

**Wayne Self Storage**  
**Lake County Parcels # 03-19-25-0001-000-01400,**  
**05900, 01200, 05300**  
**Natural Resource and Listed Species Assessment**

**November 06, 2023**

**1.0 Introduction**

This report documents the results of a natural resource assessment and listed species survey conducted on September 12, 2023 and October 31, 2023, by CHW, Inc. Ecological Services Group (CHW) for Lake County Parcels # 03-19-25-0001-000-01400, 05900, 01200, & 05300 (Project). The project totals approximately 6.25± acres and is located in Section 03, Township 19 South, and Range 25 East, Lake County, Florida (Exhibit 1). To the east of the Project are vacant residential lots and commercial parcels abutting County Road 44, to the south the Project abuts County Road 44, to the west lie single family residential homes, to the north the Project abuts Hickory Hollow Road. The Project is composed entirely of uplands, with the majority of the Project in an enclosed canopy cover (Exhibit 2).

**2.0 Land Use and Land Cover**

The vegetation and land use mapping for the Project was conducted using Florida Department of Transportation 2020 color rectified aerials. Ground truthing to map the vegetative communities was conducted on September 12<sup>th</sup> & October 31<sup>st</sup>, 2023, utilizing the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III (Florida Department of Transportation 1999). AutoCAD Map 3D 2022 software was used to determine the acreage of each mapping area, produce summaries, and generate the FLUCFCS map for the Project.

A total of four vegetative associations/land uses (i.e., FLUCFCS codes) were identified on the Project (Exhibit 3). Table 1 summarizes the FLUCFCS acreages and a description of each FLUCFCS code is provided below.

**Table 1. FLUCFCS Code Descriptions and Acreages**

<b>FLUCFCS Code</b>	<b>FLUCFCS Description</b>	<b>Acres ±</b>	<b>% of Total</b>
420	Upland Hardwood Forests	3.69	59.0
434	Hardwood – Conifer Mixed	1.12	17.9
740	Disturbed Lands	1.26	20.2
814	Road	0.18	2.9
<b>Total</b>		<b>6.25±</b>	<b>100.0%</b>

### Upland Hardwood Forests (FLUCFCS Code 420)

The canopy of this upland habitat type includes live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), water oak (*Quercus nigra*), southern magnolia (*Magnolia grandiflora*), cabbage palm (*Sabal palmetto*), and scattered long-leaf pine (*Pinus palustris*). The subcanopy includes live oak, laurel oak, water oak, cabbage palm, and camphor tree (*Cinnamomum camphora*). The groundcover includes water oak, cabbage palm, *Smilax spp.*, muscadine (*Vitis rotundifolia*), and hairy indigo (*Indigofera hirsuta*).

### Hardwood – Conifer Mixed (FLUCFCS Code 434)

The canopy of this upland forest includes long-leaf pine, live oak, laurel oak, and laurel cherry (*Prunus caroliniana*). The subcanopy includes live oak, laurel oak, cabbage palm, and winged sumac (*Rhus copallinum*). The ground cover is dominated by muscadine but also includes cabbage palm.

### Disturbed Lands (FLUCFCS Code 740)

The canopy of this habitat is open. The subcanopy includes cabbage palm and paper mulberry (*Broussonetia papyrifera*). The ground cover includes *Smilax spp.*, bahiagrass (*Paspalum notatum*), dogfennel (*Eupatorium capillifolium*), Ohio spiderwort (*Tradescantia ohiensis*), tailed bracken fern (*Pteridium aquilinum var. pseudocaudatum*), muscadine, finger grass (*Eustachys spp.*), sandspur (*Krameria lanceolata*), common ragweed (*Ambrosia artemisiifolia*), and broomsedge (*Andropogon virginicus*).

### Road (FLUCFCS Code 814)

This land use includes Variety Tree Road and its cleared right of way.

## **2.1 Lake County Protected Communities**

Lake County Code of Ordinances Chapter VI Resource Protection identifies seven naturally occurring upland communities that are considered rare and endangered and in need of additional protection. (Table 2).

**Table 2. Lake County Protected Upland Communities**

<b>Natural Upland Community</b>	<b>FLUCFCS Code</b>
Palmetto Prairie	321
Pine Flatwoods	411
Longleaf Pine/Xeric Oak	412
Sand Pine Scrub	413
Pine, Oak, and Hickory	423
Temperate Hardwoods	425
Xeric Hammock	427

No Lake County protected rare and endangered natural upland communities were documented on the Project site as described in the resource protection standards in Chapter VI Section 6.03.00 of the Lake County Code of Ordinances. Remaining upland forested habitats are of minimal size and quality; and have limited connections to other natural areas. The majority of the Projects’ habitats have been altered by historical clearing and are located in a landscape bisected by a network of roads and site improvements for both residential and commercial purposes.

### 3.0 Soils

The Natural Resources Conservation Service (NRCS) soils map describes four soil types as occurring on the Project site (Exhibit 4). Table 3 summarizes the Project’s mapped soil units and their hydric ratings. There are no hydric soil types mapped on the Project. Mapped soil types are consistent with upland hardwood communities.

**Table 3. Summary of Soils on the Project Site**

Map Unit	Soil Description	Hydric Rating
1	Sparr Sand, 0 to 5 Percent Slopes	No
8	Candler Sand, 0 to 5 Percent Slopes	No
30	Lochloosa Sand	No
49	Wauchula Sand	No

### 4.0 Listed Species

Lake County, Florida Code of Ordinances defines Designated Species as “Species that have been designated at the Federal or State level as endangered, threatened, or species of special concern” in Appendix E – Land Development Regulations Chapter II Definitions. Furthermore, the Code of Ordinances section 6.03.00 – 6.04.00 outlines protections and recommends management activities for designated species found on the Project site either occurring by themselves or especially if a designated species is associated with rare and endangered uplands. A literature review and field survey were conducted to determine if the Project site was being utilized by state or federally listed species as identified by the Florida Fish and Wildlife Conservation Commission (FWCC) and the U.S. Fish and Wildlife Service (USFWS) as endangered or threatened. In addition, the Project site was surveyed for plant species listed by the Florida Department of Agriculture and Consumer Services (FDACS) and the USFWS as endangered, threatened, or commercially exploited.

#### 4.1 Methods

A literature review involved an examination of available information on listed/designated species in the Project’s geographical region. The literature sources reviewed included the FWCC’s Florida’s Endangered and Threatened Species (2021); Florida Atlas of Breeding Sites for Herons and Their Allies (Runde et al. 1991); National Bald Eagle Management Guidelines (USFWS 2007); the Audubon Eagle Watch database of bald eagle (*Haliaeetus leucocephalus*) nest locations; and database information from the USFWS and the FWCC.

Field surveys were conducted on September 12<sup>th</sup> & October 31<sup>st</sup>, 2023, during daylight hours by qualified ecologists walking parallel belt transects across the Project site. Transects were oriented north south and spaced at approximately 75-foot intervals to ensure that sufficient visual coverage of ground and flora were obtained, Exhibit 5. At regular intervals, the ecologists stopped, remained quiet, and listened for wildlife vocalizations. The survey was conducted with the aid of 8x power binoculars. Weather conditions in the pedestrian transects during the survey on September 12<sup>th</sup> had temperatures in the mid-80s, clear skies, and no precipitation, conditions on October 31<sup>st</sup> were foggy and had temperatures in the lower 80s.

## 4.2 Results

No listed/designated species were observed on the Project site, furthermore, database information from the USFWS and FWCC regarding listed/designated species revealed that documented occurrences were outside of the Project site and their associated buffers, and no suitable habitat types existed on the Project.

According to the Audubon Eagle Watch and FWCC databases, the closest bald eagle nest (LA-172) is located approximately 1.20 miles southwest of the Project (Exhibit 6). This distance is beyond the FWCC and the USFWS recommended 660-foot buffer protection zone for active and alternate bald eagle nests. The bald eagle was delisted under the federal Endangered Species Act in 2007, but it is still protected under the Bald and Golden Eagle Protection Act.

The Florida Atlas of Breeding Sites for Herons and Their Allies (Runde et al. 1991) and the FWCC database were referenced for the locations of breeding colonies for both listed and non-listed wading birds including, but not limited to, snowy egret (*Egretta thula*), roseate spoonbill (*Ajaia ajaja*), little blue heron (*Egretta caerulea*), and tri-colored heron (*Egretta tricolor*). The FWCC information is current through 1999. According to these sources, a rookery exists approximately 1.41 miles east of the Project (Exhibit 6) which is beyond the FWCC recommended 250-foot buffer.

The Project lies within the USFWS Consultation Area for the Florida scrub jay (Exhibit 7). The closest documented Florida scrub jay location is approximately 4.6 miles northeast of the project site. No scrub habitat that may be utilized by Florida scrub jays was observed on the project site.

The Project lies within the USFWS Consultation Area for the Everglades snail kite (Exhibit 8). The Project site does not contain any wetlands or surface waters that could be utilized by Everglades snail kites for foraging or nesting.

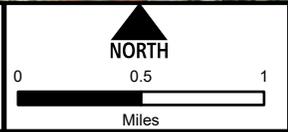
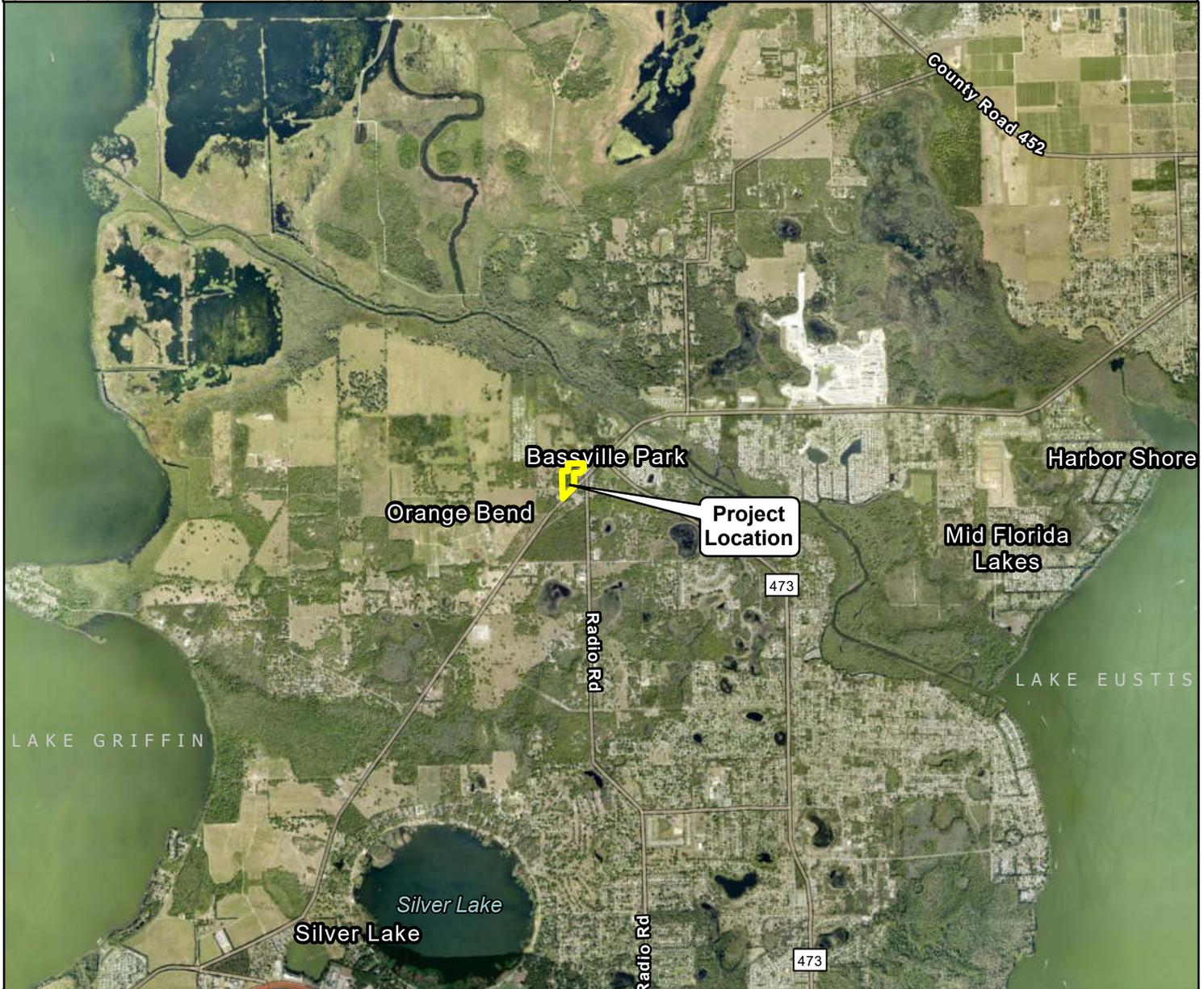
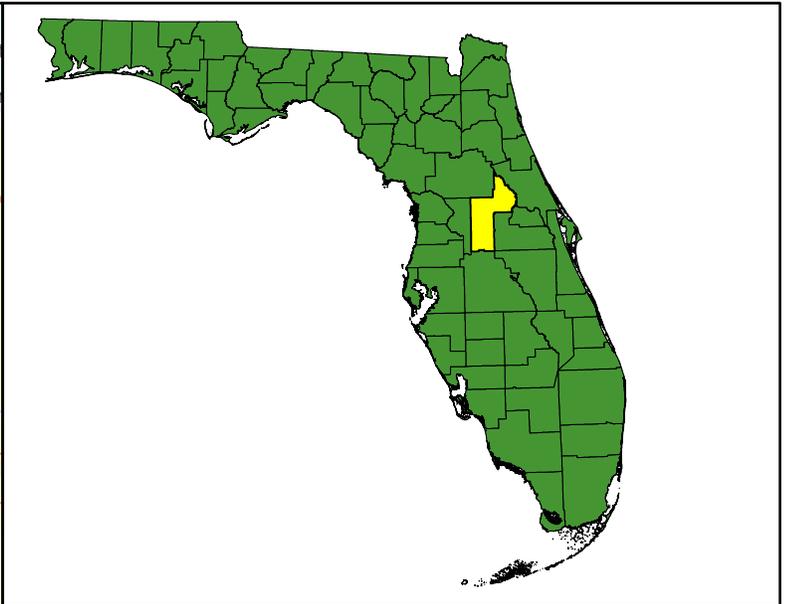
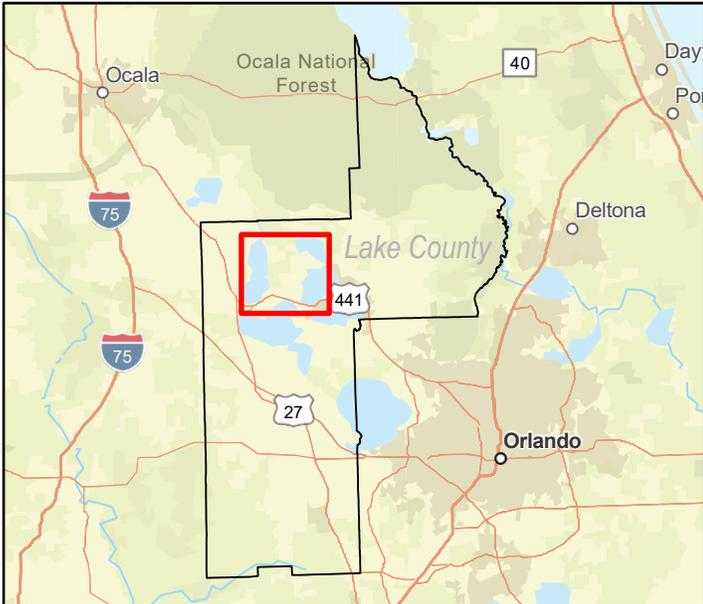
The Project lies within the USFWS Consultation area for the sand skink (Exhibit 9). The closest sand skink observation is located approximately 21.8 miles south of the Project. The Project includes a small area of soils associated with sand skink habitat (Candler Sand); however, this area of the Project was at lower elevation (approximately 75 feet) than considered suitable (> 82 feet above sea level) and densely vegetated with exotic species. No sand skinks or their sign were observed.

## **5.0 Summary**

On September 12 & October 31<sup>st</sup>, 2023, CHW ecologists conducted Project habitat mapping and survey for threatened and endangered species. The Project is composed entirely of uplands and located in a partially developed landscape bisected by roads, residential, and commercial development. No rare or endangered natural upland community types outlined by Lake County Code of Ordinances were identified. Based on field reconnaissance and a review of agency databases, no listed/ designated species were observed or have been reported on the Project site.

## **6.0 References**

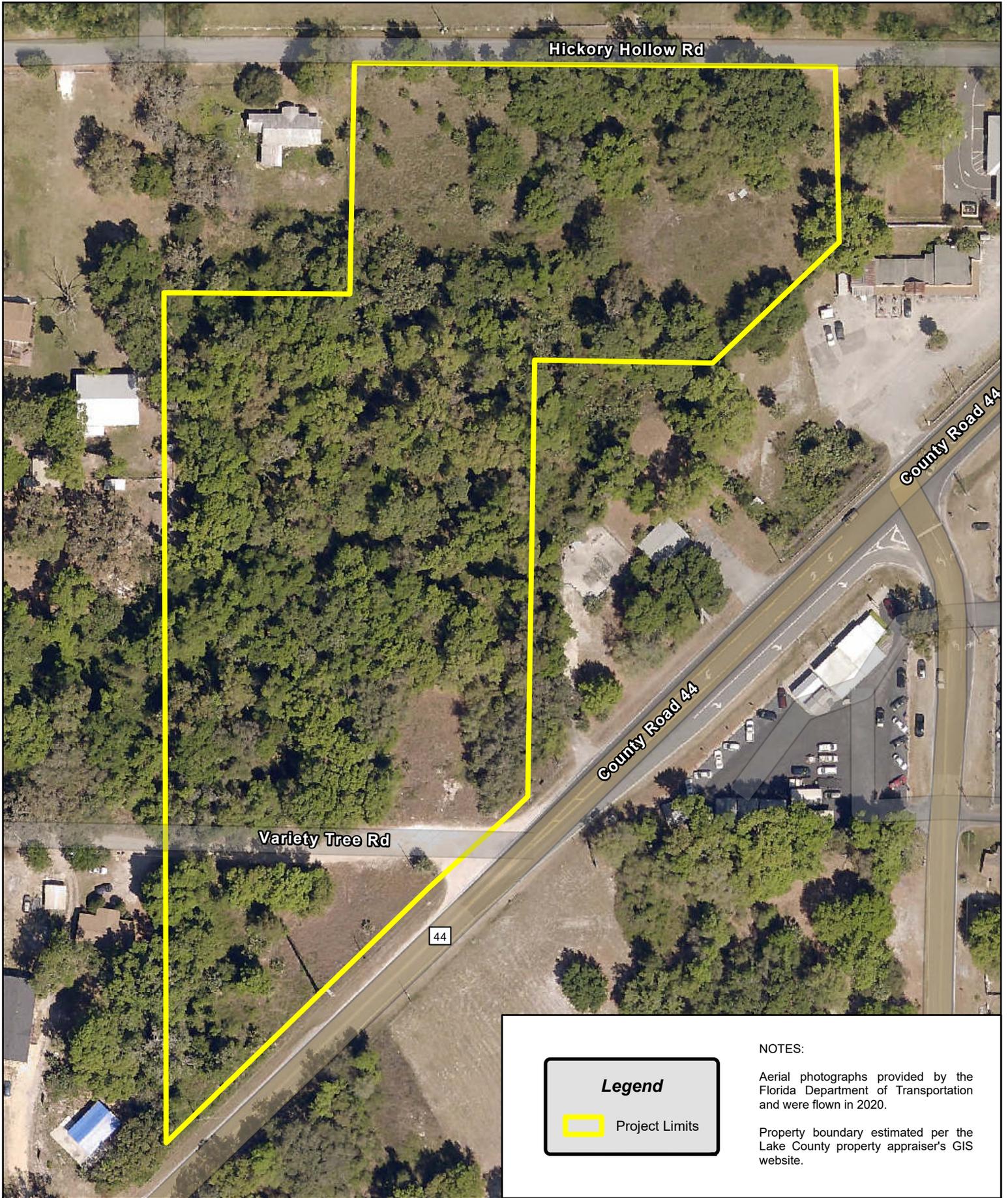
- Florida Fish and Wildlife Conservation Commission. 2022. Florida's Endangered and Threatened Species. Official Lists, Bureau of Non-Game Wildlife, Division of Wildlife.
- Runde, D.E., J.A. Gore, J.A. Hovis, M.S. Robson, and P.D. Southall. 1991. Florida Atlas of Breeding Sites for Herons and Their Allies, Update 1986 - 1989. Nongame Wildlife Program Technical Report No. 10. Florida Game and Fresh Water Fish Commission, Tallahassee, Florida. E6-5
- U.S. Fish and Wildlife Service. 2007. National Bald Eagle Management Guidelines.



# Project Location Map

## Wayne Self Storage - Lake County

DRAWN BY:	D.B.
DRAWING DATE:	11/02/23
REVIEWED BY:	A.W.
EXHIBIT NUMBER:	Exhibit 1



Hickory Hollow Rd

County Road 44

County Road 44

Variety Tree Rd

44

**Legend**

 Project Limits

**NOTES:**

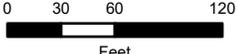
Aerial photographs provided by the Florida Department of Transportation and were flown in 2020.

Property boundary estimated per the Lake County property appraiser's GIS website.



Professional Consultants  
www.chw-inc.com

**NORTH**

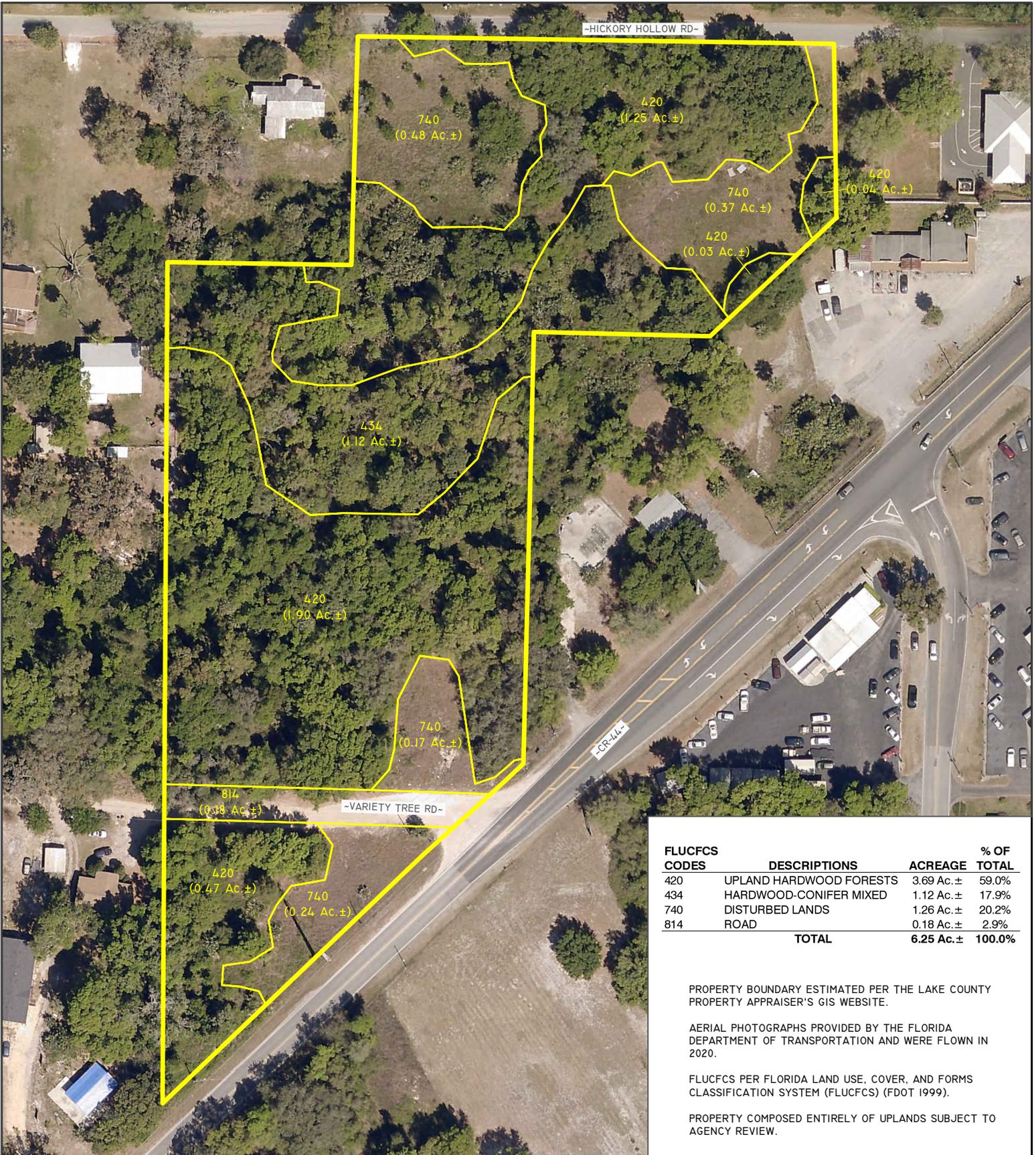


0 30 60 120  
Feet

**Aerial With Boundary**

**Wayne Self Storage - Lake County**

DRAWN BY:	D.B.
DRAWING DATE:	11/02/23
REVIEWED BY:	A.W.
EXHIBIT NUMBER:	Exhibit 2



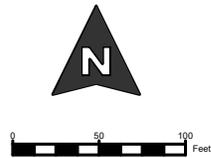
FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
420	UPLAND HARDWOOD FORESTS	3.69 Ac.±	59.0%
434	HARDWOOD-CONIFER MIXED	1.12 Ac.±	17.9%
740	DISTURBED LANDS	1.26 Ac.±	20.2%
814	ROAD	0.18 Ac.±	2.9%
<b>TOTAL</b>		<b>6.25 Ac.±</b>	<b>100.0%</b>

PROPERTY BOUNDARY ESTIMATED PER THE LAKE COUNTY PROPERTY APPRAISER'S GIS WEBSITE.

AERIAL PHOTOGRAPHS PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION AND WERE FLOWN IN 2020.

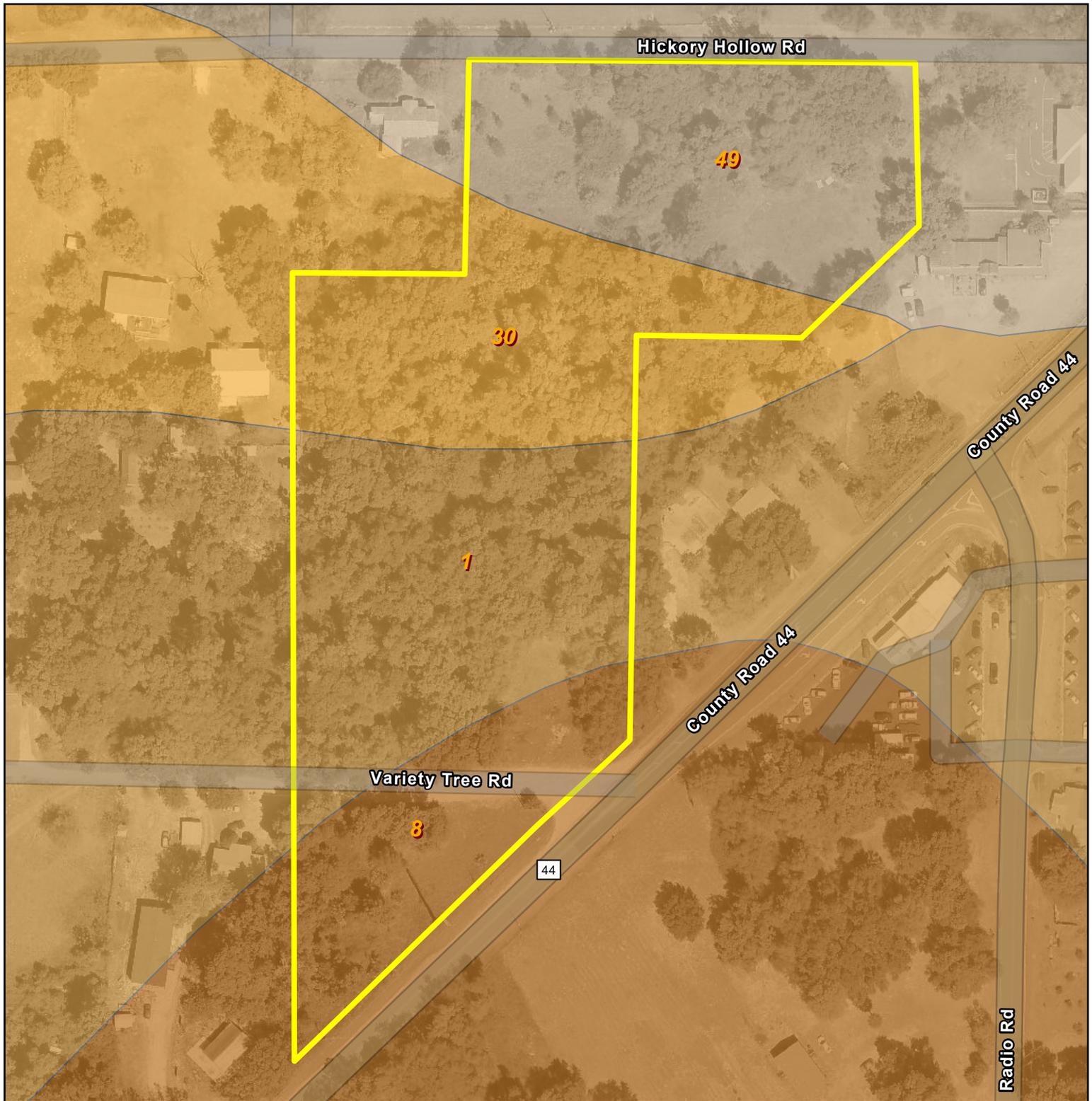
FLUCFCS PER FLORIDA LAND USE, COVER, AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

PROPERTY COMPOSED ENTIRELY OF UPLANDS SUBJECT TO AGENCY REVIEW.



## Aerial with FLUCFCS Map Wayne Self Storage - Lake County

DRAWN BY: D.B.  
DRAWING DATE: 11/02/23  
REVISED:  
EXHIBIT NUMBER: Exhibit 3



**NOTES:**

Aerial photographs provided by the Florida Department of Transportation and were flown in 2020.

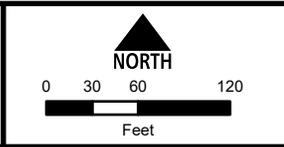
Property boundary estimated per the Lake County property appraiser's GIS website.

Soils data downloaded from the FGDL library and is comprised of data current to 2021 provided by the USDA National Resources Conservation Service.

**Legend**

 Project Limits

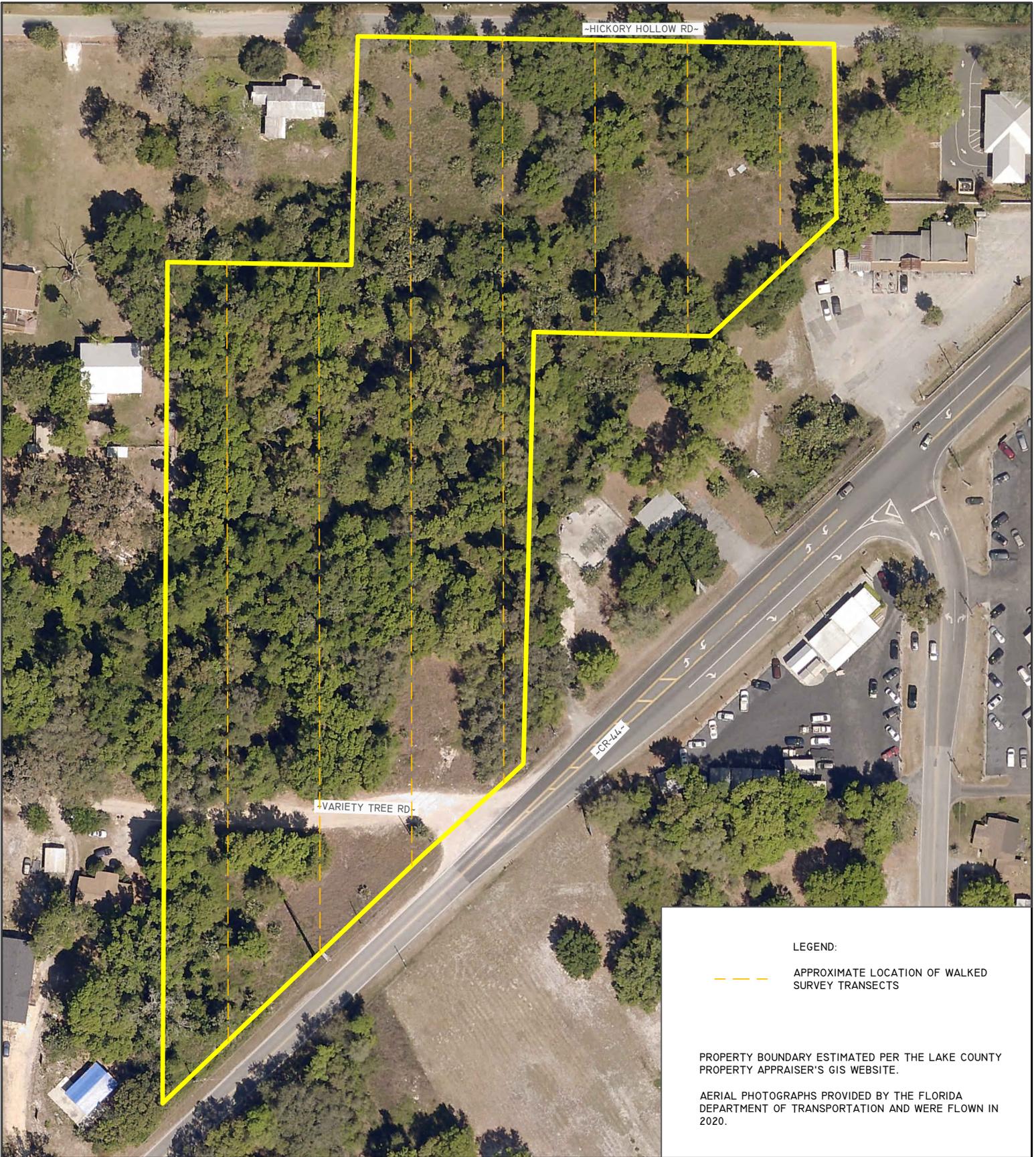
Map Unit	Soil Type	Hydric
1	Sparr Sand, 0 to 5 Percent Slopes	No
8	Candler Sand, 0 to 5 Percent Slopes	No
30	Lochloosa Sand	No
49	Wauchula Sand	No



**Soils Map**

**Wayne Self Storage - Lake County**

DRAWN BY: D.B.	DRAWING DATE: 11/02/23
REVIEWED BY: A.W.	EXHIBIT NUMBER: Exhibit 4

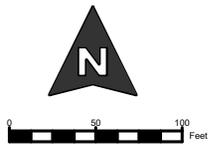


**LEGEND:**

--- APPROXIMATE LOCATION OF WALKED SURVEY TRANSECTS

PROPERTY BOUNDARY ESTIMATED PER THE LAKE COUNTY PROPERTY APPRAISER'S GIS WEBSITE.

AERIAL PHOTOGRAPHS PROVIDED BY THE FLORIDA DEPARTMENT OF TRANSPORTATION AND WERE FLOWN IN 2020.



# Aerial with Survey Transects Wayne Self Storage - Lake County

DRAWN BY: D.B.

DRAWING DATE: 11/02/23

REVISED:

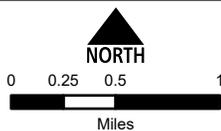
EXHIBIT NUMBER:  
Exhibit 5

**Legend**

-  Project Site
-  Bald Eagle Nest Location
-  Wading Bird Rookeries

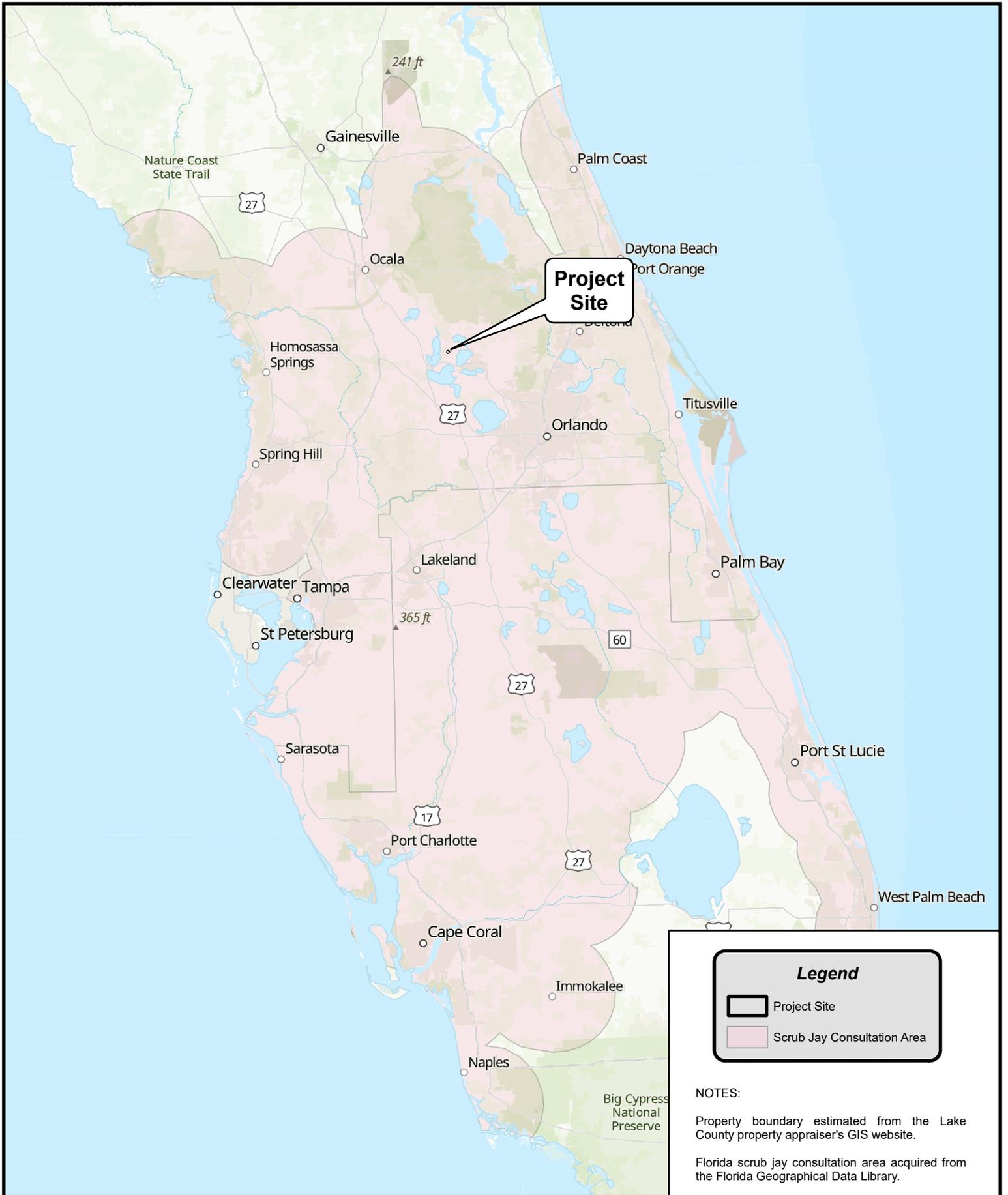
**NOTES:**

Base map per ArcGIS Base maps (2023)  
 Property boundary per the Lake County property appraiser's GIS website.  
 Listed species locations acquired from the Florida Geographical Data Library.



# Documented Occurrences of Listed Species Wayne Self Storage - Lake County

DRAWN BY:	D.B.
DRAWING DATE:	11/02/23
REVIEWED BY:	A.W.
EXHIBIT NUMBER:	Exhibit 6



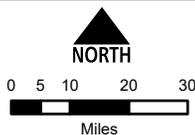
**Legend**

- Project Site
- Scrub Jay Consultation Area

**NOTES:**

Property boundary estimated from the Lake County property appraiser's GIS website.

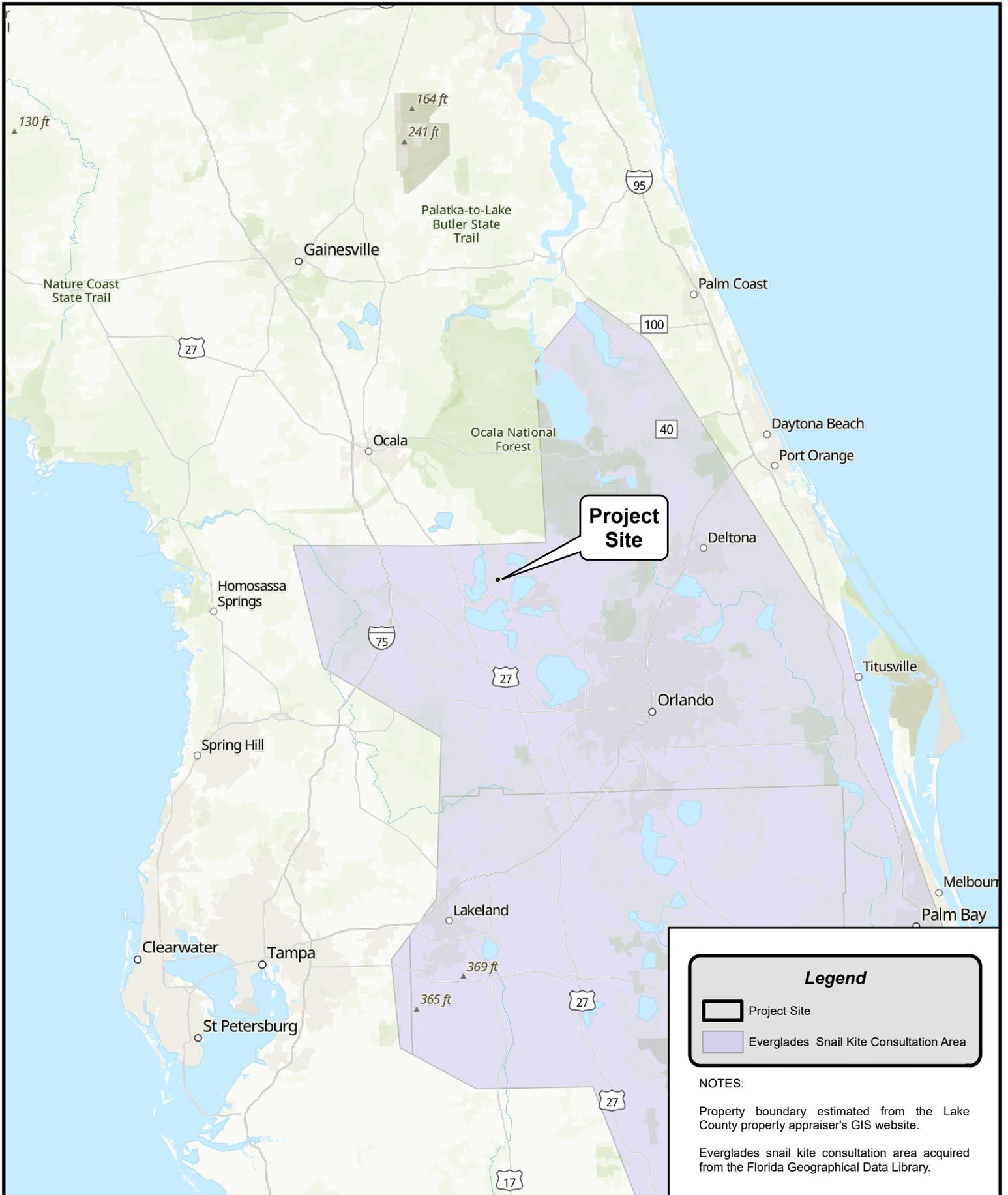
Florida scrub jay consultation area acquired from the Florida Geographical Data Library.



# Scrub Jay Consultation Area Map Wayne Self Storage - Lake County

DRAWN BY: D.B.  
 DRAWING DATE: 11/02/23  
 REVIEWED BY: A.W.  
 EXHIBIT NUMBER:

**Exhibit 7**



**Project Site**

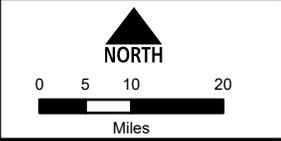
**Legend**

- Project Site
- Everglades Snail Kite Consultation Area

**NOTES:**

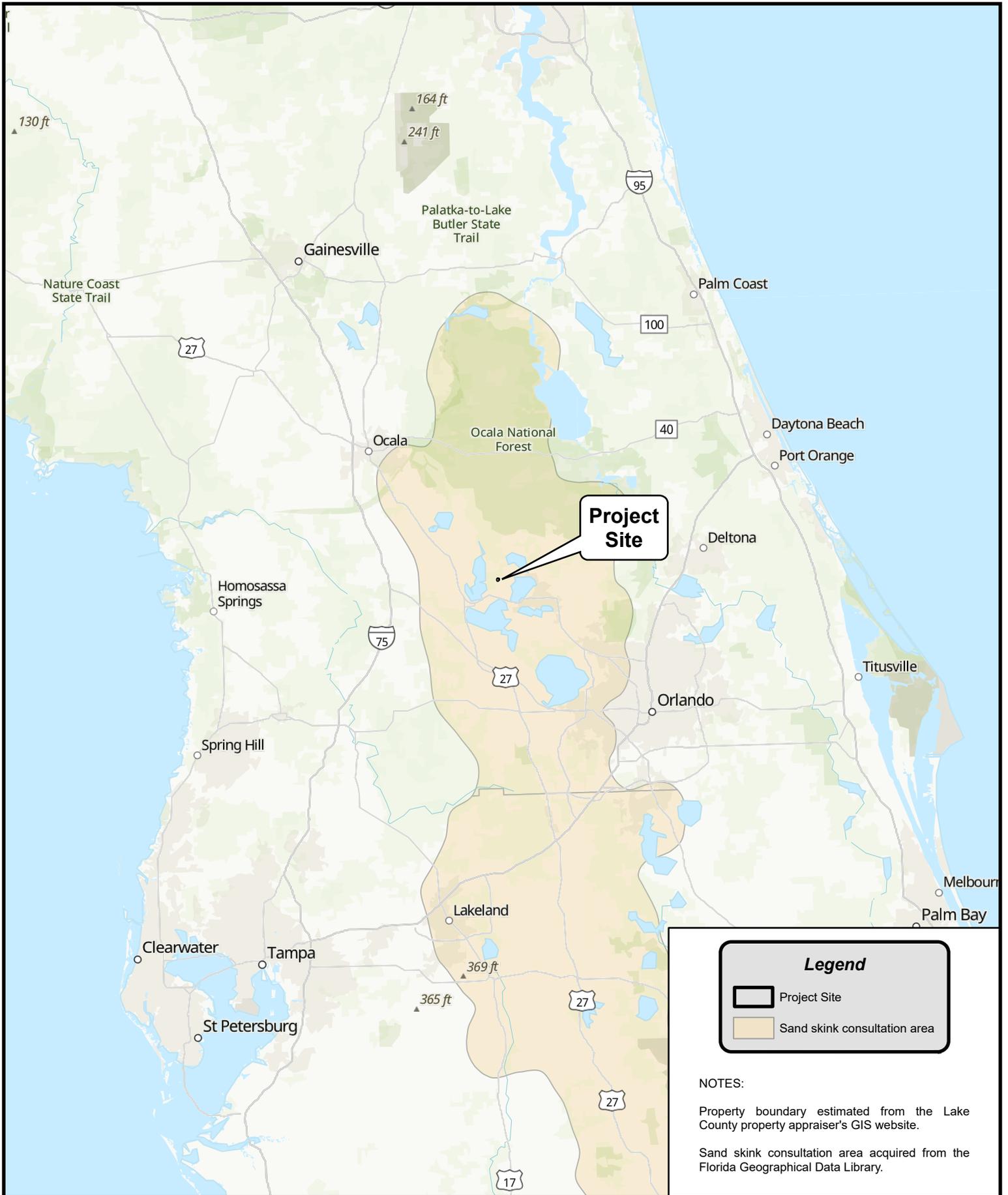
Property boundary estimated from the Lake County property appraiser's GIS website.

Everglades snail kite consultation area acquired from the Florida Geographical Data Library.



# Everglades Snail Kite Consultation Area Map Wayne Self Storage - Lake County

DRAWN BY:	D.B.
DRAWING DATE:	11/02/23
REVIEWED BY:	A.W.
EXHIBIT NUMBER:	Exhibit 8



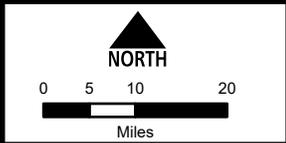
**Legend**

- Project Site
- Sand skink consultation area

**NOTES:**

Property boundary estimated from the Lake County property appraiser's GIS website.

Sand skink consultation area acquired from the Florida Geographical Data Library.



# Sand Skink Consultation Area Map

## Wayne Self Storage - Lake County

DRAWN BY:	D.B.
DRAWING DATE:	11/02/23
REVIEWED BY:	A.W.
EXHIBIT NUMBER:	Exhibit 9