

Exhibit GG. Mouton Site Phase I Cultural Resources Assessment Report





PHASE I CULTURAL RESOURCES SURVEY OF 46.7 ACRES (18.9 HECTARES) IN BROUSSARD, ST. MARTIN PARISH, LOUISIANA

Negative Findings Draft Report

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for

One Acadiana 804 E. St. Mary Blvd. Lafayette, LA 70503

August 2024



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Negative Findings Draft

by

Katt Doucet, Stephanie Banta and Malcolm K. Shuman

Surveys Unlimited Research Associates, Inc. P.O. Box 14414 Baton Rouge, Louisiana 70898-4414

for

One Acadiana 804 E. St. Mary Blvd. Lafayette, LA 70503

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ABSTRACT

From July 15th through July 25th, 2024, Surveys Unlimited Research Associates, Inc. (SURA, Inc.) conducted a Phase I cultural resources survey of 46.7 acres (ac) (18.9 hectares [ha]) in Broussard, St. Martin parish, Louisiana. The Area of Potential Effects (APE) is a part of Township 11 south, and Range 5 east. This survey was undertaken at the request of the One Acadiana as partial fulfillment of the requirements for the Louisiana of Economic Development (LED) Site Certification Program. The indirect APE for the project area is 100 feet (ft) (30.48 meters [m]) with no historic structures 50 years or older within the indirect APE.

The field crew was led by Katt Doucet and consisted of Stephanie Banta, and Jacob Cheng. Katt Doucet, Stephanie Banta and Dr. Malcolm Shuman prepared this report and Dr. Malcolm Shuman served as the principal investigator.

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CHAPTER ONE: INTRODUCTION

From July 15th through July 25th, 2024, Surveys Unlimited Research Associates, Inc. (SURA, Inc.) conducted a Phase I cultural resources survey of 46.7 acres (ac) (18.9 hectares [ha]) in Broussard, St. Martin parish, Louisiana. The Direct APE consisted of an open field with tall grass, thigh high undergrowth and a few trees spread throughout the field. The approximate center of the APE is 602471.41 m E and 3330175.96 m N. The field crew consisted of Katt Doucet, Stephanie Banta, and Jacob Cheng. A total of 193 high probability and 22 low probability shovel tests were excavated. This survey was undertaken at the request of One Acadiana as partial fulfillment of the requirements for the Louisiana Department of Economic Development (LED) Site Certification Program. The indirect APE was 100 feet (ft) (30.48 meters [m]).

The following chapters in this report describe the environmental setting, previous archaeological investigations, the methodology employed in the survey, the survey's results, and the study's conclusions and recommendations.



Figure 1. Topographic Quadrangle of Youngsville, LA 7.5-minute map (Source: USGS).

CHAPTER TWO: LAND USE HISTORY

Geology and Geomorphology

The project area is located on the west side of the Atchafalaya Basin, on the eastern edge of the Pleistocene Prairie Terrace bordering the alluvial plain of the Mississippi Valley; this area is transitional between the Holocene alluvial valley to the north and the deltaic plain to the south (Robblee et al. 1999:8). The most relevant geomorphological process has been the Mississippi River's change from the Teche Delta about 2,000 years ago to the LaLoutre Delta to the east (Gagliano 1984). The project area and environs have relatively flat topography and are well to poorly drained (Daigle et al. 2006; Glass 2022).

The two types of soils located within the direct APE are Memphis silt loam (Mh) and Memphis-Frost complex soil (Mp). They are both characterized as frequently flooded, well drained, and prime farmland.



Figure 2. Soil map of APE (University of California, Davis 2016/Google Earth).

Animal life is diverse and most of the 62-mammal species found in Louisiana may at one time have been found within the area. These include white-tail deer (*Odocoileus virginianus*), cottontail rabbit (*Sylvilagus floridanus*), swamp rabbit (*Sylvilagus aquaticus*), gray squirrel (*Sciurus carolinensis*), fox squirrel (*Sciurus niger*), skunk (*Mephitis mephitis*), black bear (*Euarctos americanus*), raccoon (*Procyon lotor*), mink (*Mustela vison*), beaver (*Castor canadensis*), opossum (*Didelphus virginiana*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*) and red fox (*Vulpes fulva*) (Lowery 1974). Birds include such predators as the great horned owl (*Bubo virginianus*), barred owl (*Strix platypterus*), marsh hawk (*Circus cyaneus*), and many others. Non-predatory types include woodcocks (*Philohela minor*), wood ducks (Aix sponsa), bobwhite quail (*Colinus virginianus*), and mourning doves (*Zenaidura macroura*) (Lowery 1955).

Reptile life is particularly diverse, owing to the heterogeneity of habitats in the area. Included are alligators (*Alligator mississippiensis*), several species of snakes, including the cotton mouth (*Agkistrodon piscivorus*), and varied species of lizards and turtles. Amphibians include species of salamanders, frogs, and toads (Dundee and Rossman 1989).

Fish life is very prolific in this part of Louisiana and no doubt was likewise prehistorically. Prominent fish species are gar (*Lepisosteus spp*), largemouth bass (*Micropterus salmoides*), and bluegill (*Lepmis macrochirus*), among many others.

A review of historic topographic maps from USGS shows several highways developing around the APE, and distributaries of Cypress Bayou spreading and receding within the APE and the surrounding area. Many structures have come and gone, and new roads have been developed (Figure 6).

Topographic Maps

Beginning in 1939, United States Highway (US Hwy) 175 runs west to east directly south of the APE, branching north to US Hwy 236 in the northwest and US Hwy 235 in the east. La Salle Coulee can be seen south of the APE and highway, running west to east, and small seasonal distributaries of the Cypress Bayou surround the APE. A small road runs south to north from US Hwy 175 along the southeast border of the APE, leading to two standing structures. The APE is surrounded by many roads and structures. Hwy 182 can be seen northeast of the APE, running northwest to southeast.



Figure 3. Portion of 1939 St. Martinville, LA 15-minute map (Source: USGS)

By 1970, the seasonal distributaries of the Cypress Bayou spread southward through much of the APE and surrounding area. I-90 has been developed running north to south just west of the APE. New roads and structures have appeared in the surrounding area, and some previously visible structures are no longer seen. What was previously labeled as US Hwy 175 is now labeled as US Hwy 92.



Figure 4. Portion of 1970 St. Martinville, LA 15-minute map (Source: USGS)

By 2012, many of the seasonal distributaries of Cypress Bayou have receded with only two distributaries remaining in the northern portion of the APE. More roads have been developed surrounding the APE.



Figure 5. Portion of 2012 Youngsville, LA 7.5-minute map (Source: USGS)

Satellite Imagery

Beginning in March 1998, most of the areas surrounding the direct APE in all directions are developed, including Highway 90 E (Evangeline Thruway) to the west of the direct APE, traveling north to south and several other roadways to the west, south, and east of the direct APE. Tree coverage is present to the east of the northern portion of the direct APE. A waterway runs from northwest to southeast through the northern portion of the direct APE with a dense forested area present to the north of the waterway. The majority of the direct APE appears to be cleared.



Figure 6. Satellite imagery of the Direct APE, March 1998 (Source: Google Earth).

By February 2004, further development had been made to the west of the direct APE. The tree coverage to the east of the northern portion of the direct APE had become denser. No other changes are present at this time.



Figure 7. Satellite Imagery of the Direct APE, February 2024 (Source: Google Earth).

By October 2007, the dense forested area north of the waterway in the northern portion of the direct APE had been cleared. A razed area is also present to the west of the southern portion of the direct APE. No other changes are present at this time.



Figure 8. Satellite Imagery of the Direct APE, October 2007 (Source: Google Earth).

By August 2009, a new development is present to the west of the southern portion of the direct APE. No other changes are present at this time.



Figure 9. Satellite Imagery of the Direct APE, August 2009 (Source: Google Earth).

By October 2010, a structure is present within the northern portion of the direct APE, along with two fenced in areas north of the structure. The entirety of the direct APE had also been cleared of vegetation. No other changes are present at this time.



Figure 10. Satellite Imagery of the Direct APE, October 2010 (Source: Google Earth).

By January 2024, two new manmade water features had been developed to the east of the northern portion of the direct APE. A development is also present to the north of the direct APE. No other changes are present at this time.



Figure 11. Satellite Imagery of the Direct APE, January 2024 (Source: Google Earth).

CHAPTER THREE: PREVIOUS INVESTIGATIONS

Projects within 1 mi (1.6 km) of Project Area

There are 4 projects recorded within 1 mile (mi) (1.6 kilometers [km]) of the APE boundaries. These surveys are compiled in Table 1 and their proximity to the APE is depicted in Figure 13.

Report No.	Report Title	Contractor	Author(s)	Type of Survey	Date
22-2455	Intensive Cultural Resources Survey, I-49 South, Route US 90: Lafayette Regional Airport to Route LA 88, Lafayette, St. Martin, and Iberia Parishes, Louisiana.	Earth Search, Inc.	South, Barry, Mary E. Weed, J. Treffinger, J. Yakubik, B. D. Maygarden, P. Heinrich, A. L. Lee, G. Lazaras, D. R. Gray, E. Poitevent IV, M. Godzinski, W. Bosma, R. L. Smith, K. B. Lintott, M. Seward, and G. Gordon	Phase I	2005
22-2483	A Phase I Cultural Resources Management Survey for the Proposed St. Martin Parish Business and Industrial Park St. Martin Parish, Louisiana	HRA Gray & Pape, LLC	Barber, Michael, Maureen Meyers, and James Hughey	Phase I	2002
22-4625	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	Atkins	Darren Schubert, M.A., Robert Rowe, M.A., Michael Nash, M.A., Dana Brown, and Krista Flores	Phase I	2013- 2014
22-6353	A Phase I Cultural Resources Survey for the Proposed Spanish Trail Industrial Park in St. Martin Parish, Louisiana	TerraXploration, Inc.	Amy Carruth	Phase I	2019

Table 1. Projects within 1 mi (1.6 km) of APE.

There are 7 previously recorded archaeological sites within 1 mi (1.6 km) of the APE. These sites are compiled in Table 2 and their proximity to the APE is depicted in Figure 13.

Site No.	Name	Component(s)	Culture(s)	Function	NRHP Status	Last Visited
16LY103	Cameron Zoo Site	Historic	Historic	Domestic	Ineligible	2004
16LY105	Cypress Bayou Site	None	None	Unknown	Ineligible	2004
16LY110	149-W-06	Historic	Historic	Domestic	Ineligible	2005
16LY111	All Cranes Site	Historic	Historic	Domestic	Ineligible	2001
16LY141	None given	Historic	Industrial and modern (1890-)	Unknown, historic	Ineligible	2013
16SM97	SMEDA site 1	Historic	Industry to modern	Historic trash scatter	Ineligible	2002
16SM120	Temp Site SC1	Historic	War & Aftermath 1860-1890; Industrial & Modern 1890-	Unknown, historic	Ineligible	2014

Table 2. Archaeological Sites within 1 mi (1.6 km) of APE

There are no previously recorded historic standing structures located within 1 mi (1.6 km) of the APE.



Figure 12. Map of known archaeological surveys, sites, and historic standing structures within 1 mi (1.6 km) of project area (LDOA).

CHAPTER FOUR: METHODOLOGY

Procedures

Methodology for the cultural resources survey included archival research and fieldwork. Initially, historic maps and aerial photographs at the United States Geological Survey (USGS) were consulted to determine any structures or roads that might have existed on the property in the early and mid-twentieth century. In addition, the site files and report library of the Louisiana Division of Archaeology were examined to determine archaeological sites reported for this area by previous investigators. The probability of the transects were determined by proximity to historic roads and waterways. Portions of the APE exceeding a 328 ft (100 m) distance of these roads were determined to be low probability while areas within 328 ft (100 m) of historic roads were determined to be high probability. The survey methodology consisted of systematic shovel testing for high and low probability areas. High probability transects were spaced 98.4 ft (30 m) apart with a shovel test dug every 98.4 ft (30 m). Low probability transects were spaced 164 ft (50 m) apart with a shovel test dug every 164 ft (50 m). All shovel tests were excavated to 50 cm or clay, whichever came first. Material recovered from the shovel tests was screened using .25-inch hardware cloth. When archaeological sites are discovered, they are defined using the protocol described in the Louisiana Division of Archaeology Guidelines.

Each cultural resource site found is assessed per current National Register of Historic Places (NRHP) criteria, as given below.

Eligibility for the National Register of Historic Places

According to the National Register of Historic Places Bulletin 15 (1995:2), "The quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association are potentially eligible for the National Register of Historic Places." To evaluate this significance, four criteria have been developed. Eligible properties...

- "A. ... are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. ... are associated with the lives of persons significant in our past; or
- C. ... embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or...
- D. ... have yielded, or may be likely to yield, information important in history or prehistory" (NRHP 1995:2).

For negative findings report:

As no cultural materials were recovered, no artifacts are to be curated; however, all project documents will be deposited with the Louisiana Division of Archaeology at:

LDOA Curation/CRT Central Plant North Building, 2nd Floor 1835 N. Third Street Baton Rouge, Louisiana 70802

CHAPTER FIVE: RESULTS OF THE SURVEY

Fieldwork

Field survey was conducted from July 15th through July 25th, 2024. The APE consisted of an open field with tall grass, thigh-high undergrowth and 3 to 4 trees spread throughout the field. A total of 193 high probability shovel tests and 30 low probability shovel tests were excavated during the initial survey (Figure 7). Table 3 depicts representative Munsell soil profiles for the APE.



Figure 13. Aerial photograph depicting shovel tests and transects of the APE (Google Earth).

Location	Depth	Munsell	Description
TS HP 23 ST 1	0-50 cmbs	4/2 7.5 YR	Brown Clay
TS HP 22 ST 1	0-50 cmbs	5/2 7.5 YR	Brown Clay
TS HP 19 ST 4	0-50 cmbs	5/3 7.5 YR	Brown Clay
TS HP 9 ST 5	20-50 cmbs	3/1 7.5 YR	Very Dark Grey Clay
TS HP 10 ST 7	20-50 cmbs	4/4 7.5 YR	Brown Clay

Table 3. R	epresentative	Munsell	Soil Profiles.



Figure 14. Tall grass within the northern portion of the direct APE, facing west.



Figure 15. Tall grass and thigh high undergrowth within the northern portion of the direct APE, facing south.



Figure 16. Open field in the southern portion of the direct APE, facing south.



Figure 17. Tall grass within the southern portion of the direct APE, facing west.



Figure 18. Tall grass within the southern portion of the direct APE, facing east.



Figure 19. Tall grass within the direct APE.



Figure 20. Creek running through direct APE, facing west.



Figure 21. Modern barn within direct APE, facing southeast.

The indirect APE is determined to be 100 ft (30.5 m); in any case, the adjacent subdivision to the east is less than 45 years old. The few historic structures adjacent to the direct APE have all been levelled and replaced by more modern structures.



Figure 22. Depiction of proximity of standing structures to the Direct APE.

From July 15th through July 25th, 2024, 193 high probability and 30 low probability shovel tests were excavated. The direct APE consisted of an open field with tall grass, thigh high undergrowth and 3 to 4 trees spread throughout the field.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

From July 15th through July 25th, 2024, Surveys Unlimited Research Associates, Inc. (SURA, Inc.) conducted a Phase I cultural resources survey of 46.7 ac (18.9 ha) in Broussard, St. Martin Parish, Louisiana, consisting of tall grass and undergrowth. A total of 193 high probability shovel tests and 30 low probability shovel tests were excavated. There were no cultural resource sites discovered and there were no historic standing structures within the indirect APE. As a result, we recommend that, from the standpoint of cultural resources, the tract surveyed be considered to meet the criteria for certification.

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