

March 8th, 2024

Morgan Reins
SFWMD
3301 Gun Club Road,
West Palm Beach, FL 33406

Proj: Gordy Creek – Fort Pierce, St. Lucie County, Florida
Section 26, Township 35 South, Range 39 East
(BTC File #1162-03)

Re: Environmental Assessment Report & ERP Application Package

Dear Mrs. Reins:

In February of 2024, Bio-Tech Consulting, (BTC) conducted an environmental assessment of the approximately ± 77.95 -acre Gordy Creek Site. This site is located in the City of Fort Pierce, directly on the west side of Gordy Road, approximately 0.3 mile south of the intersection of Okeechobee Road and the Florida Turnpike within Section 26, Township 35 South, Range 39 East, St. Lucie County, Florida (**Figures 1 and 2**). This environmental assessment included the following elements:

- **general review of site topography;**
- **review of soil types mapped within the site boundaries;**
- **evaluation of land use types/vegetative communities present;**
- **delineation of any on-site wetland communities;**
- **field review for occurrence of protected flora and fauna; and,**
- **an overview of potential development constraints.**

TOPOGRAPHY

Based upon a review of the USGS Topographic Map present in **Figure 3** (*Fort Pierce NW*, Florida Quadrangle), elevations on the subject property range from highs between +17 to +15 feet above the National Geodetic Vertical Datum of 1929 (NGVD) on the majority of the parcel, to +15 to +10 feet NGVD on the southwestern and western portions of the property, within wetland areas associated with the Ten Mile Creek.

Orlando: Main Office
3025 East South Street
Orlando, FL 32803

Jacksonville Office
11235 St Johns Industrial Pkwy N
Suite 2
Jacksonville, FL 32246

Tampa Office
6011 Benjamin Road
Suite 101-B
Tampa, FL 33634

Vero Beach Office
4445 North A1A
Suite 221
Vero Beach, FL 32963

Key West Office
1107 Key Plaza
Suite 259
Key West, FL 33040

Land & Aquatic Management
3825 Rouse Road
Orlando, FL 32817

407.894.5969
877.894.5969
407.894.5970 fax

SOILS

According to the Soil Survey of St. Lucie County, Florida, prepared by the U.S. Department of Agriculture (USDA) and the Natural Resources Conservation Service (NRCS), four (4) soil types occur within the subject property boundaries (**Figure 4**). These soil types include the following:

- **Fluvaquents, frequently flooded (#14)**
- **Riviera fine sand, 0 to 2 percent slopes (#38)**
- **Susanna and Wauchula sands (#43)**
- **Wabasso sand, 0 to 2 percent slopes (#48)**

The following presents a brief description of each of the soil types mapped for the subject site:

Fluvaquents; frequently flooded (#14) is a very poorly drained, nearly level soil found on flood plains of rivers and creeks. Slopes are smooth to concave or convex and range from 0 to 2 percent. Color, texture and thickness of the soil layers are variable within short distances. Texture ranges from sand to clay and thickness of layers ranges from 2 to 30 inches. The water table is at a depth of less than 10 inches for 4 to 6 months and within a depth of 40 inches for 9 to 12 months. More than once every 2 years the soils are flooded for a period of 7 to 30 days. Available water capacity is medium to high in the loamy and clayey layers and low in the sandy layers. Permeability is rapid in the sandy layers and moderate to very slow in the loamy and clayey layers.

Riviera fine sand (#38) is a nearly level, poorly drained soil found in hammocks and along drainageways. Typically, the surface layer of this soil type is dark grayish brown fine sand about 5 inches thick. The water table for this soil type is at a depth of less than 10 inches for 2 to 4 months in most years, and at a depth of 10 to 30 inches for most of the rest of the year. The permeability of this soil type is rapid in the surface and subsurface layers, slow to very slow in the subsoil, and rapid in the substratum.

Susanna and Wauchula sands (#43) is a very deep, poorly drained, very slowly permeable soil found on broad flats of central and southern Florida. This soil is formed in sandy and loamy marine sediments. A water table is within depths of 10 inches for 1 to 4 months and within a depth of 40 inches for about 6 months in most years. It is perched above the spodic horizon early in the summer rainy season and after heavy rainfall in other seasons. During prolonged dry seasons, the water table recedes to below a depth of 40 inches.

Wabasso sand (#48) is a nearly level, poorly drained soil found in flatwood areas. Typically, the surface layer of this soil type is sand about 8 inches thick. It is black in the upper 4 inches and very dark gray in the lower 4 inches. The water table for this soil type is at a depth of less than 10 inches

for 1 to 4 months during the summer rainy season and between depths of 10 to 40 inches for 6 to 9 months in most years. The permeability of this soil type is rapid in the surface and subsurface layers and in the substratum and moderate to moderately slow in the dark sandy subsoil.

The Florida Association of Environmental Soil Scientists (FAESS) considers the main components in the Fluvaquents, frequently flooded (#14), Riviera fine sand, 0 to 2 percent slopes (#38), soil types associated with the site to be hydric. The FAESS also considers inclusions present in the Susanna and Wauchula sands (#43) and Wabasso sand, 0 to 2 percent slopes (#48) soil types associated with the site to be hydric. This information can be found in the Hydric Soils of Florida Handbook, Fourth Edition (March 2007).

LAND USE TYPES/VEGETATIVE COMMUNITIES

The subject site currently supports three (3) land use types/vegetative communities within its boundaries. These areas were identified utilizing the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, January 1999) (**Figure 5**). The upland land use types/vegetative communities on the site are classified as Open Land (190) and Woodland Pastures (213). The wetland land use type/vegetative community on the site is classified as Streams and Lake Swamps Bottomland (615). The following provides a brief description of the land use types/vegetative communities identified on the site.

Uplands:

190 Open Land

The southwestern corner of the project site is consistent with the Open Land (190) FLUCFCS classification. Vegetative species observed within this community include Bahia grass (*Paspalum notatum*), Bermuda grass (*Cynodon dactylon*), fountain grass (*Pennisetum setaceum*), cabbage palm (*Sabal palmetto*), beggars tick (*Bidens alba*), cogon grass (*Imperata cylindrica*), guinea grass (*Panicum maximum*), Caesar's weed (*Urena lobata*), lantana (*Lantana* spp.), and sword fern (*Nephrolepis* spp.).

213 Woodland Pastures

The eastern portion of the site is consistent with the Woodland Pastures (213) FLUCFCS classification. The vegetative species observed within this community include live oak (*Quercus virginiana*), laurel oak (*Quercus laurifolia*), dogfennel (*Eupatorium capillifolium*), John Charles's (*Hyptis verticillata*), cabbage palm (*Sabal palmetto*), prickly pear cactus (*Opuntia humifusa*), Caesar's Weed (*Urena lobata*), Greenbriar (*Smilax* spp.) and Virginia creeper (*Parthenocissus quinquefolia*).

Wetland:

615 Streams and Lake Swamps (Bottomland)

The western portion of the site and a portion of the southeastern corner of the site is consistent with the Streams and Lake Swamps (Bottomland) (615) FLUCFCS classification. Vegetative species observed within this community include bald cypress (*Taxodium distichum*), pond pine (*Pinus serotina*), red maple (*Acer rubrum*), dahoon holly (*Ilex cassine*), saw palmetto (*Serenoa repens*), common buttonbush (*Cephalanthus occidentalis*), water oak (*Quercus nigra*), laurel oak (*Quercus laurifolia*), cinnamon fern (*Osmundastrum cinnamomeum*), swamp fern (*Blechnum serrulatum*), marsh pennywort, (*Hydrocotyle verticillata*), and spade leaf (*Centella asiatica*).

PROTECTED SPECIES

Using methodologies outlined in the Florida's Fragile Wildlife (Wood, 2001); Measuring and Monitoring Biological Diversity Standard Methods for Mammals (Wilson, et al., 1996); and Florida Fish and Wildlife Conservation Commission's (FWC's) Gopher Tortoise Permitting Guidelines (April 2023); an assessment for listed floral and faunal species was conducted at the site on February 8th, 2024 (**Figure 6A**). This assessment included both direct observations and indirect evidence, such as tracks, burrows, tree markings and vocalizations which indicated the presence of species observed. The assessment focused on species that are listed by the FWC's Official Lists - Florida's Endangered and Threatened Species (December 2022) and listed species that have the potential to occur in St. Lucie County (**see attached Table 1**).

Three (3) species identified on the site are listed as commercially exploited by the FDACS. The harvesting of these species, cinnamon fern (*Osmundastrum cinnamomeum*), royal fern (*Osmunda regalis* var. *spectabilis*) and saw palmetto (*Serenoa repens*) for commercial gain is prohibited. The FDACS protection of listed plant species centers on preventing the illegal collection, transport and sale of the listed plants. The FDACS will issue permits for collection purposes. There are no regulations that prohibits the destruction of state-listed flora species as a result of proposed development activities.

The following is a list of those wildlife species identified on the site during the evaluation of the property:

Reptiles and Amphibians

brown anole (*Anolis sagrei*)

Birds

American Crow (*Corvus brachyrhynchos*)
American Robin (*Turdus migratorius*)
Blue Jay (*Cyanocitta cristata*)
Common Grackle (*Quiscalus quiscula*)
Mourning Dove (*Zenaida macroura*)
Northern Mockingbird (*Mimus polyglottos*)
Red-bellied Woodpecker (*Melanerpes carolinus*)
Turkey Vulture (*Cathartes aura*)

Mammals

eastern cottontail (*Sylvilagus floridanus*)
eastern gray squirrel (*Sciurus carolinensis*)
nine-banded armadillo (*Dasypus novemcinctus*)
North American raccoon (*Procyon lotor*)
opossum (*Didelphis virginiana*)

The wildlife surveys conducted within the subject site boundaries do not preclude the potential for any listed species, currently or in the future. The following listed species were not observed on-site, but have the potential to occur:

American Alligator (*Alligator mississippiensis*)

Federally Threatened “Due to Similarity of Appearance” by USFWS

Due to strict conservation measures and extensive research, the American alligator is no longer endangered except in scattered areas of its range. However, the American alligator is listed as threatened on the U.S. Endangered Species List because it is very similar in appearance to the American crocodile (*Crocodylus acutus*), which is endangered. No further action is anticipated for the presence of the American alligator.

Bald Eagle (*Haliaeetus leucocephalus*)

State protected by F.A.C. 68A-16.002 and federally protected by both the Migratory Bird Treaty Act (1918) and the Bald and Golden Eagle Protection Act (1940)

In August of 2007, the US Fish and Wildlife Service (USFWS) removed the Bald Eagle from the list of federally endangered and threatened species. Additionally, the Bald Eagle was removed from FWC’s imperiled species list in April of 2008. Although the Bald Eagle is no longer protected under the Endangered Species Act, it is still protected under the Bald and Golden Eagle Protection Act, the Migratory Bird Treaty Act, and FWC’s Bald Eagle rule (Florida Administrative Code 68A-16.002 Bald Eagle (*Haliaeetus leucocephalus*)).

In May of 2007, the USFWS issued the National Bald Eagle Management Guidelines. In April of 2008, the FWC adopted a new Bald Eagle Management Plan that was written to closely follow the federal guidelines. In November of 2017, the FWC issued “A Species Action Plan for the Bald Eagle” in response to the sunset of the 2008 Bald Eagle Management Plan. Under the USFWS’s management plans, buffer zones are recommended based on the nature and magnitude of the project or activity. The recommended protective buffer zone is 660 feet or less from the nest tree, depending on what activities or structures are already near the nest. As provided within the above referenced Species Action Plan, the USFWS is the regulating body responsible for issuing permits for Bald Eagles. In 2017, the need to obtain a State permit (FWC) for the take of Bald Eagles or their nests in Florida was eliminated following revisions to F.A.C. 68A-16.002. A USFWS Bald Eagle “Non-Purposeful Take Permit” is not needed for any activity occurring outside of the 660-foot buffer zone. No activities are permitted within 330 feet of a nest without a USFWS permit.

In addition to the on-site evaluation for listed species, BTC conducted a review of FWC’s database (2015-2016 Nesting Season) and Audubon’s Eagle Watch program database (2022 Nesting Season) for recorded Bald Eagle nests within the surrounding 660 feet of the subject site (**Figure 6B**). This review revealed that there are no Bald Eagle nests within 660 feet of the project site boundaries. Thus, no developmental constraints are expected with respect to Bald Eagle nests unless a new nest is found.

Little Blue Heron (*Egretta caerulea*), Reddish Egret (*Egretta rufescens*), Roseate Spoonbill (*Platalea ajaja*) & Tricolored Heron (*Egretta tricolor*)

State Listed as “Threatened” by FWC

For the purposes of this report, four species of ‘wading bird’ have been consolidated into one (1) group. Each is listed in the state of Florida as a “Threatened” due to historically aggressive hunting practices and habitat loss. Currently, the majority of wading bird habitat tends to be federally protected wetlands under the ‘Clean Water Act’ and the Florida’s ‘Wetland Resource Permitting Program.’

None of the species were observed in the wetlands located within the subject property at the time of the survey. These species nest as a colony (rookery) and there are no know nearby colonies. There are no protection requirements for these species unless they are observed nesting on the site. There were no birds observed nesting during the survey conducted. As such, it does not appear that these species would be adversely affected by development of the property.

Wood Stork (*Mycteria americana*) – Core Foraging Area
State & Federally listed as “Threatened” by FWC & USFWS

The subject site is located within a Wood Stork Nesting Colony Core Foraging Area (Figure 6B). Wood Storks typically nest colonially in medium to tall trees that occur in stands located either in swamps or on islands surrounded by relatively broad expanses of open water (Ogden 1991; Rodgers et al. 1996). The Wood Stork (*Mycteria americana*) is listed as “Threatened” by the USFWS. Wood storks are large, long-legged wading birds, about 45 inches tall, with a wingspan of 60 to 65 inches. Their plumage is white except for black primaries and secondaries and a short black tail. The head and neck are largely un-feathered and dark gray in color. The bill is black, thick at the base, and slightly decurved. Wood Storks are birds of freshwater and estuarine wetlands, primarily nesting in cypress or mangrove swamps.

Successful breeding sites are those that have limited human disturbance and low exposure to land-based predators. Because of their specialized feeding behavior, Wood Storks forage most effectively in shallow-water areas with highly concentrated prey. Typical foraging sites for the Wood Stork include freshwater marshes, depressions in cypress heads, swamp sloughs, managed impoundments, stock ponds, shallow-seasonally flooded roadside or agricultural ditches and narrow tidal creeks or shallow tidal pools. Good foraging conditions are characterized by water that is relatively calm, open, and having water depths between 5 and 15 inches (5 and 38 cm). The U.S. Fish and Wildlife Service (Service) has identified core foraging area (CFA) around all known Wood Stork nesting colonies that is important for reproductive success. In Central Florida, CFAs include suitable foraging habitat (SFH) within a 15-mile radius of the nest colony; CFAs in North Florida include SFH within a 13-mile radius of a colony. The Service believes loss of suitable foraging wetlands within these CFAs may reduce foraging opportunities for the Wood Stork.

Based on our review of available databases, the site is located within the CFA, but there is no record of a Wood Stork rookery on the site or within close proximity. The USFWS and the U.S. Army Corps of Engineers require that any impacts to on-site ditches and/or wetlands, which would eliminate a portion of the Wood Stork foraging habitat, be either mitigated through the purchase of mitigation credits or recreated elsewhere on-site so that there would be no net loss of Wood Stork foraging habitat.

SITE PLAN ANALYSIS & APPLICATION INFORMATION

Project Purpose

The purpose of the proposed project is to construct a residential community which includes single family homes, roads, stormwater management features, and amenity/recreation features. This site is within close proximity of major highways, Okeechobee Road and the Florida Turnpike. The site is directly and conveniently accessible via an established roadway, Gordy Road.

Wetlands and Surface Waters

The extent of all wetlands on the site were delineated by BTC in accordance with local, state and federal guidelines utilizing pink, “Bio-Tech Consulting” flagging tape. There are 18.045-acres of wetlands within the limits of the site. The on-site wetlands are located within the St. Lucie basin.

Direct Impacts

No direct wetland impacts are proposed.

Secondary Impacts

To preclude secondary impacts to habitat functions to the remaining wetlands on-site, the applicant will provide a 25 foot average, 15 foot minimum upland buffer adjacent to the remaining preserved wetlands.

Elimination & Reduction

No impacts are proposed to the wetlands or surface waters. Remaining wetlands and associated upland buffer will be preserved. Note these wetland areas are not proposed to be placed under conservation easement.

Erosion & Sediment Control

The applicant will implement and maintain erosion and sediment control measures both prior to and during the construction of each phase of development of the overall project. This practice will ensure that no adverse water quality impacts to receiving waters and adjacent lands will occur during the proposed work. Control measures will retain sediment on-site and prevent potential violations of State standards. Practices incorporated will be in accordance with Chapter 6 of the Florida Land Development Manual: A Guide to Sound Land and Water Management.

Cultural Resources

Coordination with the Florida Department of Historical Resources (DHR) has been initiated with a letter request. No response has been received to date on whether or not a formal cultural resource assessment survey (CRAS) is warranted for the property. Any correspondence received after the application has been submitted will be forwarded to the District for review.

Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 894-5969. Thank you.

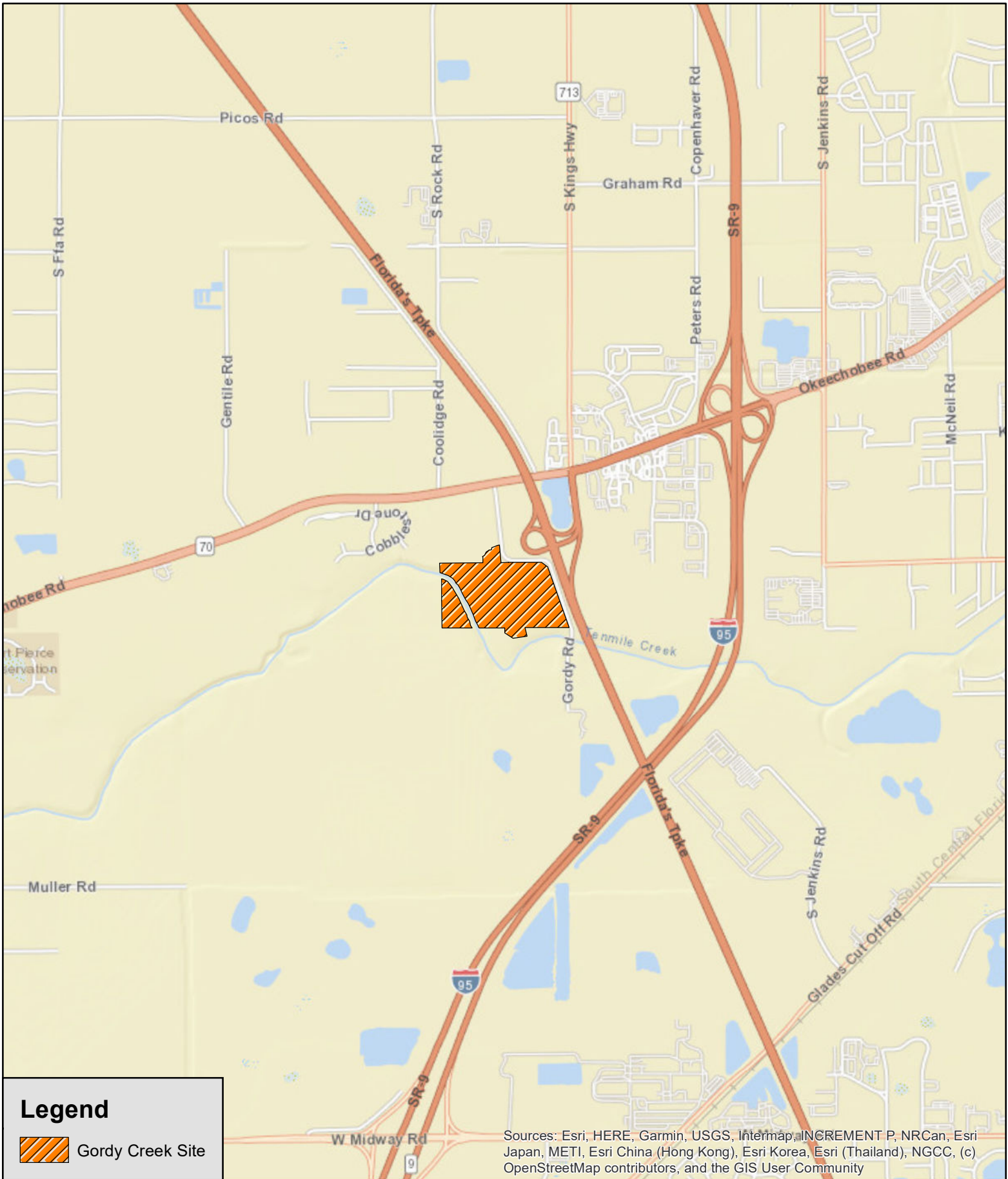
Regards,

Sophie Wild


Sophie Wild
Environmental Scientist III

Attachments:

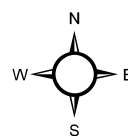
- Figure 1 – Location Map
- Figure 2 – Aerial Map
- Figure 3 – USGS Topographic Map
- Figure 4 – SSURGO Soils Map
- Figure 5 – FLUCFCS Map
- Figure 6 – Wildlife Proximity
- Figure 7 – Wetlands Map



Legend

 Gordy Creek Site

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

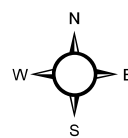


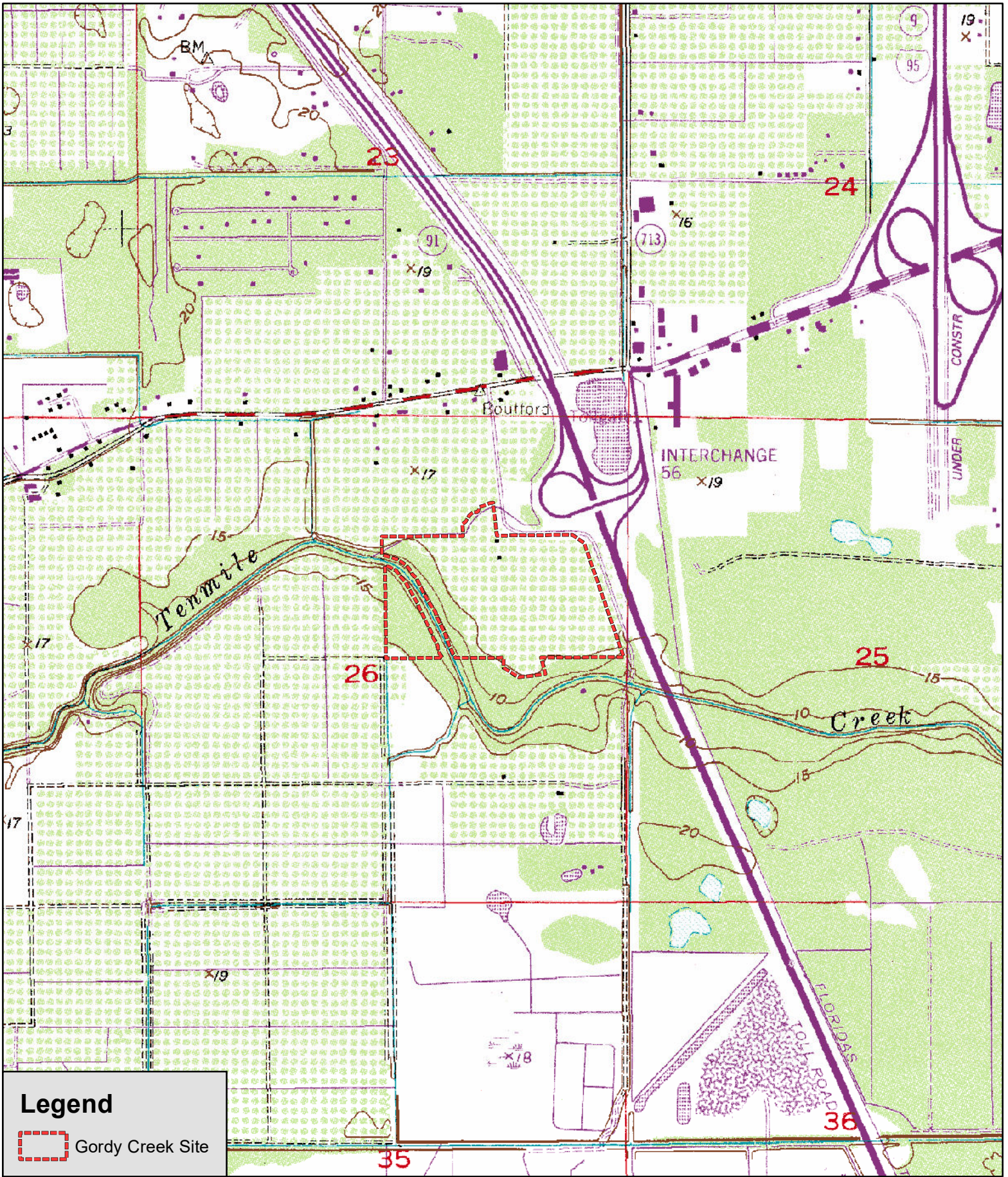


Legend

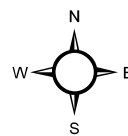
 Gordy Creek Site (± 75.98 Ac.)

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



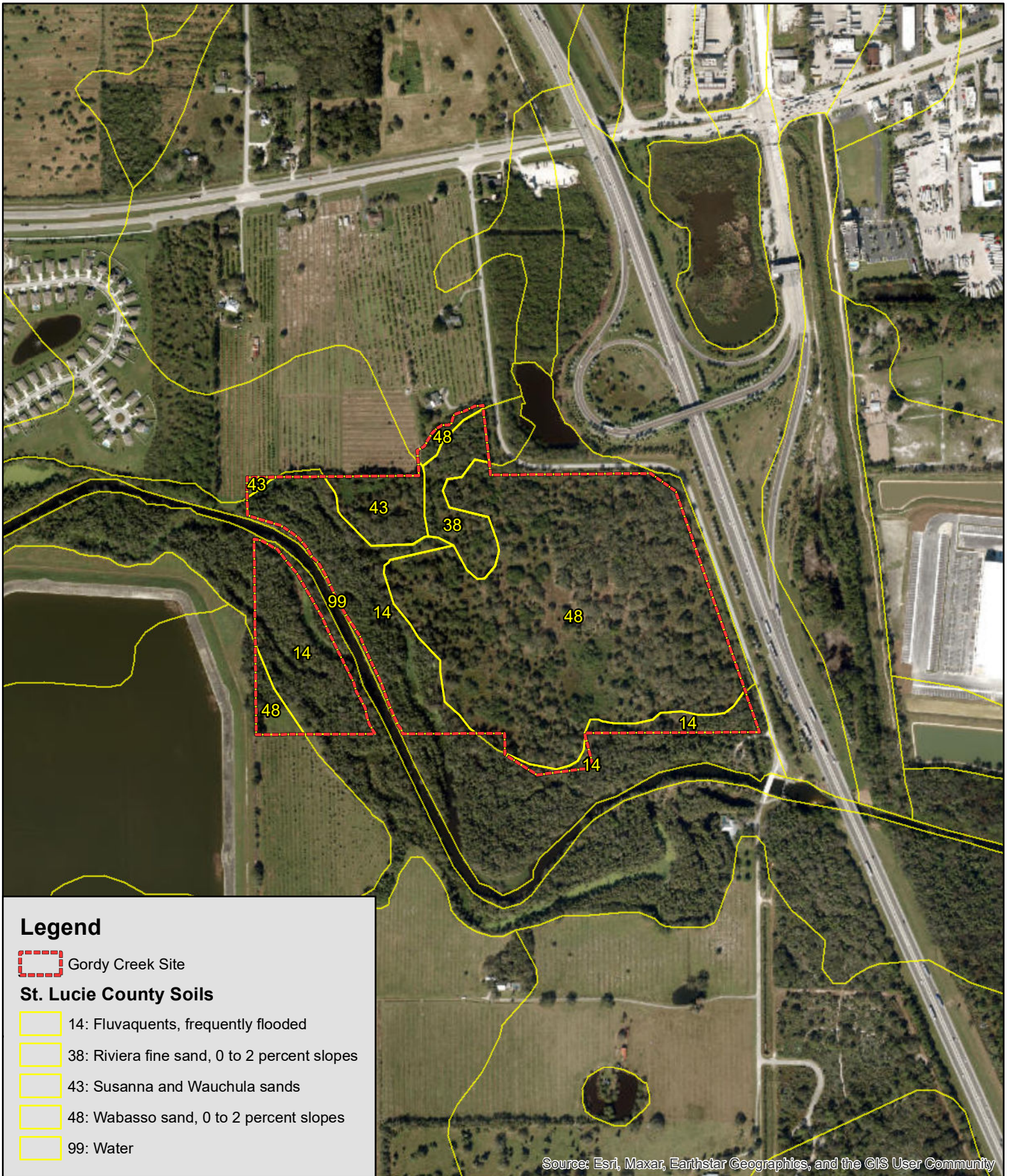


Gordy Creek Site
 St. Lucie County, Florida
 Figure 3
 USGS Topographic Map




1,500 Feet






Project #: 1162-03
 Produced By: JDH
 Date: 2/8/2024



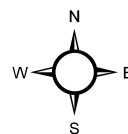
Legend

 Gordy Creek Site

St. Lucie County Soils

-  14: Fluvaquents, frequently flooded
-  38: Riviera fine sand, 0 to 2 percent slopes
-  43: Susanna and Wauchula sands
-  48: Wabasso sand, 0 to 2 percent slopes
-  99: Water

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



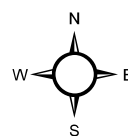


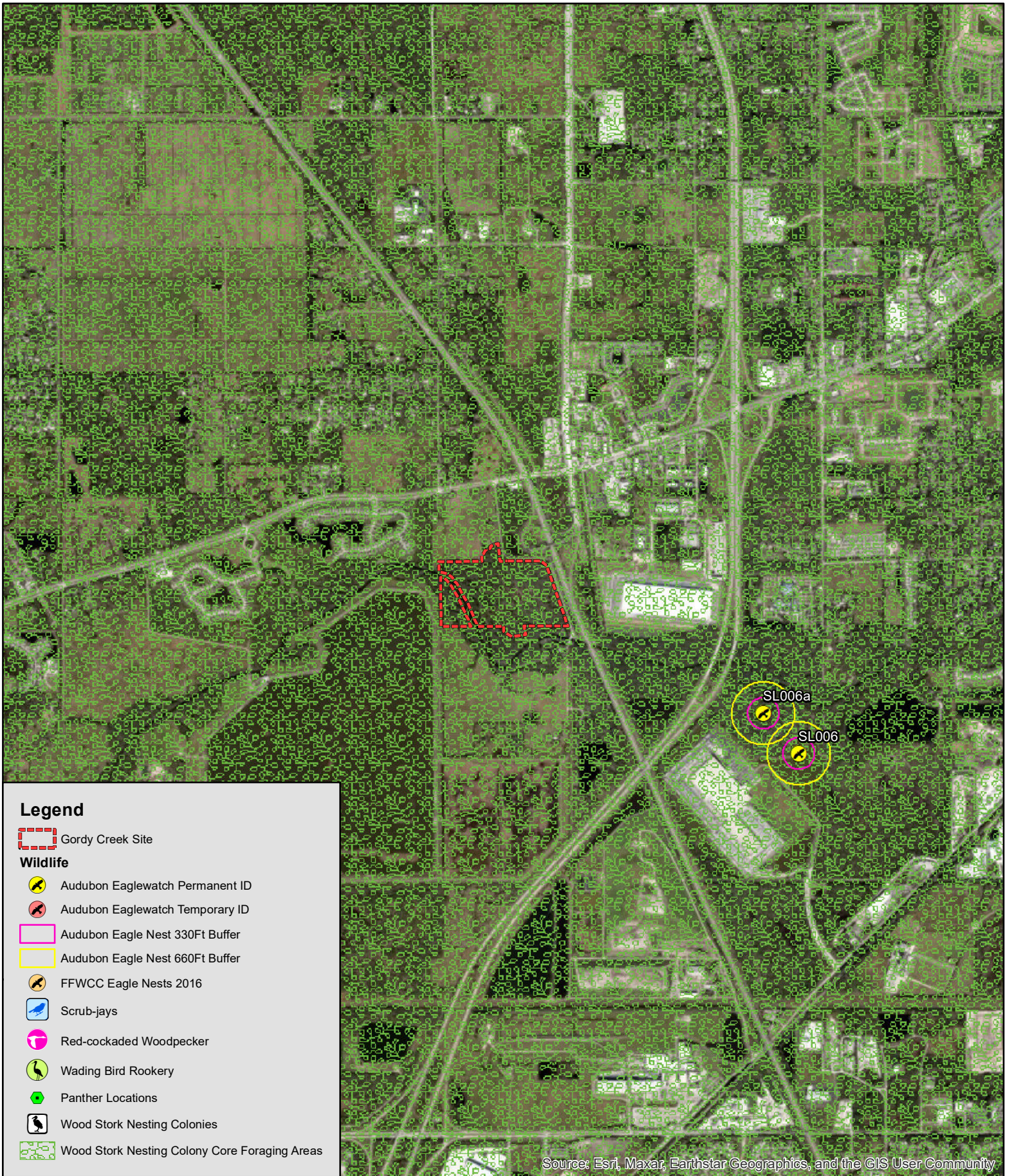
Legend

FLUCFCS

- 190: Open Land
- 213: Woodland Pastures
- 615: Streams & Lake Swamps (Bottomland)

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





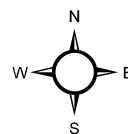
Legend

Gordy Creek Site

Wildlife

- Audubon Eaglewatch Permanent ID
- Audubon Eaglewatch Temporary ID
- Audubon Eagle Nest 330Ft Buffer
- Audubon Eagle Nest 660Ft Buffer
- FFWCC Eagle Nests 2016
- Scrub-jays
- Red-cockaded Woodpecker
- Wading Bird Rookery
- Panther Locations
- Wood Stork Nesting Colonies
- Wood Stork Nesting Colony Core Foraging Areas

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





0.5
 Miles

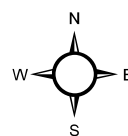
Project #: 1162-03
 Produced By: JDH
 Date: 2/8/2024



Legend

-  Gordy Creek Site
-  Wetland Boundaries (18.045 Ac.)

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



Section C: Supplemental Information for Works or Other Activities In, On, or Over Wetlands and/or Other Surface Waters

Instructions: **This section is for applications that do not involve activities associated with an individual single-family residence, duplex, triplex, or quadruplex. For those activities, please use Section B.** This form is to be completed if the proposed work or activity will occur in, on, over, or within 25 feet of a wetland or other surface water. The supplemental information required by this section is in addition to the information required by Section A of the application.

Part 1: Wetland or Other Surface Water Impact Summary

1. Describe the basic purpose of the project or activity: **construction of residential development and associated stormwater management system.**
2.
 3. Total area of work (dredging, filling, construction, alteration, or removal) in, on, or over wetlands or other surface waters: 0 sq. ft.;
 4. Total volume of material to be dredged or filled in wetlands or other surface waters:
 - a. to be dredged: 0 cubic yards,
 - b. to be filled: 0 cubic yards.
 5. Identify the seasonal high water level (SHWL) and wetland normal pool elevations for each wetland or surface water within the project site. For tidal wetlands and/or surface waters provide the elevation of mean high and mean low water. Include an aerial photograph showing the location of each sampling location, dates, datum, and methods used to determine these elevations. **TBD**
 6. Name of waterbody(ies) (if applicable & if known) in which work will occur? **Unnamed wetlands.**
 7. Is the activity proposed in an Outstanding Florida Water or Aquatic Preserve?
 yes, name: no I don't know
 8. Has there ever been a formal or informal wetland determination for the project site? If yes, provide the identifying number and/or a copy of the jurisdictional map. **Application No. 220304-33444, Permit No. 56-107122-P**
 9. Provide a map(s) of the project area and vicinity delineating USDA/NRCS soil types. **See attached.**
 10. Provide recent aerials legible for photointerpretation (no photocopies) with a scale of 1" = 400 ft, or more detailed, with project boundaries and wetland boundaries delineated on the aerial. **See attached figures.**
 11. Provide maps accurately portraying the existing and proposed natural vegetative community types and land cover classifications using recognized classification schemes. Suggested sources include: the Florida Natural Areas Inventory Guide to the Natural Communities of Florida (2010) available at



<http://www.fnai.org/naturalcommguide.cfm>, or the Florida Land Use and Cover Classification System (FLUCCS) (FDOT 1999, available at <http://www.dot.state.fl.us/surveyingandmapping/documentsandpubs/fluccmanual1999.pdf>). For vegetated areas dominated by exotic vegetation, use the descriptors representative of the native community type that was present prior to exotic infestation.

12. Impact Summary Tables (located at the end of this section):
 - a. For all projects, complete Table 1, 2 and 3 as applicable. **Attached**
 - b. For shoreline stabilization projects, provide the information requested in Table 4. **N/A**

13. If the activity is located on state owned submerged lands and requires a lease or easement, provide a list of names and addresses from the latest county tax assessment roll of all property owners located within a 500 ft. radius of the proposed lease or easement boundary in mailing label format, or you may elect to send notice to those persons by certified mail, with the return-receipt card addressed to the DEP or water management district, as applicable, in accordance with subsection 18-21.005(3), F.A.C., and Section 253.115, F.S. Attach additional sheets if necessary.
 1. Name:
Mailing Address:
City, State, Zip Code:

 2. Name:
Mailing Address:
City, State, Zip Code:

 3. Name:
Mailing Address:
City, State, Zip Code:

 4. Name:
Mailing Address:
City, State, Zip Code:

 5. Name:
Mailing Address:
City, State, Zip Code:

 6. Name:
Mailing Address:
City, State, Zip Code:

Part 2: Environmental Considerations

Note: for many questions, a state statute/Applicant's Handbook Volume I (AH I)/State 404 Program Applicant's Handbook section is cited to assist the applicant in addressing these questions.

1. Elimination or Reduction of Impacts (Avoidance and Minimization). Describe measures taken to eliminate or reduce impacts to wetlands and other surface waters (*Refer to AH I Section 10.2.1*). **see attached report.**

2. Fish, Wildlife, Listed Species, and their Habitats. Provide results of any wildlife assessments that have been conducted on the project site and provide any comments, biological opinions, formal or informal consultation decisions, or recommended actions you have received pertaining to the project from the

Florida Fish and Wildlife Conservation Commission, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service. (Refer to AH I Section 10.2.2). **see attached report.**

3. Water quantity impacts to wetlands and other surface waters (Refer to AH I Section 10.2.2.4 and AH II).
 - a. Does the activity include a proposed surface water management system with a control elevation different than the wetland normal pool elevation(s) of existing or proposed created wetlands or other surface waters? **No.**
 - b. If yes to (a), provide documentation (e.g. drawdown assessment or other methods) that shows the proposed surface water management system will not change the hydroperiod of the existing or created wetland or other surface water. **N/A**
4. Public Interest Test. Please describe how the proposed activity will **not be contrary** to the public interest, OR if such an activity significantly degrades or is located within an Outstanding Florida Water (OFW), that the regulated activity will be **clearly in** the public interest (Refer to AH I Section 10.2.3).
 - a. Please describe how the project will be designed to avoid adverse effects to public health, safety, or the welfare or the property of others. **The proposed residential development is consistent with existing subdivisions in the area. The design/construction will maintain community environments & stormwater management system will not cause flooding or water quality issues to adjacent property owners. Home lots, roads and amenities will be constructed in compliance with appropriate local code & ordinances.**
 - b. Please describe how the project will be designed to avoid adverse effects to the conservation of fish and wildlife, including endangered or threatened species, or their habitats. **Please see the attached report. No listed species were observed on-site.**
 - c. Please describe how the project will be designed to avoid adverse effects to navigation or the flow of water or cause harmful erosion or shoaling. **The proposed development, a residential subdivision with associated infrastructure, would not cause adverse effects to navigation, or cause erosion or shoaling. The proposed work would not impact navigational waters.**
 - d. Please describe how the project will be designed to avoid adverse effects to the fishing or recreational values or marine productivity in the vicinity of the activity. **The proposed development does not include any in-water work.**
 - e. Will the project be of a temporary or permanent nature? **Proposed activity is permanent.**
 - f. Please describe how the project will be designed to avoid adverse impacts to significant historical and archaeological resources, under the provisions of section 267.061, F.S. **The site does not contain any significant or historical resources. The permit will contain the general condition that the permittee must stop work and alert DHR and the proper authorities immediately if any unexpected discoveries of historic resources occur.**
 - g. Please describe how the project will be designed to avoid adverse effects to the current condition and relative value of functions being performed by areas affected by the proposed regulated activity. **The surface water flows and connections will be maintained to prevent adverse impacts to water levels and flows.**

5. Water Quality.
Provide a description of how water quality will be maintained in wetlands and other surface waters that will be preserved or will remain undisturbed, both on and offsite. Please address both short-term (such as during construction) and long-term water quality considerations (*Refer to AH I Section 10.2.4*). **The project surface water management system is designed to maintain water quality in wetlands and other surface waters onsite and offsite.**
6. Class II Waters; Waters approved for shellfish harvesting (*Refer to AH I Section 10.2.5*).
 - a. Will the project occur in Class II that are NOT approved for shellfish harvesting? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(a)*. **N/A**
 - b. Is the project located adjacent to or in close proximity to Class II waters? If yes, please provide a plan or procedure detailing the measures to be taken to meet the requirements of *AH I Section 10.2.5(b)*. **N/A**
 - c. Is the project located in Class II or Class III waters that are classified as “approved”, “restricted”, “conditionally approved”, or “conditionally restricted”? If yes, demonstrate that the project meets the requirements of *AH I Section 10.2.5(c)*. **N/A**
7. Vertical seawalls. Are vertical seawalls proposed in an estuary or lagoon as part of the project? If yes, please describe how the project meets the requirements of *AH I Section 10.2.6*. **N/A**
8. Secondary Impacts (*AH I Section 10.2.7*).
 - a. Will an upland buffer, with a minimum width of 15' and an average width of 25', be provided between the proposed activities and existing wetlands or wetlands to be preserved, enhanced, restored, or created? Provide the location and dimension of all buffers on the plans. If not, demonstrate that secondary impacts will not occur or describe how they will be offset. **See attached report.**
 - b. If listed species are present or may be present, then coordination with wildlife agencies is needed. Have you coordinated with the FFWCC and/or USFWS? If so, please provide correspondence from the wildlife agencies indicating concurrence with the species management plan(s). **BTC adheres to all recommendations provided by FFWCC and/or USFWS, and regularly coordinates with both agencies to address concerns regarding listed species. To date, no comments or recommendations have been provided from either agency.**
 - c. What measures will be taken to avoid impacts to wetland-dependent wildlife and/or listed species that use uplands for nesting or denning? **BTC adheres to all recommendations provided by FFWCC and/or USFWS.**
 - d. Describe whether there are any other relevant activities that are very closely linked and causally related to any proposed dredging or filling in wetlands or other surface waters that have the potential to cause impacts to significant historical and archaeological resources. **N/A**
 - e. Are there additional future phases or extensions of the proposed activities that are not shown? If yes, please describe. **No**

9. Cumulative Impacts. Is the proposed mitigation located within the same drainage basin (*Refer to AH I Figures 10.2.8.1 – 10.2.8.5*) as the proposed wetland impacts? **N/A** If not, please submit a Cumulative Impact Evaluation in accordance with *AH I Section 10.2.8*.

10. Mitigation Plan (*Refer to AH I Section 10.3*).

a. If a mitigation bank is proposed to offset wetland/other surface water impacts, provide:

- i. the name of the bank: **N/A**. A letter of reservation from the banker will be required once the application has been evaluated.
- ii. If the mitigation bank was assessed using UMAM, provide UMAM worksheets for impact area(s). If the bank was assessed using a method other than UMAM, then prepare the impact assessment using the same method. **N/A**

b. If mitigation is proposed to offset wetland/other surface water impacts, please provide a mitigation plan that includes, at a minimum, the following:

- i. Proposed mitigation narrative:
 - (1) Describe the current and proposed condition for each type of mitigation component (restoration, enhancement, creation, preservation), including:
 - (a) Describe current and proposed vegetation
 - (b) Describe current and proposed hydrologic conditions for the proposed mitigation.
 - (c) Describe the soil types from NRCS maps and confirm if actual soil conditions appear to match.
 - (2) Provide details of the proposed construction/mitigation activities including phasing and timing, as appropriate.
 - (3) Identify measures that will be implemented during and after construction to avoid adverse impacts related to the proposed activities.
 - (4) A mitigation implementation and monitoring schedule with dates.
 - (5) Identify the success criteria.
 - (6) Describe the anticipated site conditions in and around the mitigation area after the mitigation plan is successfully implemented.
 - (7) Provide a comparison of current fish and wildlife habitat to expected habitat after the mitigation plan is successfully implemented.
- ii. Provide a Management Plan that includes, as appropriate, aspects of operation and maintenance, including water management practices, vegetation establishment, exotic and nuisance species control, fire management, and control of access.
- iii. Maps:
 - (1) Soil map (include soil names/codes, hydrologic soil groups and hydric soil types).
 - (2) Topographic map of the mitigation area and adjacent contributing and receiving areas.
 - (3) Hydrologic features map of the mitigation area and adjacent contributing and receiving areas.
 - (4) Vegetative communities map (using FLUCCS or other appropriate classification system).
 - (5) For all maps, identify source.

- iv. Provide the necessary supporting information for the application of sections 62-345.400 - .600 (Uniform Mitigation Assessment Method (UMAM)). To meet this requirement, submittal of UMAM worksheets is acceptable for impact and mitigation areas.
- v. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a draft Conservation Easement document or other form of restrictive covenant that provides for protection of the mitigation area in perpetuity. Standard forms, as described in subsection 62-330.301(6), F.A.C., are available from the Agency or on its website.
- vi. If onsite and/or offsite applicant-responsible mitigation is proposed, submit a cost estimate for completing the mitigation, including monitoring and maintenance.
- vii. If onsite and/or offsite applicant-responsible mitigation is proposed and the proposed mitigation exceeds \$25,000, please provide a draft financial assurance document. Standard forms, as described in subsection 62-330.301(5), F.A.C., are available from the agency or on its website.
- viii. Identify the entity responsible for monitoring, maintenance, and long-term stewardship of the mitigation area (i.e. the landowner or homeowner association, not the consultant or contractor that will do the work).

Note: If your project is in retained waters, it is highly recommended that you coordinate the design of any mitigation plan that also may be required for the Corps permit to meet the requirements of both permits. Pre-application meetings with both the applicable Agency and the Corps can help you to choose a mitigation option that is acceptable to both the applicable Agency and the Corps.

Part 3: Plans

Plans: The information listed in the checklist below represents the typical information required on the submitted project plans. The Plans checklists in each application section are cumulative unless otherwise noted. Separate plans for each application section are not required.

1. Include the following on the construction plans and cross sections:
 - a. An Existing Conditions sheet showing the entire project and wetland/other surface water boundaries. Include the following: Acreage and type (herbaceous, forested or other surface water) of each wetland/other surface water.
 - b. A Proposed Conditions sheet showing the entire project and wetland/other surface water boundaries with construction plan overlay.
 - c. A Proposed Wetland Impact sheet that includes the following:
 - i. Acreage and type (herbaceous, forested, or other surface water) of each wetland/other surface water to be impacted.
 - ii. Proposed upland buffers with dimensions.
 - iii. Identify the seasonal high water and wetland normal pool elevations on the plans.
 - d. Include wetland boundaries on all construction plan sheets.
2. If onsite and/or offsite applicant-responsible mitigation is proposed, submit mitigation plans and cross sections including, at a minimum:

- a. existing conditions plan sheet identifying upland and wetland communities and acreage of each, topography, drainage patterns, and location of cross-section detail.
- b. proposed conditions plan sheet identifying proposed improvements by type (restoration, enhancement, creation, preservation), acreage of each, topography, drainage patterns, and location of cross-section detail.
- c. monitoring plan sheet including proposed improvements, monitoring transects, photostations, and mitigation signage (if applicable).
- d. cross-section and/or profile detail(s) sheet(s) including representative section of each type of mitigation component. Include existing and proposed conditions and representative elevations.
- e. planting schedule, plant species including common and scientific names divided into three sections (canopy, shrub, herbaceous) by mitigation component, quantity, spacing, size, and elevation range.

Table 1 - Project Wetland (WI) And Other Surface Water (SW) And Impact Summary

| WL & SW ID | UMAM ASSESSMENT AREA NAME(S) | WL & SW TYPE | WL & SW SIZE (acres) | WL & SW NOT IMPACTED (acres) | TEMPORARY WL & SW IMPACT SIZE (acres) | TEMPORARY WL & SW IMPACT TYPE | PERMANENT WL & SW IMPACT SIZE (acres) | PERMANENT WL & SW IMPACT TYPE | MITIGATION ID |
|------------------------|------------------------------|--------------|----------------------|------------------------------|---------------------------------------|-------------------------------|---------------------------------------|-------------------------------|---------------|
| WL-1 | | 615 | 18.045 | 18.045 | 0 | N/A | 0 | 0 | N/A |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| PROJECT TOTALS: | | | | | | | | | |

Comments:

Codes (multiple entries per cell not allowed):

- Wetland & Surface Water ID: Include ID on submitted wetland and surface water impact maps
- Wetland Type: from an established wetland classification system
- Impact Type: D=dredge; F=fill; H=change hydrology; S=shading; C=clearing; O=other

Table 2 - Project On-Site Mitigation Summary

| MITIGATION ID | UMAM ASSESSMENT AREA NAME(S) | TARGET TYPE | CREATION AREA (acres) | RESTORATION AREA (acres) | ENHANCEMENT AREA (acres) | WETLANDS PRESERVE AREA (acres) | UPLAND PRESERVE AREA (acres) | OTHER AREA (acres) |
|------------------------|------------------------------|-------------|-----------------------|--------------------------|--------------------------|--------------------------------|------------------------------|--------------------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| PROJECT TOTALS: | | | | | | | | |

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Table 3 - Project Off-Site Mitigation Summary

| MITIGATION ID | UMAM ASSESSMENT AREA NAME(S) | TARGET TYPE | CREATION AREA (acres) | RESTORATION AREA (acres) | ENHANCEMENT AREA (acres) | WETLANDS PRESERVE AREA (acres) | UPLAND PRESERVE AREA (acres) | OTHER AREA (acres) |
|------------------------|------------------------------|-------------|-----------------------|--------------------------|--------------------------|--------------------------------|------------------------------|--------------------|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| PROJECT TOTALS: | | | | | | | | |

COMMENTS:

Codes (multiple entries per cell not allowed):

- Target Type or Type=target or existing habitat type from an established wetland classification system or land use classification for non-wetland mitigation

Table 4 - Shoreline Stabilization

| Stabilization | Linear Ft. New | Linear Ft. Replaced | Linear Ft. Repaired | Linear Ft. Removed | Slope H: V: | Toe Width (Ft.) |
|--|-------------------|------------------------|------------------------|-----------------------|-------------------|--------------------|
| Natural Vegetation (living shoreline) | | | | | N/A | N/A |
| Rip Rap + Vegetation | | | | | | |
| Rip Rap | | | | | | |
| Seawall + Rip Rap | | | | | | |
| Vertical Seawall | | | | | | |
| Other Shoreline Stabilization Type | | | | | | |

Size of Rip Rap

Type of Rip Rap