons, so some portions were unable to be tested. A powerline extended west-northwest and east-southeast through the project area and joined the powerlines running north-south along the eastern boundary. Drainages ran parallel to most of the project boundaries, with the largest drainage following the road north-south on the eastern boundary. There were also several small drainages crossing the field. Portions of the grassy field were quite wet and contained crawfish chimneys. Figures 1.3-1.6 depict the present state of the project area.

This report of our investigations is presented as follows. Chapter 2 contains information regarding the past and present environmental conditions in the project area. Chapter 3 is a cultural background and context for the project area in general. Chapter 4 details the background research for this project. Chapter 5 presents the methodology and results of fieldwork. Chapter 6 concludes the report and summarizes our findings and recommendations. Appendix A is the curation agreement. The artifact inventory can be found in Appendix B.



Figure 1.1. Aerial image showing the project area.





Figure 1.2. Topographic map showing the project area.



Figure 1.3. View of western portion of project area, facing south.



Figure 1.4. View of eastern portion of project area toward sheriff's office and gas station, facing east.





Figure 1.5. View of eastern portion of project area, facing north.



Figure 1.6. View of eastern portion of project area, facing south.

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CHAPTER 2 Project area environment

The project area is located in southwest Louisiana in Calcasieu Parish, southeast of the Calcasieu River, and is occupied by Pleistocene Terraces (Figure 2.1). The study area falls within the Western Gulf Coastal Plain ecoregion, which is composed of relatively flat areas that are historically mainly grasslands. Rice and soybeans are the principal crops grown in this region (Daigle et al. 2006).

Within this ecoregion, further divisions place the project area in the Northern Humid Gulf Coastal Prairies. This region is underlain by Quaternary-age deltaic sands, silts, clays, and gravel. The historical vegetation was primarily tallgrass grasslands with gallery forests along streams. These grasses include little bluestem, big bluestem, yellow Indiangrass, brownseed paspalum, and switchgrass mixed with many other herbaceous species. Most of the coastal prairies are now cropland, pasture, crawfish aquaculture, or urban land. Soils are mostly poorly or somewhat poorly drained with silt loam or silty clay loam texture (Daigle et al. 2006).

The project area is drained by the Calcasieu River, which flows to the Gulf of Mexico. Elevations in the fairly flat project area range from about 10 to 15 ft above mean sea level. The project area was located in a wet grassy field that contained crawfish chimneys. A powerline extended from west-northwest to east-southeast through the project area until it joined the powerlines running north-south along the eastern boundary. There were drainages running parallel to most of the project boundaries, with the largest drainage following the road north-south on the eastern boundary. There were also several small drainages crossing the grassy field.

A review of the Web Soil Survey (2018) identified two soil types within the project area (Figure 2.2). Most (96 percent) of the project area contains Mowata-Vidrine complex, 0 to 1 percent slopes, rarely flooded (Mt). These soils are poorly drained and somewhat poorly drained and are normally found on broad flats on the Gulf Coast Prairies. Mowata-Vidrine soils are characterized as having multiple layers of silty loam, over a layer of clay loam or silty clay, on top of a silty clay or silty clay loam subsoil. Crowley-Vidrine complex, 0 to 1 percent slopes (Cr) covers the remainder of the project area. These soils are found on broad convex ridges on the Gulf Coast Prairies and are somewhat poorly drained. Crowley-Vidrine soils are characterized as having multiple layers of silty loam or silty clay or silty clay on top of a clay loam or silty clay or silty clay on top of a silty clay on top of a clay loam or silty clay or silty clay on top of silty clay or silty clay on top of a clay loam or silty clay loam subsoil. Both are mainly used for crops (Roy and Midkiff 1988).

The climate throughout Calcasieu Parish is characterized as having long, hot and humid summers with warm winters with cool air occasionally coming from the north. Average precipitation throughout the year measures 52 inches. Average yearly temperature for the area is 53° Farenheit (F) in the winter and 81° F in the summer. Snowfall seldom occurs and rarely stays on the ground for more than a single day.



Figure 2.1. Geologic map of Louisiana (Louisiana Geological Survey 2008).





Figure 2.2. Map depicting soil types within the project area.

10 - Chapter 2: Project Area Environment

CHAPTER 3 Cultural History

PALEOINDIAN (10,000 TO 6000 B.C.). The earliest substantial human occupation in the Western Hemisphere is defined as the Paleoindian period. In Louisiana, and generally in the Southeast, this period has provisionally been grouped into three broad temporal categories defined as Early, Middle, and Late or transitional subperiods (Anderson 1996; O'Steen et al. 1986:9).

It was thought that the population of the Paleoindian period was highly adaptive, mobile hunter-gatherers, whose ancestors had migrated from Siberia into North America between 12,000 to 10,000 B.P. The migration is believed to have occurred during the Pleistocene Epoch, when glaciers were expanding and retreating from fluctuations in the climate from cold to warm episodes (Anderson 1996). The population movements were presumably made possible when the colder periods of the Pleistocene Epoch captured large quantities of the earth's water in glaciers. This lowered sea levels and exposed large portions of the continent; allowing human populations to follow the Pleistocene mammals across the Americas. However, new discoveries are changing this long-held belief. More recent evidence of a pre-Clovis culture has emerged, based on excavations at Meadowcroft Rockshelter in Pennsylvania, the Topper Site in South Carolina, and Cactus Hill in Virginia, that places modern humans in the New World some 2,000 years earlier than previously believed. Pre-Clovis tools include small bladelets, indicating an exploitation of a broader environment. While the controversy continues, it is widely recognized that Clovis points were in the southeastern U.S. around 12,000 B.P.

Paleoindian occupations are usually represented by the presence of a specialized type of projectile point. These points are large and feature channels or flutes that are created by the removal of a long, vertical flake from the center of one or both faces of the point (Walthall 1980). Clovis, Folsom, Quad, Dalton, Plainview, and Scottsbluff are point types indicative of this period and region (Gagliano and Gregory 1965). The size of the points reflects the hunting strategy of these early inhabitants, which focused on hunting large Pleistocene mammals. Bones of large Pleistocene vertebrates (mastodon, mammoth, ground sloth, etc), which are contemporaries of the Paleoindians, are found in alluvial and backswamp deposits (Gagliano and Gregory 1965). Paleoindian sites are rare, especially with the changing geography of much of southern Louisiana. The rising sea levels have left coastal sites underwater, and the flooding and meandering of the Mississippi River has buried other sites under layers of silt.

THE MESOINDIAN (6000 TO 2000 B.C.). The three sub-periods of the Archaic period proper are believed to roughly approximate the transition from highly mobile, camp-based collector life-ways to more sedentary and opportunistic foraging life-ways.

During the Early Archaic period it is reasonable to assume there was a trend towards a more sedentary lifeway. Considering the cultural material typically present from this time period, we find a change in the biface from the previous period to be the most evident change. Rather than the long, fluted blades from the Paleoindian period, the Early Archaic bifaces have well-documented pan-regional sequences that includes the Side-Notched Tradition, the Corner-Notched Tradition, and the Bifurcate Tradition. The spears used by the Mesoindians were different than those of the earlier period; they were shorter, had a greater variety of stone points crafted from locally available stone, and were more simply crafted (Neuman and Hawkins 1982). Bone, antler, and shell tools and ornaments were also added to the tool assemblage during this period.

NEOINDIAN (2000 B.C. TO A.D. 1600). Southeastern archaeologists generally distinguish the beginning of the Neoindian period by the introduction and regular use of stamped pottery and increased ceremonialism in ritual events and mortuary practices. During the Neoindian period, the introduction and intensification of horticulture, construction of earthworks, and elaboration of artistic expression and burial ritual are all thought to be related to a reorganization of social structure. The advent of horticulture would have meant that, at least for part of the year, groups would have had to remain sedentary in order to plant, tend, and harvest crops. Shell and earthen mounds were now regularly built throughout this area of Louisiana.

Although many technologies used during the Neoindian period were actually developed during the earlier Archaic periods, it was during the Neoindian stage that changes in social organization and economy from small dispersed bands of hunter-gathers to large, semi-permanent settlement began to take place. A much heavier reliance on horticulture followed and these changes were evidenced in the archaeological record. This period includes the Tchula/Tchefuncte, Marksville, Troyville-Coles Creek, Plaquemine, and Mississippian cultures.

The Tchula/Tchefuncte Culture is set apart from early cultures by being the first Louisiana Indians to manufacture large amounts of pottery. The early pottery was crude and often undecorated, although it could include punctation, incision, and stamped geometric designs. Podal supports are common. Lithics are similar to the preceding Late Archaic. Sites in southwestern Louisiana occur on cheniers, stream terraces, salt domes, or bayous and backwater swamps on natural levees and terrace edges above seasonal flooding (Neuman and Hawkins 1993; Gibson 1974).

The Marksville Culture is generally recognized as a part of the Pan-Southeastern Middle Woodland tradition (Jeter et al. 1989). Trade, once again, increased from an area market to an inter-regional system linked to Adena-Hopewell influences from the Upper and Middle Mississippi Valley (Weinstein and Rivet 1978). These influences were most notable in the ceramic designs and even mortuary practices. Springer (1973) suggests late Marksville may exhibit a shift from the characteristic kin ties to a settlement with differing social classes.

The Troyville-Coles Creek Period is most known for the distinct spatial patterns present on the sites. These typically consist of a small series of small platform mounds positioned around a central plaza (Neuman 1984). This period also saw numerous examples of complicated stamping of ceramics in Louisiana. In addition, the bow and arrow was introduced at this period. The introduction of the bow and arrow might have led to the collapse of the Troyville-Cole Creek Culture. The increase in available food led to an increase in population; these Indians reached a level the communities could no longer support. The final change that precipitated this period and could have led to the cultural collapse was change in weather patterns. Indeed, weather from around A.D. 500 to A.D. 800 was cooler and dryer. This changed the availability of food at a time when Indian societies were already stressed to provide for the growing populations. These stresses led to an increase in warfare that continued into the following period (Stoltman 1978).

The Plaquemine Culture takes its name from the Medora Site (16WBR1), which is found in the town of Plaquemine, Louisiana. This period was witness to the zenith of eastern Woodland culture in terms of organization and complexity. During this time an almost simultaneous florescence occurred over many parts of the Southeast, resulting in the development of large, hierarchical societies centered at impressive mound complexes, such as Cahokia in present-day Illinois, Spiro in Oklahoma, Moundville in Alabama, and Etowah in northwest Georgia. Differentiating the Plaquemine culture further from their earlier Troyville-Coles Creek ancestors is seen in the brushing and engraving techniques observed in their pottery (Smith et al. 1983).



The Mississippian time period is marked by the full emergence of agriculturally based stratified societies in Louisiana. Flat-topped pyramid-shaped mounds were used as house sites for the elite and large plazas were used for community ceremonies. Wooden palisades indicate that warfare between communities occurred. While hunting and gathering were still important, this was supplemented with large-scale cultivation of corn, beans, and squash (Neuman 1984). Shell-tempered vessel types include loop- or strap-handled pots, globular jars, plates, and bottles decorated by incising, engraving, and negative painting. Mississippian ceramics at Avery Island may indicate the extraction of salt by groups not otherwise living there (Brown and Lambert-Brown 1978).

EUROPEAN EXPLORATION (A.D. 1542 TO 1699). By the time Europeans made contact with the inhabitants of North America, the people living in the Southeast had developed a complex society with a trade network that brought in exotic items from across the continent (Buxton and Crutchfield 1985). Trading paths connected villages and these would later be used by European explorers and settlers to enter the area. In 1543, the remains of the De Soto expedition crossed the Red River possibly at Shreveport or just north of the Arkansas-Louisiana border on their way to Mexico. They turned around, recrossed the Red River, and headed southward toward the Gulf of Mexico (Brain 1985; Hudson 1989; Hudson et al. 1989; Newkirk and Mueller 1981).

After De Soto, the next European to enter the Louisiana region was a Frenchman named Robert Cavalier de la Salle. In 1682, his company sailed down the Mississippi River to the Gulf of Mexico and encountered native Bayougoula people in modern-day Iberville Parish (Bryant et al. 1982:31-32). La Salle attempted to return to the area two years later, but could not relocate the Mississippi River and eventually became stranded on the Texas Coast. Attempting to locate La Salle's Texas Colony, Henri de Tonti sailed the Red River to Shreveport in 1687. In 1699, Pierre Le Moyne d'Iberville arrived with the second French expedition of the area. Rather than working south along the Mississippi River, Iberville chose to follow the coast to the Mississippi River and then work north. Iberville travelled up the Mississippi River to modern-day Point Coupee Parish (Bryant et al. 1982:33-36). The following year, Sieur de Bienville visited the Natchitoches area on an expedition. Natchitoches became the first French settlement in the Red River valley in 1714. The Great Raft log jam prevented navigation north of the settlement and Natchitoches became the northern terminus for downriver trading (Newkirk and Mueller 1981).

Louis XV ceded the territory to Spain in 1762 and the population slowly increased. By the mid-eighteenth century, frontier trade was replaced by tobacco and indigo commercial agriculture. The slave trade also grew during this period creating a growing concern among white Louisianans (Newkirk and Mueller 1981).

COLONIZATION (A.D. 1700 TO 1803). In 1718, John Law, a French proprietor, was given a trade monopoly by French King Louis XV. Law formed his company to settle and develop portions of Louisiana and vigorously sold stock throughout Europe. Most of Law's initial settlements were based along the Mississippi River with trading posts positioned throughout the region. These posts were largely inhabited by European trappers and local Native Americans. Despite Law's efforts, the majority of Louisiana was not truly colonized until France ceded the territory to the Spanish in 1763 (Weinstein and Rivet 1978). When the Spanish arrived, the area was largely inhabited by Attakapa Indians, whose chief was named Calcasieu, which meant "crying eagle" (Roy and Midkiff 1988).

European settlement continued throughout the latter part of the 1700s in Louisiana. These later settlers followed earlier settler patterns of the Acadians, French, Spanish, and other Europeans and selected higher landforms fronting the bayous and rivers (Weinstein and Rivet 1978). In 1800, France regained possession of the Louisiana Territory but they did not retain it for long. On May 2, 1803 the United States signed the Louisiana Purchase treaty with France (Wall 2008).

ANTEBELLUM PERIOD (A.D. 1803 TO 1860). Louisiana was admitted to the Union in 1812 and American settlement blossomed in the late 1820s and increased in the 1830s, as public lands became available for purchase. In 1840 "Imperial Calcasieu" was established from the western portion of St. Landry Parish (Calcasieu Parish was reduced to its current size in 1912). The first courthouse was in a small town called Marion, but around 1851 the parish seat was moved to Lake Charles. Texans moving cattle along the Old Spanish Trail en route to New Orleans encouraged growth in the parish. The proliferation of sawmills in the mid-1850s made Calcasieu Parish a thriving area (Roy and Midkiff 1988).

CIVIL WAR, RECONSTRUCTION, AND POSTBELLUM (A.D. 1861 TO PRESENT).

The Battle of Calcasieu Pass was fought on May 6, 1864, at the mouth of the Calcasieu River. The U.S.S *Wave* and the U.S.S *Granite City*, under Lt. Benjamin Loring and Lt. C. W. Lamson, received orders to proceed to Calcasieu Pass where they bombed an abandoned Confederate mud fort at the mouth of the river. Tasked with buying cattle from local farmers, the Union troops instead stole cattle and horses from several farms. Confederate forces could not let this stand. As the Union soldiers slept, their less experienced men were in charge of the guns. The local Confederate forces moved their cannons to within 1,000 yards of the gunboats and fired, penetrating the gunboat's hulls. On May 8th, *Ella Morse*, a Union Supply ship arrived unaware of the Union casualties. When she noticed that Confederates were manning the guns it was too late. The Union lost 14 cannons, the *Ella Morse*, the U.S.S Granite City, the U.S.S Wave, 450 head of cattle and horses, and many arms and provisions. That night the Confederates feasted on "captured stores of oysters, sardines, and hams" (Block 1977).

Following the establishment of rice milling facilities in 1891, rice became a major crop in the area. This was followed by commercial sulphur production in 1894 (Roy and Midkiff 1988). By the end of the nineteenth century, river travel was replaced by land roads and railroads. Settlement along the railroad continued to grow into the twentieth century and towns and villages began to emerge as a result. Cotton was soon joined by timber as one of the state's leading exports. During the early twentieth century, Louisiana led the nation in timber production (Newkirk and Mueller 1981). A devastating fire in 1910 destoyed about 30 blocks of Lake Charles, including the courthouse, city hall, and the Catholic Church. A proclamation by Governor Sanders in 1911 subdivided the parish of Old Imperial Calcasieu into Allen, Beauregard, Calcasieu, and Jefferson Davis parishes. The deep water ship channel in the Port of Lake Charles in 1926 led to rapid growth and urban development. Unfortunately, salt water was now able to move north, forever changing the ecology of the shoreline (Cormier 2007). Industries in the parish include oil and natural gas exploration, mining and refining, petrochemicals and other chemicals, lumber and wood processing, retail merchandising, raw and calcinated coke, construction, utilities, synthetic rubber, aluminum, and garment manufacturing. Crops now include more soybeans than rice, along with wheat and sorghum (Roy and Midkiff 1988).

CHAPTER 4 Previous Research

LITERATURE AND DOCUMENT SEARCH

Background research was conducted prior to the survey to identify previously recorded historic and prehistoric properties within a one-mile radius of the proposed Lake Charles Regional Airport expansion project located in Calcasieu Parish, Louisiana. This search included an online query of the Louisiana Site Files (Louisiana Division of Archaeology [LDOA] 2018). A one-mile (1.6 km) radius search was conducted around the proposed project area for previously recorded archaeological sites and previous cultural resources surveys. An examination of the Historic Standing Structure Survey Files at the State Library in Baton Rouge, Louisiana was performed on March 5, 2018 to ascertain whether any historic resources have been recorded within or near the project area. Lastly, a query into the National Register of Historic Places (NRHP) (National Park Service 2018) was conducted.

A search of the LDOA Cultural Resources Viewer (LDOA 2018) listed two recorded sites and two cemeteries within a mile of the proposed project area. Background research revealed six previously conducted cultural resources survey within a mile of the study area (Figure 4.1).

Site 16CU87. Site 16CU87 was a cultural deposit located in a field. Artifacts yielded during investigation of this site consisted of mostly mid-twentieth century material, including wire nails, brick fragments, modern glass, late historic ceramics, and rangia shell. Artifacts were all recovered between 0 and 30 cm below ground surface and further site disturbance by ditching was recorded, suggesting the artifacts found may have been redeposited. The site was recorded by Coastal Environments, Inc., in December 2015.

Site 16CU88. Site 16CU88 was a cultural deposit located in the same field as 16CU87 to the north. Artifacts yielded during investigation of this site consisted of mostly mid-twentieth century material, including wire nails, brick fragments, modern glass, late historic ceramics, and rangia shell. Artifacts were all recovered between 0 and 42 cm below ground surface and further site disturbance by ditching was recorded, suggesting the artifacts found may have been redeposited. The site was recorded by Coastal Environments, Inc., in December 2015.

LDOA# 22-0615. Archaeological Survey of a Portion of the Calcasieu LNG Project. New World Research, Inc., performed this investigation in 1978 and 1979. Survey consisted of two phases of pedestrian survey as well as a flyover of the project area. The first phase was almost 75 miles and the second phase was almost 20 miles along a narrow corridor for a pipeline extending from the LNG terminal roughly 7.5 miles southwest of Lake Charles, Calcasieu Parish, Louisiana to Longville, Beauregard Parish, Louisiana. No cultural resources were identified (Campbell 1979).

LDOA# 22-1926. A Cultural Resources Survey from Sorrento, Louisiana to Mont Belvieu, Texas. AR Consultants performed this investigation in September and October of 1995. Survey consisted of 265 miles of pedestrian survey along a narrow corridor for a pipeline stretching from Sorrento, Louisiana to Mont Belvieu, Texas. No cultural resources were identified (Skinner et al. 1995).

LDOA# 22-4625. A Phase I Cultural Resources Survey for the Proposed Aegis Ethane Header Pipeline Project, Segment 2 Calcasieu, Jefferson Davis, Acadia, Vermilion, Lafayette and St Martin Parishes, Louisiana. Atkins performed this investigation between August of 2013 and September of 2014.



Figure 4.1. Map showing previously recorded sites and cemeteries, and previous surveys within a onemile radius of the project area.



Approximately 1,892.5 hectares were surveyed, with the pipeline beginning in St. Martin Parish, Louisiana and ending in Lake Charles, Calcasieu Parish, Louisiana. Twenty-three sites were newly recorded and three previously recorded sites were relocated. None of these sites are located within a mile of the current project area (Shubert et al. 2015).

LDOA# 22-4682. A Negative Findings Phase I Cultural Resource Survey of the Proposed Custom Metals Telecommunications Tower, Calcasieu Parish, Louisiana. This cellular tower survey was accomplished by MRS Consultants in 2014. No sites were discovered, although a nearby cemetery (Highland Memory Gardens Cemetery) was noted. The tower was determined to have no effect on the cemetery (Freeman 2014).

LDOA# 22-5173. A Phase I Cultural Resources Survey of the Bayou Bridge Pipeline, LLC Bayou Bridge Pipeline Project, Acadia, Assumption, Calcasieu, Iberia, Iberville, Jefferson Davis, Lafayette, St. Martin, St. James, and Vermilion Parishes, Louisiana. This 162-mile-long pipeline survey recorded 19 new sites and revisited eight previous sites (Overfield et al. 2016a). None of these are within one mile of the current project area.

LDOA# 22-5173-1. Addendum I. A Phase I Cultural Resources Survey of the Bayou Bridge Pipeline, LLC Bayou Bridge Pipeline Project, Acadia, Assumption, Calcasieu, Iberia, Iberville, Jefferson Davis, Lafayette, St. Martin, St. James, and Vermilion Parishes, Louisiana. This report represents route alterations since the previous report (Overfield et al. 2016b). Three new sites were discovered and two sites were revisited. None of these are within one mile of the current project area.

The Highland Memory Gardens Cemetery (#3340) is a large cemetery with over 6,000 interments. Two notable people are buried there. Wilson "Boozoo" Chavis (1930-2001) is known as one of the fathers of Zydeco music. Wayne McLaren (1940-1992) achieved fame in the 1970s as the Marlboro Man in commercials. He died of lung cancer. No information could be found on the Leger Road Cemetery (#11773).

No structures appear within the project area on the 1932, 1942, or 1955 Lake Charles 15' series topographic maps. No NRHP listed properties are located within a mile of the project area.

18 - Chapter 4: Previous Research

CHAPTER 5 Methodology and field results

FIELD METHODS

The field survey conducted implemented standard archaeological survey techniques. Full land coverage requirements were achieved through visual inspections of the entire survey area and subsurface testing. While conducting visual inspections, any exposed surfaces were carefully examined for cultural material.

Subsurface testing was performed along 30-m interval transects comprised of shovel tests spaced 30 m apart. Standard shovel tests consist of 30 centimeter (cm) diameter cylindrical holes excavated to the top of the sterile subsoil layer. Soils from each test are screened through 1/4-inch (0.64 cm) hardware cloth for the purpose of recovering any cultural material that may exist at that location. When cultural material is encountered, the material is sorted by provenience and placed into bags labeled with the pertinent excavation information before being transported to TerraX's laboratory. Any archaeological site identified during transecting was further examined in order to better define its horizontal and vertical limits. Delineations were conducted by placing additional shovel tests or cultural features in cardinal directions within the project area. This testing was conducted until two negative shovel tests were encountered in each direction or until delineations extended beyond the project boundary. A hand held Garmin GPS unit was used to record the site center and a sketch map was drawn by compass and pace and plotted to scale. Digital photographs were taken for any site recorded as well as for the survey area.

LABORATORY METHODS AND COLLECTION CURATION

All cultural materials recovered during field projects are delivered to TerraX's laboratory in Tuscaloosa, Alabama for processing. Here, materials are sorted by provenience, cleaned, and analyzed. Along with the cultural material, all project records, photographs, and maps produced while conducting the investigation are transported for curation at the Troy University Archaeological Research Center, Troy, Alabama (Appendix A).

RESULTS OF FIELD INVESTIGATION

The project area was located in a grassy field east of the Lake Charles Regional Airport. It extended north from the airport terminal driveway to the fence surrounding the runway. A notch on the east side has been developed and is now a sheriff's office and a gas station. The crew was not allowed within 150 m of the main runway and 90 m of the branch that extended over the north side of the project area for safety and security reason and as such, all of Transects 33-37 and portions of Transects 30-32 were unable to be excavated.

This Phase I investigation included the placement of 718 shovel tests along 37 transects (Figure 5.1). Of these, 648 were negative, one was positive, and 69 were unable to be excavated due to the security boundary, gravel, or standing water. The typical shovel test was composed of 20 cm of grayish brown (10YR 5/2) silty loam over grayish brown (10YR 5/2) silty clay.

The investigation of the subject property led to the discovery of one archaeological site (Figure 5.2). Site 16CU97, measuring 10 m in diameter, is represented by one positive shovel test (Figure 5.3) and is located in a grassy field (Figure 5.4). Using positive Transect 16, Shovel Test 22 as datum, eight delineation shovel tests were placed at 10-m intervals in cardinal directions to search for any associated artifacts. All tests were negative. A typical shovel test in the site area consisted of 5 cm of brown (10YR 4/3) silty loam over brown



Figure 5.1. Aerial image showing shovel tests within the project area..





Figure 5.2. Map showing the location of Site 16CU97 within the project area.



Figure 5.3. Site 16CU97 sketch map.



Figure 5.4. View of Site 16CU97, facing north.



(10YR 4/3) silty clay. Artifacts recovered from the single positive shovel test consist of brick fragments (n=3), a wire nail, and a fragment of unglazed architectural or industrial ceramic tile (Appendix B). The source of these probable twentieth century artifacts is unknown and they may have been redeposited here. No structures appear in this location on the 1932, 1942, and 1955 Lake Charles, Louisiana USGS 15' series topographic quadrangles. Due to sparse artifacts and lack of features, Site 16CU97 appears to lack research potential and no further work is recommended.

24 - Chapter 5: Methodology and Field Results

CHAPTER 6 Summary and recommendations

TerraX, under contract with SWLA Economic Development Alliance of Lake Charles, Louisiana performed the Phase I cultural resources survey for the proposed Lake Charles Regional Airport expansion project located near Lake Charles in Calcasieu Parish, Louisiana in compliance with federal and state regulations. The Phase I survey was performed from February 28 through March 2 of 2018. The investigation identified one archaeological site, 16CU97. The site represents a small twentieth century artifact scatter, which may be redeposited. Site 16CU97 lacks research potential. Accordingly, no further archaeological studies are recommended for the proposed Lake Charles Regional Airport expansion project.

26 - Summary and Recommendations

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APPENDIX A Curation Agreement



Date: September 30, 2017

Paul Jackson

TerraXplorations 3130 East University Blvd Tuscaloosa Al 34504.

Dear Paul,

As per your request, this letter is to confirm our standing agreement with you to provide curation services to Terra Explorations on an as-needed basis. As you know, we are recognized by a variety of Federal agencies as a repository meeting the standards in 36 CFR Part 79 and have formal agreements to provide curation under these guidelines to multiple federal agencies such as the Army National Guard and Natural Resources Conservation Service.

Please be advised that once a year we must be notified of all reports in which we were named as the repository. Project collections must be submitted within one calendar year of completion. Small projects may be complied for periodic submission. The AHC survey policy specifies which materials must be curated (Administrative Code of Alabama, Chapter 460-X-9). Renewal of this agreement is contingent upon compliance.

We appreciate this opportunity to be of assistance and look forward to working with you in the future.

Sincerely,

ZAM-

Jason Mann Director Archeological Research Center Troy University

APPENDIX B Artifact inventory

Artifact Inventory List

Site	Location	Туре	Count	Weight (g)	Accession #
16CU	197				
ST16 TR22/I/0-27 cmbs					Bag: <u>1</u>
	ferrous metal	wire nail	1	0.0	2018.0322
	undifferentiate	ed brick fragment	3	0.0	2018.0321
	unidentified ce	eramic tile (possibly industrial)	1	0.0	2018.0323
	Lo	cation Totals	5	0.0	
Site To	otals		5	0.0	
Project Totals			5	0.0	