Natural Resource Assessment

Transwestern North
Marion County, Florida

Prepared for:
Transwestern Development Company
3340 Peachtree Road NE, Suite 100
Atlanta, GA 30326

142933003
May 2022

101 E Silver Springs Boulevard, Unit 400, Ocala, FL 34470
352-438-300

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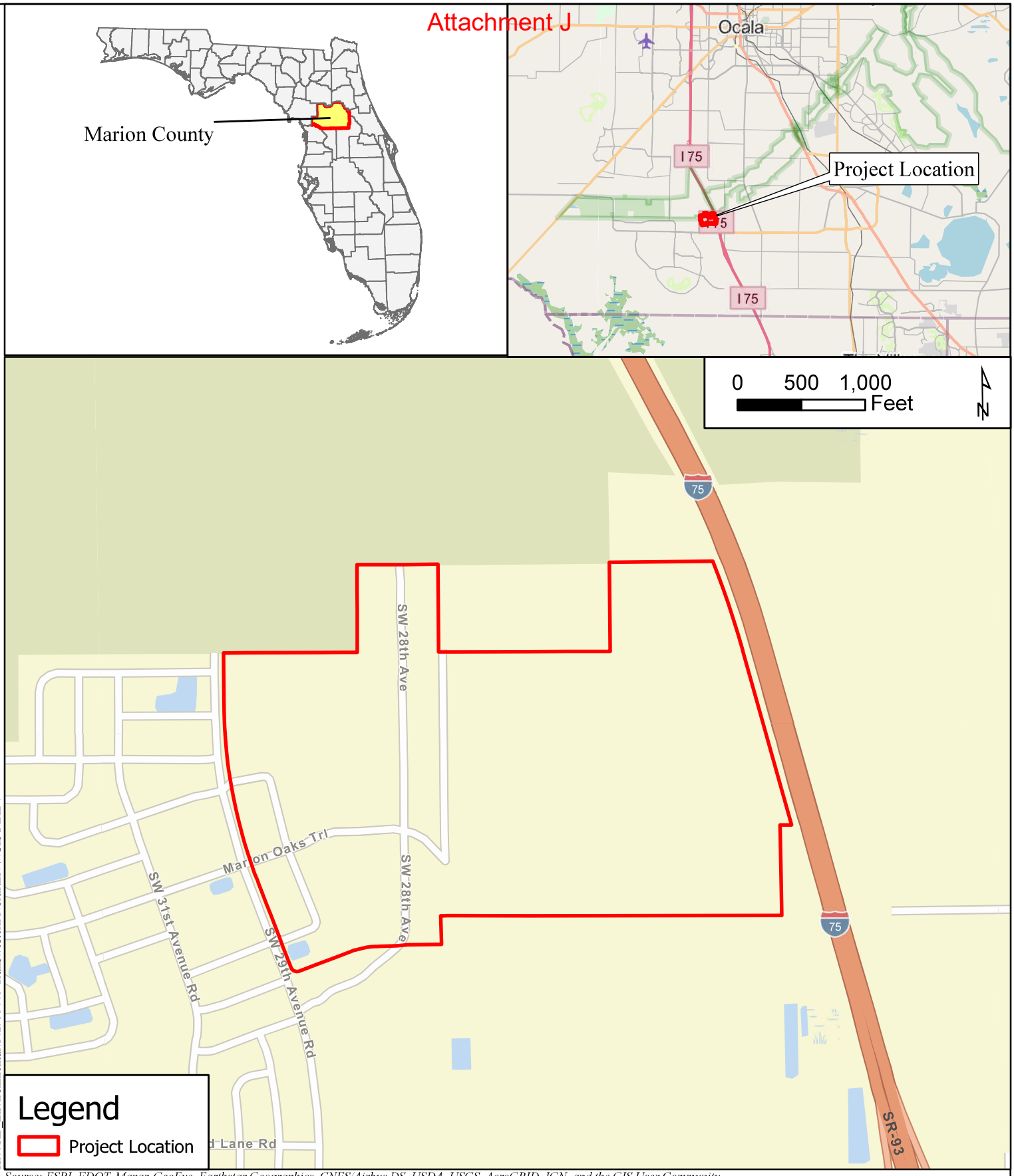
1.0 INTRODUCTION

The following technical memorandum summarizes a review of readily available documentation and the results of field reconnaissance conducted at the project site. The purpose of this Natural Resource Assessment was to characterize the existing conditions of the property relative to threatened and endangered species and their habitat, ecological communities, land cover and vegetation, wetlands, soils, hydrology, archaeological and historical resources, and floodplains.

The scope of this assessment included: reviewing available natural resource documentation, existing permits, listed species information, existing GIS databases regarding known occurrences of listed species on and near the project site, site reconnaissance, and mapping and assessment of habitat types. Site reconnaissance also included a 15% gopher tortoise survey following Florida Fish and Wildlife Conservation Commission (FWC) *Gopher Tortoise Permitting Guidelines (Revised November 2020)*.

This project site is approximately 232 acres and includes eighty-five (85) parcels, primarily consisting of undeveloped residential plots in its western portions. The site is located east of Southwest 29th Avenue Road, west of I-75 and south of the Marjorie Harris Carr Cross Florida Greenway State Recreation and Conservation Area in Sections 1, 2, 11 and 12, Township 17 south and Range 21 east, near Ocala, in unincorporated Marion County, Florida. A location map is attached as ***Figure 1.*** A portion of the U.S. Geological Service (USGS) 7.5-Minute quadrangle map depicting the location of the project site is attached as ***Figure 2***.

Attachment J



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Source: ESRI, FDOT, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Kimley»Horn

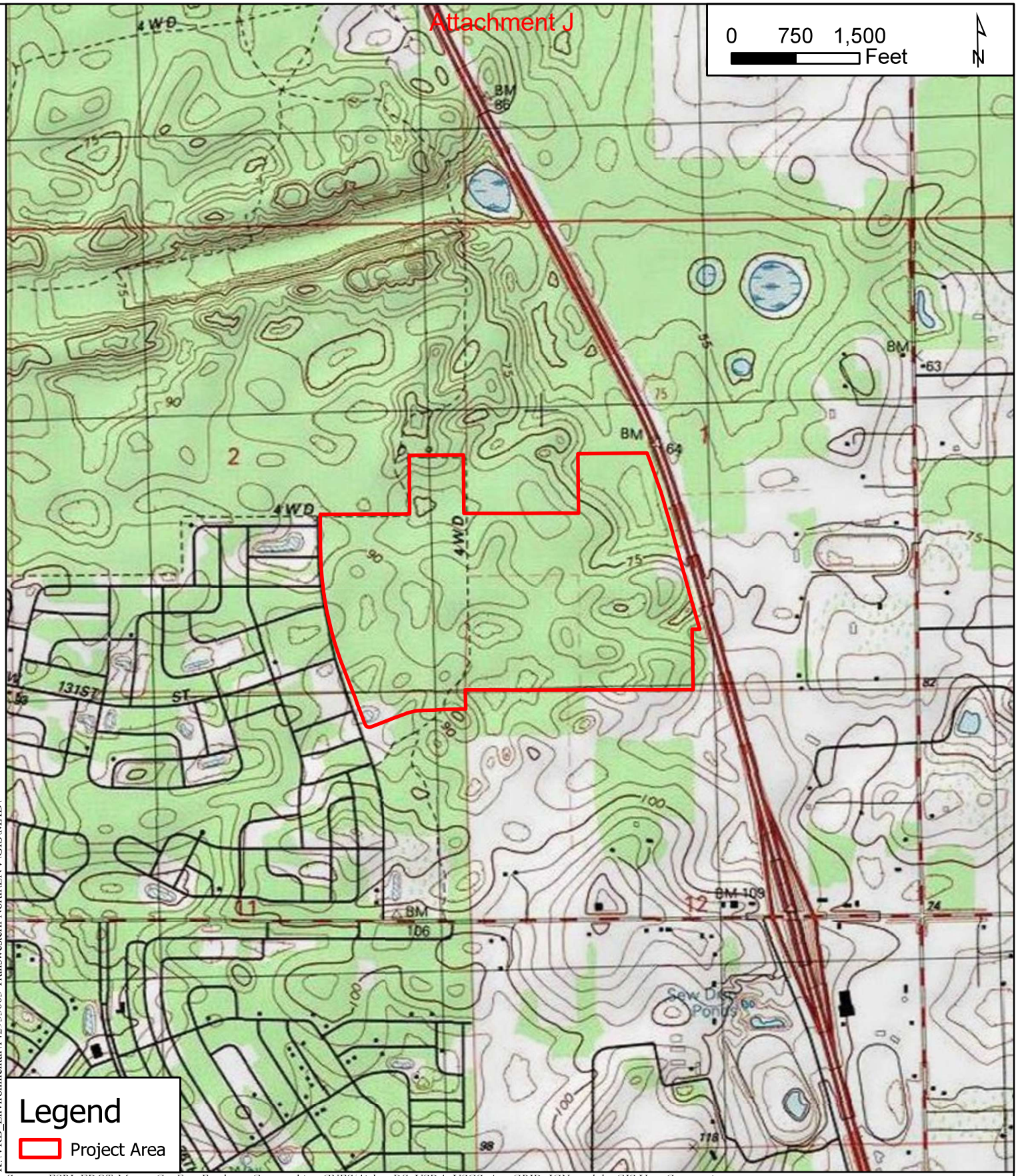
101 E Silver Springs Boulevard, Unit 400
Ocala, FL 34470
Phone (352) 438-3000
www.kimley-horn.com

Project Location Map

Transwestern North
Marion County, Florida

1 inch = 1,000 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 1

Attachment J



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101 E Silver Springs Boulevard, Unit 400
Ocala, FL 34470
Phone (352) 438-3000
www.kimley-horn.com

USGS Topographic Map

Transwestern North
Marion County, Florida

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1 inch = 1,500 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 2

2.0 METHODOLOGY

The methodology for this assessment included a review of the following resources:

- Florida Natural Areas Inventory (FNAI) Biodiversity Matrix (http://www.fnai.org/biointro.cfm)
- Various Geographic Information System (GIS) data layers from the U.S. Fish and Wildlife Service (USFWS), U.S. Geological Survey (USGS), FWC [(https://myfwc.com/wildlifehabitats/wildlife/bba/) and (https://geodata.myfwc.com/datasets/eb20bf44aeea44a8ab4a47cd4329c6b6_5/explore?location=27.754332%2C-83.751000%2C7.54)]
- USFWS IPaC Trust Resources Report (https://ecos.fws.gov/ipac/)
- U.S. Department of Agriculture (USDA) / Natural Resources Conservation Service (NRCS) Web Soil Survey for Marion County Area, Florida (http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx)
- State Historic Preservation Officer (SHPO), Florida Master Site File (http://www.flheritage.com/)
- USFWS National Wetlands Inventory (NWI) Maps (Web-based maps available from http://www.fws.gov/wetlands/Data/mapper.html)
- Federal Emergency Management Agency (FEMA) Digital Flood Insurance Rate Maps (FIRM; Web-based maps available from http://msc.fema.gov/)
- USGS Quadrangle Maps, Land Boundary Information System (LABINS; http://www.labins.org)
- Southwest Florida Water Management District (SWFWMD) GIS data,
- Florida Department of Environmental Protection (FDEP) MapDirect GIS
- Marion County Code of Ordinances

Field reconnaissance was conducted on April 13-14th, 2022.

3.0 EXISTING CONDITIONS

3.1 SOILS

The USDA / NRCS *Soil Survey of Marion County Area, Florida,* maps the following soil on the property: (9) Arredondo Sand, 0 to 5 percent slopes, (13) Astatula Sand, 0 to 5 percent slopes, (22) Candler Sand, 0 to 5 percent slopes and (23) Candler Sand, 5 to 12 percent slopes. A copy of the digital USDA/NRCS soils data is attached as ***Figure 3*** and details regarding each soil is listed in ***Table 1***.

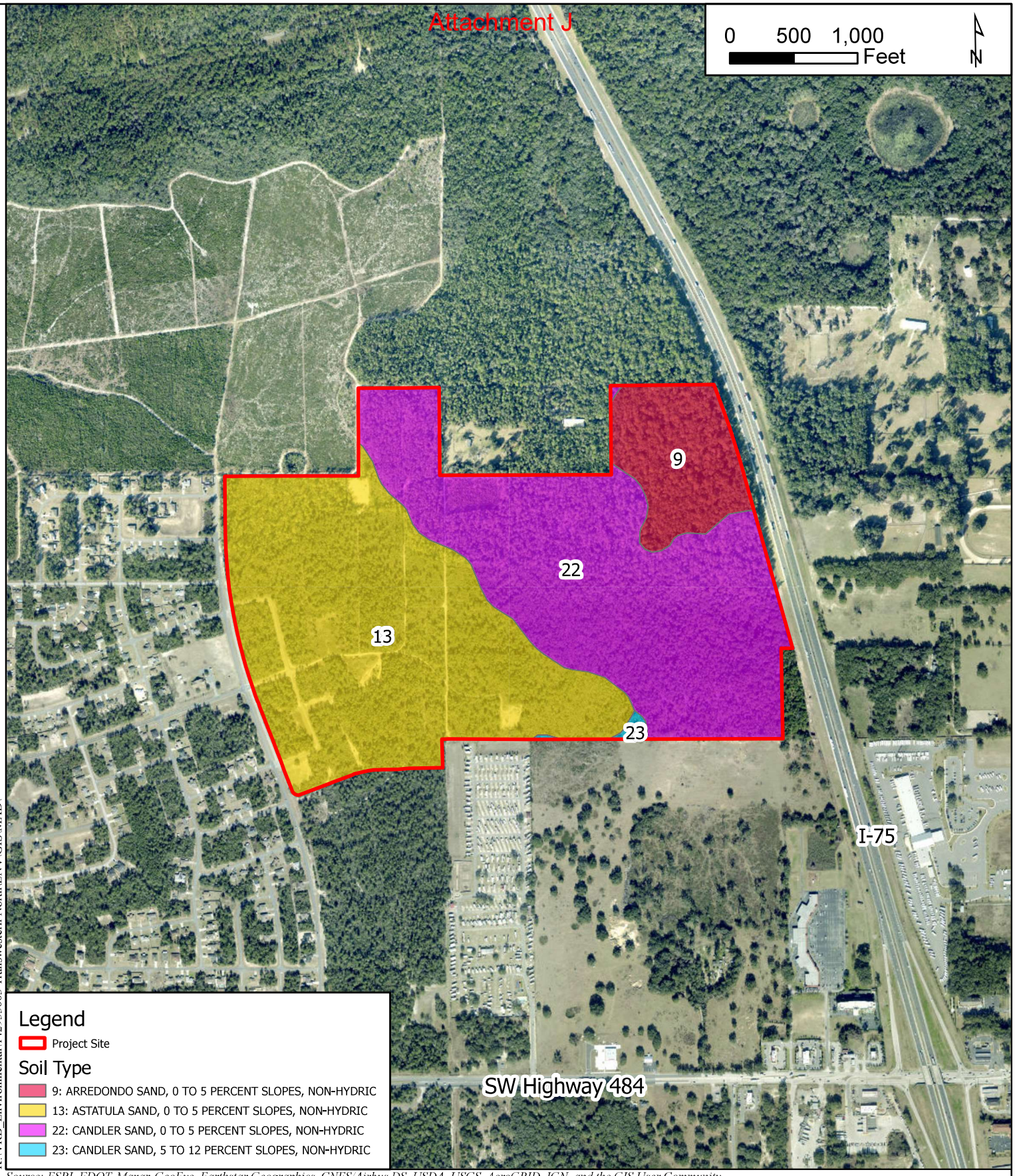
TABLE 1
NRCS SOILS IDENTIFIED WITHIN THE STUDY AREA

Soil ID Number[1]	Soil Name	Occurrence	Characteristics	Drainage Class	Groundwater Depth	Hydric, Hydric Inclusions, or Non-hydric[2]
9	Arredondo sand, 0 to 5 percent slopes	Ridges and hills on marine terraces	Available water capacity is low, and permeability is high	Well drained	More than 80 inches	Non-Hydric
13	Astatula sand, 0 to 5 percent slopes	Ridges and Hills on marine terraces	Available water capacity is very low, and permeability is very high	Excessively drained	More than 80 inches	Non-Hydric
22	Candler sands, 0 to 5 percent slopes	Ridges and knolls on marine terraces	Available water capacity is very low, and permeability is high to very high	Excessively drained	More than 80 inches	Non-Hydric
23	Candler sand, 5 to 12 percent slopes	Ridges and knolls on marine terraces	Available water capacity is very low, and permeability is high to very high	Excessively drained	More than 80 inches	Non-Hydric

[1]: Reference: Web Soil Survey of Marion County Area, Florida
http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

[2]: Reference: Hydric Soils of Florida Handbook, 4th Edition, March 2007

Attachment J



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Source: ESRI, FDOT, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Kimley»Horn

101 E Silver Springs Boulevard, Unit 400
Ocala, FL 34470
Phone (352) 438-3000
www.kimley-horn.com

NRCS Soils Map

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Marion County, Florida

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1 inch = 1,000 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 3

3.2 LAND COVER AND NATURAL COMMUNITIES

Vegetative communities on the project site were identified through pedestrian transects and aerial photograph interpretation. Vegetative communities were classified using the *Florida Land Use, Cover, and Forms Classification System* (FLUCFCS, Florida Department of Transportation, 1999). A FLUCFCS map of the site is attached as ***Figure 4***. A description of the upland land covers included below, characterizes dominant vegetation observed along random pedestrian transects, and does not represent an all-inclusive vegetative inventory. The acreage provided is approximate, based on aerial mapping.

FLUCFCS 190 Open Land (± 85.5 ac.)

This land cover is found in the southern portions of the project. The open lands in the southwestern project site consisted of cleared areas used as stormwater retention for the adjacent residential areas and cleared areas used for staging construction equipment and supplies. Open lands in the southeastern portions of the project area consisted of cleared forested areas mature trees scattered throughout. The canopy and sub-canopy consisted of sparse longleaf pine (*Pinus palustris*), sand pine (*Pinus clausa*), turkey oak (*Quercus laevis*) and lead tree (*Macaranga tanarius*). Groundcover vegetation consisted of muscadine (*Vitis rotundifolia*), stinging nettle (*Urtica dioica*), ragweed (*Ambrosia artemisiifolia*), pinewoods milkweed (*Asclepias humistrata)* and balsam apple (*Momordica balsamica*).

FLUCFCS 434 Hardwood – Conifer Mixed (± 121.7 ac.)

This land cover is found throughout the project site. The forest canopy consisted of sand pine, slash pine, sand live oak (*Quercus geminata*), myrtle oak (*Quercu myrtifolia*) wax myrtle (*Morella cerifera*), yaupon holly (*Ilex vomitoria*), common persimmon (*Diospyros virgininana*), sweet bay (*Magnolia virginiana*), winged sumac (*Rhus copallinum*), Chinese tallow (*Triadica sebifera*) and turkey oak. Vegetation in the subcanopy consisted of cabbage palm and juvenile canopy species. Groundcover consisted of reindeer moss (*Cladonia rangiferina*), ragweed, netted paw paw (*Asimina reticulata*), broomsedge (*Andropogon virginicus*), American beautyberry (*Callicarpa americana*), rusty lyonia (*Lyonia ferruginea*) and deerberry (*Vaccinium stamineum*).

FLUCFCS 438 Mixed Hardwoods (± 20.5 ac.)

This land cover is found throughout the northeast portion of the project site. The forest canopy consisted of live oak (*Quercus virginiana*), pignut hickory (*Carya glabra*), sweet gum (*Liquidambar styraciflua*), southern magnolia (*Magnolia grandiflora*), sweet bay, sand live oak, and wax myrtle. Vegetation in the subcanopy consisted of saw palmetto (*Serenoa repens*) with muscadine, dog fennel (*Eupatorium capillifolium*) and Carolina jessamine (*Gelsemium sempervirens*) making up the groundcover.

FLUCFCS 441 Coniferous Plantations (± 3.0 ac.)

This land cover comprised the north central portion of the property and consisted of rows of immature planted pine. Vegetation primarily consisted of longleaf pine and slash pine (*Pinus elliottii*).

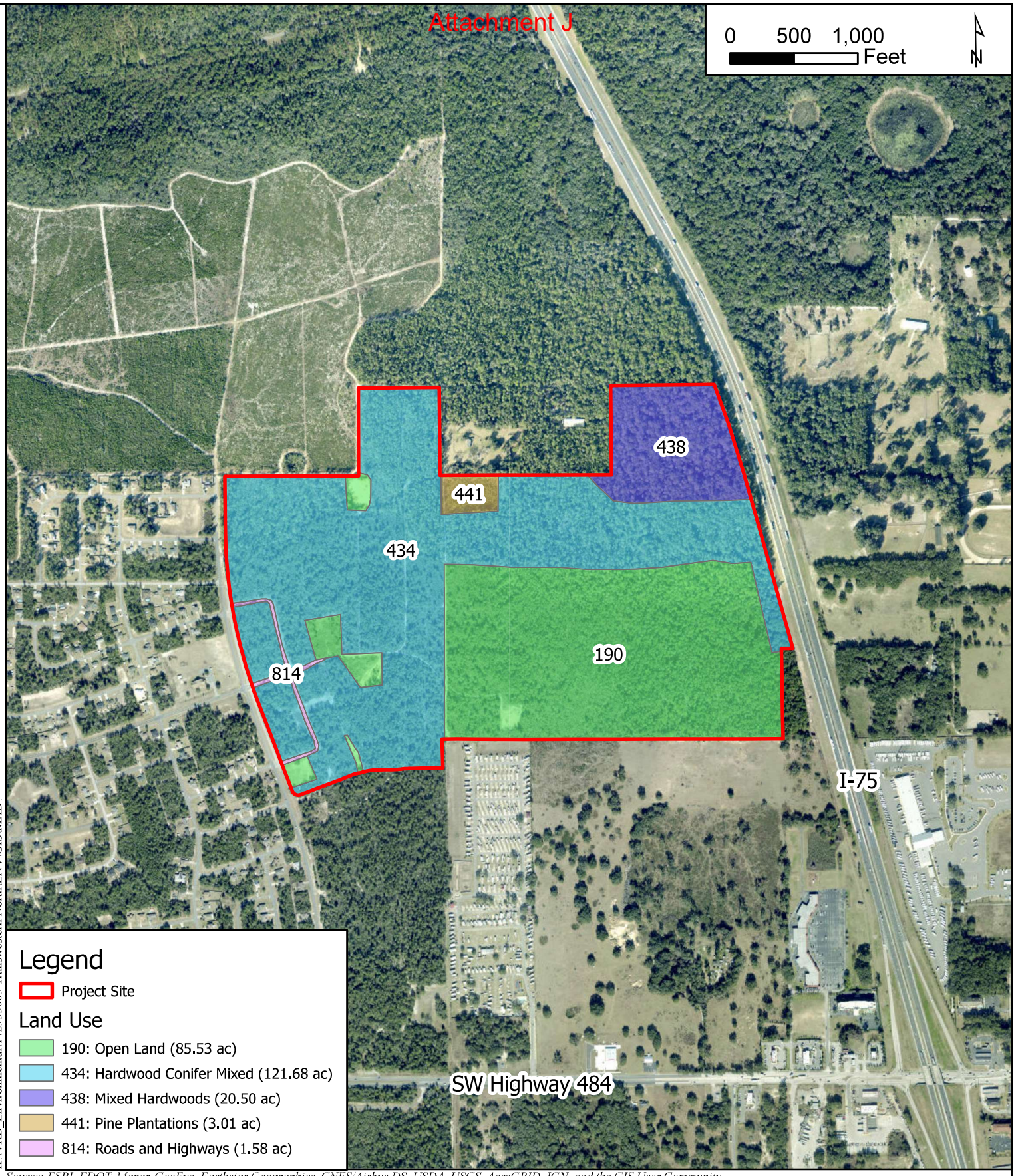
FLUCFCS 814 Roads and Highways (± 1.6 ac.)

This land cover is found in the southwest portion of the project site and consists of paved roads through undeveloped parcels adjacent to the residential neighborhood offsite. Vegetation surrounding the roads consisted of ragweed, oakleaf fleabane (*Erigeron quercifolius*), and lesser hop trefoil (*Trifolium dubium*).

3.4 WILDLIFE UTILIZATION

Wildlife observed included eastern towhee (*Pipilo erythrophthalmus*), red-bellied woodpecker (*Melanerpes carolinus*), black vulture (*Corapgyps atratus*), blue jay (*Cyanocitta cristata*), American crow (*Corvus brachyrhynchos*), red-tailed hawk (*Buteo jamaicensis*), turkey vulture (*Cathartes aura),* southeastern five-lined skink (*Plestiodon inexpectatus*) and black bears (*Ursus americanus*).

Attachment J



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Kimley»Horn

101 E Silver Springs Boulevard, Unit 400
Ocala, FL 34470
Phone (352) 438-3000
www.kimley-horn.com

Florida Land Use, Cover and Forms, Classification System Map

Transwestern North
Marion County, Florida

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1 inch = 1,000 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 4

3.5 ENDANGERED, THREATENED, AND SPECIES OF SPECIAL CONCERN

A listing of species potentially occurring within the project vicinity was reviewed using the databases described in the Section 2.0 Methodology. The results of the database review are as follows:

FNAI – FNAI reported documented listed plant species occurrences within the project site and immediate vicinity for the giant orchid (*Pteroglossaspis ecristata*), and longspurred mint (*Diceranda cornutissima*). FNAI also documented the likely occurrence of the Florida scrub-jay (*Aphelocoma coerulescens*), eastern indigo snake (*Drymarchon couperi*), wood stork (*Mycteria americana*), gopher tortoise (*Gopherus polyphemus*), Florida burrowing owl (*Athene cunicularia*), Florida sandhill crane (*Grus canadensis pratensis*), short-tailed snake (*Lampropeltis extenuate*), and Sherman's fox squirrel (*Sciurus niger shermani*) (see ***Appendix A – FNAI Data Report***).

FWC – No wading bird rookeries are present within one mile of the site. There are no bald eagle nests within one mile of the site. There are two observations of FWC listed species within one mile of the site: Florida scrub-jay and gopher tortoise.

USFWS Consultation Areas – The project site is in the following USFWS Consultation Area:

- Florida Scrub-Jay

USFWS Wood Stork Colonies – The project site is not within a core foraging area (CFA) of the wood stork (*Mycteria americana*). The CFA for the project site is defined as 15 miles from an active wood stork colony.

USFWS IPaC Data – The IPaC Trust Resources Report includes historical data in their reporting, which results in some species findings that do not reflect current on-site conditions. The eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), and Florida scrub-jay *(Aphelocoma coerulescens*) are the only listed species in the data with suitable habitat within the project site. Listed species in the data that do not have suitable habitat on-site include: wood stork (*Myceteria americana*), Eastern black rail (*Laterallus jamaicensis ssp. Jamaicensis*), and frosted flatwoods salamander (*Ambystoma cingulatum*). Additionally, five (5) plant species are listed in the data, however, these plants are likely included due to the project site's proximity to the Marjorie Harris Carr Greenway immediately north of the site; these species are not expected to occur on-site due to lack of

active ecological management and previous impacts to the area such as clearing. The project site is not within any USFWS designated Critical Habitat (See ***Appendix B – IPaC Report***).

Based on field reconnaissance and database reviews, a listing of the state and federally listed species potentially occurring within the immediate vicinity of the project site has been compiled. ***Table 2*** lists species that may occur and their likelihood of occurrence. Likelihood of occurrence is based on actual observation of the species, sign of the species (burrows, tracks, scat, etc.), observance of suitable habitat, or documented occurrences of the species within various databases.

TABLE 2
POTENTIAL LISTED SPECIES OCCURRENCE

Common Name		Scientific Name	Federal Status	State Status[1]	Comments	Likelihood of Occurrence
BIRDS	Southeastern American Kestrel	*Falco sparverius paulus*	NL	ST	Observed On-site: No Observed in Proximity: No Habitat present: Yes Habitat Type: Foraging	Medium
	Florida Scrub-Jay	*Aphelocoma coerulescens*	T	FT	Observed On-site: No Observed in Proximity: No Habitat present: Yes Habitat Type: Both nesting and foraging	Medium
	Florida Sandhill Crane	*Grus canadensis pratensis*	NL	ST	Observed On-site: No Observed in Proximity: No Habitat present: Yes Habitat Type: Foraging	Medium
	Florida Burrowing Owl	*Athene cunicularia*	NL	ST	Observed On-site: No Observed in Proximity: No Habitat present: Yes Habitat Type: Marginal nesting and foraging	Low
MAMMALS	**Black Bear**	***Ursus americanus floridanus***	**NL***	**NL***	**Observed On-site: Yes** **Observed in Proximity: No** **Habitat present: Yes** **Habitat Type: Foraging**	**High**
REPTILES	Eastern Indigo Snake	*Drymarchon corais couperi*	T	FT	Observed On-site: No Observed in Proximity: No Habitat present: Marginal Habitat Type: Foraging	Medium
	Florida Short-tailed Snake	*Lampropeltis extenuate*	NL	ST	Observed On-site: No Observed in Proximity: No Habitat present: Yes Habitat Type: Marginal foraging and nesting	Low

TABLE 2
POTENTIAL LISTED SPECIES OCCURRENCE

Common Name		Scientific Name	Federal Status	State Status[1]	Comments	Likelihood of Occurrence
	Gopher Tortoise	*Gopherus polyphemus*	C	ST	Observed On-site: Yes Observed in Proximity: No Habitat present: Yes Habitat Type: Both burrowing and foraging	High

Federal Status: E = Endangered; T = Threatened; C = Candidate Species; NL = Not Listed.

State Status: FE = Federally Endangered; FT = Federally Threatened; ST = State Threatened. Note: Coordination is not required with FWC for federally listed species.

* The Florida black bear is protected under Chapter 68A-4.009, Florida Administrative Code, the Florida Black Bear Conservation Plan.

BOLD – Denotes species observed during field reconnaissance.

Based on the database review and field reconnaissance, the following species could occur on-site or require additional evaluation, survey, or permitting:

Southeastern American Kestrel

Southeastern American kestrel habitat consists of open pine habitats, woodland edges, prairies, and pastures throughout much of Florida. Nest sites are typically found in tall dead trees, snags, or utility poles generally with an unobstructed view of the surrounding area. There is foraging and nesting habitat on-site for this species and therefore, a kestrel survey should be conducted to ensure no nests are observed within the site. Surveying season is from April through August and surveys are typically only valid for one year. If nesting kestrels are found onsite, further coordination with FWC will be required including a potential take permit.

Florida Scrub-Jay

The Florida scrub-jay inhabits fire-dominated, low-growing, oak scrub habitat found on well-drained sandy soils. The site falls within the USFWS consultation area for this species and habitat for the Florida scrub-jay exists on-site, as a result, surveys are recommended to determine if scrub-jays are present on-site. Surveys can be conducted from March-October with March, July, and October being the best times to survey. Surveys are conducted with the assistance of a scrub-jay vocalization which is broadcast along transects throughout suitable habitat. If scrub-jays are present and occupied habitat will be impacted, a permit may be required from the USFWS as well as mitigation for proposed impacts.

Florida Sandhill Crane

The Florida sandhill crane is typically seen in freshwater marshes, pastures, farmlands, prairies, and is often seen along roadsides and lawns throughout Florida. Suitable foraging habitat for the sandhill crane exists throughout the open areas of the project site, however, no nesting habitat is present due to the lack of wetlands or waterbodies. No individuals were observed during field reconnaissance and impacts to this species are not anticipated. As a result, no further action is anticipated for this species.

Florida Burrowing Owl

Burrowing owls are typically found in open prairies throughout peninsular Florida with little understory vegetation such as pastures, golf courses, vacant lots, or agricultural fields. Open areas throughout the site provide marginal foraging and nesting habitat for this species, with the majority of these areas consisting of previously forested areas that were recently cleared and contain disturbed soils with no vegetation and bare soil present. No individuals or burrows were observed during field reconnaissance and no further action is anticipated for this species.

Florida Black Bear

The Florida black bear was removed from the state's list of protected species in 2012; however, the bear remains protected under Chapter 68A-4.009, Florida Administrative Code, the Florida Black Bear Conservation Plan. The black bear requires large amounts of space for its home range and a variety of forested habitats, including flatwoods, swamps, scrub oak ridges, bayheads, and hammocks. Three (3) black bears were observed during field reconnaissance and the project site is within the FWC's Central Bear Management Unit. Consistent with the December 2019 FWC Black Bear Management Plan, it is recommended that garbage and food debris be properly removed from the construction site daily to eliminate possible sources of food that could encourage and attract bears. Nuisance bears will need to be reported to the FWC at the Wildlife Alert Hotline at 1-888-404-3922.

Eastern Indigo Snake

The eastern indigo snake occurs in a range of habitats, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats. The snake requires large tracts of land to survive and often winters in burrows of gopher tortoises, armadillos, cotton rats, and land crabs (in coastal areas) and forages in hydric habitats. No individuals were observed during field reconnaissance; however, habitat

for the eastern indigo snake does exist on-site due to the presence of gopher tortoise burrows on-site. With the implementation of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* (***Appendix C***) during construction, impacts to the eastern indigo snake are not anticipated; however, given the large size of the project site, the presence of gopher tortoise burrows, and its proximity to a large greenway, coordination with USFWS is recommended to ensure no surveys or further action will be necessary.

Florida Short-Tailed Snake

The short-tailed snake is a fossorial snake, spending the majority of its time underground primarily in areas with sandy soils, particularly longleaf pine, and xeric oak sandhill habitats. Habitat within the site is marginal for foraging and nesting due to impacts from clearing activities; while longleaf pines were observed on-site they were intermittent and were primarily scattered throughout cleared areas in the eastern portion of the project site. No xeric oak sandhill habitat exists on-site. No further action is anticipated regarding this species, however, if any short-tailed snakes are observed during gopher tortoise relocation they will be relocated to the gopher tortoise recipient site.

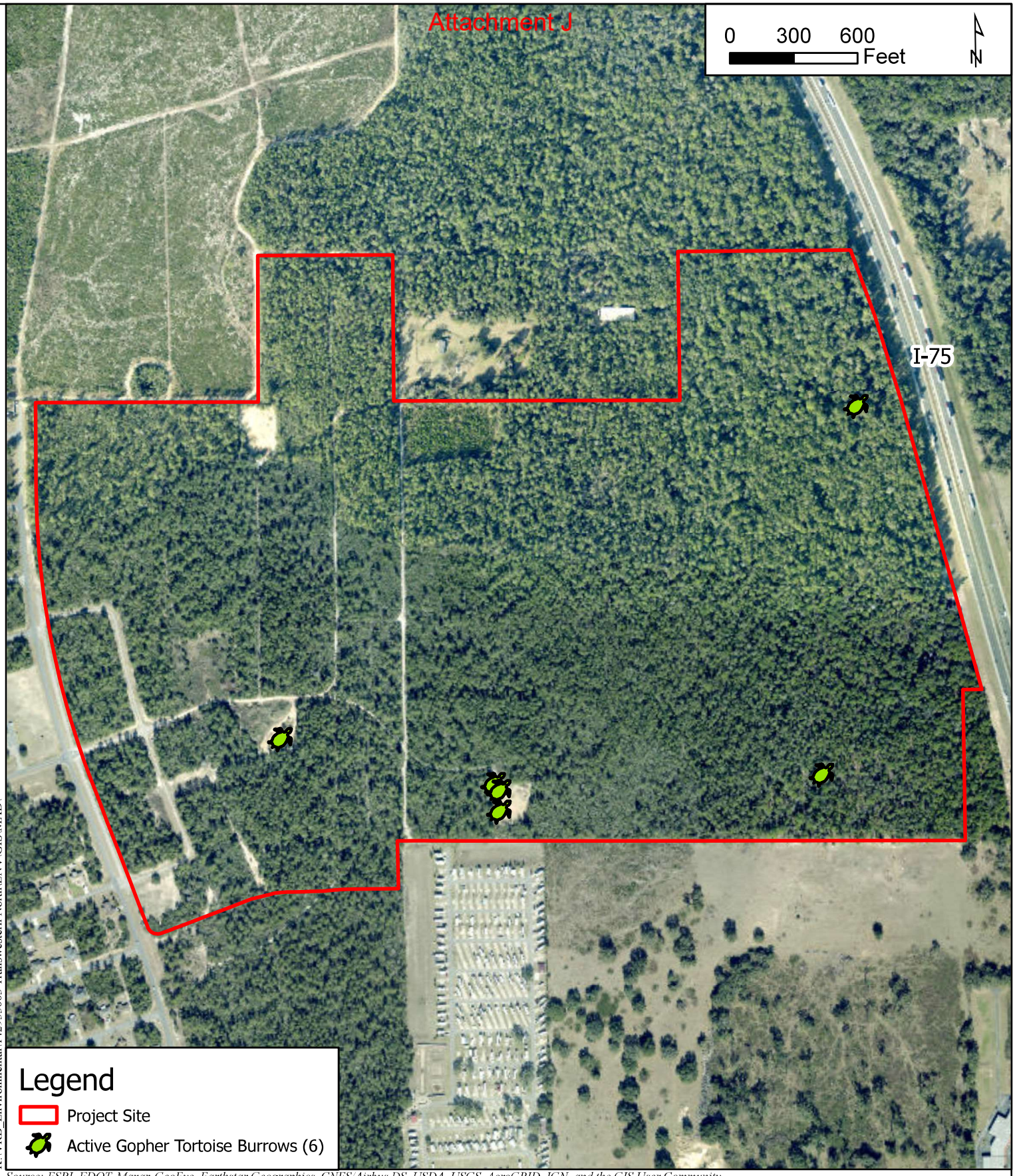
Gopher Tortoise

The gopher tortoise is a burrowing tortoise that inhabits upland habitats such as pine flatwoods, xeric oak hammocks, and open sandy pastures, but often can also be found in disturbed areas. A 15% gopher tortoise burrow survey was conducted within the project site and six (6) gopher tortoises burrows were observed (***Figure 5***). A 100% gopher tortoise survey will be required within suitable habitat prior to site development. If any gopher tortoise burrows are found on or within 25 feet of the development footprint, an FWC gopher tortoise relocation permit will be required.

Listed Plant Species

The Florida Department of Agriculture and Consumer Service's Notes on *Florida's Threatened and Endangered Plants*, and Richard Wunderlin's *Guide to Vascular Plants of Florida*, were consulted to assess habitat requirements for listed plant species. Although 18 state-listed plants and five (5) federally-listed plants were noted by FNAI and IPaC as possibly occurring in this area, none were observed during field reconnaissance. Habitat on-site has been disturbed from prior activities, and habitat for listed plant species is limited. No further action should be required regarding listed plant species.

Attachment J



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www.kimley-horn.com

Gopher Tortoise Burrow Map

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Marion County, Florida

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1 inch = 600 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 5

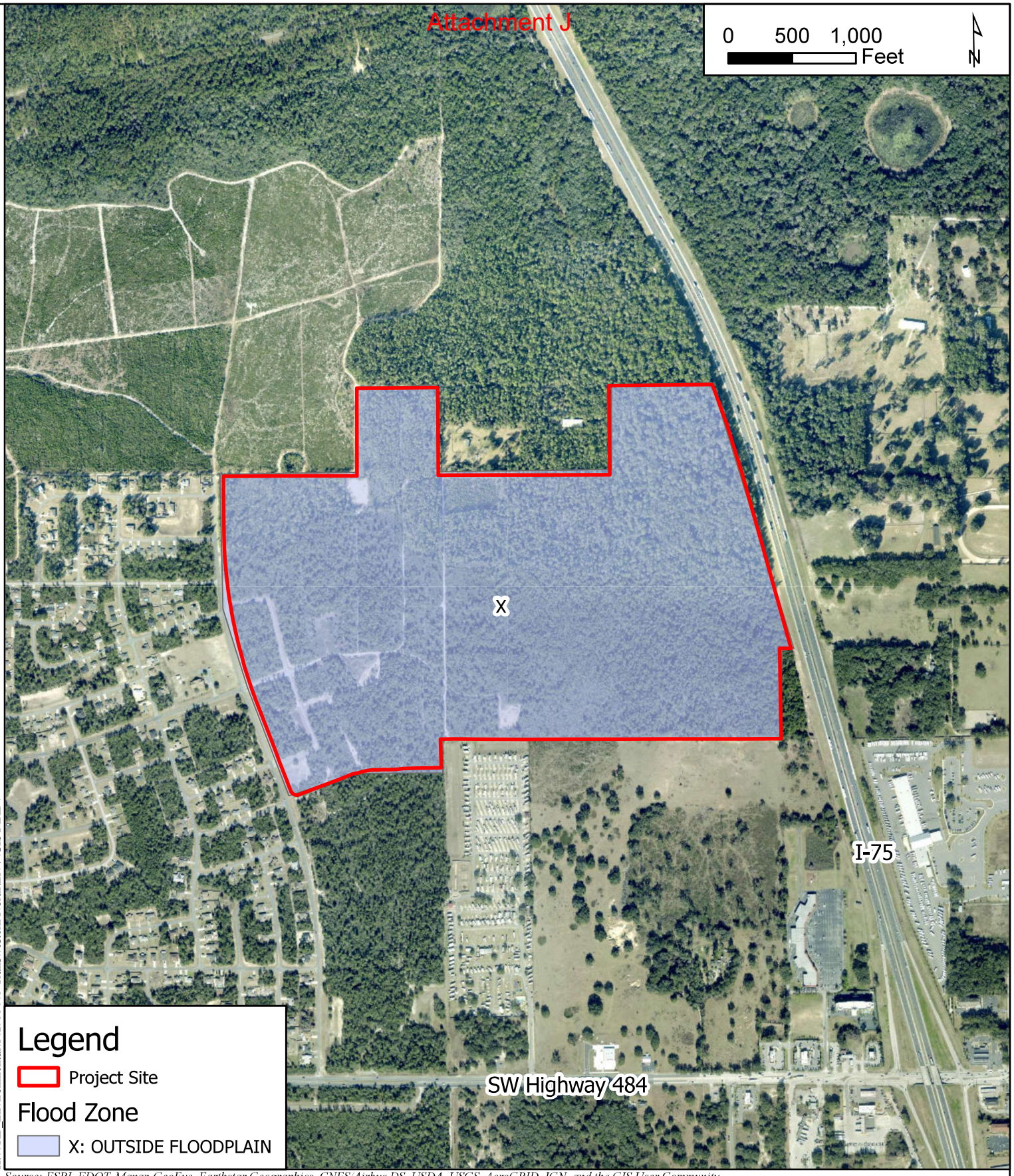
3.6 HISTORIC AND ARCHAEOLOGICAL RESOURCES

Kimley-Horn requested an inquiry from the Department of State, State Historic Preservation Officer (SHPO) Division of Historical Resources Florida Master Site File (FMSF) regarding the presence of known historic or archaeological findings on the project site or in the immediate vicinity (see ***Appendix D – SHPO Florida Master Site File Report***). The FMSF did not list any cultural resources within a 0.25-mile buffer of the project site. As no cultural resources occur on-site, no impacts are expected to occur for historic and archaeological resources and no further action should be required.

3.7 FLOODPLAIN INFORMATION

According to the FEMA, the project site is located within Zone X – Outside the Floodplain and Zone X - Within the 100 Year Floodplain. A FEMA flood zone map is attached as ***Figure 6***. No further action is required.

Attachment J



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Ocala, FL 34470
Phone (352) 438-3000
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FEMA Map

Transwestern North
Marion County, Florida

1 inch = 1,000 feet	PROJECT NUMBER: 142933003	MAY 2022	FIGURE 6

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4.0 REGULATORY REQUIREMENTS

4.1 LOCAL ENVIRONMENTAL ORDINANCES

The project site falls within unincorporated Marion County and must adhere to the Marion County Code of Ordinances. Per Sec. 2.22.4, a tree survey and Tree Removal Permit from Marion County is required for tree removal with a DBH of 10 inches or larger prior to any development.

4.2 STATE REGULATORY REQUIREMENTS

Southwest Florida Water Management District Permitting

An ERP will be required from the SWFWMD if any stormwater improvements are proposed as part of this project. Drainage design and stormwater management is not discussed further in this report as the scope was limited to natural resources.

Listed Species Permitting

The following state listed species or species otherwise managed by FWC were observed or potentially occur on-site:

- Gopher tortoise
- Southeastern American Kestrel
- Black Bear

Gopher Tortoise

Habitat is found throughout the site and six (6) burrows were observed. A 100% gopher tortoise survey will be required no more than 90 days prior to development to determine exact number of burrows on-site. If impacts to the burrows cannot be avoided with a 25-foot buffer, a permit from FWC would be required to relocate the gopher tortoises that are present on-site.

Southeastern American Kestrel

Foraging habitat is found throughout the site, with forested areas providing potential nesting habitat. A 100% kestrel survey is recommended prior to development to determine is kestrels are nesting within the project site. Due to the similar appearance of the migratory American kestrel and the southeastern American kestrel, surveys from April to August, after the migratory species has left, are recommended.

Black Bear

Three black bears were seen on-site; although this is not a federally or state protected species, FWC recommends that measures be taken during construction to try and limit human-bear interactions such as: securing trash and other attractants in bear-resistant containers and allowing bears to leave construction areas before resuming work.

4.3 FEDERAL REGULATORY REQUIREMENTS

Section 404 Dredge and Fill Permitting

A dredge and fill permit from the FDEP will not be required due to the lack of jurisdictional wetlands or surface waters present on-site.

Federal Listed Species

The following federally listed species have the potential to occur on-site:

- Eastern Indigo Snake
- Florida Scrub-Jay

Eastern Indigo Snake

Per the *Eastern Indigo Snake Programmatic Effect Determination Key (North Florida)* (August 13, 2013), implementation of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* (***Appendix C***) will be required during construction. Additionally, coordination with USFWS is recommended due to the size of the site, its proximity to a large greenway, and the presence of gopher tortoise burrows, to determine if additional surveys or permitting associated with this species will be required.

Florida Scrub-jay

Nesting and foraging habitat is found throughout the site. Coordination with the USFWS is recommended to determine if a scrub-jay survey may be required. Surveys can be conducted from March-October with March, July, and October being the best times to survey.

SUMMARY AND RECOMMENDATIONS

- An ERP from SWFWMD will be required to authorize on-site stormwater improvements as part of site development.
- A tree survey and Tree Removal Permit from Marion County may be required for tree removal prior to development.
- The following state or federally listed species may potentially occur on-site:
    - Eastern indigo snake: USFWS Standard Protection Measures for the Eastern Indigo Snake should be followed during construction to avoid and minimize potential impacts to this snake; additional coordination with USFWS is recommended to determine if survey or additional permitting are necessary
    - Gopher tortoise: A 100% gopher tortoise survey is required within 90 days of project commencement. If gopher tortoise burrows cannot be avoided with a 25-foot buffer, a permit will be required to relocate the tortoises
    - Florida scrub-jay: scrub-jay surveys are recommended for areas of suitable scrub-jay habitat; surveys can be conducted from March through October
    - Southeastern American kestrel: kestrel surveys are recommended prior to development; surveys can be completed from April through August
- FWC recommends implementing measures to try and limit human-bear interactions such as: securing trash and other attractants in bear-resistant container, removing waste from the project site daily, and allowing bears to leave construction areas before resuming work.

APPENDIX A
FNAI DATA REPORT

Attachment J

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
850-681-9364 fax
www.fnai.org

Florida Natural Areas Inventory

Biodiversity Matrix Query Results

UNOFFICIAL REPORT

Created 4/12/2022

(Contact the FNAI Data Services Coordinator at 850.224.8207 or kbrinegar@fnai.fsu.edu for information on an official Standard Data Report)

NOTE: The Biodiversity Matrix includes only rare species and natural communities tracked by FNAI.

Report for 2 Matrix Units: 30408 , 30409

Descriptions

DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.

DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.

LIKELY - The species or community is *known* to occur in this vicinity, and is considered likely within this Matrix Unit because:

1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; *or*
2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit.

POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.

Matrix Unit ID: 30408

1 **Documented** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Pteroglossaspis ecristata Giant Orchid	G2G3	S2	N	T

1 **Documented-Historic** Element Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Dicerandra cornutissima Longspurred Mint	G1	S1	LE	E

5 **Likely** Elements Found

Scientific and Common Names	Global	State	Federal	State

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	Rank	Rank	Status	Listing
Aphelocoma coerulescens Florida Scrub-Jay	G2	S2	LT	FT
Drymarchon couperi Eastern Indigo Snake	G3	S3	LT	FT
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	LT	FT
Scrub	G2	S2	N	N

Matrix Unit ID: 30409

2 **Documented** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Dicerandra cornutissima Longspurred Mint	G1	S1	LE	E
Sandhill	G3	S2	N	N

0 **Documented-Historic** Elements Found

7 **Likely** Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Aphelocoma coerulescens Florida Scrub-Jay	G2	S2	LT	FT
Drymarchon couperi Eastern Indigo Snake	G3	S3	LT	FT
Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Mesic flatwoods	G4	S4	N	N
Mycteria americana Wood Stork	G4	S2	LT	FT
Scrub	G2	S2	N	N
Upland hardwood forest	G5	S3	N	N

Matrix Unit IDs: 30408 , 30409

33 **Potential** Elements Common to Any of the 2 Matrix Units

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
Agrimonia incisa Incised Groove-bur	G3	S2	N	T
Asplenium heteroresiliens Wagner's Spleenwort	GNA	S1	N	N
Asplenium plenum Ruffled Spleenwort	G1Q	S1	N	N
Asplenium x curtissii Curtiss' Spleenwort	GNA	S1	N	N
Athene cunicularia floridana Florida Burrowing Owl	G4T3	S3	N	SSC
Calopogon multiflorus Many-flowered Grass-pink	G2G3	S2S3	N	T
Centrosema arenicola Sand Butterfly Pea	G2Q	S2	N	E
Digitaria floridana Florida Fingergrass	G1	S1	N	N
Eriogonum longifolium var. gnaphalifolium Scrub Buckwheat	G4T3	S3	LT	E
Forestiera godfreyi Godfrey's Swampprivet	G2	S2	N	E

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Gopherus polyphemus Gopher Tortoise	G3	S3	C	ST
Grus canadensis pratensis Florida Sandhill Crane	G5T2T3	S2S3	N	ST
Heterodon simus Southern Hognose Snake	G2	S2	N	N
Lampropeltis extenuata Short-tailed Snake	G3	S3	N	ST
Lithobates capito Gopher Frog	G3	S3	N	SSC
Litsea aestivalis Pondspice	G3?	S2	N	E
Matelea floridana Florida Spiny-pod	G2	S2	N	E
Monotropsis reynoldsiae Pygmy Pipes	G1Q	S1	N	E
Mustela frenata peninsulae Florida Long-tailed Weasel	G5T3	S3	N	N
Myotis austroriparius Southeastern Bat	G3G4	S3	N	N
Nemastylis floridana Celestial Lily	G2	S2	N	E
Neofiber alleni Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa Florida Beargrass	G3	S3	N	T
Notophthalmus perstriatus Striped Newt	G2G3	S2	C	N
Peucaea aestivalis Bachman's Sparrow	G3	S3	N	N
Podomys floridanus Florida Mouse	G3	S3	N	SSC
Pteroglossaspis ecristata Giant Orchid	G2G3	S2	N	T
Salix floridana Florida Willow	G2	S2	N	E
Sceloporus woodi Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani Sherman's Fox Squirrel	G5T3	S3	N	SSC
Sideroxylon alachuense Silver Buckthorn	G1	S1	N	E
Spigelia loganioides Pinkroot	G2Q	S2	N	E
Ursus americanus floridanus Florida Black Bear	G5T2	S2	N	N

Disclaimer

The data maintained by the Florida Natural Areas Inventory represent the single most comprehensive source of information available on the locations of rare species and other significant ecological resources statewide. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. FNAI shall not be held liable for the accuracy and completeness of these data, or opinions or conclusions drawn from these data. FNAI is not inviting reliance on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

These results are considered unofficial. FNAI offers a Standard Data Request option for those needing certifiable data.

APPENDIX B

IPAC REPORT

Attachment J

IPaC **U.S. Fish & Wildlife Service**

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

Marion County, Florida

Local office

Florida Ecological Services Field Office

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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 species[1] 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 Fisheries[2]).

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

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NAME	STATUS
Eastern Black Rail Laterallus jamaicensis ssp. jamaicensis Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10477	Threatened
Florida Scrub-jay Aphelocoma coerulescens Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Wood Stork Mycteria americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
Eastern Indigo Snake Drymarchon corais couperi Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened
Gopher Tortoise Gopherus polyphemus No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6994	Candidate

Amphibians

NAME	STATUS
Frosted Flatwoods Salamander Ambystoma cingulatum Wherever found There is **final** critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/4981	Threatened

Insects

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

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Flowering Plants

NAME	STATUS
Britton's Beargrass Nolina brittoniana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4460	Endangered
Florida Bonamia Bonamia grandiflora No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/2230	Threatened
Lewton's Polygala Polygala lewtonii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6688	Endangered
Longspurred Mint Dicerandra cornutissima No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1660	Endangered
Scrub Buckwheat Eriogonum longifolium var. gnaphalifolium No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/5940	Threatened

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 Act[1] and the Bald and Golden Eagle Protection Act[2].

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:

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- 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.p

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

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Bald Eagle Haliaeetus leucocephalus — Breeds Sep 1 to Jul 31
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

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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.

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 thecorresponding 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 relativeprobability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

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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.

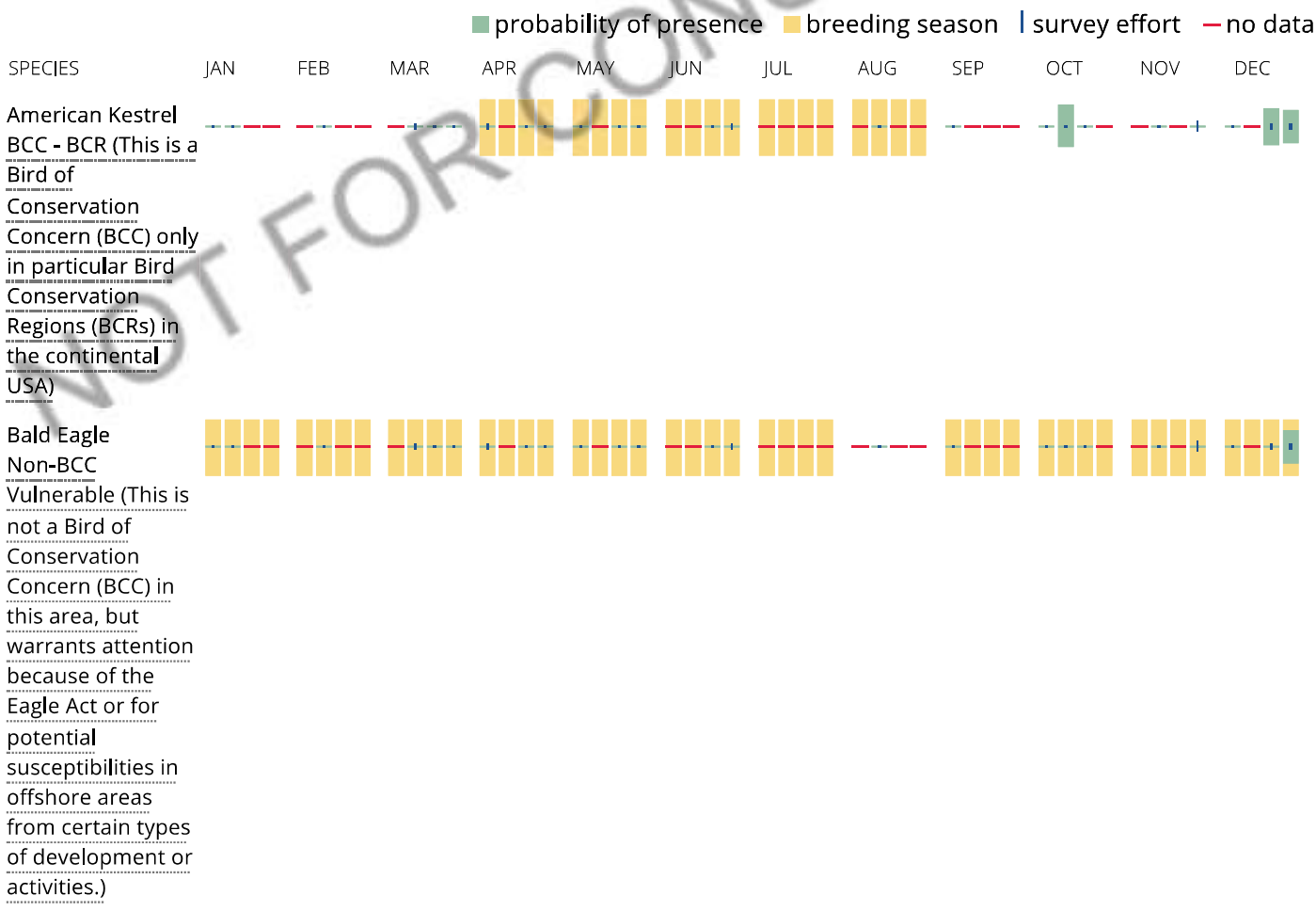
Breeding Season (▭)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
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.



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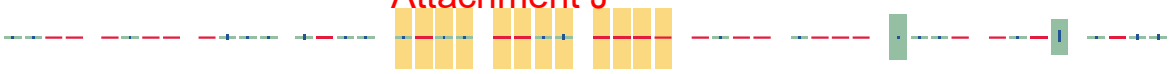
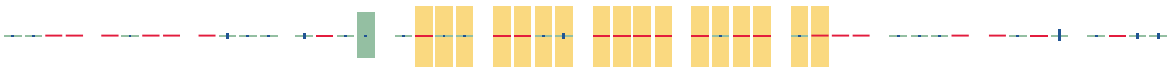
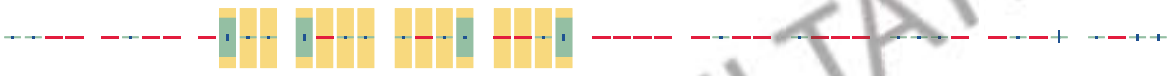
Prairie Warbler BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



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



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.

Attachment J

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.

Attachment J

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 tuberficid 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.

APPENDIX C

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida ES Office – (904) 731-3336
Panama City ES Office – (850) 769-0552
South Florida ES Office – (772) 562-3909

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

Killing, harming, or harassing indigo snakes is strictly prohibited and punishable under State and Federal Law.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

LEGAL STATUS: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

August 12, 2013

ATTENTION:

THREATENED EASTERN INDIGO SNAKES MAY BE PRESENT ON THIS SITE!!!

Please read the following information provided by the U.S. Fish and Wildlife Service to become familiar with standard protection measures for the eastern indigo snake.

ATTENTION:

THREATENED EASTERN INDIGO SNAKES MAY BE PRESENT ON THIS SITE!!!

IF YOU SEE A LIVE EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A DEAD EASTERN INDIGO SNAKE ON THE SITE:

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USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

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APPENDIX D

SHPO FLORIDA MASTER SITE FILE REPORT

This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at CompliancePermits@dos.MyFlorida.com for project review information.

May 11, 2022

Tyler Osha
Kimley-Horn | 1920 Wekiva Way, Suite 200, West Palm Beach, FL 33411
Mobile: 801 258 1774 Work: 561 629 1252

In response to your request on May 11, 2022, the Florida Master Site File lists no cultural resources recorded within a 0.25-mile of the site boundary located east of Southwest 29th Avenue Road, west of I-75 and south of the Florida Trail near Ocala, in unincorporated Marion County, Florida.

When interpreting the results of our search, please consider the following information:

- **This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.**
- **Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.**
- **While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.**
- **Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at** CompliancePermits@dos.MyFlorida.com**.**

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Eman M. Vovsi, Ph.D.
Florida Master Site File
Eman.Vovsi@DOS.MyFlorida.com

Florida Master Site File

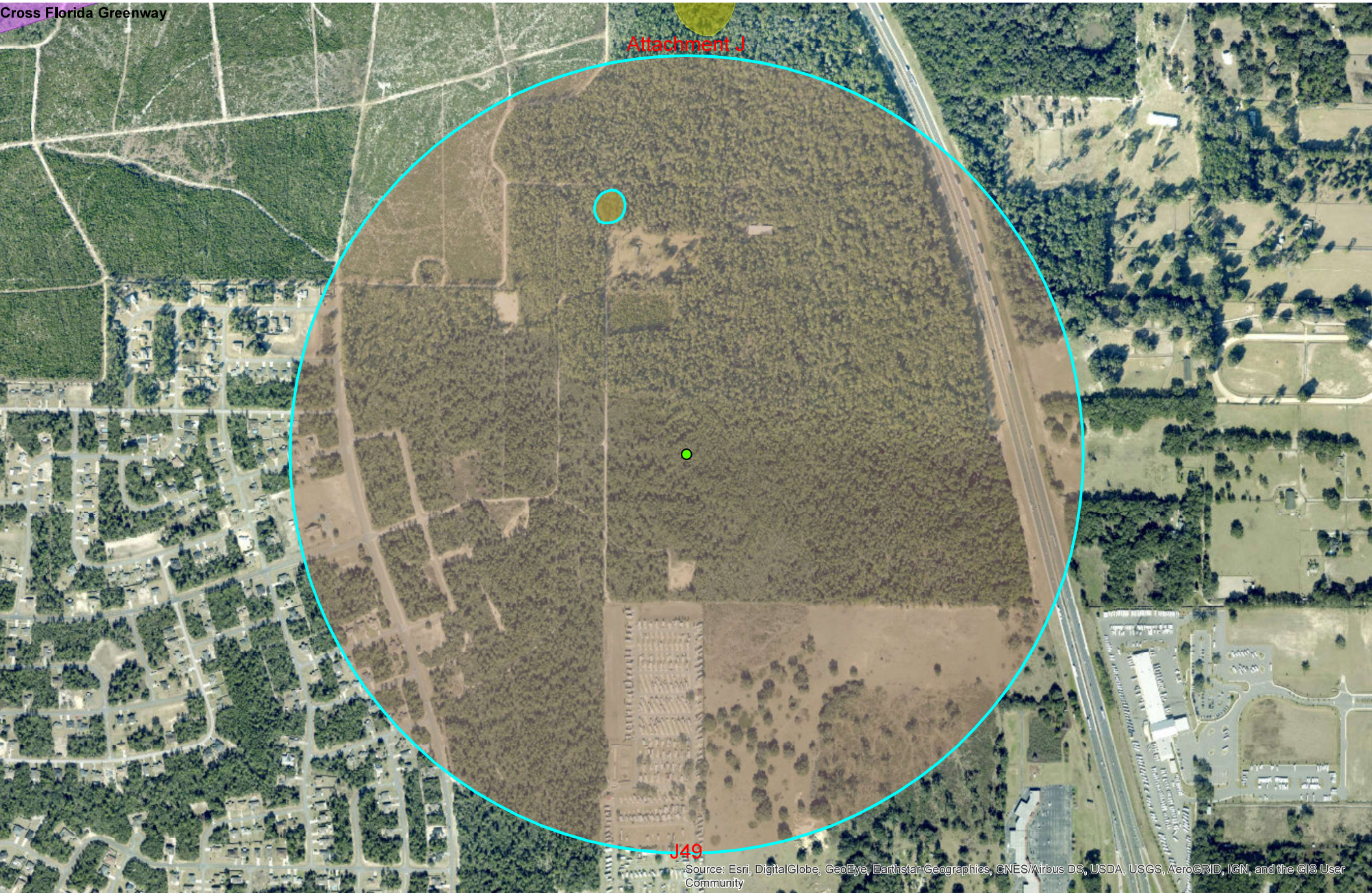
AR=1
SS=0
CM=0
RG=0
BR=0
Total=1

Attachment J

Created: 5/12/2022

Cultural Resource Roster

SiteID	Type	Site Name	Address	Additional Info	SHPO Eval	NR Status
MR00106	AR	ROAD 275		Human Remains May Be Present		


Cross Florida Greenway
Attachment J
J49
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community