STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

TECHNICAL REPORT COVERSHEET

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ENVIRONMENTAL
MANAGEMENT
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CULTURAL RESOURCES ASSESSMENT SURVEY

Florida Department of Transportation

District 1

SR 70

Limits of Project: from Lorraine Road to CR 675/Waterbury Road

Manatee County, Florida

Financial Management Number: 414506-2

ETDM Number: 14263

Date: APRIL 2019

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by FHWA and FDOT.

CULTURAL RESOURCE ASSESSMENT SURVEY
PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
SR 70 FROM LORRAINE ROAD TO CR 765/WATERBURY ROAD
MANATEE COUNTY, FLORIDA

Financial Project ID.:414506-2-22-01
Federal Aid Project No.: TBD
ETDM No: 14263

Florida Department of Transportation
District One
801 North Broadway Avenue
Bartow, Florida 33830

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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to evaluate the proposed widening of 6.1 miles of State Road (SR) 70 from Lorraine Road (MP 9.478) to County Road (CR) 675/Waterbury Road (MP 15.567) in Manatee County, including pond sites and roundabouts. This study evaluates the need for capacity improvements and provides engineering and environmental documentation and analysis to establish the optimal type and location of improvements to SR 70. The results of the study will aid Manatee County, FDOT and the FDOT Office of Environmental Management (OEM) in determining the type, preliminary design and location of the proposed improvements. The project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14263. An ETDM *Programming Screen Summary Report* containing comments from the Environmental Technical Advisory Team (ETAT) was published on April 3, 2018. The ETAT evaluated the project's effects on natural, physical, cultural, social and economic resources. Upon completion, this study will meet all requirement of the National Environmental Policy Act of 1969 (NEPA) as administered by the Florida Department of Transportation – Office of Environmental Management (OEM) and the requirements of other federal and state laws so as to qualify the proposed project for federal-aid funding.

The purpose of this Cultural Resource Assessment Survey (CRAS) is to locate and identify any cultural resources within the project Area of Potential Effects (APE) and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). This survey is in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-655, as amended), as implemented by 36 CFR 800 (*Protection of Historic Properties*, effective August 2004), as well as Chapters 267 and 373, *Florida Statutes (FS)*, Chapter 1A-46, *Florida Administrative Code (FAC)*, and Florida's Coastal Management Program. All work was performed in accordance with the standards outlined in Part 2, Chapter 8 ("Archaeological and Historical Resources") of the FDOT's *PD&E Manual* (June 2017 revision), and the standards and guidelines contained in the *Cultural Resource Management Standards and Operational Manual*: *Module 3* (Florida Division of Historical Resources [FDHR] 2003). Principal Investigators meet the *Secretary of the Interior's Professional Qualification Standards* (48 FR 44716) for archaeology, history, architecture, architectural history, or historic architecture.

As defined in 36 CFR Part § 800.16(d), and recognized by *FS* 267, the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Based on the scale and nature of the activities, the project has a limited potential for any indirect (visual or audible) or cumulative effects outside the immediate footprint of construction. Therefore, because of the project type and location of the proposed work, the archaeological APE was defined as the footprint of the improvements within the existing and proposed right-of-way (ROW) for the SR 70 corridor and the area contained within the four proposed ponds; and the historic/architectural APE was defined as the archaeological APE and adjacent parcels. The fieldwork was completed in January of 2019.

A review of the Florida Master Site File (FMSF) indicated that no archaeological sites have been recorded within the APE however one has been recorded within one half mile. It was a lithic scatter determined not eligible for listing in the NRHP by the State Historic Preservation Officer (SHPO). Given the known patterns of settlement and the amount of disturbance in the area, the APE was considered to have a low probability for archaeological site occurrence, mainly due to the amount of disturbance that has occurred within the APE. As a result of the archaeological field investigations, consisting of surface reconnaissance and subsurface testing, no archaeological sites were discovered.

A review of the FMSF and the NRHP revealed that portions of three previously recorded historic linear resources (50 years of age or older) are within the project APE: 8MA01814, a segment of an abandoned rail bed once associated with the East & West Coast Railway, 8MA01815 (the Lakewood Ranch Canal #2), and 8MA01816 (the Lakewood Ranch Canal #3). Portions of 8MA01814 have been determined eligible for listing in the NRHP by the SHPO; however, the portions of railbed adjacent and within the APE was determined not eligible for listing in the NRHP by the SHPO. In addition, 8MA01815 and 8MA01816 were also determined not eligible for listing in the NRHP by the SHPO. Background research did reveal that portions of SR 70 have been recorded in Manatee County and determined not eligible for listing in the NRHP; but the segment of SR 70 within the APE has not been recorded. Thus, 8MA01906 was updated to reflect the segment of SR 70 within the APE. This portion of SR 70 also does not appear to be eligible for listing in the NRHP. The Manatee County property appraiser's data indicated that no historic buildings or structures were located within the APE (Hackney 2019). This was confirmed by field reconnaissance.

Based on these data, there are no archaeological sites or historic resources that are listed, determined eligible, or that appear to be eligible for listing in the NRHP within the APE.

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1.0 INTRODUCTION

1.1 Project Description

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) study to evaluate the proposed widening of 6.1 miles of State Road (SR) 70 from Lorraine Road (MP 9.478) to County Road (CR) 675/Waterbury Road (MP 15.567) in Manatee County, as depicted in **Figure 1.1,** including one regional pond site and three Floodplain Compensation (FPC) sites, hereinafter referred to as ponds and seven roundabouts.

This study evaluates the need for capacity improvements and provides engineering and environmental documentation and analysis to establish the optimal type and location of improvements to SR 70. The results of the study will aid Manatee County, FDOT and the FDOT Office of Environmental Management (OEM) in determining the type, preliminary design and location of the proposed improvements.

The project was evaluated through FDOT's Efficient Transportation Decision Making (ETDM) process as project #14263. An ETDM *Programming Screen Summary Report* containing comments from the Environmental Technical Advisory Team (ETAT) was published on April 3, 2018. The ETAT evaluated the project's effects on natural, physical, cultural, social and economic resources. In the ETDM the Florida Department of State identified three historic linear resources, the East and West Coast Railway and two drainage canals, within 500 feet of the project corridor. A portion of the East and West Coast Railway was determined to be eligible for the National Register of Historic Places (NRHP) in 2014; the two canals were determined to be NRHP-ineligible. No unrecorded structures were reported within the project vicinity.

Upon completion, this study will meet all requirement of the National Environmental Policy Act of 1969 (NEPA) as administered by the FDOT OEM and the requirements of other federal and state laws so as to qualify the proposed project for federal-aid funding.

1.2 Purpose and Need

The purpose of this project is to improve traffic operational conditions along the SR 70 corridor from Lorraine Road to CR 675/Waterbury Road to accommodate projected travel demand, specifically increased commuter and freight traffic. Traffic flow within the corridor is of particular concern given the high percentage of heavy trucks mixed with non-truck traffic. The unique acceleration and deceleration characteristics of the trucks cause vehicular travel delay and, ultimately, impact the movement of commuter and freight traffic on the two-lane undivided roadway.

Two Developments of Regional Impact (Cypress Banks and Northwest Sector) surround the western project terminus. Of the five Planned Unit Developments that are present, two are located at the western project terminus and three surround the eastern portion of the project corridor (two of these three are Panther Trace and Concession). Del Webb Lakewood Ranch is also present south of SR 70 near Uihlein Road. The corridor further abuts a master planned community, Lakewood Ranch, to the west. Lakewood Ranch is also identified by Manatee County as one of four major growth and focus areas of the county. Growth along the project corridor is anticipated to occur most heavily within the area surrounding the western half of the corridor as the area will continue to support residential and mixed use community activities with commercial uses concentrated at the intersection of SR 70 and Lorraine Road.

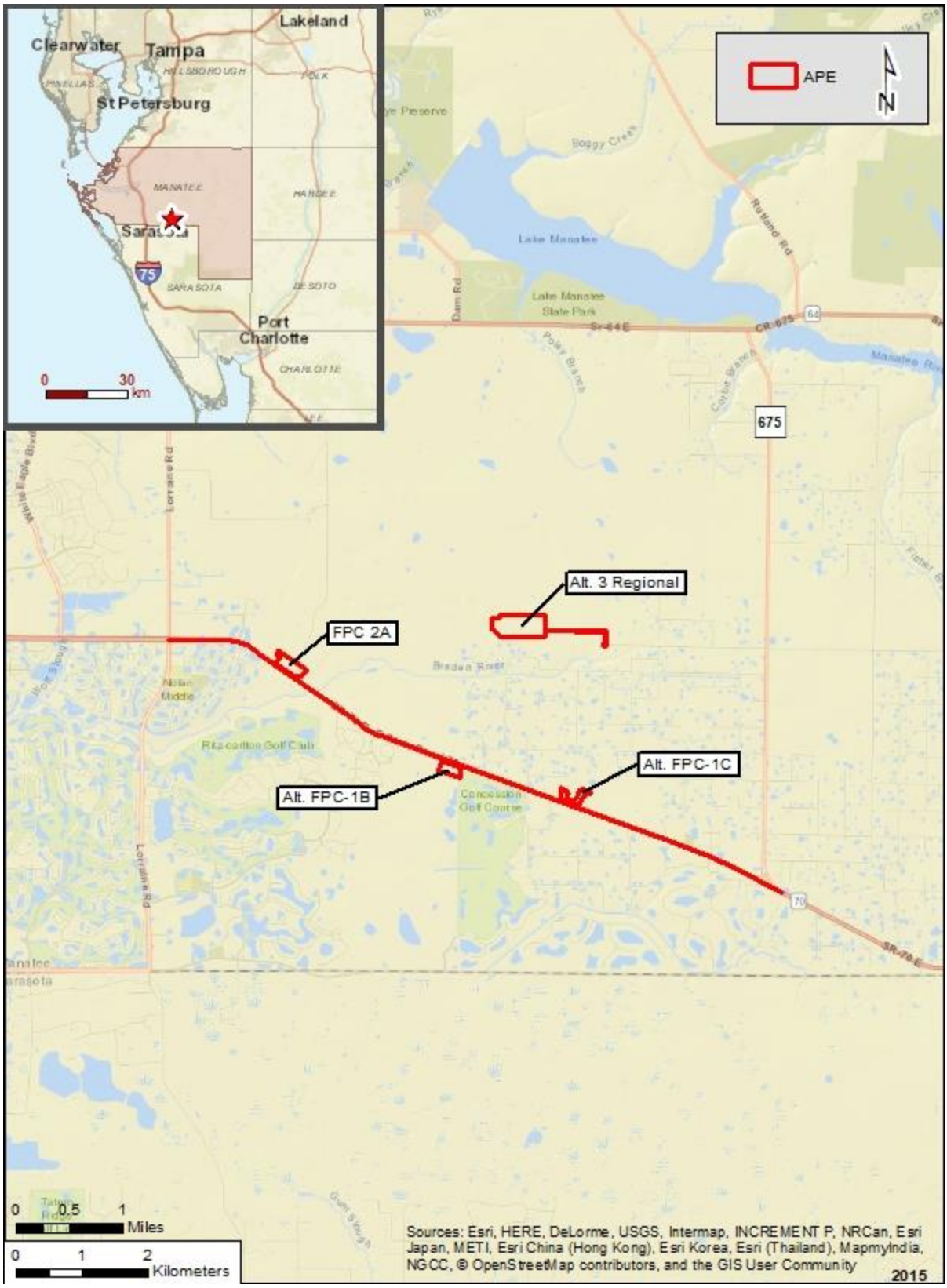

Figure 1.1. Location of the SR 70 APE, Manatee County, Florida.

Due to the fact that it provides regional access to agriculture and ranching operations, industrial/commercial areas, and freight distribution facilities throughout central Florida, particularly with its connections to several major transportation facilities, SR 70 has been designated as part of the SIS network. Accordingly, the project segment of SR 70 currently carries significant truck traffic.

This project is anticipated to improve traffic operations and preserve operational capacity along SR 70. It will address increased travel demand as a result of projected growth along the corridor and higher volumes of heavy trucks on the corridor. The proposed project is also anticipated to improve safety characteristics of the facility, which are particularly exacerbated by the high truck percentages, by enhancing overall traffic operations.

1.3 Existing Facility

Throughout the limits of this study SR 70 is designated as a rural principal arterial highway, a SIS highway and an evacuation route. As defined by the FDOT Design Manual, Section 200, the context classification of the project is C3R – Suburban Residential. The existing SR 70 facility consists of a two-lane undivided facility with 12-foot travel lanes (one in each direction) and 12-foot shoulders (5 feet paved) (**Figure 1.2**). Within the study limits the existing right-of-way (ROW) width is approximately 200 feet throughout the majority of the project corridor and approximately 250 feet near the intersection of SR 70 and CR 675/Waterbury Road. There are 14 cross drains, ranging in size from 24-inch pipes to a quadruple 10' x 7' box culvert. The posted speed limit within the project area is 60 miles per hour (mph).

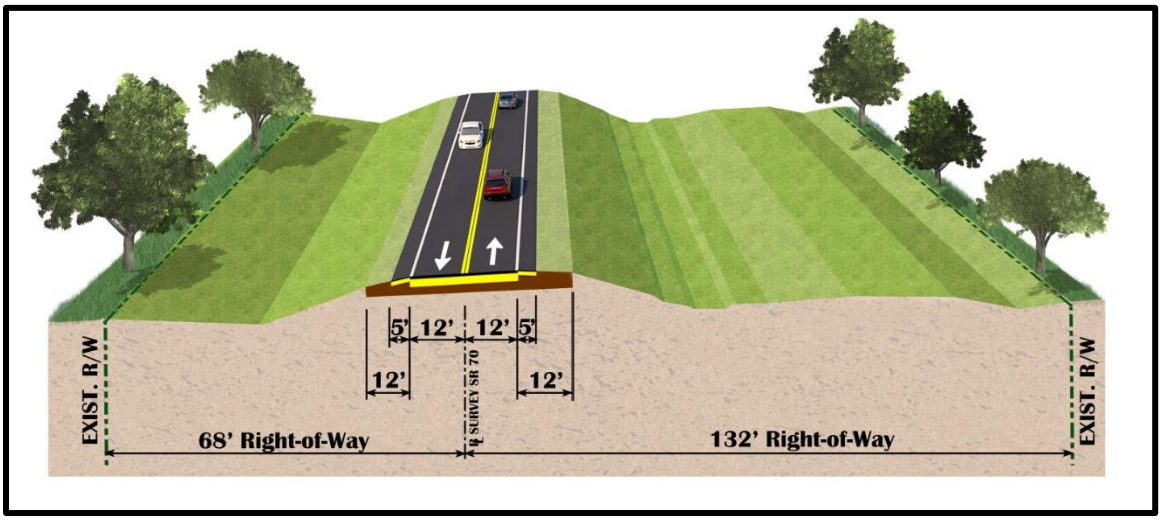

Figure 1.2. Existing Typical Roadway Section.

1.4 Proposed Action

The proposed action is to increase the capacity of the existing two-lane undivided roadway by widening it to a four or six-lane divided roadway to accomplish the purpose and need described in the previous section.

1.4.1 Project Alternatives

Within the limits of this study, FDOT is evaluating one project build alternative and three project segments. The three segments are separated for analysis so this study can best address the local transportation needs. Segment A extends from Lorraine Road to east of Greenbrook Boulevard, Segment B extends from east of Greenbrook Boulevard to Bourneside Boulevard, and Segment C extends from Bourneside Boulevard to the eastern project limit at CR 675 (**Figure 1.3**).

The No-Build alternative remains a viable alternative throughout the study process.

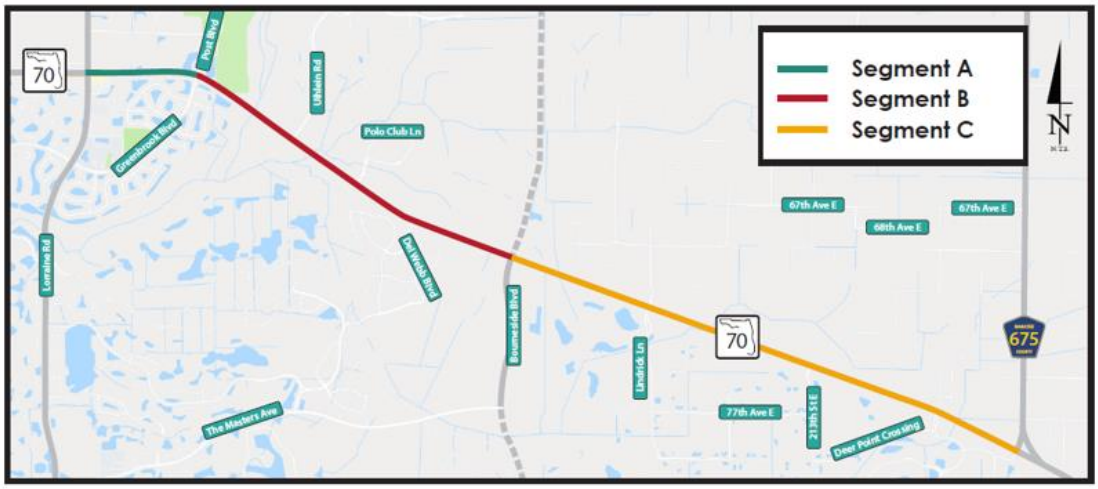

Figure 1.3. Project Location Map by Segment.

1.4.2 Typical Sections

The designation of SR 70 as a SIS facility throughout the project limits presents a key variable for the design speeds for the project. The FDOT Design Manual (FDM), Part 2 Table 201.4.1 provides design speed controls for SIS facilities. For SIS facilities with a C3R context classification a minimum design speed of 50 mph is required. However, within the C3R context classification, if curbed roadways are proposed the design speed may be reduced to 45 mph. As designed, the proposed high-speed curbed typical sections proposed for Segment A meets the FDM criteria with a 45 mph design speed. The 50 mph design speed proposed for Segments B and C meet the minimum design speed for an SIS facility.

Proposed build improvements for each of the three project segments include the following:

<u>Segment A</u>

The proposed typical section for Segment A will provide a high-speed curbed roadway design with three 11-foot travel lanes in each direction, 7.0-foot paved outside shoulders (buffered bike lanes), a closed drainage system with curbs and gutters, and 8-foot sidewalks in both directions **(Figure 1.4)**. The proposed improvements in this segment are anticipated to be accomplished within the existing 200-foot ROW; minimal ROW is needed just west of Greenbook Boulevard.

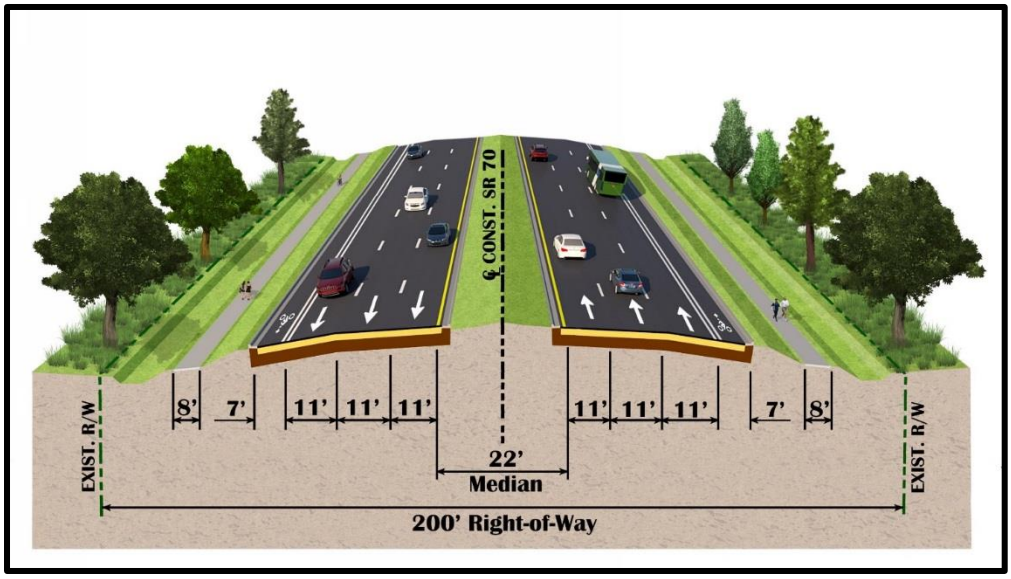

Figure 1.4. Segment A Proposed Typical Roadway Section.

Segment B

The proposed typical section for Segment B will provide a high-speed curbed roadway design with two 12-foot lanes in each direction, 5.0-foot paved outside shoulders (buffered bike lanes), a closed drainage system with curbs and gutters, and 8-foot sidewalks in both directions **(Figure 1.5)**. The proposed roadway has been designed with a 54-foot wide median such that it is expandable to a six-lane section in the future, when traffic needs merit an expansion, by adding a 12-foot lane in each direction on the inside. The proposed improvements in this segment are anticipated to be accomplished primarily within the existing 200-foot ROW; minimal ROW is needed to construct proposed roundabouts at Uihlein Road, Del Webb Boulevard, and Bourneside Boulevard.

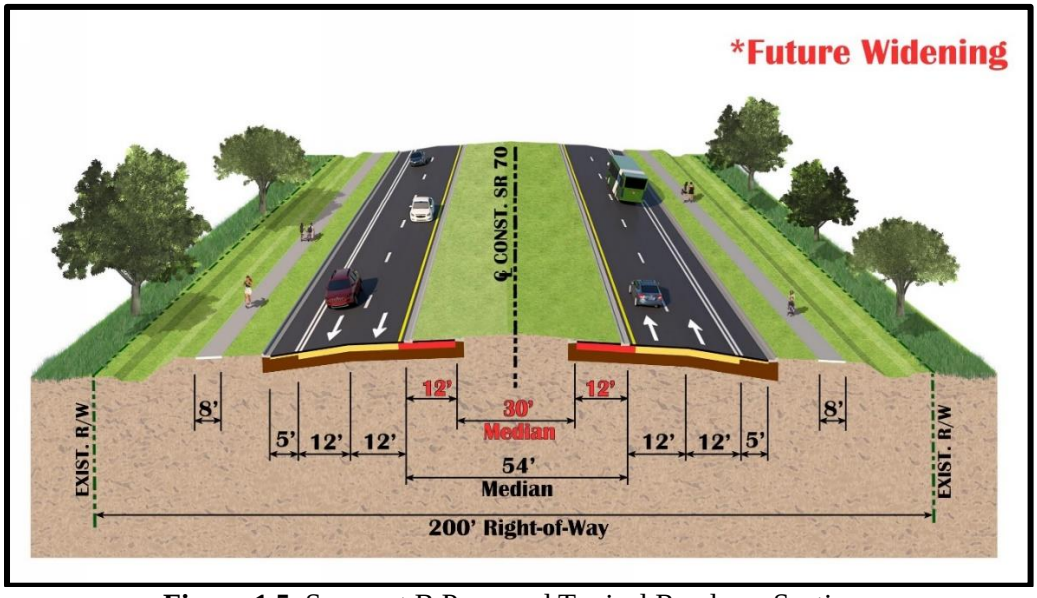

Figure 1.5. Segment B Proposed Typical Roadway Section.

Segment C

The proposed typical section for Segment C will provide a high-speed curbed roadway design with two 12-foot lanes in each direction, 10-foot outside shoulders (5 feet paved), an open drainage system, and 8-foot sidewalks in both directions **(Figure 1.6)**. The proposed improvements in this segment are anticipated to be accomplished primarily within the existing 200-foot right-of-way; minimal right-of-way will be needed to construct proposed roundabouts at 197th Street East/Lindrick Lane, 213th Street East, 225th Street East/Panther Ridge Trail, and CR 675.

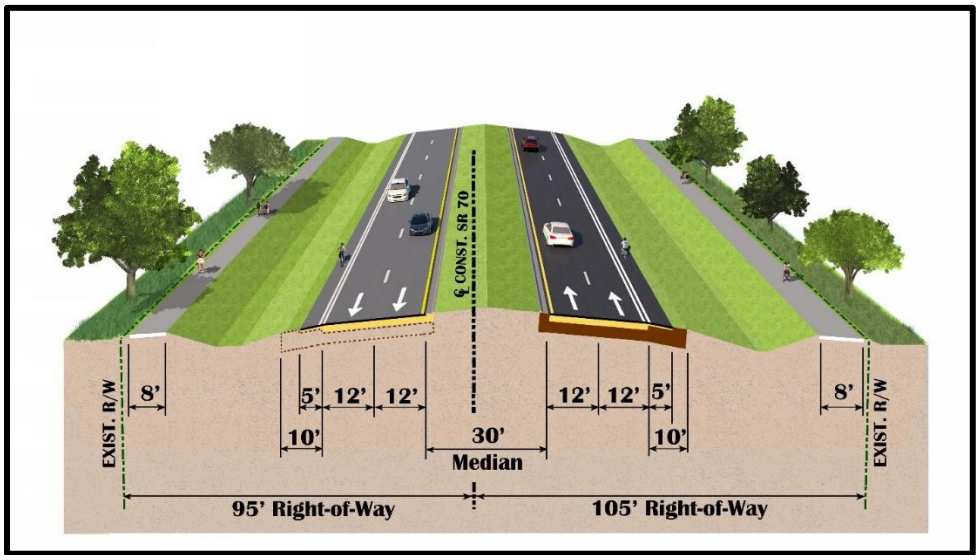

Figure 1.6. Segment C Proposed Typical Roadway Section.

1.5 Purpose of Report

The purpose of this Cultural Resource Assessment Survey (CRAS) is to locate and identify any cultural resources within the project Area of Potential Effects (APE) and to assess their significance in terms of eligibility for listing in the National Register of Historic Places (NRHP). This survey is in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-655, as amended), as implemented by 36 CFR 800 (*Protection of Historic Properties*, effective August 2004), as well as Chapters 267 and 373, *Florida Statutes (FS)*, Chapter 1A-46, *Florida Administrative Code (FAC)*, and Florida's Coastal Management Program. All work was performed in accordance with the standards outlined in Part 2, Chapter 8 ("Archaeological and Historical Resources") of the FDOT's *PD&E Manual* (January 2019 revision), and the standards and guidelines contained in the *Cultural Resource Management Standards and Operational Manual*: *Module 3* (Florida Division of Historical Resources [FDHR] 2003). Principal Investigators meet the *Secretary of the Interior's Historic Preservation Professional Qualification Standards* (62 FR 33708) for archaeology, history, architecture, architectural history, or historic architecture.

As defined in 36 CFR Part § 800.16(d), and recognized by *FS* 267, the APE is the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist." Based on the scale and nature of the activities, the project has a limited potential for any indirect (visual or audible) or cumulative effects outside the immediate footprint of construction. Therefore, because of the project type and location of the proposed work, the archaeological APE was defined as the footprint of the improvements within the existing and

proposed right-of-way (ROW) for the SR 70 corridor and the area contained within the four proposed ponds; and the historic/architectural APE was defined as the archaeological APE and adjacent parcels.

2.0 ENVIRONMENTAL OVERVIEW

Environmental factors such as geology, topography, relative elevation, soils, vegetation, and water resources are important in determining where precolonial and historic period archaeological sites are likely to be located. These variables influenced what types of resources were available for utilization in a given area. This, in turn, effected decisions regarding settlement location and land-use patterns. Because of the influence of the local environmental factors upon the aboriginal inhabitants, a discussion of the effective environment is included.

2.1 Project Location and Physical Setting

The APE is located in various sections of Township 35 South, Ranges 19 and 20 East in Manatee County, Florida (United States Geological Survey [USGS] Verna) (**Figure 2.1**). Land within the APE is mixed use consisting of commercial and residential development, vacant parcels, and parcels being used for agricultural purposes. Disturbances include roadway widening and modification, sidewalks, and underground and overhead utilities (**Photos 2.1 – 2.9**).

Photo 2.1. Looking west at FPC 2A.

Figure 2.1. Environmental setting of the APE.

Photo 2.2. Northeast view of FPC 1C.

Photo 2.3. FPC 1B looking northeast.

Photo 2.4. General view of Regional pond (Alt. 3) looking northeast.

Photo 2.5. Looking east toward Lorraine Road intersection.

Photo 2.6. Maintained area adjacent to the south side of SR 70.

Photo 2.7. SR 70 ROW (south side) near Del Webb Boulevard, looking southeast.

Photo 2.8. Looking northwest toward Waterbury Road intersection.

Photo 2.9. Looking south, southeast towards proposed roundabout at Bourneside Boulevard.

2.2 Geology and Geomorphology

The project area is located within the Central or mid-peninsula physiographic zone (White 1970) and more specifically within the DeSoto Plain. The area is underlain by medium fine sand and silt, which is associated with the undifferentiated sediments of the Pleistocene and Holocene (Knapp 1980; Scott 2001; Scott et al. 2001). The APE is roughly 10-55 ft above mean sea level (amsl).

2.3 Soils and Vegetation

Soils within the project area are part of the Myakka-Waveland-Cassia soil association, which is characterized by poorly drained soils of the flatwoods (United States Department of Agriculture [USDA] 1983). Specifically, the project area is underlain primarily by poorly drained Myakka fine sand. The isolated wetlands are underlain by the very poorly drained Floridana-Immokalee-Okeelanta association and the poorly drained Felda-Wabasso association is located along the creek (USDA 1983, 2012). The natural vegetation of the former consists of longleaf and slash pine with an understory of sawpalmetto, running oak, gallberry, waxmyrtle, huckleberry, pineland threeawn, and scattered fetterbushes. The Floridana association supports sawgrass, maidencane, willow, and some cypress as well as St. Johnswort, various bluestems, smooth cordgrass, and sedges. The floodplain soils support gum, oak, maple, hickory, bay, and magnolia, with scattered pine and palmetto on the low ridges.

2.4 Paleoenvironmental Conditions

The early environment of the region was different from that seen today. Sea levels were lower, the climate was arid, and fresh water was scarce. An understanding of human ecology during the earliest periods of human occupation in Florida cannot be based on observations of the modern environment because of changes in water availability, botanical communities, and faunal resources. Aboriginal inhabitants would have developed cultural adaptations in response to the environmental changes taking place, which were then reflected in settlement patterns, site types, artifact forms, and subsistence economies.

Due to the arid conditions between 16,500 and 12,500 years ago, the perched water aquifer and potable water supplies were absent (Dunbar 1981:95). Palynological studies conducted in Florida and Georgia suggest that between 13,000 and 5000 years ago, this area was covered with an upland vegetation community of scrub oak and prairie (Watts 1969, 1971, 1975). However, the environment was not static. Evidence recovered from the inundated Page-Ladson Site in north Florida has clearly demonstrated that there were two periods of low water tables and dry climatic conditions and two episodes of elevated water tables and wet conditions (Dunbar 2006c). The rise of sea level reduced xeric habitats over the next several millennia. Intermittent flow in the Hillsborough River some 8500 years ago was likely due to precipitation and surface runoff, and by 6000 years ago, the river probably began flowing because of spring discharge from the Floridan aquifer (Dunbar 1981:99).

By 5000 years ago, a climatic event marking a brief return to Pleistocene climatic conditions induced a change toward more open vegetation. Southern pine forests replaced the oak savannahs. Extensive marshes and swamps developed along the coasts and subtropical hardwood forests became established along the southern tip of Florida (Delcourt and Delcourt 1981). Northern Florida saw an increase in oak species, grasses, and sedges (Carbone 1983). At Lake Annie, in south central Florida, pollen cores were dominated by wax myrtle and pine. The assemblage suggests that by this time, a forest dominated by longleaf pine along with cypress swamps and bayheads existed in the area (Watts 1971, 1975). About 5000 years ago, surface water was plentiful in karst terrains and the level of the Floridan aquifer rose to 5 ft above present levels. With the establishment of warmer winters and cooler summers than in the preceding early Holocene, the fire-adapted pine communities prevailed. These depend on the high summer precipitation caused by the thunderstorms and the accompanying lightning strikes to spark the fires (Watts et al. 1996; Watts and Hansen 1994). The increased precipitation also resulted in the formation of the large swamp systems such as the Okefenokee and Everglades (Gleason and Stone 1994). After this time, modern floral, climatic, and environmental conditions began to be established.

3.0 CULTURE HISTORY

A discussion of the regional culture history is included to provide a framework within which the local historical and archaeological records can be examined. Archaeological sites and historic features are not individual entities, but rather are part of once dynamic cultural systems. As a result, individual sites cannot be adequately examined or interpreted without reference to other sites and resources in the area. In general, archaeologists summarize the culture history (i.e., an archaeological region) by outlining the sequence of archaeological cultures through time. These are defined largely in geographical terms but also reflect shared environmental and cultural factors. The APE is located in the Central Peninsular Gulf Coast region (Milanich 1994; Milanich and Fairbanks 1980). This region extends from just north of Tampa Bay southward to the northern portion of Charlotte Harbor (**Figure 3.1**). Within this zone, the Paleo-Indian, Archaic, Formative, and Mississippian stages have been defined based on unique sets of material culture traits such as stone tools and ceramics as well as subsistence, settlement, and burial patterns.

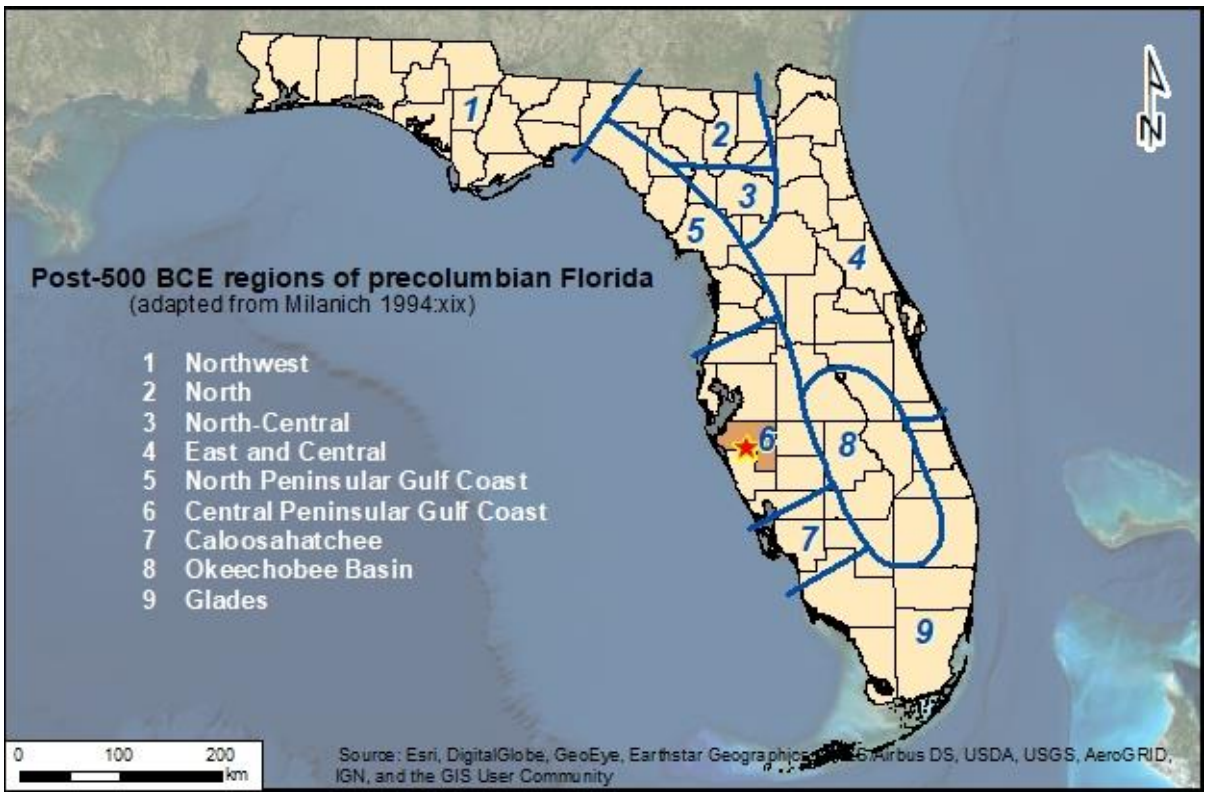

Figure 3.1. Florida Archaeological Regions.

The local history of the region is divided into four broad periods based initially upon the major governmental powers. The first period, Colonialism, occurred during the exploration and control of Florida by the Spanish and British from around 1513 until 1821. At that time, Florida became a U.S. territory and 21 years later became a State (Territorial and Statehood). The Civil War and Aftermath (1861-1899) period deals with the Civil War, the period of Reconstruction following the war, and the late 1800s, when the transportation systems were dramatically increased and development throughout the state expanded. The Twentieth Century period includes subperiods defined by important historic events such as the World Wars, the Boom of the 1920s, and the Depression. Each of these periods

evidenced differential development and utilization of the region, thus effecting the historic site distribution.

3.1 Paleo-Indian

The Paleo-Indian stage is the earliest known cultural manifestation in Florida, dating from roughly 12,000 to 7500 Before Current Era (BCE) (Milanich 1994). Archaeological evidence for Paleo-Indians consists primarily of scattered finds of diagnostic lanceolate-shaped projectile points. The Florida peninsula at this time was quite different than today. In general, the climate was cooler and drier with vegetation typified by xerophytic species with scrub oak, pine, open grassy prairies, and savannas (Milanich 1994:40). When human populations were arriving in Florida, the sea levels were still as much as 40 to 60 m (130-200 ft) below present levels and coastal regions of Florida extended miles beyond present-day shorelines (Faught 2004). Thus, many sites have been inundated (Faught and Donoghue 1997).

The Paleo-Indian period has been sub-divided into three horizons based upon characteristic tool forms (Austin 2001). Traditionally, it is believed that the Clovis Horizon (10,500-9000 BCE) represents the initial occupation of Florida and is defined based upon the presence of the fluted Clovis points. These are somewhat more common in north Florida. Research suggests that Suwannee and Simpson points may be contemporary with or predate Clovis (Dunbar 2006a; Stanford 1991). The Suwannee Horizon (9000-8500 BCE) is the best known of the three Paleo-Indian horizons. The lanceolate-shaped, unfluted Simpson and Suwannee projectile points are diagnostic of this time (Bullen 1975; Daniel and Wisenbaker 1987; Purdy 1981). The Suwannee tool kit includes a variety of scrapers, adzes, spokeshaves, unifacially retouched flakes, and blade-like flakes as well as bone and ivory foreshafts, pins, awls, daggers, anvils, and abraders (Austin 2001:23).

Following the Suwannee Horizon is the Late Paleo-Indian (8500-8000 BCE). The smaller Tallahassee, Santa Fe, and Beaver Lake projectile points have traditionally been attributed to this horizon (Milanich 1994). However, many of these points were recovered stratigraphically from late Archaic and early Woodland period sites and thus, may not date to this period at all (Austin 2001; Farr 2006). Florida notched or pseudo-notched points, including the Union, Greenbriar, and Hardaway-like points may represent late Paleo-Indian types, but these types have not been recovered from datable contexts and their temporal placement remains uncertain (Dunbar 2006a:410).

Archaeologists hypothesize that Paleo-Indians lived in migratory bands and subsisted by gathering and hunting, including the now-extinct Pleistocene megafauna. It is likely that these nomadic hunters traveled between permanent and semi-permanent sources of water, such as artesian springs, exploiting the available resources. These watering holes would have attracted the animals, thus providing food and drink. In addition to being tethered to water sources, most of the Paleo-Indian sites are close to good quality lithic resources. The settlement pattern consisted of the establishment of semi-permanent habitation areas and the movement of the resources from their sources of procurement to the residential locale by specialized task groups (Austin 2001:25).

Although the Paleo-Indian period is generally considered to have been cooler and drier, there were major variations in the inland water tables resulting from large-scale environmental fluctuations. There have been two major theories as to why most Paleo-Indian materials have been recovered from inundated sites. The Oasis theory, put forth by Wilfred T. Neill, was that due to low water tables and scarcity of potable water, the Paleo-Indians, and the game animals upon which they depended, clustered around the few available water holes that were associated with sinkholes (Neill 1964). Whereas, Ben Waller postulated that the Paleo-Indians gathered around river-crossings to ambush the large

Pleistocene animals as they crossed the rivers (Waller 1970). This implies periods of elevated water levels. Based on the research along the Aucilla and Wacissa Rivers, it appears that both theories are correct, depending upon what the local environmental conditions were at that time (Dunbar 2006b). During the wetter periods, populations became more dispersed because the water resources were abundant and the animals they relied on could roam over a wider range.

Some of the information about this period has been derived from the underwater excavations at two inland spring sites in Sarasota County: Little Salt Spring and Warm Mineral Springs (Clausen et al. 1979). Excavation at the Harney Flats Site in Hillsborough County has provided a rich body of data concerning Paleo-Indian life ways. Analysis indicates that this site was used as a quarry-related base camp with special use activity areas (Daniel and Wisenbaker 1987). It has been suggested that Paleo-Indian settlement may not have been related as much to seasonal changes as generally postulated for the succeeding Archaic period, but instead movement was perhaps related to the scheduling of tool-kit replacement, social needs, and the availability of water, among other factors (Daniel and Wisenbaker 1987:175). Investigations along the Aucilla and Wacissa Rivers, as well as other sites within the north Florida rivers, have provided important information on the Paleo-Indian period and how the aboriginals adapted to their environmental setting (Webb 2006). Studies of the Pleistocene faunal remains from these sites clearly demonstrate the importance of these animals not for food alone, but as the raw material for their bone tool industry (Dunbar and Webb 1996).

3.2 Archaic

Climatic changes occurred, resulting in the disappearance of the Pleistocene megafauna and the demise of the Paleo-Indian culture. The disappearance of the mammoths and mastodons resulted in a reduction of open grazing lands, and thus, the subsequent disappearance of grazers such as horse, bison, and camels. With the reduction of open habitat, the herd animals were replaced by the more solitary, woodland browser: the white-tailed deer (Dunbar 2006a:426). The intertwined data of megafauna' extinction and cultural change suggests a rapid and significant disruption in both faunal and floral assemblages. The Bolen people represent the first culture adapted to the Holocene environment (Carter and Dunbar 2006). This included a more specialized toolkit and the introduction of chipped-stone woodworking implements.

Due to a lack of excavated collections and the poor preservation of bone and other organic materials in the upland sites, our knowledge of the Early Archaic artifact assemblage is limited (Carter and Dunbar 2006; Milanich 1994). Discoveries at the Page-Ladson, Little Salt Spring, and Windover sites indicate that bone and wood tools were used (Clausen et al. 1979; Doran 2002; Webb 2006). The archaeological record suggests a diffuse, yet well-scheduled, pattern of exploiting both coastal and interior resources. Because water sources were much more numerous and larger than previously, the Early Archaic peoples could sustain larger populations, occupy sites for longer periods, and perform activities requiring longer occupations at a specific locale (Milanich 1994:67).

Marked environmental changes, which occurred some 6500 years ago, had a profound influence upon human settlement and subsistence practices. Among the landscape alterations were rises in sea and water table levels that resulted in the creation of more available surface water. In addition to changed hydrological conditions, this period is characterized by the spread of mesic forests and the beginnings of modern vegetation communities including pine forests and cypress swamps. Humans adapted to this changing environment and regional and local differences are reflected in the archaeological record (Russo 1994a, 1994b; Sassaman 2008).

The Middle Archaic archaeological record is better understood than the Early Archaic. The material culture inventory included several stemmed, broad blade projectile point types including the Newnan, Levy, Marion, and Putnam types (Bullen 1975). Population growth, as evidenced by the increased number of Middle Archaic sites and accompanied by increased socio-cultural complexity, is assumed for this time (Milanich and Fairbanks 1980). Site types included large base camps, smaller special-use campsites, quarries, and burial areas. The most common sites are the smaller campsites, which were most likely used for hunting or served as special-use extractive sites for such activities as gathering nuts or other botanical materials. At quarry sites aboriginal population mined stone for their tools. They usually roughly shaped the stone prior to transporting it to another locale for finishing. Base camps are identified by their larger artifact assemblages and wider variety of tool forms.

During the Late Archaic period, population increased and became more sedentary. The broad bladed, stemmed projectile styles of the Middle Archaic continued to be made with the addition of Culbreath, Lafayette, Clay, and Westo point types (Bullen 1975). A greater reliance on marine resources is indicated in coastal areas. Subsistence strategies and technologies reflect the beginnings of an adaptation to these resources. Around 4000 years ago, evidence of fired clay pottery appears in Florida. The first ceramic types, tempered with fibers (Spanish moss or palmetto), are referred to as the Orange series. Initially, it was thought that the ceramics lacked decoration until about 1700 BCE, when they were decorated with geometric designs and punctations. Research has called this ceramic chronology into question; AMS dates from a series of incised Orange sherds from the middle St. Johns River Valley, have produced dates contemporaneous with the plain varieties (Sassaman 2003).

Milanich (1994:86-87) suggests that while there may be little difference between Middle and Late Archaic populations, there are more Late Archaic sites and they were primarily located near wetlands. The abundant wetland resources allowed larger settlements to be maintained. It is likely that the change in settlement patterns was related to the environmental changes. By the end of the Middle Archaic, the climate closely resembled that of today; vegetation changed from those species that preferred moist conditions to pines and mixed forests (Watts and Hansen 1988). Sea levels rose, inundating many sites located along the shoreline. The adaptation to this environment allowed for a wider variety of resources to be exploited and a wider variation in settlement patterns. No longer were the scarce waterholes dictating the location of sites. Shellfish, fish, and other food sources were now available from coastal and freshwater wetlands resulting in an increased population size.

The Transitional stage of the Late Archaic refers to that portion of the ceramic Archaic when sand was mixed with the fibers as a tempering agent. The same basic settlement and subsistence patterns were being followed. It has been suggested that during this period there was a diffusion of cultural traits because of the movement of small groups (Bullen 1959, 1965). This resulted in the appearance of several ceramic and lithic tool traditions, and the beginning of cultural regionalism.

3.3 Formative

The Formative stage is comprised of the Manasota and Weeden Island-related cultures (ca. 500 BCE to 800 CE [Common Era]). Settlement patterns consisted of permanent villages located along the coast with seasonal forays into the interior to hunt, gather, and collect those resources unavailable along the coast. Most Manasota sites are shell middens found on or near the shore where aboriginal villagers had easiest access to fish and shellfish (Milanich 1994). The subsistence economy focused on the coastal exploitation of maritime resources, supplemented by the hunting and gathering of inland resources (Luer and Almy 1982). Investigations at the Shaw's Point, Fort Brook Midden, Yat Kitischee, and Myakkahatchee sites have provided a wealth of information on site formation, subsistence economies, and technology and their changes over time (Austin 1995; Austin et al. 1992; Luer et al.

1987; Schwadron 2002). The major villages were located along the shore with smaller sites being located up to 12-18 miles inland. These inland sites, which may have served as seasonal villages or special-use campsites, were often located in the pine flatwoods on elevated lands proximate to freshwater where a variety of resources could be exploited (Austin and Russo 1989; Luer and Almy 1982). Hardin and Piper (1984) suggest that some of the larger inland sites may actually be permanent or semi-permanent settlements as opposed to seasonal campsites.

Manasota is characterized by a wide range of material cultural traits such as a well-developed shell and bone tool technology, sand tempered plain ceramics, and burials within shell middens (Luer and Almy 1982). Much of the shell and bone technology evolved out of the preceding Archaic period. The lithic assemblage of the Manasota culture was scarce along the coast especially in the more southern portions of the region where stone suitable for tool manufacture was absent. Projectile point types associated with the Manasota period include the Sarasota, Hernando, and Westo varieties (Luer and Almy 1982). Through time, the burial patterns became more elaborate, with burials being placed within sand burial mounds located near the villages and middens. The early burial patterns consisted of primary flexed burials in shell middens, while later sites contained secondary burials in sand mounds.

Temporal placement within the Manasota period can be determined based upon diagnostic ceramic rim and vessel forms (Luer and Almy 1982). The early forms (ca. 500 BCE to 400 CE) are characterized as flattened globular bowls with incurving rims and chamfered lips. Pot forms with rounded lips and inward curving rims were utilized from about 200 BCE until 700 CE. Deeper pot forms with straight sides and rounded lips were developed around 400 CE and continued into the Safety Harbor period. Simple bowls with outward curving rims and flattened lips were used from the end of the Late Weeden Island period (ca. 800 CE) into the Safety Harbor period. Vessel wall thickness decreased over time.

Influences from the Weeden Island "heartland," located in north-central Florida, probably resulted in the changes in burial practices. These influences can also be seen in the increased variety of ceremonial ceramic types through time. The secular, sand tempered ware continued to be the dominant ceramic type. Manasota evolved into what is referred to as a Weeden Island-related culture. The subsistence and settlement patterns remained consistent. Hunting and gathering of the inland and coastal resources continued. Evidence of a widespread trade network is seen by the ceramic types and other exotic artifacts present within the burial mounds.

Ceremonialism and its expressions, such as the construction of complex burial mounds containing exotic and elaborate grave offerings, reached their greatest development during this period. Similarly, the subsistence economy, divided between maritime and terrestrial animals and perhaps horticultural products, represents the maximum effective adjustment to the environment. Many Weeden Island-related sites consist of villages with associated mounds, as well as ceremonial/burial mound sites. The artifact assemblage is distinguished by the presence of Weeden Island ceramic types. These are among some of the finest ceramics in the Southeast; they are often thin, well fired, burnished, and decorated with incising, punctations, complicated stamping, and animal effigies (Milanich 1994:211). Coastal sites are marked by the presence of shell middens, indicating a continued pattern of exploitation of marine and estuarine resources. Interaction between the inland farmer-gatherers and coastal hunter-gatherers may have developed into mutually beneficial exchange systems (Kohler 1991:98). This could account for the presence of non-locally made ceramics at some of the Weeden Island-related period sites. There is no definitive evidence for horticulture in the coastal area (Milanich 1994:215).

3.4 Mississippian

The final aboriginal cultural manifestation in the Central Peninsular Gulf Coast region is Safety Harbor, named for the type-site in Pinellas County. The presence of datable European artifacts (largely Spanish) in sites, along with radiocarbon dates from early Safety Harbor contexts associated with Englewood ceramics, provide the basis for dividing the Safety Harbor period into two pre-Columbian phases: Englewood (900-1000 CE) and Pinellas (1000-1500 CE) and two colonial period phases: Tatham (1500-1567 CE) and Bayview (1567-1725 CE) (Mitchem 1989). The Safety Harbor variant in Hillsborough, northern Manatee, Pinellas, and southern Pasco counties is identified as the Circum-Tampa Bay regional variant.

Although inland sites do occur, the Safety Harbor culture was primarily a coastal phenomenon (Mitchem 1989, 2012). Large coastal towns or villages often had a temple mound, plaza, midden, and a burial mound associated with them. Although some maize agriculture may have been practiced by the Safety Harbor peoples, the coastal environment was not suitable for intensive maize agriculture (Luer and Almy 1981; Mitchem 2012). Away from the coastal plain, a more dispersed pattern of smaller settlements were evident and the burial mounds appear to have been located away from the habitation areas (Mitchem 1988, 1989).

Influences from the north led to the incorporation of some Mississippian traits by the late Manasota peoples, which became the Safety Harbor culture. Most, Safety Harbor components are located on top of the earlier Manasota deposits and there is evidence of significant continuity from Manasota into Safety Harbor. However, in some areas, Manasota continued later than previously thought, while in other areas Englewood did not appear to have occurred at all (Austin et al. 2008). The lack of the diagnostic Englewood ceramics at many sites may indicate that the Englewood phase was skipped in the developmental sequence from Manasota to Safety Harbor (Mitchem 2012).

The primary difference between Manasota and Safety Harbor is the ceramic assemblage. The utilitarian ceramics include the Pasco (limestone tempered), Pinellas (laminated paste), and sand tempered plain varieties. The decorated ceramics, primarily recovered from burial mounds, include Englewood Incised, Sarasota Incised, Lemon Bay Incised, St. Johns Check Stamped, Safety Harbor, Incised, and Pinellas Incised (Willey 1949). The adoption of Mississippian traits such as jar and bottle forms, and the guilloche or loop design, are indicative of this period. However, unlike most Mississippi period ceramics, the use of mussel shell as the aplastic is not present (Mitchem 2012).

Trade between the Safety Harbor people and other Southeastern Mississippian cultures took place. It is likely that marine whelks and conchs were traded with groups in the Southeast and Midwest. In turn, items such as copper and ground-stone artifacts made their way south. Based on Spanish accounts, the Safety Harbor culture had evolved into a chiefdom form of government, albeit minus the maize agriculture of other Mississippian period groups in the Southeast. This lack of agriculture was likely due to the extremely successful adaptation to the local environment and the lack of suitable soils for the production of maize. Mitchem notes that although contact with Mississippian people may have led to political and religious changes, there was no compelling reason to change their lifestyle completely (Mitchem 2012:185).

3.5 Colonialism

The cultural traditions of the native Floridians ended with the advent of European expeditions to the New World. The initial events, authorized by the Spanish crown in the 1500s, ushered in devastating European contact. After Ponce de Leon's landing near St. Augustine in 1513, Spanish explorations were confined to the west coast of Florida; Narvaéz is thought to have made shore in 1528

in St. Petersburg and de Soto's 1539 landing is commemorated at De Soto Point on the south bank of the Manatee River.

The Timucuan Indians are the historic counterparts of the Safety Harbor people. In the Tampa Bay area, they are referred to as the Tocobaga. Their range extended roughly from Tarpon Springs southward to the Sarasota area (Bullen 1978). The Tocobaga consisted of a number of small chiefdoms whose leaders frequently waged war against each other. The most powerful chiefdom was Tocobaga, located at the head of Old Tampa Bay at the Safety Harbor site; other major chiefdoms included the Mocoço (at the mouth of the Alafia River) and Ucita (at the mouth of the Little Manatee River) (Hann 2003). When the first Europeans arrived in coastal southwest Florida in the 16th century, they encountered the Calusa, a powerful, complex society ruled by a paramount chief. The principal town of the Calusa is probably Mound Key near Fort Myers Beach. Historic documents suggest that the Calusa chief ruled over fifty towns, from which he exacted tribute (Widmer 1988). By the mid-18th century, the Calusa population had been decimated and dispersed because of conflicts with the Europeans and exposure to their diseases.

As the Calusa disappeared, fishing communities, or "ranchos," were established by Cuban and Spanish fisherfolk on islands and along the coast between Charlotte Harbor and Tampa Bay. The earliest recorded ranchos may have been at Useppa Island and San Carlos Bay in Charlotte Harbor around 1765 (Hammond 1973; Palov 1999). There is some evidence that remnants of the once powerful Calusa joined the Cuban-Spanish fisherfolk at the ranchos in Charlotte Harbor during the early 18th century (Almy 2001). The ranchos supplied dried fish to Cuban and northern markets until the mid-1830s, when onset of the Seminole Indian Wars and customs control ruined the industry.

The area that now constitutes the State of Florida was ceded to England in 1763 after two centuries of Spanish possession. England governed Florida until 1783 when the Treaty of Paris returned Florida to Spain; however, Spanish influence was nominal during this second period of ownership. Prior to the American colonial settlement of Florida, portions of the Muskogean Creek, Yamassee and Oconee Native American populations moved into Florida and repopulated the demographic vacuum created by the decimation of the original aboriginal inhabitants. These migrating groups of Native Americans became known to English speakers as Seminoles. They had an agriculturally based society, focusing upon cultivation of crops and the raising of horses and cattle. The material culture of the Seminoles remained similar to the Creeks, the dominant aboriginal pottery type being Chattahoochee Brushed. European trade goods, especially British, were common. The Creek settlement pattern included large villages located near rich agricultural fields and grazing lands.

Their early history can be divided into two basic periods: *colonization* (1716-1767) when the initial movement of Creek towns into Florida occurred, and *enterprise* (1767-1821) which was an era of prosperity under the British and Spanish rule prior to the American presence (Mahon and Weisman 1996). The Seminoles formed at various times loose confederacies for mutual protection against the new American Nation to the north (Tebeau 1980:72). The Seminoles crossed back and forth into Georgia and Alabama conducting raids and welcoming escaped slaves. This resulted in General Andrew Jackson's invasion of Florida in 1818, which became known as the First Seminole War.

3.6 Territorial and Statehood

Because of the war and the Adams-Onis Treaty of 1819, Florida became a U.S. territory in 1821, but settlement was slow and scattered during the early years. Andrew Jackson, named provisional governor, divided the territory into St. Johns and Escambia Counties. At that time, St. Johns County encompassed all of Florida lying east of the Suwannee River, and Escambia County included the land

lying to the west. In the first territorial census in 1825, some 317 persons reportedly lived in South Florida; by 1830 that number had risen to 517 (Tebeau 1980:134).

Even though the First Seminole War was fought in north Florida, the Treaty of Moultrie Creek in 1823, at the end of the war, was to affect the settlement of all of south Florida. The Seminoles relinquished their claim to the whole peninsula in return for an approximately four million-acre reservation south of Ocala and north of Charlotte Harbor (Covington 1958; Mahon 1985:50). The treaty satisfied neither the Indians nor the settlers. The inadequacy of the reservation and desperate situation of the Seminoles living there, plus the mounting demand of the settlers for their removal, soon produced another conflict.

In 1823, Gadsden County was created from St. John's County, and the following year Mosquito County was created out of Gadsden. This new county included all of the Tampa Bay area and reached south to Charlotte Harbor (Historic Tampa/Hillsborough County Preservation Board [HT/HCPB] 1980:7). In 1824, Cantonment (later Fort) Brooke was established on the south side of the mouth of the Hillsborough River in what is now downtown Tampa by Colonel George Mercer Brooke. Frontier families followed the soldiers and the settlement of the Tampa Bay area began. This caused some problems for the military, as civilian settlements were not in accord with the Camp Moultrie agreement (Guthrie 1974:10). By 1830, the U.S. War Department found it necessary to establish a military reserve around Fort Brooke with boundaries extending 16 miles to the north, west, and east (Chamberlin 1968:43). This reserve included a guardhouse, barracks, storehouse, powder magazine, and stables.

Hillsborough County was established in 1834 by the Territorial Legislature of Florida; it reached north to Dade City and south to Charlotte Harbor, encompassing an area that today comprises Pasco, Polk, Manatee, Sarasota, DeSoto, Charlotte, Highlands, Hardee, Pinellas, and Hillsborough counties. Due to its isolated location, Hillsborough County was slow to develop. The Tampa Bay post office was closed at this time and reestablished as "Tampa" on September 13, 1834 (Bradbury and Hallock 1962). As settlement in the area increased, so did hostilities with Native Americans. The growing threat of Seminole invasion to the civilians near the fort propelled them to sign a petition asking for military protection. Only 25 men signed the petition showing the meager settlement in the area (Brown 1999:46). By the early 1830s, governmental policy shifted in terms of relocating the Seminoles to lands west of the Mississippi River. Outrage at this policy of forced relocation resulted in the Second Seminole War (1835-1842).

The Second Seminole War was triggered by an attack on Major Francis Langhorne Dade as he led a company of soldiers from Fort Brooke to Fort King (now Ocala). As part of the effort to subdue Indian hostilities in Florida, military patrols moved into the wilderness in search of any Seminole concentrations. As the Second Seminole War escalated, attacks on isolated settlers and communities became more common. To combat this, the U.S. Army and Navy converged on southwest Florida attempting to seal off the southern portion of the Florida peninsula from the estimated 300 Seminoles remaining in the Big Cypress Swamp and Everglades (Covington 1958; Tebeau and Carson 1965).

In 1837, Fort Brooke became the headquarters for the Army of the South and the main garrison for the Seminole wars. It also served as a haven for settlers who left their farms to seek protection from the warring Seminoles (Piper et al. 1982). Several other forts, including Fort Alabama (later Fort Foster), Fort Thonotosassa, and Fort Simmons were established during the Seminole War years (Bruton and Bailey 1984). Their uses varied from military garrisons to military supply depots; others were built to protect the nearby settlers during Indian uprisings. The Second Seminole War ended in 1842 when the federal government withdrew troops from Florida. Some of the battle-weary Seminoles were persuaded to emigrate to the Oklahoma Indian Reservation where the federal government had set aside land for their occupation. However, those who wished to remain were allowed to do so, but were pushed

further south into the Everglades and Big Cypress Swamp. This area became the last stronghold for the Seminoles (Mahon 1985).

In 1840, the population of Hillsborough County was 452, with 360 of those residing at Fort Brooke (HT/HCPB 1980). Encouraged by the passage of the Armed Occupation Act in 1842, designed to promote settlement and protect the Florida frontier, settlers moved south through Florida. The Act made available 200,000 acres outside the already developed regions south of Gainesville to the Peace River, barring coastal lands and those within a two-mile radius of a fort. The Armed Occupation Act stipulated that any family or single man over 18 able to bear arms could earn title to 160 acres by erecting a habitable dwelling, cultivating at least five acres of land, and living on it for five years. During the nine-month period the law was in effect, 1184 permits were issued totaling some 189,440 acres (Covington 1961a:48).

Through the Armed Occupation Act, Josiah Gates purchased a quarter section of land at a mineral spring on the south bank of the Manatee River. He built a log cabin and moved his family into it in January 1842. By 1844, extensive sugar plantations and mills had been constructed along the river. Two brothers, Hector and Dr. Joseph Braden, purchased land on the south side of the Manatee River at the confluence of the river and a large creek, which acquired the name of Braden. They grew sugar cane on their 1100 acres and constructed a residence of tabby in 1850, later known as Braden Castle. In addition to the Braden brothers, the Gamble brothers, also from Tallahassee, arrived in the area to farm the north side of the river. In 1844, Major Robert Gamble constructed a sugar plantation on the Manatee River with approximately 1500 acres under cultivation (Matthews 1983:152-155).

Tampa became a center of distribution for settlements being established along the Alafia River and in South Florida. In 1843, William G. Ferris established a general merchandising business at Fort Brooke becoming the first of several merchandising firms. The Tampa area had first been a military center and now was developing into a commercial center for the Gulf Coast region of Florida (Robinson 1928). In 1845, the State of Florida was admitted to the Union, and Tallahassee was selected as the capital. The land surrounding Fort Brooke continued to belong to the U.S. government until 1846; therefore, there were few permanent structures beyond the immediate vicinity of the fort. After the military reservation was reduced from sixteen square miles to four square miles, John Jackson was hired to survey and plat the town in 1847.

To hasten settlement of Florida, the U.S. government commenced official surveys of public land. In 1843 and 1846, Samuel Reid surveyed the exterior lines and section lines of Township 35 South, Range 19 and 20 East. Reid described the landscape of the general survey area as third rate pine; low wet pineland with thick saw palmetto; and swamps (State of Florida 1843:294-296, 1846:452-488). The resulting plat did not depict any historic features, including Indian trails or mounds within or near the project area (State of Florida 1847) (**Figure 3.2**).

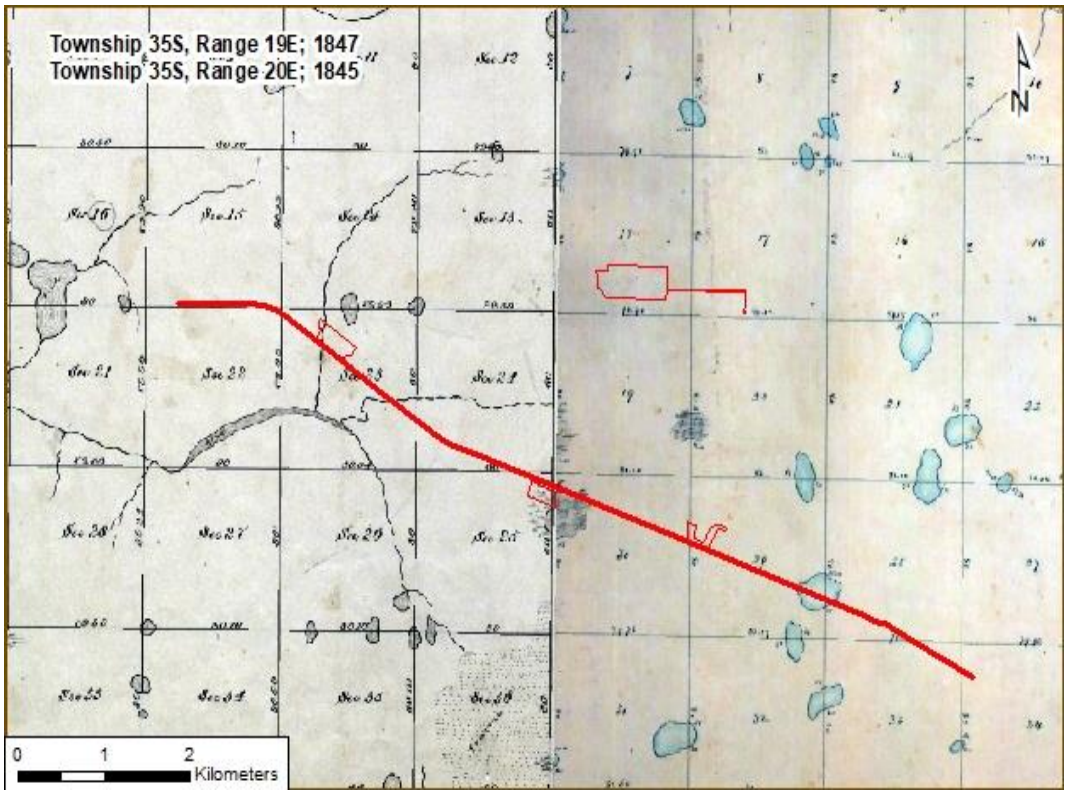

Figure 3.2. Plats of the APE.

Although the majority of Florida's Seminoles had been deported to the western territories by the end of Second Seminole War, a number of Seminoles remained in central and south Florida. In July 1849, an incident occurred at the Kennedy and Darling Store near the Peace River. Four Seminoles killed two men, and wounded William McCollough and his wife Nancy, before looting and burning the store. This incident created the "Indian Scare" of 1849 and resulted in the federal government establishing a series of forts across the state (Brown 1991; Covington 1961b).

General David Twiggs of Tampa was appointed to oversee the construction of the forts. Starting at the mouth of the Manatee River, the forts were built 15 miles apart, to keep the Seminoles south of the line of forts. Fort Hamer was established by the U.S. Army on November 28, 1849. Located ten miles upriver from Manatee Village, "near the head of the steamboat navigation," it lay at the western terminus of a cross-Florida military trail. Twiggs described this location as one of the finest sites for a military installation that he had ever seen.

In January of 1855, Manatee County was carved from the southern portion of Hillsborough County. It encompassed the area from Tampa Bay south to Charlotte Harbor and inland to the Kissimmee River and Lake Okeechobee. The village of Manatee, approximately one-mile east of present day Bradenton, was designated at the county seat. On December 15 of that year, the City of Tampa was incorporated by an act of the state legislature. Also at that time, the Third Seminole War, or the Billy Bowlegs War, started due to pressure placed on the Indians remaining in Florida to migrate west. The war started when Seminole Chief Holatter-Micco, also known as Billy Bowlegs, and 30 warriors attacked an army camp killing four soldiers and wounding four others. The attack was in retaliation for damage done by several artillerymen to property belonging to Billy Bowlegs. This hostile action renewed state and federal interest in the elimination of the Seminoles from Florida. In 1856, Braden Castle was attacked by the Seminoles. The Castle served as a refuge for neighboring families

for approximately nine months. Fort Hamer was reactivated and occupied by a detachment of ten men from William B. Hooker's Company for Florida Mounted Volunteers (Covington 1982; FWP 1939; Sheppard et al. 1981).

Military action was not decisive during the war; therefore, in 1858 the U.S. government resorted to monetary persuasion to induce the remaining Seminoles to migrate west. Chief Billy Bowlegs accepted $5000 for himself and $2500 for his lost cattle, each warrior received $500, and $100 was given to each woman and child. On May 4, 1858, the ship *Grey Cloud* set sail from Fort Myers with 123 Seminoles. Stopping at Egmont Key, 41 captives and a Seminole woman guide were added to the group. On May 8, 1858, the Third Seminole War was declared over (Covington 1982).

Residents turned to citrus, tobacco, vegetables, and lumber to make their living. Cattle ranching served as one of the first important economic activities reported in Manatee County. Mavericks left by the early Spanish explorers provided the source for the herds raised by the mid-eighteenth century "Cowkeeper" Seminoles. As the Seminoles were pushed further south during the wars, their cattle were either sold or left to roam. Settlers captured or bought the cattle and branded them for their own. By the late 1850s, the cattle industry of southwest Florida was developing on a significant scale. Hillsborough and Manatee Counties constituted Florida's leading cattle production region. By 1860, Fort Brooke and Punta Rassa (south of Ft. Myers) were major cattle shipping points for southwest Florida. William B. Hooker, a veteran Indian fighter and former legislative delegate from Hamilton County, was among those whose cattle grazed north of the Manatee River. Hooker's agricultural enterprises at present day Parrish included citrus cultivation and the cultivation of Sea Island cotton with William H. Johnson (Matthews 1983). By 1860, the Manatee County population was only 854 (Sheppard et al. 1981).

3.7 Civil War and Aftermath

In 1861, Florida followed South Carolina's lead and seceded from the Union in a prelude to the American Civil War. Florida had much at stake in this war as evidenced in a report released from Tallahassee in June of 1861. It listed the value of land in Florida as $35,127,721 and the value of the slaves at $29,024,513 (Dunn 1989:59). Even though the coast of Florida, including the port of Tampa, experienced a naval blockade during the war, the interior of the state saw very little military action (Robinson 1928:43). Many male residents abandoned their farms and settlements to join the Union army at one of the coastal areas retained by the U.S. government or joined the Confederate cow cavalry. The cow cavalry provided one of the major contributions of the state to the Confederate war effort by supplying and protecting the transportation of beef to the government (Akerman 1976). It was estimated that three-quarters of the Florida beef supplied to the Confederacy came from Brevard and Manatee Counties (Shofner 1995). Salt works along the Gulf Coast also functioned as a major contributor to the Confederate efforts (Lonn 1965).

Union troops stationed at Punta Rassa conducted several raids into the Peace River Valley to seize cattle and destroy ranches. In response, Confederate supporters formed the Cattle Guard Battalion, consisting of nine companies under the command of Colonel Charles J. Mannerlyn. The lack of railway transport to other states, the federal embargo, and the enclaves of Union supporters and troops holding key areas such as Jacksonville and Ft. Myers prevented an influx of finished materials. Additionally, federal gunboats blockaded the mouth of the Manatee River, as well as other large rivers throughout the state preventing the shipment of raw materials. In 1862, armed forces advanced up the Manatee River burning sugar mills and plantation houses. Because of this, new settlement within the area remained limited. The war lasted until 1865.

Immediately following the war, the South underwent a period of "Reconstruction" to prepare the Confederate states for readmission to the Union. The program was administered by the U.S. Congress, and on July 25, 1868, Florida officially returned to the Union (Tebeau 1980:251). Civilian activity slowly resumed a normal pace after recovery from wartime depression, and the population continued to expand. The 1866 Homestead Act was passed to encourage settlement. The act allowed freedmen and loyal U.S. citizens to receive 80-acre tracts in Florida and the other four public land states of the South. Former Confederates were not eligible to receive homesteads under the Act until 1876 when the lands were open to unrestricted sale (Tebeau 1980:266, 294). The Homestead Act encouraged growth and settlement throughout the Reconstruction era. It was at this time that the Manatee county seat was moved to Pine Level, which was more centrally located within the 5,000 square mile county. It remained the county seat for the next 21 years (Knight 1983).

The post-war economic conditions of much of the rest of the South contributed to changes in the economy of the Tampa Bay area and communities to the south along the Gulf Coast. Post-war cattle shipments to Cuba varied considerably with changes in Cuban demand and the institution of a duty. The net result of Reconstruction-period cattle shipping was the movement of ranges and cattlemen farther south, closer to Charlotte Harbor and the Caloosahatchee River (Brown 1991:199). An influx of poor farmers, coinciding with the southward movement of cattle ranches, made the economic stability of the area dependent upon reliable sources of overland freight transport (Mormino and Pizzo 1983:68).

During the 1870s and 1880s, the economy boomed with a number of winter visitors seeking the favorable subtropical climate, and an increase of agricultural production with the introduction of truck farming of tomatoes, cucumbers, and beans, as well as experimentation with oranges and lemons. Cattle continued to play a major role in the inland economy around Pine Level and Arcadia. According to the Federal Writers' Project (FWP), Manatee became a popular winter resort in the 1870s, at which time tourists and health seekers, as well as mail and supplies, were transported on sailing ships from Cedar Key, the nearest railroad station. Boarding houses stimulated appetites by offering wild turkey, venison, a variety of fresh- and salt-water fish, and lemon pie; one hostelry advertised its "well-tended croquet grounds." Grapes flourished, but no use was made of them, which led a visiting woman to remark that if the manufacture of wine were encouraged, "this beastly drunkenness from strychnine whiskey would very soon be abandoned" (FWP 1939:471).

The State of Florida faced a financial crisis involving title to public lands in the early 1880s. By Act of Congress in 1850, the federal government turned over to the states for drainage and reclamation all "swamp and overflow land." Florida received approximately ten million acres. To manage that land and the five million acres the state had received on entering the Union, the Florida legislature created the Board of Trustees of the Internal Improvement Fund in 1851. In 1855, the legislature set up the trust fund in which state lands were to be held. The Fund became mired in debt after the Civil War, and under state law, no land could be sold until the debt was cleared. In 1881, the Trustees started searching for someone to buy enough state land to pay off the Fund's debt to permit sale of the remaining millions of acres that it controlled.

By 1881, Hamilton Disston, a member of a prominent Pennsylvania saw manufacturing family and friend of then Governor William Bloxham, had entered into agreement with the State to purchase four million acres of swamp and overflowed land for one million dollars. In exchange for this, he promised to drain and improve the land. Disston's land holding company was the Florida Land and Improvement Company (FLIC). He and his associates also formed the Atlantic and Gulf Coast Canal and Okeechobee Land Company in 1881 (Davis 1939:205). This company was established as part of the drainage contract with the State. This contract provided one-half of the acreage that they could drain, reclaim, and make fit for cultivation south of Orlando and east of the Peace River. The Disston Purchase enabled the distribution of large land subsidies to railroad companies, inducing them to begin

extensive construction. Disston and the railroad companies in turn sold smaller parcels of land to developers and private investors (Tebeau and Carson 1965:252). Disston sold half of this contract to the British Florida Land and Mortgage Company, headed by Sir Edward James Reed, in 1882 (Tischendorf 1954). This was done to cover the second payment on the Purchase since Disston's assets had been tied up in the drainage contract.

The first real influence on the growth of the area was the investment of capital in railroad construction during the 1880s. This was encouraged by the State of Florida, which granted sizeable amounts of land to the railroad companies. The Jacksonville, Tampa, and Key West Railway Company obtained most of the project area in 1884 (State of Florida n.d.:244-235). This development increased access, stimulated commerce, and promoted tourism, resulting in population growth and economic prosperity. The Florida Southern Railroad acquired the railroad charter and land grant of the Gainesville Ocala, and Charlotte Harbor Railroad which was due to expire in 1885. To hold this charter and secure the land, immediate railroad construction was necessary. Construction started at Bartow in Polk County and continued southward to Punta Gorda (Pettengill 1952). With the railroad as a catalyst, there was a sudden surge of buying land for speculation, agriculture, and settlement. This resulted in DeSoto County being cut from eastern portion of Manatee County. Braidentown (now Bradenton) was selected as the new county seat for Manatee County (McDuffee 1961).

During the 1880s, harvesting of the natural resources, timber and naval stores, fostered industry across the region. Along the rivers, the timber was first tapped for its rosin, and then later harvested for lumber. Tallevast Turpentine Camp operated at Mitchellville, and W. S. Warner of Palma Sola operated a logging camp west of Fort Hamer. Warner's sawmill turned out lumber from the logs barged from the old fort down river. Warner advertised yellow pine, cypress, and cedar made into orange and vegetable crates, shingles, doors, and sashes together with his general store merchandise. He was an agent for Disston's Florida Land and Improvement Company (Warner and Warner 1986). In the late 1880's, phosphate was discovered in the Alafia River. In 1894, the Peruvian Mining Company was formed. In addition to the processing plant, the phosphate-boom led to the construction of a hotel and some houses on the north bank of the river before the shallow deposit was depleted and mining proved too expensive (HT/HCPB 1980; Maio et al. 1998:83). However, it did add to the growth of the area. Through the early part of the century, more settlements sprung up along the Peace River and its drainage basin. The industry radiated out across the into the deposit regions of the Alafia, Little Manatee, Manatee and Peace Rivers (HT/HCPB 1980:16, 18).

Although the national financial panic of 1893 prompted a decline in capital and investment in the area, most folks relied primarily on seafood harvesting, cattle production, and citrus cultivation for sustenance. The Great Freeze of 1894 and 1895 ruined the crops, but did not destroy the trees, as had happened in areas further north. From the late 1890s through the early 1940s, the production of naval stores including the harvesting of lumber for construction and rosin for products such as glass, varnish, gunpowder, waxes, turpentine, and paints, served as a major industry. The Manatee Crate Mill produced crates and hampers for the farming and citrus industries.

The Spanish American War, in 1898, brought millions of dollars and many troops to Tampa. Tampa was the United States' nearest shipping point for the war effort in Cuba. Consequently, it was the designated departure point for the troops. Henry Plant's Tampa Bay Hotel became the headquarters of the Army (Evans 1972). Troops began arriving in April of 1898 and by May of that year, they outnumbered residents two to one (Friedel 1985; Grismer 1950). By early June, an estimated 20,000 troops had shipped out to Cuba with thousands more waiting. However, the war ended on July 5, and by the end of August, the troops were gone and Tampa returned to normal.

3.8 Twentieth Century

The turn of the century prompted optimism and an excitement over growth and development. A north/south connector from Tampa to Miami significantly opened up Manatee County. In 1915, a group of businesspersons met to discuss the feasibility of a cross-state highway from Tampa to Miami by way of Sarasota. The segment of this route was constructed in Manatee County with the passage of a bond issue. This road was eventually designated as US 41, or the Tamiami Trail; it was not completed until 1928 (Scupholm 1997). In 1915, the East & West Coast Railroad, a subsidiary of the Seaboard Air Line Railroad, was completed between Bradenton and Arcadia; it carried passengers and freight (McDuffee 1961:320). Developers used propaganda promoting Florida as the eternal garden to attract tourists and new residents. The great Florida land boom of the 1920s saw widespread development of towns and highways. Several reasons prompted the boom, including the mild winters, the growing number of tourists, the larger use of the automobile, the completion of roads, the prosperity of the 1920s, and the promise by the state legislature never to pass state income or inheritance taxes.

Signs of growth were halted by the end of the Florida Land Boom and the Great Depression hit Florida earlier than the rest of the nation. By 1926-27, the bottom fell out of the Florida real estate market. Massive freight car congestion from hundreds of cars loaded with building materials sitting idle in the railroad yards caused the Florida East Coast Railway to embargo all but perishable goods in August of 1925 (Curl 1986). The embargo spread to other railroads throughout the state, and, as a result, most construction halted. The 1926 real estate economy in Florida was based upon such wild land speculations that banks could not keep track of loans or property values (Eriksen 1994:172). By October, rumors were rampant in northern newspapers concerning fraudulent practices in the real estate market in south Florida. Confidence in the Florida real estate market quickly diminished, and the investors could not sell lots (Curl 1986). To make the situation even worse, two hurricanes hit south Florida in 1926 and 1928. The 1928 hurricane created a flood of refugees fleeing northward. The following year, in 1929, the Mediterranean fruit fly invaded and paralyzed the citrus industry creating quarantines and inspections that further slowed an already sluggish industry.

The 1930s saw the closing of mines and mills and widespread unemployment. The East & West Coast Railroad was closed in 1934 since the turpentine resources had been exhausted and the SAL went into receivership and needed to cut their losses (McDuffee 1961; TampaBayTrains.com n.d.). Also affected by the depression was the cigar industry of nearby Tampa, the area's economic backbone for a half century. Several cigar factories closed, eleven cigar firms moved, and three merged into one (Campbell 1939). Further compounding the desperate economic situation was the all-time record flood crest of the Alafia River on June 9, 1933. However, during the 1930s, tropical fish farms were established in the general area.

In the mid-1930s, the New Deal programs of Franklin D. Roosevelt's administration were aimed at pulling the nation out of the Depression, and Manatee County did benefit from these with the Public Works Administration's projects (Lowry 1974). However, it was not until World War II that the local economy recovered, along with the rest of the state. Federal roads, channel building, and airfield construction for the wartime defense effort brought numerous Americans into the region.

As World War II ended, Manatee County, like most of Florida, experienced a population boom in the 1950s. According to the U.S. Census Bureau (USCB), Florida's population increased from 1,897,414 in 1940 to 2,771,305 in 1950 (Forstall 1995). After the war, car ownership increased, making the American public more mobile. Tourism, along with corporate investments, developed as one of the major industries for the Tampa Bay area. Many who had served at Florida's military bases during World

War II also returned with their families to live. As veterans returned, the trend in new housing focused on the development of small tract homes in new subdivisions.

Finally, the late 1950s saw the end of the cigar industry in Tampa due to Fidel Castro's takeover of Cuba and an American embargo on Cuban tobacco. Tourism began its development as one of the major industries for the city along with corporate investments. As a result, in the 1960s construction of I-75 in Florida was begun, generating a spurt of activity that has continued into the 21st century. Completion of Interstate 275 provided convenient access within the metropolitan Tampa area. Interstate 75, completed through eastern Hillsborough and Manatee Counties in the early 1980s, provided access allowing continued growth in the counties. Throughout the last twenty years, commercial development, including tourist attractions, restaurants, and hotels, have exploded along the interstate systems, keeping tourism as one of the primary revenue sources in Florida.

With the population explosion in the region, the character of the area has changed dramatically. By 1970, development of residential communities, mobile home parks, and villages was well underway throughout the region. By 2010, Manatee was ranked 16th in populous, with a population of 322,833 (USCB 2013). The largest employers are in the retail trade, services, and government sectors. Manatee County is part of the Sarasota-Bradenton-Venice Metropolitan Area.

3.9 Project Area Specifics

A review of the aerial photos from the Publication of Archival, Library & Museum Materials (PALMM) revealed that the area was mainly undeveloped through 1994, although may have been used for cattle grazing as some drainage ditches had been excavated in the general area (**Figure 3.3**). However, cattle trails were not evident on the aerials.

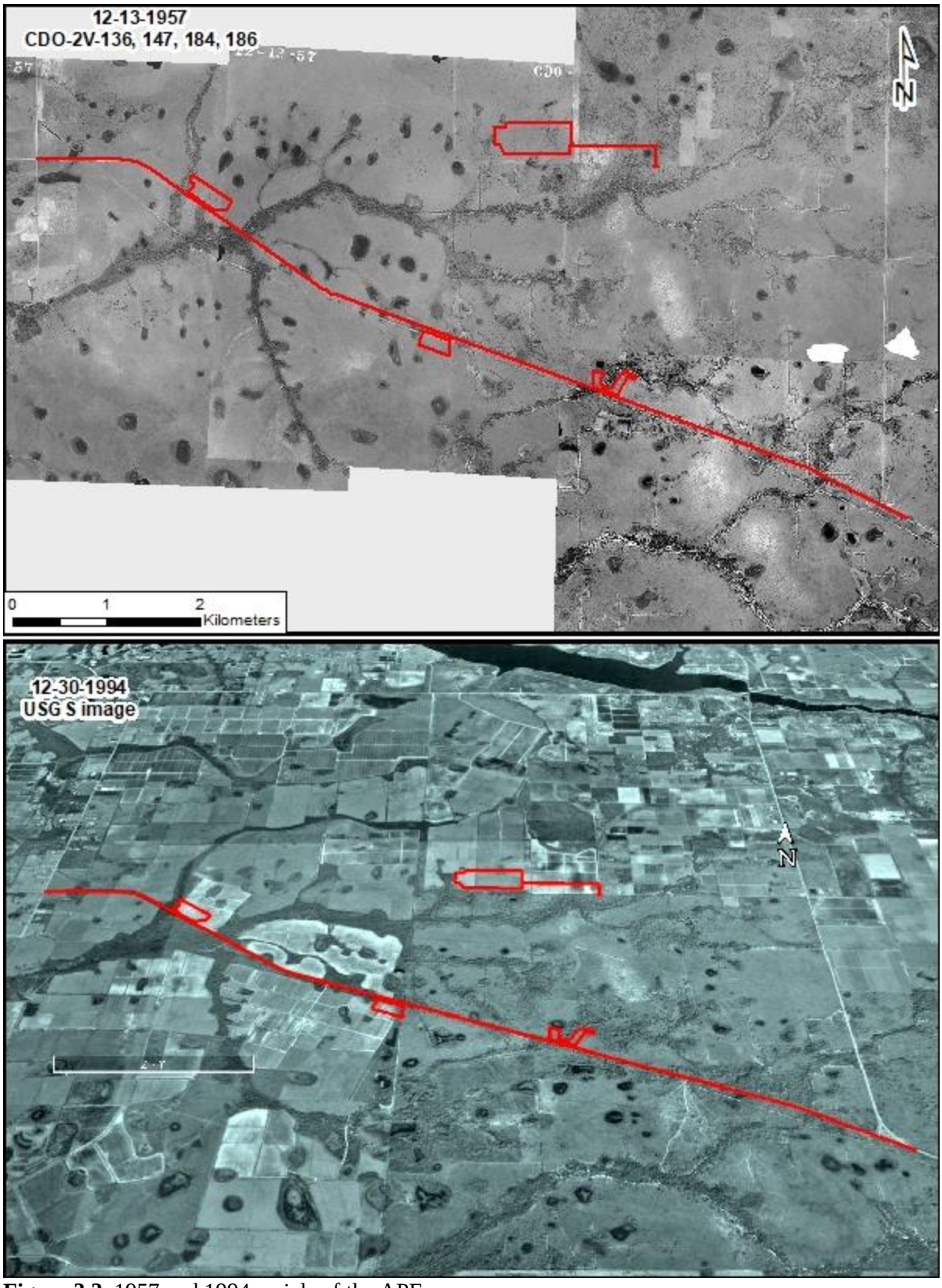

Figure 3.3. 1957 and 1994 aerials of the APE.

4.0 RESEARCH CONSIDERATIONS AND METHODS

4.1 Background Research and Literature Review

For CRAS projects, research designs are formulated prior to initiating fieldwork to delineate project goals and strategies. Of primary importance is an attempt to understand, based on prior investigations, the spatial distribution of known resources. Such knowledge serves not only to generate an informed set of expectations concerning the kinds of sites which might be anticipated to occur within the project area, but also provides a valuable regional perspective and, thus, a basis for evaluating any new sites discovered. The digital FMSF data used in this report were obtained in December 2018. However, according to FMSF staff, input is typically several weeks behind receipt of reports and site files and the GIS data are updated quarterly. Thus, the findings of the background research phase of investigation may not be current with actual work performed in the area. No one was encountered who had information on the history of the project area.

4.1.1 Archaeological Considerations

A review of the FMSF revealed that no archaeological sites have been previously recorded within the project area and only one site has been recorded within one half miles of the APE (**Figure 4.1**). 8MA02020 is a temporally indeterminate lithic scatter that was discovered during the survey for the Lakewood National Golf and Country Club (Mikell 2014). The SHPO has deemed the site ineligible for listing in the NRHP (FMSF).

There have been a number of CRASs conducted in the area for a variety of developments (ACI 2003, 2014; Janus Research 1998, 2002, 2003, 2004a, 2005, 2007; Wallace 2017), cell towers (Dynamic Environmental Associates 2016; McMakin 2013; Parker 2001, 2002), roadways (ACI 2018; Ambrosino 2003; Browning 1986; Janus Research 2000), and a powerline corridor (Dickinson and Wayne 2012). Based on these data, and other regional site location predictive models and studies (e.g., Almy 1976; Austin et al. 1991; Burger 1982; de Montmollin 1983; Deming 1980; Janus Research 1992, 2004b; Weisman and Collins 2004) informed expectations concerning the types of sites likely to occur within the project area, as well as their probable environmental settings, was generated. As archaeologists have long realized, aboriginal populations did not select their habitation sites and activity areas in a random fashion. Rather, many environmental factors had a direct influence upon site location selection. Among these variables are soil drainage, distance to freshwater, relative topography, and proximity to food and other resources including stone and clay. It has been repeatedly demonstrated that non-coastal archaeological sites are most often located near a permanent or semi-permanent source of potable water. In addition, aboriginal sites are generally found on better-drained soils, and at the upland margins of wetland features such as swamps, sinkholes, lakes, and ponds. Upland sites well removed from potable water are rare. In the pine flatwoods, sites tend to be situated on ridges and knolls near a freshwater source. It should be noted that this settlement pattern could not be applied to sites of the Paleo-Indian and Early Archaic periods, which precede the onset of modern environmental conditions. These were tied to water and lithic resources much more so than is evident during the later periods.

Using these criteria, the project area was considered to have a low probability for archaeological site occurrence. Sites, if found, were expected to be small lithic and/or artifact scatters similar to the previously recorded sites within the general area. Given the results of the historic research, no 19th century homesteads, forts, military trails, or Indian encampments were expected.

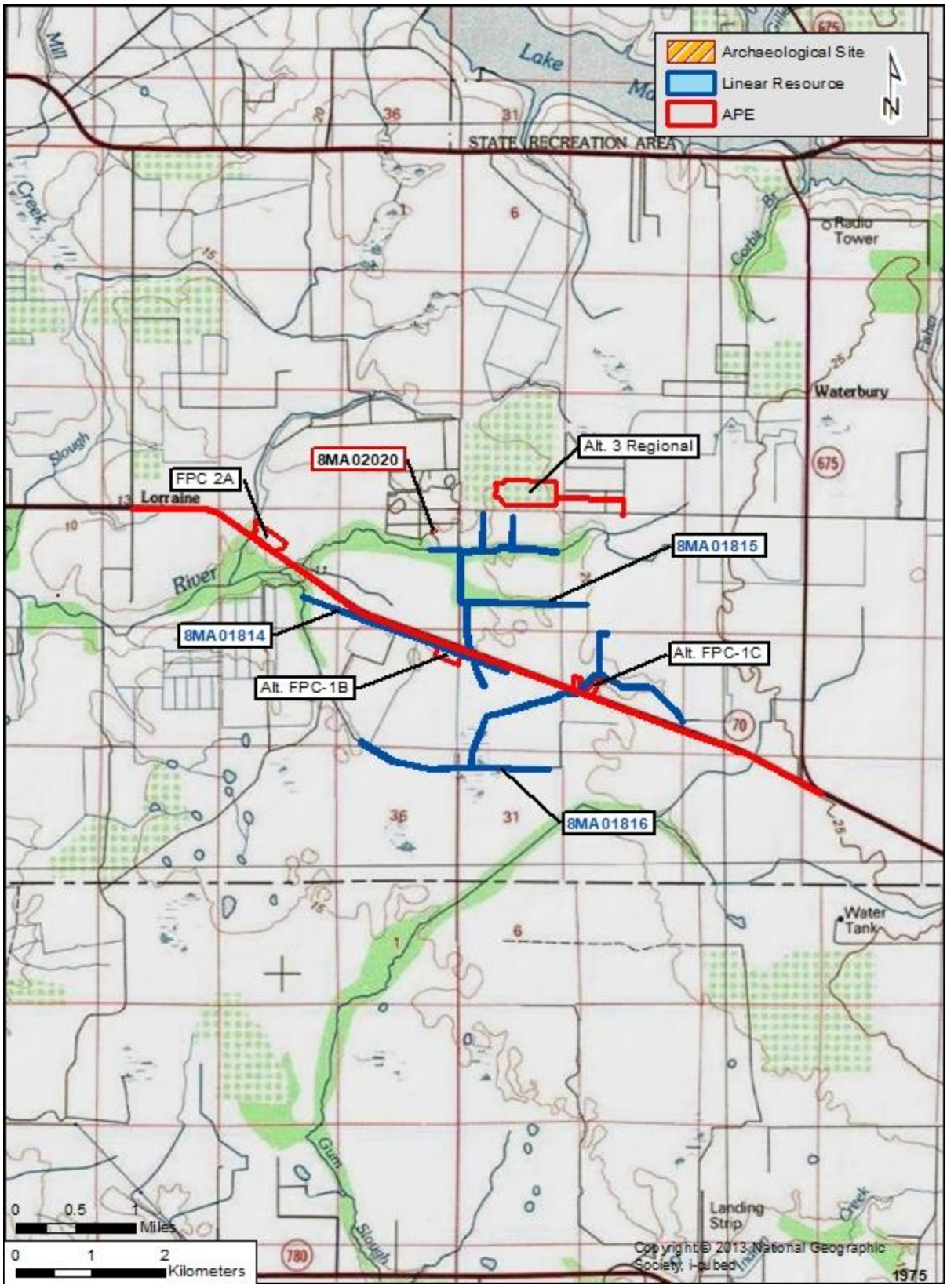

Figure 4.1. Location of the previously recorded archaeological sites within one half mile of the APE.

4.1.2 Historical Considerations

A review of the FMSF and the NRHP indicated that there are no previously recorded historic buildings or structures within the APE, however, portions of three linear resources have been recorded: 8MA01814, a segment of an abandoned rail bed once associated with the East & West Coast Railway, 8MA01815 (the Lakewood Ranch Canal #2), and 8MA01816 (the Lakewood Ranch Canal #3). Portions of 8MA01814 have been determined eligible for listing in the NRHP by the SHPO; however, the portions of railbed adjacent and within the APE was determined not eligible for listing in the NRHP by the SHPO as well as 8MA01815 and 8MA01816 which were also determined not eligible for listing in the NRHP by the SHPO.

In addition, background research did reveal that portions of SR 70 have been recorded in Manatee County and determined not eligible for listing in the NRHP; but the segment of SR 70 within the APE has not been recorded. Thus, 8MA01906 will be updated to reflect the segment of SR 70 within the APE. The Manatee County property appraiser's data indicated that no historic buildings or structures were located within the APE (Hackney 2019).

4.2 Field Methodology

The FDHR's Module Three, Guidelines for Use by Historic Professionals, indicates that the first stage of archaeological field survey is a reconnaissance of the project area to "ground truth," or ascertain the validity of the predictive model (FDHR 2003). During this part of the survey, the researcher assesses whether the initial predictive model needs adjustment based on disturbance or conditions such as constructed features (i.e., parking lots, buildings, etc.), underground utilities, landscape alterations (i.e., ditches and swales, mined land, dredged and filled land, agricultural fields), or other constraints that may affect the archaeological potential. Additionally, these Guidelines indicate that non-systematic "judgmental" testing may be appropriate in urbanized environments where pavement, utilities, and constructed features make systematic testing unfeasible; in geographically restricted areas such as proposed pond sites; or within project areas that have limited high and moderate probability zones, but where a larger subsurface testing sample may be desired. While predictive models are useful in determining preliminary testing strategies in a broad context, it is understood that testing intervals may be altered due to conditions encountered by the field crew at the time of survey. A reasonable and good faith effort was made per the regulations laid out in 36 CFR § 800.4(b)(1) (Advisory Council on Historic Preservation n.d.) to test all areas of the APE.

Archaeological field methods consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. Shovel tests were placed at approximately 50 m and 100 m intervals and judgmentally. Shovel tests were circular and measured approximately 50 centimeters (cm) in diameter by at least 1 m in depth unless impeded by water. All soil removed from the tests was screened through 0.64 cm mesh hardware cloth to maximize the recovery of artifacts. The locations of all shovel tests were recorded with a Juno 5 Series GPS device, and following the recording of relevant data such as stratigraphic profile, all shovel tests were refilled.

Historic structures field methodology consisted of a reconnaissance survey of the area to determine the location of any historic properties, including evidence of previously recorded resources. Discovered resources were to be subjected to an in-depth study, photographs taken, and information needed for completion of the FMSF forms would be gathered, including a physical description and interviews with residents and other individuals knowledgeable about the history of the area.

4.3 Inadvertent/Unanticipated Discovery of Cultural Remains

Occasionally, archaeological deposits, subsurface features or unmarked human remains are encountered during the course of development, even though the project area may have previously received a thorough and professionally adequate cultural resources assessment. Such events are rare, but they do occur. In the event that human remains are encountered during the course of development, the procedures outlined in Chapter 872, *FS* must be followed. However, it was not anticipated that such sites would be found during this survey.

In the event such discoveries are made during the development process, all activities in the immediate vicinity of the discovery will be suspended, and a professional archaeologist will be contacted to evaluate the importance of the discovery. The area will be examined by the archaeologist, who, in consultation with staff of the Florida SHPO, will determine if the discovery is significant or potentially significant. In the event the discovery is found to be not significant, the work may immediately resume. If, on the other hand, the discovery is found to be significant or potentially significant, then development activities in the immediate vicinity of the discovery will continue to be suspended until such time as a mitigation plan, acceptable to SHPO, is developed and implemented. Development activities may then resume within the discovery area, but only when conducted in accordance with the guidelines and conditions of the approved mitigation plan.

4.4 Laboratory Methods and Curation

No artifacts were recovered, thus no laboratory methods were utilized. All project-related records, including maps, field notes, and photos, will be maintained at the ACI office (ACI File No. P17073) in Sarasota.

5.0 RESULTS AND RECOMMENDATIONS

5.1 Archaeological Results

The archaeological investigations consisted of surface reconnaissance combined with systematic and judgmental subsurface testing. A total of 126 shovel tests were excavated within the APE (47 within the pond sites, 48 along the corridor, and 31 within the proposed roundabout areas) (**Figures 5.1 and 5.2**). Shovel tests were placed at 50 m and 100 m intervals and judgmentally. As a result, no archaeological sites were found.

Soils within the project APE were typically poorly to very poorly drained. General stratigraphic profiles of ponds are included in the pond table (**Table 5.1**). General stratigraphy of the south side of the project corridor include the following:

- 0-20 cm dark gray sand; 25-90 cm light gray sand; 90-100 cm brown sand; water at 80 cm
- 0-30 cm gray sand; 30-60 cm dark brown sand; 60-80 cm light brown sand; water at 70

Stratigraphy on the north side of SR 70 varied, but tests showed more disturbance. Sample profiles follow:

- 0-100 cm mottled gray/brown sand
- 0-30 cm dark gray gravelly/shell fill sand; 30-50 cm light gray brown sand, trace gravel and non-diagnostic bottle glass; 50-100 dark brown sand

Sample profile at Lorraine Rd intersection:

- 0-30 cm compact gravelly gray/brown mottled fill sand (utilities immediate)

Sample profile at Waterbury Rd intersection:

- 0-20 cm gray sand; 20-50 cm light gray sand; 50-70 cm dark brown sand; 70-80 cm gray-brown sand; 80-100 cm brown sand, wet

5.2 Historical Results

The historical resources survey of the project area revealed an absence of historic buildings or structures (50 years of age or older) within the APE. However, one linear resource, SR 70, was located within the APE and recorded. In addition, portions of three previously recorded linear resources are located within the APE: 8MA01814, a segment of an abandoned railbed once associated with the East & West Coast Railway, 8MA01815 (the Lakewood Ranch Canal #2), and 8MA01816 (the Lakewood Ranch Canal #3). Portions of 8MA01814 have been determined eligible for listing in the NRHP by the SHPO; however, the portions of the railbed adjacent and within the APE was determined not eligible for listing in the NRHP by the SHPO. In addition, 8MA01815 and 8MA01816 were also determined not eligible for listing in the NRHP by the SHPO. Since all three resources were determined not to be eligible for listing in the NRHP, the FMSF forms were not updated but a brief description of each follows. Portions of SR 70 (8MA01906) have been recorded within Manatee County, therefore, the FMSF for was updated for the segment that is located within the current APE. The FMSF form for this resource is in **Appendix A**.

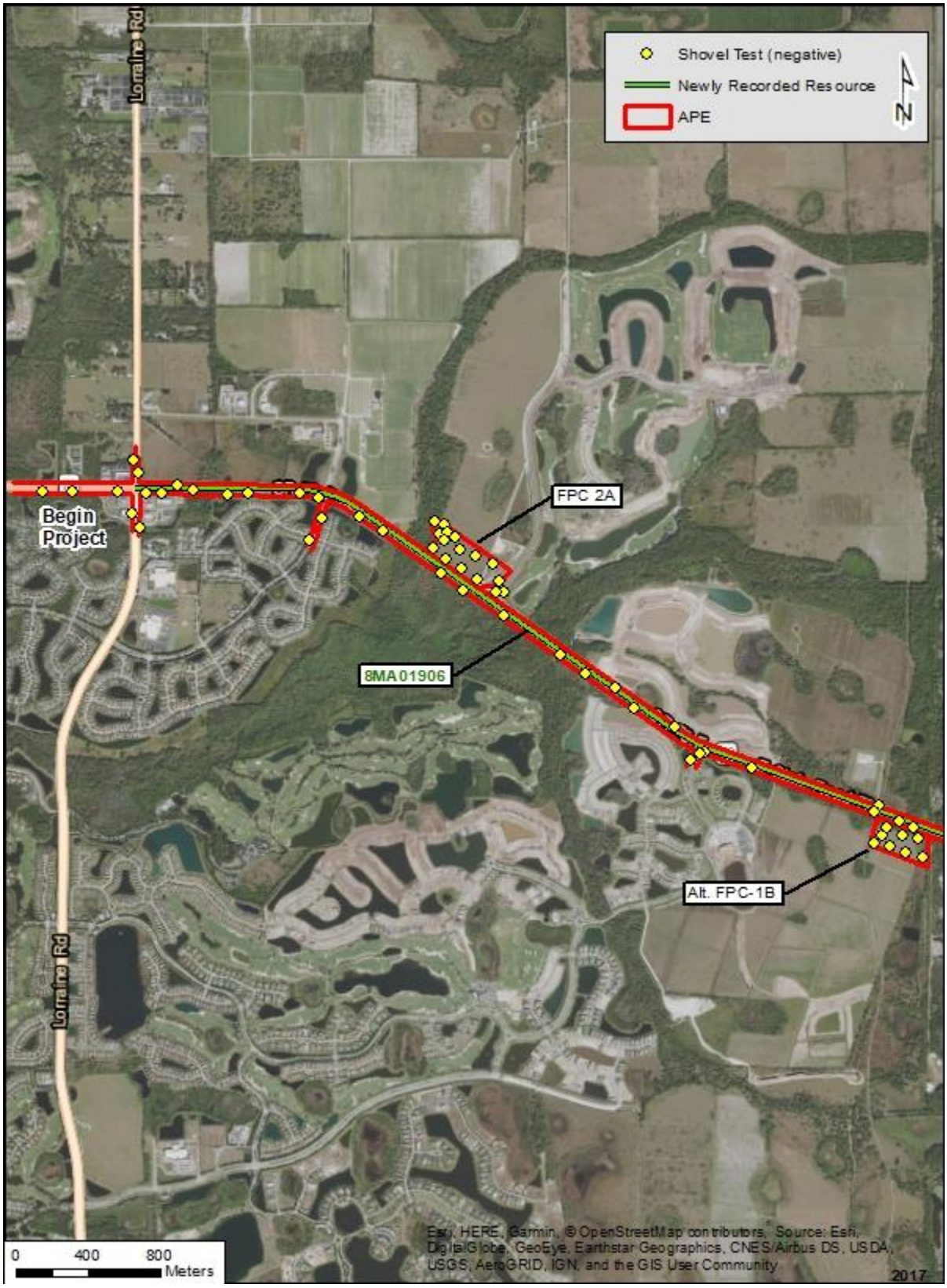

Figure 5.1. Location of the shovel tests and linear resource within the APE.

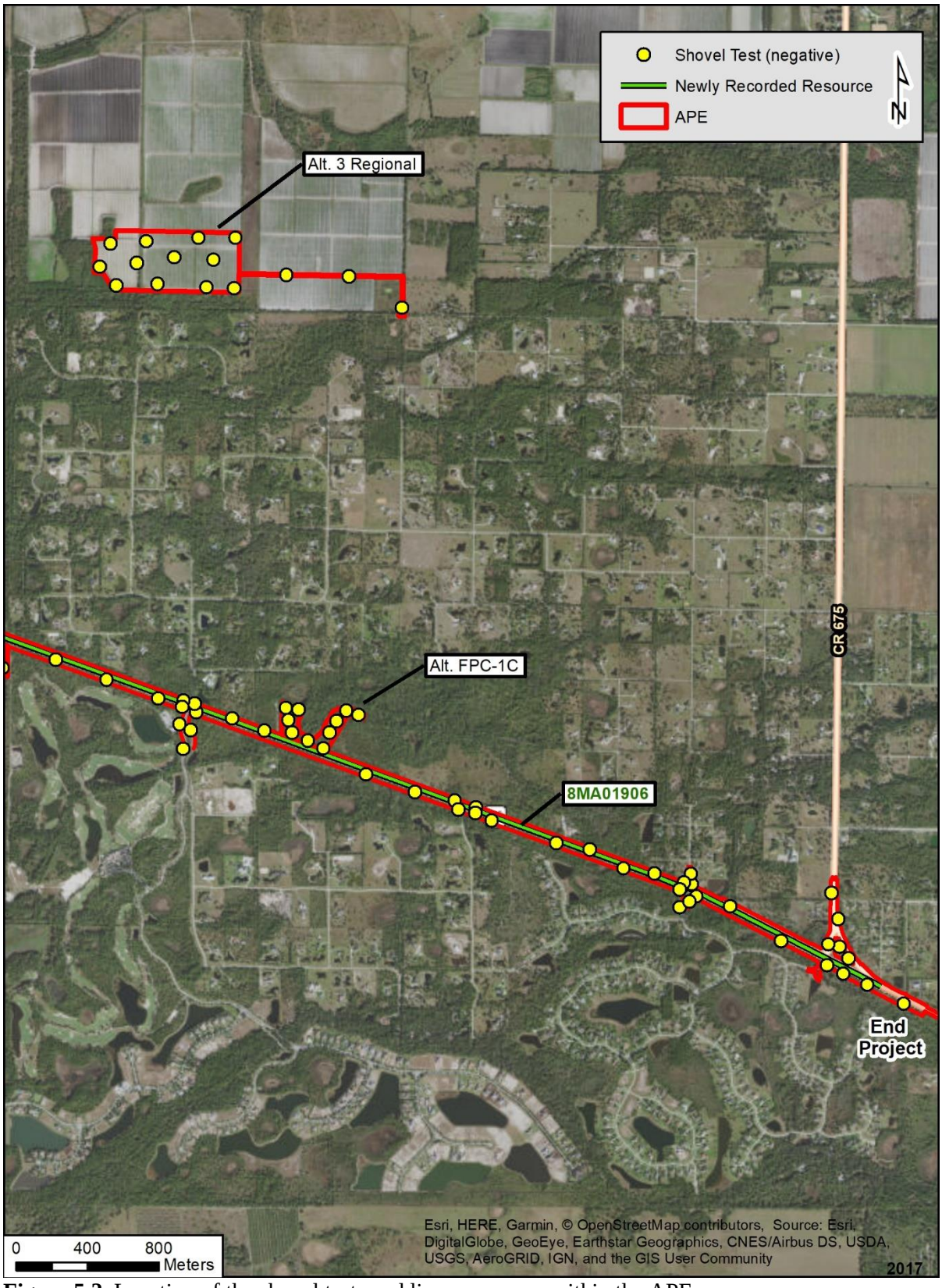

Figure 5.2. Location of the shovel tests and linear resource within the APE.

8MA01814: A linear elevation, presumed to be a segment of 8MA01814 the abandoned East & West Coast Railway bed, was observed along the north border of FPC-1B and south of SR 70. This area was overgrown with saw palmetto and other vegetation (**Photo 5.1**). However, no tracks, ties, or ballast was observed. Research conducted as part of this survey indicated that the East & West Coast Railway was a subsidiary of the Seaboard Air Line Railway. The 48-mile long Railway was organized in 1913 and operational in 1915; it extended between Arcadia and Bradenton, via Myakka City, providing both passenger and freight service. Naval stores, including milled lumber and turpentine, were transported on the railroad. However, by the early 1930s, freight revenues seriously declined as the area forests had been expended. Additionally, passenger demand dropped; only 93 patrons used the service in 1932. As a result of these trends and the fact that Seaboard went into receivership in 1930, the East & West Coast Railway track and associated features were completely dismantled in 1933 (Turner 2003, 2008). The open, rural nature of the historic landscape has been displaced by SR 70 and the introduction of ditches have altered the setting and physical integrity of this resource.

Photo 5.1. Looking northwest towards where railbed is located.

8MA01815 and 8MA01816: the Lakewood Ranch Canal #2 and #3, are associated with the Depression and New Deal period (1930-1940) and are standard drainage canals associated with the Lakewood Ranch drainage system (Dickinson and Wayne 2012). They evidence no distinctive features or significant historical associations and are therefore not considered NRHP eligible as located within the APE.

8MA01906: SR 70, within the APE is located in Sections 15, 22, 23, 24, 25 of Township 35 South Range 19 and Sections28, 29, 39, 33 of Township 35 South and Range 20 East (USGS 1973a, 1973b), for a length of approximately 6.1 miles (**Photo 5.2; Figures 5.1, 5.2**). This segment of SR 70 consists of a two-lane undivided facility with 12-foot travel lanes (one in each direction) and 12-foot shoulders (5 foot paved). There are 14 cross drains, ranging in size from 24-inch pipes to a quadruple 10’ x 7’ box culvert. Utility lines, underground utilities, and standard signage are present throughout the corridor.

Photo 5.2. Looking at SR 70 from Post Boulevard.

SR 70 in the APE is first evident on a 1940 Florida highway map (Florida State Road Department 1940). The road also appears on historic aerials in 1957 and 1958 (USDA 1957, 1958). Based upon the aerials, it appears the current road follows the historic alignment; however, the section of highway within the project APE has lost much of its integrity through modern development and various road improvements including widening and resurfacing projects.

SR 70 is of a common design and construction for the state and is not associated with significant historical events or people. Moreover, the historic setting of SR 70 has been heavily compromised by recent development as well as significant road widening and modification. Therefore, within the APE, SR 70 does not appear to be eligible for NRHP listing, neither individually nor as part of a district.

5.3 Conclusions

Based on background research and field survey, there are no archaeological sites or historic resources, as present within the APE, which are listed, determined eligible, or that appear for listing in the NRHP. No further work is recommended.

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APPENDIX A

FMSF Form

☐ Original
☒ Update

RESOURCE GROUP FORM
FLORIDA MASTER SITE FILE
Version 4.0 1/07

Site #8 MA01906
Field Date 1-11-2019
Form Date 1-14-2019
Recorder# _____

NOTE: Use this form to document districts, landscapes, building complexes and linear resources as described in the box below. Cultural resources contributing to the Resource Group should also be documented individually at the Site File. Do not use this form for National Register multiple property submissions (MPSs). National Register MPSs are treated as Site File manuscripts and are associated to the individual resources included under the MPS cover using the Site File manuscript number.

Check ONE box that best describes the Resource Group:

- ☐ Historic district (NR category "district"): buildings and NR structures only: NO archaeological sites
- ☐ Archaeological district (NR category "district"): archaeological sites only: NO buildings or NR structures
- ☐ Mixed district (NR category "district"): includes more than one type of cultural resource (example: archaeological sites and buildings)
- ☐ Building complex (NR category usually "building(s)"): multiple buildings in close spatial and functional association
- ☐ Designed historic landscape (NR category usually "district" or "site"): can include multiple resources (see *National Register Bulletin #18*, page 2 for more detailed definition and examples: e.g. parks, golf courses, campuses, resorts, etc.)
- ☐ Rural historic landscape (NR category usually "district" or "site"): can include multiple resources and resources not formally designed (see *National Register Bulletin #30, Guidelines for Evaluating and Documenting Rural Historic Landscapes* for more detailed definition and examples: e.g. farmsteads, fish camps, lumber camps, traditional ceremonial sites, etc.)
- ☒ Linear resource (NR category usually "structure"): Linear resources are a special type of rural historic landscape and can include canals, railways, roads, etc.

Resource Group Name SR 70 (53rd Ave E) Multiple Listing [DHR only] _____
Project Name CRAS, SR 70, Lorraine Rd to Waterbury, Manatee FMSF Survey #_____
National Register Category (please check one): ☐building(s) ☒structure ☐district ☐site ☐object
Linear Resource Type (if applicable): ☐canal ☐railway ☒road ☐other (describe): _____
Ownership: ☐private-profit ☐private-nonprofit ☐private-individual ☐private-nonspecific ☐city ☐county ☒state ☐federal ☐Native American ☐foreign ☐unknown

LOCATION & MAPPING

	Street Number	Direction	Street Name	Street Type	Suffix Direction
Address:			SR 70		

City/Town (within 3 miles) Bradenton In Current City Limits? ☐yes ☒no ☐unknown
County or Counties (do not abbreviate) Manatee
Name of Public Tract (e.g., park) _____
1) Township 35S Range 19E Section 1522 23 ¼ section: ☐NW ☐SW ☐SE ☐NE Irregular-name: _____
2) Township 35S Range 19E Section 24 25 ¼ section: ☐NW ☐SW ☐SE ☐NE
3) Township 35S Range 20E Section 28 29 ¼ section: ☐NW ☐SW ☐SE ☐NE
4) Township 35S Range 20E Section 30 33 ¼ section: ☐NW ☐SW ☐SE ☐NE
USGS 7.5' Map(s) 1) Name LORRAINE USGS Date 1973
2) Name VERNA USGS Date 1973
Plat, Aerial, or Other Map (map's name, originating office with location) _____
Landgrant _____
Verbal Description of Boundaries (description does not replace required map) This portion of SR 70 extends from Lorraine Road to Waterbury Road/SR 675

DHR USE ONLY	OFFICIAL EVALUATION	DHR USE ONLY
NR List Date _____ ☐Owner Objection	SHPO – Appears to meet criteria for NR listing: ☐yes ☐no ☐insufficient info Date _____ Init._____ KEEPER – Determined eligible: ☐yes ☐no Date _____ NR Criteria for Evaluation: ☐a ☐b ☐c ☐d (see *National Register Bulletin 15*, p. 2)	

RESOURCE GROUP FORM

Site #8 MA01906

HISTORY & DESCRIPTION

Construction Year: 1940 ☐approximately ☒year listed or earlier ☐year listed or later
Architect/Designer(last name first): _____ Builder(last name first): _____
Total number of individual resources included in this Resource Group: # of contributing 1 # of non-contributing _____
Time period(s) of significance (choose a period from the list or type in date range(s), e.g. *1895-1925*)
1. Twentieth C American 3. _____
2. _____ 4. _____
Narrative Description (*National Register Bulletin 16A* pp. 33-34; fit a summary into 3 lines or attach supplementary sheets if needed) See continuation sheet

RESEARCH METHODS (check all that apply)

☒FMSF record search (sites/surveys)	☐library research	☐building permits	☐Sanborn maps
☐FL State Archives/photo collection	☐city directory	☐occupant/owner interview	☐plat maps
☒property appraiser / tax records	☐newspaper files	☐neighbor interview	☐Public Lands Survey (DEP)
☒cultural resource survey	☒historic photos	☐interior inspection	☐HABS/HAER record search

☒other methods (specify) USDA aerials
Bibliographic References (give FMSF Manuscript # if relevant) _____

OPINION OF RESOURCE SIGNIFICANCE

Potentially eligible individually for National Register of Historic Places? ☐yes ☒no ☐insufficient information
Potentially eligible as contributor to a National Register district? ☐yes ☒no ☐insufficient information
Explanation of Evaluation (required, see *National Register Bulletin 16A* p. 48-49. Attach longer statement, if needed, on separate sheet.) See continuation sheet

Area(s) of Historical Significance (see *National Register Bulletin 15*, p. 8 for categories: e.g. "architecture", "ethnic heritage", "community planning & development", etc.)
1. _____ 3. _____ 5. _____
2. _____ 4. _____ 6. _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

1) Document type All materials at one location Maintaining organization Archaeological Consultants Inc
Document description notes, photos, maps File or accession #'s P17073

2) Document type _____ Maintaining organization _____
Document description _____ File or accession #'s _____

RECORDER INFORMATION

Recorder Name Lee Hutchinson Affiliation Archaeological Consultants Inc
Recorder Contact Information 8110 Blaikie Court, Suite A, Sarasota, FL 34240/941-379-6206/ACIFlorida@comcast.net
(address / phone / fax / e-mail)

Required Attachments

❶ PHOTOCOPY OF USGS 7.5' MAP WITH DISTRICT BOUNDARY CLEARLY MARKED
❷ LARGE SCALE STREET, PLAT OR PARCEL MAP WITH RESOURCES MAPPED & LABELED
❸ TABULATION OF ALL INCLUDED RESOURCES (name, FMSF #, contributing? Y/N, resource category, street address or township-range-section if no address)
❹ PHOTOS OF GENERAL STREETSCAPE OR VIEWS (Optional: aerial photos, views of typical resources) Photos may be archival B&W prints OR digital image files. If submitting digital image files, they must be included on disk or CD AND in hard copy format (plain paper is acceptable). Digital images must be at least 1600 x 1200 pixels, 24-bit color, jpeg or tiff.

CONTINUATION SHEET

Narrative Description

State Road (SR) 70, within the APE is located in Sections 15, 22, 23, 24, 25 of Township 35 South Range 19 and Sections28, 29, 39, 33 of Township 35South and Range 20 East (United States Geological Survey [USGS] 1973a, 1973b); for a length of approximately 6.1 miles. This segment of SR 70 consists of a two-lane undivided facility with 12-foot travel lanes (one in each direction) and 12-foot shoulders (5 feet paved). There are 14 cross drains, ranging in size from 24-inch pipes to a quadruple 10' x 7' box culvert. Utility lines, underground utilities, and standard signage are present throughout the corridor.

SR 70 in the project area is first evident on a 1940 Florida highway map (Florida State Road Department 1940). The road also appears on historic aerials in 1957 and 1958 (USDA 1957, 1958). Based upon the aerials, it appears the current road follows the historic alignment; however, the section of highway within the project APE has lost much of its integrity through modern development and various road improvements including widening and resurfacing projects.

Explanation of Evaluation

SR 70 is of a common design and construction for the state and is not associated with significant historical events or people. Moreover, the historic setting of SR 70 has been heavily compromised by recent development as well as significant road widening and modification. Therefore, within the APE, SR 70 does not appear to be eligible for NRHP listing, neither individually nor as part of a district.

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1973a Lorraine Quadrangle Map, Florida

1973b Verna Quadrangle Map, Florida.

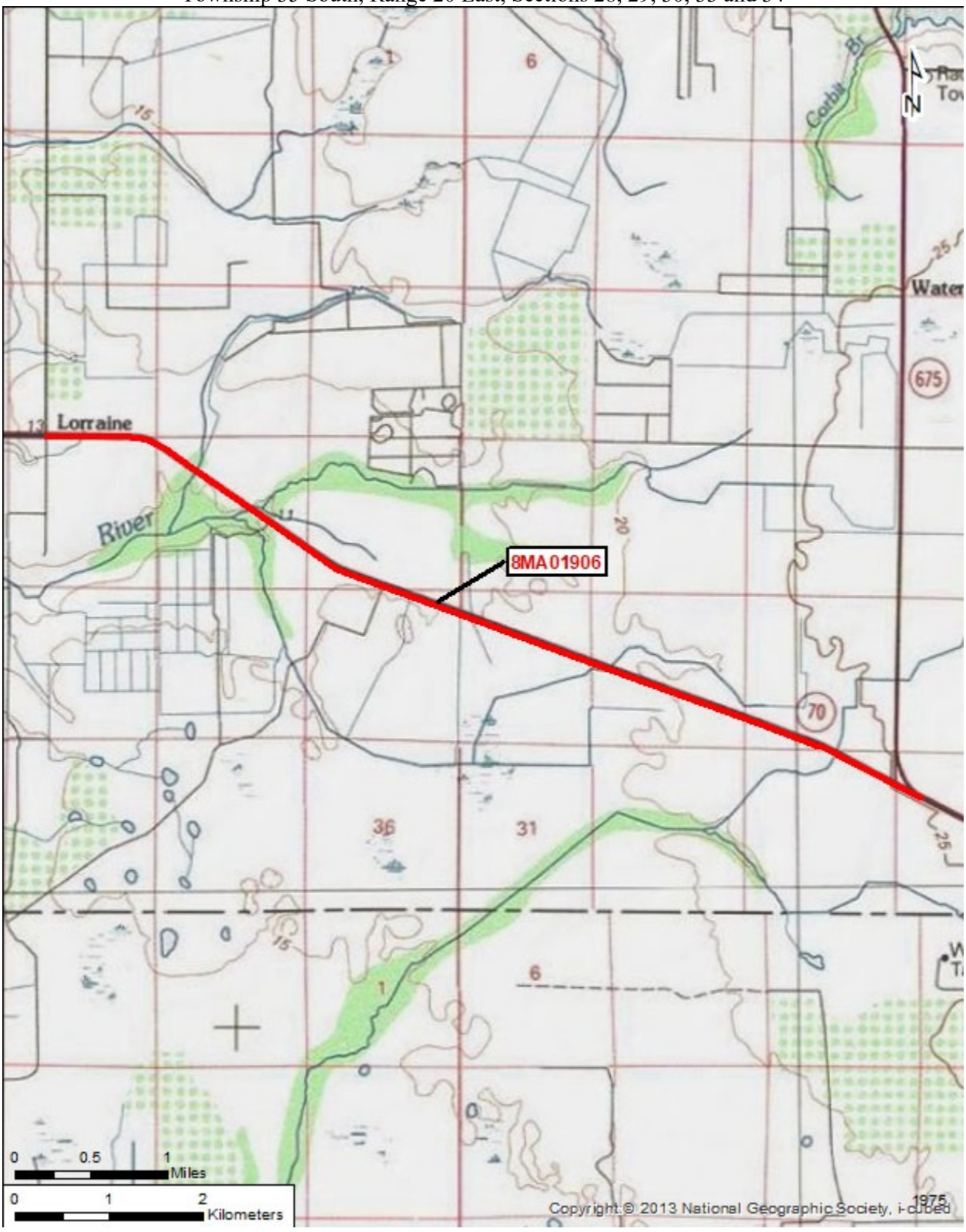
PHOTOGRAPHS

PHOTOGRAPHS

AERIAL MAP

USGS Verna and Lorraine

Township 35 South, Range 19 East, Sections 22, 23, 24 and 25
Township 35 South, Range 20 East, Sections 28, 29, 30, 33 and 34



APPENDIX B

Survey Log

Ent D (FMSF only)_____

Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (name and project phase) PD&E Study SR 70 from Lorraine Road to CR 765/Waterbury Road, Manatee County

Report Title (exactly as on title page) Cultural Resource Assessment Survey, Project Development and Environment (PD&E) Study SR 70 from Lorraine Road to CR 765/Waterbury Road Manatee County, Florida; Financial Project ID.:414506-2-22-01

Report Authors (as on title page, last names first) 1. ACI 3. _____ 2. _____ 4. _____

Publication Date (year) 2019 **Total Number of Pages in Report** (count text, figures, tables, not site forms) 55

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)

P17073 ACI, Sarasota

Supervisors of Fieldwork (even if same as author) Names Almy, Marion

Affiliation of Fieldworkers: Organization Archaeological Consultants Inc City Sarasota

Key Words/Phrases (Don't use county name, or common words like *archaeology*, *structure*, *survey, architecture, etc.*)

1. _____ 3. _____ 5. _____ 7. _____
2. _____ 4. _____ 6. _____ 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)

Name _____ Organization Florida Dept of Transportation - District 1

Address/Phone/E-mail 801 North Broadway Avenue Bartow, Florida 33830

Recorder of Log Sheet Lee Huchinson **Date Log Sheet Completed** 3-26-2019

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes: **Previous survey #s (FMSF only)** _____

Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)

1. Manatee 3. _____ 5. _____
2. _____ 4. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)

1. Name VERNA Year _____ 4. Name _____ Year _____
2. Name _____ Year _____ 5. Name _____ Year _____
3. Name _____ Year _____ 6. Name _____ Year _____

Description of Survey Area

Dates for Fieldwork: Start 1.7.19 End 3.21.19 **Total Area Surveyed** (fill in one) _____ hectares 100 acres

Number of Distinct Tracts or Areas Surveyed 12

If Corridor (fill in one for each) **Width:** _____ meters _____ feet **Length:** _____ kilometers 6.00 miles

Survey Log Sheet

Survey #_____

Research and Field Methods

Types of Survey (check all that apply): ☒archaeological ☒architectural ☒historical/archival ☐underwater
☐damage assessment ☐monitoring report ☐other(describe): _____

Scope/Intensity/Procedures background research, systematic & judgmental subsurface testing, 1 m deep, 50 cm diameter, 6.4 mm mesh screen; 126 shovel tests excavated at 50 and 100 m intervals and judgmentally; historic resources survey

Preliminary Methods (check as many as apply to the project as a whole)

☐Florida Archives (Gray Building)	☒library research- *local public*	☒local property or tax records	☒other historic maps
☐Florida Photo Archives (Gray Building)	☐library-special collection - *nonlocal*	☐newspaper files	☒soils maps or data
☒Site File property search	☒Public Lands Survey (maps at DEP)	☒literature search	☒windshield survey
☒Site File survey search	☐local informant(s)	☐Sanborn Insurance maps	☒aerial photography

☐other (describe): _____

Archaeological Methods (check as many as apply to the project as a whole)

☐Check here if **NO** archaeological methods were used.

☐surface collection, controlled	☐shovel test-other screen size	☐block excavation (at least 2x2 m)
☐surface collection, **un**controlled	☐water screen	☐soil resistivity
☒shovel test-1/4"screen	☐posthole tests	☐magnetometer
☐shovel test-1/8" screen	☐auger tests	☐side scan sonar
☐shovel test 1/16"screen	☐coring	☒pedestrian survey
☐shovel test-unscreened	☐test excavation (at least 1x2 m)	☐unknown

☐other (describe): _____

Historical/Architectural Methods (check as many as apply to the project as a whole)

☐Check here if **NO** historical/architectural methods were used.

☐building permits	☐demolition permits	☐neighbor interview	☐subdivision maps
☐commercial permits	☒exposed ground inspected	☐occupant interview	☐tax records
☐interior documentation	☒local property records	☐occupation permits	☐unknown

☐other (describe): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☒Yes ☐No

Count of Previously Recorded Sites 1 **Count of Newly Recorded Sites** _____

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) MA01906

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) _____

Site Forms Used: ☐Site File Paper Form ☒Site File Electronic Recording Form

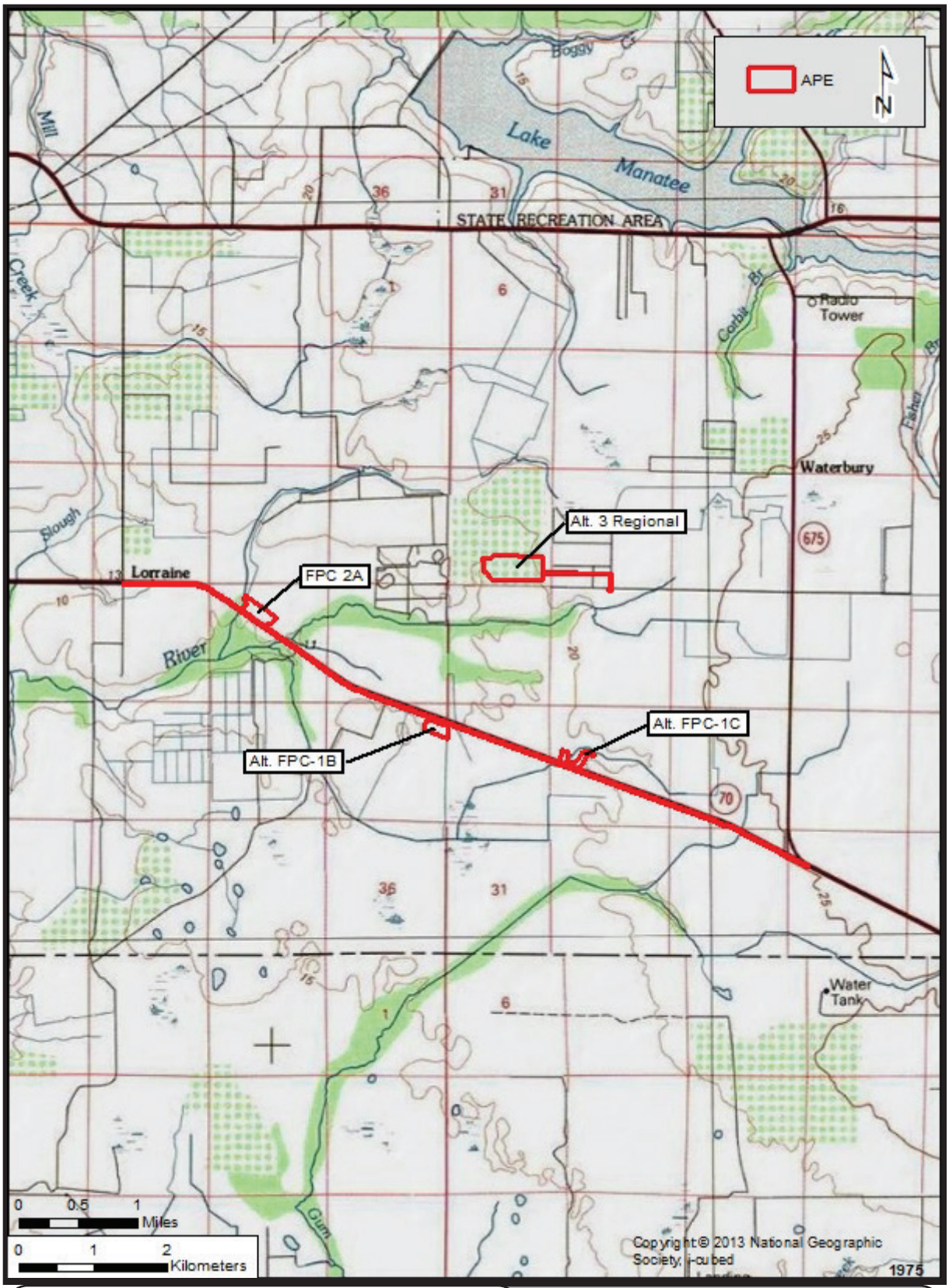
*****REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)*****

SHPO USE ONLY **SHPO USE ONLY** **SHPO USE ONLY**

Origin of Report: ☐872 ☐CARL ☐UW ☐1A32 # _____ ☐Academic ☐Contract ☐Avocational
☐Grant Project # _____ ☐Compliance Review: CRAT # _____

Type of Document: ☐Archaeological Survey ☐Historical/Architectural Survey ☐Marine Survey ☐Cell Tower CRAS ☐Monitoring Report
☐Overview ☐Excavation Report ☐Multi-Site Excavation Report ☐Structure Detailed Report ☐Library, Hist. or Archival Doc
☐MPS ☐MRA ☐TG ☐Other: _____

Document Destination: _____ **Plotability:** _____



Preferred Pond Sites
Township 35 South, Ranges 19 and 20 East
USGS Verna
Manatee County.

CRAS PD&E Study
State Road 70 from Lorraine Road to
County Road 675/Waterbury Road
Manatee County, Florida,
FPID No.: 414506-2-22-01