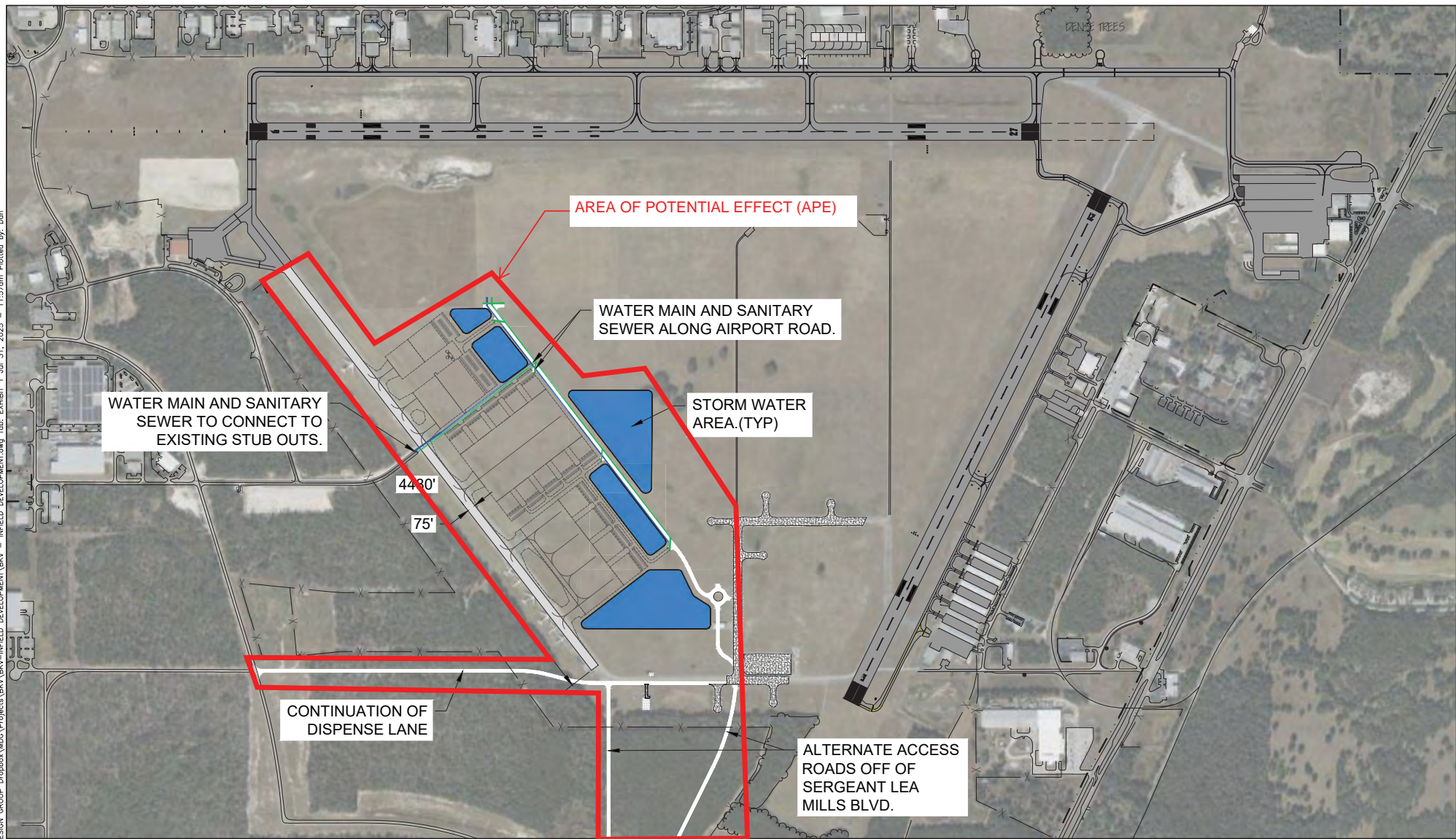


APPENDIX A
PROJECT EXHIBIT (SITE PLAN)

C:\Users\Don\MOHSEN DESIGN GROUP Dropbox\MDG\Projects\BKV\BKV-INFIELD DEVELOPMENT\BKV - INFIELD DEVELOPMENT.dwg Tab: EXHIBIT 1 Jun 31, 2025 = 11:57am Plotted by: Don



INFIELD DEVELOPMENT



BROOKSVILLE-TAMPA BAY
REGIONAL AIRPORT
15800 FLIGHT PATH DR.
BROOKSVILLE, FL 34604



EXHIBIT 1

APPENDIX B

RUNWAY 9-27 EXTENSION CULTURAL RESOURCE DESKTOP ANALYSIS

**CULTURAL RESOURCE ASSESSMENT
DESKTOP ANALYSIS
BROOKSVILLE-TAMPA BAY REGIONAL AIRPORT
ENVIRONMENTAL ASSESSMENT
HERNANDO COUNTY, FLORIDA**

Prepared for:

**Michael Baker International, Inc.
4211 W. Boy Scout Road, Suite 500
Tampa, Florida 33607**

Prepared by:



Florida's First Choice in Cultural Resource Management

**Archaeological Consultants, Inc.
8110 Blaikie Court, Suite A
Sarasota, Florida 34240
(941) 379-6206**

August 2021

**CULTURAL RESOURCE ASSESSMENT
DESKTOP ANALYSIS
BROOKSVILLE-TAMPA BAY REGIONAL AIRPORT
ENVIRONMENTAL ASSESSMENT
HERNANDO COUNTY, FLORIDA**

Prepared for:

**Michael Baker International, Inc.
4211 W. Boy Scout Road, Suite 500
Tampa, Florida 33607**

Prepared by:

**Archaeological Consultants, Inc.
8110 Blaikie Court, Suite A
Sarasota, Florida 34240**

**Project Manager – Marion Almy
Project Archaeologist – Elizabeth A. Horvath
Project Architectural Historian – Kimberly M. Irby**

August 2021

TABLE OF CONTENTS

	<u>Page</u>
Introduction	1
Location and Environmental Setting	1
Background Research and Literature Review	7
Archaeological and Historical Considerations	7
Conclusions	15
References Cited.....	15

LIST OF FIGURES

Figure 1.	Location of the BKV, Hernando County.	2
Figure 2.	Environmental setting of the BKV.	3
Figure 3.	Runway Extension.	4
Figure 4.	Areas of Direct and Indirect Effects.	5
Figure 5.	Soil type distribution.....	6
Figure 6.	Location of the previously recorded cultural resources proximate to the project location.....	8
Figure 7.	1848 plats of the project area.	13
Figure 8.	1944 and 1995 aerial photos of the airport.	14

LIST OF TABLES

Table 1.	Soil types within the project area.....	6
Table 2.	Previously recorded sites proximate to the project location.	7
Table 3.	CRAS projects conducted proximate to the airport.	9
Table 4.	Distribution of sites by water type and distance.	10
Table 5.	Distribution of sites by drainage and soil types.	10

Introduction

A desktop analysis for the Brooksville-Tampa Bay Regional Airport (BKV) Environmental Assessment, located in Hernando County, was conducted by Archaeological Consultants, Inc. (ACI) on behalf of Michael Baker International, Inc. This study, conducted as due diligence, included the identification and description of all known archaeological sites and historic resources located within or proximate to the property, as well as a discussion of potential archaeologically sensitive areas. Background research indicated that no archaeological sites have been recorded within the property, although four have been recorded within one mile, there is a low probability for aboriginal and historic archaeological sites based on the environmental setting and previous construction activities associated with the airport.

Historical/architectural background research revealed that no previously recorded historic resources are located within the proposed Direct Impact and Indirect Impact Area of Potential Effects (APE). Three previously recorded historic resources are located east of Broad Street, immediately adjacent to, but outside of the proposed APE. A review of the Hernando County Property Appraiser data and historic aerial photographs indicate that the circa (ca.) 1942 Brooksville Army Airfield, now known as the BKV, and associated runways are located within the proposed Direct Impact and Indirect Impact APE. The Airfield could be recorded within the Florida Master Site File (FMSF) as a Resource Group with two contributing resources – Runway 9-27 and Runway 3-21. No buildings or structures that are 50 years of age or older (constructed in 1971 or earlier) are located within the proposed APE; however, a field survey would be necessary for proper identification of historic resources within the proposed APE.

There is a low potential for archaeological sites, but a high potential for historic resources, as such, a Cultural Resource Assessment Survey (CRAS) may be required as part of the permitting process. The fieldwork should meet the requirements of Chapters 267, 373 and 872.05, *Florida Statutes (FS)*, Florida's Coastal Management Program, and implementing state regulations, for possible effects on historic properties listed, or eligible for listing, in the National Register of Historic Places (NRHP), or otherwise of historical, architectural, or archaeological value, as well as the standards contained in Florida Division of Historical Resources' (FDHR) *Cultural Resource Management Standards and Operational Manual* (FDHR 2003). The report should meet the specifications set forth in Chapter 1A-46, *Florida Administrative Code (FAC)*.

Location and Environmental Setting

The project area is in Sections 13-14 and 23-25 of Township 23 South, Range 18 East and Sections 18-19 and 30 of Township 23 South, Range 19 East (United States Geological Survey [USGS] Masaryktown 2013). It is located south of Springhill Drive between the Suncoast Parkway and US 41/SR 45 on lands within the existing airport (**Figures 1 and 2**). The project will involve the extension of Runway 9-27, reconfiguration of taxiways, and additional related improvements. **Figures 3 and 4** show the proposed improvements and the Areas of Direct and Indirect Potential Effects.

The airport sites at an elevation of 21 to 26 meters (m) (70-85 feet [ft]) above mean sea level. It lies within the Gulf Coastal Lowlands physiographic region (White 1970). The property is underlain by Harthorn Group limestone that is surficially evidenced by clayey sand (Florida Department of Environmental Protection [FDEP] 2001a, 2001b). Originally the area was covered with hardwood or longleaf pine and xerophytic oak forests (Davis 1980).



Figure 1. Location of the BKV, Hernando County.

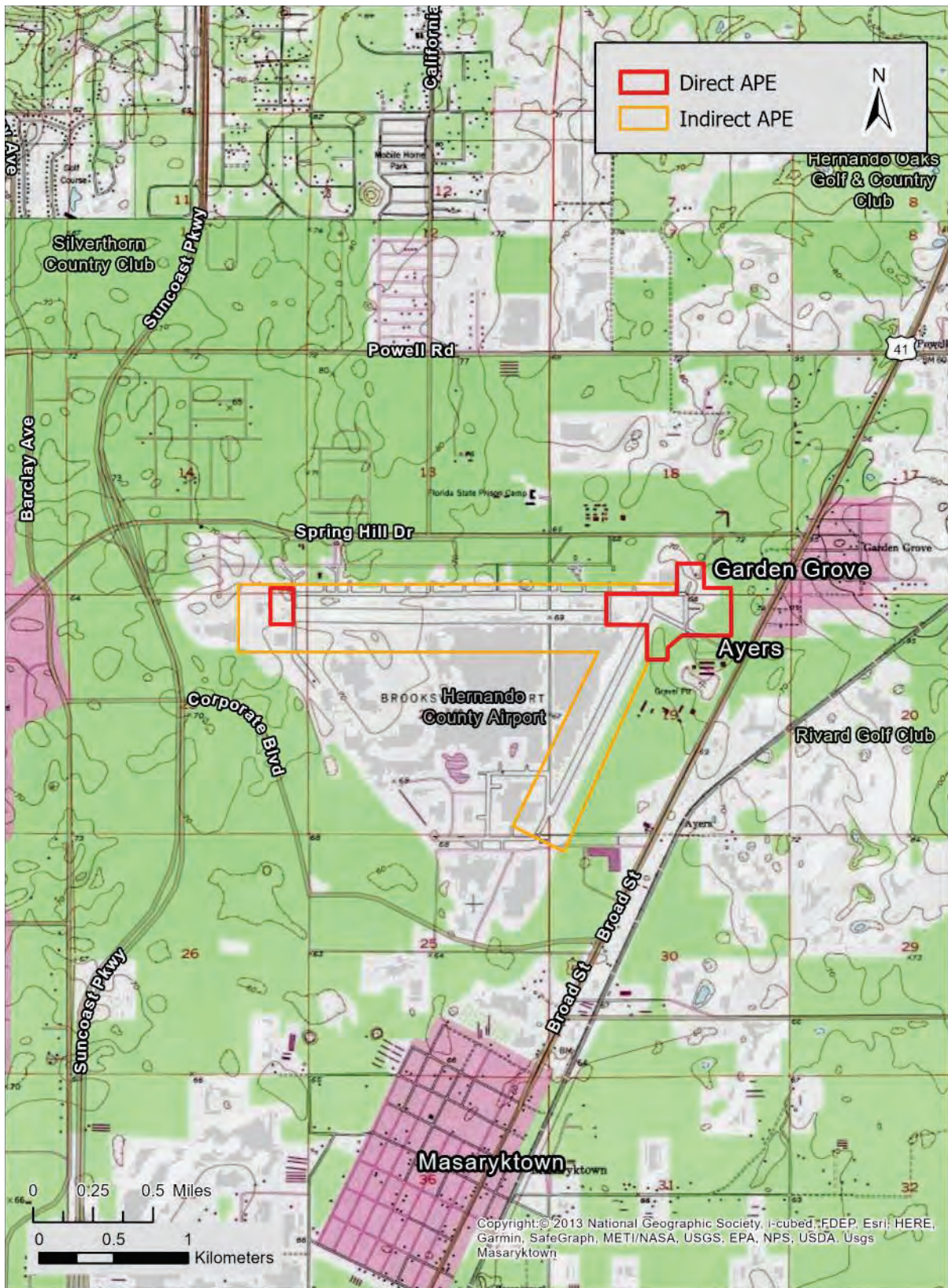
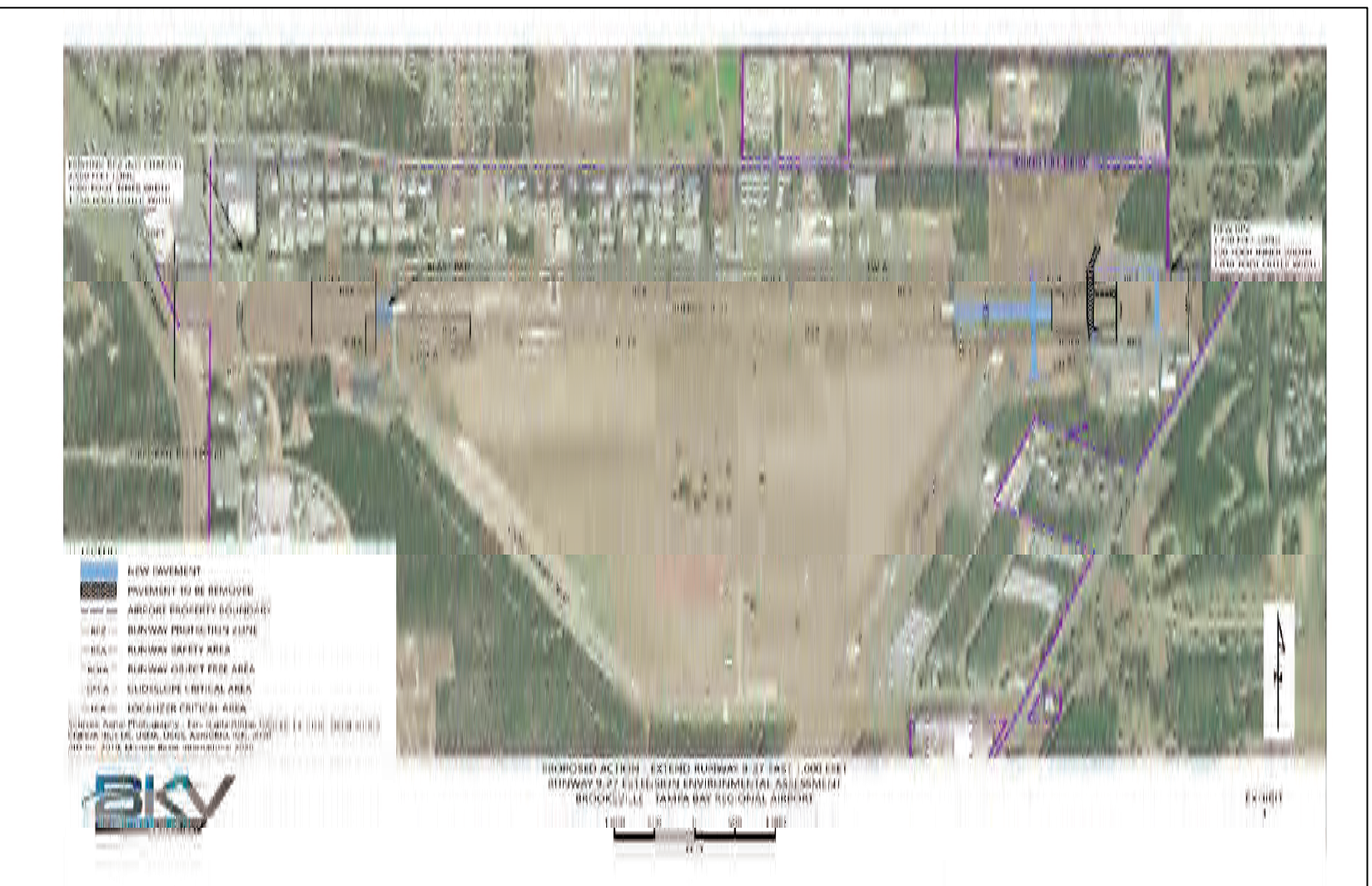
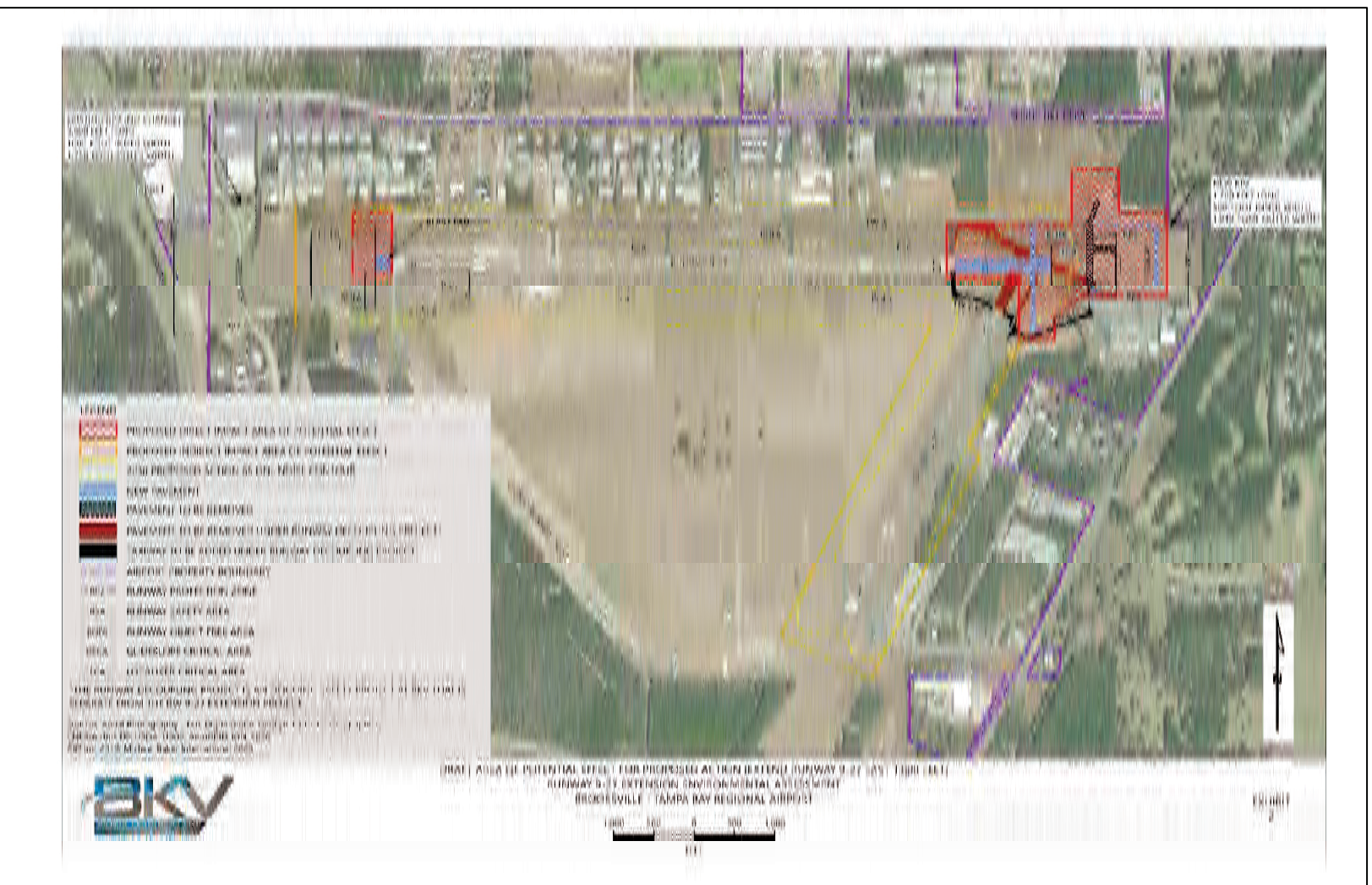


Figure 2. Environmental setting of the BKV.





According to the U.S. Department of Agriculture (USDA), the airport is within the Candler-Tavares-Paola and Nobleton-Blichton-Flemington soil associations (Hyde et al. 1977). The former consists of nearly level to sloping, excessively and moderately well drained sandy soils that occur in broad, rolling sand hill areas interspersed with small ponds, wet swampy areas, and a few sinks. The natural vegetation consists of bluejack, post, and turkey oaks and scattered longleaf and slash pine with a sparse understory of native grasses and annual forbs. The Paola soils support sand pine, scrub live oak, scattered turkey and bluejack oak, with an understory of scattered sawpalmetto, creeping dodder, rosemary, cacti, mosses, and lichen. In the more poorly drained areas, the native vegetation is slash and longleaf pine, inkberry and oak with bay, gum, cypress, and water-tolerant grasses and sedges in the wet, swampy areas.

The Nobleton-Blichton-Flemington association consists of nearly level to strongly sloping, somewhat poor and poorly drained fine sandy loams to sands. These are made up of large to small areas of nearly level to strongly sloping soils on the uplands interspersed with sinkholes. The natural vegetation is slash, loblolly, and longleaf pine; laurel, live, and water oaks; and sweetgum, hickory, magnolia, dogwood, ironwood, and scattered red cedar. The understory includes wax myrtle, inkberry, American beautyberry, huckleberry, deer tongue, scattered sawpalmetto, and native grasses. **Table 1** provides a list of the soil types within the project location; their locations are depicted on **Figure 5** (Hyde et al. 1977; USDA 2018).

Table 1. Soil types within the project area.

Soil type, % slopes	Drainage	Setting
Candler fine sand, 0-5%	Excessive	Uplands
Kendrick fine sand, 0-5%	Well	Uplands
Masaryk very fine sand, 0-5%	Moderately well	Broad ridges
Nobleton fine sand, 0-5%	Somewhat poor	Uplands

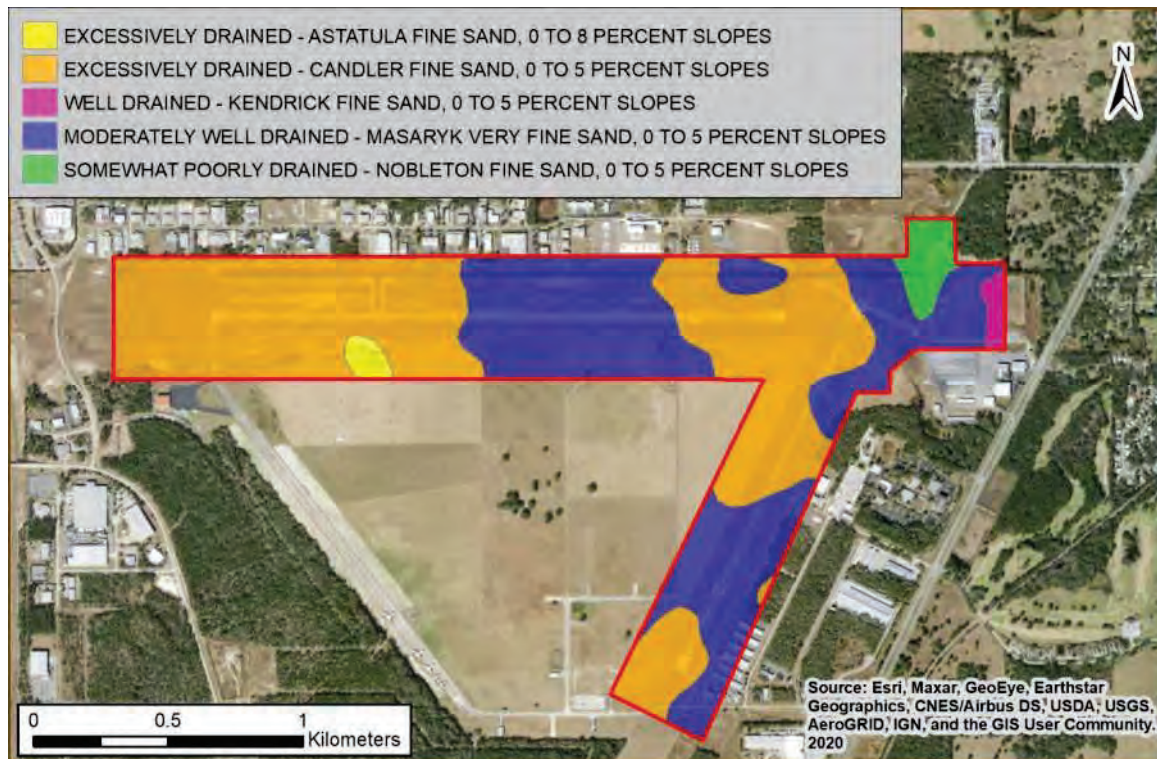


Figure 5. Soil type distribution.

The soils support different vegetative regimes, which in turn provide habitats for the local animal population, and thus provide essential food resources. However, the soils have variable suitability for openland, woodland, and wetland habitats. The habitat for openland wildlife consists of cropland, pasture, meadows, and areas that are overgrown with grasses, herbs, shrubs, and vines. These areas produce grain and seed crops, grasses, and legumes, and wild herbaceous plants. The wildlife attracted to these areas include bobwhite quail, dove, sparrow hawk, meadowlark, field sparrow, cottontail, and cattle egret. Candler, Kendrick, Masaryk, and Nobleton soils are rated fair for openland habitat. Woodland wildlife habitat includes area of deciduous plants or coniferous plants or both and associated grasses, legumes, and wild herbaceous plants. Wildlife attracted to these areas include turkey, towhee, woodpeckers, owls, squirrels, gray fox, racoon, and deer. Candler and Nobleton soils are rated fair for this habitat; Kendrick sand is well suited to woodlands. The habitat for wetland wildlife includes areas of open, marshy or swampy, shallow water areas. Wildlife in these areas include ducks, egrets, herons, kingfishers, alligators, and otters. Floridana sand is well suited to wetland habitats (Hyde et al. 1977: Table 13).

Background Research and Literature Review

A review of pertinent archaeological and historical literature, records, and other documents and data pertaining to the general area was conducted. The focus of this desktop analysis was to ascertain the types of cultural resources known in the project vicinity, as well as the potential for the occurrence of yet unrecorded resources. Research included a review of sites listed in the NRHP and the FMSF (July 2021 GIS update); an examination the Hernando County Property Appraiser's data; soil survey information; plat map, field notes, and tract book records; historic aerial photos on file with the Publication of Archival Library and Museum Materials (PALMM); regional prehistories, histories, and site location predictive models; and relevant CRAS reports and manuscripts.

Archaeological and Historical Considerations

The archaeological background research indicated that no archaeological sites are located within the project location; five are located within 1.6 kilometers (km) (1 mile [mi]) (**Table 2, Figure 6**). Most of the sites are lithic scatter that have been determined ineligible for listing in the NRHP. One lithic scatter and the historic town have not been evaluated by the State Historic Preservation Office (SHPO) in terms of NRHP eligibility. 8HE00287 (Rural) was recorded by the Hernando County Planning Department (HCPD) based on historic documentation and has had no archaeological investigations conducted. **Table 3** provides a list of the CRAS projects conducted near the airport. These have been conducted for transportation projects, developments, cell towers, National Guard armories, airport facilities, and for the development of the Hernando County Comprehensive Plan.

Table 2. Previously recorded sites proximate to the project location.

FMSF #	SITE NAME	SITE TYPE	CULTURE	REFERENCE	SHPO EVAL
8HE00027	Garden Grove	Lithic scatter/quarry	Archaic	(FMSF)	Not Evaluated
8HE00258	Holland Spring 1	Lithic scatter/quarry	Indeterminate	(Wharton 1990)	Ineligible
8HE00287	Rural	Historic town	1898-1916	(HCPD 1990)	Not Evaluated
8HE00430	Golf Ball Chase	Lithic scatter	Indeterminate	(ACI 2001)	Ineligible
8HE00438	Rivard	Lithic scatter	Indeterminate	(ACI 2001)	Ineligible

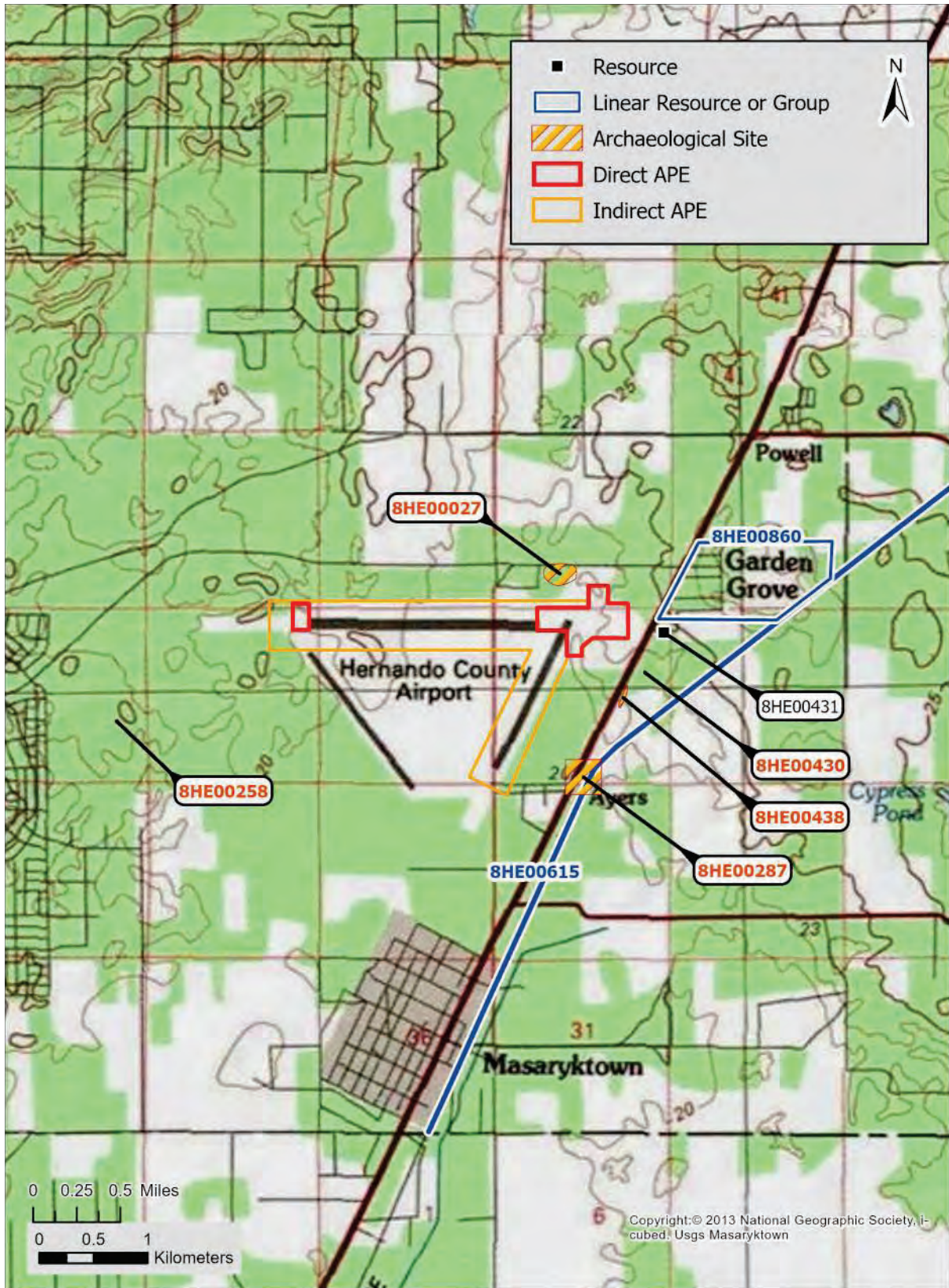


Figure 6. Location of the previously recorded cultural resources proximate to the project location.

Based on these data, and other regional site location predictive models and studies (e.g., Austin et al. 1991; Burger 1982; de Montmollin 1983; Deming 1980; Ellis et al. 1995; Ellis et al. 1998; Ellis et al. 1993; Horvath 1986; Janus Research 1992, 2004; Smith et al. 2008; Weisman and Collins 2004; Wharton 1990) informed expectations concerning the types of sites likely to occur within the project APE, 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, including soil drainage, distance to water, topography, and proximity to resources. It should be noted that the settlement pattern noted below cannot be applied to sites of the Paleoindian and Early Archaic periods, which precede the onset of modern environmental conditions.

Table 3. CRAS projects conducted proximate to the airport.

REFERENCE	PROJECT	# of Newly Recorded Resources	# of Previously Recorded Resources
140 / (Marsh 1976)	An Archaeological Survey of the Brooksville 201 Facilities Plan Hernando County, Florida	1	1
554 / (Marsh 1981)	Archaeological Survey of the Proposed Holland Springs Development, Unit One	0	0
2785 / (HCPD 1990)	Excerpts from the Hernando County Comprehensive Plan, Historical and Archaeological Element	57	0
4889 / (ACI 1995)	A CRAS Suncoast Parkway Reevaluation Areas Hillsborough, Pasco, and Hernando Counties, Florida	12	8
7186 / (Janus Research 2002)	Cultural Resource Assessment Technical Memorandum State Road 45 (U.S. 41) from County Line Road to South of SWFWMD Entrance, Hernando County, Florida	5	0
7453 / (Pracht 2001)	Cultural Resource Reconnaissance Survey/ Section 106 Review; Proposed Cellular Tower Site: Oakcrest 4100 Barclay Road, Hernando County, Florida	0	0
8019 / (Sims 2001)	An Archaeological and Historical Survey of the Proposed Cypress Pond Tower Location in Hernando County, Florida	0	1
8537 / (Stokes 2002)	A Phase I Cultural Resource Survey of Six Florida Army National Guard (FLARNG) Facilities in Florida	4	0
9533 / (ACI 2001)	CRAS Technical Memorandum Pond and Floodplain Compensation Site Alternatives US 41 (SR 45) from SWFWMD Entrance to South of Powell Road, Hernando Co, Florida	3	0
13640 / (Batun et al. 2006)	Cultural Resources Survey and Assessment, Hernando Oaks DRI, Hernando County, Florida	4	1
16300 / (Wood 2008)	Phase I Archaeological Survey of the Proposed Silverthorn Cell Tower, Hernando County, Brooksville	0	0
17575 / (FDOT et al. 1994)	Final Environmental Impact Statement: Volume 1: Zone 2: SR 52 to US 98 in Hernando County, FL	26	0
18055 / (McReynolds 2010)	Proposed 102-foot Monopole Telecommunications Tower / Hernando County Airport	0	0
21779 / (ACI 2015)	Phase I CRAS of the Brooksville-Tampa Bay Regional Airport MRO Hanger Development in Hernando Co.	0	0
21702 / (McMakin 2015)	Cultural Resources Assessment of the 23577 P and R Rentals 086386 Cellular Tower, Hernando County, FL	0	0

Analysis of the April 2021 data for the 86 aboriginal archaeological sites, with known locations in the Gulf Coastal Lowlands physiographic region of Hernando County, was conducted. Historic archaeological sites and aboriginal archaeological sites that were plotted “per vague verbal description” were deleted from this analysis.

Proximity to water is often an important site location feature. Over 74% of the sites are located within 100 m (328 ft) of a water source, with another 14% of the sites within 200 m (656 ft) of water (**Table 4**). There are six sites within 300 m (956 ft) and another four that had a further water source. It is possible that smaller water sources may have been present during aboriginal times but were not identified based on the maps and soil types as identified today. Given the extraction of water through wells and drainage projects, prehistoric water sources may have been obscured. Wetlands and swamps account for almost half of the sites, with ponds/lakes following a distant second at 16%. Depressions and sinkholes, which or may not have served as water sources, each account for 14% of the sites. The remaining 8% of the sites are next to the Weeki Wachee River or an intermittent stream.

Table 4. Distribution of sites by water type and distance.

Type	≤100 m		≤200 m		≤300 m		>300 m		Total	
	Cnt	%	Cnt	%	Cnt	%			Cnt	%
Creek/river	5	5.8%	2	2.3%		0.0%		0.0%	7	8.1%
Depressions	6	7.0%	2	2.3%	2	2.3%	2	2.3%	12	14.0%
Pond/lake	12	14.0%	1	1.2%	1	1.2%		0.0%	14	16.3%
Sink	12	14.0%		0.0%		0.0%		0.0%	12	14.0%
Wetland/swamp	29	33.7%	7	8.1%	3	3.5%	2	2.3%	41	47.7%
Total	64	74.4%	12	14.0%	6	7.0%	4	4.7%	86	100.0%

Soil types and their drainage characteristics can also be used to assess the likelihood for aboriginal site occurrence (Almy 1978). However, it should be remembered that although we know what soils the sites fall on, we do not have a good handle on what percentage of the soils have been surveyed for archaeological sites. As more archaeological surveys are conducted, the model presented here can be refined. There are 43 soil types within the Gulf Coastal Lowlands portion of Hernando County; of which 24 have recorded archaeological sites (**Table 5**). Many of the sites occurred on more than one soil type. This analysis only includes the four types covering the greatest acreage for each site, which totaled 133 soil type occurrences. The column “1” indicates that this soil type had the greatest area of the site, and so on down the line, so that column “4” had the smallest site acreage.

Table 5. Distribution of sites by drainage and soil types.

DRAINAGE/Soil type, & slopes	% of Area	1	2	3	4	Total	% of Sites	Difference
EXCESSIVELY DRAINED								
Astatula fine sand, 0-8%	0.3%					0	0.0%	-0.3%
Candler fine sand, 0-5%	51.6%	40	2	2		44	33.1%	-18.5%
Candler fine sand, 5-8%	6.4%	1	2			3	2.3%	-4.1%
Paola fine sand, 0-8%	2.3%	7	2			9	6.8%	4.5%
Total	60.6%	48	6	2	0	56	42.1%	-18.5%
MODERATELY WELL DRAINED								
Masaryk very fine sand, 0-5%	3.9%	5	1			6	4.5%	0.6%
Pomello fine sand, 0-5%	0.1%					0	0.0%	-0.1%
Tavares fine sand, 0-5%	1.6%	8	3			11	8.3%	6.7%
Total	5.5%	13	4	0	0	17	12.8%	7.2%
POORLY DRAINED								
Basinger fine sand	0.9%	3	1			4	3.0%	2.1%
Blichton loamy fine sand, 0-2%	0.4%		1	1		2	1.5%	1.1%

DRAINAGE/Soil type, & slopes	% of Area	1	2	3	4	Total	% of Sites	Difference
Blichton loamy fine sand, 2-5%	0.7%	1	1			2	1.5%	0.8%
EauGallie fine sand	0.2%			1		1	0.8%	0.6%
Flemington fine sandy loam, 0-2%	0.2%					0	0.0%	-0.2%
Flemington fine sandy loam, 2-5%	0.8%	1				1	0.8%	0.0%
Flemington fine sandy loam, 8-12%	0.1%					0	0.0%	-0.1%
Myakka-Myakka, wet, fine sands, 0-2%	2.7%	4	6			10	7.5%	4.8%
Pompano fine sand	0.0%					0	0.0%	0.0%
Wabasso fine sand	0.4%					0	0.0%	-0.4%
Wauchula fine sand, 0-5%	0.2%		1			1	0.8%	0.6%
Total	6.5%	9	10	2	0	21	15.8%	9.3%
SOMEWHAT POORLY DRAINED								
Adamsville fine sand, 0-2%	0.1%					0	0.0%	-0.1%
Aripeka fine sand	0.0%					0	0.0%	0.0%
Aripeka-Okeelanta-Lauderhill association	0.2%				1	1	0.8%	0.5%
Electra variant fine sand, 0-5%	0.0%					0	0.0%	0.0%
Micanopy loamy fine sand, 0-2%	0.7%					0	0.0%	-0.7%
Micanopy loamy fine sand, 2-5%	2.5%	5	2			7	5.3%	2.8%
Nobleton fine sand, 0-5%	6.9%	4		1	1	6	4.5%	-2.4%
Sparr fine sand, 0-5%	0.3%					0	0.0%	-0.3%
Total	10.8%	9	2	1	2	14	10.5%	-0.2%
VERY POORLY DRAINED								
Anclote fine sand, 0-2%, ponded	0.3%	1	1			2	1.5%	1.2%
Basinger fine sand, depressional, 0-1%	2.0%		2	1		3	2.3%	0.3%
Floridana fine sand	0.0%					0	0.0%	0.0%
Floridana variant loamy fine sand	0.2%	1				1	0.8%	0.6%
Homosassa mucky fine sandy loam	0.0%					0	0.0%	0.0%
Lacoochee fine sandy loam	0.1%					0	0.0%	-0.1%
Okeelanta-Terra Ceia association	10.2%		1	1	1	3	2.3%	-7.9%
Samsula muck	0.0%		1		1	2	1.5%	1.5%
Total	12.8%	2	5	2	2	11	8.3%	-4.5%
WELL DRAINED								
Arredondo fine sand, 0-5%	0.0%					0	0.0%	0.0%
Kendrick fine sand, 0-5%	1.1%	1	2	4		7	5.3%	4.1%
Williston loamy fine sand, 2-5%	0.0%	1				1	0.8%	0.7%
Total	1.2%	2	2	4	0	8	6.0%	4.8%
OTHER								
Hydraquents	0.3%					0	0.0%	-0.3%
Pits	0.3%	1	2			3	2.3%	2.0%
Pits-dumps complex	0.1%					0	0.0%	-0.1%
Quartzipsamments, shaped, 0-5%	0.1%					0	0.0%	-0.1%
Udalfic arents-Urban land complex	0.6%	2		1		3	2.3%	1.7%
Water	1.4%					0	0.0%	-1.4%
Total	2.7%	3	2	1	0	6	4.5%	1.8%
Grand Total	100.0%	86	31	12	4	133	100.0%	0.0%

The excessively drained soils cover almost 61% of the area but have only 42% of the sites. The very poorly drained soils cover almost 13% of the area with 8% of the sites. The somewhat poorly drained soils cover 11% of the area and have 10% of the sites. Almost 16% of the sites occur on poorly

drained soils that cover only 6.5% of the area. There is also a somewhat high correlation of sites with the moderately well drained soils. These cover over 5% of the area and have almost 131% of the sites. Although the well drained soils cover just over 1% of the area, they account for 6% of the sites. The remaining 4.5% of the area is covered by water, has been excavated for pits, or are reworked soils (hydraqunts, quartzipsammments, Udalfic arents); six sites were recorded in these areas.

However, there is variation in the preference/avoidance of certain soil types within the various drainage classes. Those soils that have a higher percentage of sites as compared to area (2% or greater) are marked in red on the table, while those that seem less likely to be used (-2% or less) are marked in blue. As might be expected, there is a preference for the better drained soils, but the excessively drained soils are used significantly less than one would expect based on the acreage. The Candler sands cover 58% of the area but account for only 35.4% of the sites. Those soils that have a negative correlation with sites are Candler fine sand, 0-5% and 5-8% slopes, Okeelanta-Terra Ceia association, and Nobleton fine sand, 0-5%. The preferred soils, in order of preference, are Tavares fine sand, 0-5%; Myakka-Myakka wet, fine sand, 0-2%; Paola fine sand, 0-8%; Kendrick fine sand, 0-5%; Micanopy loamy fine sand, 2-5%; and Basinger fine sand.

Based on the environmental setting, the project APE was considered to have a low probability for aboriginal archaeological site occurrence. Although Kendrick sand has a positive correlation with sites, there are no nearby water sources. No evidence was uncovered to suggest usage of the area prior to construction of the airport. In addition, had sites been present, they would have likely been destroyed by construction of the airport facilities.

A review of the 1848 plat maps of the area revealed no occupation in the area (Watson et al. 1848a; Watson et al. 1848b) (**Figure 7**). Township 23 South, Ranges 18 and 19 East were surveyed in the 1840s by Henry Washington, George Watson, R.W. Templeman, and R.W. Norris (Norris 1845; Templeman 1844; Washington 1843b, 1843a; Watson 1846-47). The land proximate to the project area were described as undulating 3rd and 2nd rate pine with black jack and turkey oak (Watson 1846-47:31-42, 113-148). The area was not purchased until the late-1800s when the lands within the project area were deeded to John J. Carter (1885), Charles D. Woodson (1885), M.B. Patchin and A.M. Millerd (1883) and William H. Hawk (1890) (State of Florida n.d.-a:259, 262, n.d.-b:185).

Historical/architectural background research revealed that no previously recorded historic resources are located within the proposed APE. Three previously recorded historic resources are located on the east side of Broad Street, immediately adjacent to, but outside of the proposed Direct Impact and Indirect Impact APE (**Figure 6**). These include the Garden Grove Historic District (8HE00860), linear resource, the Seaboard Air Line (SAL) Railway (8HE00615), and one Frame Vernacular style building (8HE00431). Of these, the SAL and Frame Vernacular style building were determined ineligible for listing in the NRHP by the SHPO. The Garden Grove Historic District is a typical subdivision platted in the 1920s and wasn't fully developed until the 1950s. According to FMSF, the district never achieved its original vision and does not retain historic integrity. The historic district has not been evaluated by the SHPO. Furthermore, remnants of the Brooksville Army Airfield Bunker are located 900-ft north of the proposed Indirect Impact APE near the intersection of Aviation Loop Drive and Sam Pearson Way. The resource has not been recorded in the FMSF.

By 1942, the Brooksville Army Airfield had been constructed as an operational training facility consisting of runways, taxiways, aprons, roads, utility systems, and about 150 buildings (BKV 2021) (**Figure 8**). It was used during World War II as an auxiliary airfield of MacDill Field and Drew Field for training pilots and ground crews. Operations at this field began in November 1942 with the arrival of the 1st Bomb Squadron. The 9th Bombardment Group used the airport for training on B-17 Flying Fortresses and B-24 Liberators. The Army Airfield remained active until late 1945, when the Army

determined the site was surplus. The War Assets Administration (WAA) sold or removed most of the improvements for off-site use. The WAA conveyed the acreage and remaining improvements to the City of Brooksville, which eventually transferred the property to the Hernando County Board of County Commissioners (BKV 2021).

A review of the Hernando County Property Appraiser data and historic aerial photographs indicate that the ca. 1942 Brooksville Army Airfield, now known as the BKV, and associated runways are located within the proposed Direct Impact and Indirect Impact APE. No buildings or structures that are 50 years of age or older (constructed in 1971 or earlier) are located within the proposed APE. The review of aerial photos revealed little change to the area between 1944 and 1957 (USDA 1944a, 1944b, 1951, 1957).

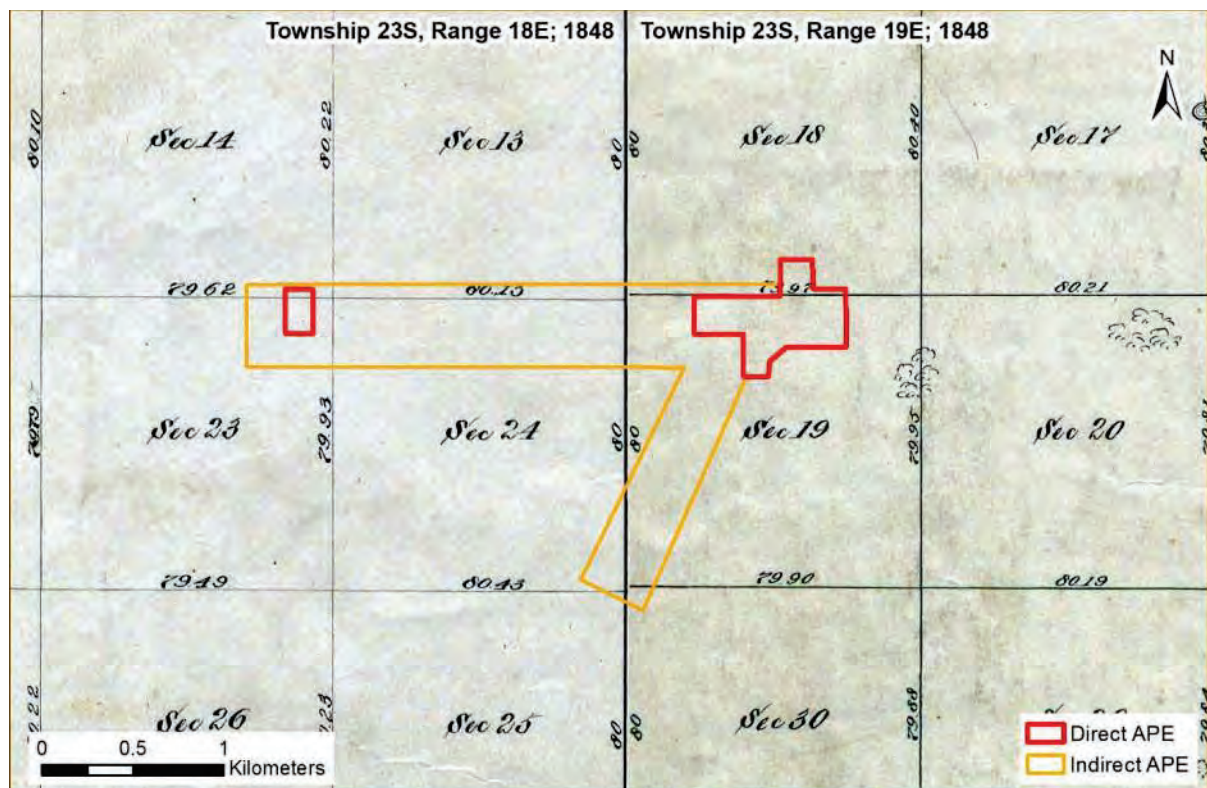


Figure 7. 1848 plats of the project area.

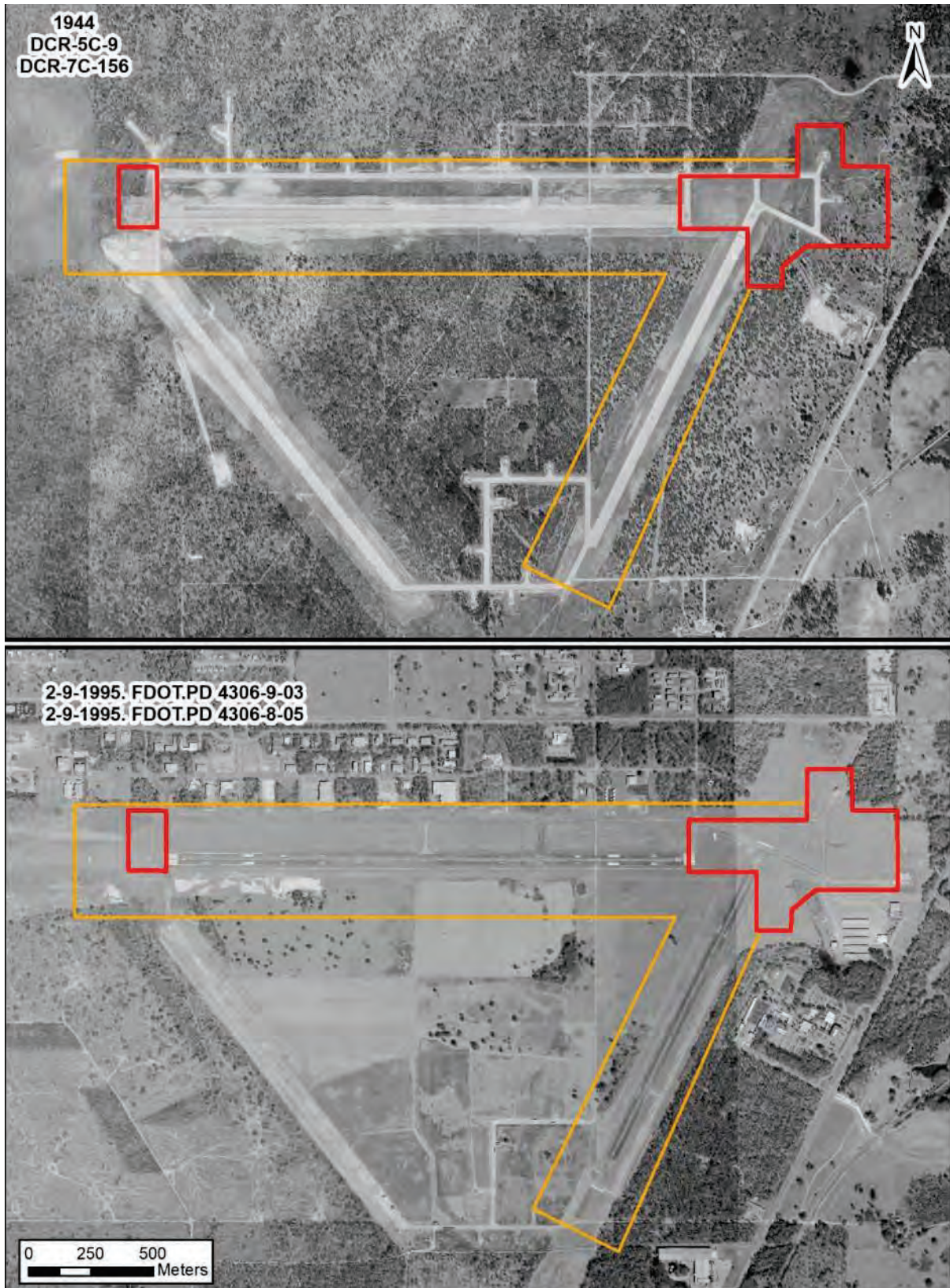


Figure 8. 1944 and 1995 aerial photos of the airport.

Conclusions

The background research revealed no recorded archaeological sites or historic resources within the project area. There is a low potential for intact aboriginal and historic archaeological sites, based on environmental conditions, historic land use patterns, and the extensive disturbance of the project area over time. It is ACI's professional opinion that no additional archaeological survey is needed. Historical/architectural background research revealed that no previously recorded historic resources are located within the proposed APE. The ca. 1942 Brooksville Army Airfield, now known as the BKV, and associated runways are located within the proposed APE. The Airfield could be recorded within the FMSF as a Resource Group with two contributing resources – Runway 9-27 and Runway 3-21. No buildings or structures that are 50 years of age or older (constructed in 1971 or earlier) are located within the proposed APE; however, a field survey would be necessary for proper identification of historic resources within the proposed APE.

A CRAS may be required during the permitting process to document historic cultural resources within the project area. The fieldwork should meet the requirements of Chapters 267, 373, and 872.05, *FS*, Florida's Coastal Management Program, and implementing state regulations, for possible effects on historic properties listed, or eligible for listing, in the NRHP, or otherwise of historical, architectural or archaeological value, as well as the standards contained in FDHR's *Cultural Resource Management Standards and Operational Manual* (FDHR 2003); the report should meet the specifications set forth in Chapter 1A-46, *FAC*.

References Cited

ACI (Archaeological Consultants, Inc.)

- 1995 A Cultural Resource Assessment Survey, Suncoast Parkway Reevaluation Areas, Hillsborough, Pasco, and Hernando Counties, Florida. ACI, Sarasota. MS# 4889.
- 2001 Cultural Resource Assessment Survey Technical Memorandum Pond and Floodplain Compensation Site Alternatives US 41 (SR 45) from SWFWMD Entrance to South of Powell Road, Hernando County, Florida. ACI, Sarasota. MS# 9533.
- 2015 Phase I Cultural Resource Assessment Survey of the Brooksville-Tampa Bay Regional Airport MRO Hanger Development in Hernando County, Florida. ACI, Sarasota. MS# 21779.

Almy, Marion M.

- 1978 The Archaeological Potential of Soil Survey Reports. *The Florida Anthropologist* 31(3):75-91.

Austin, Robert J., Howard Hansen, and Charles Fuhrmeister

- 1991 An Archaeological and Historical Survey of Unincorporated Areas of Pinellas County, Florida. Janus Research, Inc., Tampa. MS# 2827.

- Batun, A. Ivan, Martin F. Dickinson and Lucy B. Wayne
 2006 Cultural Resources Survey and Assessment, Hernando Oaks DRI, Hernando County, Florida. SouthArc, Inc., Gainesville. MS# 13640.
- BKV
 2021 History. Brooksville-Tampa Bay Regional Airport, Brooksville.
<https://flybkv.com/about-bkv/history/>. Accessed 8-24-21.
- Burger, B. W.
 1982 *Cultural Resource Management in Manatee County, Florida: The Prehistoric Resource Base*. MA thesis, Department of Anthropology, University of South Florida, Tampa.
- Davis, John H.
 1980 General Map of Natural Vegetation of Florida. *Circular S-178*. Agriculture Experiment Station, University of Florida, Gainesville.
- de Montmollin, Wanda
 1983 *Environmental Factors and Prehistoric Site Location in the Tampa Bay Area*. MA thesis, Department of Anthropology, University of South Florida, Tampa.
- Deming, Joan
 1980 *The Cultural Resources of Hillsborough County: An Assessment of Prehistoric Resources*. Historic Tampa/Hillsborough County Preservation Board, Tampa.
- Ellis, Gary D., Robin L. Denson, and Russell A. Dorsey
 1995 Phase II Archaeological Study, Citrus County, Florida. Gulf Archaeological Research Institute, Lecanto. MS# 4029.
- Ellis, Gary D., Robin L. Denson, Russell A. Dorsey, Randy G. Martin, Kenneth Nash, and Jeanne E. Ellis
 1998 Withlacoochee State Forest Archaeological Modeling Study for Citrus, Hernando, Sumter and Pasco Counties. Gulf Archaeology Research Institute, Lecanto. MS# 6547.
- Ellis, Gary D., Russell A. Dorsey, Robin Denson, John J. Ellis, John Milton, and Virgil R. Beasley
 1993 Archaeological Study Citrus County, Florida. Gulf Archaeological Research Institute, Lecanto. MS# 3570.
- FDEP (Florida Department of Environmental Protection).
 2001a *Geology (Environmental)*. Florida Geographic Data Library, Gainesville.
 2001b *Surficial Geology*. Florida Geographic Data Library, Gainesville.
- FDHR (Florida Division of Historical Resources)
 2003 *Cultural Resource Management Standards and Operational Manual*. Florida Division of Historical Resources, Tallahassee.
- FDOT, PBS&J, and Inc. HDR Engineering
 1994 North Suncoast Corridor Zone 2 Final Environmental Impact Statement. FDOT, Tallahassee. MS# 17575.

FMSF (Florida Master Site File)

Various site file forms. On file, FDHR, Tallahassee.

HCPD (Hernando County Planning Department)

- 1990 Excerpts from the Hernando County Comprehensive Plan, Historical and Archaeological Element. Hernando County Planning Department, Hernando County Board of County Commissioners, Brooksville. MS# 2785.

Horvath, Elizabeth A.

- 1986 *The Archaeological Resources of Hernando County, A Site Location Predictive Model.* MA thesis, Department of Anthropology, University of South Florida, Tampa.

Hyde, Adam G., Lloyd Law, Jr., Robert L. Weatherspoon, Melvin D. Cheyney, and Joseph J. Eckenrode

- 1977 *Soil Survey of Hernando County, Florida.* USDA, Soil Conservation Service.

Janus Research

- 1992 An Archaeological Resource Inventory and Archaeological Site Predictive Model for Manatee County, Florida. Janus Research, Inc., Tampa. MS# 3066.
2002 Cultural Resource Assessment Technical Memorandum State Road 45 (U.S. 41) from County Line Road to South of SWFWMD Entrance, Hernando County, Florida. Janus Research, Inc., Tampa. MS# 7186.
2004 Updated Archaeological Site Predictive Model for the Unincorporated Areas of Hillsborough County, Florida. Janus Research, Inc., Tampa. MS# 10723.

Marsh, Robert G.

- 1976 An Archaeological Survey of the Brooksville 201 Facilities Plan, Hernando County, Florida. On file, FDHR, Tallahassee. MS# 140.

Marshe, Robert G.

- 1981 An Archaeological Survey of the Proposed Holland Spring Development Unit One. On file, FDHR, Tallahassee. MS# 554.

McMakin, Todd

- 2015 Cultural Resources Assessment of the 23577 P and P Rentals 086386 Cellular Tower, Hernando County, Florida. Stone Point Services, Inc., Tyler, TX. MS# 21702.

McReynolds, Nancy

- 2010 Proposed 102-foot Monopole Telecommunications Tower / Hernando county Airport. Terracon Consulting Engineers & Scientists, Duluth, GA. MS# 18055.

Norris, R. W.

- 1845 *Field Notes.* Volume 113.

Pracht, Jodi B.

- 2001 Cultural Resource Reconnaissance Survey / Section 106 Review; Proposed Cellular Tower Site: Oakcrest 4100 Barclay Road, Hernando County, Florida. ACI, Sarasota. MS# 7453.

Sims, Cynthia L.

- 2001 An Archaeological and Historical Survey of the Proposed Cypress Pond Tower Location in Hernando County, Florida. Panamerican Consultants, Inc., Tampa. MS# 8019.

Smith, Greg C., Patrick Sullivan, Mary Beth Reed, and Pinellas County Planning Department

- 2008 Countywide Cultural Resources Survey, Pinellas County, Florida. *New South Associates Technical Report* 1561. New South Associates, Stone Mountain, GA. MS# 16115.

State of Florida, Department of Environmental Protection

- n.d.-a *Tract Book*. Volume 15.
n.d.-b *Tract Book*. Volume 16.

Stokes, Anne V.

- 2002 A Phase I Cultural Resources Survey of Six Florida Army National Guard (FLARNG) Facilities in Florida. SEARCH, Jonesville. MS# 8537.

Templeman, R. W.

- 1844 *Field Notes*. Volume 109.

USDA (U.S. Department of Agriculture)

- 1944a Aerial Photograph: 10-25-44, DCR-7C-156. On file, PALMM, Gainesville.
1944b Aerial Photograph: 11-11-44, DCR-15C-9. On file, PALMM, Gainesville.
1951 Aerial Photograph: 5-5-51, DCR-3H-23. On file, PALMM, Gainesville.
1957 Aerial Photographs: 3-23-57, CTT-1T-22, 25. On file, PALMM, Gainesville.
2018 Soil Survey Geographic (SSURGO) Database for Florida - September 2018. USDA, NRCS, Fort Worth, TX.

USGS (U.S. Geological Survey)

- 2013 *Masaryktown, Fla.* USA_Topo_Maps.

Washington, Henry

- 1843a *Field Notes*. Volume 92.
1843b *Field Notes*. Volume 74.

Watson, George

- 1846-47 *Field Notes*. Volume 95.

Watson, George, R. W. Templeman, and H. Washington

- 1848a *Plat. Township 23 South, Range 18 East*. Florida Department of Environmental Protection.

Watson, George, R. W. Templeman, and Henry Washington

- 1848b *Plat. Township 23 South, Range 19 East*. Florida Department of Environmental Protection.

Weisman, Brent R. and Lori Collins

- 2004 A GIS Archaeological Modeling and Testing of Nine ELAPP Preserves, Hillsborough County, FL. Department of Anthropology, University of South Florida, Tampa. MS# 10759.

Wharton, Barry R.

- 1990 An Archaeological and Historical Resource Assessment of the Proposed North Suncoast Expressway, Hillsborough, Pasco, and Hernando Counties, Florida. HDR Engineering, Inc., Tampa. MS# 2684.

White, William A.

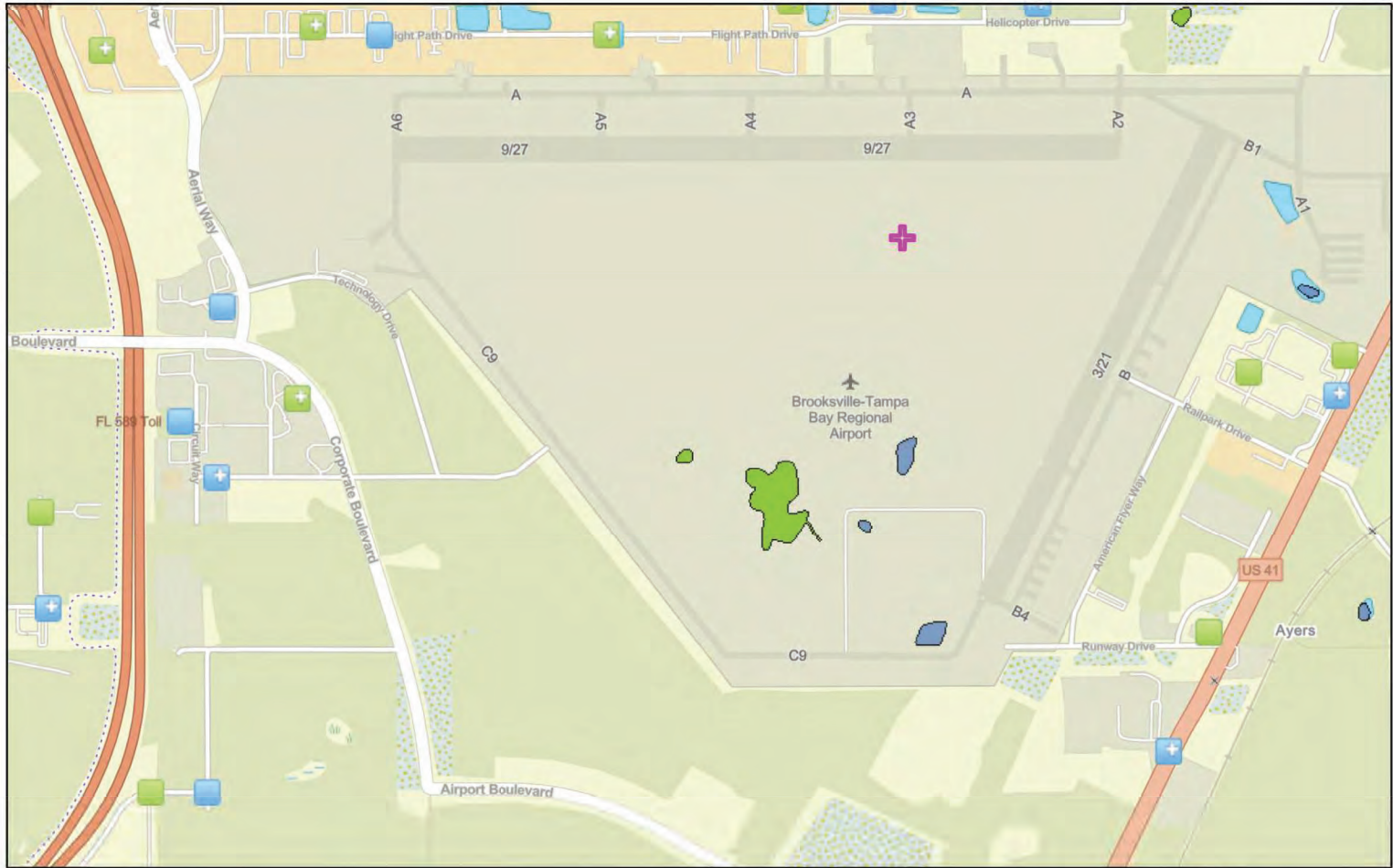
- 1970 Geomorphology of the Florida Peninsula. *Geological Bulletin* 51. Florida Department of Natural Resources, Bureau of Geology, Tallahassee.

Wood, Karen G.

- 2008 New Tower ("NT") Submission Packet FCC Form 620 Crown Castle USA - Silverthorn #8248-2849. Southern Research, Ellerslie, GA. MS# 16300.

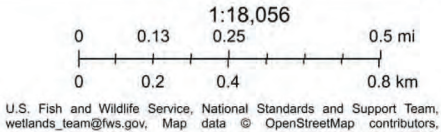
APPENDIX C

ENVIRONMENTAL FEATURES MAP

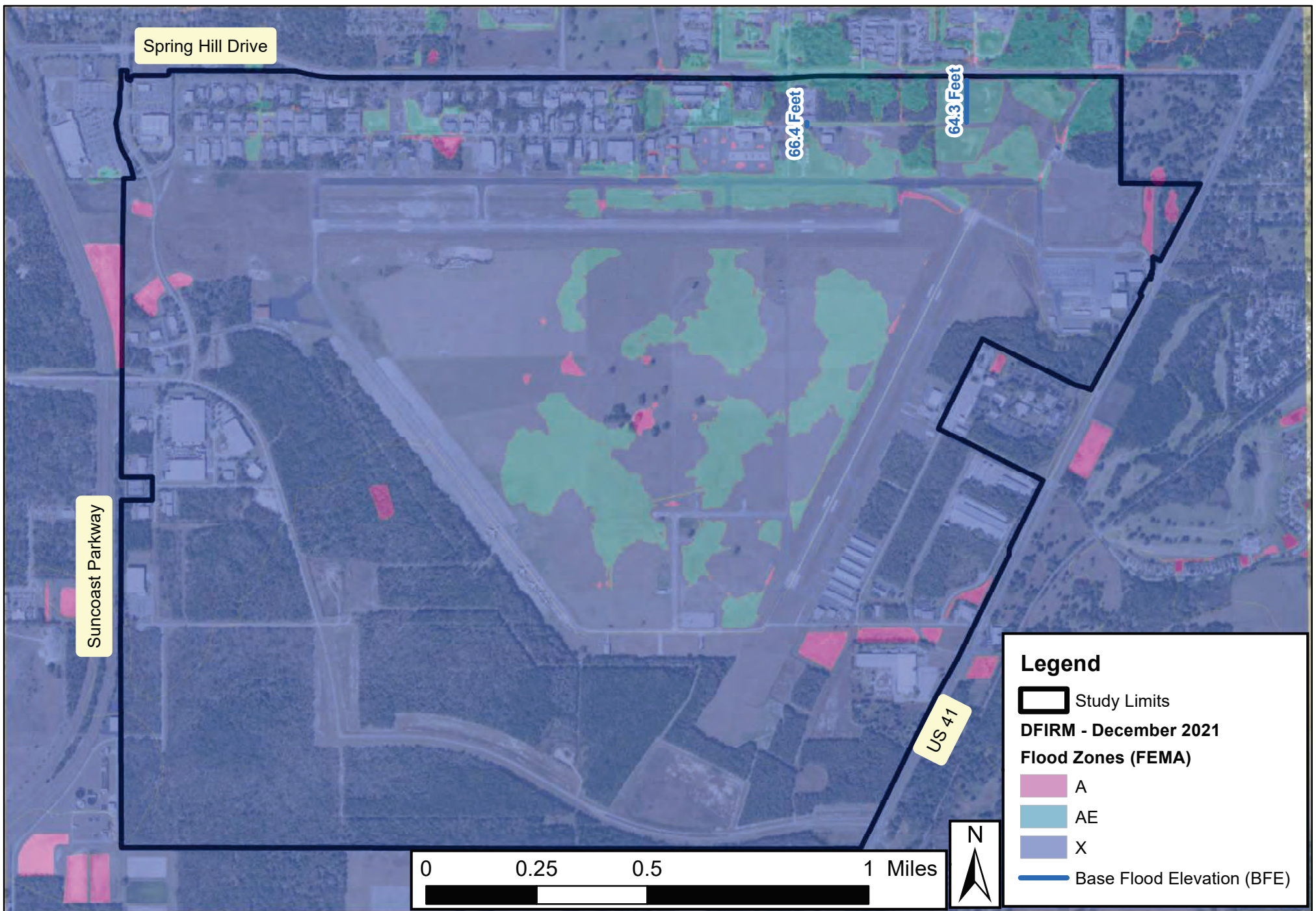


March 7, 2024

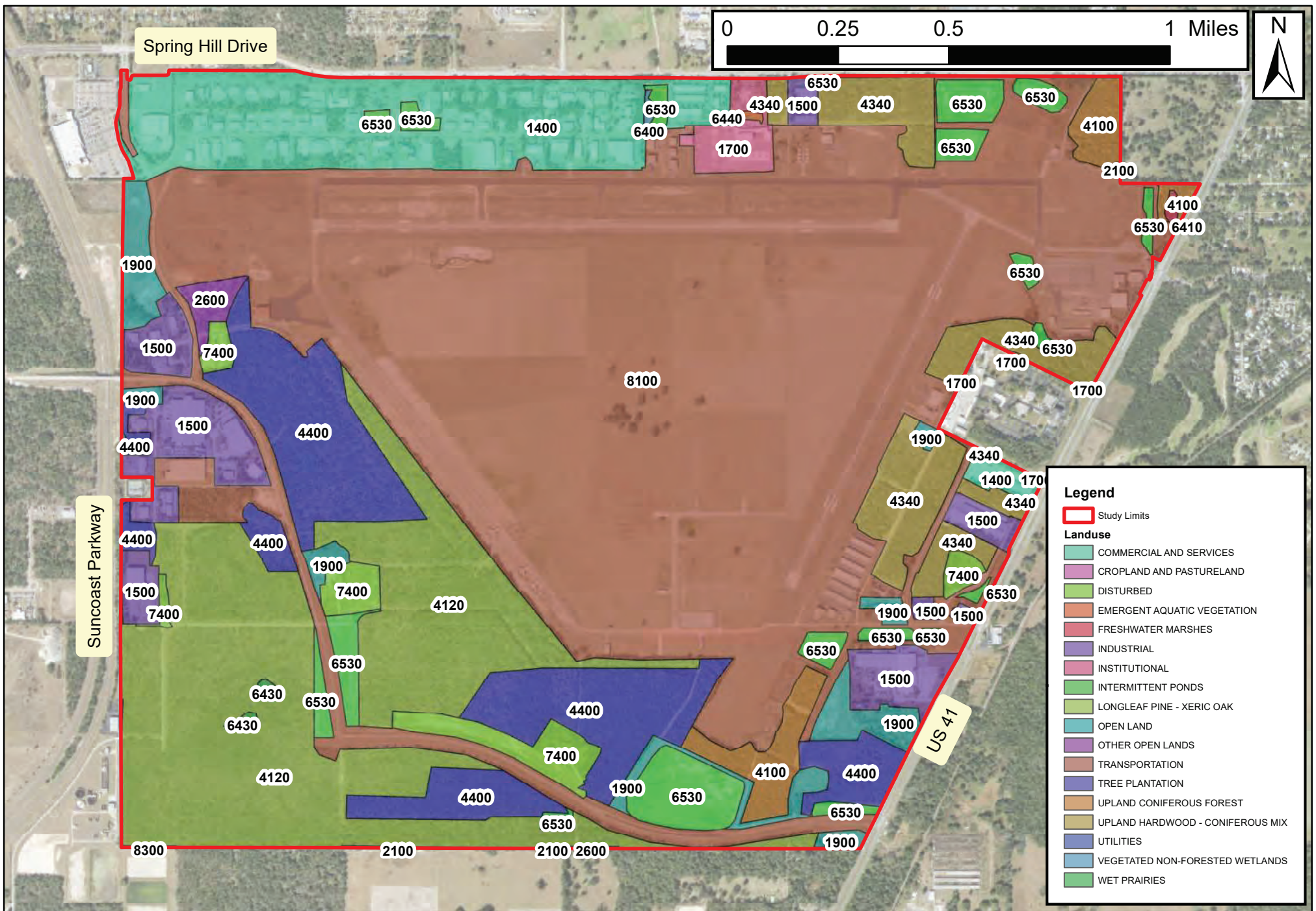
- | | | | |
|----------------------------|--------------------------------|-----------------------------------|-----------------------|
| Water Dischargers (NPDES) | Hazardous Waste (RCRAInfo) | Estuarine and Marine Wetland | Other |
| Water Dischargers (NPDES) | Toxic Releases (TRI) | Freshwater Emergent Wetland | Riverine |
| Hazardous Waste (RCRAInfo) | Wetlands | Freshwater Forested/Shrub Wetland | Search Result (point) |
| | Estuarine and Marine Deepwater | Freshwater Pond | Water Bodies |
| | | Lake | |



APPENDIX D
FLOODPLAIN MAP



APPENDIX E
LANDUSE MAP



APPENDIX F

TREE REMOVAL DOCUMENTED CATEGORICAL EXCLUSION

APPENDIX A. DOCUMENTED CATEX

Airport sponsors may use this form for projects eligible for a categorical exclusion (CATEX) that have greater potential for extraordinary circumstances or that otherwise require additional documentation, as described in the Environmental Orders (FAA Order 1050.1F and FAA Order 5050.4B).

To request a CATEX determination from the FAA, the sponsor should review potentially affected environmental resources, review the requirements of the applicable special purpose laws, and **consult with the Airports District Office or Regional Airports Division Office staff** about the type of information needed. The form and supporting documentation should be completed in accordance with the provisions of FAA Order 5050.4B, paragraph 302b, and submitted to the appropriate FAA Airports District/Division Office. The CATEX cannot be approved until all information/documentation is received and all requirements have been fulfilled.

Name of Airport, LOC ID, and location:

Brooksville-Tampa Bay Regional Airport (BKV), Brooksville, Florida

Project Title:

Land Clearing and Grading for Wildlife Hazard Mitigation

Give a brief, but complete description of the proposed project, including all project components, justification, estimated start date, and duration of the project. Include connected actions necessary to implement the proposed project (including but not limited to moving NAVAIDs, change in flight procedures, haul routes, new material or expanded material sources, staging or disposal areas). Attach a sketch or plan of the proposed project. Photos can also be helpful.

The project consists of tree clearing, grubbing, smooth grading, and hydroseeding of 115.4 acres at BKV to remove wildlife cover and foraging habitat thereby reducing wildlife attractants and hazardous wildlife to facilitate safe aircraft operations at BKV (Exhibit 1). This includes 114.8 acres of currently wooded land within the fenced airport operations area and an additional 0.6 acres of vegetated habitat that would be cleared adjacent to existing airport fencing to establish a clear maintenance and access corridor adjacent to the perimeter fence in the locations depicted on Exhibit 1. The project is estimated to start in Fall of 2023. It is anticipated that for hauling of vegetation debris offsite for disposal, the contractor would use a number of different haul routes. It is anticipated that the contractor would not have to cross runways or taxiways to do this work as there are existing gates, roads, and trails around the perimeter of the airfield that will facilitate access to the tree removal areas.

Give a brief, but complete, description of the proposed project area. Include any unique or natural features within or surrounding airport property.

The first component of the project area includes the 12 separate areas of upland mixed pine-hardwood and mixed hardwood forest that are within the BKV perimeter fence. Common tree cover species in these areas include slash pine, live oak, water oak, laurel oak, turkey oak, and red maple. These areas total approximately 114.8 acres in size.

The second component of the project area includes additional areas of tree removal that are included in the project to provide a 10 foot wide fence inspection and maintenance corridor adjacent to 5 fence segments total. These areas total 0.6 acres (Exhibit 1).

Areas of wetland occur between Tree Removal Areas 8 and 9 as well as within Tree Removal Area 10 (Exhibit 1). Impacts to these wetland areas will be avoided during the project and a minimum 15-foot wide (average 25-foot wide) wetland buffer will be observed during construction. A feature that appears to be a sinkhole is located within the wetland in Tree Removal Area 10. The project would not impact the sinkhole.

Identify the appropriate CATEX paragraph(s) from Order 1050.1F (paragraph 5-6.1 through 5-6.6) or 5050.4B (Tables 6-1 and 6-2) that apply to the project. Describe if the project differs in any way from the specific language of the CATEX or examples given as described in the Order.

5-6.4l - Federal financial assistance for, licensing or approval of the grading of land, the removal of obstructions to air navigation, or erosion control measures, provided those activities occur on and only affect airport property

5-6.4p - New grading landscaping, and/or maintenance of existing landscaping that does not cause or promote the introduction or spread of invasive species that would harm the native ecosystem.

The circumstances one must consider when documenting a CATEX are listed below along with each of the impact categories related to the circumstance. Use FAA Environmental Orders 1050.1F, 5050.4B, and the Desk Reference for Airports Actions, as well as other guidance documents to assist you in determining what information needs to be provided about these resource topics to address potential impacts. Keep in mind that both construction and operational impacts must be included. Indicate whether or not there would be any effects under the particular resource topic and, **if needed**, cite available references to support these conclusions. Additional analyses and inventories can be attached or cited as needed.

5-2.b(1) National Historic Preservation Act (NHPA) resources

	YES	NO
<p>Are there historic/cultural resources listed (or eligible for listing) on the National Register of Historic Places located in the Area of Potential Effect? If yes, provide a record of the historic and/or cultural resources located therein and check with your local Airports Division/District Office to determine if a Section 106 finding is required.</p> <p>A Cultural Resources Assessment Survey (CRAS) was performed and no historic or cultural resources listed or recommended as eligible for listing on the National Register of Historic Places were found. A letter and a copy of the CRAS were provided to the Florida Department of State, Division of Historical Resources, Compliance Review Section (SHPO). The SHPO agreed with the findings of the CRAS. Please see the attached coordination from the SHPO.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
<p>Does the project have the potential to cause effects? If yes, describe the nature and extent of the effects.</p> <p>Since no listed or recommended eligible for listing resources were found, the CRAS found that the project will not affect known historic properties or cultural resources. If previously undocumented resources are discovered during construction, activity would cease and the SHPO would be contacted for further guidance..</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Is the project area undisturbed? If not, provide information on the prior disturbance (including type and depth of disturbance, if available)</p> <p>Portions of the area have been disturbed in the past due to the construction of the Brooksville Army Airfield in 1942 and subsequent disturbance for airport related use. Other areas have been subject to more limited disturbance for harvesting of trees or agricultural use historically.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project impact tribal land or land of interest to tribes? If yes, describe the nature and extent of the effects and provide information on the tribe affected. Consultation with their THPO or a tribal representative along with the SHPO may be required.</p> <p>A letter and a copy of the CRAS were provided to the five Native American Tribe entities with areas of interest that include the region of Florida within which the project is located. Two of the five responded (Exhibit 2). The Seminole Tribe of Florida indicated that they had no objections or other comments. The Muscogee (Creek) Nation indicated that they were not aware of any sacred sites, burial grounds, or significant cultural resources located within the immediate tree removal areas and that they agreed with the findings of the CRAS and concurred that there should be no effects to any known historic properties. Both Tribes indicated that if inadvertent discoveries of cultural resources, human remains and related resources protected by the Native American Graves Protection and Repatriation Act were to occur during construction that all work should cease and their offices and other appropriate agencies should be notified. Please see attached correspondence with the Native American tribe entities.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(2) Department of Transportation Act Section 4(f) and 6(f) resources

	YES	NO
<p>Are there any properties protected under Section 4(f) (as defined by FAA Order 1050.1F) in or near the project area? This includes publicly owned parks, recreation areas, and wildlife or waterfowl refuges of national, state or local significance or land from a historic site of national, state or local significance.</p> <p>No. The entire project is on existing airport property within the airfield perimeter fence. There are no Section 4(f) properties in the project area. Additionally, there are no section 4(f) lands near the project area. This was determined by reviewing, a number of resources including the following:</p> <ul style="list-style-type: none"> • List of Hernando County parks and preserves; • List of City of Brooksville parks; • Hernando County GIS Zoning/Future Land Use interactive map; • Florida Conservation Lands GIS data layer, including National Parks, state forests, wildlife management areas, local preserves, and private preserves; • Cultural Resources Assessment Survey prepared for the project; • Letter of coordination from the Florida Department of State, Division of Historical Resources, State Historic Preservation Officer (SHPO); • National Register of Historic Places (NRHP) National Archives; • NRHP Spatial Data; and, • NRHP NPGallery Database. <p>Based on a review of the above sources, there are no known Section 4(f) resources located within or in the vicinity of the Affected Environment. One golf course, the Rivard Golf Club is located on the east side of U.S. Route 41, southeast of the Runway 27 approach. However, although this golf course is open to the general public, it is not publicly owned and it is not operated and managed by a public agency, therefore it is does not qualify as a Section 4(f) resource. No impact to the Rivard Golf Club would occur as a result of the project.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will project construction or operation physically or constructively “use” any Section 4(f) resource? If yes, describe the nature and extent of the use and/or impacts, and why there are no prudent and feasible alternatives. See 5050.4B Desk Reference Chapter 7.</p> <p>No, since there are no 4(f) resources within or in the vicinity of the project there will be no physical or constructive use of a 4(f) resource.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
<p>Will the project affect any recreational or park land purchased with Section 6(f) Land and Water Conservation Funds? If so, please explain, if there will be impacts to those properties.</p> <p>No. All of the affected land is existing airport property. There are no recreational or park lands within or in the vicinity of the project.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(3) Threatened or Endangered Species

	YES	NO
<p>Are there any federal or state listed endangered, threatened, or candidate species or designated critical habitat in or near the project area? This includes species protected by individual statute, such as the Bald Eagle.</p> <p>Gopher tortoise burrows are found around the perimeter of each of the tree removal areas except for Area 9 (Exhibit 3). The gopher tortoise is listed as Threatened by the State of Florida. It is also possible that the eastern indigo snake, which is federally listed as Threatened, could utilize habitats that will be affected by the proposed project. No evidence of other federal or state listed species or candidate species was found in the project area during the field survey conducted for the project.</p> <p>Removal of the trees will be phased to flush out wildlife primarily mammals that are not threatened and endangered species and allow them to move out. Should an animal be found during tree removal activities, the animal would be relocated to the nearest forest outside of the airport limits or if injured would be transported to the nearest animal shelter.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
<p>Does the project affect or have the potential to affect, directly or indirectly, any federal or state-listed, threatened, endangered or candidate species, or designated habitat under the Endangered Species Act? If yes, Section 7 consultation between the FAA and the US Fish & Wildlife Service, National Marine Fisheries Service, and/or the appropriate state agency will be necessary. Provide a description of the impacts and how impacts will be avoided, minimized, or mitigated. Provide the Biological Assessment and Biological Opinion, if required.</p> <p>A 100 percent gopher tortoise survey will have to be conducted by a permitted Authorized Gopher Tortoise Agent in all suitable habitat within the project limits. A gopher tortoise conservation permit will have to be obtained from the Florida Fish and Wildlife Conservation Commission. This would be initiated approximately 90 days prior to construction. Impacted burrows that cannot be avoided will be excavated under the conditions of the permit and the gopher tortoises that are captured will be relocated to a state-approved gopher tortoise recipient site per the conditions of the permit. Potential for impact to the eastern indigo snake will be minimized by requiring the contractor to implement the USFWS' Standard Protection Measures for the Eastern Indigo Snake throughout construction.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

<p>Does the project have the potential to take birds protected by the Migratory Bird Treaty Act? Describe steps to avoid, minimize, or mitigate impacts (such as timing windows determined in consultation with the US Fish & Wildlife Service).</p> <p>A list of migratory bird species of concern that may occur in the vicinity of the project was provided with the USFWS IPaC list that was generated for the project (Exhibit 4). This IPaC list included seven species from the USFWS' list of Birds of Conservation Concern (American kestrel, great blue heron, lesser yellowlegs, prairie warbler, red-headed woodpecker, short billed dowitcher, and swallow tailed kite) and an additional species, the bald eagle, which is protected under the Bald and Golden Eagle Protection Act. Of these species, five nest in forested areas (American kestrel, great blue heron, red-headed woodpecker, swallow tailed kite, and bald eagle). However, for the great blue heron, the swallow-tailed kite, and the bald eagle, nesting locations are typically found in forested areas near or within large areas of bottomland hardwood wetlands, on islands within bodies of water, within other various types of wetlands, or in large trees within short distances of bodies of water. Habitats within the proposed tree removal areas are unlikely to be used for nesting by these species because there are only two small areas of wetlands within the project and these areas would not be impacted. Additionally there are no large bodies of water in close proximity to BKV.</p> <p>Of the remaining two forest-nesting migratory bird species on the IPaC list, the red-headed woodpecker and the American kestrel have some potential to utilize the habitats within the tree removal areas for nesting. The kestrel breeding season is reported by the IPaC report as being from April through August. Based on data from BKV's 2014 to 2015 Wildlife Hazard Assessment (WHA), kestrel observations at BKV were lower from April through July and highest from October through March. This data indicates that there are at least some non-migratory kestrels that utilize BKV's airfield for foraging year-round. These kestrels are likely to nest somewhere near the airfield. The average number of individual kestrel observations per month during breeding season at BKV was approximately 7 individuals. It is very likely that some of these observations were duplicates because the observations were recorded across three survey periods per day for two days per month. So the population of non-migratory kestrels using the habitats at the airport that could potentially nest in forested areas on the airport is likely to be relatively low. No red-headed woodpeckers were observed during the WHA. Although it is possible that red-headed woodpeckers could utilize wooded habitats at BKV occasionally, this was not documented during the WHA.</p> <p>While the proposed action would remove potential nesting habitat for kestrels, red-headed woodpeckers, and other forest nesting migratory birds, there would be no intentional take of these species is anticipated with the project. Nesting habitat for forest nesting birds would be reduced but foraging habitat for birds that prefer to forage in open habitats (such as American kestrels) or nest in open habitats would be potentially increased. Approximately 22.96 acres (114.8 acres of forested habitat x 20%) of forested nesting habitat would be removed as a result of the proposed action.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------

	YES	NO
However, it should be noted that the reason for the project is to reduce available wildlife habitat for species that could present hazards to aircraft operations at BKV. While some incidental impact to migratory bird species, such as disturbance from equipment noise and presence of workers during tree removal activities, could occur as a result of the proposed project, reduction of wildlife populations in the habitats adjacent to the airfield is beneficial in this case because it would reduce the potential for wildlife collisions with aircraft at BKV. In addition, due to the available habitat outside the perimeter fence and the large amounts of similar habitat in the region containing the airport, these impacts would not be considered to be significant. Due to the fact that the project will likely take several months to complete, no modifications of construction schedules to avoid conducting activities during periods when higher numbers of birds may be nesting (such as spring and summer) is proposed at this time.		

5-2.b (4) Other Resources

Items to consider include:

a. Fish and Wildlife Coordination Act	YES	NO
<p>Does the project area contain resources protected by the Fish and Wildlife Coordination Act? If yes, describe any impacts and steps taken to avoid, minimize, or mitigate impacts.</p> <p>No, the project does not impact any streams or other water bodies.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Wetlands and Other Waters of the U.S.	YES	NO
<p>Are there any wetlands or other waters of the U.S. in or near the project area?</p> <p>There are two areas of wetlands within the project area. The first is a 0.6 acre wetland within Area 10, and the second is a 4.1 acre wetland located between Areas 8 and 9 (Exhibit 1). Both of these wetlands would be avoided and a minimum 15 foot and average 25 foot wide buffer around each of the wetlands would be marked with flagging tape and retained during construction.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Has wetland delineation been completed within the proposed project area? If yes, please provide U.S. Army Corps of Engineers (USACE) correspondence and jurisdictional determination. If delineation was not completed, was a field check done to confirm the presence/absence of wetlands or other waters of the U.S.? If no to both, please explain what methods were used to determine the presence/absence of wetlands.</p> <p>Wetland limits have been approximated through a combination of field reconnaissance and desktop evaluation. A field wetland delineation will be conducted approximately 60 days prior to the start of construction.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>If wetlands are present, will the project result in impacts, directly or indirectly (including tree clearing)? Describe any steps taken to avoid, minimize or mitigate the impact.</p> <p>No. The contractor will be required to avoid all impacts to wetlands during construction. A wetland buffer averaging 25 feet wide with a minimum width of 15 feet will be observed.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Is a USACE Clean Water Act Section 404 permit required? If yes, does the project fall within the parameters of a general permit? If so, which general permit?</p> <p>No Section 404 permit will be required because there will be no wetland impact.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

c. Floodplains	YES	NO
<p>Will the project be located in, encroach upon or otherwise impact a floodplain? If yes, describe impacts and any agency coordination or public review completed including coordination with the local floodplain administrator. Attach the FEMA map if applicable and any documentation.</p> <p>The project area overlaps 8.77 acres of 100 year floodplains (Exhibit 5). However, since some of the area shown as floodplain in Area 10 is also wetland, and since all wetland impacts are being avoided, actual clearing and smooth grading within floodplains will be less than 8.77 acres. The floodplain impacts will consist of tree and vegetation removal, smooth grading, and establishment of turfgrass to allow mowing/maintenance. No fill is proposed, and due to removal of root material, net flood storage capacity is actually likely to increase slightly as a result of the project.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Coastal Resources	YES	NO
<p>Will the project occur in or impact a coastal zone as defined by the State's Coastal Zone Management Plan? If yes, discuss the project's consistency with the State's CZMP. Attach the consistency determination if applicable.</p> <p>All of Florida is considered to be within the State's Coastal Zone. Based on coordination with the Southwest Florida Water Management District (SWFWMD), the project will require a Minor Modification Environmental Resource Permit application. The permit that would be modified is the permit for BKV's existing stormwater management system. In the state of Florida, coastal zone consistency is evaluated as part of the Environmental Resource Permit application process. Issuance of an Environmental Resource Permit constitutes a determination that the project is consistent with the State's CZMP. All of the project's impacts would be within the existing airport perimeter fence, on land that has already been dedicated for airport use. There would be no negative effects on beaches or shorelines, emergency evacuation routes, conservation or recreation lands, greenways or trails, historic resources, commercial development, water resources, energy resources, or other important coastal resources. It is anticipated that the project will be determined to be consistent with the state's CZMP.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Will the project occur in or impact the Coastal Barrier Resource System as defined by the US Fish and Wildlife Service?</p> <p>The project is located well inland and will have no impact on the Coastal Barrier Resource System.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. National Marine Sanctuaries	YES	NO
<p>Is a National Marine Sanctuary located in the project area? If yes, discuss the potential for the project to impact that resource.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

No National Marine Sanctuary is located in the project area. The project is in an inland area in south central Hernando County.		
f. Wilderness Areas	YES	NO
Is a Wilderness Area located in the project area? If yes, discuss the potential for the project to impact that resource. There is no wilderness area within the project area.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g. Farmland	YES	NO
Is there prime, unique, state, or locally important farmland in/near the project area? Describe any significant impacts from the project. Based on a review of the USDA Natural Resources Conservation Web Soil Survey tool, there is no prime, unique, state important, or locally important farmland in the project area. Please refer to Exhibit 6.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include the acquisition and conversion of farmland? If farmland will be converted, describe coordination with the US Natural Resources Conservation and attach the completed Form AD-1006. The project will not result in conversion of farmland.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

h. Energy Supply and Natural Resources	YES	NO
<p>Will the project change energy requirements or use consumable natural resources either during construction or during operations?</p> <p>Energy, in the form of fuel for landclearing equipment, would be consumed during the construction phase of the project; however, this would be a short term effect that would not affect availability of energy resources in the region containing the project. After construction is complete, there would be a minor increase in annual energy consumption at BKV because the cleared areas would have to be mowed regularly during the growing season, and this would require increased use of fuel for the airport's mowing equipment. This increase in fuel usage would not be expected to have an effect on the availability of fuel in the region containing BKV. Consumable natural resources that would be affected by the project would include timber resources because existing tree cover would be removed from the wooded areas within the airport's perimeter fence. The winning contractor has the option of selecting suitable trees for timber and chipping or mulching trees that cannot be logged. Mulched/chipped materials would be transported to the nearest Hernando County solid waste facility.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Will the project change aircraft/vehicle traffic patterns that could alter fuel usage either during construction or operations?</p> <p>During the period of time that trees are being removed from the wooded areas south of the Runway 3 approach, it is likely that traffic would be diverted from Runway 3-21 to Runway 9-27. This would only be necessary during daytime hours while tree clearing is underway and construction vehicles would have potential to be driving in or near the approach RSA for Runway 3. This would not be anticipated to alter fuel usage. No changes in other vehicle traffic patterns would be required.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i. Wild and Scenic Rivers	YES	NO
<p>Is there a river on the Nationwide Rivers Inventory, a designated river in the National System, or river under State jurisdiction (including study or eligible segments) near the project?</p> <p>The nearest designated wild and scenic river is the Wekiva River system, which is located over 60 miles east-northeast of the project.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project directly or indirectly affect the river or an area within ¼ mile of its ordinary high water mark?</p> <p>No</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

j. Solid Waste Management	YES	NO
<p>Does the project (either the construction activity or the completed, operational facility) have the potential to generate significant levels of solid waste? If so, discuss how these will be managed.</p> <p>The project will generate solid waste in the form of tree and vegetation debris that will be removed from the project area. However the amount of material that will be removed would not approach levels that would be considered significant, and depending on what the contractor decides to do with the material, some of it may be merchantable material that could be sold as pulpwood or sawtimber that would not contribute to solid waste. Material that is not useful as wood chips, mulch, pulp, or sawtimber would likely disposed of in a solid waste landfill that accepts vegetation debris.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5-2.b(5) Disruption of an Established Community

	YES	NO
<p>Will the project disrupt a community, planned development or be inconsistent with plans or goals of the community?</p> <p>There will be no community disruption from the project, because it is completely contained within the existing airport.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Are residents or businesses being relocated as part of the project?</p> <p>No relocations will be required.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(6) Environmental Justice

	YES	NO
<p>Are there minority and/or low-income populations in/near the project area?</p> <p>The census block groups that surround the Airport include census tract (CT) 040302 block group (BG) 1, CT 040906 BG 2, CT 040908 BG 2, and CT 040911 BG 1. Five-year data from the United States Census Bureau's American Community Survey were reviewed for these four block groups and compared to the data for Hernando County and for the State of Florida as a whole. The socioeconomic characteristics of the people living in block groups considered are comparable to those living in Hernando County as a whole and the State of Florida. All four block groups have a higher median household income than that of Hernando County as whole. Only CT 40906 BG 2 has a median household income that is notably less (by approximately 5,700 dollars) than the median household income for the State of Florida. Median family income is less than both the county and the state for CT 40906 BG 2 and CT 40908 BG 2, but the percent of households with income below the poverty level is lower for all of the block groups evaluated than for Hernando County as a whole or the State of Florida. Based on the consideration of this data, it was concluded that none of the block groups in the study area contain environmental justice populations. Since the percent of households with income below the poverty level is lower than that of Hernando County as a whole and the State of Florida, none of these block groups would be considered to be low income populations. In addition, the percentage of minorities living in the four block groups considered ranges from seven to ten percent, which is lower than minority percentage for Hernando County as whole (11 percent) or the State of Florida (25 percent); therefore none of these block groups would be considered to be minority populations.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project cause any disproportionately high and adverse impacts to minority and/or low-income populations? Attach census data if warranted.</p> <p>Since the project is completely contained within existing airport property and will not result in increased noise, light emissions, relocations, or traffic, it will have no disproportionate impact to minority or low-income populations.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(7) Surface Transportation

	YES	NO
<p>Will the project cause a significant increase in surface traffic congestion or cause a degradation of level of service provided?</p> <p>No. The project is completely contained within airport property and will not result in increased usage of the airport. It is strictly a safety project that is intended to decrease the usage of the habitat on the airport by wildlife that are attracted to forested habitats and that cause hazards to aircraft operations such as white-tailed deer.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO
<p>Will the project require a permanent road relocation or closure? If yes, describe the nature and extent of the relocation or closure and indicate if coordination with the agency responsible for the road and emergency services has occurred.</p> <p>No road relocations or closures are proposed.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(8) Noise

	YES	NO
<p>Will the project result in an increase in aircraft operations, nighttime operations, or change aircraft fleet mix?</p> <p>The project will not result in an increase operations or change in fleet mix.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project cause a change in airfield configuration, runway use, or flight patterns either during construction or after the project is implemented?</p> <p>During removal of trees from the approach end of Runway 3, some traffic may be shifted temporarily to Runway 9-27 because construction haul routes may be within the RSA for the approach end of Runway 3. The contractor will provide the airport with a schedule concerning when the haul route near the approach end of Runway 3 will be needed so that Runway 3 can be closed and NOTAMs declaring the closure of Runway 3 can be issued. This would only be required during daylight hours when construction activities are taking place and construction vehicles are traveling to and from the site. Construction within the remaining tree removal and grading areas would not cause changes in runway use patterns.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Does the forecast exceed 90,000 annual propeller operations, 700 annual jet operations or 10 daily helicopter operations or a combination of the above? If yes, a noise analysis may be required if the project would result in a change in operations.</p> <p>This threshold is exceeded based on FAA TAF which states that GA and military aircraft operations total 90,840 for BKV, but the project will not result in a change in operations.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Has a noise analysis been conducted, including but not limited to generated noise contours, a specific point analysis, area equivalent method analysis, or other screening method. If yes, provide that documentation.</p> <p>A noise analysis is being developed for another ongoing NEPA evaluation for the proposed extension of Runway 27. That analysis is still in draft status and has not been finalized, but preliminary results indicate that the noise contours for both the existing condition and the proposed condition do not extend off of BKV property and there are no noise sensitive land uses and no residences within the 65 DNL contour for any of the years modeled (2019, 2025, and 2030).</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
<p>Could the project have a significant impact (DNL 1.5 dB or greater increase) on noise levels over noise sensitive areas within the 65+ DNL noise contour?</p> <p>No noise impacts are anticipated from the tree removal and grading project.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(9) Air Quality

	YES	NO
<p>Is the project located in a Clean Air Act non-attainment or maintenance area?</p> <p>No</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>If yes, is it listed as exempt, presumed to conform or will emissions (including construction emissions) from the project be below <i>de minimis</i> levels (provide the paragraph citation for the exemption or presumed to conform list below, if applicable) Is the project accounted for in the State Implementation Plan or specifically exempted? Attach documentation.</p> <p>N/A</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Does the project have the potential to increase landside or airside capacity, including an increase of surface vehicles?</p> <p>No</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Could the project impact air quality or violate local, State, Tribal or Federal air quality standards under the Clean Air Act Amendments of 1990 either during construction or operations?</p> <p>No. Minor emissions would occur due to operation of equipment during construction but this would not affect attainment status or result in violations of local, State, Tribal, or Federal air quality standards.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b (10) Water Quality

	YES	NO
<p>Are there water resources within or near the project area? These include groundwater, surface water (lakes, rivers, etc.), sole source aquifers, and public water supply. If yes, provide a description of the resource, including the location (distance from project site, etc.).</p> <p>There are wetlands within two of the tree removal and grading areas, but these wetlands will not be disturbed and a 15 foot minimum/25 foot average width buffer will be retained around the wetland areas.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	YES	NO
<p>Will the project impact any of the identified water resources either during construction or operations? Describe any steps that will be taken to protect water resources during and after construction.</p> <p>Impacts to water resources will be avoided during construction.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will the project increase the amount or rate of stormwater runoff either during construction or during operations? Describe any steps that will be taken to ensure it will not impact water quality.</p> <p>It is possible that runoff may increase to a small extent temporarily during construction, but the existing stormwater management system at the airport would help to contain and treat any temporary increases in runoff that may occur. In other portions of the property the wooded areas are adjacent to large areas of maintained grass of the airfield that would help to slow runoff. All of the areas affected are within the Airport's closed drainage basin so any temporary increase in runoff during construction would be contained within airport property and would not affect other property owners. Much of the project site is nearly level and most of the soils are highly permeable sandy soils so it is anticipated that a large percentage of precipitation will simply percolate. During construction, sediment and erosion best management practices will be incorporated to reduce erosion and sedimentation. Once grading is complete bare ground will be seeded to help control runoff.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<p>Does the project have the potential to violate federal, state, tribal or local water quality standards established under the Clean Water and Safe Drinking Water Acts?</p> <p>No. The project will not affect aquifers that are sources for local drinking water. During construction the project will utilize sediment and erosion control measures, will implement a construction stormwater pollution prevention plan, and will implement a spill prevention control and countermeasures plan to protect surface and groundwater quality.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Are any water quality related permits required? If yes, list the appropriate permits.</p> <p>An Environmental Resource Permit minor modification will be required so that the Southwest Florida Water Management System can review the projects effects and ensure that the Airport's existing stormwater management system will be able to continue to effectively treat airfield runoff once the project is constructed. No adverse effects are anticipated. In addition, the contractor will be required to obtain a National Pollutant Discharge Elimination System Construction Permit for a large construction site (larger than 5 acres in size).</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

5-2.b(11) Highly Controversial on Environmental Grounds

	YES	NO
<p>Is the project highly controversial? The term “highly controversial” means a substantial dispute exists as to the size, nature, or effect of a proposed federal action. The effects of an action are considered highly controversial when reasonable disagreement exists over the project’s risks of causing environmental harm. Mere opposition to a project is not sufficient to be considered highly controversial on environmental grounds. Opposition on environmental grounds by a federal, state, or local government agency or by a tribe or a substantial number of the persons affected by the action should be considered in determining whether or not reasonable disagreement exists regarding the effects of a proposed action.</p> <p>No since the project has no risk of resulting in notable environmental harm it would not be considered highly controversial. There are no unique habitats that would be impacted, wetland impacts are being avoided, and impacts to gopher tortoises, where unavoidable, will be mitigated by relocating affected tortoises to a state-approved recipient site.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2.b(12) Inconsistent with Federal, State, Tribal or Local Law

	YES	NO
<p>Will the project be inconsistent with plans, goals, policy, zoning, or local controls that have been adopted for the area in which the airport is located?</p> <p>No. The areas within the project limits are already zoned as either Aviation Facilities or split zoned as Aviation Facilities/Planned Development Project (Corporate Park). The project area is within the "Airport Planned Development District" which was established for the utilization of BKV as a center for aviation and aviation related uses and industrial and business park uses. Removal of the trees within the perimeter fence does not conflict with any of these designations.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Is the project incompatible with surrounding land uses?</p> <p>No. The project would not result in any land use conflicts or incompatibilities. Most of the land surrounding the project is either already developed as aviation facilities, industrial use, or commercial use. The only residential use is east-northeast of BKV on the east side of US Route 41 and is effectively screened from the airport by existing vegetation that is not planned for removal as well as an area of existing agricultural land with scattered trees and shrubs that is used for cattle farming (Exhibit 6).</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2 .b (13) Light Emissions, Visual Effects, and Hazardous Materials

a. Light Emissions and Visual Effects	YES	NO
<p>Will the proposed project produce light emission impacts?</p> <p>No. Tree removal will result in less visual screening between the airport and some surrounding properties, but these surrounding properties area either vacant or contain either commercial or industrial land use. There would be no reduction in screening for the residences to the east-northeast of the airport along US Route 41 because there would be no significant tree removal along the line of sight between those residences and the airport. The only tree removal near this part of the airport would be maintenance removal of trees within a 10 foot wide corridor on the inside of the perimeter fence so that the fence can be inspected and maintained as needed. This would not result in light emissions impacts for those residences on the east side of US Route 41.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will there be visual or aesthetic impacts as a result of the proposed project and/or have there been concerns expressed about visual/aesthetic impacts?</p> <p>The visual impact will consist of conversion of some existing forested habitats to open maintained turf. This is not anticipated to result in concerns related to visual or aesthetic impacts. Areas of forested habitat removal will not take place adjacent to any residential areas.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Hazardous Materials	YES	NO
<p>Does the project involve or affect hazardous materials?</p> <p>The project is not anticipated to have hazardous materials involvement. Based on review of available hazardous materials listsearch data for the airport, there are no documented hazardous waste sites or generators of hazardous waste within any of the proposed tree removal areas.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>Will construction take place in an area that contains or previously contained hazardous materials?</p> <p>The database listsearch report prepared for the Runway 27 extension Environmental Assessment was reviewed because it also encompasses the project area for this wildlife hazard mitigation project. There are no documented hazardous materials sites within the tree removal areas according to the database listsearch report.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>If the project involves land acquisition, is there a potential for this land to contain hazardous materials or contaminants?</p> <p>N/A, the project does not involve land acquisition.</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Will the proposed project produce hazardous and/or solid waste either during construction or after? If yes, how will the additional waste be handled?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Solid waste generated will include vegetation debris removal from the land clearing work and general refuse from day to day operations of the construction crew. The contractor will be required to remove and properly dispose of all solid waste generated during construction activities.		

5-2 .b (14) Public Involvement

	YES	NO
Was there any public notification or involvement? If yes, provide documentation. No public notification is planned.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5-2 .b (15) Indirect/Secondary/Induced Impacts

	YES	NO
Will the project result in indirect/secondary/induced impacts? It is not anticipated that the project will result in indirect, secondary, or induced impacts. No development is currently planned within five years for any of the areas of tree removal. Areas of near-term future development were specifically excluded from the project.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<p>When considered with other past, present, and reasonably foreseeable future projects, on or off airport property and regardless of funding source, would the proposed project result in a significant cumulative impact?</p> <p>Below is a list of past, current, and future projects at Brooksville-Tampa Bay Airport that were provided by airport management staff.</p> <p>Brooksville-Tampa Bay Regional Airport Projects in the last 10 years</p> <ul style="list-style-type: none"> • Runway 9-27 Rehabilitation • Taxiway A Overlay • Telcom Drive/Technology Drive Construction <p>Current Airport Projects</p> <ul style="list-style-type: none"> • Decoupling of Runways 21 and 27 • Northside Hangar Development • PemAir Engine Shop Facility • Ackley Corporate Hangar (off Taxiway B) • Barrett Manufacturing Plant <p>Projects Planned for the Next Five Years</p> <ul style="list-style-type: none"> • MRO Hangar Development • Extension of Runway 9-27 to the east • T-hangar Expansion • Corporate Hangar Development • FBO and Corp hangar • Jet Concepts Repair Facility • Flight Path Aviation – Avionics Facility • Global Jet Hangar – 2nd 20,000 SF Hangar • American Aviation Maintenance Hangar <p>Impacts due to the proposed tree removal project are minimal. Similarly the past, present, and future projects in the Airport's vicinity have generated or are anticipated to generate only low environmental impacts.</p> <p>The primary impact from the proposed land clearing and grading project would be removal of forested habitat within the Airport's perimeter fence that is currently utilized by some species of wildlife such as deer, coyotes, small mammals, and forest-dwelling birds. Since the goal of the project is to reduce future hazards for</p>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	-------------------------------------

<p>aircraft operations that would result from the occurrence of wildlife within the Airport's perimeter fence, this impact is justified. Impact to these wildlife species will be minimized by using a phased construction approach to flush them out and allow them to move out of the area that will be cleared of trees. Although some of the other past, current, and future projects would also remove forested habitat, most of the projects considered are either entirely or partially within the perimeter fence, where removal of habitat will be a benefit to safety of aircraft operations. In other cases the future projects would occur in areas that are already cleared as part of the air operations area. The cumulative effect of the projects considered on availability of forested habitat in the region within which the Airport is located is not significant. Large areas of forested habitat occur in the region, particularly east of U.S. 41.</p> <p>Other impacts that may occur as a result of the tree removal project include potential gopher tortoise relocation impacts. However, since the gopher tortoise conservation regulations in the State of Florida require that impacted gopher tortoise burrows be excavated and that gopher tortoises be relocated to an FWC-approved recipient site, no significant cumulative impacts to gopher tortoises would be anticipated to result from this project and the other past, current, and future projects in the vicinity.</p> <p>Potential impact to the Eastern indigo snake, which is known to utilize gopher tortoise burrows, would be minimized by implementing the USFWS' Standard Protection Measures for the Eastern Indigo Snake during construction. Other projects requiring federal or state approvals would also be likely to be required to implement these measures. Therefore the proposed land clearing and grading project and other projects considered as part of the cumulative impact analysis are not likely to contribute to the decline of this species.</p> <p>None of the past, current or future projects considered, including the land clearing and grading project, would be anticipated to impact wetlands. Wetlands on Airport property are minimal in extent and would be avoided by all of the projects considered. Similarly, there are no natural streams or waterbodies in the vicinity of the Airport that would be impacted by past, current, or future projects, including the tree removal project.</p> <p>Although, the cumulative development projects have the potential to generate environmental impacts, existing programs, policies, and regulatory requirements are expected to avoid and/or minimize the potential for significant impacts. In some cases where unavoidable impacts will occur, appropriate mitigation would be required. The minimal impacts associated with the land clearing and grading project</p>	
---	--

	YES	NO
such as loss of wildlife habitat and displacement of wildlife, when considered in conjunction with impacts associated with past, present, and future development projects, are not expected to result in substantial cumulative impacts		

Permits

List any permits required for the proposed project that have not been previously discussed. Provide details on the status of permits.

Permits that will be required will include the previously discussed Environmental Resource Permit from the SWFWMD that is required for changes to the surface water management system at the Airport, the previously discussed gopher tortoise conservation permit from the Florida Fish and Wildlife Conservation Commission, a National Pollutant Discharge Elimination System (NPDES) construction permit, and a county land development permit. No permit applications have been submitted to-date.

Environmental Commitments

List all measures and commitments made to avoid, minimize, mitigate, and compensate for impacts on the environment, which are needed for this project to qualify for a CATEX.

The project will be conducted without impact to wetlands and a 15 foot minimum, 25 foot average wetland buffer will be observed in order to avoid wetland impact. The wetland limits and wetland buffer will be marked using flagging tape at least 60 days prior to start of construction.

A gopher tortoise survey will be conducted in 100 percent of suitable habitat for gopher tortoises approximately 90 days prior to construction. If gopher tortoise burrows are found within, or within 25 feet of, the limits of construction, a gopher tortoise conservation permit application will be submitted to the Florida Fish and Wildlife Conservation Commission. It is anticipated that for most burrows that are located on the edges of the wooded areas, impacts to the burrows can be avoided. In cases where impacts to burrows cannot be avoided, burrows will be excavated under the terms of the permit and recovered tortoises will be relocated to a state approved gopher tortoise recipient site under the conditions of the permit.

The contractor will be required to follow the Standard Protection Measures for the Eastern Indigo Snake throughout the construction phase of the project.

The contractor will be required to implement a Stormwater Pollution Prevention Plan during construction to prevent erosion and sedimentation through the implementation of sediment and erosion control best management practices. The contractor will also be required to implement a Spill Prevention Control and Countermeasures Plan that will detail the procedures for the safe handling, storage, clean up, and disposal of potential pollutants during construction.

Preparer Information

Point of Contact: Michael Baker International, attention: Jay Gable		
Address: 4211 West Boy Scout Boulevard, Suite 500		
City: Tampa	State: FL	Zip Code: 33607
Phone: 813 466-6027	Email Address: jgable@mbakerintl.com	

Signature: _____

Date: 12/16/2022

Airport Sponsor Information and Certification (may not be delegated to consultant)

Provide contact information for the designated sponsor point of contact and any other individuals requiring notification of the FAA decision.

Point of Contact: Steve Miller, Airport Manager		
Address: 15800 Flight Path Drive		
City: Brooksville	State: FL	Zip Code: 34604
Phone Number: 352 540-6342		Email Address: smiller@co.hernando.fl.us
Additional Name(s):		Additional Email Address(es):

I certify that the information I have provided above is, to the best of my knowledge, correct. I also recognize and agree that no construction activity, including but not limited to site preparation, demolition, or land disturbance, shall proceed for the above proposed project(s) until FAA issues a final environmental decision for the proposed project(s) and until compliance with all other applicable FAA approval actions (e.g., ALP approval, airspace approval, grant approval) has occurred.

Signature: _____

Date:

FAA Decision

Having reviewed the above information, it is the FAA's decision that the proposed project (s) or development warrants environmental processing as indicated below.

Name of Airport, LOC ID, and location: Brooksville- Tampa Bay Regional Airport (BKV)
Brooksville, FL

Project Title: Hazardous Wildlife Habitat & Tree Removal

- ☒ No further NEPA review required. Project is categorically excluded per (cite applicable 1050.1.F CATEX that applies: 5-6.4(l))
- ☐..An Environmental Assessment (EA) is required.
- ☐..An Environmental Impact Statement (EIS) is required.
- ☐..The following additional documentation is necessary for FAA to perform a complete environmental evaluation of the proposed project.

Name: Amy M. Reed

Title: Environmental Protection Specialist

Responsible FAA Official

AMY MARIE REED

Digitally signed by AMY MARIE
REED
Date: 2023.05.17 16:08:44 -04'00'

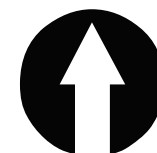
Signature: _____

Date: 5/17/2023



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

EXHIBIT 1:
BKV Proposed Land Grading
and Tree Removal Areas



0 500 1,000
 Feet

LEGEND

- Existing Airport Perimeter Fence
- Area Needing Cleared 10 Foot Wide Maintenance Corridor Adjacent to Fence (2,715 Linear Feet or 0.6 Acres)
- Areas of Proposed Land Grading and Tree Removal (114.8 Acres Total)
- Wetland (Approximate)
- No Tree Removal

Note: No other development is planned in the next five years for the areas proposed for land grading and tree removal .

**EXHIBIT 2: CORRESPONDENCE FROM STATE HISTORIC PRESERVATION OFFICE
AND NATIVE AMERICAN TRIBES REGARDING CULTURAL RESOURCES
ASSESSMENT SURVEY**



FLORIDA DEPARTMENT of STATE

RON DESANTIS
Governor

CORD BYRD
Secretary of State

Amy Reed, Environmental Protection Specialist
Federal Aviation Administration-FAA
Orlando Airports District Office-ADO
South Park Center
8427 South Park Circle – 5th Floor
Orlando, FL 32819

August 4, 2022

DHR Project File No.: 2022-4125-B

Received by DHR: June 24, 2022

Cultural Resource Assessment Survey for the Brooksville-Tampa Bay Regional Airport Wildlife Hazard Mitigation Tree Removal Project, Hernando County, Florida

Dear Ms. Reed:

Our office reviewed the referenced project in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations in 36 CFR Part 800: Protection of Historic Properties, and Chapters 267.061, Florida Statutes, and implementing state regulations, for possible effects on historic properties listed in, or eligible for, the National Register of Historic Places (NRHP), or otherwise of historical, architectural, or archaeological value. The project is subject to compliance with requirements for the Federal Aviation Administration.

In March 2022, Archaeological Consultants Inc. (ACI) conducted the above referenced Phase I cultural resource assessment survey (CRAS) on behalf of Michael Baker International. ACI excavated 124 shovel tests. No archaeological sites were discovered. However, three archaeological occurrences (AO) were identified. These consist of one or two pieces of lithic debitage. AOs are categorically excluded from listing in the NRHP. As such, ACI determined that there are no cultural resources that are listed, determined eligible for listing, or that appear potentially eligible for listing in the NRHP within the APE. Therefore, it is the professional opinion of ACI that the proposed undertaking will result in no historic properties affected.

Based on the information provided, our office concurs with the presented survey results and recommendations. We concur with the Corps determination of no adverse effect to historic properties listed, or eligible for listing, on the NRHP. Further, we find the submitted report complete and sufficient in accordance with Chapter 1A-46, Florida Administrative Code. If you have any questions, please contact Michael DuBose, Historic Preservationist, by email at Michael.DuBose@dos.myflorida.com or telephone at 850.245.6342.

Sincerely,

Alissa Slade Lotane
Director, Division of Historical Resources
& State Historic Preservation Officer

Division of Historical Resources
R.A. Gray Building • 500 South Bronough Street • Tallahassee, Florida 32399
850.245.6300 • 850.245.6436 (Fax) • FLHeritage.com



Reed, Amy M (FAA)

From: Section106 <Section106@muscogeenation.com>
Sent: Tuesday, October 4, 2022 2:46 PM
To: Reed, Amy M (FAA)
Subject: Re: Brooksville Airport (BKV) | Section 106 Consultation - Tree Removal Project

Good afternoon Ms. Reed,

Thank you for sending the correspondence regarding the proposed hazardous wildlife habitat removal project located at the Brooksville-Tampa Bay Regional Airport in Hernando County, Florida. Hernando County is located within the Muscogee (Creek) Nation's historic area of interest and is of importance to us. After review, the Muscogee Nation is unaware of any Muscogee sacred sites, burial grounds, or significant cultural resources located within the immediate tree removal areas. The Muscogee Nation agrees with the findings of the associated cultural resource assessment survey report and concurs that there should be **no effects to any known historic properties**. However, due to the historic presence of Muscogee people in the project area, inadvertent discoveries of cultural resources, human remains and related NAGPRA items may occur, even in areas of existing or prior development. Should this occur, the Muscogee (Creek) Nation requests that all work cease and our office as well as other appropriate agencies be notified immediately. Please feel free to contact me if there are any questions or concerns.

Thank you,

Robin Soweka, Jr.

Cultural Resource Specialist, Historic and Cultural Preservation Department
The Muscogee Nation
P.O. Box 580 | Okmulgee, OK 74447
T 918.732.7726 | F 918.758.0649
rosoweka@MuscogeeNation.com
MuscogeeNation.com



From: Reed, Amy M (FAA) <amy.m.reed@faa.gov>
Sent: Friday, September 2, 2022 10:26 AM
To: Section106 <section106@muscogeenation.com>
Cc: Bolen, Layne E (FAA) <Layne.E.Bolen@faa.gov>
Subject: Brooksville Airport (BKV) | Section 106 Consultation - Tree Removal Project

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear Ms. Butler,

Hernando County Board of County Commissioners (Florida) has requested approval from the Federal Aviation Administration for a hazardous wildlife habitat removal project at the Brooksville-Tampa Bay Regional Airport (BKV). The project will include approximately 115 acres of clearing and grading within the airfield. The federal actions associated with the proposed development project require consultation under Section 106 of the National Historic Preservation

Act. FAA appreciates your review of the project and letting us know if the Muscogee (Creek) Nation has an interest in the project area and would like to participate in the Section 106 consultation process.

Respectfully,
Amy Reed

Amy Reed

Environmental Protection Specialist
Federal Aviation Administration-FAA
Orlando Airports District Office-ADO
South Park Center
8427 South Park Circle – 5th Floor
Orlando, FL 32819
T 407-487-7297 (Office)
T 813-966-9410 (Cell)
amy.m.reed@faa.gov

SEMINOLE TRIBE OF FLORIDA
TRIBAL HISTORIC PRESERVATION OFFICE

TRIBAL HISTORIC
PRESERVATION OFFICE
SEMINOLE TRIBE OF FLORIDA
30290 JOSIE BILLIE HWY, PMB 1004
CLEWISTON, FL 33440
THPO PHONE: (888) 699-8949
TAS: (888) 208-1107
THPO website: www.stofthpo.com



BOARD OF PEOPLE
MARCELLUS W. OSCEOLA JR.
CHAIRMAN
MITCHELL GYFRESS
VICE CHAIRMAN
LAVONNE ROSE
SECRETARY
PETER A. HAHN
TREASURER

September 2, 2022

Attn: Amy Reed, Environmental Protection Specialist
Federal Aviation Administration-FAA
Orlando Airports District Office-ADO
South Park Center
8427 South Park Circle—5th Floor
Orlando, FL 32819
Office: 407-487-7297
Mobile: 813-966-9410
Email: amy.m.reed@faa.gov

Subject: Brooksville Airport (BKV), Section 106 Consultation - Tree Removal Project, Hernando County, Florida
THPO Compliance Tracking Number: 0033698

In order to expedite the THPO review process:

1. Please correspond via email and provide documents as attachments (a THPO FTP site is available for large files).
2. Please send all emails to THPOCompliance@seminbe.com.
3. Please reference the THPO Compliance Tracking Number if one has been assigned.

Dear Ms. Reed,

Thank you for contacting the Seminole Tribe of Florida – Tribal Historic Preservation Office (STOF-THPO) Compliance Section regarding the *Brooksville Airport (BKV), Section 106 Consultation - Tree Removal Project, Hernando County, Florida*.

The proposed undertaking does fall within the STOF Area of Interest. We have reviewed the documents that you provided and completed our assessment pursuant to Section 108 of the National Historic Preservation Act (16 USC 470) as amended and it's implementing regulations (36 CFR 800). We have no objections or other comments at this time.

We appreciate your assistance in protecting and preserving cultural resources important to the Seminole Tribe of Florida. Please contact us if any archaeological, historical, or burial resources are inadvertently discovered during project implementation, and feel free to contact us with any questions or concerns.

Respectfully,

Bradley M. Mueller

Bradley M. Mueller, MA, Compliance Review Specialist
STOF-HERO-THPO, Compliance Review Section
30290 Josie Billie Hwy, PMB 1004
Clewiston, FL 33440
Email: THPOCompliance@seminbe.com

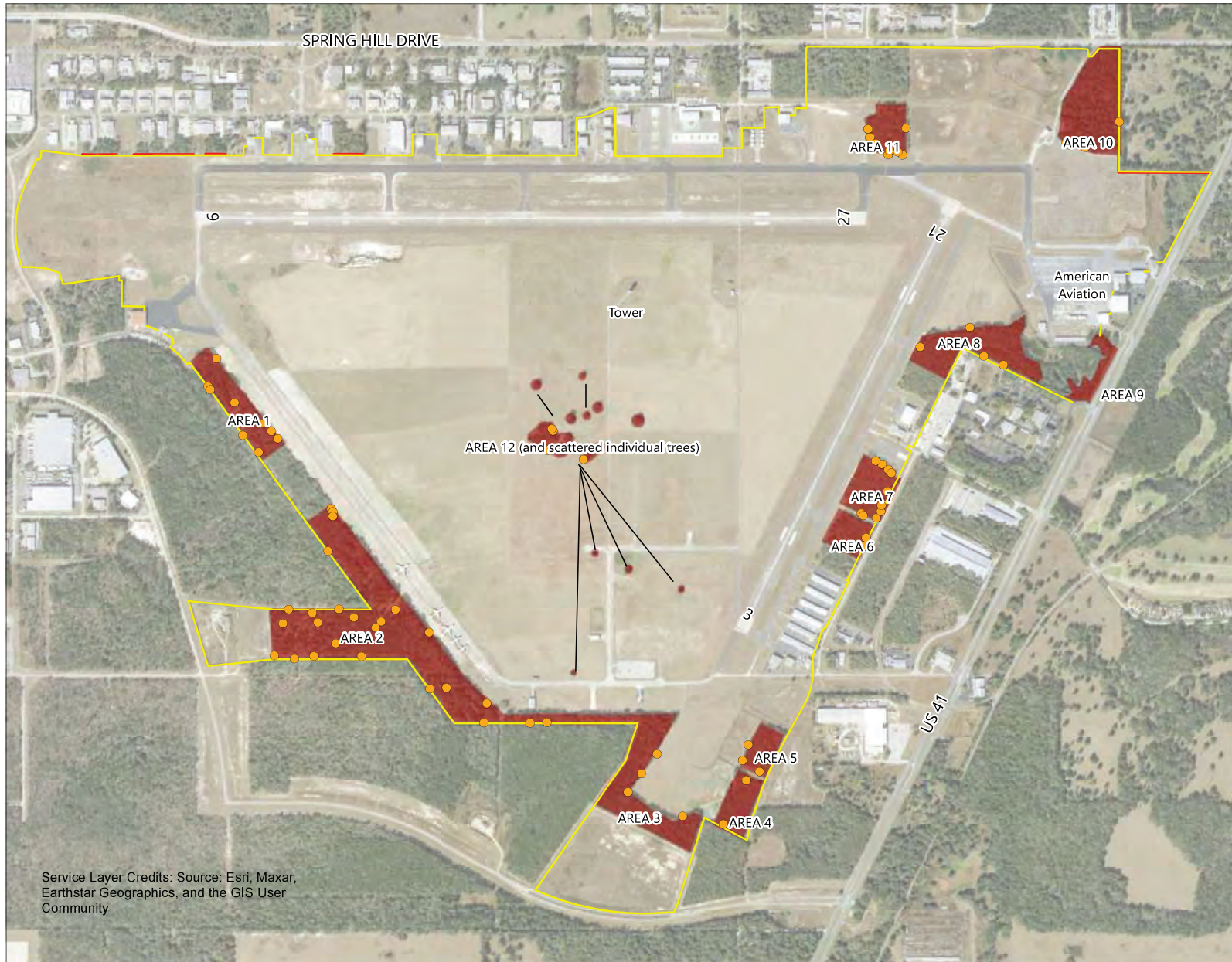
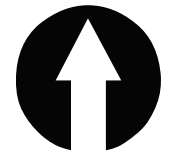


EXHIBIT 3:
Gopher Tortoise Burrows



0 500 1,000
Feet

LEGEND

- Existing Airport Perimeter Fence
- Area Needing Cleared 10 Foot Wide
- Maintenance Corridor Adjacent to Fence (2,715 Linear Feet or 0.6 Acres)
- Areas of Proposed Land Grading and Tree Removal (114.8 Acres Total)
- Gopher Tortoise Burrow from September 2021 Survey

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Hernando County, Florida



Local office

North Florida Ecological Services Field Office

☎ (904) 731-3336

📠 (904) 731-3045

7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
Eastern Black Rail <i>Laterallus jamaicensis ssp. jamaicensis</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Wood Stork <i>Mycteria americana</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake <i>Drymarchon corais couperi</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened
Gopher Tortoise <i>Gopherus polyphemus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6994	Candidate
Loggerhead Sea Turtle <i>Caretta caretta</i> There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/1110	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Flowering Plants

NAME	STATUS
Brooksville Bellflower <i>Campanula robinsiae</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5809	Endangered

Cooley's Water-willow *Justicia cooleyi*

Endangered

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/4653>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird

species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

American Kestrel *Falco sparverius paulus*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9587>

Breeds Apr 1 to Aug 31

Bald Eagle *Haliaeetus leucocephalus*

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

<https://ecos.fws.gov/ecp/species/1626>

Breeds Sep 1 to Jul 31

Great Blue Heron *Ardea herodias occidentalis*

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Breeds Jan 1 to Dec 31

Lesser Yellowlegs *Tringa flavipes*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9679>

Breeds elsewhere

Prairie Warbler *Dendroica discolor*

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Breeds May 1 to Jul 31

Red-headed Woodpecker *Melanerpes erythrocephalus*

Breeds May 10 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher *Limnodromus griseus*

Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9480>

Swallow-tailed Kite *Elanoides forficatus*

Breeds Mar 10 to Jun 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8938>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (I)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

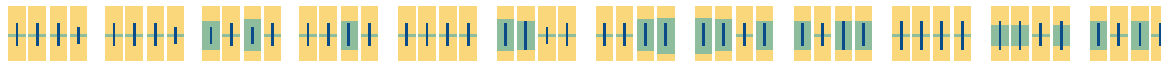
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Great Blue Heron
BCC - BCR (This is a
Bird of
Conservation
Concern (BCC) only
in particular Bird
Conservation
Regions (BCRs) in
the continental
USA)



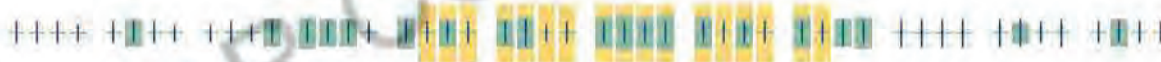
Lesser Yellowlegs
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Prairie Warbler
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Red-headed
Woodpecker
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Short-billed
Dowitcher
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Swallow-tailed Kite
BCC Rangewide
(CON) (This is a
Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental USA
and Alaska.)



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds](#)

[guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid

or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

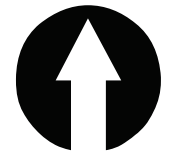
Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

EXHIBIT 5:
FEMA-Designated 100-Year
Floodplains

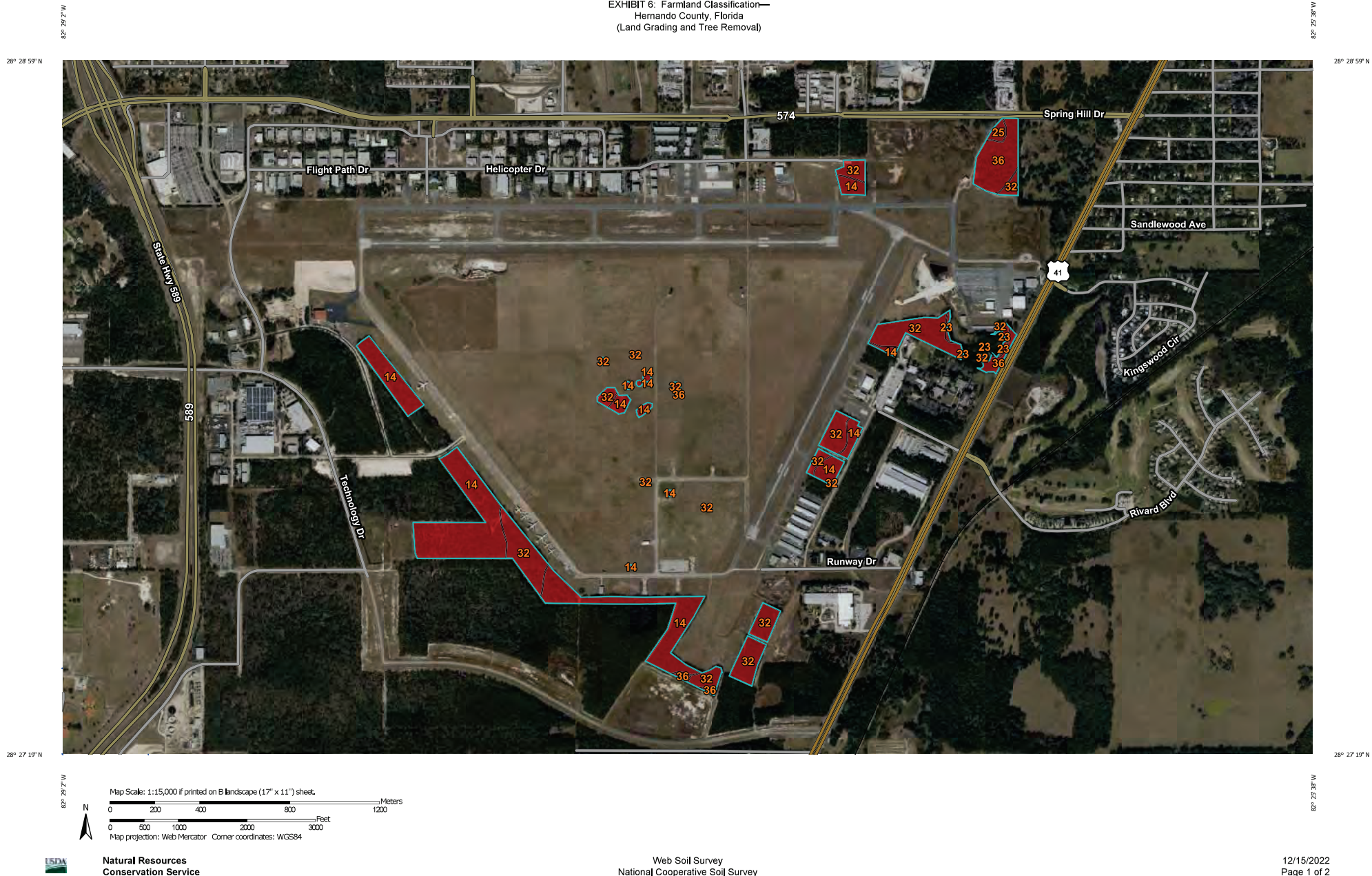


0 500 1,000
Feet

LEGEND

- Existing Airport Perimeter Fence
 - Area Needing Cleared 10 Foot Wide Maintenance Corridor Adjacent to Fence (2,715 Linear Feet or 0.6 Acres)
 - ▨ Areas of Proposed Land Grading and Tree Removal (114.8 Acres Total)
 - 100 Year Floodplains (1% Annual Chance Flood Hazard)
 - 500 Year Floodplains (0.2% Annual Chance Flood Hazard)
- Source: FEMA National Flood Hazard Layer 2022

EXHIBIT 6: Farmland Classification—
Hernando County, Florida
(Land Grading and Tree Removal)



Farmland Classification

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
14	Candler fine sand, 0 to 5 percent slopes	Not prime farmland	59.3	51.7%
23	Floridana fine sand, frequently ponded, 0 to 1 percent slopes	Not prime farmland	1.4	1.2%
25	Floridana variant loamy fine sand	Not prime farmland	1.3	1.2%
32	Masaryk very fine sand, 0 to 5 percent slopes	Not prime farmland	39.1	34.1%
36	Nobleton fine sand, 0 to 5 percent slopes	Not prime farmland	13.5	11.8%
99	Water	Not prime farmland	0.0	0.0%
Totals for Area of Interest			114.6	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower