

2901 JACARANDA BOULEVARD

**ENVIRONMENTAL ASSESSMENT &
SPECIES SURVEY REPORT**

Sarasota County Parcel ID #: 0460130003

August 2024

Prepared For:

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Introduction

An environmental assessment was conducted on the property located at 2901 Jacaranda Boulevard on August 15, 2024. The 3.90± acre site is located in Section 34, Township 43S, and Range 25E, of Sarasota County, Florida. More specifically, the site is located south of US 41, east of Englewood Boulevard, north and east of Jacaranda Boulevard, in Venice, Florida. Please see the attached Project Location Map (Exhibit A).

The purpose of this assessment was to identify the potential for either U.S. Army Corps of Engineers (ACOE) Department of Environmental Protection (DEP), and/or Southwest Florida Water Management District (SWFWMD) jurisdictional wetlands. The site was also assessed to determine the potential of listed (endangered, threatened, etc.) species inhabiting the site that are regulated by the U.S. Fish & Wildlife Service (FWS) and the Florida Fish & Wildlife Conservation Commission (FWC).

The project's surrounding land uses are a mixture of residential developments, commercial developments, undeveloped vacant land, and forested land. The survey was conducted in the mid-morning; the temperature was in the upper 80's to low 90's, with light breezes, and partly cloudy skies.

Background

The ACOE, DEP, and the SWFWMD are the agencies that regulate development activities in wetlands. To be considered wetlands by the ACOE, DEP, and/or SWFWMD, the area should exhibit wetland hydrology, contain wetland vegetation, and have hydric soils. For an area to be considered wetlands, a site should have hydric soils, wetland hydrology, and wetland vegetation present. The property was reviewed for indicators of these parameters.

Hydric soils are identified by certain characteristics that are unique to wetland soils. Wetland hydrology is normally present if the soil is saturated or inundated for a period of time; typically from May through November; the rainy season in Southwest Florida. In the absence of visual signs of saturation or inundation, the regulatory agencies typically use hydrologic indicators such as adventitious rooting, lichen lines, or algal matting as method of guidance. If the majority of the shrubs/plants that are present are those that are adapted to saturated soil conditions, it's likely wetland vegetation.

The FWS and FWC are the primary agencies that review potential impacts to listed species. The FWS reviews potential impacts and provides comments to the ACOE and DEP during the permitting process, while the FWC provides comments to the SWFWMD. In general, the wildlife agency concerns need to be addressed in order for the permits to be authorized by the ACOE, DEP, and/or the SWFWMD.

Methodology

The protected species survey methodology consisted of overlapping parallel transects performed for all FLUCFCS communities on-site. The frequency of transects performed in these habitats, unless otherwise discussed, were designed to meet the minimum coverage requirements. This method is comprised of a several step process; the vegetation communities or land-uses on the study area are delineated on an aerial photograph using the Florida Land Use, Cover and Forms Classification System (FLUCFCS). Next, these FLUCFCS codes are cross-referenced with the County's Protected Species List. With a list of the potential listed plants and animals, each FLUCFCS community is searched in the field for these species.

An intensive pedestrian survey is conducted using parallel belt transects that are approximately 10-20 feet apart, depending upon both the thickness of vegetation and visibility, as a means of searching for plants and animals. In addition, periodic “stop-look-listen” and quiet stalking methods are conducted for animals. Signs or sightings of these species are then recorded. The table at end of the report lists the FLUCFCS communities found on the parcel and the corresponding species which have a probability of occurring in them.

Existing Site Conditions

Boundary – The project boundary was obtained from the Sarasota County parcel data and is assumed to be approximately 3.90± acres.

Soils - The soils on the property have been mapped by the National Resource Conservation Service (NRCS, formerly the Soil Conservation Service). These mappings are general in nature but can provide a certain level of information about the site as to the possible extent of wetland area. The agencies commonly use these mappings as justification for certain wetland/upland determinations. According to these mappings, the parcel is underlain by Holopaw fine sand, frequently ponded (NRCS #22; hydric). Holopaw fine sand, frequently ponded soils is considered hydric at both the local and national levels. Please see the attached NRCS Soils Map (Exhibit D).

Vegetation Descriptions – Vegetation is one parameter used in determining the presence of uplands or wetlands; these community mappings will generally reflect what a specific area could be considered by the regulatory agencies. We did not identify any “other surface water” communities on-site; however, we did identify approximately 3.58± acres of wetlands on-site, during the initial site assessment.

While on-site, generalized community delineations are hand-drawn on an aerial defining the different vegetation associations on-site. These general delineations were based on the nomenclature of the Florida Land Use, Cover and Forms Classification System (FLUCFCS), Level III and IV (FDOT 1999). Please see the attached FLUCFCS Map with Aerial (Exhibit B) and FLUCFCS Map without Aerial (Exhibit C). Listed below are the vegetation communities and land-uses identified on the site.

FLUCFCS Codes & Community Descriptions

Uplands

The following community areas have been designated as upland habitats. Uplands are any area that does not qualify as a wetland because the associated hydrologic regime is not sufficiently wet enough to elicit development of vegetation, soils, and/or hydrologic characteristics associated with wetlands.

FLUCFCS 740 Disturbed Lands – 0.32± Acres

This upland area occupies approximately 0.32± acres of the property. This community is found along the southeast corner of the property and also includes some of the Jacaranda Boulevard right-of-way. The canopy is mostly open with scattered slash pine (*Pinus elliotti*). The sub-canopy is also mostly open with scattered Brazilian pepper (*Schinus terebinthifolius*), melaleuca (*Melaleuca quinquenervia*), earleaf acacia (*Acacia auriculiformis*), and cabbage palm (*Sabal palmetto*). The ground cover includes broomsedge (*Andropogon virginicus*), Spanish needle (*Bidens pilosa*), dog fennel (*Eupatorium capillifolium*), false buttonweed (*Spermacoce verticillata*), ragweed (*Ambrosia trifida*), caesar weed (*Urena lobata*), hairy beggar-ticks (*Bidens alba*), creeping ox-eye (*Wedelia chinensis*), sandspur (*Cenchrus echinatus*), and bahia grass (*Paspalum notatum*), with various other opportunistic weedy species. Commonly observed vines include greenbriar (*Smilax sp.*), grapevine (*Vitis rotundifolia*), Virginia

creeper (*Parthenocissus quinquefolia*), peppervine (*Ampelopsis arborea*), and poison ivy (*Toxicodendron radicans*). This community would be considered uplands by the regulatory agencies.

Wetlands

The following community areas have been designated as wetland habitats. Wetlands are any areas that under normal circumstances have hydrophytic vegetation, hydric soils, and wetland hydrology.

FLUCFCS 618 Wax Myrtle & Willow Wetland – 0.32± Acres

This wetland community type occupies approximately 0.32± acres of the property. The canopy is dominated by Carolina willow (*Salix caroliniana*), with scattered laurel oak (*Quercus laurifolia*). The sub-canopy contains wax myrtle (*Myrica cerifera*), with Brazilian pepper (*Schinus terebinthifolius*) along the perimeter of the wetland. The ground cover vegetation includes swamp fern (*Blechnum serrulatum*), yellow-eyed grass (*Xyris floridana*), rosy camphorweed (*Pluchea rosea*), dollar weed (*Hydrocotyle umbellata*), little blue maidencane (*Amphicarpum muhlenbergianum*), frog fruit (*Phyla nodiflora*), smart weed (*Polygonum hydropiperoides*), pickerel weed (*Pontederia cordata*), arrowhead (*Sagittaria latifolia*), and white-top sedge (*Rhynchospora colorata*), with various other grasses and sedges. Commonly observed vines include greenbriar (*Smilax* spp.) and Japanese climbing fern (*Lygodium japonicum*). This community does contain some transitional wetland vegetation, advantageous rooting, water line staining, and algal matting, as well as other signs in this community that would be classified as wetlands. This community would be considered wetlands by the regulatory agencies.

FLUCFCS 620 Mixed Wetland Forest – 1.24± Acres

This wetland community type occupies approximately 1.24± acres of the property. The canopy contains slash pine (*Pinus elliottii*), laurel oak (*Quercus laurifolia*), Carolina willow (*Salix caroliniana*), red maple (*Acer rubrum*), and melaleuca (*Melaleuca quinquenervia*). The sub-canopy vegetation includes Brazilian pepper (*Schinus terebinthifolius*), wax myrtle (*Myrica cerifera*), myrsine (*Rapanea punctata*), dahoon holly (*Ilex cassine*), primrose willow (*Ludwigia peruviana*), buttonbush (*Cephalanthus occidentalis*), and dahoon holly (*Ilex cassine*). The ground cover includes swamp fern (*Blechnum serrulatum*), smart weed (*Polygonum hydropiperoides*), beakrush (*Cyperus* sp.), yellow-eyed grass (*Xyris floridana*), rosy camphorweed (*Pluchea rosea*), mermaid weed (*Proserpinaca palustris*), dollarweed (*Hydrocotyle umbellata*), flatsedge (*Cyperus ligularis*), water hyssop (*Bacopa monnieri*), water lettuce (*Pistia stratiotes*), torpedo grass (*Panicum repens*), arrowhead (*Sagittaria latifolia*), and giant leather fern (*Acrostichum danaeifolium*). Commonly observed vines include greenbriar (*Smilax* spp.), and climbing hempvine (*Mikania scandens*). This community does contain some transitional wetland vegetation, advantageous rooting, water line staining, and algal matting, as well as other signs in this community that would be classified as wetlands. This community would be considered wetlands by the regulatory agencies.

FLUCFCS 643 Freshwater Marsh – 2.02± Acres

This wetland community type occupies approximately 2.02± acres of the property. The canopy is mostly open with scattered melaleuca (*Melaleuca quinquenervia*). The sub-canopy contains scattered primrose willow (*Ludwigia peruviana*), wax myrtle (*Myrica cerifera*), melaleuca (*Melaleuca quinquenervia*), and Brazilian pepper (*Schinus terebinthifolius*). The ground cover includes torpedo grass (*Panicum repens*), yellow-eyed grass (*Xyris floridana*), cat-tail (*Typha latifolia*), rosy camphorweed (*Pluchea rosea*), sand cordgrass (*Spartina* sp.), dog fennel (*Eupatorium capillifolium*), little blue maidencane (*Amphicarpum muhlenbergianum*), tickseed (*Coreopsis floridana*), mermaid-weed (*Proserpinaca palustris*), asiatic pennywort (*Centella asiatica*), dollar weed (*Hydrocotyle umbellata*), frog fruit (*Phyla nodiflora*), maidencane (*Panicum hemitomon*), mock bishop's weed (*Ptilimnium capillaceum*), and white-top sedge (*Rhynchospora colorata*), with other various grasses and sedges. This community does contain some transitional wetland vegetation, advantageous rooting, water line staining, and algal matting, as well as other

signs in this community that would be classified as wetlands. This community would be considered wetlands by the regulatory agencies.

Table 1. FLUCFCS Community Table

FLUCFCS Code	Community Description	Habitat Type	Acres
618	Wax Myrtle & Willow Wetland	Wetland	0.32± Ac.
620	Mixed Wetland Forest	Wetland	1.24± Ac.
643	Freshwater Marsh	Wetland	2.02± Ac.
740	Disturbed Lands	Upland	0.32± Ac.
Total			3.90± Ac.

Species Survey Results

During our field survey for protected species on the property, we did not observe any protected species or signs thereof. There were no gopher tortoise (*Gopherus polyphemus*) and/or burrowing owl (*Athene cunicularia floridana*) burrows identified. There were several other burrows, believed to belong to that of the eastern nine-banded armadillo (*Dasypus novemcinctus*), that were identified; there was no evidence that these burrows were being used by gopher tortoises. There were no other protected species or signs thereof observed; there were no nest-like structures or tree cavities noted while conducting the protected species survey on-site.

There were several non-listed species identified while conducting the protected species survey, among those were an eastern cottontail rabbit (*Sylvilagus floridanus*), and a black racer (*Coluber constrictor*). The various listed species that may occur in the FLUCFCS communities on-site have been tabulated on the attached table. Please see the attached Protected Species Map (Exhibit E).

Mitigation Discussion

Generally, the ACOE and/or DEP does not regulate isolated wetlands or excavation in wetlands where there is only incidental fall back of fill material; the ACOE or DEP do not have jurisdiction over isolated wetlands. In making the determination on whether the wetlands are isolated, the ACOE and DEP considers if water leaves the site, (i.e. ditches) or whether the wetlands are completely contained on-site or extend off-site. If the wetlands extend off-site, they will more than likely assert jurisdiction. Currently, the ACOE and DEP position on most all wetlands is that one of them has jurisdiction; the ACOE regulates navigable waters whereas the DEP regulates both navigable waters and adjacent wetlands. However, the agencies would not make this determination until a Joint Environmental Resource Permit (ERP) and Dredge & Fill Permit (D&F) application is received.

The SWFWMD does not require mitigation for impacts to isolated wetlands not used by listed (protected) species that are less than 0.50± acres in size. Impacts to wetlands greater than 0.50± acres or those utilized by protected species would require mitigation. With the ACOE and DEP, impacts to wetlands that are less than 0.50± acres, the activity can usually be processed as a Nationwide Permit application. For projects with greater than 0.50± acres of impacts, the application will be processed as an Individual Permit application. This involves a public notice process and coordination with other federal agencies such as the EPA and the FWS.

There are three steps that are required to be addressed when requesting an ERP permit with the SWFWMD and/or the DEP for impacts to regulated wetlands:

- 1) Avoidance (i.e. can these wetland impacts be completely avoided)
- 2) Minimization (i.e. can the amount of wetland impact be reduced while maintaining a feasible project)
- 3) Mitigation (i.e. the loss of wetland function must be replaced)

It should be noted that avoidance and minimization must first be substantiated, before mitigation will be considered by the agencies. When wetlands are proposed to be impacted, the impacts cannot result in any loss of wetland function. In order to prevent net loss in wetland function, wetland mitigation must be provided. Mitigation is a way to off-set impacts to natural resources such as wetlands and may consist of wetland enhancement, wetland creation, wetland preservation, upland compensation, or off-site mitigation. Mitigation costs usually increase with the quantity of proposed impacts. The actual amount of mitigation required would be finalized during the Environmental Resource Permit review process with the SWFWMD, ACOE, and DEP.

There are two main categories of wetland mitigation, onsite or off-site. On-site mitigation would include preserving a portion of the on-site wetlands, treating and removing the exotics, potentially providing supplemental plantings, and placing the preserve areas under a Conservation Easement. Preserve areas are required to be maintained in perpetuity. Off-site mitigation requires the purchase of wetland credits at an approved mitigation bank within the service area of the site. This parcel lies within the service area of several mitigation banks.

Summary

In general, this site does not contain much native, undisturbed community types in which protected species would typically inhabit. Due to the disturbed nature of the site, the surrounding land uses, and busy roadways, it is unlikely that this site supports or would provide habitat for protected species. A formal protected species survey would be required in order to confirm the presence or absence of protected species.

Community locations were drawn using non-rectified aerial images with approximate property boundaries; hence their location, aerial extent, and acreage is approximate. Before any detailed site planning, it is recommended that the wetland lines are flagged, surveyed by professional land surveyor, and approved by the regulatory agencies.

The determination of ecological system classifications, functions, values, and boundaries is an inexact science, and different individuals and agencies may reach different conclusions. The on-site conditions can vary throughout the year; therefore, the findings of this survey were based upon the site conditions at the time of the inspection. It is not possible for BearPaws Environmental Consulting to guarantee the outcome of such determinations; therefore, the conclusions of this report are preliminary in nature and would require a full review by the appropriate regulatory agencies.

The information contained and the work performed as part of this initial assessment, conforms to the standards and generally accepted practices in the environmental field, and was prepared substantially in accordance with then-current technical guidelines and criteria. The conclusions of this report represent the results of our analysis of the information provided by the client and their consultants, together with information gathered in the course of the study. No other guarantee, expressed or implied, is made.

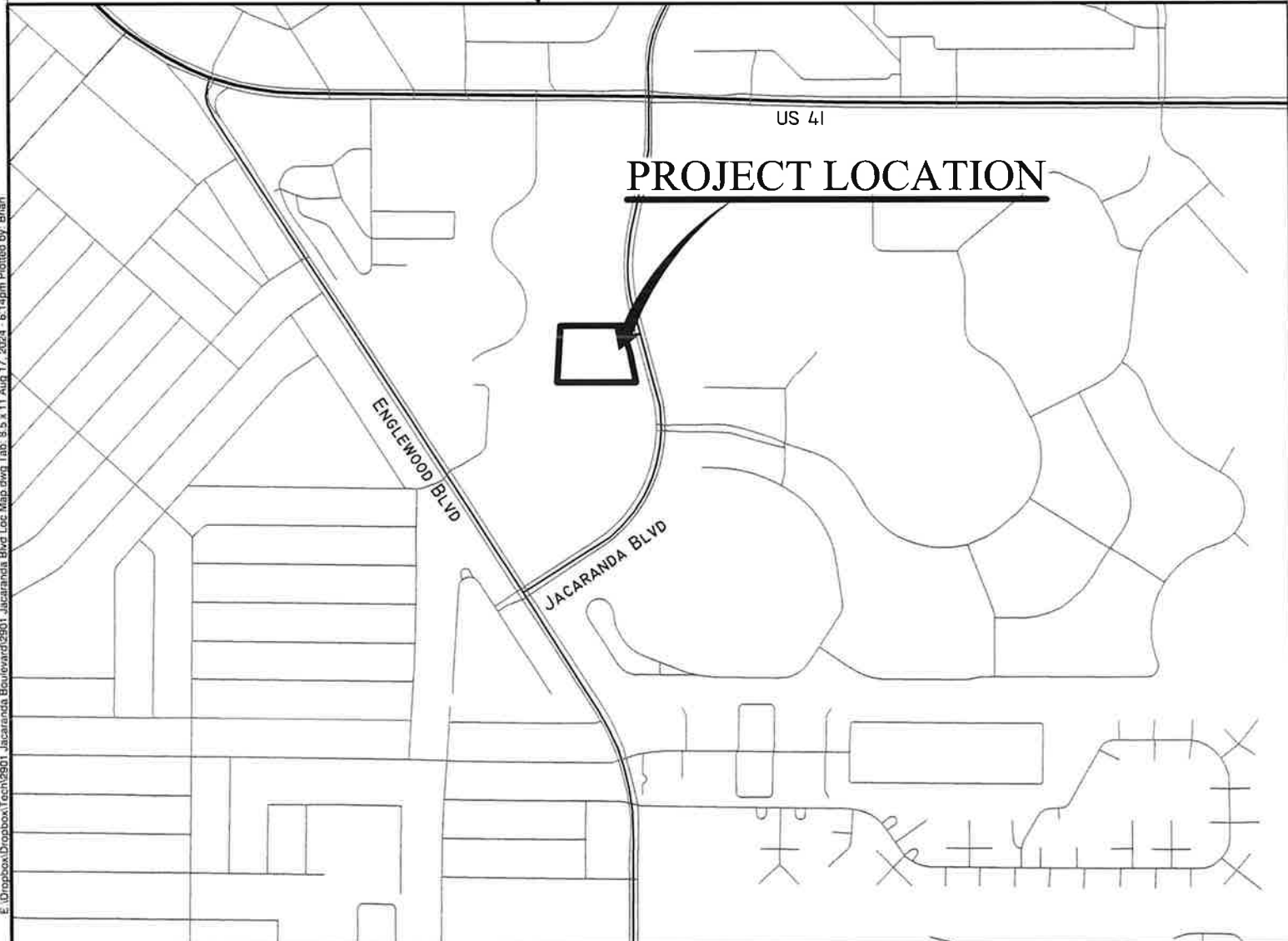
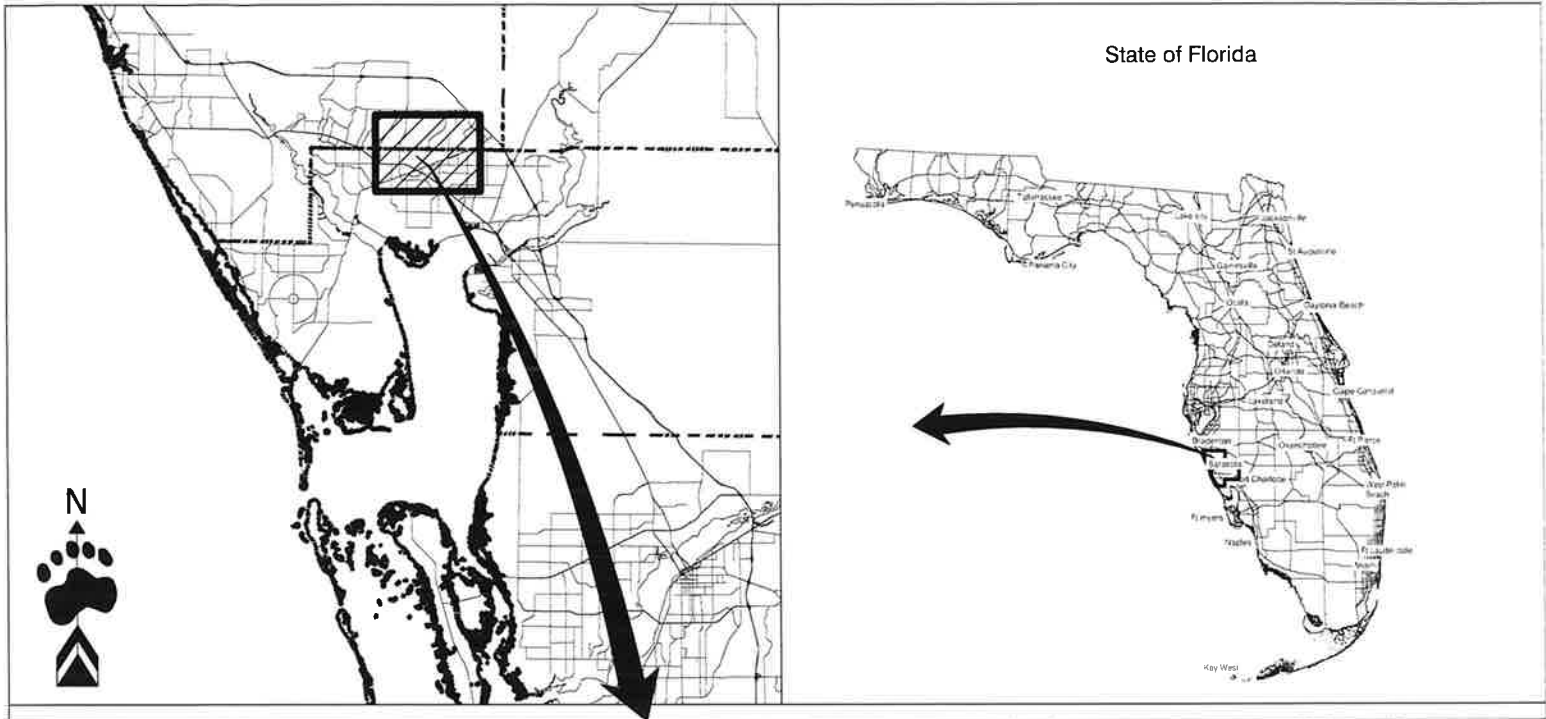
Table 3: Listed Species by Habitat with Current Status

FLUCFCS Code	FLUCFCS Description	Common Name	Scientific Name	Observed	USDA	FDA&CS	FWS	FWC
618	Wax Myrtle & Willow Wetland	Florida black bear	<i>Ursus americanus floridanus</i>	---	---	---	SAT	T
		Limpkin	<i>Aramus guarana</i>	---	---	---	---	SSC
		Little blue heron	<i>Egretta caerulea</i>	---	---	---	---	SSC
		Snowy egret	<i>Egretta thula</i>	---	---	---	---	SSC
		Tricolored heron	<i>Egretta tricolor</i>	---	---	---	---	SSC
620	Mixed Wetland Forest	Florida black bear	<i>Ursus americanus floridanus</i>	---	---	---	SAT	T
		Little blue heron	<i>Egretta caerulea</i>	---	---	---	---	SSC
		Snowy egret	<i>Egretta thula</i>	---	---	---	---	SSC
		Tricolored heron	<i>Egretta tricolor</i>	---	---	---	---	SSC
		American alligator	<i>Alligator mississippiensis</i>	---	---	---	SAT	SSC
643	Freshwater Marsh	Everglades mink	<i>Mustela vison evergladensis</i>	---	---	---	---	T
		Florida sandhill crane	<i>Grus canadensis pratensis</i>	---	---	---	---	T
		Limpkin	<i>Aramus guarana</i>	---	---	---	---	SSC
		Little blue heron	<i>Egretta caerulea</i>	---	---	---	---	SSC
		Snail kite	<i>Rostrhamus sociabilis</i>	---	---	---	E	E
		Snowy egret	<i>Egretta thula</i>	---	---	---	---	SSC
		Tricolored heron	<i>Egretta tricolor</i>	---	---	---	---	SSC
740	Disturbed Lands	Gopher tortoise	<i>Gopherus polyphemus</i>	---	---	---	T	T

C = Commercially Exploited, SAT = Similarity of Appearance Threatened, SSC = Species of Special Concern, T = Threatened, E = Endangered

Table designates listed species with potential to occur in each FLUCFCS community.

EXHIBIT A
Project Location Map



Drawn By:	Date:	Category
BWS	8/17/24	Location
Job Number		Scale:
		NTS
S/T/R		County
3/40S/21E		Sarasota

2901 Jacaranda Boulevard

Location Map



Page

Exhibit

EXHIBIT B

FLUCFCS Map with Aerial



FLUCFCS Table		
FLUCFCS Code	Description	Project Acreage
618	Wax Myrtle & Willow Wetland	0.32
620	Mixed Wetland Forest	1.24
643	Freshwater Marsh	2.02
740	Disturbed Lands	0.32
Total		3.90

NOTES:
 FLUCFCS lines estimated from 1"=200' aerial photographs and locations approximated.
 FLUCFCS per Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT 1999).
 Aerial photographs were acquired from the Sarasota County GIS Dept.

Revisions Date: Drawn By: Date: Job Number: S/T/R: 34/43S/25E		2901 Jacaranda Boulevard Aerial FLUCFCS Map		Category FLUCFCS	Page -
		Scale: 1" = 100'	County Sarasota	Exhibit -	

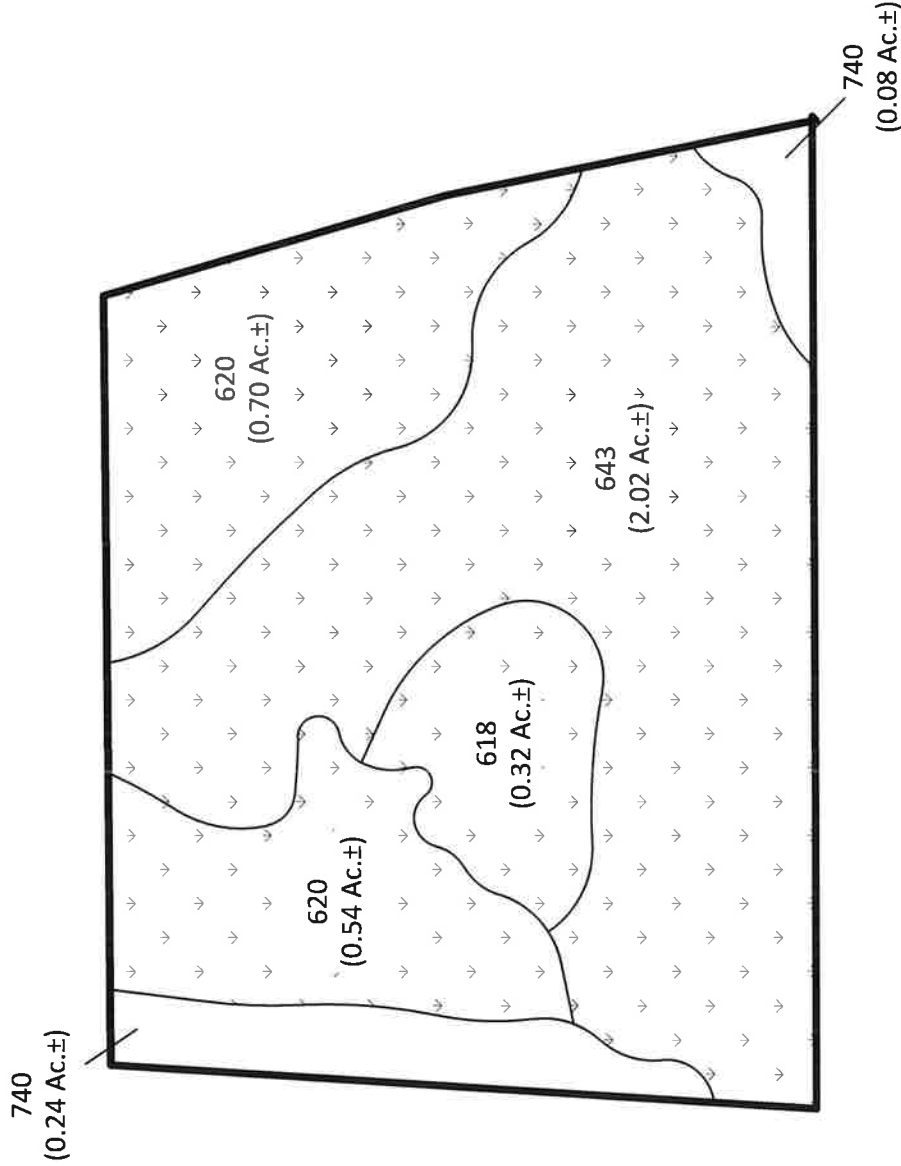


EXHIBIT C

FLUCFCS Map



Scale: 1" = 100'



FLUCFCS Table		
FLUCFCS Code	Description	Project Acreage
618	Wax Myrtle & Willow Wetland	0.32
620	Mixed Wetland Forest	1.24
643	Freshwater Marsh	2.02
740	Disturbed Lands	0.32
Total		3.90

NOTES:

FLUCFCS lines estimated from 1"=200' aerial photographs and locations approximated.

FLUCFCS per Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT 1999).


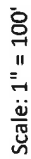


Revisions	Date:	Drawn By: BWS	Date: 8/17/24	2901 Jacaranda Boulevard
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EXHIBIT D

NRCS Soils Map



22

Soils	Name		Hydric
No.			
22	Holopaw Fine Sand, Frequently Ponded, 0 To 1 Percent Slopes		Yes

Soils were acquired from LABINS and are from the NRCS.


Revisions	Date:	Drawn By:	Date:	2901 Jacaranda Boulevard Soils Map		Page	
		BWS	8/17/24			Soils	-
			Job Number			1" = 100'	Exhibit
			S/T/R			County	
			34/43S/25E	Sarasota	1599 C Ovington Circle East, Fort Myers, FL 33919 (239) 344-0678 bearpaws.com consulting@bearpaws.com	-	

EXHIBIT E

Protected Species Survey Map



Notes:


FLUCFCS lines estimated from 1"=200' aerial photographs and locations approximated.


FLUCFCS per Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT 1999).

Aerial photographs were acquired from the Sarasota County GIS Dept. and have a flight date of 2023.

FLUCFCS Table		
FLUCFCS Code	Description	Project Acreage
618	Wax Myrtle & Willow Wetland	0.32
620	Mixed Wetland Forest	1.24
643	Freshwater Marsh	2.02
740	Disturbed Lands	0.32
Total		3.90

Legend

Wetlands
(3.58± Ac)

Protected Species
Survey Transects

Revisions	Date:	Drawn By:	Date:	2901 Jacaranda Boulevard Aerial PSS Map		Category	Page
		BWS	8/17/24			PSS	
		Job Number				Scale 1" = 100'	Exhibit
		S/T/R				County	
			34/43S/25E			Sarasota	

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