

CREEK CROSSING VOLUSIA COUNTY, FLORIDA

ENVIRONMENTAL IMPACT ANALYSIS

Prepared For:

**Volusia County
Growth and Resource Management
123 West Indiana Avenue, Room 202
DeLand, Florida 32720**

Prepared By:



**410 North Street
Unit 130
Longwood, FL 32750**

November 2025

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1.0 INTRODUCTION

Pursuant to Section 72-300(b), of the Zoning Ordinance, and Section 72-505(i), of the Volusia County Land Development Code, an environmental impact analysis was performed on the proposed development known as Woodruff Ridge.

The Land Development Code requires information and findings pertaining to the following: wetland protection, tree protection, surface and stormwater management, land clearance, air quality, protection of environmentally sensitive land and critical habitat, and protection of endangered and threatened species.

The Creek Crossing project site ($\pm$ 127 acres) located immediately east of County Circle Drive E, west of Spruce Creek Boulevard, south of Taylor Road and north of Russell Road in Port Orange, Florida. More specifically, the project site is located in Section 36, Township 16 South and Range 32 East of Volusia County, Florida (Figure 1).

The subject property consists of a portion of Spruce Creek and adjacent wetlands. The upland portion of the property consists of a mixture of forested uplands with trails and open herbaceous areas of mixed rangeland.

On April 23rd & 24th, 2024, and April 21st & 29th, 2025, site surveys were conducted to assess the onsite conditions and to perform listed species surveys.

Pedestrian surveys were conducted in order to qualitatively document the existing vegetation and to assess the present land use patterns according to *the Florida Land Use, Cover and Forms Classification System, Department of Transportation* (FLUCFCS; DOT 1999). Eleven (11) land-use types were determined for the project site (Figure 2). A brief description of each FLUCFCS community is provided below.

110 – Residential

A single family residence is located on the 40-acre parcel along the southeast property boundary. The house is a single story structure with a storage shed and covered car port. This area is regularly mowed and maintained. Groundcover consists of bahia grass (*Paspalum notatum*) with some scattered landscaping shrubs and flowers. Farming equipment is scattered around the residence.

190 – Open Lands

Located in the westernmost portion of the property and is the main access point for the property. This area is regularly mowed and maintained with a monoculture of bahia grass. There is a dirt road to access the property within this habitat.

211 – Improved Pasture

This habitat is located on the southern 40 acre parcel. Groundcover is dominated by bahia grass. Other species observed included Caesar weed (*Urena lobata*), dog fennel (*Eupatorium capillifolium*), lantana (*Lantana camara*), torpedo grass (*Panicum repens*), greenbrier (*Smilax rotundifolia*), cogon grass (*Imperata cylindrica*), pepper vine (*Ampelopsis arborea*) and blackberry (*Rubus fruticosus*). A few live oak (*Quercus virginiana*) are scattered throughout this habitat. This area is grazed by cattle.

213 – Woodland Pasture

This upland habitat is present on the southwest portion of the 40-acre parcel. It is an area with dense tree species and no shrub vegetation and very little groundcover vegetation. Species observed include dense live oaks in the canopy with some scattered tropical soda apple (*Solanum viarum*), bahia grass and American beautyberry (*Callicarpa americana*) in the groundcover.

330 – Mixed Rangeland

Found throughout the center of the project site, this area has the highest elevations on site. The ground cover is low and consists of predominately bahia grass, grapevine (*Vitis rotundifolia*), Caesar weed (*Urena lobata*), and some broomsedge (*Andropogon virginicus*). The canopy cover was scattered and consists of slash pine (*Pinus elliottii*), live oak (*Quercus virginiana*), cabbage palms (*Sabal palmetto*), and some sweetgums (*Liquidambar styraciflua*), and a few sand pines (*Pinus clausa*).

427 – Live Oak

In the northeastern portion of the property adjacent to the golf course this habitat is dominated by mature live oaks. Groundcover is regularly mowed and maintained and consists of bahia grass and Caesar weed.

434 – Hardwood – Conifer Mixed

The largest upland habitat type found on site, this habitat has a dense canopy covered with a variety of species such as sweet gum, slash pine, pig nut hickory (*Carya glabra*), horn beam (*Carpinus caroliniana*), laurel oak (*Quercus laurifolia*), cabbage palm, and loblolly bay (*Gordonia lasianthus*). Other vegetation observed is moderately dense with saw palmetto (*Serenoa repens*), sparkle berry (*Vaccinium arboreum*), greenbrier (*Smilax rotundifolia*), bracken fern (*Pteridium aquilinum*), American beauty berry (*Callicarpa americana*), and patches of different grasses.

510 – Streams and Waterways

The southern portion of Spruce Creek runs along the western boundary of the property. The creek has steep side slopes on either side. Water was present and flowing with a white sand bottom, aquatic vegetation was not present throughout most of the creek. Edge vegetation consisted of red maple (*Acer rubrum*), cabbage palm, cypress (*Taxodium distichum*), and horn beam.

615 – Bottomland

This habitat is located immediately adjacent to Spruce Creek and appears to regularly flood. Groundcover was minimal and consisted of swamp fern (*Telmatoblechnum serrulatum*), netted chain fern (*Woodwardia areolata*), cinnamon fern (*Osmundastrum cinnamomeum*), lizards' tail (*Saururus cernuus*), red root (*Lachnanthes caroliana*), and soft rush (*Juncus effuses*).

617 – Mixed Wetland Hardwoods

This forested wetland habitat is found on the 40-acre parcel. It is a wetland strand, extending north / south through the center of the 40-acre parcel and on the northeast corner of the parcel. Tree species consist of water oak (*Quercus nigra*), laurel oak, red maple, slash pine (*Pinus elliottii*), dahoon holly, loblolly bay (*Gordonia lasianthus*), sweet bay (*Magnolia virginiana*), cabbage palm, and red bay (*Persea borbonia*). Groundcover was scarce, mostly consisting of leaf debris, with some vegetation being swamp fern, chalky bluestem (*Andropogon virginicus* var. *glaucus*), and greenbriar (*Smilax rotundifolia*).

643 – Wet Prairie

Located in the north central portion and the 40-acre parcel. Groundcover is low and consist of St. Augustine grass (*Stenotaphrum secundatum*), red root, little blue maiden cane (*Amphicarpum muehlenbergianum*), and marsh pennywort (*Hydrocotyle umbellata*). The edge habitat contains a few slash pines and American holly (*Ilex opaca*).

2.0 WETLAND PROTECTION

The onsite wetlands total 23.8 acres of wetlands and 2.26 acres of surface waters and consists of eight wetlands and four surface waters.

A portion of Spruce Creek is present on the west side of the property. Spruce Creek has Riparian Habitat Protection Zones established to protect the creek and associated wetlands. The setback from the creek edge is 275 feet. Approximately 63 acres is dedicated to preservation (wetlands and upland buffers) and will be placed under a conservation easement (please see the site plan).

A bridge crossing, necessary to provide access to the subject site, is the only impact proposed to Spruce Creek. The bridge will span the creek and wetland habitat side slopes.

3.0 TREE PROTECTION

A tree protection plan has been prepared for the proposed development. Please see the Specimen and Historic Tree Mitigation Plan for specific details.

4.0 SURFACE AND STORMWATER MANAGEMENT

A master stormwater management system has been designed by the project engineer, Evans Engineering, Inc. Please see the plan set for specific details.

5.0 LAND CLEARANCE

The project site does comply with County specimen tree (ST) preservation requirements per Sec. 72-843 of the Land Development Code (LDC).

A tree survey was performed for all trees at least 6 inches in diameter at breast height with specimen and historic trees noted. The tree survey must identify pine and hardwood trees by specific species.

A tree removal plan which indicates all trees planned for removal is provided (Please see Specimen and Historic Tree Mitigation Plan of the plan set for specific details).

Pursuant to Land Development Code Sec. 72-838, the project site meets the minimum tree coverage standard of one tree per 2,500 square feet of parcel area (rounded up to the nearest whole tree).

The plans include a tree protection detail consistent with Sec. 72-844 of the Land Development Code. The root zone of the tree is approximated by one foot of radius per inch of tree diameter.

Tree protection will be installed around the perimeter of each tree preservation area prior to clearing.

6.0 AIR QUALITY

Appropriate air quality best management practices will be implemented during the site clearing and mass grading of the proposed project site.

7.0 ENDANGERED AND THREATENED SPECIES

A survey of the project boundaries was conducted to assess the potential occurrence of flora and fauna listed as threatened or endangered by the United States Fish and Wildlife Service (USFWS), Florida Fish and Wildlife Conservation Commission (FWC), and the Florida Department of Agriculture (FDA). Tables 1 and 2 provide a listing of the species known to occur within Volusia County and their expected occurrence of the project site.

The survey was conducted by Ecological Consulting Solutions Inc (ECS) for the purpose of evaluating the site for the presence or absence of wetland habitat and protected flora and fauna or their habitat. The survey was conducted by means of pedestrian transects in the early morning to assure the potential of observing listed fauna as recommended by the FWC and the USFWS.

ECS biologists searched the USFWS database at <http://endangered.fws.gov> for the presence of critical habitats within the proposed project site. There are no critical habitats within the project boundaries.

ECS will determine the potential effect of listed species utilizing the Consultation Key direct project proponents through a series of couplets that will provide a conclusion or determination for potential effects to Florida listed species. Below is the list of determinations and there descriptions.

- **No effect** - The proposed site activity will not affect a listed species or its habitat. No follow-up surveys for these species are recommended as necessary.
- **May affect, not likely to adversely affect (MANLAA)** - The proposed action effects on listed species are expected to be discountable, insignificant, or completely beneficial. A pre-construction survey may be required to document species absence, to ensure minimization efforts are implemented (if present), or to permit the relocation of gopher tortoisies through the FWC.
- **May affect** – If the potential site activity may have an effect on listed species or their habitat. Coordination with the state or federal agency may be required to mitigate the project’s effect on a listed species.
- **Jeopardy** - The appropriate conclusion when a proposed action would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

The project site is occupied by as well as in the consultation range for multiple threatened and endangered species. These species and the proposed methods of protection of those species are listed below.

7.1 Gopher Tortoise

A cursory survey was conducted throughout the property for gopher tortoisies (*Gopherus polyphemus*), a species listed by the FWC as a Threatened. Twenty-three (23) gopher tortoise burrows were observed throughout the property. A 100% survey will be required to determine the actual number of burrows onsite.

Currently, there are four suitable options to conduct activities that may adversely impact tortoises. The options are to:

1. Avoid developing the area occupied by the tortoises.
2. Avoid individual burrow entrances to ensure the protection of the entire burrow, usually a distance of 25 feet. An FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them.

Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed “islands” or “crop circles”) and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed.

3. Capture and relocate the tortoises to a separate onsite location. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area during and following site development. The on-site recipient area should be a minimum of 750 square feet (e.g., 25ft x 30ft), with a minimum width of no less than 10 feet wide. At least half of the on-site recipient area must be located at a minimum of 25 feet away from the edge of clearing /grading, construction activities, and/or vehicular traffic.
4. Capture and relocate the tortoises to an offsite FWC-approved recipient site.

For gopher tortoise conservation permits, tortoises may be relocated to an on-site preserve at a density of up to two tortoises per acre of suitable upland habitat. For 10 or fewer burrows permits, up to five tortoises can be relocated into the onsite recipient area. Onsite recipient sites must be suitable set-aside areas that are not disturbed by construction activities, which provide a safe environment, and that exclude (through temporary fencing or other means) tortoises from development areas until such development activities have been completed.

Gopher tortoises need access to the following: 1) sufficient areas of forage (herbaceous and low-growing plants including native broadleaf grasses, legumes [bean/pea family], asters, blackberries and other fruits, prickly pear cactus, and a variety of other non-native grasses, except cogon grass); 2) sandy, well-drained, open (uncanopied), sunny sites for burrows and basking; 3) protection from dogs, cats, other predators, human harassment, roads and canals; 4) ability to roam freely, without barriers such as permanent 120 fencing that precludes access to suitable forage or burrowing habitat. Such general conditions must remain after development, outside the built footprint on the site.

Small sites typically have gopher tortoises that normally "roam" between adjoining neighboring parcels to forage or burrow, so this should be considered as well. The

herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area.

For onsite relocation of gopher tortoise conservation permits, a permanent FWC-approved easement is recommended to be placed over the onsite recipient area to be maintained in perpetuity. If the client elects not to put the land under easement, they will incur a significantly higher mitigation contribution fee in order to receive their permit.

If the project site does not have a dedicated onsite preserve for tortoises, then offsite relocation will be necessary. In this event, tortoises can be relocated by biologists to an FWC approved recipient site.

ECS biologists are authorized by the FWC to relocate gopher tortoises by various means including backhoe extraction. ECS also manages five (5) gopher tortoise recipient sites which are long-term protected sites.

The tasks associated with conducting an offsite relocation of tortoises would include reserving a yet to be determined number of acres at the recipient site, submitting an application to the FWC for the relocation, removing the tortoises from the donor site to the recipient site and reporting the results of the relocation to the FWC. Once the relocation permit is received, ECS can complete the relocation using either the backhoe or bucket trapping extraction methods.

7.2 Florida Scrub Jays

Florida scrub jays (*Aphelocoma c. coerulescens*) were not observed on the project site. This species is listed as threatened at the state and federal levels. The property does not contain scrub habitat. There were no open sandy patches of groundcover. The guidelines outlined in the *Ecology & Development-Related Habitat Requirements of the Florida Scrub Jay* (April 1991) were reviewed prior to the site visit to aid with the habitat assessment. ECS has determined that there will be **“No effect”** on Florida scrub jays or their habitat.

ECS reviewed the mapped locations of Florida scrub jays and the mapped habitat areas per Volusia County. The project is not within the mapped scrub jay habitat range. Scrub jay habitat is reported just north of the project site. ECS did not observe or hear Florida scrub jays during any of the site visits.

7.3 Eastern Indigo Snake

Concerning the eastern indigo snake, ECS conducted survey transects to identify potential aboveground and underground refugia, which eastern indigo snakes may inhabit. Underground refugia includes active or inactive gopher tortoise burrows, mammal burrows, hollows at the base of trees and other similar formations. Above ground refugia includes thick shrub formations, stumps, the base of thick palmetto, ground litter, brush piles, trash piles, and abandoned structures, and crevices of rock-lined ditch walls and other similar refugia.

Surveys for eastern indigo snakes are recommended by the USFWS during the time of October 01st through April 30th. There was no suitable refugia for the eastern indigo snake onsite. No eastern indigo snakes were observed. ECS has determined that there will be **“No effect”** on Eastern indigo snakes or their habitat. Approximately 63 acres of wetlands and upland buffers will be preserved onsite.

To determine if the site has an eastern indigo snake habitat will be up to the USFWS reviewer assigned to the project.

7.4 Wading Birds

Listed wading birds such as limpkin (*Aramus guarauna*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), wood stork (*Mycteria americana*), and white ibis (*Eudocimus albus*) were not observed. The onsite wetlands and surface waters provide high quality wetland habitat, and it is likely used by wading birds regularly. ECS has determined that there will be **“MANLAA”** on wading birds or their habitat.

Spruce Creek does provide suitable wading bird habitat. The only proposed impact to Spruce Creek will be a bridge crossing. Suitable habitat will remain onsite for wading birds. Both Spruce Creek and a 275 foot setback from Spruce Creek will remain undisturbed.

7.5 Sandhill Cranes

ECS has determined there is minimal potential nesting habitat for this species as there are no freshwater marshes onsite. ECS staff does recommend that surveys for nesting Florida sandhill cranes be conducted prior to construction activities and during the December through August breeding season. ECS has determined that there will be **“MANLAA”** on sandhill cranes or their habitat.

Per the FWC recommended guidelines; three surveys will be spaced at least 3 weeks apart during the breeding season. The objective of the surveys is to detect nesting activity: thus, if observers detect nesting sandhill cranes in a wetland on the first survey date, there is no need to conduct the second or third survey in that wetland. If active nests or flightless young are found, the applicant will coordinate with the FWC to discuss avoidance, minimization, and mitigation.

If no active nests or flightless young cranes are found, no further coordination is needed with the FWC regarding sandhill cranes during the ERP process.

The FWC has developed measures to protect the developer and to eliminate the need for an FWC Take permit of the nest.

The following measures will eliminate the need for an FWC take permit.

1. Avoid impacts to suitable natural wetlands used by sandhill cranes for breeding, feeding, or sheltering.
2. Avoid activities within 400 feet of an active nest.

If flightless young (chicks) are present in a wetland, avoid land use conversion in suitable upland habitat within 1500 feet of the nest site until after young are capable of sustained flight (i.e., young within first 70 days after hatching).

7.6 Bald Eagle

Bald eagles (*Haliaeetus leucocephalus*) or their nests were not observed on the site. Bald eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The USFWS has established a 660-foot protection zone around a bald eagle nest.

ECS searched the FWC website and the Audubon's Eagle Watch website to determine if any documented bald eagle nests are within 660 feet of the project site. There is no reported bald eagle nest in close proximity to the project site. ECS did not observe any bald eagle nests anywhere within the property boundaries.

Therefore, the project site is outside of the 660-foot eagle nest protection zone, and the development will not affect any bald eagle nests. ECS has determined that there will be "MANLAA" on Bald eagles or their habitat.

During the additional surveys necessary for this project site ECS biologists will observe and record any potential nests or eagle sitings.

8.0 CRITICAL HABITAT

The subject site does not contain any areas designated as critical habitat by the USFWS. The highest quality onsite habitat is Spruce Creek. As discussed within the report, Spruce Creek and its associated Riparian Habitat Protection Zone will be preserved. A total of 63 acres within the subject site will be preserved and placed under a Conservation Easement. The highest quality habitat will remain undisturbed with a large upland buffer. The preservation of Spruce Creek and associated upland buffers will provide for an uninterrupted wildlife corridor along the west side of the subject site.

9.0 SUMMARY

In summary, one listed species, the gopher tortoise, was observed within the project site. A 100% survey will be conducted and a permit to relocate the onsite gopher tortoise population will be obtained.

Wading bird nest surveys for nesting Florida sandhill cranes will be conducted prior to construction activities and during the December through August breeding season.

Prior to any land clearing or construction activities, the USFWS must be provided with an eastern indigo snake protection/education plan. The USFWS must approve the protection/education plan prior to construction. There were no other environmental concerns observed for this project.

Should you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,

ECOLOGICAL CONSULTING SOLUTIONS INC

A handwritten signature in blue ink that reads "Bill Griffy". The signature is written in a cursive style with a large, stylized "B" and "G".

Bill Griffy

FIGURES



LEGEND

 Project Boundary (±127.90 Acres)



CREEK CROSSING VOLUSIA COUNTY, FLORIDA PROJECT SITE LOCATION MAP

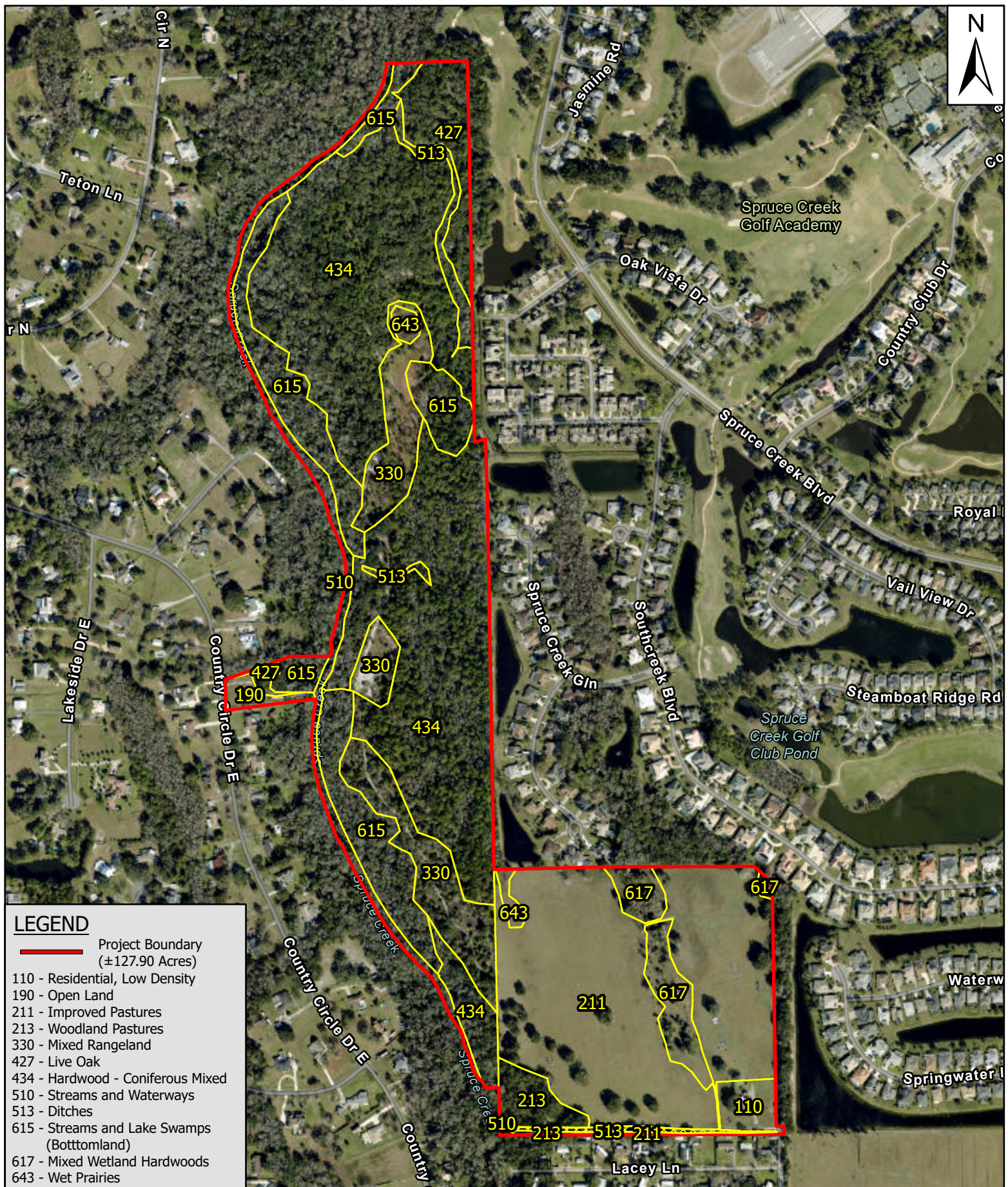
Project #: 1069.02.24 DATE: 05/27/25 FIGURE: 1

0 10,500 21,000 Feet

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JBD

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com





CREEK CROSSING VOLUSIA COUNTY, FLORIDA FLUCFCS MAP

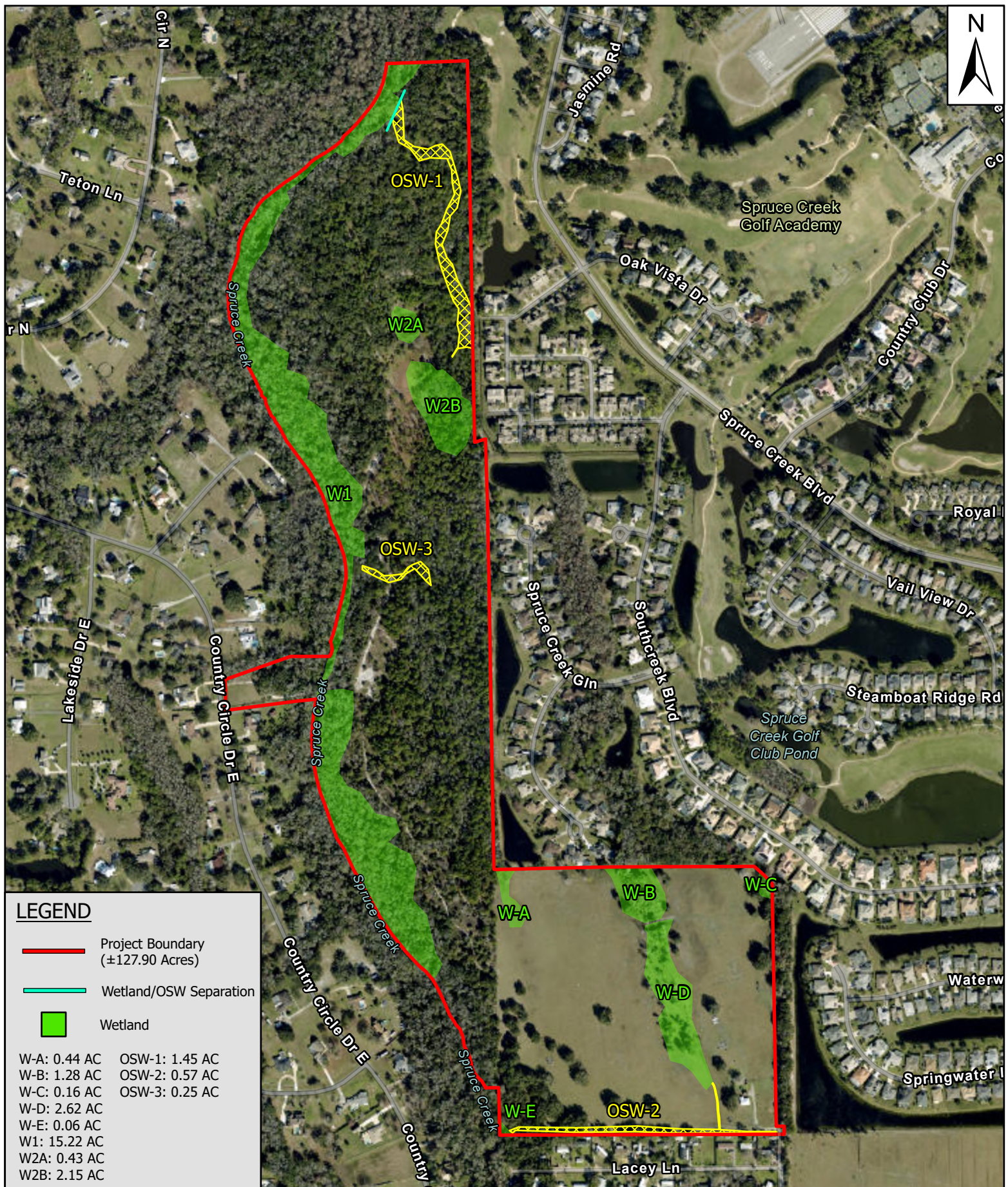
Project #: 1069.02.24 DATE: 06/17/25 FIGURE: 2

0 800 1,600 Feet

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CREEK CROSSING VOLUSIA COUNTY, FLORIDA WETLAND MAP

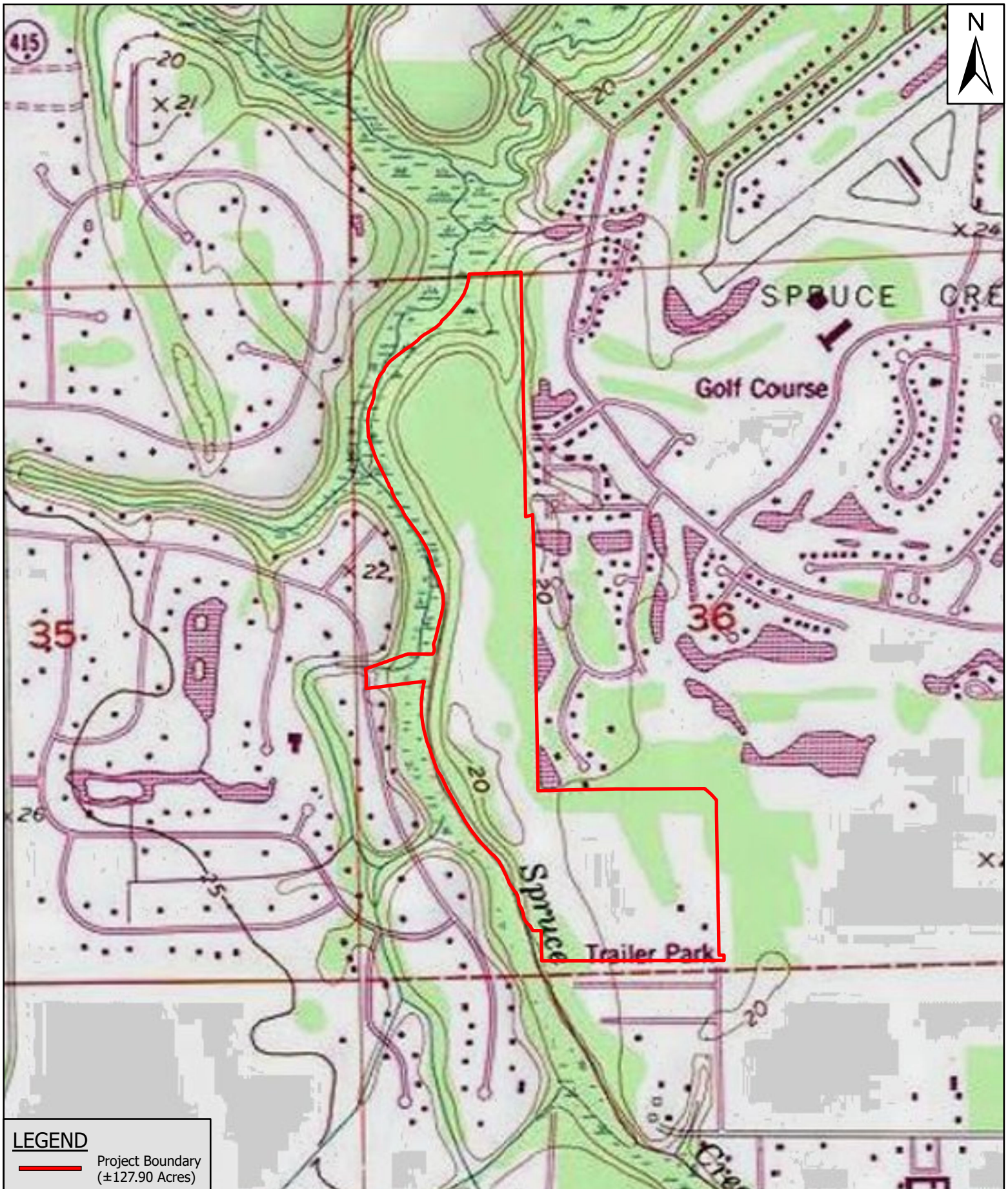
Project #: 1069.02.24 DATE: 06/24/25 FIGURE: 3

0 800 1,600 Feet

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**CREEK CROSSING
VOLUSIA COUNTY, FLORIDA
TOPOGRAPHY MAP**

Project #: 1069.02.24 DATE: 05/29/25 FIGURE: 4

0 1,250 2,500 Feet

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LEGEND

— Project Boundary
(±127.90 Acres)

13 - Cassia fine sand,
0 to 2 percent slopes

22 - Electra fine sand,
0 to 5 percent slopes

23 - Farmton fine sands

24 - Fluvaquents

48 - Placid fine sands, frequently ponded,
0 to 1 percent slopes

63 - Tavares fine sand,
0 to 5 percent slopes



CREEK CROSSING VOLUSIA COUNTY, FLORIDA NRCS SOILS MAP

Project #: 1069.02.24 DATE: 05/29/25 FIGURE: 5

0 500 1,000 Feet

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APPENDIX A

Creek Crossing Subdivision Conservation Management Plan

October 2025



PROJECT SUMMARY

The Creek Crossing subdivision, consisting of approximately 125.77 acres from the combined of two parcels (parcel IDs: 623600000050 and 623600000060) area located east of County Circle Drive E, to the north of Lacey Lane, south and west of the Reserve at Spruce Creek fly-in subdivision.

The project is proposed to develop single-family subdivision, which consists of 111 lots. This subdivision will be designed under the criteria of conservation subdivision, in which the total land area to be developed is not to exceed 40 percent. The remaining shall be designated as permanently protected open space, managed for either passive recreation, conservation purposes, or floodplain compensation. The homeowners' association or property owners' association will be required to enforce covenants and restrictions to ensure that all lands designated as open space are maintained and protected as specified in this Conservation Management Plan (CMP).

This CMP is prepared for Creek Crossing Subdivision to be reviewed and approved as part of the Overall Site Development Plan by Volusia County. The CMP provides general guidelines for stewardship activities that are intended to protect, and where appropriate restore, natural resources and provide for appropriate opportunities for public use.

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1.0 INTRODUCTION

More specifically, the project site is located in Section 36, Township 16 South and Range 32 East of Volusia County, Florida, See Project Location Map. The property is currently owned by Spruce Creek Crossing, LLC. This CMP is assigned to the homeowners' association or property owners' association to manage and protect and shall be incorporated by reference in the Conservation Easement and Covenants granted to Volusia County. Figure 2 outlines the area to be designated as conservation area.

1.1 CONSERVATION MANAGEMENT PLAN

The conservation area consists of approximately 63 acres designated as highly environmental resource lands. These areas were designated as Environmental Core Overlay (ECO) lands and managed for natural resource protection and preservation. Besides, there are approximately 14 acres of land that are designated as open spaces for passive and active activities where existing special vegetation species are proposed to be protected. This would add up to a total of 77 acres out of 125 acres (61%) of natural lands, water bodies and wetlands to be preserved. See Conservation Management Exhibit

All designated above will be recorded under the conservation easement, covenants and conservation management plans. The CMP establishes a continuing duty of care to manage the property consistent with the CMP, conservation covenants and easements enforceable against Spruce Creek Crossing, LLC, and their successors and assigns. All conservation easements and covenants shall be subject to this CMP and enforceable by Volusia County. This CMP is effective upon formal approval by the County Council and shall be incorporated into the conservation covenants and conservation easements for the purposes of enforcement of the provisions of the CMP.

1.2 CONSERVATION MANAGEMENT PLAN REQUIREMENTS

The CMP is to set resource protection standards and management protocols designed to ensure the long-term maintenance of the ecology and restoration of the area. Specific requirements are as follows:

The CMP shall establish conservation goals and objectives for diversified habitats within the conservation area which are consistent with respective habitat requirements, ecological communities, and other natural resources and resource requirements, as conditions associated with public access and passive recreational use. Listed below are required components of the CMP with a cross reference to the provision within this CMP where it is addressed at a minimum.

- a) A list of natural resource management objectives for the site and implementation methods that protect and enhance ecosystem integrity, function, and biodiversity.
- b) Identification of natural and cultural resources in need of protection.
- c) Description of natural communities and establish desired future conditions by specific habitat type.
- d) Identification of known threatened or endangered plants and animals occurring on site, as well as exotic species which may require special habitat protection.
- e) Provisions for significant water resources (such as streams, creeks, natural drainage ways, floodplains, and wetlands) protection, enhancement, restoration and planned hydrological restoration.
- f) Appropriate public access, and development of trails, including provisions for elevated roadways or wildlife crossings.

2.0 DESCRIPTION OF NATURAL RESOURCES

2.1 HYDROLOGY

The Creek Crossing property is within Spruce Creek basin. Spruce Creek flows along the western property line which includes a FEMA Regulatory Floodway, a FEMA 100YR Base Flood Elevation (BFE), and a Riparian Habitat zone. Along the path of Spruce Creek there are recorded wetlands and surface waters as well as several isolated wetlands in the project site. As mentioned above, there are two parcels whose drainage flow patterns explain as follows:

Parcel A is heavily forested and has various slopes sloping from east to the creek along the western boundary of the parcel. Stormwater sheet flows across Parcel A, the Woodside at Spruce Creek neighborhood has a series of swales that discharge to Parcel A where the stormwater travels along a ravine and into Spruce Creek. Per the National Wetlands Inventory, there are two unique wetland bodies located within the confines of Parcel A: Wetland PFO1c and PFO1/3Cd. Wetland PFO1c is the wetland body along Spruce Creek and Wetland PFO1/3Cd is an isolated depressional area that accumulates stormwater and eventually overtops where it discharges to Spruce Creek.

Parcel B is sparsely forested with large areas of open fields and clusters of trees along the southwest corner of the property with additional clusters in an isolated wetland in the middle of the parcel. The western third of the parcel is sloped towards the creek, with the middle third sloped towards the isolated wetland, and the eastern third sloped towards the east draining to a wet detention pond located in the adjacent Reserve at Spruce Creek neighborhood. This flows north through a series of interconnected wetlands in the Lakes at Spruce Creek and Reserve at Spruce Creek neighborhoods where it eventually discharges to Spruce Creek. Per FEMA FIRM panel #12127C0508J, dated September 29th, 2017, Parcel B is designated Zone "X", areas of minimal flood hazard.

2.2 SOILS

Per the site geotechnical investigation performed by UES Professional Solutions, LLC, there are seven native soil types mapped within the general area of the site according to the USDA NRCS Soil Resource Report. A summary of soil type is presented in Figure 3.

2.3 NATURAL COMMUNITIES

This information presented and discussed below was adopted and referenced from the recent study prepared by environmental engineer, Ecological Consulting Solutions, Inc. (ECS). ECS biologists have studied that the property uplands consists of improved pasture, a mixture of forested uplands with trails and open herbaceous area of mixed rangeland. In addition, figures included in Appendix below are referenced from ECS Environmental Assessment report.

Twelve land use types were determined within the 126.77-acre property. These land use types/vegetative communities were identified utilizing the Florida Land Use, Cover and Forms Classification System, Level III (FLUCFCS, FDOT, January 2004). The on-site upland land use types/vegetative communities are classified as Residential (110), Open Lands (190), Improved Pasture (211), Woodland Pasture (213), mixed rangeland (330), live oak (427) and hardwood conifer mixed (434).

2.4 WATER BODIES AND WETLANDS

The on-site wetland/surface water land use type/vegetative community is classified as Streams and Waterways (510), Ditch (513), Bottomland (615), Mixed Wetland Hardwoods (617), and Wet Prairie (643).

The onsite wetlands on the north parcel total 19.24 acres of wetlands and 1.69 acres of surface waters and consists of three wetlands and two surface waters. The onsite wetlands on the south parcel total 4.56 acres and 0.57 acres of surface waters and consists of five wetlands and two surface waters.

Parcel A

Wetland 1 (16.66 acres) is a portion of Spruce Creek and extends along the western boundary of the property. The creek has steep side slopes on either side. Water was present and flowing with a white sand bottom, aquatic vegetation was not present throughout most of the creek. The upper banks are forested and in good condition. This wetland is considered high quality.

Wetland 2A (0.43 acres) is an isolated herbaceous wetland located on the east side of the property. This wetland is frequently mowed, and vegetation height is only a few inches. Due to the mowing, this wetland is considered disturbed. There was no standing water present. This area more resembles an open pasture than a wetland and is considered low quality.

Wetland 2B (2.15 acres) is an isolated forested wetland located adjacent to the east property boundary. This wetland is degraded due to high density of slash pines that were likely historically planted in this wetland and surrounding uplands. Standing water was present in the wetland interior. Groundcover is dense pine duff. This wetland is considered average to low quality.

Two surface water ditches are present on the north parcel. Both ditches serve to collect runoff from the surrounding uplands and discharging into Spruce Creek.

Parcel B

Wetland A (0.44 acres) is an herbaceous wetland located on the northwest corner of the property. This wetland extends slightly offsite to the north. Vegetation is predominately grass species. There was no standing water present. Cattle grazing keeps the vegetation low in height. This wetland is considered low quality.

Wetland B (1.28 acres) and Wetland D (2.62 acres) are part of the same wetland system that extends north-south through the center of the parcel. Standing water was limited to isolated pools. A pond has been excavated in the north end of Wetland No. 4. Tree species are scattered throughout. Cattle keep the herbaceous vegetation low. These wetlands are considered moderate to low quality.

Wetland C (0.16 acres) is present on the northeast corner of the property. The onsite portion of the wetland is part of a larger wetland system that extends offsite to the east. This wetland is forested with very little groundcover species. No wetland shrub species are present. No standing water was present. This wetland is considered low quality.

Wetland No. E (0.06 acres) is a small portion of wetland habitat associated with Spruce Creek. This wetland area is considered high quality. Spruce Creek has Riparian Habitat Protection Zones established to protect the creek and associated wetlands.

2.5 ENDANGERED AND SPECIAL SPECIES

A survey was conducted by ECS biologists using pedestrian transects throughout the site to assess the occurrence of flora, fauna listed as threatened, endangered species and species of special concern by the Florida Fish and Wildlife Conservation Commission (FWC), United States Fish and Wildlife Service (USFWS), and Florida Department of Agriculture (FDA)

Birds

According to ECS biologists, who have performed a search for critical habitats on the USFWS database at <http://endangered.fws.gov> for the presence of critical habitats within the proposed project site. There are no critical habitats within the project boundaries. There are approximately 35 species (and sub-species) of birds found in Florida are protected by the FWC and/or the USFWS. For Volusia County, the USFWS federally lists five (5) bird species. None of the following birds were found on site.

- Florida scrub jays (*Aphelocoma c. coerulescens*), and Red-cockaded woodpeckers (*Picoides borealis*)
- Wading birds such as limpkin (*Aramus guarauna*), little blue heron (*Egretta caerulea*), tricolored heron (*Egretta tricolor*), wood stork (*Mycteria americana*), and white ibis (*Eudocimus albus*).
- Bald eagles (*Haliaeetus leucocephalus*)
- Southeastern American kestrels (*Falco sparverius paulus*) or Arctic peregrine falcons (*Falco peregrinus tundrius*)
- Florida sandhill cranes (*Grus canadensis pratensis*)

Amphibians and Reptiles

During ECS site investigation, it can be determined that there is no sand skink (*Neoseps reynoldsi*) were observed on site. Sand skink is listed as threatened by both FWS and FWC. The sand skink is primarily found in rosemary scrub, sand pine and oak scrub. Sand skinks require loose sand with a large area of no groundcover or canopy cover. The property is not within the sand skink consultation area.

Per ECS site investigation, there are gopher tortoises (*Gopherus polyphemus*), a species listed by the FWC as a Threatened were observed within the project boundary. There were many gopher tortoise burrows that were observed on site.

ECS conducted survey transects to identify potential aboveground and underground refugia, which eastern indigo snakes may inhabit. The results from ECS show that there was no suitable refugia for the eastern indigo snake onsite.

3.0 PROTECTION AND MANAGEMENT OBJECTIVES

3.1 GOAL

The goal of the CMP is to provide a framework for holistic land and natural resources management pursuant to accepted principles of sustainable forestry and ecosystem management such that conservation area of Creek Crossing may be managed in a complimentary manner. This CMP is designed to establish the framework for conservation over the Creek Crossing conservation and open space areas.

3.2 NATURAL RESOURCE MANAGEMENT OBJECTIVES

The CMP's objectives are to provide implement management techniques to achieve sustainable forestry and natural resources. The following is a prioritized list of management objectives:

- Promote functional regional wildlife based upon habitat requirements.
- Establish forested stands of different vegetative communities to provide a diverse mosaic of habitats for a variety of plants and animals.
- Foster conservation of listed and imperiled species.
- Provide BMPs to avoid adverse impacts to wetlands.
- Eliminate or reduce populations of invasive and exotic or nuisance species.

4.0 MANAGEMENT STRATEGIES AND DESIRED FUTURE CONDITIONS

4.1 IDENTIFICATION AND PROTECTION OF SPECIAL AREAS

As mentioned above the site is under the jurisdiction of Volusia County and SJRWMD, therefore, any impacts to the onsite wetlands and/or ditches will have to be permitted by St. Johns River Water Management District (SJRWMD). Spruce Creek has Riparian Habitat Protection Zones (RHPZ) established to protect the creek and associated wetlands. The setback from the creek edge is 275 feet. Any impacts to upland habitat within the Riparian Zone will require mitigation. This CMP has outlined a conservation easement to avoid impacts to Spruce Creek and the associated RHPZ limits.

4.2 PROTECTION OF RESOURCE BASED OPEN SPACE

Resource base open space is defined in the green area within the conservation easement. About 23% of conservation areas are set aside for ecological preservation, enhancement and restoration, nature trails, observation areas.

4.3 GOPHER TORTOISE PROTECTION

As mentioned above, ECS have only found many gopher tortoise burrows. Currently, there are four suitable options to conduct activities that may adversely impact tortoises. The options are to:

1. Avoid developing the area occupied by the tortoises.
2. Avoid individual burrow entrances to ensure the protection of the entire burrow, usually a distance of 25 feet. An FWC permit is not required if development activity on a project site avoids impacts to tortoise burrows by 25 feet in all directions from the mouth of all burrows. Development activity must not harm gopher tortoises nor violate rules protecting them. Leaving a 50-foot diameter (25-foot radius) circle of habitat around each burrow (e.g., undisturbed “islands” or “crop circles”) and developing the rest of a project site does not qualify and requires a permit to ensure that gopher tortoises are not harmed.
- 3 Capture and relocate the tortoises to a separate onsite location. The herbaceous vegetation must be maintained (mowing, burning, etc.), and pesticides/herbicides should not be used in the recipient area during and following site development. The on-site recipient area should be a minimum of 750 square feet (e.g., 25ft x 30ft), with a minimum width of no less than 10 feet wide. At least half of the on-site recipient area must be located at a minimum of 25 feet away from the edge of clearing /grading, construction activities, and/or vehicular traffic.
4. Capture and relocate the tortoises to an offsite FWC-approved recipient site.

4.4 WILDFILE CROSSINGS

The Creek Crossing CMP requires any roadway development to be designed to avoid and minimize conflicts between motor vehicles and the movement of wildlife. Tools to minimize this conflict include, but are not limited to, location criteria, landscaping techniques, fencing, speed limits, wildlife underpasses and overpasses, bridging, and elevating roadways.

5.0 PROVISIONS FOR PASSIVE RECREATIONAL USE AND PUBLIC ACCESS

5.1 NATURAL TRAIL

The CMP sets forth a requirement for appropriate public access and the development of natural trails, boardwalks, and interpretive facilities. Except as specifically set forth in this plan, the conservation lands are not appropriate for unbridled public access such as hunting and fishing.

5.2 WATER RESOURCE DEVELOPMENT

It was determined that there will be no well water proposed for consumption for this development. Spruce Creek Crossing LLC will apply to the City of Port Orange for a consumptive use permit for potable water, reclaim for irrigation. The applicant will comply with permit conditions such as vegetative and hydrological monitoring. Additionally, any future alternative water supply project or water resource development projects would be subject to permitting and approval by Volusia County and the City of Port Orange. Therefore, there will be no adverse effect to the natural water resources onsite.

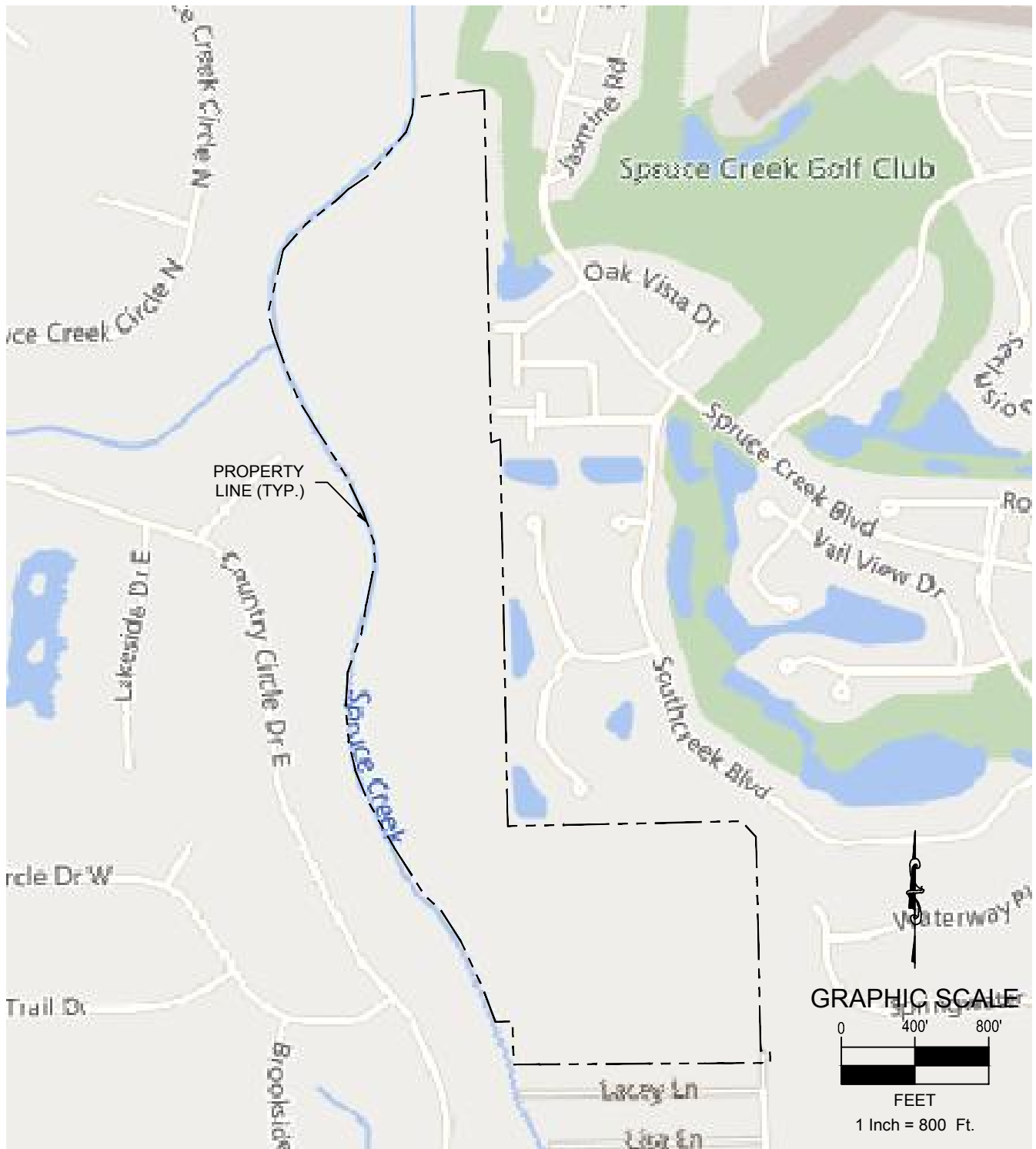
6.0 OWNERSHIP AND MANAGEMENT

The conservation land is subject to conservation easements and covenants and is to be managed in accordance with this CMP. Creek Crossing property presently is owned by Spruce Creek Crossing, LLC, a privately held corporation. The CMP shall be implemented by Creek Crossing HOA which will be created, as well as its assigned affiliates and subsequent owners. Creek Crossing HOA or its successors in interest shall manage the conservation lands in accordance with this CMP. The Conservation Easement will acknowledge a continuing duty of care by Creek Crossing HOA and its successors in interest to the Grantees under the easement to carry out the intent and purpose of this CMP. However, any transfer from Creek Crossing HOA to a third party shall include a statement of affirmation of the third party's duty to assume all management obligations associated with the Conservation Covenants and easements and this CMP.

The CMP may be amended at any time subject to agreement of the landowners at the time and all grantees under the conservation covenants and conservation easement. An amendment may be proposed based upon a good faith understanding of changes in law, change in conditions on the property, natural disaster, change in conservation principles over time, or need for adaptive management.

APPENDICES

APPENDIX A: SITE EXHIBITS AND FIGURES



EVANS
ENGINEERING, INC.

CIVIL ENGINEERING LAND PLANNING PERMITTING SERVICES

719 IRMA AVENUE
ORLANDO, FLORIDA 32802
(407) 872-1515
www.evansenginc.com

CERTIFICATE OF AUTHORIZATION NO. 00006788

SPRUCE CREEK CROSSING LOCATION MAP



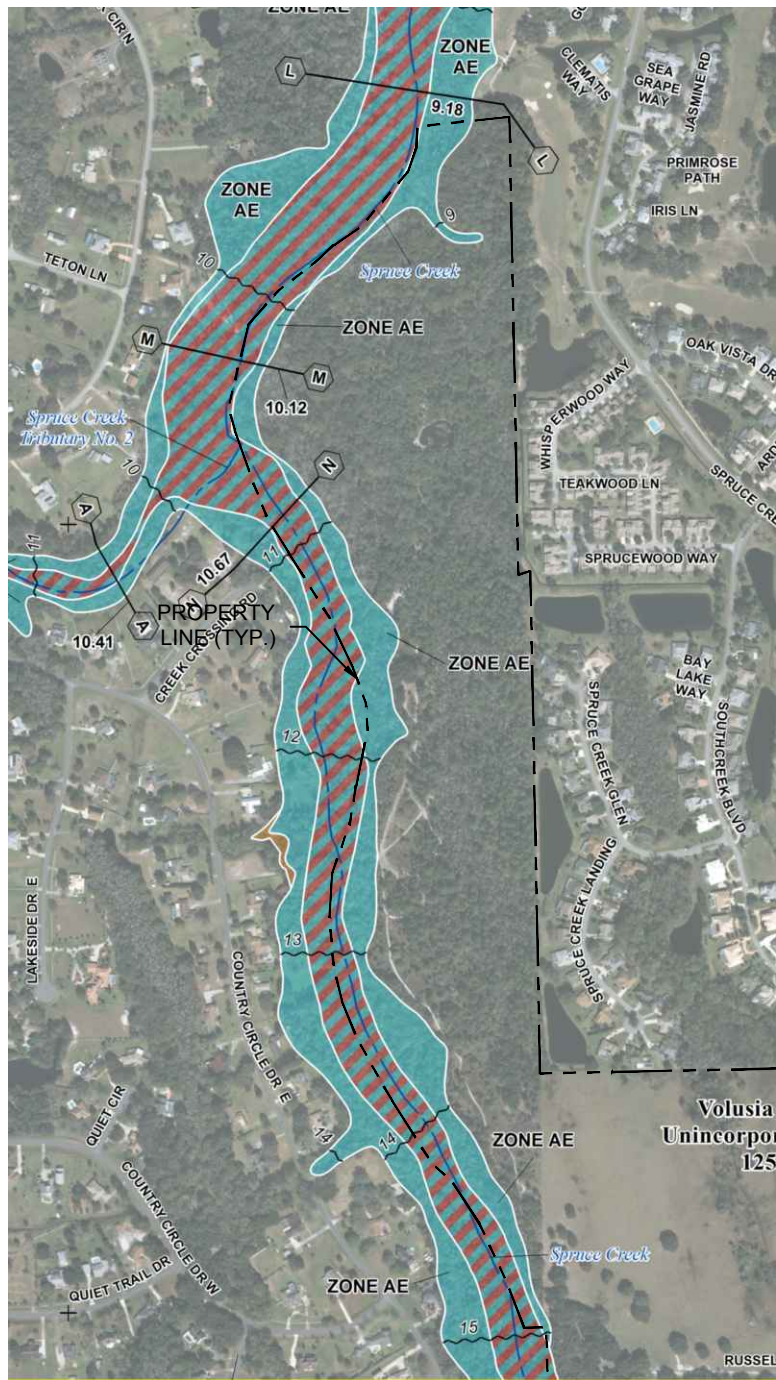
EVANS
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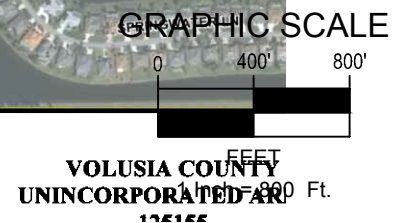
SPRUCE CREEK CROSSING AERIAL MAP



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
 THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
 DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://MSC.FEMA.GOV](http://MSC.FEMA.GOV)

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
OTHER AREAS OF FLOOD HAZARD		Regulatory Floodway
		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
OTHER AREAS		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee See Notes Zone X
GENERAL STRUCTURES		Areas of Minimal Flood Hazard Zone X
		Area of Undetermined Flood Hazard Zone D
OTHER FEATURES		Channel, Culvert, or Storm Sewer
		Accredited or Provisionally Accredited Levee, Dike, or Floodwall
OTHER FEATURES		Non-accredited Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation (BFE)
OTHER FEATURES		Coastal Transect
		Coastal Transect Baseline
OTHER FEATURES		Profile Baseline
		Hydrographic Feature
OTHER FEATURES		Base Flood Elevation Line (BFE)
		Limit of Study
OTHER FEATURES		Jurisdiction Boundary



SOURCE: FEMA FIRM PANEL 12127C0508J, SEPTEMBER 29, 2017
 FEMA FIRM PANEL 12127C0516H, FEBRUARY 19, 2014



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 ENGINEERING, INC.

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 ORLANDO, FLORIDA 32802
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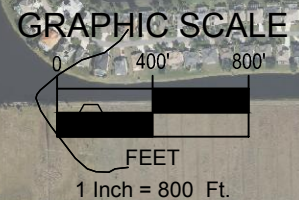
CERTIFICATE OF AUTHORIZATION NO. 00006788

SPRUCE CREEK CROSSING FEMA FIRM MAP

C:\Users\TAYLOR~1\AppData\LocalTemp\AcPublish_23704\37603 Spruce Creek_Property Exhibits.dwg (SOIL MAP) Plotted on: May 14, 2025 - 5:03pm by Taylor Dimer

SOILS MAP LEGEND

SOILS NUMBER	SOIL NAME & DESCRIPTION	HYDROLOGIC GROUP
8	BASINGER FINE SAND, FREQUENTLY PONDED, 0-1% SLOPES	A/D
13	CASSIA FINE SAND, 0-2% SLOPES	A
17	DAYTONA SAND, 0-5% SLOPES	A
22	ELECTRA FINE SAND, 0-5% SLOPES	A
23	FARMTON FINE SAND	B/D
24	FLUVAQUENTS	D
31	MALABAR FINE SAND	A/D
42	PAOLA FINE SAND, 0-8 % SLOPES	A
48	PLACID FINE SAND, FREQUENTLY PONDED, 0-1% SLOPES	A/D
49	POMONA FINE SAND	A/D
51	POMONA-ST. JOHNS COMPLEX	A/D
61	ST. JOHNS FINE SAND	B/D
63	TAVARES FINE SAND, 0-5% SLOPES	A
66	TOMOKA MUCK, FREQUENTLY PONDED, 0-1% SLOPES	A/D
73	WABASSO-WABASSO, WET, FINE SAND, 0-2% SLOPES	B/D
75	WAUCHULA FINE SAND	A/D



SOURCE: NRCS SOIL RESOURCE REPORT



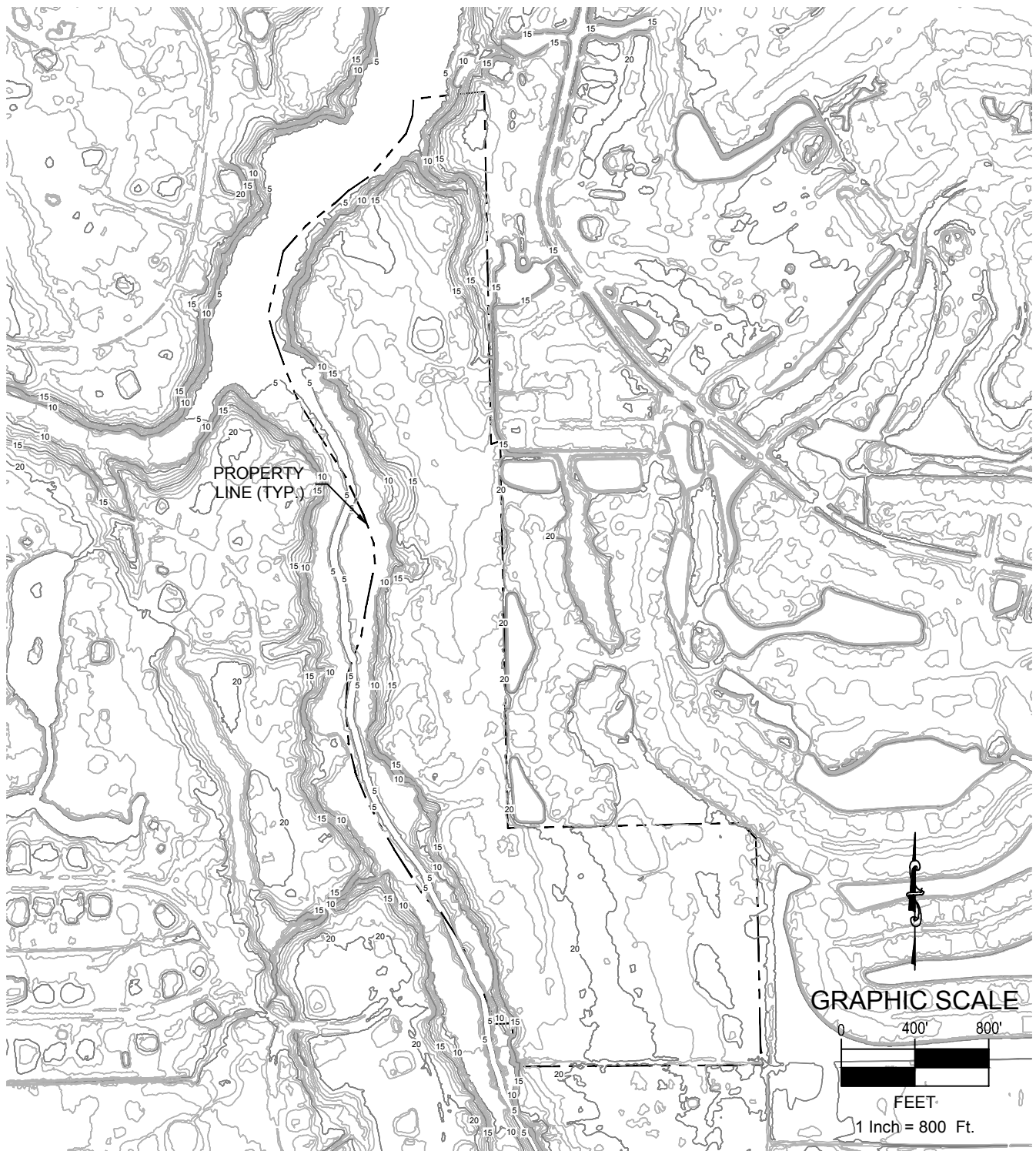
EVANS
ENGINEERING, INC.

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CERTIFICATE OF AUTHORIZATION NO. 00006788

SPRUCE CREEK CROSSING SOIL MAP



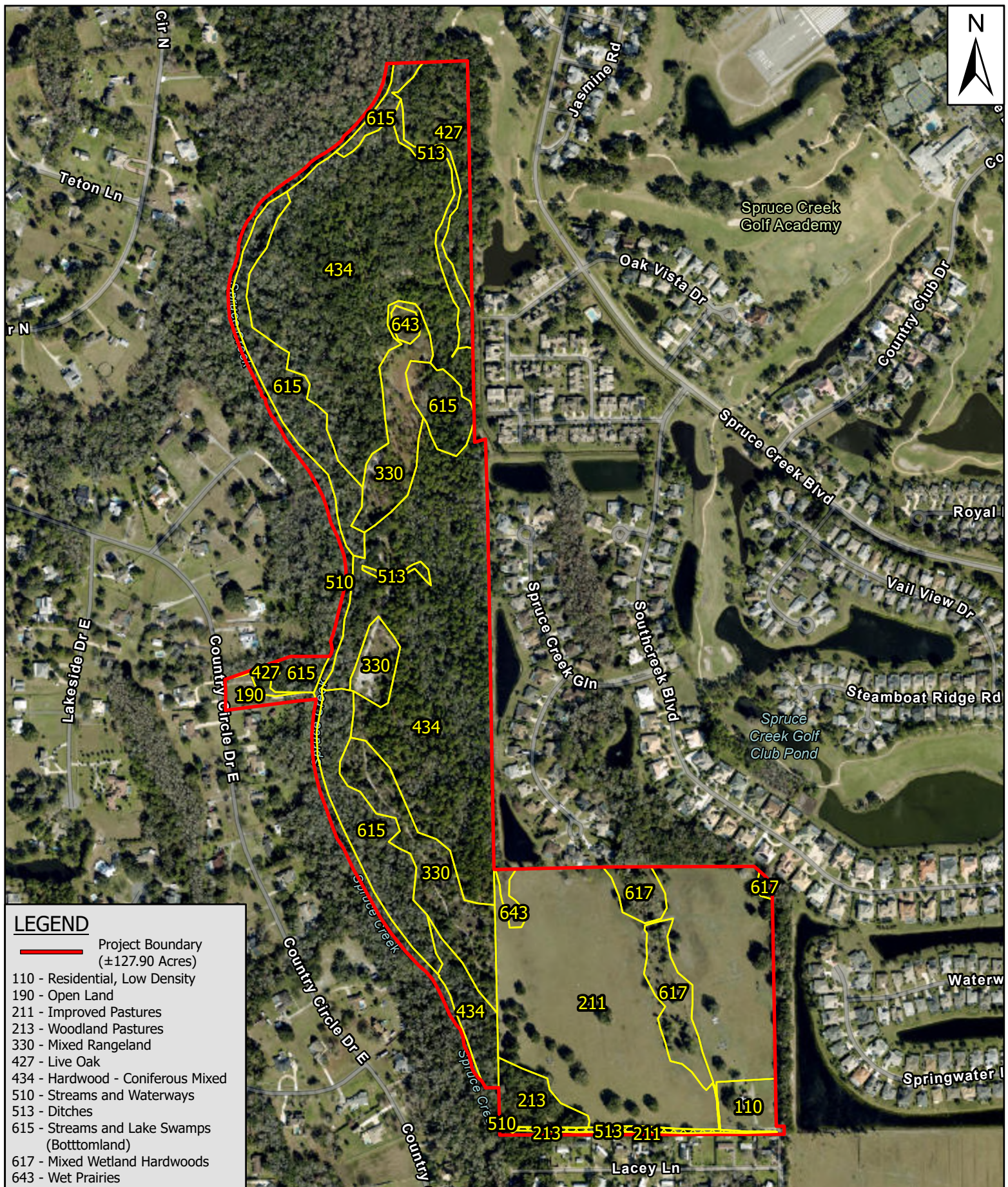
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CERTIFICATE OF AUTHORIZATION NO. 00006788

SPRUCE CREEK CROSSING TOPOGRAPHIC MAP



CREEK CROSSING VOLUSIA COUNTY, FLORIDA FLUCFCS MAP

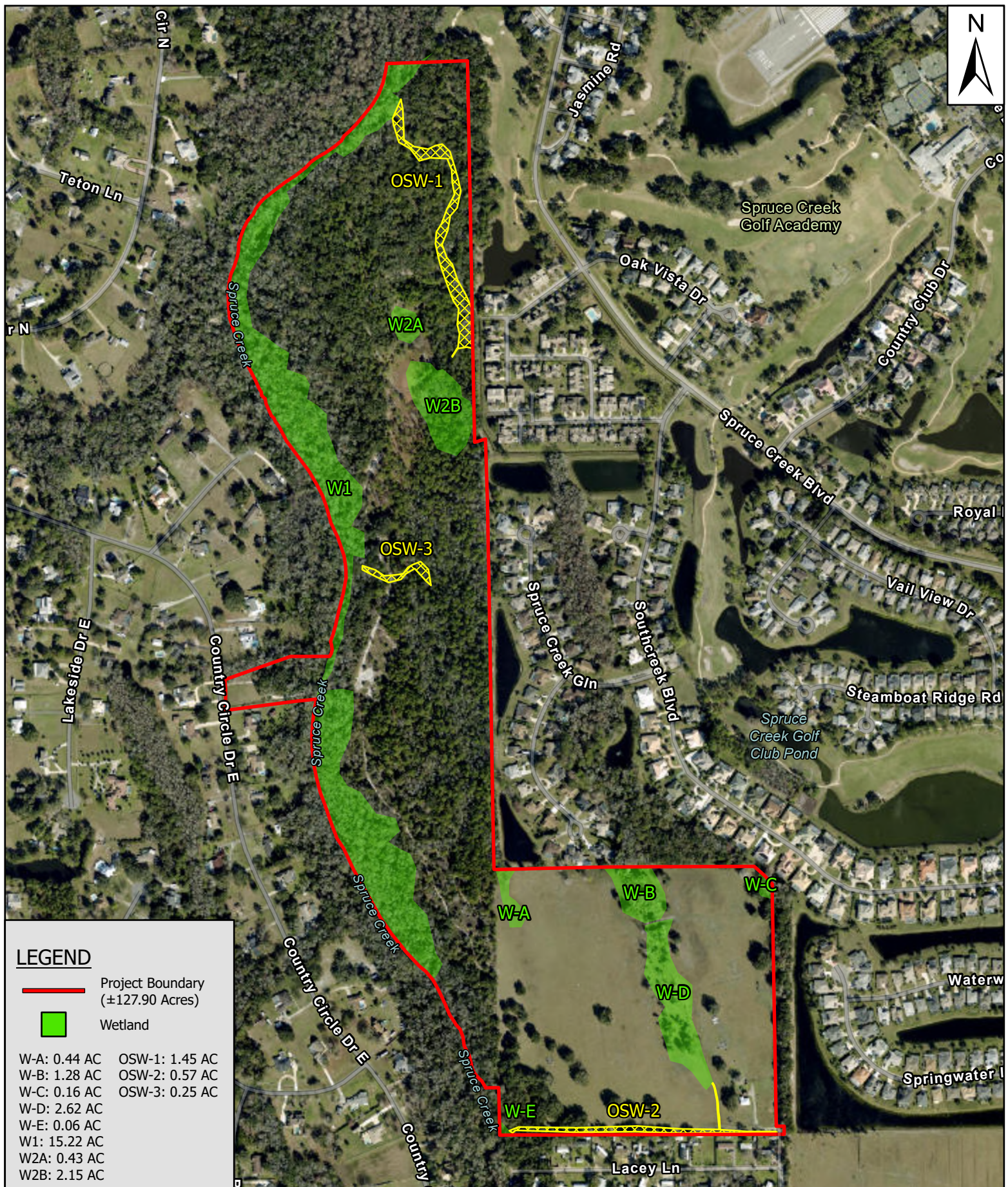
Project #: 1069.02.24 DATE: 06/17/25 FIGURE: 1

0 800 1,600 Feet

Created by:
JBD

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com





CREEK CROSSING VOLUSIA COUNTY, FLORIDA WETLAND MAP

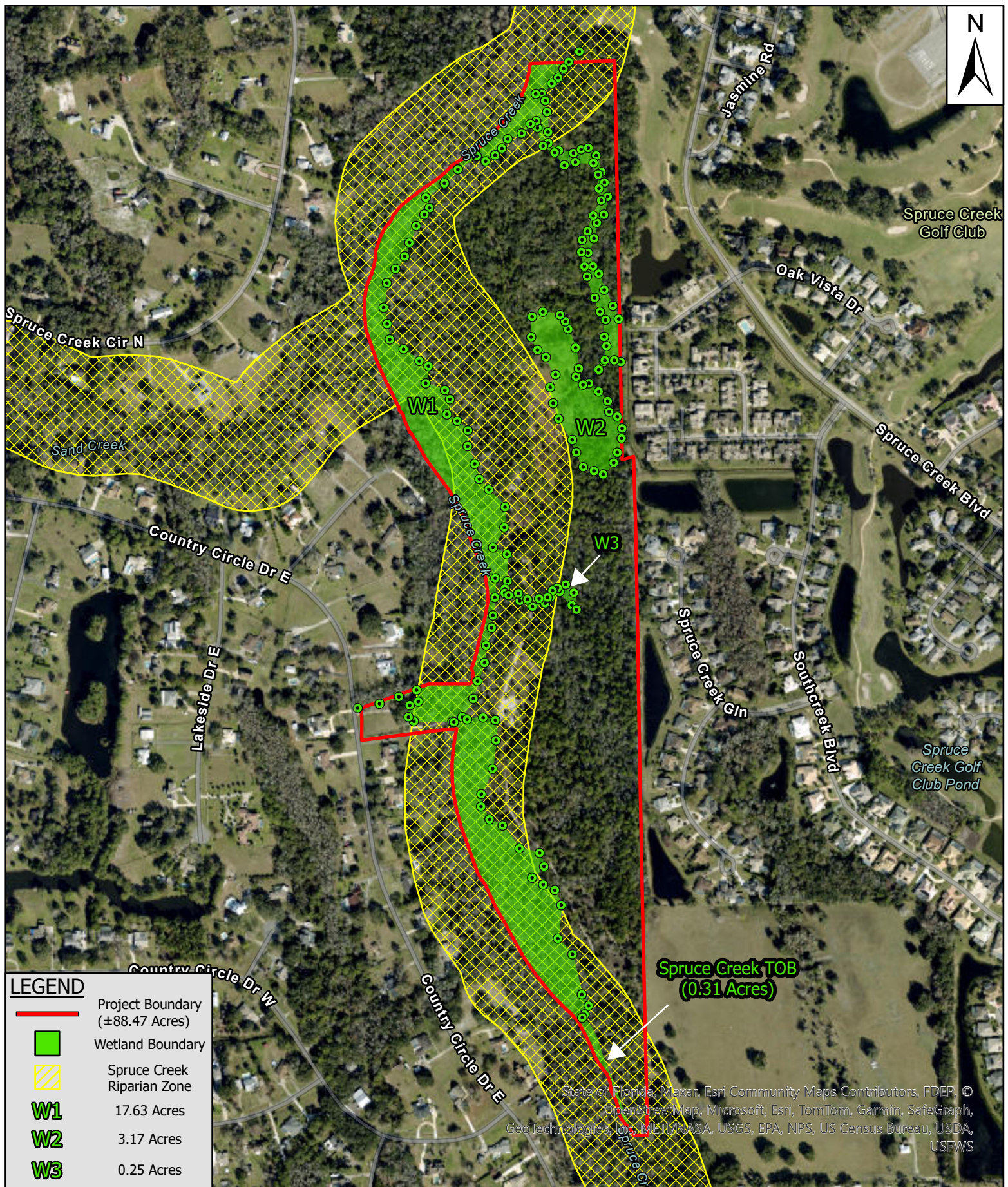
Project #: 1069.02.24 DATE: 06/17/25 FIGURE: 2

0 800 1,600 Feet

Created by:
JBD

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com





CREEK CROSSING VOLUSIA COUNTY, FLORIDA WETLAND MAP

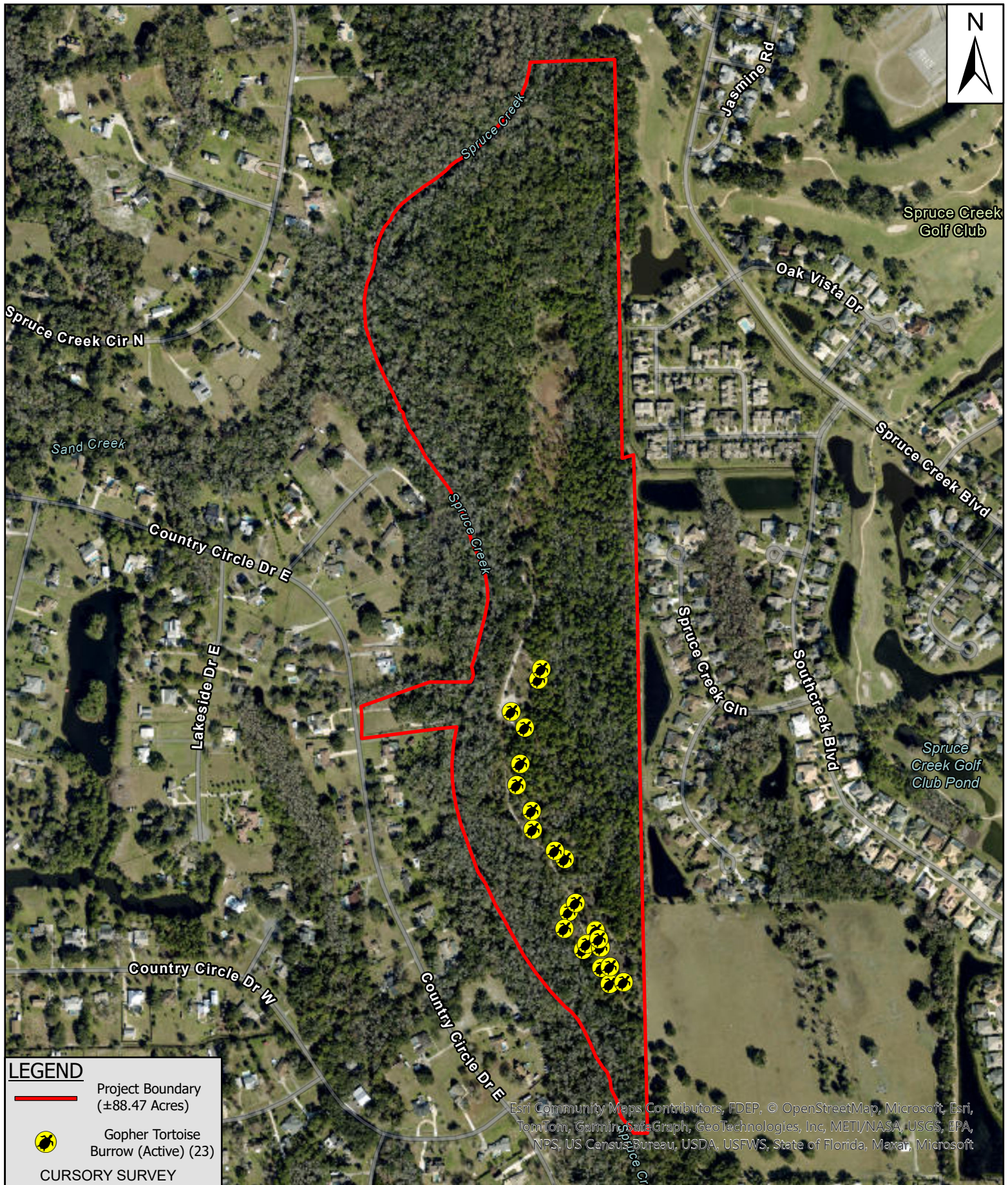
Project #: 1069.02.24 DATE: 04/24/24 FIGURE: 3

0 500 1,000 Feet

Created by:
CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com





CREEK CROSSING VOLUSIA COUNTY, FLORIDA GOPHER TORTOISE BURROW MAP

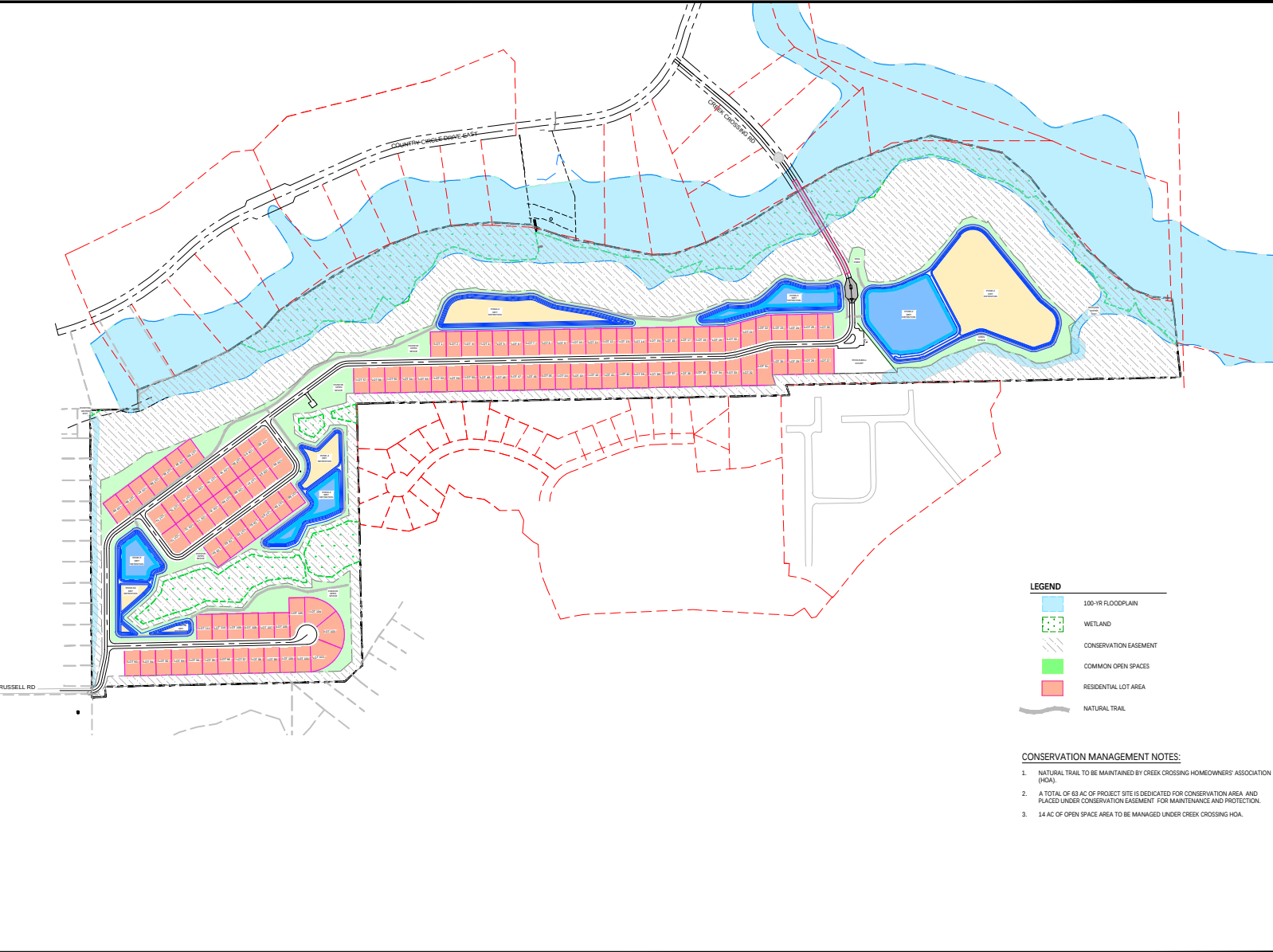
Project #: 1069.02.24 DATE: 04/24/24 FIGURE: 4

0 500 1,000 Feet

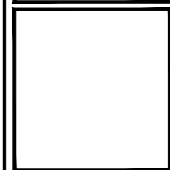
Created by:
CSK

410 North Street, Suite 130
Longwood, FL 32750
Phone: (407) 869-9434
www.ecologicalconsulting.com





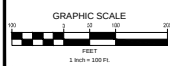
EVANS ENGINEERING, INC.
CIVIL ENGINEERING LAND PLANNING SURVEYING SERVICES
7119 IRMA AVENUE
ORLANDO, FLORIDA 32803
(407) 872-1515
www.evanseng.com
CERTIFICATE OF AUTHORIZATION NO. 00007878



OVERALL DEVELOPMENT PLANS
CREEK CROSSING
VOLUSIA COUNTY, FLORIDA
CONSERVATION MANAGEMENT PLAN
EASEMENT EXHIBIT

REVISIONS		DATE	BY

DRAWN BY: HQT	DATE: 09/18/25
CHECKED BY: DLE	DATE: 09/18/25



SHEET #
EX-1

THIS PLAN IS A PRELIMINARY PLAN AND IS NOT TO BE USED FOR CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE USER TO OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

APPENDIX B: OVERALL CONSERVATION SITE PLAN



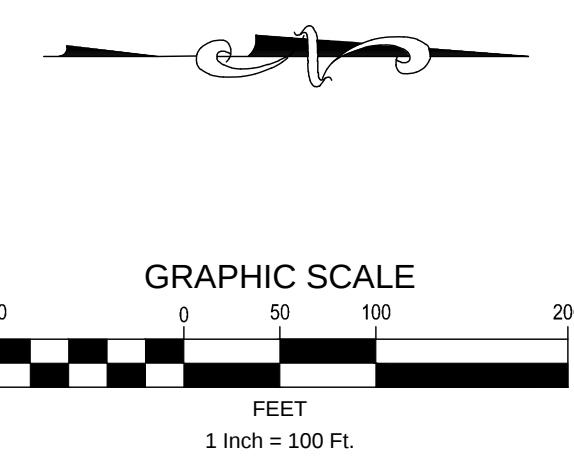
CREEK CROSSING

VOLUSIA COUNTY, FLORIDA

CONSERVATION MANAGEMENT PLAN

[illegible]

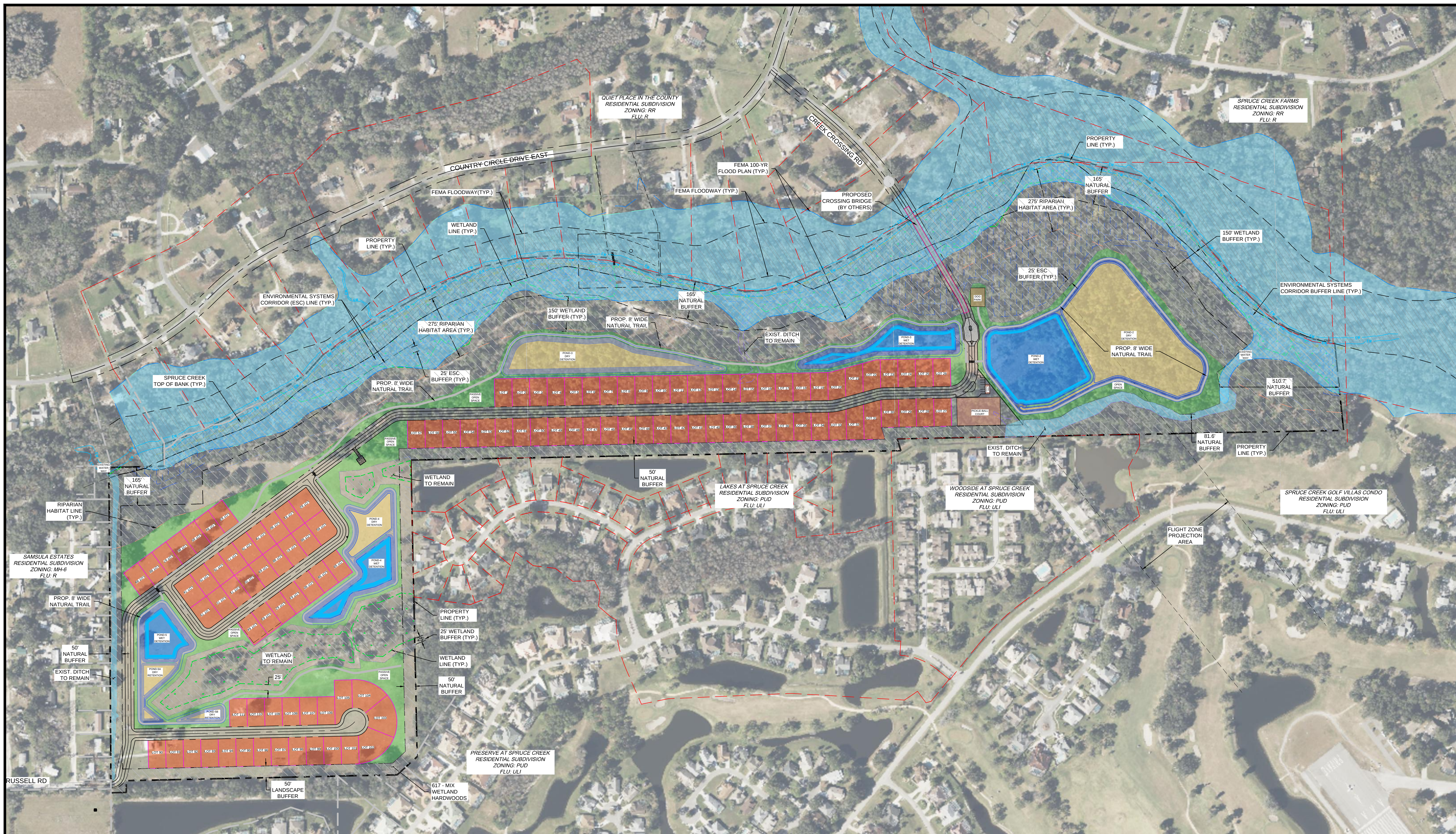
DRAWN BY: HQT	DATE: 09/18/25
CHECKED BY: DLE	JOB #: 37603



SHEET #:

C03.0

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1. A MINIMUM OF 25 FEET WETLAND BUFFER IS REQUIRED FOR WETLAND PROTECTION.
2. DEVELOPMENT AREA SHALL NOT EXCEED 40 PERCENT OF THE GROSS LAND AREA.
3. PRESERVED AREA FOR EXISTING VEGETATION AND TREES PROTECTION IS CALCULATED UNDER ITEM #2 OF THE SITE CONSERVATION CALCULATIONS.
4. NATURAL TRAIL TO BE MAINTAINED BY CREEK CROSSING HOMEOWNERS' ASSOCIATION (HOA).
5. A TOTAL OF 63 AC OF PROJECT SITE IS DEDICATED FOR CONSERVATION AREA AND PLACED UNDER CONSERVATION EASEMENT FOR MAINTENANCE AND PROTECTION.
6. 14 AC OF OPEN SPACE AREA TO BE MANAGED UNDER CREEK CROSSING HOA.

1.	PERIMETER BUFFER = AVERAGE 100' PROPERTY LINE OFFSET (CONS. SUBDIVISION)	
	TOTAL REQUIRED PERIMETER AREA	± 14487' x 100' = 1,448,700 SF
	SOUTH & WEST BUFFER w/ 50' OFFSET	± 8,100' x 50' = 405,000 SF
	NORTH & EAST BUFFER w/ 165' OFFSET	± 6,387' x 165' = 1,053,855 SF
	TOTAL PROVIDED PERIMETER BUFFER	1,458,855 SF > 1,448,700 SF
2.	REQUIRED MIN. PROTECTED OPEN SPACE (60%) = ± 75.46 AC	
	LOT AREA	± 23.43 AC
	ROADWAY	± 8.95 AC
	TOTAL AREA	± 32.38 AC
	PROVIDED OPEN SPACE	125.77 AC - 32.38 AC = ± 93.39 AC > 75.46 AC
3.	PROPOSED OPEN SPACE	
	PASSIVE:	
	STORMWATER POND	± 16.47 AC
	COMMON OPEN SPACE	± 10.86 AC
	ACTIVE:	
	COMMUNITY AMENITY	± 0.80 AC
	DOG PARK	± 0.20 AC
	TOTAL OPEN SPACE:	± 28.33 AC

	ENVIRONMENTAL SYSTEMS CORRIDOR (ESC)
	WETLAND TO REMAIN
	WETLAND/WATERWAY IMPACT AND REMOVE
	FEMA 100-YR FLOOD PLAIN
	FEMA FLOODWAY
	RESIDENTIAL LOT AREA
	COMMON OPEN SPACES
	CONSERVATION EASEMENT
	NATURAL TRAIL

APPENDIX B

D:\WORKING FILES\11-19-2025\L101\L101.dwg
25-10-2025 BONNETT DESIGN GROUP, 2025 101 LUXUR-CREEK CROSSING_1SRASE - COPY.DWG

1

SPECIMEN TREES TO BE REMOVED:

POINT NO.	DESCRIPTION
7602	18" OAK
7602	18" OAK
7618	12" CEDAR
7618	20" CEDAR
8724	26" OAK
8783	21" OAK
8784	23" OAK
8787	32" OAK
8795	20" OAK
8813	18" OAK
8816	23" OAK
8836	19" OAK
8867	22" OAK
8868	20" OAK
8900	19" OAK
9158	20" OAK
10223	21" OAK
10261	16" BAY
10269	17" BAY
10887	14" BAY
10945	12" BAY
10982	12" BAY
11932	16" BAY
12455	13" BAY
12482	22" GUM
12860	13" CEDAR
12946	26" OAK
13005	12" CEDAR
13019	13" CEDAR
13812	14" BAY
15710	19" OAK
15736	21" OAK
15795	20" OAK
15825	18" OAK
15832	18" OAK
15845	20" OAK
15860	34" OAK
15870	30" OAK
15876	19" OAK
15877	24" OAK
15916	21" OAK
15925	19" OAK
15926	28" OAK
15933	30" OAK
15948	26" OAK
15968	22" OAK
15974	20" OAK
15974	20" OAK
15981	18" OAK
17215	29" OAK
17216	18" OAK
17216	30" OAK
17216	32" OAK
17225	19" OAK
17227	21" OAK
17228	21" OAK
17228	31" LIVE OAK
17229	21" OAK
17336	19" OAK
17340	29" OAK

17342	27" OAK
17343	34" OAK
17350	19" OAK
17390	21" OAK
17591	20" OAK
17593	18" OAK
17796	21" GUM
17827	22" OAK
17838	21" OAK
17839	32" OAK
18066	21" LIVE OAK
18067	23" LIVE OAK
18067	23" LIVE OAK
30400	30" GUM
30567	12" BAY
30587	14" BAY
30808	12" BAY
32001	23" OAK
32002	27" OAK
32017	18" OAK
32058	32" OAK
32082	30" OAK
32247	18" OAK
32259	18" OAK
60230	20" OAK
60350	20" OAK
60355	20" OAK
60356	19" OAK
60357	29" OAK
60358	19" OAK
60713	26" OAK
60714	26" OAK
61020	19" OAK
61035	18" OAK
61057	27" OAK
61058	18" OAK
61083	18" OAK
61217	19" OAK

SPECIMEN TREES TO BE SAVED/PROTECTED:

POINT NO.	DESCRIPTION
7485	21" OAK
8028	22" OAK
8029	26" OAK
8034	22" OAK
8034	23" OAK
8041	18" OAK
8043	23" OAK
8046	31" OAK
8053	20" OAK
8074	22" OAK
8097	21" OAK
8110	18" OAK
8111	18" OAK
8112	21" OAK
8119	21" OAK
8139	18" OAK
8141	18" OAK
8142	20" OAK
8143	23" OAK
8145	21" OAK
8146	19" OAK
8147	21" OAK
8154	20" OAK
8160	20" OAK
8161	18" OAK
8164	19" OAK
8210	21" OAK
8222	20" OAK
8238	22" OAK
8247	18" OAK
8252	24" OAK
8261	19" OAK
8279	18" OAK
8286	26" OAK
8292	20" OAK
8295	18" OAK
8297	21" OAK
8299	19" OAK
8299	20" OAK
8300	24" OAK
8301	32" OAK
8303	19" OAK
8304	19" OAK
8323	18" OAK
8326	18" OAK
8326	19" OAK
8328	20" OAK
8330	18" OAK
8334	20" OAK
8342	25" OAK
8345	20" OAK
8346	19" OAK
8354	24" OAK
8411	21" OAK
8412	19" OAK
8414	18" OAK
8444	26" OAK
8467	18" OAK
8471	19" OAK
8473	19" OAK

8480	19" OAK
8532	21" OAK
8579	30" OAK
8607	19" OAK
8608	19" OAK
8646	19" OAK
8660	18" OAK
8680	24" OAK
14137	24" GUM
14168	19" GUM
14173	24" GUM
14179	30" OAK
14183	20" GUM
14186	19" OAK
14208	18" OAK
14215	25" OAK
14229	18" GUM
14250	22" GUM
14254	24" GUM
14255	18" GUM
14268	22" OAK
14304	30" GUM
14307	22" MAPLE
14308	22" GUM
14309	24" OAK
14313	22" OAK
14317	32" OAK
14318	26" GUM
14351	20" GUM
14354	24" OAK
14362	18" GUM
14364	22" GUM
14377	22" GUM
14391	18" GUM
14436	32" GUM
14444	30" OAK
14448	22" OAK
14460	24" GUM
14468	30" OAK
14594	20" GUM
14595	19" GUM
14606	26" OAK
14630	22" OAK
14649	32" OAK
14650	18" OAK
14753	19" OAK
14753	21" OAK
14756	13" BAY
14767	22" OAK
14776	17" BAY
14787	20" OAK
14794	12" BAY
14797	13" BAY
14812	20" OAK
15971	20" OAK
16037	12" BAY
16046	20" OAK
16070	18" OAK
16076	36" HICKORY
16081	18" OAK

16082	18" OAK
16085	18" OAK
16107	24" BAY
16121	19" GUM
16134	26" BAY
16145	20" OAK
16146	18" OAK
16166	19" OAK
16180	18" OAK
16190	21" OAK
16206	26" OAK
16251	19" OAK
16280	18" BAY
16296	24" GUM
16297	26" BAY
16321	19" GUM
16330	18" GUM
17210	23" OAK
17213	22" OAK
17215	23" OAK
17217	18" OAK
17217	26" OAK
17218	19" OAK
17222	18" OAK
17232	30" OAK
17233	23" OAK
17241	23" OAK
17246	25" OAK
17261	18" OAK
17263	24" OAK
17264	25" OAK
17266	28" LIVE OAK
17270	23" OAK
17272	18" OAK
17276	22" OAK
17285	21" OAK
17291	20" OAK
17292	21" OAK
17295	24" OAK
17296	26" OAK
17297	28" OAK
17298	22" OAK
17300	26" OAK
17303	24" OAK
17305	25" OAK
17306	24" OAK
17309	22" OAK
17311	24" OAK
17313	31" OAK
17314	21" OAK
17315	18" OAK
17317	27" OAK
17318	20" OAK
17319	30" OAK
17320	30" LIVE OAK
17327	24" OAK
17328	29" OAK
17329	29" OAK
17330	35" OAK
17331	23" OAK

17333	23" OAK
17335	19" OAK
17337	30" OAK
17339	29" OAK
17345	28" OAK
17346	23" OAK
17347	28" OAK
17368	23" CYPRESS
17389	20" OAK
17438	18" OAK
17439	24" OAK
17501	20" OAK
17575	12" BAY
17582	19" OAK
17590	18" OAK
17687	18" OAK
17701	23" OAK
17708	28" OAK
17724	19" OAK
17751	20" OAK
17753	18" OAK
17755	21" OAK
17801	21" GUM
17813	17" BAY
17828	21" OAK
17830	25" OAK
17831	21" OAK
17834	21" OAK
17837	19" OAK
17856	22" MAPLE
17870	13" MAGNOLIA
30201	22" GUM
30455	19" GUM
30797	26" OAK
30907	22" OAK
60275	23" HICKORY
60276	22" HICKORY
60280	28" HICKORY
60287	29" HICKORY
60291	36" HICKORY
60301	25" HICKORY
60315	26" HICKORY
60339	33" OAK
60343	28" OAK
60372	28" OAK
60373	33" OAK
60376	18" OAK
60385	19" LIVE OAK
60391	24" OAK
60420	33" OAK
60460	22" OAK
60484	20" GUM
60497	19" HICKORY
60499	30" HICKORY
60502	20" HICKORY
60503	20" HICKORY
60509	22" GUM
60552	24" OAK
60562	19" OAK
60570	18" OAK

60590	21" OAK
60594	26" OAK
60597	20" OAK
60602	19" OAK
60627	24" OAK
60630	33" OAK
60650	24" HICKORY
60658	30" HICKORY
60659	28" HICKORY
60666	24" OAK
60668	24" HICKORY
60680	26" OAK
60683	26" GUM
60699	18" HICKORY
60704	24" OAK
60705	39" LAUREL OAK
60742	26" OAK
60763	24" OAK
60774	23" OAK
60778	30" OAK
60779	20" OAK
60803	23" HICKORY
60820	30" OAK
60828	21" HICKORY
60832	24" OAK
60838	46" LAUREL OAK
60858	27" HICKORY
60867	24" OAK
60889	32" OAK
60897	19" OAK
60899	43" HICKORY
60915	24" HICKORY
60936	30" HICKORY
60948	20" OAK
60979	63" HICKORY
60995	22" OAK
60998	26" OAK
61105	20" OAK
61111	21" HICKORY
61114	48" HICKORY
61123	25" HICKORY
61126	24" HICKORY
61145	27" LIVE OAK
61150	31" HICKORY
61162	58" HICKORY
61170	18" HICKORY
61181	45" HICKORY
61182	26" HICKORY
61185	36" HICKORY
61192	21" HICKORY
61194	58" HICKORY
61206	24" OAK

HISTORIC TREES TO BE REMOVED:

POINT NO.	DESCRIPTION	CONDITION
10917	36" LIVE OAK	FAIR
17243	51" LIVEOAK	GOOD
17341	39" LIVE OAK	FAIR
17344	41" LIVE OAK	GOOD
17349	53" LIVE OAK	FAIR
17503	37" LIVE OAK	POOR
17504	52" LIVE OAK	POOR
17829	45" LIVE OAK	GOOD
17885	41" LIVE OAK	FAIR
17886	43" LIVE OAK	FAIR
60247	39" LIVE OAK	POOR
18068	36" LIVE OAK	POOR
18072	36" LIVE OAK	POOR

NOTE: REFER TO TREE ARBORIST REPORT DATED 11-12-2025, FOR HISTORIC TREE ANALYSIS

HISTORIC TREES TO BE SAVED/PROTECTED:

POINT NO.	DESCRIPTION
8144	43" LIVE OAK
8350	39" LIVE OAK
8679	36" LIVE OAK
14257	44" LIVE OAK
14356	40" LIVE OAK
14384	36" LIVE OAK
14429	44" LIVE OAK
14445	44" LIVE OAK
14607	39" LIVE OAK
17249	48" LIVE OAK
17262	36" LIVE OAK
17294	41" LIVE OAK
17299	43" LIVE OAK
17302	46" LIVE OAK
17308	39" LIVE OAK
17310	45" LIVE OAK
17323	50" LIVE OAK
17326	36" LIVE OAK
20140	49" LIVE OAK
60262	37" LIVE OAK
60331	39" LIVE OAK
61145	39" LIVE OAK
17304	77" LIVE OAK

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BONNETT design group, llc
landscape architecture
community planning
FL LA1718 - NC LA2492

400 South Orlando Ave. Suite 201
Maitland, FL 32751
407.622.1588

Creek Crossing
Landscape Architecture
Luxer Development, LLC

Volusia County, Florida

SPECIMEN & HISTORIC TREE CHARTS

DATE: OCTOBER 15, 2025

DRAWN BY: BRL

CHECKED BY: TWB

JOB NUMBER: 2025.151

FILE NAME:
2025_101_LUXUR-CREEK CROSSING_1SRASE - ODP

REVISIONS:
County Comments 11-19-2025

L101

Tad W. Bonnett, RLA # FL000726