PHASE I CULTURAL RESOURCE ASSESSMENT OF TWO PARCELS IN THE JOHN C. STENNIS SPACE CENTER, HANCOCK COUNTY, MISSISSIPPI

SARAH E. PRICE

WIREGRASS ARCHAEOLOGICAL CONSULTING

PHASE I CULTURAL RESOURCE ASSESSMENT OF TWO PARCELS IN THE JOHN C. STENNIS SPACE CENTER, HANCOCK COUNTY, MISSISSIPPI

REPORT Prepared For:

Ecological Asset Management, LLC 724 Dunbar Avenue Bay St. Louis, Mississippi 39520

Prepared By:



WIREGRASS ARCHAEOLOGICAL CONSULTING

Sarah E. Price, Principal Investigator

forah E. F.

Project Number 2016.058 ARPA Permit No. DACW1-4-17-0713 February 2017

List of Figuresiii
List of Tablesiv
Introduction1
Project Description and Environmental Setting1
Site Context and Previous Research14
Methods
Results
Conclusions
References Cited55
Appendix A59
Appendix B62

TABLE OF CONTENTS

(Cover photo: "Lumberjacks in Hancock County" no date, Hancock County Historical Society)

LIST OF FIGURES

1.	Location of Parcels A and B	2
2.	2016 aerial imagery of the two survey parcels	3
3.	Geology and topography of the project tract	5
4.	Hydrology in the project tract and vicinity	7
5.	Intermittent standing water in Parcel A	8
6.	Large inundated area associated with intermittent stream in Parcel B	8
7.	Water seeping out of the hillside above Turtleskin Creek in Parcel A	9
8.	Edge of floodplain in southeast portion of Parcel B	9
9.	Project tract soils	10
10.	Gallberry and yaupon thicket in Parcel B	11
11.	Gallberry and yaupon thicket in Parcel A	12
12.	Young pines in wet grass savannah-like setting on edge of gallberry in Parcel A	12
13.	Mature pine and sweetbay with open understory just outside of a drainage in Parcel B	13
14.	Powerline ROW in southern portion of B with grasses and sedges	13
15.	BLM PLSS land patents crossing Parcels A and B	16
16.	Real property acquisitions in relation to survey parcels A and B	
	of the current project tract	24
17.	Historical topographic quadrangle and aerial views of structures described	
	in real estate appraisals	26
18.	Structure in Tract 238, possible correlate to 1957 topographic structure	27
19.	Structures located in Tract 248 at the time of acquisition	27
20.	1930 USDA soil survey map and historical railroads	29
21.	2016 aerial imagery with historical railways	30
22.	Survey efforts in Parcel A	32
23.	Looking east at the concrete pad and loading station	33
24.	Looking north from the loading platform	33
25.	Survey efforts in Parcel B	34
26.	Example of culvert in Parcel A	40
27.	Clearcut boring land in Parcel A	40
28.	Another clearcut through a very wet area in Parcel A	41
29.	Road in Parcel A running through a very wet area	41
30.	Cleared boring line in Parcel B	42
31.	Old road in Parcel B	43
32.	Tree falls in Parcel B wetland	43
33.	Isolated Find (IF) #1 site map	44
34.	View of the utility line off which IF #2 is located	45
35.	Isolated Find (IF) #2 site map	46
36.	Ditch where IF #2 surface collection came from	46
37.	Beverage containers from IF #2	47
38.	Sites 22HA785 and 22HA786 site map	48
39.	View of site 22HA785	49

40. Site 22HA785 artifacts	49
41. Site 22HA786 site map	51
42. Herty cup from 22HA786 datum positive shovel test	52
43. View of 22HA786 from clearcut near the datum test	52
44. Site 22HA786 surface collected assemblage	53

LIST OF TABLES

1.	Summary of Archaeological Surveys within One-Mile of the Two Parcels	14
2.	Previously Recorded Archaeological Sites Within One-Mile of the Two Parcels	15
3.	Original Land Patent Records for the Current Survey Parcels	17
4.	Glass Colors and General Date Ranges of Production	35
5.	Penny Weights of Nails and General Use Groups	37

INTRODUCTION

Wiregrass Archaeological Consulting was contracted by Ecological Asset Management, LLC (client) to conduct a Phase I Cultural Resources Assessment of two parcels, totaling ±400 acres, located in the John C. Stennis Space Center (SSC) in Hancock County, Mississippi. These two parcels will be used for test well borings. This work was undertaken at the request of the client, prior to review by the Mississippi Department of Archives and History (MDAH), therefore there is no MDAH project number assigned as of this report writing.

Fieldwork was conducted by Sarah E. Price, who also served as principal investigator, Justin Stickler, Andrew Culp, Hamilton Bryant, and Ben Stewart, beginning January 10, 2017, and completed on February 1, 2017; 11 days were spent in the field conducting survey work. Generally, there were no impediments to conducting the archaeological survey. The SSC is generally a low-lying area, and for much of the year standing water is present at the ground surface, and several heavy rain storms further inundated some areas of the project tract.

Several federal laws require this assessment, including Sections 106 of the National Historic Preservation Act of 1966, as amended, and associated implementing regulations (36 CFR, Part 800); the National Environmental Policy Act (NEPA); and reporting standards outlined in the MDAH *Guidelines for Archaeological Investigation and Reports in Mississippi* (Sims 2001); hereinafter referred to as MDAH Survey Guidelines. An After-the-Fact Archaeological Resource Protection Act (ARPA) permit was obtained by Wiregrass Archaeological consulting from the U.S. Army Corps of Engineers, Mobile District on January 27, 2017 (Permit No. DACW01-4-17-0713). Michael P. Fedoroff, Mobile District USACE Environmental Team, facilitated obtaining the ARPA permit. Adam Murrah is the installation Historic Preservation Officer, and worked closely with the USACE and contractors to complete this project.

PROJECT DESCRIPTION AND ENVIRONMENTAL SETTING

The project tract is located in Hancock County, in the John C. Stennis Space Center, Mississippi. The SSC is north of Interstate 10, and south of Texas Flat Road. The client provided shapefiles for two parcels designated A (north) and B (south). Parcel A is completely within Section 29 of Township 7 South, Range 16 West on the *Nicholson* and *Dead Tiger Creek* 7.5' USGS quadrangles (Figure 1). Parcel B crosses portions of Sections 29, 31, 32, and 37 (irregular, Spanish Land Grant) in Township 7 South, Range 16 West, and is mainly located in the *Dead Tiger* Creek quadrangle, although the northwest corner crosses the *Nicholson* quadrangle as well (Figure 1).





Figure 1. Location of Parcels A and B.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Figure 2. 2016 aerial imagery of the two survey parcels.

Topography and Geology

Hancock County lies within the Coastal Pine Meadows region, of the Gulf Coastal Plain physiographic province, which extends north from the Gulf for about 20 km. The Coastal Pine Meadows lie between the Gulf and the Long Leaf Pine Hills to the north, and are generally low-lying with a few areas of slight relief (MGETS 1919:33). Elevations are generally lower than 50 ft AMSL and the terrain slopes to sea level on a south-trending grade. Ground water lies near the surface and forms many marshes and swamps which tend to parallel the coastline. The only topographic reliefs are relic sand dunes, and can be 10 to 15 ft above the surrounding terrain.

Elevations within the current project tract range from a low of 15 ft AMSL to a high of 30 ft AMSL (Figure 3). Parcel A has more relief than Parcel B, and contains a small portion of the Turtleskin Creek terrace, as well as a ridge crest. Parcel B is almost completely flat with the only contour line at the 30 ft AMSL on the north side, and dropping to 25 ft AMSL in the southeast corner.

The surficial geology is mapped as the Prairie Formation which is a Pleistocene age deposit (Figure 3). This is a fluvial/alluvial deposit laid down during a period of higher sea level (20-25 ft above present levels) that formed floodplains, and continued to be deposited in the Coastal Plain after the Sangamon inundation subsided (Otvos 1982). This formation underlies present day marshes in coastal Mississippi. Pellegrin (1978) makes the argument that the stratigraphic sequence is actually more complex and that there were three periods of high sea levels, and the unit has a more complex lithology.

There are no known sources of knappable rock within the Prairie Formation, but the older Citronelle Formation to the north certainly contains Citronelle cherts and quartz gravels that could have been exploited by prehistoric people. These raw materials typically occur as deposits in streams and rivers, although they tend to be fairly small this far south in the deposit. Hendryx et al. (2011:Figure 2.1) documented some very dense Citronelle bars in Hancock County, but did not specify a location. It is generally known that Citronelle gravels are mined in Hancock County. A search of Google Earth imagery of the project tract, and adjacent drainages to the northwest in the Citronelle Formation, did not reveal any possible point bars or other lag deposits.





Figure 3. Geology and topography of the project tract.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36



Hydrology

The current survey parcels are located in the Mikes/Pearl River Basin, specifically Lower Pearl Watershed. A first-order intermittent stream runs northeast/south across the southeast portion of Parcel B (Figure 4). A fourth-order perennial tributary of Turtleskin Creek runs around the east end of Parcel A, and just outside the southern boundary (Figure 4).

The client provided preliminary wetland shapefiles based on their Phase I survey, and these data are shown in conjunction with the National Wetland Inventory (NWI) dataset in Figure 4. The NWI dataset indicates that the majority of the two parcels are wetlands. Based on the SWI decoder (NWI 2017), all but a small area is classified as Freshwater Forested/Shrub. More specifically, a palustrine system, dominated by trees (needle-leaved evergreens), shrubs (broad-leaved deciduous), and seasonally saturated. A small, 0.8-acre freshwater, emergent wetland is mapped in Parcel A. In summary, as expected based on prior work in the area and topography, the project tract parcels encompass large areas of low-lying, seasonally flooded wetlands.

Most of the hydrological features encountered during fieldwork were either isolated inundated areas, or large swaths of standing water. Figure 5 is of an isolated intermittent area of standing water in Parcel A. Figure 6 is of a much larger area of standing water, not directly associated with a stream, in Parcel B. The sideslope above Turtleskin Creek in Parcel A was seeping water, and the floodplain was completely inundated during the first and last week of fieldwork (Figure 7). The floodplain above the unnamed drainage in Parcel B contained about 6 in. of standing water at the edges, and water was flowing during fieldwork (Figure 8).

Soils

The mapped soils in the two parcels can be broken into two broad categories: hydric, and nonhydric (Figure 9). The series that are classified as hydric by the USDA (1981) include Atmore silt loam, and Smithton fine sandy loam, where the water table is within 15 cm of the ground surface, and the areas are frequently flooded. Soil series that are non-hydric include: Escambia silt loam (0-2% and 2-5% slopes), Eustis loamy fine sand (2-5% slope), Harleston fine sandy loam (2-5% slope), Poarch fine sandy loam (2-5% slope), and Saucier-Susquehanna complex (2-5% slope).

The Atmore series (At) consists of poorly drained silty loam and is found on wet, flat but upland landforms. This series is mapped across most of Parcels A and B. The Smithton series (Su) is also a poorly drained, and frequently flooded, soil found on broad wet flats, drainage ways, and stream terraces. This series is mapped in the drainageways of Parcels A and B.

The non-hydric soils include series from the Escambia (EsA, EsB), Eustis (EuB), Harleston (HIB), Poarch (PoB) association, and the Saucier-Susquehanna (ScB) complex. These series are typically loam to fine sandy loams, with slopes between 0 and 5 percent, with the exception of the Saucier-Susquehanna complex which can be between 2 and 12 percent in the current project tract. These soils, while not considered hydric, vary from somewhat poorly drained in the Escambia series, to moderately well drained.





Figure 4. Hydrology in the project tract and vicinity.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36



Figure 5. Intermittent standing water in Parcel A.



Figure 6. Large inundated area associated with intermittent stream in Parcel B.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Figure 7. Water seeping out of the hillside above Turtleskin Creek in Parcel A.



Figure 8. Edge of floodplain in southeast portion of Parcel B, earthen embankment and drainage pipe present.





Figure 9. Project tract soils.



Vegetation

Located in the Gulf Coast Flatwoods of the Southern Coastal Plain ecoregion, this portion of Mississippi naturally is a low-lying strip of level terraces and wet, broad depressions. Harper (1914:559) made what he considered to be scientific observations of the "Pine Barrens" flora (from a moving train) and included: long leaf, loblolly, and slash pines, swamp tupelo, magnolia, turkey, blackjack and southern red oak and a plethora of other smaller trees, shrubs and "herbs."

The two parcels encompass large expanses of young loblolly pines with a dense understory of gallberry and yaupon (Figures 10-12). The wetlands are the most diverse, with more mature pine, sweetbay, and magnolia, and typically lack the dense understory of the "uplands" (Figure 13) Secondary vegetation includes a variety of oaks, river cane, pitcher plants, mosses and lichens, cat brier, St. Johns wort, grasses and sedges. The southern portion of Parcel B is traversed by a utility line Right-of-Way (ROW) and most of the area is inundated with a dense mat of grasses and sedges (Figure 14).



Figure 10. Gallberry and yaupon thicket in Parcel B.





Figure 11. Gallberry and yaupon thicket in Parcel A.



Figure 12. Young pines in wet grass savannah-like setting on edge of gallberry (background) in Parcel A.





Figure 13. Mature pine and sweetbay with open understory just outside of a drainage in Parcel B.



Figure 14. Powerline ROW in southern portion of B with grasses and sedges.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36

SITE CONTEXT AND PREVIOUS RESEARCH

A search of various datasets was completed prior to fieldwork, including the National Register of Historic Places (NRHP 2017) for Hancock County, and the MDAH online mapper (sites, surveys, structures, and Mississippi Landmarks). Additionally, historical documents and maps were examined to determine the potential for prehistoric and historical resources in the project area.

Previously Recorded Sites and Surveys

A review of the National Register of Historic Places (NRHP) indicates there are no NRHP properties in the project vicinity. The Rocket Propulsion Test Complex is the closest NRHP resource, and it is located 2.5 miles southeast of Parcel B.

There are three previously recorded archaeological sites within a one-mile radius of the project tract: 22HA531, 22HA627, and 22HA682. There are no Mississippi Landmarks or Local Designations within one mile of the project tract.

Portions of two previously completed surveys cross the current project tract: 88-082 (Parcel A) and 98-201 (Parcel B). The survey completed by the U.S. Army Corps of Engineers (USACE 1988:9) covered targeted areas within the fee-area of Stennis, but it appears that no subsurface testing was conducted, and no cultural resources were located.

Lauro (1998) conducted a survey of two tracts, one that crosses Parcel B, and in a letter report states that shovel tests were excavated at 25-30 m intervals and "Approximately 70% of all shovel tests were screened through ¼-inch mesh." This survey also failed to locate any archaeological sites or standing historical structures.

Three surveys have been conducted within a one-mile radius of the two project tract parcels (Table 1). Two of the survey located archaeological sites, and one historical standing structure, but none of the resources were recommended as potentially eligible for listing on the NRHP.

Survey			_	
No.	Author	Title	Resources	NRHP
13-0080	Hendryx, Greg et al.	CRS of sixty five arce [sic] at the navy western maneuver area training range Phase I CRS and Arch Inventory of the MS Portion of the Proposed Tri-State Pipeline Replacement Project, Hancock	22HA728	Ineligible
10-0716	Athens, William	and Harrison Counties, MS, plus Addendum 1	22HA706; Structure HSS-AR09-01	Ineligible
98-135	Lauro, James	Cultural Resources Survey of Two Tracts of Land Hancock County, MS	No resources	n/a

Table 1. Summary of Archaeological Surveys within One-Mile of the Two Parcels



There are three previously recorded archaeological sites within a one-mile radius of the current project tract (Table 2). Two of the sites have been recommended as ineligible for listing on the NRHP, and one has an unknown eligibility. There is no associated report, it appears to site location was volunteered, and no elaboration on why this site may or may not be significant.

		-	NRHP	
Site No.	Site Name	Recorded	Status	Components
22HA531	Turtleskin	Jean Hartfield	Unknown	Middle Woodland, Historical
22HA682	Marco's Hill	Marco Giardino	Ineligible	Historical
22HA627	n/a	Jim Lauro	Ineligible	Historical

 Table 2. Previously Recorded Archaeological Sites Within One-Mile of the Two Parcels

One Historic Resource, the Central Control Center and Von Braun Tower (Inventory # 045-BSL-6004), is located within a mile of the current project tract. No photographs or architectural sheet of this structure are available on the MDAH (2017) website, but the fact sheet states it was constructed in 1965.

Historical Background Check

Aside from the logging towns that grew along the Pearl River and the coastal habitation, most of the interior portion of Hancock County was very sparsely populated. To the east of the current project tract was a post-removal Choctaw settlement, occupied from at least 1837 to the early 1900s (Mikell 2013; Price 2013, 2017). Historical research and documents for that project conducted by this author were examined and utilized in this project, but there is no evidence in the form of Choctaw scrips or other documents that the current project tract was settled by historical Choctaws.

Table 3 and Figure 15 contain a summary of patents and land grants issued for parcels that are crossed by Parcels A and B. Two sections, 31 and 37 (and, yes that is a real number) were pre-PLSS land grants crossed by Parcel B. Section 37 was originally settled by a William Langston in March 1805, but settled by Littlebury West as of February 1813. West was granted the section, and that claim was later formalized by the U.S. Government in 1951. Hercules O'Connor was the original claimant to Section 31, a Spanish Ordinance Survey made on November 15, 1806. His descendent, Mark, made the claim but a note in the ASP states: O'Connor's order of survey does not specify the place; and it is doubtful whether Grand Pret [sic] had any jurisdiction where the land lies." The remaining parcels of property were claimed in more traditional ways, either through cash sales or homestead patents.





Figure 15. BLM PLSS land patents crossing Parcels A and B.



Tract	T/R/S	Lot/Tract	Name	Date	Authority
	7S/16W/S29	Lot 1	Nicholas H. Langston	9/20/1873	1862 Homestead
		Lot 2 (N1/2)	Enoch McFadden	5/2/1859	1820 Cash Sale
Parcel A		Lot 2 (S1/2)	William S. Smith	7/28/1911	1862 Homestead
		Lot 3	Thomas Leonard	5/2/1859	1820 Cash Sale
		Lot 4	Benjamin Leonard	5/2/1859	1820 Cash Sale
	7S/16W/S29	Lot 5	William H. Brown	9/1/1846	1820 Cash Sale
		Lot 6	Nathan Casher	3/30/1882	1862 Homestead
Parcel B	7S/16W/S32	Lot 2	James T. McQueen	5/5/1910	1862 Homestead
	7S/16W/S31	Claim No. 33	Mark Oconnor, Hercules	10/24/1951	
			Oconnor		
	7S/16W/S37	Claim No. 26	Littlebury West	10/31/1951	

Table 3. Original Land Patent Records for the Current Survey Parcels

Langston Family

Nicholas H. Langston was born around 1846 in Hancock County. As of the 1850 census he was four, living with his parents John and Mary, in the vicinity of the Gainesville Post Office. It does not appear that his father ever filed for land in Hancock County, as Nicholas is the only Langston in the GLO records. There is a William Langton [sic], who filed for land in Section 37 under the Littlebury West claim, but his possible relationship to Nicholas is not known from available historical records. Nicholas' father is listed as having no occupation, with a personal value of \$250. He stated that he was originally from Georgia.

The 1860 census for Hancock County is non-extant, so the next historical record for the Langston family is the 1870 census. His mother, Mary, is the head of household and Nicholas is still residing at home, along with four younger siblings. The family is still enumerated near the Gainesville Post Office. Jeff, the youngest child was seven, so John must have died sometime after 1863. There are four Langstons buried in Hancock County cemeteries, none of which are any of this family. Logically, this would seem to indicate that John W. died in the Civil War, but examination of Civil War service records (Ancestry, Fold3) failed to yield a match. There are several John and John W. Langstons that served in the Confederate Army, none are old enough to be Nicholas' father or lived in the correct place. None of the Langston family have occupations listed, and no personal or real estate values were recorded. The entire family disappears from historical records after the 1870 census enumeration. None of the family members are included in the Catholic Church Records (marriages, deaths and obituaries, baptisms) for Hancock County, or the Deeds Books.

McFadden Family

An Enoch McFadden filed a patent for land in Parcel A in 1859 as a cash sale. This person could be Enoch Sr., or Jr., as there is a father/son in Hancock County from the 1830s onward. Enoch, Sr., born around 1808 in Kentucky, was in Louisiana for a time where he married Rebecca Cochran. They then resided in either Concordia, Louisiana or Hancock County from 1830 onwards



until their deaths in 1872 and 1885, respectively. There are census records for both places in 1830, so it may be that they held property in Hancock County prior to moving there.

Enoch, Jr., was born around 1834 in Hancock County, the third child of eight. His older brother Milton patented 160 acres just north of the Enoch claim on the same day (May 2) in 1859. In the 1850 census, Enoch is a teenager, residing at home in the Gainesville census district. His father is listed as a farmer, with a \$2000 estate, relatively well-off relative to his neighbors. Milton and Enoch, Jr. are listed as students. The 1850 slave schedule shows Enoch, Sr. owning three slaves, down from five in the 1840 census. Interestingly, the slaves are listed in the Habolochitto, not Gainesville, district. It is unfortunate that the non-population schedules (agriculture and industry) are not extant for Hancock County as this could provide additional insight into where and what the McFadden family was doing between 1850 and 1880.

Enoch Jr., along with his brother James, served in the Union Army during the Civil War. Enoch, Jr. mustered into Company A of the New Orleans Infantry as a 1st Sergeant in 1864. James died in service in 1864, and Enoch served until 1866. Of all the muster cards from his three years in service, he was only absent one time in September and October of 1865 on furlough. This particular regiment guarded the defenses of New Orleans and in the La Fourche district for the duration of the war. After the war, Enoch Jr., married Julia Mayer in Catahoula Parish on August 11, 1867. Based on his service records, marriage, and lack of Hancock County census records after 1850, it would appear that Enoch Jr. lived in Louisiana as an adult and the land patent belonged to his father.

The 1870 census shows Enoch Sr., his wife Rebecca, son Milton and daughter Georgianne, residing together in the "Not Stated" district of Hancock County near the Gainesville Post Office. There is no occupation or personal/real estate values listed for any of them. Enoch, Sr. died in 1872, and is buried in the Turtleskin Cemetery, which is located just northeast of Parcel A.

By the 1880 census, Enoch, Jr. is a head of household in Gainesville District, with his second wife Elizabeth (Julia appears to have died just after 1870), their one year old son John, and his mother Rebecca. Very little additional information is included by the census taker, other than Enoch is a farmer. Rebecca died in 1885 and is buried in Turtleskin Cemetery next to Enoch, Sr. What happened after this point in time is somewhat of a mystery. Enoch, Jr., may have died between the 1880 and 1900 census enumerations, as he is nowhere to be found. Milton moved to Texas, and he appears to have sold his land to his father (HCHS 2017), but the disposition of his father's land is unknown.

What is apparent from the historical records is that Enoch McFadden, and various members of his family resided in the project tract vicinity from at 1840 to 1885, when Rebecca was buried in Turtleskin Creek. Since only a portion of Lot 2 (North half) is within Parcel A, it is unknown if the McFadden residence was located there. There is also the issue of the McFadden slaves being



included in the Hobolochitto district. Hobolochitto/Habolochitto as a Post Office was located at Kimball's Store, which is well north of the current project tract and the McFadden tract, but the McFadden's do not appear to have owned property there.

Smith Family

A William S. Smith fulfilled an 1862 homestead patent on July 28, 1911. There are multiple people named William S. Smith in Hancock County that were alive and old enough to have filed a homestead claim in 1911. The same William S. Smith filed claims for 120 contiguous acres in Section 28 in 1904. The Hancock County Historical Society records are of no additional help as there are even more William S. Smith and William Smiths included in their records, with no way of discerning which one was associated with this particular land patent. There is no person named William Smith interred in any cemetery in Hancock County, the closest burial with this name is located in Pearl River County. It is beyond the scope of this project to research this further, particularly when no archaeological resources were found within the Smith parcel.

Leonard Family

Thomas and Benjamin Leonard entered patents for Lots 3 and 4, respectively, on May 2, 1859 as Cash Sale entries. (These patents from May 2 were likely sold at a public auction, as is often the case with multiple entries from the same date.) These two men were likely brothers (Thomas had a son named Thomas, born in 1846) from North Carolina originally. There are some records for the Leonard brothers in Alabama, prior to 1840 when they appear together in Hancock County, Mississippi. Benjamin was born around 1806, and Thomas about four years later. When and why they came to Mississippi is unknown, family histories do not specify, but it appears their oldest brother Jacob inherited their father's estate so perhaps they left to build their own fortunes.

Enumerated in the Gainesville district in 1850, Benjamin is listed as a farmer with a young (20 years old) wife, and two children. His real estate is valued at \$5000. Also in his household are his brother Thomas, a physician (\$600 in real estate), with his two sons, and a carpenter by the name of Austin Reeder (also from North Carolina). That the two men had somewhat substantial real estate is not surprising. Benjamin and Thomas co-owned 40 acres with the Poitevants, Hays, and Thomas Batte by 1849 (it is said that this group of men came to Alabama, then Mississippi together [Bradsport 2017]). Benjamin owned another 40 acres for his service in the Florida war, and later sold it to a John Lundy in 1856. By 1859, he owned 322 acres in Hancock County. Thomas filed patents on 160 acres by 1859. Benjamin appears repeatedly in the early deed books for Hancock County as buying and selling various parcels and mortgages (HCHS 2017). Benjamin is also listed as the county treasurer in many transactions.

Interestingly, both brothers are enumerated in Amite County in 1860, and Benjamin owned 160 contiguous acres of property there as of 1859; Thomas does not appear to have filed patents in Amite County. Benjamin is enumerated one page before Thomas and is listed as a "Planter" with \$25,000 in real estate and \$4,500 in personal wealth. Thomas, still shown as a "Doctor" and has



\$4,000 in real estate and \$13,000 in his personal estate. He married (probably his second wife) a woman named Susan Mitchell from Florida in 1853, (23 years his junior) and they had three young children by the time of the 1860 census.

In 1870, Thomas and his family are back in Hancock County, this time enumerated in "Beat 1" at the Pearlington Post Office. He and Susan had seven children, but unlike previous years Benjamin is not living near his brother. Benjamin died between the 1860 and 1870 census as Mary, his wife, is enumerated in Amite County in the 1870 census as a widow. Thomas died in 1872, and is buried in the Napoleon Cemetery. Susan filed for a widow's pension in 1880 in Hancock County, Thomas was purportedly a captain, but no firm records for his service could be located. Thomas also appears to have served in the Mississippi House, as resolution was passed on January 21, 1873 commemorating his death (State of Mississippi 1873:1141). Benjamin also served in the House of Representatives in 1846 (Lowry and McCardle 1891:482). The disposition of the Leonard land in Hancock County is unknown, there are no estate papers or wills available in historical databases.

Brown Family

William H. Brown filed a cash claim for Lot 5 in Section 29 on September 1, 1846. A William H. Brown is listed in the 1850 census, in Hancock County. Enumerated in "Beat 1," his occupation is listed as "Lumber M..." and the real estate value is smudged. Also, included in his house is a 21-year-old female (presumably his wife) and a one year old son, as well as an Englishman named Paterick Dunn [sic], who is listed as a carpenter. The census states that William was originally from New York, and his father had immigrated from Scotland. Available historical records indicate he was involved in the lumber business his entire life. But, he is only shown in Hancock County in the 1850 census. By the 1860 census, he is living in Wabash County, Illinois, which is where he was buried in 1889. His wife is listed as being born in Hancock County, maiden name White, but no clues to their habitation or land disposition were found in her line. William H. Brown is mentioned in the early deed books of Hancock County, but only in reference to legal land descriptions which state parcel boundaries is relation to his patent (HCHS 2017).

Casher Family

A Nathan Casher filed Homestead Patent for Lots 6 and 7 in Section 29 on March 30, 1882; these are his only land claims in Hancock County. No historical documents could be located for this person in Hancock County, Mississippi.

McQueen Family

James Thomas McQueen filed claims for the north half of Lot 1, and all of Lot 2, in Section 32, on May 5, 1910. A William J. McQueen claimed portions of Section 9, to the northeast, in 1904. These are the only land patents associated with the last name McQueen in Hancock County.



The most likely match for this James Thomas McQueen was born in 1875, but it is unknown where. There is a possible record for him in the 1880 census, in Honey Island (St. Tammany Parish, Louisiana), but his World War I draft card states that he was born in Kiln (Hancock County). The first census record match for him is not until 1900. James, his wife Josephine, and three of their four surviving children are enumerated in "Gainesville—District 0024." James has no occupation listed, but the census states they were renting their home.

In 1910, the family is shown in "Beat 2—District 0026," but this time James is listed as a farmer and he owns his own home "free" of any mortgage. This is about the time he fulfilled his homestead patent, so it makes sense that they might own a house at this point in time. The home is listed as being on "Nicholson Road," for which a modern correlate could not be found. (There is also a photograph in the HCHS [2017a] which is labeled "McQueen Family ca. 1900 in Gainesville, but it cannot be said this is the same group).

In 1918, James enlisted in the U.S. Army, but his draft card states that he lived in Slidell, Louisiana. The draft card also states that he was a farmer and "stock raiser." The 1920, 1930, and 1940 census enumerations indicate the McQueen family was still residing in St. Tammany Parish. James died in 1947 and was brought to Turtleskin Cemetery for burial, as was Josephine ten years later. Three of their children, two who died in infancy, and a son (d. 1930) are buried there, but no other family members are interred in that cemetery. No will or probate records could be located, and it is unknown if one of James' sons inhabited the Hancock County property, or if it was sold when the family moved to Slidell.

Littleberry West

Littleberry West was born around 1763 in Virginia, and by the late 1770s had migrated to the Natchez area of Mississippi. A Littleberry West is enumerated in the Natchez District in 1792. Littleberry and his brother Cato owned land on Coles Creek, and operated large tobacco and cotton plantations. The American State Papers (ASP) indicate that the West claim in Section 37, was originally settled by William Langston in March of 1805 (ASP 1816:33). A family tree on Ancestry states that in 1792, William (a brother) and Littleberry settled on a Spanish Land Grant on the Louisiana side of the Bogue Chitto River, and that "Indians later drive the family north to Natchez and Rapides Parish, Louisiana" but it is unclear how the record cited provides that information. However, there is a letter in the Pearl River County Library archives written on behalf of William (his father) by Littleberry:

To James Corby Esq Commissioner of Civil Claims for the district West of Pearl River

Sir take notice that I <u>William West</u> claim as much land as the Government may think proper to grant in virtue of a Settlement made in the year One Thousand Seven Hundred and ninety eight on the west side of Bogchitto five miles below the line of Demarcation or thereabout in the parish of St Tammany. I have been driven from sd improvement by the Indians & before I had an opportunity of returning a certain John Wooton settled thereon and their ______ although forbid by my friend <u>William</u> <u>Vardiman</u> from settling on the aforesaid improvement. I inhabited & cultivated sd improvement one year & raised one crop there on & had permission to settle under <u>Dalton White.</u>

> For my Father William West

Little Berry West

The Bogue Chitto land that belonged to his father is in Louisiana. Littleberry's claim in Hancock County was made in February of 1813 and it is unknown if he ever resided there, or remained on his property further north (ASP 2017). His second wife's, Eleanor Carter, father had an adjacent land grant (Section 38) in Hancock County, so there is some connection between families. Littleberry is shown in St. Tammany Parish in the 1820 and 1830 censuses, and then he disappears from the historical records. Some descendants believe that a Littleberry West in an 1840 census in Virginia is the same person, but it is impossible to determine. His death and burial details are unknown.

The early deed books at the Hancock County Historical Society contain several transactions that refer to boundaries defined by Littleberry's claim. But, on page 512, there is a transaction that includes his land grant (HCHS 2017b):

"S. Gilmore Kendall for \$1,200 deeds to Daniel Stanley, S half of the Littleberry west [sic] claim, **bounded on N by upper half of same, now claimed by Enoc McFadden Sr.** [emphasis added], E by part sec. 32 W by lot No. 36, T 7S R 16 W, 316.14 acres. Signed by Kendall and wife Francina on 11-26-1856."

This deed indicates that the north half of West's grant (of which a portion of Parcel B crosses) was owned by the same Enoch McFadden discussed previously. When that transaction occurred, and from whom McFadden obtained the property is unknown from available records.

Hercules and Mark O'Connor

Section 31, crossed by a portion of Parcel B in the current survey, was claimed by Hercules O'Connor on November 15, 1806 through Mark O'Connor under a "Spanish Ordinance Survey" (ASP 1816:15). (The BLM GLO plat map shows "Michael O'Connor," but all of the documents state Mark.) There are no clear associations between historical records pertaining to O'Connor and those who owned land in Hancock County.

There are many O'Connors in the Natchez area in the early 1800s, but no Mark, Michael, or Hercules. Likewise, there is no person named Michael or Mark O'Connor buried in Mississippi that was born around the correct time period to have been making claims in the early 1800s. The only Hercules O'Connor listed in FindAGrave (2017) was born in 1825, lived in New Orleans at the time of his death, and is buried in Baltimore (d. 1868). Apparently, H. Weston Company filed a claim for the parcel on August 21, 1951 and it was awarded.

Stennis Space Center Land Acquisition Records

When the Federal government decided to build a NASA facility in Hancock County, they had to acquire the privately held property. This involved surveys and assessments of parcels under existing ownership. Marco Giardino, former Stennis archaeologist, was kind enough to provide digital copies of the acquisition records and a copy of the acquisition map. Parcel A contains a portion of a parcel owned by John Coffman et al., and Parcel B is crossed by three tracts: Loyola Lee, John Mars, and Mars and International Paper (Figure 16), and the "Michael O'Conner" tract.

Coffman et al.—Tracts 255-1 and 255-2

The John Coffman et al. tract deed includes John L., his wife Wilmer W., E. L. Coffman, and his wife Ida W, specifically for Tracts 255-1 and 255-2. These parcels were deeded to John and E. L. by H. Weston Lumber Company on December 15, 1947. Schedule B of the agreement between the Coffmans and the government includes "The Right to remove the following buildings and/or improvements: 728 square foot dwelling (with attached porch), 504 square foot dwelling (with attached porch), 338 square foot barn, 120 square foot corn crib, 256 square foot chicken house, Privy, 150-gallon butane tank, All piping and all fencing."

Perhaps more importantly, the negotiations for this sale took place at the Coffman's residence in Picayune; so they did not reside on this property. Also of import, is that the improvement described in the deed lay within Tract 255-2, but it is Tract 255-1 that is located in Parcel A of the current project tract. The Coffman's drove a hard bargain. Negotiations began on May 28, 1962, and an agreement was not reached until July 30, 1962. They refused to accept the offer of \$7000 for both tracts, and eventually sold the property and improvements for \$7,400; this was \$850 more than the appraisal value. It can be inferred from the appraisal that Tract 255-2 was a rental property with two homesites, with the unimproved areas and Tract 255-1 utilized for farmland and timber. The only improvement that crossed into Parcel A is a segment of the gravel road, likely the same gravel road present today. Incidentally, E. L. and Ida Coffman are buried in Turtleskin Cemetery, although John and Wilmer are not.





Figure 16. Real property acquisitions in relation to survey parcels A and B of the current project tract.

Loya Lee Smith Andrews —Tract 238

The Andrews tract was the first of 11 to be appraised for acquisition for the SCC. This tract contains a portion of James Thomas McQueen's property in Lot 2 of Section 32. Ms. Andrews, and an Eli Alsobrook, received the title from Walter L. Penton and his wife on July 9, 1955. The appraisal further clarifies that Walter Penton married Loya's [sic] sister, Leagon, and that Eli Alsobrook is their father.

The appraisal states that there is a single residence located within the tract, although there is no indication where exactly the house stood in relation to roads or other identifiable markers. The 1957 *Dead Tiger Creek* 7.5' quadrangle shows a structure in the Andrews tract outside of Parcel A (Figure 17). No structures are visible on the 1942 or 1958 aerial images of the same area. The house is described as a brick structure with a concrete slab, approximately 864 square feet with a porch (Figure 18). The house had an air conditioner, electric stove outlet, metal cabinets, venetian blinds, cyclone fencing, cattle guard, a butane tank, septic tank, and water pipe. Additionally, a carport, laundry house, tool house, and 26 fruit and nut trees were located on the five-acre parcel.

John Mars—Tract 248

Tract 248, owned by John Mars at the time of acquisition, overlaps the southeastern portion of Parcel B. The deed states that this 15-acre parcel was conveyed to Mars by a Mrs. Bertie Reaton Moore on June 16, 1961. (Mrs. Moore was born in 1905 and died in 1981, she appears to have lived in Biloxi as a child, and Picayune as an adult.)

The assessors report states that there was an "old four room frame residence" on wooden piers, with unpainted wood siding and a metal roof. The lot also included a barn, smokehouse, chicken house, a well, hog wire fence, and a number of fruit and landscape plants (e.g., pecan, fig, tung, plum, and peach). There is a structure located in this tract on the 1957 *Dead Tiger Creek* 7.5' quadrangle, which would presumably be this house (Figure 19). It is difficult to tell, but the structures may be visible on the 1942 and 1958 aerial images.

John and Mars and International Paper—Tract 251

A very small corner of this tract is within Parcel B. This parcel was purchased from the same Mrs. Bertie Reaton Moore by John Mars (June 16, 1961) and International Paper (December 8, 1952). The appraiser did not note any structures in this tract, but there were several utility easements.





Figure 17. Historical topographic quadrangle and aerial views of structures described in real estate appraisals.



Figure 18. Structure in Tract 238, possible correlate to 1957 topographic structure.



Figure 19. Structures located in Tract 248 at the time of acquisition.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36



Examination of other available historical maps at a scale that provides some detail about the project did not reveal much in the way of additional information on the occupation of these two parcels. The 1930 USDA Soil Survey map of Hancock County indicates a structure in the same area as that in Tract 248 (Figure 20), as well as one that was possibly along the southern border of Parcel A. It also shows the railroad line that runs east/west across the southern portion of Parcel B, which belonged to H. Weston Lumber Co., and into Parcel A, and the Stennis transportation railway lines. An undated aerial image in the 1981 USDA Hancock County Soil Survey does not show any structural remnants in either parcel, only the old railroad lines (USDA 1981: Sheet 15).

While there are a number of Mississippi maps, from its time as one of the Florida Parishes up through the twentieth century, there are almost no historical maps available digitally of Hancock County, and most of them only span the coastline.

Several railroad lines crossed Parcels A and B. The lines in Parcel A mostly belong to NASA, and were used for transporting materials and products. The NASA lines were constructed around 1969, and today the gravel berms remain, but the tracks have been removed (Figure 21).

The H. Weston Lumber Company built the two feeder rail lines around 1903 (Mississippi Rails 2017), which joined a larger line to the east of the current project tract. No evidence of the southern line in Parcel B was observed during the survey, although there were some "higher" ground remnants in the woodline, just east of old Highway 43. The Weston line ceased to operate around 1932.





Figure 20. 1930 USDA soil survey map and historical railroads.





Figure 21. 2016 aerial imagery with historical railways; a) view of two gravel rail beds at convergence (view to the east).

The H. Weston Lumber Co. was founded by Maine native, Henry Weston in 1854, with several partners. The company was very successful, as Weston said, he "made money like smoke" (Hickman 1962). The Civil War brought a stop to most lumbering, and Weston served as the head of local law enforcement, protecting citizens from "jayhawkers" (Callaway 2010:3). Another stop to timbering and milling came in 1877 when the federal government sued the company for cutting trees from government land. A resolution was not reached until 1879. Henry died in 1912, but his sons continued to operate the business until 1930 (USM 2017). Presumably, based on tangential evidence, Weston, or his heirs, owned much of the land that became Stennis.



METHODS

Field Methods

Wiregrass archaeologist Sarah E. Price served as principal investigator, and was assisted in the field by Andrew Culp, Ben Stewart, Justin Stickler, and Hamilton Bryant. The Phase I survey began on January 10, 2017, halted on January 19 due to the need to obtain an after-the-fact ARPA permit. Fieldwork resumed on January 30, and was completed by February 1, 2017.

Based on the preliminary field examination, surface inspection was not anticipated to play a role in the survey of the two parcels. The two tracts are densely vegetated, and lack the topography that provides eroded slopes, or maintained roadbeds, for good surface exposure. All exposed ground encountered within the two tracts was examined for structural remains, earthworks, and artifacts.

Examination of the environmental variables within the two tracts in ArcGIS was compared to known site locations. In the interior of Hancock County, previously recorded sites are generally located in non-hydric soils, at 30 ft AMSL, and within 100 m of a water source. By itself, this model would continue the bias present in most CRM-derived archaeology as development most often occurs on more elevated lands, and along major waterways. For instance, most COE permits are issued for areas along waterways, so there is a bias in that these environments are overrepresented in the archaeological record. Alternatively, it has been demonstrated that intensive historical research can yield results in less-than-habitable environments (e.g., Price 2013, 2017).

In combination with the environmental baseline data, examination of historical maps and records was used to refine the subsurface testing regime for the two Parcels. It was decided to test the non-hydric soils at 30 m intervals, where possible, based on the lack of surface exposure. A grid of tests at 30 m intervals was generated in ArcGIS. The crew was instructed to test as far into the "hydric soils" and areas defined as wetlands as possible, and to examine those areas for features like log flumes, dams, or other historical remnants.

Shovel tests were a minimum of 30 cm², and excavated to subsoil or the water table, which ever was reached first. All fill was screened through ¼-inch hardware cloth. All subsurface test soil profiles were documented using USDA soil descriptors and attributes, and the *Munsell Book of Colors* (1994). Representative photographs were taken of soil profiles. All cultural materials encountered on the surface, and in subsurface pits, was documented, and if feasible collected; some larger items could not be collected. All shovel tests, surface finds, and no-digs, were recorded using a Trimble Geo 7.0x. Points were classified by their type (e.g., Negative Shovel Test [NST], Datum Positive Shovel Test [DPST], Negative Walkover [NWO]) along with any additional information, such as the reason for a NWO point.

When a shovel test yielded artifacts, or a surface find was encountered, bounding tests were excavated at ten meter intervals in the four cardinal directions until at least two negative tests were excavated. All cultural materials were collected, bagged, and labeled with the appropriate provenience information.



After review of the ARPA permit, the Mobile COE asked that the hydric soil areas be examined as well. A pedestrian survey of the areas delineated as hydric was conducted, and shovel tests excavated where possible. The pedestrian transects were recorded with a Trimble Geo 7.0x, as a linear feature (recording location every five meters) with embedded points for shovel tests and other notes.

In total, essentially 100 percent of the accessible areas of Parcels A and B were examined in some fashion. Within Parcel A, a large area in the north-central section could not be examined visually due to pervasive standing water. This is the same area that contains gravel road beds (former railroad beds) with long, linear stretches of water in between. The unexamined portions in Parcel A total approximately 27 percent, or 69 acres, of the tract (Figure 22). A loading ramp adjacent to the railroad bed at the southern border was the only feature observed (Figures 23 and 24). A large, concrete and rubber loading station, with metal hand rails is situated on the southern side of NASA railroad bed.



Figure 22. Survey efforts in Parcel A.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Figure 23. Looking east at the concrete pad and loading station.



Figure 24. Looking north from the loading platform, railroad bed is to the right.



Approximately eight percent (12.4 acres) of Parcel B could not be examined due to standing water, and/or utility lines (Figure 25). The intermittent creek floodplain was relatively dry on the east side, but there was a significant amount of water flowing in the drainage and floodplain to the west.



Figure 25. Survey efforts in Parcel B.

Laboratory Methods

All paperwork, digital photos, and associated paperwork were returned to Wiregrass offices for processing, and will be appropriately curated and stored. Artifact analysis followed a standardized methodology of classification into material, class, group, and then further refined into formal types when possible. This discussion of artifact classification is restricted to those classes recovered from this survey. Wiregrass archaeologist Sarah E. Price conducted all of the artifact analysis for this project. Appendix A contains an FS log and artifact classification log. Appendix B contains the MDAH site cards submitted prior to this report to obtain trinomials.

Historical Artifact Analysis

Historical artifacts were analyzed following South's (1978) classification, with deviations when appropriate. Each artifact was placed into a functional group (e.g., kitchen, personal,) and then



classified according to specific categories and types, forms, and patterns (e.g., blue transfer-print whiteware plate, rim fragment).

Morphologically, glass artifacts often are divided into curved and flat types. Functionally, glass artifacts are divided into two major groups -- container and window -- but other objects were manufactured from silica-based raw material. Container or curved glass objects are manufactured by hand or by machine. Though both may involve the use of molds, hand-made or blown glass is uneven in thickness while machine-made glass is even in thickness. Glass artifacts vary in color depending on elemental variability of the raw material. For example, clear glass usually contains arsenic or lead, yellow glass contains selenium, amethyst glass contains manganese, and deep blue glass contains cobalt. Some glass colors are chronologically diagnostic. Container glass artifacts include bottles, wells, glassware, tumblers, jars, and vases. Container glass objects may retain mold marks, rod marks, suction cup rings, maker's marks, labels, and other features. Glass color can be a good indicator of a vessel's age, and Table 4 gives general dates for some colors.

Color	Date
White (milkglass)	ca. 1890s-present
Aqua	ca. 1800-1920s
Green	ca. 1860s-present
Amber/Brown	ca. 1860s-present
Cobalt Blue	ca. 1890s-present
Purple (solarized Manganese)	ca. 1885-1920
Yellow	ca. 1918-1920s

Table 4. Glass Colors and General Date Ranges	of Production
---	---------------

By the early twentieth century, almost all glass manufacturing was automated to one degree or another, and this includes window glass. The three main methods were rolled plate, machine drawn cylinder sheet, and flat draw sheet. The machine drawn cylinder method was the first mechanical method for drawing window glass, invented in 1903. Cylinders of glass 40 feet high were drawn vertically from a tank and then annealed. The glass was then cut into 7 to 10 foot cylinders, which were then cut lengthways, reheated, and flattened. Flat drawn sheet glass was first developed in Belgium during the early 1900s, although the process was adopted globally. It is an example of a "vertical draw" process, in that the glass is drawn against gravity in an upward direction. This process uses a ceramic die to shape molten glass into a ribbon of rectangular cross section, which is then annealed and cut into final sheets. Rolled plate glass is made by throwing molten glass onto cast iron plate which is then flattened by iron rollers. The glass could be polished subsequently or imprinted with a design during the rolling process. Unfortunately, without larger pieces of glass, it is virtually impossible to distinguish between the different types. Window glass with an impressed design would be the only exception.

The study of window glass as a diagnostic from historic period sites has received a significant amount of attention (see Weiland 2009). The basic premise is that the thickness of glass increases through time as larger panes were manufactured. This holds true up until the mechanization of

window glass manufacture in the early twentieth century when thickness became standardized at about 3.0 to 3.33 mm.

All metal artifacts were classified according to material, manufacture, and function. The majority of the historic metals recovered from this survey are are rusted, and have a significant amount of concretion buildup. Nails were carefully examined to determine manufacture, and all other recovered metal had to be classified as "indeterminate metal fragments."

Nails are the most common architectural artifacts recovered, but are typically not whole or lack diagnostic attributes. Nails were commonly made from two forms of iron, wrought iron and cast steel. Wrought iron has silica impurities that create a lineated or "woody" appearance to the metal. Steel is a combination of iron and carbon; it has a circular or pitted appearance.

Nails are divided into three groups based on manufacturing technique. Wrought or hand-forged nails are made by nail smiths who hammer or forge nail rods into the desired product. The shafts of wrought nails are square in cross section. Machine-cut, or simply cut nails, are cut from strips of steel called nail plates. The heads are either hand- or machine-stamped, the tips are typically flat, and the cross section is rectangular. Wire, or round, nails are cut from drawn cylindrical rods of metal; they typically have pointed tips.

Nails can be chronologically diagnostic. Wrought nails were made until about 1800, but in some places they were manufactured as late as 1830. Cut nails, as implied by their name, were manufactured by cutting rectangular strips of iron of the desired thickness and height. The use of iron sheets brought uniformity to nail production as did the mechanization of nail manufacture in the early 1800s. Cut nails are distinguishable from earlier hand-wrought nails because they only taper on two sides of the shank, and (if preservation allows) striations can be seen on the shank resulting from the cutting process. The heads of early cut nails were still wrought by hand, but in 1830, machines took over that aspect of manufacture as well. Cut nails were most popular in the United State from about 1830 to 1890 (Sutton and Arkush 1998:168). Wire nails were adopted in about the 1880s to 1890s, when coils of round steel were first produced. Complete automation of the manufacturing process made production of wire nails cheaper than cut nails, thus the decline in popularity of cut nails in the late nineteenth century. Interestingly, wire nails are weaker than cut nails, but that did not seem to matter to consumers as cost was more important. Nails commonly are divided into size categories referred to as "penny size" or weights. Penny size is useful in determining nail function and cost, so it can inform us about activities and economics (Table 5). Also, nails that have been pulled out of a building or object and become bent are called "clinched." This characteristic can tell us if an extinct structure was intentionally disassembled or if it burned or blew down.



Penny size	Length (in.)	Use
2d	1	
3d	1¼	carpentry, finishing, small construction
4d	11/2	
6d	2	
7d	2¼	
8d	21⁄2	
9d	2¾	multi-purpose, medium construction
10d	3	
12d	3¼	
16d	31⁄2	
20d	4	
30d	41/2	
40d	5	house framing, fencing, large construction
50d	5½	
60d	6	

Table 5. Penny Weights of Nails and General Use Groups

Cans tend to contain perishable items, ranging from food to milkpaint, and actually date earlier than might be expected. The first patent for a metal paint can with a fitted top was issued in 1868. Changes in canning technology can be divided into three major categories: hole-in-cap, hole-in-top, and sanitary. Hole-in-cap cans have seams sealed with lead, a soldered filler cap, and a pin hole vent covered with a spot of solder. The can ends fit around the outside of the can, which were then soldered to the body. This type of can was soldered by hand prior between 1820 and 1880, and by machine after 1880 (resulting in neater seam soldering applications).

Hole-in-top cans were introduced between 1895 and 1900 by Carnation, and are similar to holein-cap cans in that a pin hole was left for ventilation and then soldered after filling. Evaporated milk cans are recognizable in a trash pile as they were opened with two puncture holes so that the thick liquid contents could be poured out. Condensed milk was too thick to be poured out of these holes, so part of the lid had to be removed/opened to get the contents out.

Sanitary cans were a machine innovation that negated the need for soldering by crimping the seams together. Commercially, side crimped seams were made starting in the 1890s. In 1897 a machine was invented that could crimp can ends to the sides, and by 1911 they had completely taken over the market.

Historic ceramics were divided by pastes, glazes, and surface decorations into various types. Those that exhibited no surface treatment were classified as indeterminate. Portion was also an attribute recorded, e.g., rim, body, base, handle. Rim sherds were classified by form, and rim diameters



were measured when possible. When present, maker's marks are identified, although none of the artifacts in the current collection retain a maker's mark.

Whiteware has a stark white paste, favored as it is harder than pearlware, and has a true clear glaze. Whiteware was developed in England about 1810. By the 1830s it had become the most common earthenware in America and remains common through the present day. Surface treatments are myriad and are the subject of a vast literature. Our discussion will be limited to those characteristics that are temporally sensitive.

The types of surface decorations can be organized into at least nine categories by employing the attributes of color, technique of application, and underlying production technology. They are: (1) plain, undecorated; (2) hand painted designs; (3) transfer printed designs; (4) sponge ware; (5) annular; (6) luster and embossing; (7) decal ware; (8) art ware; and (9) fiesta ware.

Plain, undecorated whiteware, often with a molded rim, became common after 1820. It was the cheapest form of table service and was found in most households by 1840. It enjoyed a long production and is recovered from contexts that postdate 1930 (Esary 1982:186). The use of bands of luster as part of the edge treatment on plain or molded edge whiteware became increasingly common after 1890. It continued to be produced through the 1930's and has a median ceramic date of 1910 (Esary 1982:186).

Porcelain is the most highly vitrified of the basic paste types. In its original Chinese expression, it was made up of kaolin and feldspar fired at temperatures between 1250 and 1400° C. The resulting "hard paste" was translucent in thin-section and displayed no difference between the body and the glaze. The Chinese porcelains were always hand painted. Early European potters attempted to imitate the quality of this body by mixing in large quantities of ground glass. Vitrification was achieved at a lower temperature and underglaze colors could be employed. After 1800, a "soft paste" porcelain was introduced by English potters. It contained a high proportion of calcium phosphate in the form of bone ash and is consequently often referred to as Bone China. The European porcelain received many types of surface treatments including: plain white, hand painted underglaze, hand painted overglaze, transfer printed, decal, and gilded. Porcelain was always a more expensive ware and, consequently, uncommon. Unfortunately for the archaeologist it proves difficult to date.

Although not technically a tableware, Herty cups are a type of ceramic. Put into production in 1904 by its inventor (or emulator of the French) Charles Herty, the "Herty System" involved the use of metal gutters along the cat face of a tree, and a round, terra cotta cup (nailed to the tree) to collect turpentine. This system extended the life of the trees, and the turpentine industry, and allowed for trees to be harvested for pulpwood. The rectangular terra cotta cup was invented by George C. Pringle in 1909, but was never as popular as the Herty cup. Galvanized metal cups were invented in 1914, but the Herty cup was manufactured and in use up until at least 1942 (Anderson and Smith 2003:447).



Curation Statement

All artifacts, field notes, maps, photographs, and copies of this report will be temporarily stored at the Wiregrass office in Dothan, Alabama. Permanent curation will be the responsibility of SSC and the USACE.

RESULTS

Two archaeological sites, 22HA785 and 22HA786, and two isolated finds (IF #1 and IF #2) were documented, as a result of the Phase I CRA of Parcels A and B. All of the cultural resources represent historical activities/occupations.

Surface exposure in the two parcels is poor, with most exposed areas along existing roads, the railroad berms in Parcel A. That being said, artifacts were located on the ground surfaces in areas with no exposed soils. Isolated finds (IF) in Parcel B were surface finds, including a shard of aqua glass (IF #1), and a scatter of beer and soda cans along the road in the southwest quadrant (IF #2). There is modern debris scattered through the two parcels, particularly along roadways. Other than artifacts, no standing structures, historical earthworks, or other surficial features were found during the current fieldwork.

Subsurface testing in the two parcels was moderately successful, two historical sites were located as a result of subsurface testing. Portions of both parcels could not be tested due to standing water during the course of fieldwork. Even in areas delineated as non-hydric, and away from wetlands, standing water was frequently encountered at the surface or within a few centimeters of the surface.

Parcel A

No historical cultural resources were located within Parcel A. The railroad beds, and the loading platform, are mainly associated with NASA railroad tracks, dating to the 1960s and onward.

Parcel A is a mix of young planted pines, with a very thick understory of yaupon and gallberry in the more elevated areas. In the floodplains and lower elevations, similar vegetation prevails. Soils in subsurface tests were unproductive, and water was encountered near the surface in many of the tests. A typical soil profile consists of 5 cm of dark gray fine loam (O-horizon), underlain by 10 cm of yellowish brown to dark yellowish brown sandy loam (B-horizon). The deepest test excavated in Parcel A went down to 45 cmbs, and consisted of a 5 cm dark gray fine sandy loam (O-horizon), underlain by 40 cm of pale brown, wet, clay. Gley soils (soils that are saturated long enough to develop a distinctive coloring) were present in many subsurface tests.

There seems to have been quite a bit of earthmoving, as there are many roads, culverts/drainage pipes, pushpiles, and cut over areas (Figures 26-29). Some of these are recent, and related to the technical boring activities, but many of the road beds were older.





Figure 26. Example of culvert in Parcel A.



Figure 27. Clearcut boring lane in Parcel A.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Figure 28. Another clearcut through a very wet area in Parcel A.



Figure 29. Road in Parcel A running through a very wet area.



Parcel B

Four cultural resources were located within Parcel B: sites 22HA785 and 22HA786, and two Isolated Finds, IF #1 and IF #2. Parcel B is crossed by a section of Old Highway 43/Shuttle Parkway, and is bordered on the south by Flattop Road. It is not surprising that historical remains were located along these historical roadways.

Parcel B is a mix of pine, sweetbay, yaupon and gallberry, in the "uplands." The floodplains are more open, with slightly more mature vegetation including sweetbay, magnolia, and various water-adapted species (e.g., river cane, mosses, grasses, sedges, pitcher plants).

Lines had already been cut for the boring equipment at the time of this survey work, although most of the disturbance was superficial (Figure 30). A few older roads are present in Parcel B (Figure 31). The one along the north border is partially submerged in places, but is slightly elevated, and composed of sand and *Rangia* shell. Parallel to Old Highway 43 is an old powerline corridor, although it is becoming grown over. The only other type of subsurface disturbance were tree falls (Figure 32).



Figure 30. Cleared boring line in Parcel B.

Soil profiles in negative tests in Parcel B were similar to Parcel A, a shallow O-horizon of dark gray loam, underlain by a yellowish brown fine sandy loam, occasionally grading into clay. Gley soils were observed along the wetlands, and in isolated pockets. Shovel test soils in the west-central portion of the tract were slightly deeper, to an average of 40 cmbs (where the water table was encountered), and similar soils.





Figure 31. Old road in Parcel B.



Figure 32. Tree falls in Parcel B wetland.

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Isolated Find #1 247879.668E/3365923.679N Township 7 South, Range 16 West, Section 31 Dead Tiger Creek quadrangle

A single shard of aqua glass was recovered from the ground surface in Parcel B in a boring line cut, in the northwest quadrant (Figure 33). A shovel test was excavated under the surface find, and bounding tests were excavated from the datum in the four cardinal directions at ten meter intervals. Adjustments were made on the delineation lines to not test in the clearcut, but on the margins. No additional cultural materials were found in the surface inspection of the line, or in the bounding tests.

The single artifact is a small shard of light aqua glass with a seam, which likely indicates it was machine-made. Aqua glass is not a particularly good diagnostic as it was manufactured for over one hundred years (see Table 4). The artifact lacks context, and since no additional materials were recovered, it is difficult to assign a function or associated historical occupation. There are no land acquisition records for this area of Parcel B, and it seems unlikely that this shard was associated the O'Connor ownership. Since not enough artifacts were recovered to designate this find a site, and there are no discernable historical correlates for structures or other occupations, no further work is necessary.



Figure 33. Isolated Find (IF) #1 site map.



Isolated Find #2 248076.076E/3365326.293N Township 7 South, Range 16 West, Section 37 Dead Tiger Creek quadrangle

A scatter of cans and a few bottles were observed on the surface in a ditch alongside a utility Right-of-Way in the southwest quadrant of Parcel B (Figures 34 and 35). The ditch (and most of the adjacent utility line) contained water, and on the south side of the ditch were numerous pushpiles, and several large tree falls (Figure 36).



Figure 34. View of the utility line (looking west) off which IF #2 is located, just in the woods on the left.

All of the cans, except one Pepsi can, contained beer. A Schlitz, Miller High Life, Miller Light, and Budweiser can were all noted, and all have pull-tab tops (Figure 37). (Pull-tab tops were introduced in 1965 and was in production for approximately ten years. This makes this diagnostic artifact officially over 50 years of age in the early range.) The Pepsi can logo most closely matches cans made between 1978 and 1985.





Figure 35. Isolated Find (IF) #2 site map.



Figure 36. Ditch where IF #2 surface collection came from (view to the east).





Figure 37. Beverage containers from IF #2 (top row, I-r): Anheuser Busch bottle, possible juice bottle, soda bottle; (bottom row, I-r) Pepsi can, Miller Lite can, Miller High Life can, Schlitz can, Budweiser can.

Three glass bottles were also observed (Figure 37). A large amber glass bottle, that at one point had a paper label, and a late Owens-Illinois maker's mark ("I" inside the "O") which dates to 1954-1958 onward. The manufacture year date on the stippled base is from 1975. The twist off crown cap for this bottle dates to 1960 or later, and is printed with the Anheuser-Busch logo. A small, clear glass bottle with a Chattanooga Glass Company logo ("C" in a circle) maker's mark was also noted. This maker's mark was in use between 1927 and 1988, and the bottle appears to have contained soda, although it lacks any specific markings. The twist off crown cap is also present, but does not have a logo. The smallest of the glass bottles is also clear, with stippling around the neck and shoulders. It lacks a cap, but it does have a threaded finish. There is not a maker's mark, but the bottle is reminiscent of a sports drink or juice bottle.

Although eight artifacts were found, this does not qualify as an historical archaeological site. Most of the identifiable attributes indicate a 1970s-1980 activity that centered around beverage consumption. It is feasible to imagine workers sitting around at lunch or at the end of a work day and "knocking a few back" after working on the utility line (As H. I. McDonough says in *Raising*



Arizona, "Honey, me and the boys are gonna knock back a few...Coca Colas.") No further work is necessary at this location.

22HA785 – Stennis 1 248472.816E/3365518.928N Township 7 South, Range 16 West, Section 32 Early Twentieth Century, Possible Turpentine Camp-Related Dead Tiger Creek quadrangle

Site 22HA785 is a single positive shovel test located on the east side of an intermittent stream in the central-east section of Parcel B (Figure 38). The site is located on a broad, flat terrace at about the same elevation as the stream, although there are some micro-topographic differences. The datum positive shovel test contained four machine-made nails (20d, 4-inch), a body sherdlet (<1/2-inch) of indeterminate whiteware, and a shard of clear bottle glass, likely machine-made based on the presence of a seam (Figure 39). Artifact recovery in the positive datum test was from the upper 20 cm in a grayish brown fine sandy loam soil deposit. Bounding tests at 10 m intervals around the datum test were all negative, but a fragment of a machine-made, aqua bottle finish was located on the surface within 5 m of the datum test (see Figure 39). A 10-meter buffer defines the site around the datum positive shovel test.



Figure 38. Sites 22HA785 and 22HA786 site map.





Figure 39. View of site 22HA785 (looking east/southeast from datum).



Figure 40. Site 22HA785 artifacts (I-r): Machine-made nail; clear glass bottle shard with seam; (top) aqua glass bottle finish; (bottom) indeterminate whiteware sherdlet.

Site 22HA785 is located within the James Thomas McQueen land patent, and there are no acquisition files for this locale in the Stennis real property records. The nails indicate a possible structure, or a remnant of a structure that was probably demolished when NASA acquired the property. The aqua bottle finish (cork closure) and whiteware are items associated with household kitchens. Based on the presence of Herty cup fragments to the northwest of this site, and at site 22HA786, it could be that the nails are associated with hanging turpentine cups, and that the household artifacts are trash discarded at temporary campsites by a turpentine crew. There was a Weston Company logging railroad line 40 m to the south of the site, which was later reused by Stennis/NASA, so the possibility of association with logging and/or turpentine seems to be relatively high.

A lack of historical records to place this site into context, coupled with a low-density and lowdiversity assemblage, leads to a recommendation of ineligible for site 22HA785, and no further work is recommended.

22HA786 – Stennis 2 248502.333E/3365428.249N Township 7 South, Range 16 West, Section 32 Early Twentieth Century, possible residential house or turpentine camp Dead Tiger Creek quadrangle

Site 22HA786 was located through transect shovel testing when a test yielded a Herty cup fragment (Figures 41 and 42). Surface inspection in a boring line clearcut yielded additional artifacts (Figure 43). Delineation tests around the positive datum test did not yield additional artifacts. It should be noted that the north delineation line was adjusted to avoid the clear-cut and the site boundary is based on the extent of the surface scatter. The datum shovel test artifact was recovered in from a 10 cm deep, grayish brown fine sandy loam A-horizon, under a very shallow O-horizon. There is no E-horizon development, and the B-horizon is composed of the same yellowish brown, fine sandy loam observed across the project tract. Including the surface artifacts, the site boundary is approximately 47 m north/south, and 12 m east/west.

The associated surface collection includes five additional Herty cup fragments, shards of aqua glass (appears to be a canning jar; MNV=1, n=5); a small folded piece of ferrous metal, a metal clamp-style fastener, indeterminate whiteware base and body sherds (n=6; likely MNV=1 from the same plate), indeterminate porcelain sherds (n=3), and a basal fragment of blue hand-painted porcelain (small cup or bowl) (Figure 44). None of these artifacts are particularly diagnostic beyond late nineteenth to early twentieth century, but the Herty cup fragments, if associated directly with the rest of the assemblage would place this site in the early twentieth century. Hose clamps, like the one in Figure 44, were invented in 1921 and are still in use today.





Figure 41. Site 22HA786 site map.

Like site 22HA785 (68 m to the north), site 22HA786 is located in the same McQueen patent parcel, and there are no Stennis land acquisition records for this site. The Weston Co./NASA railroad was located to the north of 22HA786, about 30 meters away. Site 22HA786 has a more diverse assemblage than 22HA785, including the presence of hand-painted porcelain, which is often associated with the presence of a female. But, the half Herty cup, and additional sherds once again point to a possible association with a turpentine camp or collection area. The other possibility is that this site represents two occupations, one associated with turpentining, and the other an historical household from the late nineteenth/early twentieth century. The diagnostic artifacts, mainly the Herty cup and the hose clamp, do seem to indicate early twentieth century. This is also the same time period in which the Weston Co. operated the railroad (1903-1932).

Without additional contextual information to tie this assemblage to people on the landscape and in the historical record, site 22HA786 does not have much potential for yielding additional information about the past occupation and landuse. The site also lacks vertical integrity, and to a lesser degree horizontal patterning. Site 22HA786 is recommended as ineligible as no further work is considered to be necessary.





Figure 42. Herty cup from 22HA786 datum positive shovel test.



Figure 43. View of 22HA786 from clearcut near the datum test (view to the south).

Phase I Cultural Resources Surveys Of the Stennis Space Center, Hancock Co., MS Wiregrass Project No. 2016.36





Figure 44. Site 22HA786 surface collected assemblage (counter clockwise from top left: hand painted porcelain cup/small bowl basal sherd; indeterminate whiteware basal sherds; ferrous metal (hose?) clamp; aqua canning jar shards, clear glass bottle finish.



CONCLUSIONS

Two archaeological sites, 22HA785 and 22HA786, and two Isolated Finds, were located and documented as a result of this Phase I Cultural Resources Survey of two parcels in the John C. Stennis Space Center. It was expected that historical remains might be encountered, based on historical maps of the area, but after reading the acquisition files it appears that all of the structures were demolished and materials of value were sold as scrap. A structure was shown in the 1957 Dead Tiger Creek quadrangle, but no evidence of this structure could be located. The two historical sites that were found do not correspond with any features on historical maps or aerial images of the project tracts.

It is apparent from the presence of Herty cup fragments, that turpentining was occurring at least in the eastern portion of Parcel B. The residential materials could very well be associated with turpentine camps, especially given their location in relation to the Weston Co. railroad. Without additional historical records or information, it is difficult to tie these sites down in the past in terms of specific occupations and activities. These sites also lack assemblages that can help distinguish what exactly was occurring at these locations, and exactly when. Site 22HA785 can only generally be associated with the late nineteenth/early twentieth century, and site 22HA786 can be more specifically tied to the early twentieth century based on the Herty cup and hose clamp. Both sites lack the kind of integrity and context that could provide archaeological insight into these occupations. Both sites are recommended as ineligible for listing on the NRHP, and no further work is recommended.

These recommendations should be considered provisional until accepted or modified by the Army Corps of Engineers, as the oversight agency, and if provided the opportunity to comment, the Mississippi Department of Archives and History, and other relevant oversight agencies (NASA-Stennis historic preservation office). If any significant prehistoric or historical remains are encountered during any phase of construction activity, those offices should be contact immediately. The client should provide the appropriate local, state, and federal agencies with copies of this report, if required for permit applications.

In the event human remains are encountered, excavation will cease. The Project Archaeologist will determine if the remains represent those of an individual who has been dead more than 75 years. If so, the State Archaeologist will be notified of the unmarked burial. If it is determined that the remains may be from an individual who has been dead for less than 75 years, then the district medical examiner (DME) will be notified. These actions are consistent with Chapter 872.05, F.S. and the implementing rule for this law, Rule 1A-44, F.A.C. Either the DME or the State Archaeologist will determine what additional action, if any, needs to be taken.



REFERENCES CITED

American State Papers (ASP)

- 2017 Online searchable archive. https://memory.loc.gov/cgibin/query/r?ammem/hlaw:@field(DOCID+@lit(sp0292)). Accessed January 15, 2017.
- 1816 "Claims East of the Pearl River." A List of actual settlers in the District East of Pearl river, in Louisiana, who have no claims derived from either the French, British, or Spanish Governments.

Ancestry.com (Ancestry)

2017 Private subscriber account.

Anderson, David G. and Steven D. Smith

2003 *Archaeology, History, and Predictive Modeling: Research at Fort Polk, 1972-2002.* University of Alabama Press, Tuscaloosa.

Bradsport (bradsport.com)

2017 "Sixth Generation." http://bradsport.com/aHenryLeonard1618/b33943.htm. Accessed February 7, 2016.

Bureau of Land Management General Land Office Records (BLM-GLO)

2017 Online search at http://www.glorecords.blm.gov . Accessed January 6, 2017.

Callaway, Graham

2010 Henry West and the H. Weston Lumber Company. Online at https://crgis.ndc.nasa.gov/crgis/images/a/ae/Henry_Weston_and_the_H._Weston_Lum ber_Company.pdf. Accessed January 27, 2017.

Esary, Mark Edward

1982 Archaeological Geographical and Historical Comparison. Eleven Nineteenth Century Archaeological Sites near Belleville. Unpublished MS thesis submitted to the Department of Anthropology, Illinois State University, Normal.

Find A Grave (findagrave.com)

2017 Hercules O'Connor. https://www.findagrave.com/cgibin/fg.cgi?page=gr&GSIn=O%27Connor&GSfn=Hercules&GSbyrel=all&GSdyrel=all&GSob =n&GRid=118544518&df=all&. Accessed February 2, 2017.

Galloway, Patricia K.

1995 Choctaw Genesis, 1500-1700. University of Nebraska Press, Lincoln.

Halbert, H. S.

1902 Section 2. The Small Indian Tribes of Mississippi. In *Publications of the Mississippi Historical Society, Volume 5.* Mississippi Historical Society, Oxford.

Hancock County Historical Society (HCHS)

- 2017a "McQueen family ca. 1900 in Gainesville." http://www.hancockcountyhistoricalsociety.com/gallery/People/20#McQueen-familyca-1900-in-Gainesville.
- 2017b http://www.hancockcountyhistoricalsociety.com/reference/deed-book-A.htm.

Harper, Roland M.

1914 A Superficial Study of the Pine-Barren Vegetation of Mississippi. *Bulletin of the Torrey Botanical Club* 41(11):551-567.

Hendryx, Greg S., Nicholas J. Linville, Christopher L. Mickwee, and Rockie L. Jarvis, III

2011 Phase I Archaeological Investigations of Improved Explosive Device Defeat Training Enhancement Areas to the Navy's Western Maneuver Area Training Range, Hancock County, Mississippi. Report submitted to NAVFAC Southeast by Southeastern Archaeological Research, Inc., Pensacola.

Hickman, Nollie W.

1962 *Mississippi Harvest: Lumbering in the Longleaf Pine Belt: 1840-1915.* University of Mississippi Press, Oxford.

Kappler, Charles J.

 1904 Indian Affairs: Laws and Treaties, Vol. II, Treaties. Government Printing Office, Washington D. C. Available online at http://digital.library.okstate.edu/kappler/Vol2/treaties/cho0069.htm.

Lauro, James

1998 Cultural Resource Survey of Two Tracts of Land Hancock County, MS. Report submitted to Mason Technologies. Archaeology Mississippi, Inc., Jackson.

Lowry, Robert and William H. A. McCardle

1891 A History of Mississippi, from the Discovery of the Great River by Hernando DeSoto [sic], Including the Earliest Settlement Made by the French Under Iberville, to the Death of Jefferson Davis (1541-1889). R. H. Henry & Co., Jackson.

Mississippi State Geological Survey

1919 Mississippi Geological, Economic, and Topographical Survey (MGETS). Bulletin, Mississippi State Geological Survey Issue 14.

Mikell, Gregory A.

2014 Phase I Cultural Resource Assessment Survey Portions [sic] of the Texas Flat Wetlands



Mitigation Bank Hancock County, Mississippi. Report submitted to Cypress Environmental Science and Engineering. PanAmerican Consultants, Inc., Tuscaloosa.

Mississippi Rails (msrailroads.com)

2017 H. Weston Lumber Co. http://www.msrailroads.com/Weston.htm. Accessed January 2, 2017.

Munsell Soil Color Charts

1994 Revised edition. Gretag MacBeth, New Windsor.

National Register of Historic Places (NRHP)

2017 National Register of Historic Places Program: Research. https://www.nps.gov/nr/research/. Accessed January 2, 2017.

National Wetland Inventory (NWI)

2017 Statewide data download. https://www.fws.gov/wetlands/Data/Data-Download.html.

Otvos, Ervin G.

1982 Coastal Geology of Mississippi, Alabama, and adjacent Louisiana Areas. New Orleans Geological Society Guidebook.

Pellegrin, Freddie J.

1978 Late Pleistocene Stratigraphy of Southern Hancock County, Mississippi. *Gulf Coast Association of Geological Societies Transactions* 28:383-383.

Price, Sarah E.

- 2013 Historic Context for the Piney Woods, Hancock County, Mississippi. Draft report prepared for Cypress Environmental Science and Engineering. Coastal Environments, Inc., Biloxi.
- 2017 The Devil is in the Details: Finding Post-Removal Choctaws in Southern Mississippi. Manuscript in press to *Mississippi Archaeology*, to be printed in spring issue.

South, Stanley

1978 Pattern Recognition in Historical Archaeology. *American Antiquity* 43(2): 223-230.

State of Mississippi

1873 Journal of the House of Representatives of the State of Mississippi, at a Regular Session Thereof, Held in the City of Jackson. Kimball, Raymond & Co., State Printers, Jackson. Online at

https://books.google.com/books?id=F_VBAQAAMAAJ&printsec=frontcover&source=gbs _ge_summary_r&cad=0#v=onepage&q&f=false. Accessed February 7, 2017.

Sutton, Mark Q. and Brooke S. Arkush

1998 Archaeological Laboratory Methods: An Introduction. Kendall/Hunt Publishing Company, Dubuque, Iowa.

Swanton, J. R.

1922 The Territory Between the Choctawhatchee and Mississippi Rivers. 1:2,500,000. Bureau of American Ethnology, Bulletin 73, Plate 5. Smithsonian Institution, Washington D. C.

United States Army Corps of Engineers (USACE)

1988 Cultural Resources Investigations for National Aeronautics and Space Administration at National Space Technology Laboratories, NSTL, Mississippi. Report submitted to NASA by the U. S. Army Corps of Engineers, Mobile.

United States Department of Agriculture (USDA)

- 1930 Hancock County Soil Survey Map. Available online at http://alabamamaps.ua.edu/historicalmaps/soilsurvey/Mississippi/mississippi.html. Accessed January 12, 2017.
- 1981 Soil Survey of Hancock County, Mississippi. U. S. Department of Agriculture, Soil Conservation Service, Washington D. C. Online archive at https://catalog.hathitrust.org/Record/101758944. Accessed January 12, 2017.

University of Southern Mississippi (USM)

2017 Weston Lumber Company Photographs. Biographical/Historical Sketch. http://www.lib.usm.edu/legacy/archives/m293.htm. Accessed January 27, 2017.

Web Soil Survey (WSS)

2017 Online soils mapper. http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx.

Weiland, Jonathan

2009 A Comparison and Review of Window Glass Analysis Approaches in Historical Archaeology. *Technical Briefs in Historical Archaeology* 4:29-40.



APPENDIX A

FS LOG AND ARTIFACT CATALOG



Project #	FS	Area	Site No.	Point	Date	Initials		
2016.036	001	В	22HA786	DPWO 534	1/31/2017	ННВ		
2016.036	002	В	22HA786	PWO 58	1/31/2017	DC/BS		
2016.036	003	В	22HA785	DPST 534	1/31/2017	ННВ		
2016.036	004	В	22HA786	DPST 545	1/31/2017	ННВ		
2016.036	005	В	22HA786	PWO around 545	1/31/2017	DC/BS/HHB		
2016.036	006	В	IF 1	DPWO 122	2/1/2017	HHB/BS		

Table A-1. Field Specimen (FS) Log



FS No.	Site	Catalog No.	Group	Artifact Type	Count	Comment
FS 001	22HA786	1	Household	Ind. aqua bottle finish	1	
FS 002	22HA786	1	Industry	Herty Cup	1	
FS 003	22HA785	1	Architecture	Machine made nails (whole)	3	4 in.
		2	Architecture	Machine made nails (frag)	1	
		3	Household	Ind. clear glass shard	1	Machine- made, seam present
		4	Household	Ind. whiteware sherdlet	1	
FS 004	22HA786	1	Industry	Herty Cup sherd	1	
FS 005	22HA786	1	Industry	Herty Cup sherd	5	MNV = 2
		2	Industry	Ferrous metal hose clamp	1	Two observed, one collected
		3	Unknown	Ind. ferrous metal fragment	1	
		4	Household	Ind. whiteware basal sherd	6	MNV = 1
		5	Household	Ind. whiteware sherdlet	2	
		6	Household	Ind. porcelain body sherd	3	MNV = 2
		7	Household	Hand painted porcelain cup base	1	
		8	Household	Clear glass bottle finish and neck	1	Machine- made, seam present
		9	Household	Ind. aqua glass shard	7	MNV = 1, canning jar
FS 006	IF #1	1	Household	Ind. aqua bottle shard	1	

Table A-2. Artifact Catalog



APPENDIX B

MDAH SITE CARDS



	Mississippi Department of Arc	hives and History	Dead		
SITE NAME: Stennis - 2	SITE NO: 322HA786	OTHER NO	DS:75 QUAD: Tiger Creek		
COUNTY: Hancock	SEC: 32 TWN: 75	RNG: 16W U	TM DATA: zone 16 E 248498 N 3365430		
OWNERSHIP: private [] state [] county [] ci	ty [] federal [>]	0			
NAME OF OWNER: Stennis Space (enter RECORDER So	arah E. Pr	DATE: 6 Feb 2017		
NATIONAL REGISTER POTENTIAL: eligible [] ineligible 🏳 unknown [] NATURAL SETTING: bluff [] bluff shelter [] chenier [] dune []					
floodplain [] first terrace 🖂 knoll on terrace [] upland (ridge) [] estuary [] natural levee [] backswamp []					
VEGETATION COVER: active cultivation [] fallow field [] pasture [] orchard [] pine forest [] hardwood forest [] denuded [] garden [] other []					
ESTIMATION OF GROUND COVER: (estimate %) 50 DEGREE OF DISTURBANCE (estimate %) 80					
TYPE OF DISTURBANCE: cultivation [] nature	al [] scientific excavation []	Г	Place Quad Xerox Here		
unscientific excavation [] extensively collected [] construction [] land levelled [] buried site []			
redeposited site 🖂 forestry 🖂 periodic flooding	g 🕅 indefinitely flooded [] unknow	vn [] other []			
SOIL TYPE: Pourch F3L SOIL COI	DE: $P = B$		31		
ARTIFACT DENSITY: heavy [] medium [>] li	ght [] single artifact []				
INSTITUTION WHERE ARTIFACTS CURATE	D:		30		
SURFACE AREA(sq.m.): 497 max length 47	max width 12 ELEVATION	N (ft): 20	Stannis 2		
DEPOSIT DEPTH (m.):	OGY: Paleo Indian []		Stellins-2		
Archaic [] early [] middle [] late [] Woodl	and [] early [] middle []		A A A		
late [] Miss. [] early [] middle [] late []	Historic Indian []				
Contact Indian [] Unknown Aboriginal [] His	toric M late 19th /early 2	20th	-2 0. 10 -		
REPORT REFERENCE: Phase I CRA of	Two Parcels in the J	S.S.C.	37		
MDAH REPORT NO: USE REV	VERSE SIDE FOR ADDITIONAL IN	NFORMATION	BM BO		
			25		

.

Mounds # conical [] # pyramidal [] # indeterminate [

earthworks [

material identified: Herty cup body/base (n=6) Aqua glass canning jar shards (n=5) Ferrous metal strap (n=1) Indeterminate whiteware, body + basel (n=6) Indeterminate porcelain (n=3)

Historical - Herty ap Agua carring jar comments:

A single positive shovel test yielded a Herty cup fragment. Rounding tests at 10m intervals were all negative, but a scatter of surface artifacts were found in a recently clean-cut lane. Addition sherds b Herty cups, canning jan shards, curamics, + a metal mattress remnant were found in the clear cut. The site is located in a 1910 land patent, but there is no evidence the owner resided at the site is location. Historical maps timagery do not show any structures in the vicinity. This site is recommended as ineligible (For listing on the NRHP.

MDAH USE ONLY

Physiographic Region: YB[], LH[], FW[], PR[], BP[], TH[], JP[], LLPB[], CPM[], NCH[] National Register Status: NRL [], date ______, criteria ______ DOE [], date ______, criteria ______ NHL [], date ______, criteria ______ Mississippi Landmark [], date _______

Mississippi Department of Archives and Histor	Dead				
SITE NAME: Stennis - 1 SITE NO: 22HA785_ OTHER	NOS:75 QUAD: Tiger Creek				
COUNTY: Hancock SEC: 32 TWN: 75 RNG: 164	UTM DATA: zone 16 E 248472 N 3365518				
OWNERSHIP: private [] state [] county [] city [] federal [>]					
NAME OF OWNER: Stennis Space Center RECORDER Sarah E.	Price DATE: 6 Feb 2017				
NATIONAL REGISTER POTENTIAL: eligible [] ineligible [1] unknown [] NATURAL SETTING: bluff [] bluff shelter [] chenier [] dune []					
floodplain [] first terrace [>] knoll on terrace [] upland (ridge) [] estuary [] natural levee [] backswamp []					
VEGETATION COVER: active cultivation [] fallow field [] pasture [] orchard [] pine forest [] hardwood forest [] denuded [] garden [] other []					
ESTIMATION OF GROUND COVER: (estimate %) $\underline{\neg Q}$ DEGREE OF DISTURBANCE (estimate %) $\underline{\neg 5}$					
TYPE OF DISTURBANCE: cultivation [] natural [] scientific excavation []	Place Quad Xerox Here				
unscientific excavation [] extensively collected [] construction [] land levelled [] buried site [Party Contractor IV/A				
redeposited site [] forestry 🖂 periodic flooding 🖂 indefinitely flooded [] unknown [] other [and a second of the				
SOIL TYPE: Poarch FSLSOIL CODE: PoB	31				
ARTIFACT DENSITY: heavy [] medium [] light [] single artifact []					
INSTITUTION WHERE ARTIFACTS CURATED:	Stennis-1				
SURFACE AREA(sq.m.): $\underline{\$0}$ max length $\underline{10}$ max width $\underline{10}$ ELEVATION (ft): $\underline{20}$	30				
DEPOSIT DEPTH (m.): • 10 CHRONOLOGY: Paleo Indian []	at the internet of the				
Archaic [] early [] middle [] late [] Woodland [] early [] middle []	and a start				
late [] Miss. [] early [] middle [] late [] Historic Indian []					
Contact Indian [] Unknown Aboriginal [] Historic M late 19th / early 20th	21 9. 1.22				
REPORT REFERENCE: Phase ICRA of Two Parals in the J.S.S.C.	37 32				
MDAH REPORT NO: USE REVERSE SIDE FOR ADDITIONAL INFORMATION	BM B				
	25				

.

Mounds # conical [] # pyramidal [] # indeterminate []

earthworks []

material identified:

machine cut nails = 4 indeterminate whiteware sherdlet (n = 1)indeterminate clean glass shard (n = 1)machine - made aqua bottle finish(n = 1)

component - diagnostics Historical - cut nails whiteware aqua glass

comments:

A single positive shovel test yielded a small assemblage with a shallow A horizon. Bounding tests at 10m intervals Overe all negative. Historical research shows site is located in a paral purchased in 1910, but the owner resided in LA from at least 1918 onward. The Stennis land acquisition files do not show a private owner for this paral, 4 no other historical map correlates were Found. This site is recommended as ineligible For listing on the NRHP.

MDAH USE ONLY

Physiographic Region:

YB[], LH[], FW[], P	R[], BP[], TH[], JP[], LLPB[], CPM[], NCH[]
National Register Status:	NRL [], date	, criteria	
	DOE [], date	, criteria	
	NHL [], date	, criteria	
Mississippi Landmark [], date		