

If you have any questions or concerns, please do not hesitate to contact me at your convenience.

Sincerely,

Kristen D. Reed

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**PROPOSED LARGE-SCALE
FUTURE LAND USE MAP (FLUM) AMENDMENT**

OVERVIEW

ORDINANCE: ORD # 2019-424

APPLICATION: L-5325-18A-3-11

APPLICANT: PAUL HARDEN, ESQ.

PROPERTY LOCATION: NORTH OF PHILIPS HIGHWAY AND EAST OF E TOWN PARKWAY

Acreage: 2,795.50

Requested Action:

	Current	Proposed
LAND USE	AGR-I, AGR-II, AGR-III, AGR-IV	LDR*
ZONING	AGR	RR-Acre

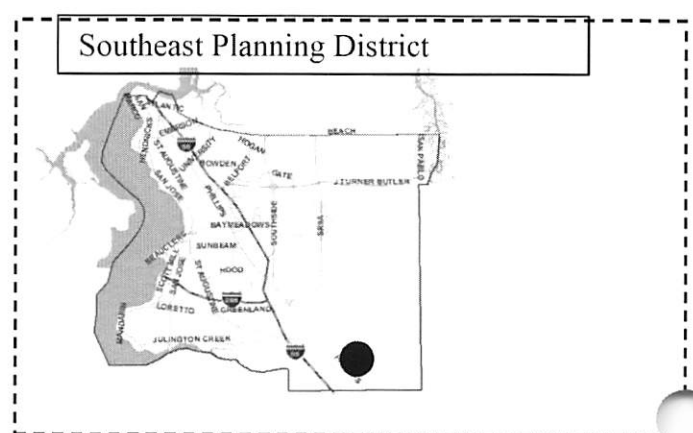
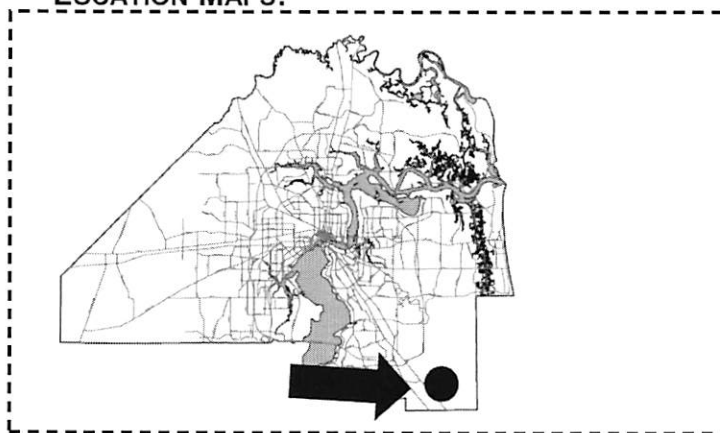
**Subject to Site Specific Policy*

Existing FLUM Category	Proposed FLUM Category	Existing Maximum Density (DU/Acre)	Proposed Maximum Density (DU/Acre)	Existing Maximum Intensity (FAR)	Proposed Maximum Intensity (FAR)	Net Increase or Decrease in Maximum Density	Non-Residential Net Increase or Decrease in Potential Floor Area
AGR-I, AGR-II, AGR-III, AGR-IV	LDR	154 DUs AGR-I 1 DU/100 Acres; AGR-II 1 DU/40 Acres; AGR-III 1 DU/10 Acres; AGR-IV 1 DU/2.5 Acres;	13,977 DUs (5 DU/ acre)	N/A	N/A	Increase 13,823 DUs	N/A

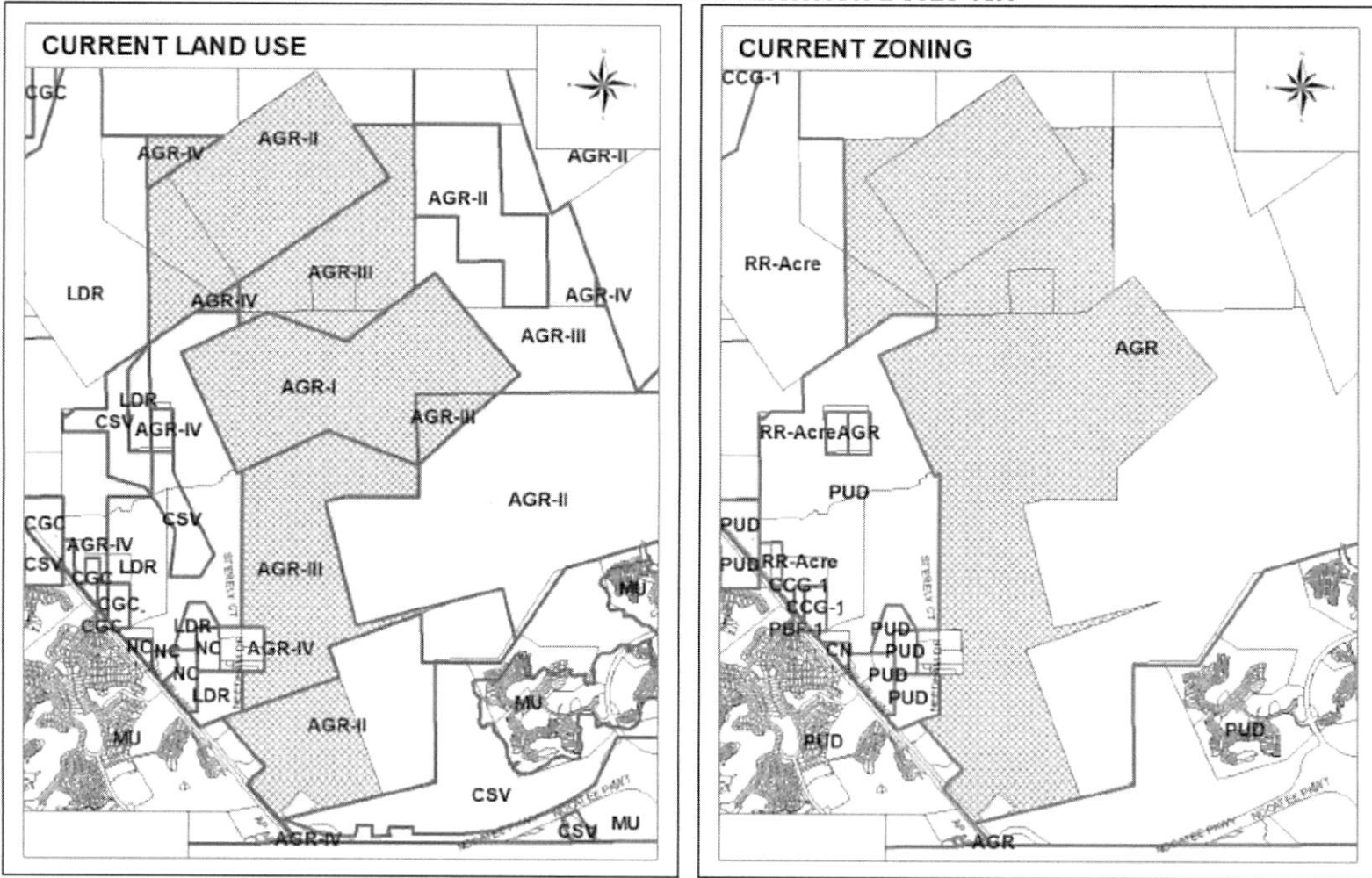
PLANNING AND DEVELOPMENT DEPARTMENT'S RECOMMENDATION:

APPROVAL subject to the site specific FLUE Policy 4.4.11

LOCATION MAPS:



LARGE SCALE LAND USE APPLICATION L-5325-18A



Existing FLUM Land Use Categories: Agriculture-I (AGR-I), Agriculture-II (AGR-II), Agriculture-III (AGR-III), Agriculture-IV (AGR-IV)

Requested FLUM Land Use Category: Low Density Residential (LDR)

Current Zoning District(s): Agriculture (AGR)

Requested Zoning District(s): Residential Rural -Acre (RR-Acre)

ANALYSIS

Background:

The amendment site consists of 2,795.50 acres located off of the north side of Philips Highway (US 1/ SR 5) and East of E Town Parkway. The property includes portions of six parcels and is located in the Southeast Planning District 3, Council District 11 and within the Southeast Jacksonville Vision Plan. The subject property is undeveloped and according to the Development Areas Map in the Future Land Use Element, the site is located within the Rural Development Area, with a small portion, approximately 15 acres along the southern boundary within the Suburban Development Area.

The subject property has approximately 1,400 linear feet of frontage on Philips Highway (US 1/ SR 5), a four-lane principal arterial roadway. The Duval/St. Johns County Line and Nocatee Parkway/Racetrack Road are approximately a ¼ of a mile south of the subject site with the Bartram Springs residential community and the Bartram Park Development of Regional Impact (DRI) located across Philips Highway.

The applicant proposes a large-scale future land use map amendment from Agriculture-I (AGR-I), Agriculture-II (AGR-II), Agriculture-III (AGR-III) and Agriculture-IV (AGR-IV) to Low Density Residential (LDR). The applicant plans to develop the property for residential use. Although the companion conventional rezoning will be submitted during the adoption round of public hearings, the applicant has indicated the intent to file the companion rezoning to the RR-Acre zoning district. The RR-Acre zoning district allows single family residential on lots that are a minimum of one (1) acre.

The amendment site stretches north approximately four miles from Philips Highway. The area surrounding the site is primarily undeveloped to the north and east and in the AGR land use categories. The lands to the northwest and west along Philips Highway include mostly undeveloped land in the LDR land use category with some commercial uses fronting Philips Highway. Directly abutting the property to the west, Ordinance 2015-318-E adopted a land use change from AGR-II, - III, and -IV and LDR to LDR and Conservation (CSV) on approximately 646 acres of land. Further west is the Bayard Community that consists of commercial uses fronting Philips Highway and single family residential uses north of Philips Highway. Directly across Philips Highway are two master planned Development of Regional Impacts (DRIs), the Flagler Center DRI (approximately 939 acres) and the Bartram Park DRI (approximately 2,516 acres), with a mix of uses that includes the Baptist South Hospital, retail and office uses and large residential components. South of the property is the Nocatee DRI (approximately 1,991 acres) with boundaries stretching across both Duval and St. Johns Counties. The Nocatee DRI is a master planned community which includes a mix of uses with some office and retail components but mostly residential uses. Additionally, Ordinance 2019-425 (Land Use Application L-5349-18A) proposes an additional land use change from AGR-II, AGR-III and AGR-IV to LDR for approximately 2,528 acres north of the subject site. (See Attachment A-1, Land Utilization Map, Attachment A-2, Development Area Map and Attachment A-3, Proximate Land Use Applications Maps).

The Dual Map on page 2 and Attachment A-1 – Land Utilization Map provide a detailed picture of the existing development pattern for the immediate area.

The adjacent uses and zoning districts are as follows:

Adjacent Property	Land Use	Zoning District	Current Use(s)
North	AGR	AGR	Vacant land
South	MU,CSV, AGR	PUD, AGR	Mixed Use DRI Developments, Conservation land, Vacant land, St. Johns County
East	AGR,CSV, MU	AGR	Vacant land, St. Johns County
West	LDR, NC, CGC, CSV	PUD, RR-Acre, CCG-1	Vacant land, some commercial uses on Philips Highway

Impact Assessment:

Potential impacts of a proposed land use map amendment have been analyzed by comparing the Development Impact Standards for the subject site’s existing vs. proposed land use categories unless maximum density/intensity is noted on the Annotated FLUM or is in a site specific policy. Development Impact Standards are detailed in FLUE Policy 1.2.16, *Development Standards for Impact Assessment*. These standards produce development potentials as shown in this Section.

Utility Capacity

The calculations to determine the water and sewer flows contained in this report and/or this spreadsheet have been established by the City of Jacksonville Planning and Development Department and have been adopted by JEA solely for the purpose of preparing this report and/or this spreadsheet. The method of calculating water and sewer flows in order to properly size infrastructure shall continue to be based on JEA’s Water, Sewer and Reuse for New Development Projects document (latest edition).

Maximum gross density for LDR in the Rural Area is 7 units/acre when connected with both centralized (JEA) water and sewer. Maximum gross density for LDR in the Rural Area shall be 4 units/acre and the minimum lot size shall be ¼ of an acre if either one of centralized potable water or wastewater services are not available. However, Policy 1.2.9 of the Sanitary Sewer Sub-Element of the Infrastructure Element requires a minimum of one acre of unsubmerged land per dwelling unit for sites that are not connected to centralized (JEA) sewer and are located in the Rural Development Area.

JEA has provided a Water and Sewer Demand Analysis for the development potential of the subject land use amendment identifying improvements that would be required to provide service to the development which include the following:

- Water treatment plant (including associated property and easement needs) will be required to support the water needs of the development.
- Electric substations (including associated property and easement needs) will be required to support the electric needs for the development.

See Attachment C for the JEA Analysis. A JEA Review and Availability letter will be required at the adoption round of this land use amendment with the companion rezoning application.

Infrastructure Element Sanitary Sewer Sub-Element

Policy 1.2.9 Septic tanks shall be permitted in Rural Areas, provided they meet the requirements of Chapter 64E-6, F.A.C., and that all lots created after shall have a minimum of 1 acre of un-submerged property.

The site specific policy recommendation included in this report calls for the creation of a long-term master plan that will identify the future mix of uses and densities and the associated strategy for providing centralized utilities for water and sewer service throughout the planning area.

Transportation

The Planning and Development Department completed a transportation analysis based on the impact assessment standards detailed in FLUE Policy 1.2.16 (see Attachment B) and determined that the proposed amendment has the potential to result in an increase of 130,489 new net daily external trips. This analysis is based upon the comparison of what potentially could be built on that site (as detailed in FLUE Policy 1.2.16 Development Standards for Impact Assessment) versus the maximum development potential. Potential traffic impacts will be addressed through the Concurrency and Mobility Management System Office.

Transportation Element

Policy 1.2.1 The City shall use the Institute of Transportation Engineers *Trip Generation Manual*, latest edition, to determine the number of trips to be produced or attracted to a particular land use when assessing a traffic impact.

Capital Improvements Element

Policy 1.6.1 Upon adoption of the Mobility Plan implementing ordinance, the City shall cease transportation concurrency and use a quantitative formula for purposes of assessing a landowner's mobility fee for transportation impacts generated from a proposed development, where the landowner's mobility fee shall equal the cost per vehicle miles traveled (A); multiplied by the average vehicle miles traveled per Development Area (B); multiplied by the daily trips (C); subtracted by any trip reduction adjustments assessed to the development.

Supplemental Transportation Information

Objective 2.4 of the Transportation Element (TE) of the 2030 Comprehensive Plan requires that the City shall coordinate the mobility circulation system with the future land uses shown on the Future Land Use Map series in order to ensure that roads, road improvements and other mobility alternative improvements are provided as necessary to support development in an economically efficient and environmentally sound manner.

Policy 2.4.2 of the TE of the 2030 Comprehensive Plan requires that the City shall amend the adopted Comprehensive Plan to incorporate the data and analysis generated by a periodic regional transportation model and study and facilitate the implementation of the study recommendations.

These two Comprehensive Plan policies ensure that the transportation impact related to land use amendments are captured in the Long Range Transportation Plan (LRTP) that is conducted every 5 years. This analysis includes the cumulative effect of all land use amendments that were approved within this time period. This plan identifies the future transportation needs and is used to create cost feasible roadway needs that can be funded by the City's Mobility Strategy Plan.

Mobility needs vary throughout the city and in order to quantify these needs, the city was divided into 10 Mobility Zones. The Mobility Strategy Plan identifies specific transportation strategies and improvements to address traffic congestion and mobility needs for each mode of transportation. The project site is located in Mobility Zone 1.

Existing available roadway capacity for the vehicle/truck mode for the entire zone was tested based on volume demand to capacity ratio (V/C), where the average daily traffic volumes determined from the most recent City of Jacksonville traffic count data were compared to the *Maximum Service Volumes (MSV)* from the current *FDOT Quality/Level of Service Handbook (2012)* for each functionally classified roadway within the zone. A V/C ratio of 1.0 indicates the roadway network is operating at its capacity.

The result of the V/C ratio analysis for the overall Mobility Zone 1 is **0.71**.

The proposed land use amendment based on impact assessment standards has the development potential of 13,977 homes and generating approximately 131,943 new daily vehicular trips onto the roadway network. Philips Highway (US 1) is the first functional classified roadway that could be significantly impacted by the proposed development. US1 is subject to FDOT review and access management requirements. The Transportation Planning Division recommends that a traffic operational analysis of the adjacent roadway network be conducted by a licensed professional traffic engineer, to determine the impact to the external trips as a result of the land use change. A methodology meeting with the Florida Department of Transportation and Transportation Planning Division should be held prior to commencement of the study.

School Capacity

Based on the impact assessment standards detailed in FLUE Policy 1.2.16, the 2,795.50 acre proposed land use map amendment has a development potential of 13,977 dwelling

units. The proposed development was analyzed in accordance with the adopted level of service standards (LOS) for school capacity as established in the Interlocal Agreement (ILA) and the Public Schools and Facilities Element. The ILA was entered into in coordination with the Duval County Public School System (DCPS) and the other municipalities within Duval County.

School concurrency LOS is the methodology used to analyze and to determine whether there is adequate school capacity for each school type (elementary, middle, and high school) to accommodate a proposed development. The LOS (105% of permanent capacity) is based on Concurrency Service Areas (CSAs), not the closest school in the area for elementary, middle and high schools, as well as on other standards set forth in the City of Jacksonville School Concurrency Ordinance.

In evaluating the proposed residential development for school concurrency, the following results were documented:

School Impact Analysis							
L-5325-18A							
Development Potential: 13,977 Residential Units							
School Type	CSA	2018-19 Enrollment/CSA	Current Utilization (%)	New Student/ Development	5-Year Utilization (%)	Available Seats - CSA	Available Seats - Adjacent CSA 3, 4 & 6
Elementary	5	8,745	88%	2,334	94%	16	1,845
Middle	5	2,595	92%	1,020	88%	52	417
High	5	7,750	100%	1,300	98%	13	358
Total New Students				4,654			

Total Student Generation Yield: 0.333
 Elementary: 0.167
 Middle: 0.073
 High: 0.093

The analysis of the proposed residential development reveals a deficiency for school capacity within the CSA and adjacent CSAs. Potential school capacity impacts will be addressed through the Concurrency and Mobility Management System Office.

Public School Facilities Element

Policy 2.3.2 The City will coordinate with DCPS to establish plan review procedures to manage the timing of Future Land Use Map amendments and other land use decisions so that these decisions coordinate with adequate school capacity.

Policy 2.3.3 The City will take into consideration the DCPS comments and findings on the availability of adequate school capacity in the evaluation of comprehensive plan amendments, and other land use decisions as provided in Section 163.3177(6)(a), F.S. and development of regional impacts as provided in 1380.06, F.S

Objective 3.2 Adopted Level of Service (LOS) Standards
 Through the implementation of its concurrency management systems and in coordination with the DCPS, the City shall ensure that the capacity of

schools is sufficient to support new residential developments at the adopted level of service (LOS) standards within the period covered in the five-year schedule of capital improvements and the long range planning period. These standards shall be consistent with the Interlocal Agreement agreed upon by the DCPS, the City and the other municipalities. Minor deviations to the LOS standards may occur, so long as they are limited, temporary and with scheduled capacity improvements, school capacity is maximized to the greatest extent feasible.

Policy 3.1.1 The LOS standards set forth herein shall be applied consistently for the purpose of implementing school concurrency, including determining whether sufficient school capacity exists to accommodate a particular development application, and determining the financial feasibility of DCPS Five-Year Capital Facilities Plan and the City's Capital Improvement Plan.

Policy 3.3.6 In any instance where the DCPS, in consultation with the City, has determined that a proposed development will cause level of service standards for schools to be exceeded within the testing period in both the affected School Concurrency Service Area and the adjacent School Concurrency Service areas, then the City shall coordinate with the applicant for the proposed development and the DCPS to determine whether improvements will be in place or under actual construction within three years after issuance of final subdivision or site plan approval, or the functional equivalent, sufficient to provide adequate capacity to meet the adopted level of service. If adequate capacity does not exist, then the City will coordinate with the applicant for the development and the DCPS to determine whether improvements are planned in the Capital Improvement Plan with adequate capacity after the 3rd year of the Capital Facilities Plan. The City will also request that the DCPS determine whether it has the capacity to further maximize school usage in the system to accommodate the anticipated impact without requiring the construction of new school facilities.

After all alternatives to providing sufficient capacity to provide for the adopted level of service are considered and determined not to be feasible, the City, the applicant and the DCPS may: (i) enter into a mitigation agreement whereby the applicant will pay for his proportionate share of the impacts; or (ii) some other form of acceptable mitigation will be provided, and upon payment of the proportionate share mitigation, the developer will be allowed to proceed with development. If no mitigation agreement can be reached that is acceptable to all parties, and proportionate share mitigation is not feasible, then the school capacity deficiency shall be a basis for denial of the application.

Supplemental School Information:

The following additional information regarding the capacity of the assigned neighborhood schools was provided by the Duval County School Board. This is not based on criteria utilized by the City of Jacksonville School Concurrency Ordinance.

SCHOOL	CONCURRENCY SERVICE AREA	STUDENTS GENERATED	SCHOOL CAPACITY (Permanent/Portables)	CURRENT ENROLLMENT 20 Day Count (2018/19)	% OCCUPIED	4 YEAR PROJECTION
Twin Lakes ES #251	5	2,334	1,014	870	86%	95%
Twin Lakes MS #253	5	1,020	1,462	1,152	79%	91%
Atlantic Coast HS #268	5	1,300	2,443	2,354	96%	112%

- Does not include ESE & room exclusions
- Analysis based on a maximum **13,977** dwelling units – L-5325-18A

****The percentage occupied may not appear correct due to ESE space requirements.***

Archaeological Sensitivity

According to the Duval County Archaeological Predictive Model, the subject property is located within an area of mostly low with some high sensitivity for the presence of archaeological resources. Projects that move forward through the Site Review process may be required to perform a Professional Archaeological Reconnaissance Survey on the portion of the site that is in a high sensitivity area. If archaeological resources are found during future development/redevelopment of the site, Section 654.122 of the Code of Subdivision Regulations should be followed.

Historic Preservation Element

Policy 1.2.6 The Planning and Development Department shall maintain and update for planning and permitting purposes, a U.S.G.S. series of topographic maps upon which recorded archaeological sites are shown.

Wetlands

The applicant submitted a wetland map and a wetland assessment and listed wildlife assessment report for the 2,795.50 acre application site that shows approximately 1,625 acres of wetlands and 1,170.5 acres of uplands are found on the site. The applicant's wetlands and wildlife report, in addition to further evaluation with the use of the City's GIS system and photogrammetric analysis, shows that the wetlands on site are Category III wetlands. Based on the information noted below, the proposed amendment may be consistent with the Conservation/Coastal Management Element (CCME) wetlands policies. (Attachment D, Wetlands Assessment Map) (Attachment H, Preliminary Wetland Assessment and Listed Wildlife Assessment Report)

The site specific policy recommendation included in the report calls for creation of a long-term master plan that will include the general distribution of conservation areas and wetland buffers.

Wetlands Characteristics:

Approximate Size: 1,625 acres of wetlands

General Location(s): Wetlands are located throughout the amendment site. (See Attachment D, Wetlands Assessment Map)

Quality/Functional: The Category III wetlands on site have a medium functional value for water filtration attenuation and flood water capacity due to its isolation, size and having an indirect impact on the City's waterways.

Soil Types/ Characteristics: See the USDA Soil Survey within the Preliminary Wetland Assessment and Listed Wildlife Assessment Report, Attachment H

Wetland Category: Category III

Consistency of Permitted Uses: Category III Wetlands: All uses. Must meet CCME Policies 4.1.3 and 4.1.6

Environmental Resource Permit (ERP): Not provided by the applicant

Wetlands Impact: Insufficient information to determine impacts

Associated Impacts: AO flood zone is found throughout the property. A site plan has not been submitted with the land use amendment to determine potential impacts of the development. (See Attachment E, Flood Zone Map)

Relevant Policies: CCME Policies 4.1.3 and 4.1.6 – see below

CCME Policy 4.1.3

The following performance standards shall apply to all development, except public utilities and roadways, permitted within Category I, II, and III wetlands:

(a) Encroachment

Encroachment in Category I, II, or III wetlands is the least damaging and no practicable on-site alternative exists; and

(b) No net loss

Development is designed and located in such a manner that there is no net loss to the wetland functions including but not limited to:

i the habitat of fish, wildlife and threatened or endangered species,
ii the abundance and diversity of fish, wildlife and threatened or endangered species,
iii the food sources of fish and wildlife including those which are threatened or endangered,

iv the water quality of the wetland, and
v the flood storage and flood conveyance capabilities of the wetland; and

(c) Floodplain protection

Buildings are built at an elevation of sufficient height to meet the designated flood zone standards as set forth by the Federal Emergency Management Agency. The design must be in conformance with Chapter 652 (Floodplain Regulations) of the Ordinance Code; and

(d) Stormwater quality

In the design and review of developments which will discharge stormwater into the Category I, II, or III wetlands the following performance standards shall be used to protect water quality:

i Issuance of a Management and Storage of Surface Waters permit pursuant to Chapter 40C-4 or 40C-40, F.A.C. or a stormwater permit issued pursuant to Chapter 40C-42, F.A.C., provides assurances necessary for compliance with subsections (i) - (iv) above provided the stormwater management system is constructed in accordance with the permit; and

ii Regular monitoring and maintenance program on an annual basis for the performance of stormwater treatment systems

(e) Septic tanks

Septic tanks, drainfields and/or greywater systems are located outside the Category I, II, or III wetland area and not within 75 feet of the mean high water line of tidal bodies or within 75 feet of any wetland unless the Duval County Health Department grants a variance for a hardship case pursuant to the provisions of Section 381.0065, F.S. Where public utilities are available, development is required to connect to these facilities; and

(f) Hydrology

The design of the fill shall include measures to maintain the wetlands hydrology of the site.

CCME Policy 4.1.6

The permitted uses within Category III wetlands shall be limited to the following land uses and associated standards, provided such use is consistent with the Future Land Use Map series (FLUMs)

(1) Any use not otherwise listed below, provided all of the basic requirements outlined in Policy 4.1.3 above are met:

(a) Silvicultural uses, provided the following standards are met:

Best Management Practices: Silviculture

Such activities are conducted in compliance with the provisions of the "Silvicultural Best Management Practices Manual", as may be amended, published by the Florida Division of Forestry, Department of Agriculture and Consumer Services.

(b) Agricultural uses, provided the following standards are met:

Best Management Practices: Agriculture

Such activities are to be in compliance with Chapter 40C-44, F.A.C.

(2) Any use that can be shown to be clearly in the public interest, subject to the requirements of (a), (b), (d) and (f) as noted in the performance standards outlined in Policy 4.1.3 above.

Flood Zone

Approximately 1,200 acres of the subject site was determined to be within the AO flood zone; the majority of the wetlands on site are within this flood zone. Flood zone designations are assigned by the Federal Emergency Management Agency (FEMA). FEMA defines the various flooding characteristics of different lands based on a 100-year storm. The 100-year storm or Special Flood Hazard Area (SFHA) refers to a flood occurring from a storm event that happens an average of every 100 years. This does not mean that a storm of this type will happen every 100-years. There is a 1-percent chance that a storm of this magnitude will occur in any given year.

The AO flood zone is defined as an area of relatively shallow flooding within the 100-year floodplain or SFHA. Flood insurance is mandatory within the AO flood zone. Any development within the floodplain will be required to comply with Chapter 652, the Floodplain Management Ordinance. (See Attachment E, Flood Zone Map)

Conservation /Coastal Management Element

Policy 1.4.4 The City shall require all development within the 100 year flood plain to be in strict conformance with all applicable federal, State, regional and local development regulations.

Policy 2.7.1 The City shall continue to define the surface hydrology of the area to

determine flood plain vulnerability and sensitivity, and will determine appropriate protection measures.

- Policy 2.7.3 The City shall protect appropriate floodplain areas for the public benefit and restore degraded floodplain areas by:
- A. Land acquisition or conservation easement acquisition;
 - B.Regulation, including setbacks, buffer zones, designated wildlife corridors, low density zoning, performance standards and open space requirements; and
 - C.Incentives, including tax benefits and transfer of development rights.

Wildlife

The applicant submitted a listed wildlife assessment report of the site identifying existing habitat types and wildlife survey fieldwork results. A bald eagle was observed in flight. The Bald Eagle is protected under the Bald and Golden Eagle Protection Act, a United States federal statute. Multiple active gopher tortoises were observed throughout the subject property. The gopher tortoise is classified as a state threatened species and is protected by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, F.A.C.) According to the report, "any proposed impacts to the species, Florida Fish and Wildlife Conservation Commission (FWC) regulations require a 100% coverage gopher tortoise burrow survey and subsequent relocation efforts be performed by an authorized gopher tortoise agent. Any development of the subject property within occupied tortoise habitat, upon implementation of FWC approved tortoise relocation and/or management requirements, is not likely to adversely affect this species." The report continues stating that "a gopher tortoise relocation permit would be required by the state FWC prior to any land disturbing activities." No other state or federally listed wildlife species were documented during the assessment. (Preliminary Wetland Assessment and Listed Wildlife Assessment Report, Attachment H)

Conservation Coastal Management Element

Policy 3.5.5 The City shall maintain a land development review process for the assessment and protection of listed species and their habitat, which shall apply to issuance of development permits and land clearing, excluding bona fide silvicultural and agricultural activities. Projects which contain areas identified for protection shall be required to incorporate creative project designs through utilization of such measures as clustering, mixed land use designations and transfer of development rights programs. For purposes of Policy 3.5.5, the term listed species shall be limited to listed animal species as defined in the Definitions Section of this Element.

- A. All proposed developments or land clearing, with the exception of bona fide silvicultural or agricultural activities, which are located on all or part of a parcel or contiguous parcels of land containing 50 acres or more under common ownership shall be reviewed by the City to determine if the site contains listed species.

IMPACT ASSESSMENT

L-5325-18A

2,795.50 Acres

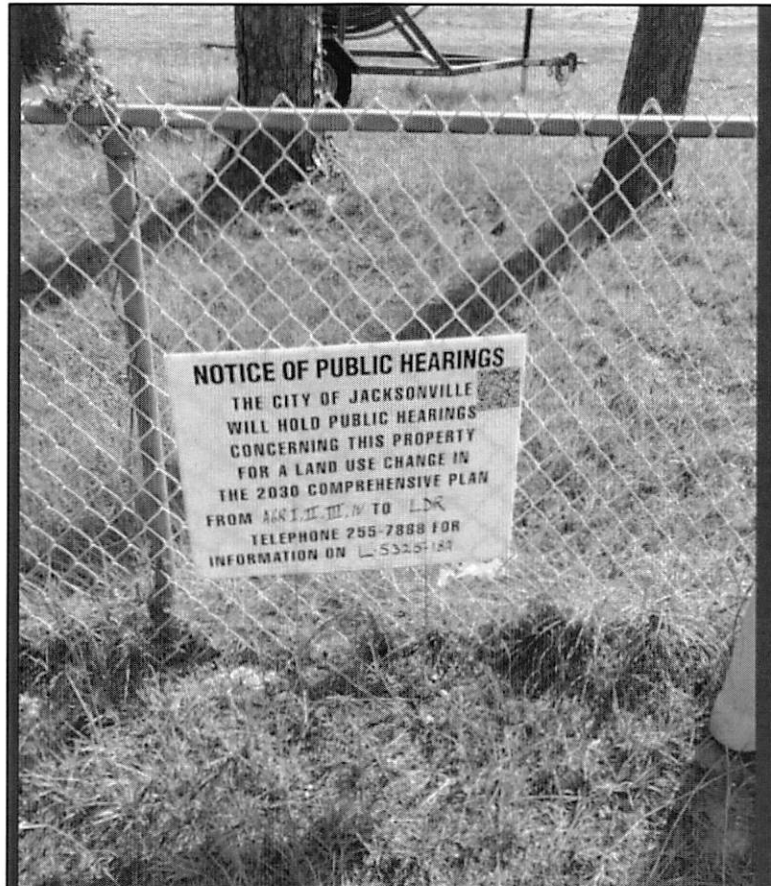
DEVELOPMENT ANALYSIS		
Development Boundary	Rural Area	
Roadway Frontage Classification	Philips Highway – Principal Arterial	
Plans/Studies	US 1 Corridor Plan (Ord 2001-757-E); Southeast Vision Plan	
	CURRENT	PROPOSED
Site Utilization	Undeveloped	Residential
Land Use/Zoning	AGR I, AGR II, AGR III, AGR IV / AGR	LDR* / RR-Acre
Development Standards For Impact Assessment	AGR-I 1 DU/100 Acres; AGR-II 1 DU/40 Acres; AGR-III 1 DU/10 Acres; AGR-IV 1 DU/2.5 Acres;	5 DU/Acre with 2,795.50 acres total
Development Potential	AGR-I 7 DUs; AGR-II 25 DUs; AGR-III 99 DUs; AGR-IV 23 DUs. Total = 154 DUs	13,977 DUs
Population Potential	409 people	37,178 people
SPECIAL DESIGNATIONS AREAS		
	YES	NO
Aquatic Preserve		X
Septic Tank Failure Area		X
Airport Environ Zone		X
Industrial Preservation Area		X
Cultural Resources		X
Archaeological Sensitivity	Mostly Low with some High Sensitivity	
Historic District		X
Coastal High Hazard/Adaptation Action Areas		X
Ground Water Aquifer Recharge Area		X
Well Head Protection Zone		X
Boat Facility Siting Zone		X
Brownfield		X
State Road (SR)	SR Name: US 1 / SR 5	

PUBLIC FACILITIES	
Potential Roadway Impact	Increase of 130,489 new net daily external trips
Potential Public School Impact	Increase of 4,654 students
Water Provider	JEA
Potential Water Impact	Increase of 3,713,892 gallons per day
Sewer Provider	JEA
Potential Sewer Impact	Increase of 2,785,419 gallons per day
Potential Solid Waste Impact	Increase of 35,939 tons per year
Drainage Basin / Sub-Basin	Julington Creek / Durbin Creek – Power’s Bay
Recreation and Parks	None
Mass Transit	N/A
NATURAL FEATURES	
Elevations	21-24 foot
Land Cover	6170-Mixed Wetland Hardwoods; 4410-Pine Plantation; 4430-Forest Regeneration; 1400-Commercial and Services; 6300-Wetland Forested Mixed
Soils	See Preliminary Wetland Assessment and Listed Wildlife Assessment Report
Floodzone	AO
Wetlands	See Preliminary Wetland Assessment and Listed Wildlife Assessment Report
Wildlife (sites greater than 50 acres)	See Preliminary Wetland Assessment and Listed Wildlife Assessment Report

**Subject to Site Specific FLUE Policy 4.4.11*

PROCEDURAL COMPLIANCE

Upon site inspection by the Planning and Development Department on June 24, 2019, the required notices of public hearing signs were posted. Twenty-eight (28) notices were mailed out to adjoining property owners and other interested parties informing them of the proposed land use change and pertinent public hearing and meeting dates.



The Citizen Informational Meeting was held on June 17, 2019. There were a number of people in attendance to discuss the abutting land use amendment to the north, Ordinance 2019-425. These concerns covered the entire area which included the subject land use amendment. There was also one member from the public in attendance specifically for this land use amendment. Questions and concerns from the public ranged from transportation access to the provision of schools and the timeframes for development.

CONSISTENCY EVALUATION

2030 Comprehensive Plan

Proposed amendment analysis in relation to the Locational Criteria, Objectives and Policies of the 2030 Comprehensive Plan, Future Land Use Element (FLUE):

Future Land Use Element

Development Area

Rural Area (RA): The RA consists of all lands outside of the Suburban Area and corresponds with predominantly undeveloped portions of the City with land uses such as Agriculture, Recreation, Conservation, or Public Buildings Facilities. Development should occur at very low densities which create little demand for new infrastructure and community serving supporting uses, unless development occurs under the Multi-Use Category, as a Rural Village or as a Master Planned Community as defined in this element. Development may occur within the Rural Area provided that it is consistent with the Operational Provisions and the Land Use category descriptions. Otherwise, development beyond such boundaries is considered urban sprawl and is to be discouraged.

- Goal 1 To ensure that the character and location of land uses optimize the combined potentials for economic benefit and enjoyment and protection of natural resources, while minimizing the threat to health, safety and welfare posed by hazards, nuisances, incompatible land uses and environmental degradation.
- Objective 1.1 Ensure that the type, rate, and distribution of growth in the City results in compact and compatible land use patterns, an increasingly efficient urban service delivery system and discourages proliferation of urban sprawl through implementation of regulatory programs, intergovernmental coordination mechanisms, and public/private coordination.
- Policy 1.1.10 Gradual transition of densities and intensities between land uses in conformance with the provisions of this element shall be achieved through zoning and development review process.
- Policy 1.1.12 Promote the use of Planned Unit Developments (PUDs), cluster developments, and other innovative site planning and smart growth techniques in all commercial, industrial and residential plan categories, in order to allow for appropriate combinations of complementary land uses, and innovation in site planning and design, subject to the standards of this element and all applicable local, regional, State and federal regulations.
- Policy 1.1.20 Development uses and densities shall be determined by the Development Areas described in the Operational Provisions for the Central Business District (CBD); Urban Priority Area (UPA); the Urban Area (UA); the Suburban Area (SA); and the Rural Area (RA) as identified in the 2030 Comprehensive Plan, in order to prevent urban sprawl, protect agricultural lands, conserve natural open space, and to minimize the cost of public facilities and services.
- Policy 1.1.21 Future amendments to the Future Land Use Map series (FLUMs) shall include consideration of their potential to further the goal of meeting or

exceeding the amount of land required to accommodate anticipated growth and the projected population of the area and to allow for the operation of real estate markets to provide adequate choices for permanent and seasonal residents and business consistent with FLUE Policy 1.1.5. The projected growth needs and population projections must be based on relevant and appropriate data which is collected pursuant to a professionally acceptable methodology. In considering the growth needs and the allocation of land, the City shall also evaluate land use need based on the characteristics and land development pattern of localized areas. Land use need identifiers include but may not be limited to, proximity to compatible uses, development scale, site limitations, and the likelihood of furthering growth management and mobility goals.

Policy 1.1.22 Future development orders, development permits and plan amendments shall maintain compact and compatible land use patterns, maintain an increasingly efficient urban service delivery system and discourage urban sprawl as described in the Development Areas and the Plan Category Descriptions of the Operative Provisions.

Objective 1.2 Manage the use of land in the City by approving new development and redevelopment only if necessary public facilities are provided concurrent with the impacts of development. Ensure the availability of adequate land suitable for utility facilities necessary to support proposed development. Verify prior to development order issuance that all new development and redevelopment will be served with potable water, wastewater, solid waste disposal, stormwater management facilities, and parks that meet or exceed the adopted Levels of Service established in the Capital Improvements Element.

Policy 1.2.1 The City shall ensure that the location and timing of new development and redevelopment will be coordinated with the ability to provide public facilities and services through the implementation of growth management measures such as the Development Areas and the Plan Category Descriptions of the Operative Provisions, development phasing, programming and appropriate oversizing of public facilities, and zoning and subdivision regulations.

Policy 1.2.6 The City shall ensure through the implementation of Chapter 654, Ordinance Code (Code of Subdivision Regulations) that suitable lands and/or easements are available for the provision of utility and transportation facilities necessary to support proposed development, and implement improvements with minimum land use, social and environmental disruption. Consider the location and timing of new public facility construction in requests for Future Land Use Map series amendments.

Policy 1.5.14 In accordance with the Conservation and Coastal Management Element, the City shall encourage environmentally sensitive areas to be placed in a

Conservation land use category, Conservation zoning district, and/or conservation easement.

Policy 2.10.2 The City shall include incentives in the development review process to encourage residential development with supporting uses such as retail, restaurant, recreation and open space that relate physically and visually to nearby areas of the City through a design concept, which includes, but is not limited to:

1. Residential development with a full range of urban uses and support facilities; and
2. Physically connected neighborhoods bound together by pedestrian paths and public spaces.

Goal 3 To achieve a well-balanced and organized combination of residential, non-residential, recreational and public uses served by a convenient and efficient transportation network, while protecting and preserving the fabric and character of the City's neighborhoods and enhancing the viability of non-residential areas.

Objective 3.1 Continue to maintain adequate land designated for residential uses which can accommodate the projected population and provide safe, decent, sanitary and affordable housing opportunities for the citizens. Protect single-family residential neighborhoods by requiring that any other land uses within single-family areas meet all applicable requirements described in the Development Areas and the Plan Category Descriptions of the Operative Provisions of the 2030 Comprehensive Plan and Land Development Regulations.

Policy 3.1.11 The City shall require new residential areas to be designed to include an efficient system of internal circulation and connection to adjacent developments and neighborhoods. The Land Development Regulations shall detail the requirements for public access and interconnectivity within and between developments based on standards such as but not limited to a connectivity score, maximum separations between connections to adjacent developments, and rules relative to hours, operations, and public safety considerations for any restriction of access through the use of gates.

According to the Category Description of the Future Land Use Element (FLUE), the AGR functional land use categories accommodate primarily agriculture activities with some single family dwellings and are intended to preserve the existing rural character of outlying areas of the City.

According to the Category Description of the FLUE, the Low Density Residential (LDR) land use category in the Rural Area primarily permits low density residential development in the

form of single-family and multi-family dwellings at up to seven dwelling units per acre when full urban services are available. Plan amendment requests for new LDR designations are discouraged in the Rural Area because they would potentially encourage urban sprawl.

The 2,795.50 subject site is located just within the boundaries of the Rural Development Area with a relatively small 15 acre section along the southern property line in the Suburban Area. The western boundary of the property is at the Suburban Area / Rural Area boundary line. According to the locational criteria of the operative provisions in the Future Land Use Element (FLUE), development of lands within the Rural Development Area should only occur at very low densities. The LDR land use category allows a maximum of 7 dwelling units per acre and the LDR category description states that plan amendment requests for new LDR designations are discouraged in the Rural Area because they could encourage urban sprawl. However, directly abutting the subject site to the west are lands in the LDR land use category, Suburban Area, which provide continued land use compatibility in the area. Additionally, the applicant has indicated the intent to submit the companion rezoning application for the RR-Acre zoning district. The RR-Acre zoning permits residential development on lots that are a minimum of one (1) acre and would serve to hold potential development to a low-density scale consistent with the intent of the Rural Area designation.

The operative provisions of the FLUE also call for consideration of the availability of public services, facilities and infrastructure to serve proposed development. The ability to provide municipal utilities, drainage, schools, solid waste disposal, and recreational sites consistent with the level of service standards in the Capital Improvements Element will be evaluated and addressed in accordance with established concurrency and mobility processes.

Given the adjacent land use category of LDR, the proposed land use amendment would result in a compatible and appropriate transition of density for the area, meeting FLUE Goal 1 and Policy 1.1.10. While at a much larger scale than past land use amendments in the surrounding area, the proposed land use is consistent with the development trends in the area as called for in FLUE Objective 1.1 and 3.1.

Consistent with FLUE Objective 3.1 and Policy 1.1.21, the land use amendment would contribute additional lands for residential development increasing the amount of land available to accommodate anticipated growth and the projected population in the area.

The property abuts Philips Highway (US 1), a major arterial roadway, which would provide access to the development in accordance with FLUE Policy 1.2.6.

Due to the scale and size of the proposed land use amendment, the development will produce substantial impacts and increase the need for infrastructure and facilities. A strategically designed long-term master plan would provide for an innovative site planning mechanism to ensure that development resulting from this amendment occurs in an orderly, efficient, effective and predictable manner. It is critical to understand how new public facilities to accommodate development will be provided to ensure a well-balanced and organized combination of residential, non-residential, recreational and public uses. Additionally, according to the applicant, the adoption round companion rezoning will be filed for the RR-

Acre zoning district thus limiting the allowed density until such time as a long term master plan for the area is completed pursuant to the site-specific policy recommendation included in this report.

In order to ensure adequate public facilities are provided concurrent with development and to facilitate the integration of land uses with an efficient system of internal circulation and connection, a site specific policy is recommended requiring a long-term master plan subject to review and approval prior to the submittal of land development reviews and approvals. Proposed Future Land Use Element Policy 4.4.11 is as follows:

Future Land Use Element (FLUE), Policy 4.4.11

In accordance with Ordinance 2019-424, which designates a 2,795.50 acre LDR land use category on the Future Land Map, the owner or authorized agent shall develop a conceptual long-term master plan addressing the entire 2,795.50 acre site. The conceptual master plan, and proposed revisions or amendments to the approved plan, shall be subject to review and approval by the Planning Commission prior to submittal of land development reviews and approvals. However, approximately 350 acres of the site can be developed or rezoned prior to approval of the conceptual master plan. Revisions or amendments to the plan that do not change the approved densities or intensities may be administratively modified by the Planning and Development Department. Development within the site shall be consistent with the conceptual master plan. The conceptual master plan shall, at a minimum, address the following conditions:

1. The general distribution, location and densities/intensities of residential and non-residential (if anticipated) development;
2. Acknowledgement that future land use map amendments and rezonings will be required where such uses and densities are inconsistent with the current land use and/or zoning designations;
3. The general distribution and location of conservation areas and wetland buffers;
4. The strategy for providing centralized utilities for water and sewer service throughout the planning area.
5. Identification of the major internal transportation facilities necessary to serve the future land uses through an efficient and connected network;
6. General identification of how the major internal transportation facilities will connect to the external transportation network.

The approved conceptual master plan shall be on file with the Planning and Development Department and posted on the Department's website.

The proposed land use amendment, in conjunction with the recommended site-specific policy, ensures that development of the site will result in:

- the appropriate character and location of uses and development, taking into consideration future uses, densities and intensities;
- a compatible and connected land use pattern;

- the identification of conservation areas and wetland buffers to protect environmentally sensitive land; and
- the predictable, orderly and effective provision of public facilities and infrastructure.

Therefore, the proposed amendment is consistent with and furthers the intent of FLUE Goals 1 and 3, Objectives 1.1, 1.2 and 3.1 and Policies 1.1.10, 1.1.12, 1.1.20, 1.1.21, 1.1.22, 1.2.1, 1.2.6, 1.5.14, 2.10.2, and 3.1.11.

US 1 Corridor Study Review

The subject site is located off of Philips Highway and partially within the boundaries of the US 1 Corridor Plan. The Plan supports the proposed use for single family residential developments that have frontage along the southern section of the US1 Corridor but emphasizes the need to greatly improve the aesthetics along the corridor through visually appealing buffers and landscaping.

Southeast Vision Plan

The application site lies within the Southeast Vision Plan area. The plan does not identify specific recommendations for the subject site. However, the Plan provides a summary of recommendations for future planning efforts in the vision plan area. Recommendations for redevelopment and infill along this portion of Philips Highway and reducing vehicle miles traveled are suggested. Transportation connectivity, compact development, quality open space and walkable neighborhoods with a mix of uses is preferred to balance the quality of life assets in the area. The proposed land use change to Low Density Residential could provide the opportunity to achieve these vision plan goals, thereby illustrating the proposed land use amendment's consistency with the Southeast Jacksonville Vision Plan. A long-term master plan will promote consistency with these recommendations.

Strategic Regional Policy Plan

The proposed amendment is consistent with the following Policy of the Strategic Regional Policy Plan:

Policy 21: The Region supports diverse and sufficient housing stock to provide choices for all households, from single persons to extended families with children.

The proposed land use amendment would create a location for the development of new housing stock for the area. Therefore, the proposed amendment is consistent with Policy 21 of the Strategic Regional Policy Plan, Regional Health Element.

RECOMMENDATION

The Planning and Development Department recommends **Approval of this application subject to the addition of site specific policy 4.4.11** based on its consistency with the overall intent of the 2030 Comprehensive Plan and the Strategic Regional Plan.

Future Land Use Element (FLUE), Policy 4.4.11

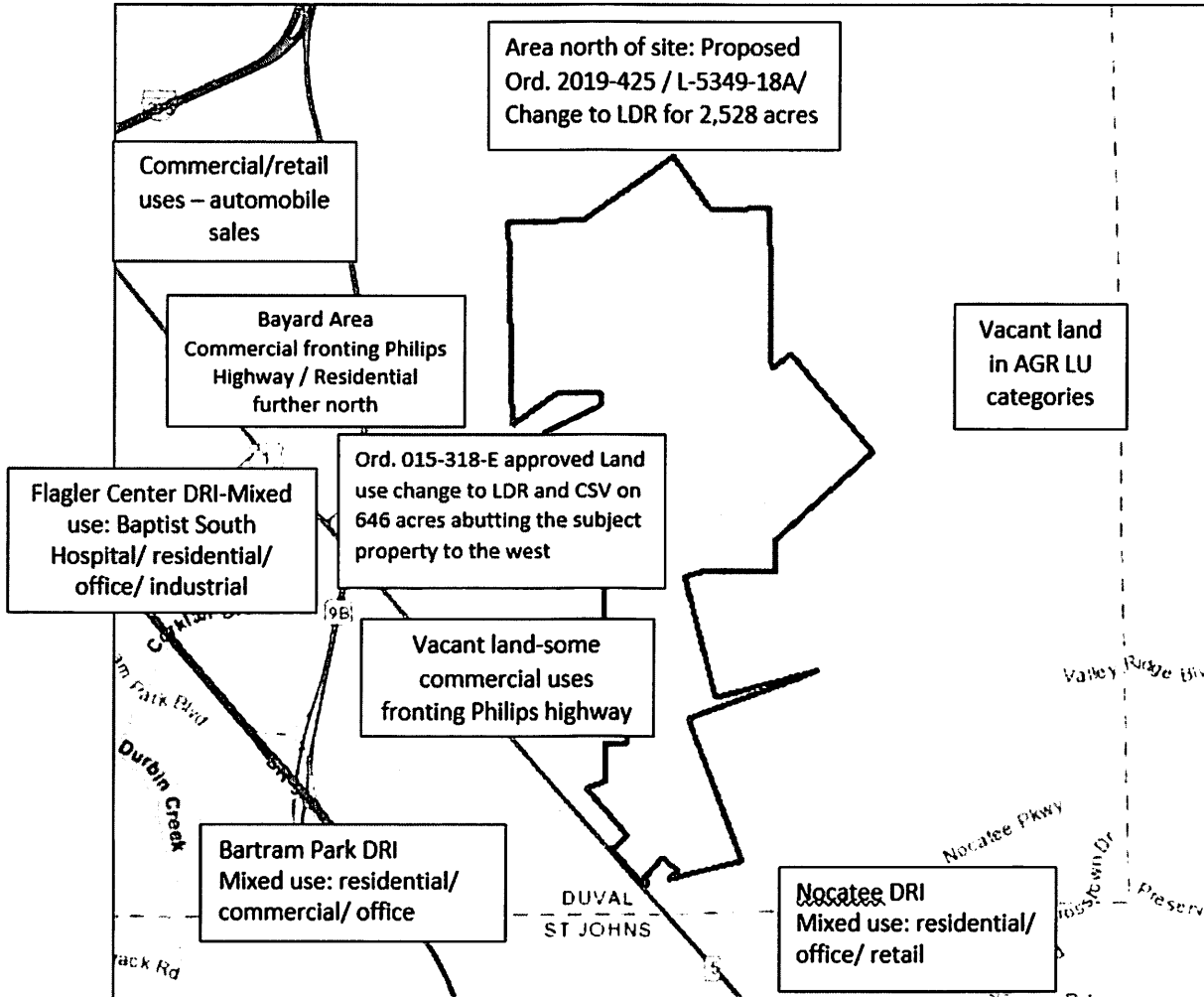
In accordance with Ordinance 2019-424, which designates a 2,795.50 acre LDR land use category on the Future Land Map, the owner or authorized agent shall develop a conceptual long-term master plan addressing the entire 2,795.50 acre site. The conceptual master plan, and proposed revisions or amendments to the approved plan, shall be subject to review and approval by the Planning Commission prior to submittal of land development reviews and approvals. However, approximately 350 acres of the site can be developed or rezoned prior to approval of the conceptual master plan. Revisions or amendments to the plan that do not change the approved densities or intensities may be administratively modified by the Planning and Development Department. Development within the site shall be consistent with the conceptual master plan. The conceptual master plan shall, at a minimum, address the following conditions:

1. The general distribution, location and densities/intensities of residential and non-residential (if anticipated) development;
2. Acknowledgement that future land use map amendments and rezonings will be required where such uses and densities are inconsistent with the current land use and/or zoning designations;
3. The general distribution and location of conservation areas and wetland buffers;
4. The strategy for providing centralized utilities for water and sewer service throughout the planning area.
5. Identification of the major internal transportation facilities necessary to serve the future land uses through an efficient and connected network;
6. General identification of how the major internal transportation facilities will connect to the external transportation network.

The approved conceptual master plan shall be on file with the Planning and Development Department and posted on the Department's website.

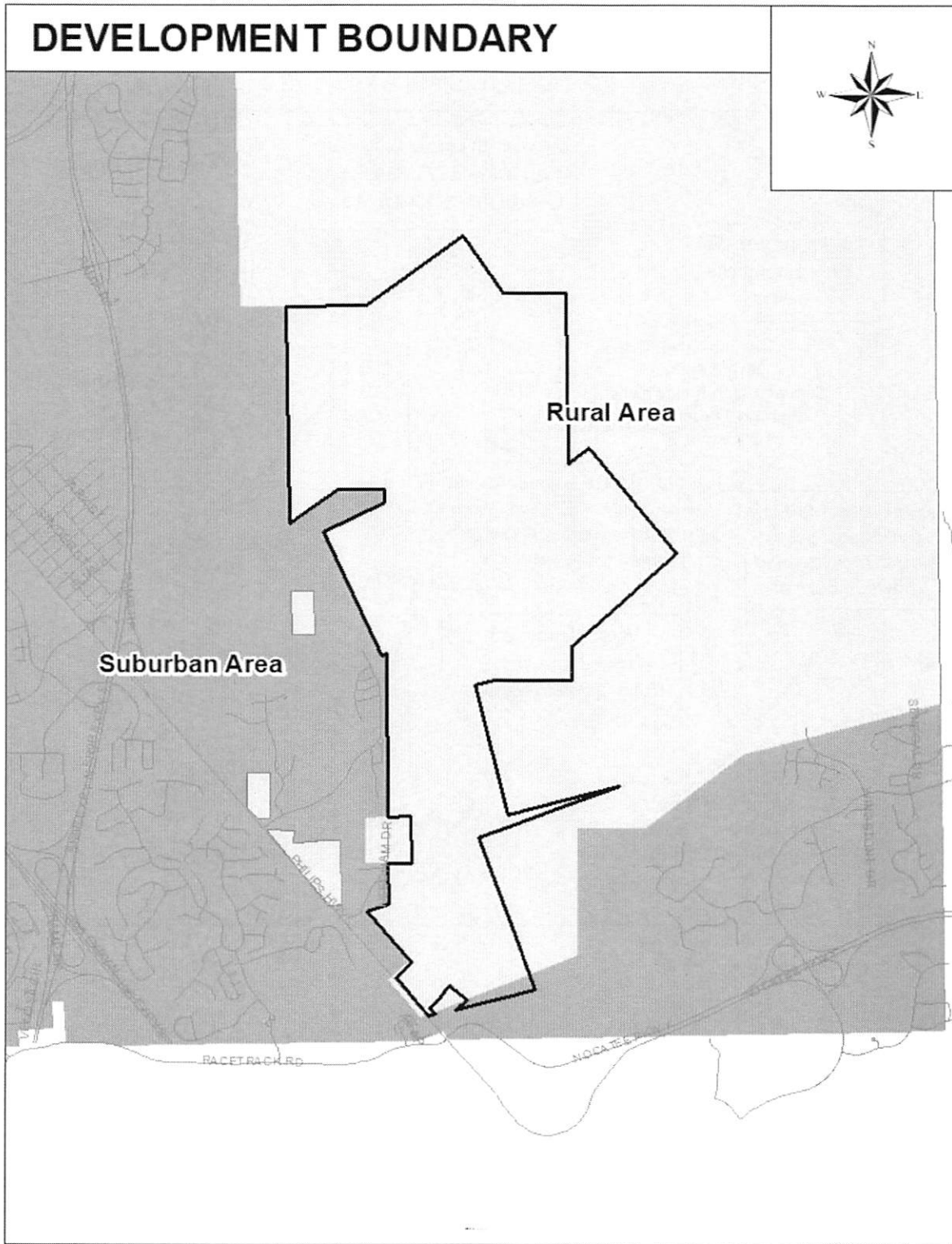
ATTACHMENT A-1

Existing Land Utilization:



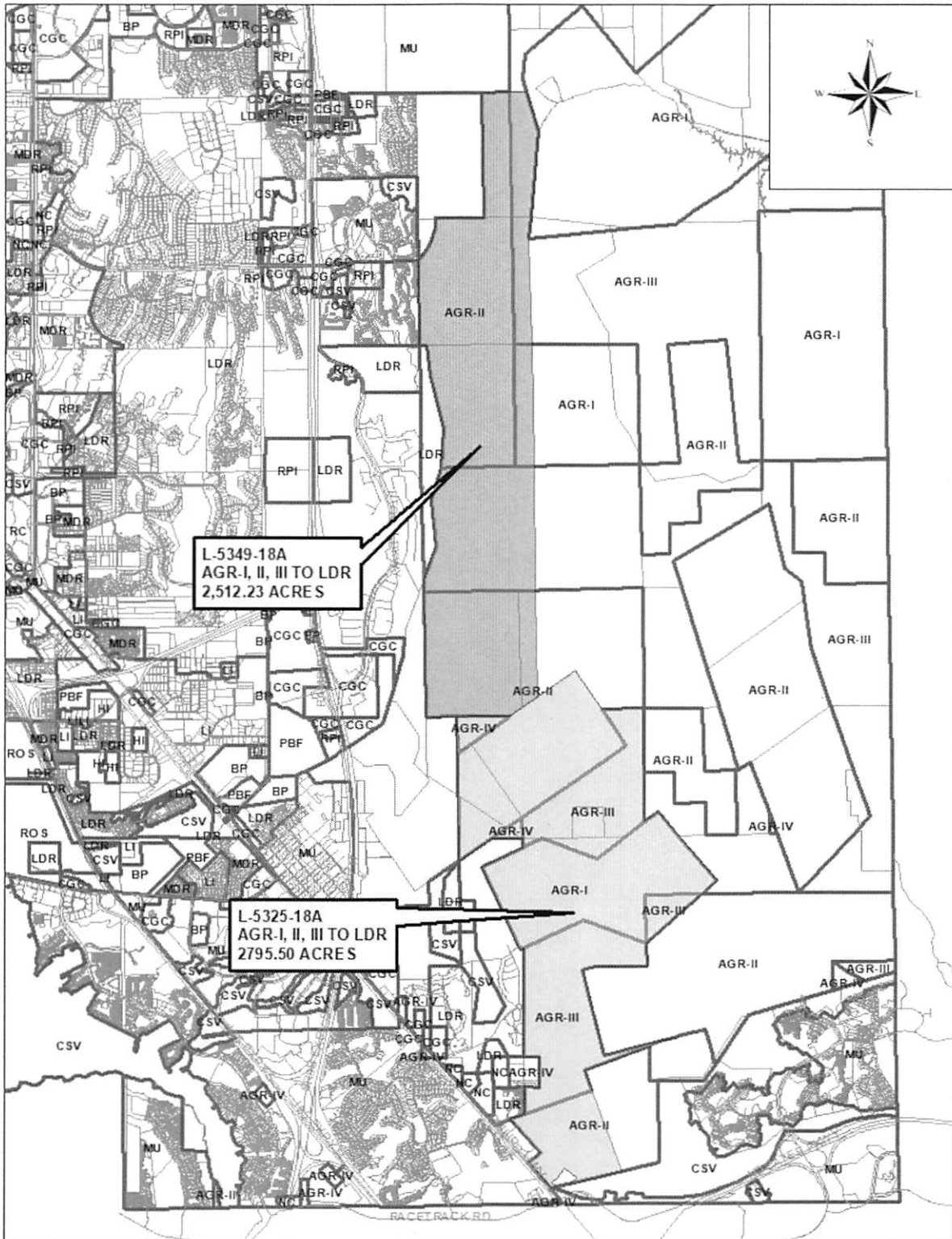
ATTACHMENT A-2

Development Boundary:



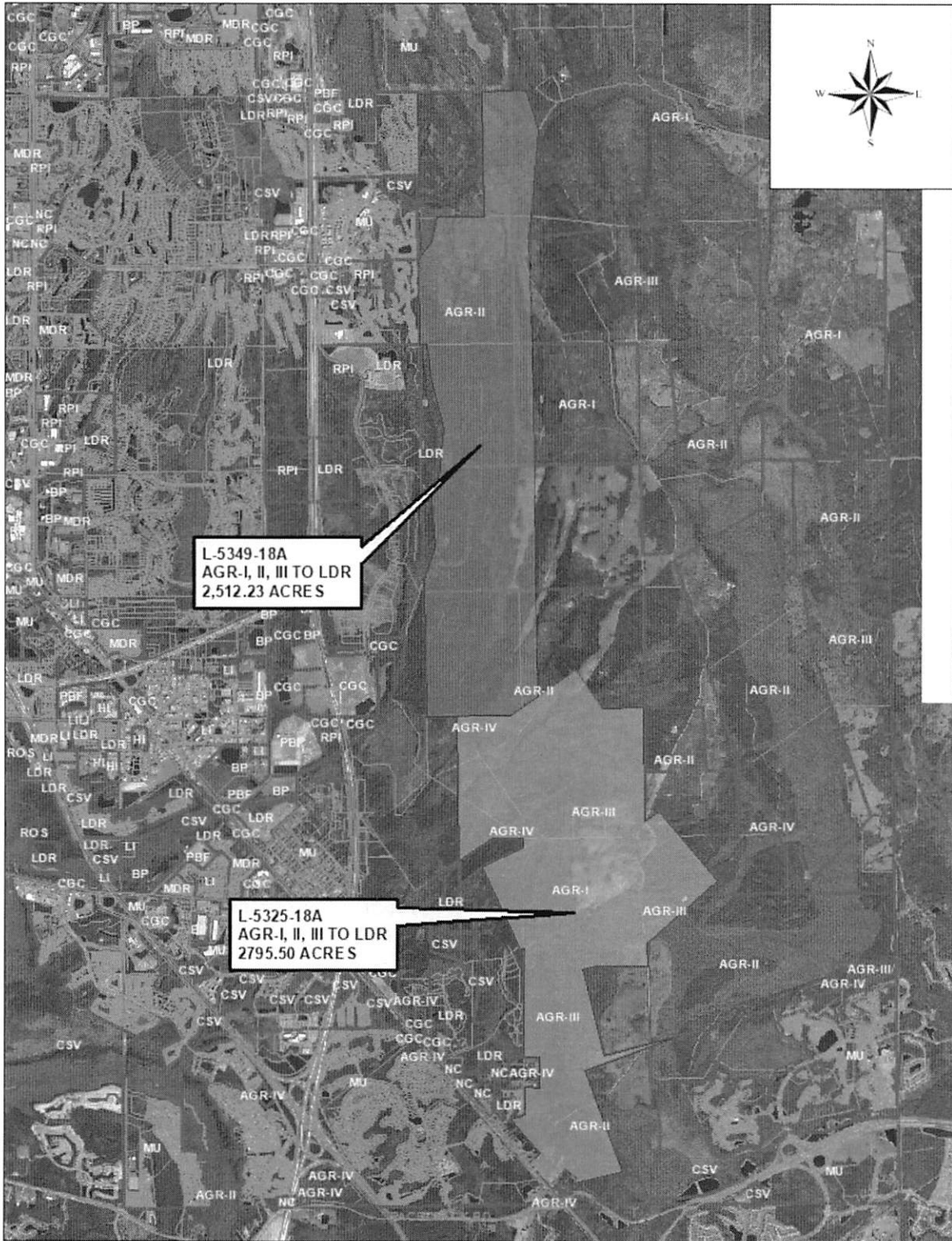
ATTACHMENT A-3

Proximate Land Use Applications:



ATTACHMENT A-3 (continued)

Proximate Land Use Applications:



ATTACHMENT B

Transportation Analysis:



ONE CITY. ONE
JACKSONVILLE.

City of Jacksonville, Florida

Lenny Curry, Mayor

City Hall at St. James
117 W. Duval St.
Jacksonville, FL 32202
(904) 630-CITY
www.coj.net

MEMORANDUM

DATE: May 29, 2019

TO: Susan Kelly
Community Planning Division

FROM: Lurise Bannister
Transportation Planning Division

SUBJECT: Transportation Review: Land Use Amendment L-5325-18A

A trip generation analysis was conducted for Land Use Amendment L-5325-18A, located east of SR 9B and Philips Highway (US 1), and north of the Duval/St. Johns County line in the Rural Development Area of Jacksonville, Florida. The subject site consists of multiple parcels with an existing mixture of Agriculture I, -II, -III, and -IV (AGR-I, AGR-II, AGR-III, AGR-IV) land use categories. The proposed land use amendment is to allow for Low Density Residential (LDR) on approximately 2,795 +/- acres.

Transportation Element Policy 1.2.1 of the 2030 Comprehensive Plan requires the use of the most current ITE Trip Generation Manual (10th Edition) to calculate the vehicular trips based on the maximum development potential for existing and proposed land uses. In accordance with development standards for impact assessments established in the Future Land Use Element Policy 1.2.16, the AGR-I, -II, -III, and -IV land use categories development impact assessment standards result in a development potential of 154 single family homes (ITE Land Use Code 210), generating 1,454 new daily vehicular trips. The proposed LDR land use category development impact assessment standard is 5-single family dwelling units per acre, resulting in a development potential of 13,977 homes (ITE Land Use Code 210), generating 131,943 new daily vehicular trips. This will result in 130,489 net new daily vehicular trips if the land use is amended from AGR-I, -II, -III, and -IV to LDR, as shown in Table A.

ATTACHMENT B

Transportation Analysis-cont:

Table A
Trip Generation Estimation

Current Land Use	ITE Land Use Code	Potential Number of Units (X)	Estimation Method (Rate or Equation)	Gross Trips	Less Pass By Trips	Net New Daily Trip Ends
AGR - I	210	7 SF DUs	T = 9.44 (X)	66	0.00%	66
AGR - II	210	25 SF DUs	T = 9.44 (X)	236	0.00%	236
AGR - III	210	99 SF DUs	T = 9.44 (X)	935	0.00%	935
AGR - IV	210	23 SF DUs	T = 9.44 (X)	217	0.00%	217
Total Section 1						1,454
Proposed Land Use	ITE Land Use Code	Potential Number of Units (X)	Estimation Method (Rate or Equation)	Gross Trips PM/Daily	Less Pass By Trips	Net New Daily Trip Ends
LDR	210	13,977 SF DUs	T = 9.44 (X)	131,943	0.00%	131,943
Total Section 2						131,943
Net New Daily Trips						130,489

Source: Trip Generation Manual, 10th Edition, Institute of Engineers

Additional Information:

Objective 2.4 of the Transportation Element (TE) of the 2030 Comprehensive Plan requires that the City shall coordinate the mobility circulation system with the future land uses shown on the Future Land Use Map series in order to ensure that roads, road improvements and other mobility alternative improvements are provided as necessary to support development in an economically efficient and environmentally sound manner.

Policy 2.4.2 of the TE of the 2030 Comprehensive Plan requires that the City shall amend the adopted Comprehensive Plan to incorporate the data and analysis generated by a periodic regional transportation model and study and facilitate the implementation of the study recommendations.

These two Comprehensive Plan policies ensure that the transportation impact related to land use amendments are captured in the Long Range Transportation Plan (LRTP) that is conducted every 5 years. This analysis includes the cumulative effect of all land use amendments that were approved within this time period. This plan identifies the future transportation needs and is used to create cost feasible roadway needs that can be funded by the City's Mobility Strategy Plan.

Mobility needs vary throughout the city and in order to quantify these needs, the city was divided into 10 Mobility Zones. The Mobility Strategy Plan identifies specific transportation strategies and improvements to address traffic congestion and mobility needs for each mode of transportation. The project site is located in Mobility Zone 1.

Existing available roadway capacity for the vehicle/truck mode for the entire zone was tested based on volume demand to capacity ratio (V/C), where the average daily traffic volumes determined from the most recent City of Jacksonville traffic count data were compared to the *Maximum Service Volumes (MSV)* from the current *FDOT Quality/Level of Service Handbook (2012)* for each functionally classified roadway within the zone. A V/C ratio of 1.0 indicates the roadway network is operating at its capacity.

The result of the V/C ratio analysis for the overall Mobility Zone 1 is 0.71.

ATTACHMENT B

Transportation Analysis-cont:

The proposed land use amendment based on impact assessment standards has the development potential of 13,977 homes and generating approximately 131,943 new daily vehicular trips onto the roadway network. Philips Highway (US 1) is the first functional classified roadway that could be significantly impacted by the proposed development. US1 is subject to FDOT review and access management requirements. The Transportation Planning Division recommends that a traffic operational analysis of the adjacent roadway network be conducted by a licensed professional traffic engineer, to determine the impact to the external trips as a result of the land use change. A methodology meeting with the Florida Department of Transportation and Transportation Planning Division should be held prior to commencement of the study.

ATTACHMENT C

JEA Assessment:



21 West Church Street
Jacksonville, Florida 32202-3139

June 6, 2019

MEMORANDUM

To: Planning and Development Department

From: Susan R. West, PE
JEA

Subject: Land Use Amendment
L-5325-18A

Upon review of the referenced application, JEA has identified the following improvements that will be required to provide service to the development:

1. Water treatment plant (including associated property and easement needs) will be required to support the water needs of the development;
2. Electric substations (including associated property and easement needs) will be required to support the electric needs for the development.

This memorandum may not encompass all of the improvements needed. Additional service and design elements will be addressed following applicant's request for service availability. If you have any questions, please call or email me directly at 904-665-7980 or westsr@jea.com.

ATTACHMENT D

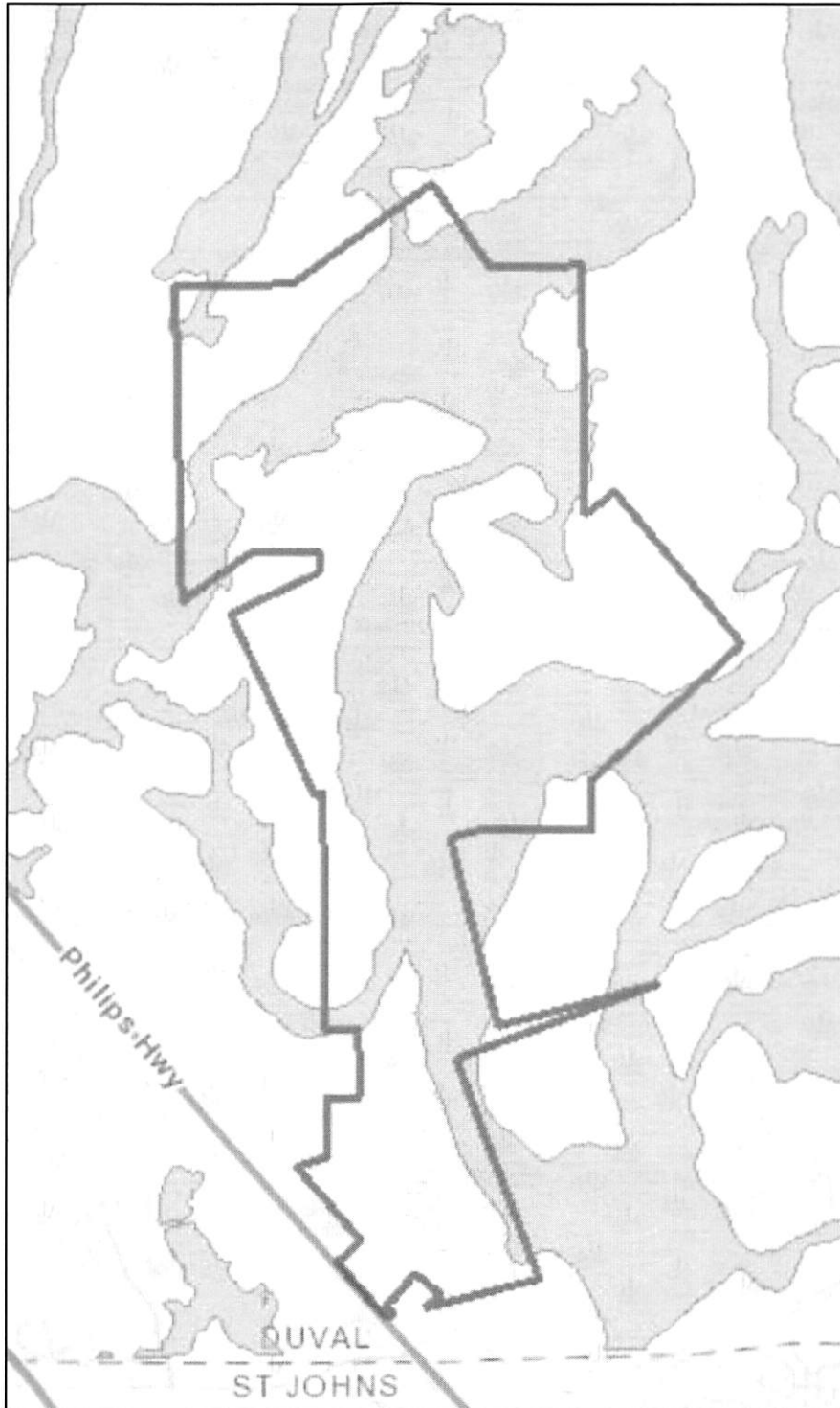
Wetlands Map:



ATTACHMENT E


Flood Zone Map:

AO Flood Zone



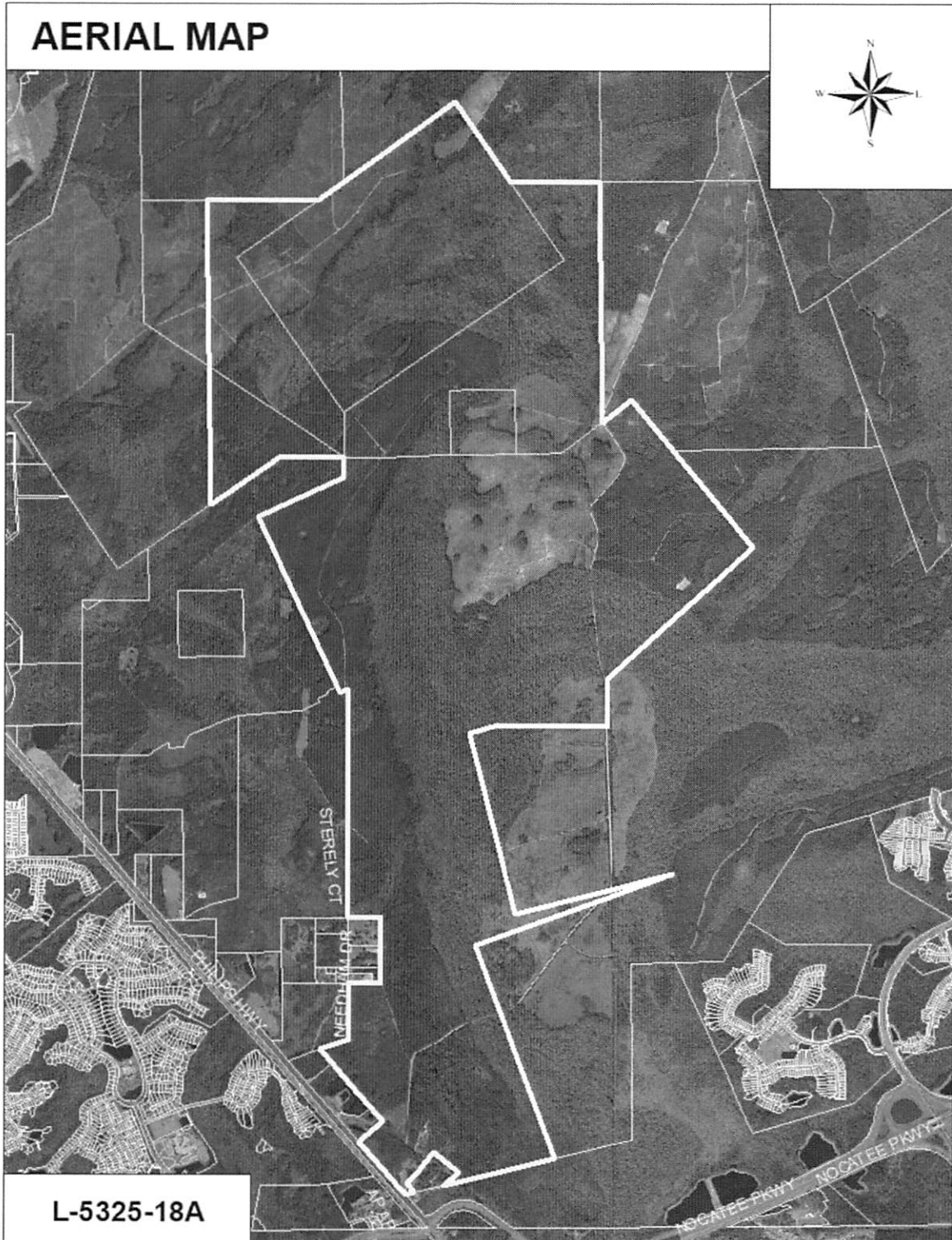
ATTACHMENT F

Land Use Amendment Application:

	APPLICATION FOR LARGE-SCALE LAND USE AMENDMENT TO THE FUTURE LAND USE MAP SERIES - 2030 COMPREHENSIVE PLAN		
Date Submitted: Land Use Transmittal Ordinance #: JPOD Application #: Assigned Planner:	11/7/18 2019-424 L-5325-18A Helena Paros	Date Staff Report is Available to Public: Planning Commission's LPA Public Hearing: 1st City Council Public Hearing: LUZ Committee's Public Hearing: 2nd City Council Public Hearing:	7/12/2019 7/18/2019 7/23/2019 8/6/2019 8/13/2019
<u>GENERAL INFORMATION ON APPLICANT & OWNER</u>			
Applicant Information: PAUL HARDEN LAW OFFICE OF PAUL M. HARDEN 501 RIVERSIDE AVENUE, SUITE 901 JACKSONVILLE, FL 32202 Ph: 9043965731 Fax: 9043995461 Email: PAUL_HARDEN@BELLSOUTH.NET		Owner Information: JED DAVIS ESTUARY LLC 4310 PABLO OAKS COURT JACKSONVILLE, FL 32234	
<u>DESCRIPTION OF PROPERTY</u>			
Acres: 2.795.50 Real Estate #s): 168162 0000 167779 0040, a portion of 167868 0000 167890 0000, a portion of 167869 0000 168177 0110, a portion of		General Location: NORTH OF PHILIPS HWY, EAST OF E TOWN PKWY	
Planning District: 3 Council District: 11 Development Area: RURAL AREA		Address: 14931 PHILIPS HWY 0 SLOCUMB AVE 0 PHILIPS HWY 0 GRANT STREET	
Between Streets/Major Features: PHILIPS HWY and BUTLER BLVD			
<u>LAND USE AMENDMENT REQUEST INFORMATION</u>			
Current Utilization of Property: VACANT LAND Current Land Use Category/Categories and Acreage:			
AGR-I 743.50 AGR-II 1,007.50 AGR-III 987.00 AGR-IV 57.50		Surrounding Land Use Categories: AGR-II, AGR-IV, LDR	
Requested Land Use Category: LDR Applicant's Justification for Land Use Amendment: TO DEVELOP PROPERTY FOR RESIDENTIAL USE.			
<u>UTILITIES</u>			
Potable Water: JEA		Sanitary Sewer: JEA	
<u>COMPANION REZONING REQUEST INFORMATION</u>			
Current Zoning District(s) and Acreage: AGR 2,795.50			
Requested Zoning District: RLD-50			
Additional information is available at 904-255-7888 or on the web at http://maps.coj.net/luzap/			

ATTACHMENT G

Aerial:



ATTACHMENT H

Preliminary Wetland Assessment and Listed Wildlife Assessment

see following pages

November 27, 2018

Mr. Mikey White
4314 Pablo Oaks Ct
Jacksonville, FL 32224

Via Email: Mwhite@parcgroup.net

**Re: Preliminary Wetland Assessment and Listed Wildlife Assessment
Pike Hole/Well's Creek
Duval County, Florida
LG2ES Project Number 2018-260**

Dear Mr. White:

Pursuant to your request, LG² Environmental Solutions, Inc. (LG²ES) has conducted a listed wildlife species and habitat assessment of the above-referenced property. The purpose of the assessment was to determine the potential presence and extent of wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWC) and U.S. Fish and Wildlife Service (USFWS). Additionally, on-site habitat types, including jurisdictional wetlands, were examined and their extents preliminarily mapped. Attached please find a report of our findings.

The User of this report is encouraged to review the entire report to gain a full understanding of the assessment results. Should you have any comments or questions regarding this report, please do not hesitate to contact us. We appreciate the opportunity to provide you professional environmental services.

Sincerely,

LG² Environmental Solutions, Inc.

Kristina Witter
Project Manager

Attachment 1 – Listed Wildlife and Habitat Assessment Report

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**Preliminary Wetland Assessment and
Listed Wildlife Assessment Report**

**Pike Hole/Well's Creek
Duval County, Florida**

**LG²ES Project Number
2018-260**

Prepared for:

**Mr. Mikey White
4314 Pablo Oaks Ct
Jacksonville, FL 32224**

Prepared by:



**LG² Environmental Solutions, Inc.
10475 Fortune Parkway, Suite 201
Jacksonville, Florida 32256
(904) 363-1686
www.lg2es.com**

November 27, 2018

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	Figure 2 – Aerial Site Map
	Figure 3 – Soils Survey Determination
	Figure 4 - Florida Land Cover Classification System Determination
	Figure 5 – Wood Stork Nest Proximity Map
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Appendix B	FNAI Biodiversity Matrix Report
Appendix C	USFWS IPaC Endangered Species Resource List
Appendix D	FWC Eagle Nest Locator Report

1.0 INTRODUCTION

During November 5 through 12, 2018 LG² Environmental Solutions, Inc. (LG²ES) conducted preliminary wetland assessment and listed wildlife and habitat assessment of the subject property in Duval County, Florida. The purpose of the assessment was to determine the potential presence and extent of wildlife species, and their associated habitats, listed as endangered, threatened or Species of Special Concern (SSC) by the Florida Fish and Wildlife Conservation Commission (FWC) and U.S. Fish and Wildlife Service (USFWS). Additionally, the presence and extent of jurisdictional wetlands was preliminarily assessed.

2.0 METHODOLOGY

Prior to the site assessment, aerial orthophoto satellite images, United States Geological Survey (USGS) topographic maps, and U.S. Department of Agriculture (USDA) soil survey maps were reviewed to determine potential habitat and associated wildlife species on-site. *The Soil Survey of Duval County* (USDA-NRCS 1987) was reviewed to help evaluate suitable habitat for sensitive species depending on substrate requirements (USDA 1987). Wildlife databases including the *Florida Fish and Wildlife Conservation Commission Bald Eagle Nest Locator* (FWC 2018), the *Florida Natural Areas Inventory Biodiversity Matrix* (FNAI 2018), and the *USFWS Information for Planning and Consultation* (IPaC) endangered species resource list were accessed prior to site assessment to determine potential for sensitive wildlife species and their suitable habitats. Additionally, the U.S. Army Corps of Engineers (USACE) Jacksonville District USFWS Wood Stork Programmatic Key (USFWS 2008) and Eastern Indigo Snake Programmatic Effect Determination Key (USFWS 2013) were referenced to assist in determination of presence and potential impacts to these species.

During the site assessment, meandering pedestrian transects were conducted within each vegetative community. Within each transect, LG²ES collected data such as plant species, wildlife species, weather conditions, time assessment commenced and terminated, and anthropogenic activity. Vegetative communities were identified according to the *Florida Land Cover Classification System* (FLCCS) (FWC 2014). These methods are consistent with recognized FWC survey guidelines for a general wildlife assessment.

3.0 DATABASE REVIEW OF SITE CONDITIONS

3.1 USDA Soil Survey

The *Soil Survey of Duval County* (USDA-NRCS 1987) indicates that nine soil types are defined on the property. The soil types are listed below and depicted on the attached Figure 3.

Boulogne Fine Sand (14) – This soil series consists of poorly drained soils and has a parent material of sandy marine deposits. The water table is usually 6 to 18 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Evergreen-Wesconnett Complex, Depressional (22) – This soil series consists of poorly drained soils and has a parent material of organic material over sandy marine deposits. The water table is usually 0 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Hurricane and Ridgewood Soils (24) – This soil series consists of somewhat poorly drained soils and has a parent material of sandy marine deposits. The water table is usually 24 to 42 inches from the surface. Slopes range from 0 to 5 percent. This soil type supports planted pine plantations.

Leon Fine Sand (32) – This soil series consists of poorly drained soils and has a parent material of sandy marine deposits. The water table is usually 6 to 18 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Lynn Haven Fine Sand (35) – This soil series consists of poorly drained soils and has a parent material of sandy marine deposits. The water table is usually 0 to 6 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Mascotte Fine Sand (38) – This soil series consists of poorly drained soils and has a parent material of sandy and loamy marine deposits. The water table is usually 6 to 18 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Pelham Fine Sand (51) – This soil series consists of poorly drained soils and has a parent material of sandy and loamy marine deposits. The water table is usually 6 to 12 inches from the surface. Slopes range from 0 to 2 percent. This soil type supports planted pine plantations.

Pottsburg Fine Sand, High (58) – This soil series consists of somewhat poorly drained soils and has a parent material of sandy marine deposits. The water table is usually 12 to 24 inches from the surface. Slopes range from 0 to 3 percent. This soil type supports planted pine plantations.

Stockade Fine Sandy Loam, Depressional (81) – This soil series consists of very poorly drained soils and has a parent material of loamy marine deposits. The water table is usually 0 inches from the surface. Slopes range from 0 to 2 percent. These soils support Cypress/Pine/Cabbage Palm and Cypress/Hardwood forest communities.

4.0 SITE VISIT SUMMARY

During November 5 through 12, 2018, LG2ES biologists conducted a site visit to record the habitat and their associated wildlife species on-site, with emphasis on the presence of listed wildlife species, their associated habitats, and jurisdictional wetlands. The observed vegetative communities are described in the following Section 4.1. The weather conditions during the site visit were reported as cloudy to occasionally sunny skies with an average high temperature of 80°F and winds up to 10mph. These conditions, considering the time of day, the season, and the scope of the inspection, may have influenced the wildlife species observed. The presence of specific wildlife species was determined visually, audibly, or by evidence of tracks, scat, nests, burrows, and/or dens. General wildlife species observed were recorded and are detailed in the following Section 4.2.

4.1 Observed Vegetative Communities

During the site assessment, LG²ES biologists conducted a series of meandering pedestrian transects throughout the subject property to categorize the on-site vegetative communities in accordance with FLCCS criteria. The location of natural resource issues of concern, and occurrences, were recorded using hand-held global positioning system (GPS) technology for later use in generating report graphics and

recommendations. The attached Figure 4 provides a FLCCS map for reference. The following is a brief description of the habitat communities observed.

Uplands

Coniferous Plantations (FLCCS 183332) – This classification is applied to all pine plantations of various ages that were artificially generated by planting seedling stock or seeds, usually along mechanically created bed rows. The groundcover was predominantly saw palmetto, goldenrod (*Solidago* sp.), grape vine (*Vitis rotundifolia*), bracken fern and broomsedge. This community type likely contained areas of wetlands where slash pines were planted through shallow flatwoods depression and hydric flatwoods wetland communities. Identification and mapping of these subtle wetlands within the coniferous plantation was beyond the scope of this preliminary assessment and would require a jurisdictional wetland delineation.

Mesic Flatwoods (FLCCS 1311) – This vegetative community was characterized by mesic, sandy soils with an open longleaf and/or slash pine canopy and a layer of low shrubs and herbs including saw palmetto, gallberry, dwarf live oak, wiregrass.

Bare Soil/ Clear Cut (FLCCS 1880) – This xeric community type was represented by areas that were devoid of trees and contained exposed soils as the result of recent timber cutting operations.

Rural Structures (FLCCS 1832) – The area was represented by a homestead, surrounding yard, and associated buildings as well as an area of small industrial equipment with maintained cleared landscape in a rural setting.

Wetlands

Slash Pine Swamp Forest (FLCCS 2224) - This forest type was represented by domed, depressional swamps and strands dominated by slash pine and pond cypress (*Taxodium ascendens*) with black tupelo (*Nyssa sylvatica*), loblolly bay and swamp bay (*Persea palustris*) as well as sphagnum moss, dahoon holly (*Ilex cassine*), gallberry (*Ilex coriacea*), saw palmetto and cinnamon fern (*Osmundastrum cinnamomeum*).

Cypress/Hardwood Swamps (FLCCS 2241) - This community was represented by a mix of cypress (*Taxodium ascendens*, *A. distichum*) and hardwood species where neither

was dominant and included black tupelo (*Nyssa sylvatica*), loblolly bay, sweet bay (*Magnolia virginiana*), cabbage palm (*Sabal palmetto*), and slash pine.

Wet Coniferous Plantation (FLCCS 2450) – This forest type is comprised of planted slash pine in hydric soils.

Clearcut Wetland (FLCCS 2440) – These are wetlands where potentially merchantable trees, possibly containing cypress and mixed hardwoods, have been removed.

4.2 Wildlife

During the site reconnaissance, LG²ES biologists conducted meandering pedestrian transects and stationary observations to survey the onsite habitat types, with emphasis on those areas with vegetative assemblages and hydrology and/or soils potentially indicative for the presence of listed wildlife species identified in the desktop review. The scope of this effort was a presence/absence survey for listed wildlife species and the supporting habitats identified for each species. Formal, species-specific, surveys were not within the scope of this site assessment but can be conducted to satisfy any future permitting requirements needed to quantify the onsite listed wildlife species population parameters.

Observations of wildlife were made visually, audibly, or by evidence of tracks, scat, nests, burrows, and/or dens. Observed wildlife and potentially-occurring listed species are detailed in the following sections. The wildlife species observed during the site assessment are listed in the following Table 1.

Table 1
Observed Wildlife Species

Common Name	Taxonomic Name	Observation	*Listing Status
Gopher tortoise	<i>Gopherus polyphemus</i>	Burrow, Scat	ST
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Flight	BGEPA
Downy woodpecker	<i>Picoides pubescens</i>	Calls	None
Southern black racer	<i>Coluber constrictor priapus</i>	Visual	None
Eastern Kingbird	<i>Tyrannus tyrannus</i>	Visual	None
Bald-faced hornet	<i>Dolichovespula maculata</i>	Visual	None

Blue-grey gnatcatcher	<i>Poliophtila caerulea</i>	Visual	None
Wild Turkey	<i>Meleagris gallopavo</i>	Visual	None
Raccoon	<i>Procyon lotor</i>	Visual	None
Florida Hog	<i>Sus scrofa</i>	Visual, Foraging Impacts	Invasive
Pileated Woodpecker	<i>Hylatomus pileatus</i>	Flight, Calls	None
Queen Butterfly	<i>Danaus gilippus</i>	Visual	None
White-tailed Deer	<i>Odocoileus virginianus</i>	Tracks	None
American Kestrel	<i>Falco sparverius</i>	Calls, Visual	LC
Great Egret	<i>Ardea alba</i>	Visual	LC
Great Blue Heron	<i>Ardea herodias</i>	Visual	None
Red-shouldered Hawk	<i>Buteo lineatus</i>	Flight	None
Cottonmouth	<i>Agkistrodon piscivorus conanti</i>	Visual	None
Ground Skink	<i>Scincella lateralis</i>	Visual	None
Pygmy rattlesnake	<i>Sistrurus miliarius</i>	Visual	None

*Federally-designated endangered (FE); Federally-designated threatened (FT); Federally-designated threatened species due to similarity of appearance [FT(S/A)]; State designated threatened (ST); State Species of Special Concern (SSC); Least Concern Species (LC); Federally protected under the Bald and Golden Eagle Protection Act (BGEPA)

4.2.1 Sensitive Species and Supporting Habitats

Sensitive species are those species deemed Federally Endangered (FE), State of Florida Threatened (ST) and Federally Threatened (FT), or Species of Special Concern (SSC) by the FWC and/or USFWS. Prior to the site reconnaissance, online databases including, but not limited to, the FNAI biodiversity matrix, FWC Bald eagle nest data, and USFWS IPaC resource list, were reviewed for known occurrences of listed species and potential suitable habitats within the subject property.

The FNAI biodiversity matrix listed zero "documented", three "likely" and two "potential" rare, threatened, or endangered (RTE) wildlife species expected to inhabit the area. A search of the USFWS IPaC resource list yields five additional T&E species with the potential to occur in the area. The RTE wildlife species referenced in these reports are presented in Table 2. State and federally listed wildlife species that occurred, or could potentially occur, within the subject property are discussed in more detail below. Species listed in these reports but occurring exclusively in marine environments, such as manatees and sea turtles, are not included in this discussion because no waterbodies with the capacity to sustain these animals were observed onsite. A copy of the FNAI Biodiversity Matrix and USFWS IPaC reports are included in the appendices.

Table 2
FNAI Biodiversity Matrix Listed Wildlife Species

Result	Common Name	Taxonomic Name	Observed on-site	*Listing Status
Likely	Florida Black Bear	<i>Ursus americanus floridanus</i>	No	De-listed
Likely	Wood Stork	<i>Mycteria americana</i>	No	FT
Likely	Black Creek Crayfish	<i>Procambarus pictus</i>	No	ST
Potential	Gopher Tortoise	<i>Gopherus polyphemus</i>	Yes	ST
Potential	Eastern Indigo Snake	<i>Drymarchon couperi</i>	No	ST & FT

USFWS IPAC Endangered Species List

Result	Common Name	Taxonomic Name	Observed on-site	*Listing Status
Potential	Anastasia Island Beach Mouse	<i>Peromyscus polionotus phasma</i>	No	FE
Potential	Piping Plover	<i>Charadrius melodus</i>	No	FT
Potential	Red knot	<i>Calidris canutus rufa</i>	No	FT
Potential	Red-cockaded Woodpecker	<i>Picoides borealis</i>	No	FE
Potential	Frosted Flatwoods Salamander	<i>Ambystoma cingulatum</i>	No	FT

*Federally-designated endangered (FE); Federally-designated threatened (FT); Federally-designated threatened species due to similarity of appearance [FT(S/A)]; State designated threatened (ST); State Species of Special Concern (SSC); Federally protected under the Bald and Golden Eagle Protection Act (BGEPA)

Florida Black Bear

The Florida black bear was recently de-listed in the State of Florida due to growth in numbers but maintains a high-profile status in the state with regard to conservation and protection. Although primarily black, the muzzle may be tan or nearly black, and some Florida black bears have blonde or white "blazes" on their chests. Black bears are extremely adaptable and show a great variation in habitat types, though they are primarily found in forested areas with thick ground vegetation and an abundance of fruits, nuts, and vegetation. They grow to 2 to 3-feet high and 4 to 7-feet long with males weighing and average of 150 to 300 pounds.

No evidence of black bear foraging or nesting was observed on the subject property and no habitat that could sustain hibernation dens are present. It is unlikely that black bears regularly utilize this habitat as there is a lack of fruit and nut bearing plants and little evidence of small mammals as a food source and insufficient habitat for sustaining

hibernation dens. Any development at the subject property is not likely to adversely affect this species.

Wood Stork

The wood stork is listed as Threatened by the federal Endangered Species Act (ESA) and as federally-designated Threatened by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). These large wading birds reach up to 45-inches in length with a long, heavy curved bill and long legs. This species is identified by the scaly appearance of their head due to its lack of feathers. The adults are voiceless. According to the USFWS, wood storks prefer to forage in ponds and marshes with little or no canopy but have been observed in forested wetlands with canopies of less than 20 percent (%). Suitable foraging habitat (SFH) for wood storks includes, but is not limited to, freshwater marshes, cypress depressions, swamp sloughs, tidal creeks and pools, and seasonally-flooded ditches.

For counties in Northeast Florida, the USFWS designated a 13-mile core foraging area (CFA) buffer around active nesting wood stork colonies to protect wood stork SFH. The subject property is located within the designated CFA and within 4-miles of the nearest wood stork nesting colony (Dee Dot Ranch Site, Figure 5). This property contained numerous cypress depressions and small pools and much of the roads on the property were lined with road-side ditches that could be considered wood stork SFH. The USFWS Wood Stork Programmatic Key was used to identify any potential impacts to wood storks and whether further consultation with USFWS would be required. Per the Key, projects impacting less than 0.5-acres of wood stork SFH will result in a "Not Likely to Adversely Impact" (NLAI) determination. If USACE permitting is required for this project, further coordination with USACE may require additional documentation to determine the status of wood stork SFH within the subject property.

Black Creek Crayfish

The Black Creek crayfish is protected as a State-designated Threatened species by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). This medium sized crayfish grows to 3-inches in length and has a distinctive pattern of yellowish to white spots and stripes on a dark brown to black carapace, and a rust-colored abdomen with dark cross-bands. In the wild, its unique color pattern readily distinguishes this species from all other Florida crayfishes. They inhabit small, tannic stained, swift sandy-bottomed streams and headwaters flowing

through or from swampy terrain, where they can be found taking refuge under tree roots and in vegetation (Franz 1994). This species can be found in St. Johns, Duval, Clay, and Putnam counties in Florida.

The subject property did not contain flowing, sandy-bottomed streams that would serve as suitable habitat for the Black creek crayfish, therefore, it is unlikely that any proposed development at the subject property would adversely affect this species.

Gopher Tortoise

The gopher tortoise is classified as a state-Threatened species and is protected by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). The gopher tortoise is a moderate-sized, terrestrial turtle averaging 9 to 11-inches in length. The species is identified by its stumpy, elephantine hind feet and flattened, shovel-like forelimbs adapted for digging. The shell is oblong and generally tan, brown, or gray in coloration. They prefer upland habitats with open canopy and well drained soils.

During this assessment, multiple active gopher tortoise burrows were observed throughout the subject property (see Figure 6) while conducting meandering surveys. For any proposed impacts to the species, FWC regulations require a 100% coverage gopher tortoise burrow survey and subsequent relocation efforts be performed by an authorized gopher tortoise agent. Any development of the subject property within occupied tortoise habitat, upon implementation of FWC approved tortoise relocation and/or management requirements, is not likely to adversely affect this species.

Eastern Indigo Snake

The eastern indigo snake is listed as Threatened by the ESA and as federally-designated Threatened by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). This non-venomous snake is bluish-black in color and can reach lengths of 8-feet. Eastern indigo snakes inhabit a mosaic of habitats including sandhills, pine flatwoods, hardwood forests, moist hammocks, and areas that surround cypress swamps. In high xeric habitats, eastern indigo snakes are associated with gopher tortoise whose burrows provide shelter from winter cold and summer heat. In central and coastal Florida, eastern indigos are mainly found in high sandy ridges. Their current range extends throughout the state of Florida and southern Georgia.

The eastern indigo snake was not observed during the onsite reconnaissance. The subject property contained suitable habitat which could sustain eastern indigo snakes as well as numerous gopher tortoise burrows which could provide shelter. It is possible that the eastern indigo snake occurs on this property. The USFWS Eastern Indigo Snake Programmatic Key was used to identify potential impacts to eastern indigo snakes and whether further consultation with USFWS would be required. Per the Key, projects impacting less than 25-acres of suitable eastern indigo snake habitat, as described above, will result in a "Not Likely to Adversely Impact" (NLAI) determination.

If USACE permitting is required for this project, consultation between USACE and USFWS may require; additional surveys to document the presence/absence of eastern indigo snakes within the subject property, specific protection measures to be implemented before and during construction activities which may include excavation and monitoring of gopher tortoise burrows, and/or monetary mitigation contributions for impacts to suitable eastern indigo snake habitats.

Anastasia Island Beach Mouse

The Anastasia Island beach mouse is classified as endangered by the federal ESA and is protected under Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). They are a subspecies of the small old-field mouse that can reach a length of 5.5-inches. This species of beach mouse has a yellowish-brown to gray-pink dorsal (back) color, with a white belly. The tail of the Anastasia Island beach mouse is usually white with a white nose and white spots/blemishes over both eyes.

No Anastasia Island beach mice were observed during this assessment and it is unlikely they would occur as no suitable habitat was observed within the subject property. Additionally, the Anastasia Island beach mouse is currently known to be restricted to sand dunes on Anastasia Island, Florida.

Piping Plover

The piping plover is listed as Threatened by the federal ESA and as federally-designated Threatened by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). As small, stocky, sandy-colored birds, piping plovers resemble sandpipers. Adult plovers have yellow-orange legs, a black band across the forehead from eye to eye, and a black ring around the base of the neck. Piping

plovers' do not breed in Florida but do winter in the southeastern US, including Florida. They are generally found along wide, flat, open, sandy beaches with very little grass or other vegetation.

The subject property did not contain suitable piping plover habitat. No piping plovers were observed during the site assessment and it is unlikely that any proposed development at the subject property would adversely affect this species.

Red knot

The red knot is listed as Threatened by the federal ESA and as federally-designated Threatened by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code) . The red knot is a type of sandpiper reaching 11 inches in length and possessing pale gray wings and rumps with a white chest and face. This shorebird is easily identified during the spring when it exhibits rusty-red chest plumage. Red knots do not breed in Florida but do winter in the southeastern US, including Florida. They are generally found along coastal marine and estuarine habitats with large areas of exposed intertidal sediments.

The subject property did not contain suitable red knot habitat. No red knots were observed during the site visit. Any development at the subject property is not likely to adversely affect this species.

Red-cockaded Woodpecker

The red-cockaded woodpecker (RCW) is listed as Endangered by the federal ESA and as federally-designated Endangered by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). The RCW is a black and white bird that can reach lengths of 9 inches. RCWs have a large white patch located on their cheek, a black head and neck, a white belly, and a barred black and white back. The cockade, which is only found on the male and rarely visible when not in-hand, consists of a small patch of red feathers at the temples. RCWs prefer mature pine forests, especially those containing longleaf pine (*Pinus palustris*). This is the only species of woodpecker to create nesting and roosting cavities in live pine trees.

No red-cockaded woodpeckers were observed onsite during this assessment; however, RCWs and active cavity trees were documented within 4-miles to the north of this site. Typical RCW foraging territories extend an average of up to 2-miles from the cluster but

the subject property, mainly forested with mixed cypress/hardwood wetlands and young or recently harvested slash pine plantations, did not contain suitable foraging habitat nor did it contain trees of sufficient size to support red-cockaded woodpecker nesting and roosting cavities. The development of this property is not likely to adversely affect this species. In the future, growth of the planted pine to maturity could result in its reclassification as suitable RCW foraging habitat and USFWS consultation could be necessary.

Frosted Flatwoods Salamander

The frosted flatwoods salamander is protected as a Threatened species by the Federal Endangered Species Act and as a Federally-designated Threatened species by Florida's Endangered and Threatened Species Rule (Chapter 68A-27.0031, Florida Administrative Code). It is likely to become endangered within the foreseeable future throughout all or a significant portion of its range. Flatwoods salamanders are endemic to the lower Gulf and Atlantic coastal plains where they occur in longleaf pine-wiregrass flatwoods and savannas. The flatwoods salamander reaches a length of up to 5 inches and ranges in color from silvery gray to black, with the back heavily mottled with a variable gray cross-band pattern. The underside is plain gray with faint creamy blotches.

No frosted flatwood salamanders were observed during this site reconnaissance and little to no particularly suitable habitat for this species was identified. It is unlikely that the frosted flatwoods salamander would occur on this property and; therefore, any proposed development is unlikely to adversely impact this species.

Bald Eagle (*Haliaeetus leucocephalus*)

The bald eagle is no longer protected under the ESA; however, it is still afforded protection under the Bald and Gold Eagle Protection Act (BGEPA) and the Migratory Bird Treaty Act (MBTA). In addition to the federal law, the state of Florida protects eagles under the State Eagle Rule (Chapter 68A-16.002, Florida Administrative Code). The bald eagle is a large-bodied raptor. Bald eagles typically nest in forested areas adjacent to large bodies of water, staying away from heavily developed areas when possible. Bald eagles are tolerant of human activity when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate. For perching, bald eagles prefer tall, mature coniferous or deciduous trees that afford a wide view of the surroundings.

No nests were observed on-site during this preliminary investigation; however, a bald eagle was observed in flight over a clearing on the central-western portion of the property. An FWC eagle nest locator database search was performed to further search for documented bald eagle nests within the proximity of the property. The search results identified one eagle nest (#SJ017; see Appendix D) within 5.5-miles of a central point on the subject property. It was last surveyed in 2010 and it's last known activity was in 2002. The FWC eagle nest database documents known nests surveyed through April 2017 to within 0.1-miles. If an eagle's nest is established onsite in the future, current FWC, FWS and/or County protection protocols will need to be followed. The proposed project is not likely to adversely affect this species.

5.0 CONCLUSION & SUMMARY

During the wildlife survey, LG²ES biologists conducted meandering pedestrian transects and stationary observation posts throughout each on-site habitat type to observe the potential presence of listed wildlife species. The upland and wetland habitat communities found on-site are considered common in the landscape of Duval County and northeast Florida.

LG²ES documented no listed wildlife species utilizing the property during the on-site assessment; however, biologists observed a protected bald eagle and evidence of state threatened gopher tortoises. A gopher tortoise relocation permit would be required by the state FWC prior to any land disturbing activities, beyond the current land use of silviculture, within occupied gopher tortoise habitat.

If a USACE and/or SJRWMD permit is required for the project, USFWS and/or FWC may be notified and allowed to comment on listed species with the potential to occur on site. During this comment period, additional information may be requested from the applicant to document whether the project proposes to impact any potentially occurring listed wildlife species. This request for additional information may take the form of informal correspondence or formal consultation. The species that may trigger a request for additional information include the eastern indigo snake and/or the wood stork. If no USACE and/or SJRWMD/Florida Department of Environmental Protection (FDEP) permit is required for land use activities with potential to disturb listed species habitat, then USFWS and/or FWC consultations regarding listed wildlife species will be at the discretion of the property owner.

6.0 REFERENCES

Florida Department of Transportation (FLDOT). Florida Land Use Cover and Forms Classification System (FLUCFCS) Final Report: 2014
Accessed online at: <http://myfwc.com/media/4311749/landcoverclassification2014.pdf>

Florida Fish & Wildlife Conservation Commission (FWC) 2018. Wildlife Technology Services in the Division of Habitat and Species Conservation, Eagles Nest Locator by County, updated 2018.
Accessed online at: <https://publictemp.myfwc.com/FWRI/EagleNests/nestlocator.aspx>

Florida Fish & Wildlife Conservation Commission (FWC) 2018. Florida's Endangered Species, Threatened Species, or Species of Special Concern, updated May 2017.
Accessed online at: <http://www.myfwc.com/media/1515251/threatened-endangered-species.pdf>

Florida Fish and Wildlife Conservation Commission (FWC). 2018 "Species Profiles" website.
Accessed online at <http://myfwc.com/wildlifehabitats/profiles/>

Florida Natural Areas Inventory (FNAI). 2018. Biodiversity Matrix Search.
Accessed online at: <http://fnai.org/biointro.cfm>

Cornell Lab of Ornithology. 2017. "All about Birds" website.
Accessed online at https://www.allaboutbirds.org/guide/Bald_Eagle/lifehistory

Cornell Lab of Ornithology. 2017. "All about Birds" website.
Accessed online at https://www.allaboutbirds.org/guide/Florida_Scrub-Jay/lifehistory

Cornell Lab of Ornithology. 2017. "All about Birds" website.
Accessed online at https://www.allaboutbirds.org/guide/Wood_Stork/lifehistory

United States Department Of Agriculture (USDA), Natural Resources Conservation Service (NRCS) 1987.
Accessed online at: <https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>

United States Fish & Wildlife Service (USFWS) 2018. Threatened & Endangered Species System (TESS); listings by state and territory as of October.

Accessed online at: <https://ecos.fws.gov/ecp0/reports/species-by-current-range-county?fips=12127>

Army Corps of Engineers, Jacksonville District (USACE) & U.S. Fish & Wildlife Service, Jacksonville Ecological Services Field Office (USFWS) September 2013. Wood Stork Key for Central and North Peninsular Florida.

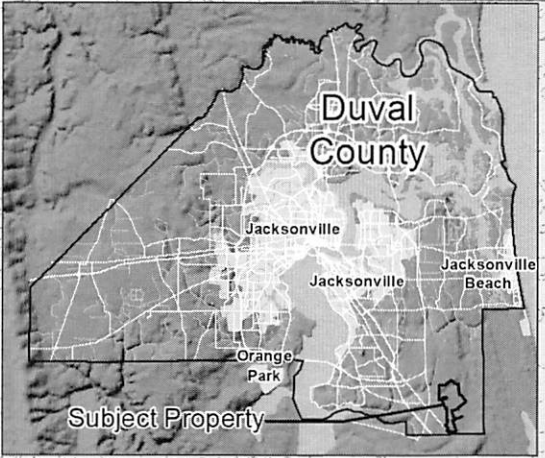
Accessed online at:

https://www.fws.gov/northflorida/WoodStorks/Documents/20080900_JAXESO_WOST_Key.pdf

APPENDIX A
Figures 1-6

USGS Quadrangles
Palm Valley and Durbin

Township 4 South
Range 28 East
Multiple Sections

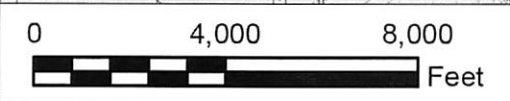


Subject Property

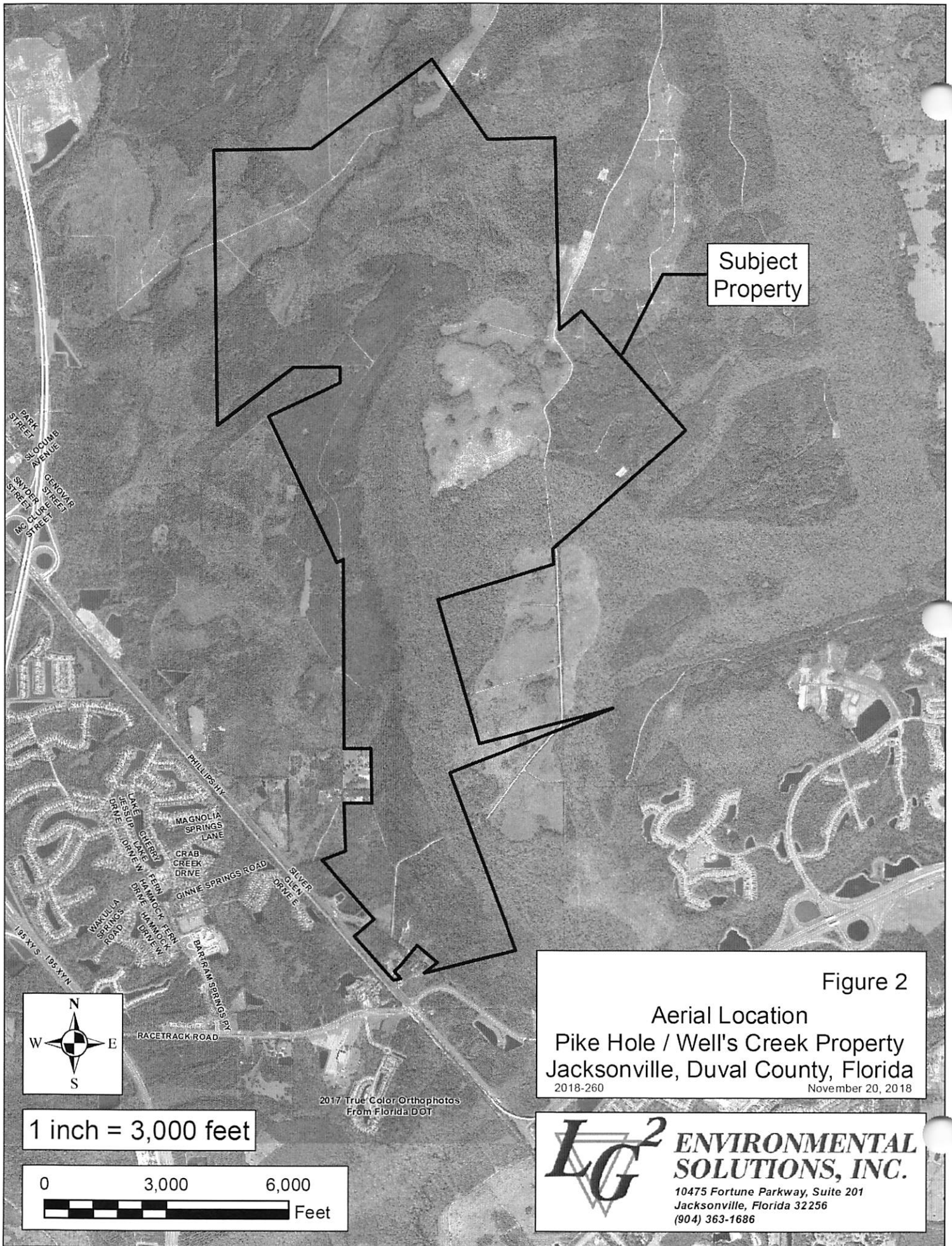
Figure 1
Topographic Site Location
Pike Hole / Well's Creek Property
Jacksonville, Duval County, Florida
2018-260
November 20, 2018



1 inch = 4,000 feet



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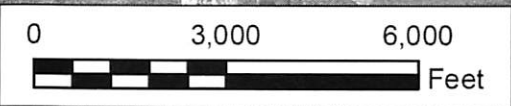


Subject Property

Figure 2
 Aerial Location
 Pike Hole / Well's Creek Property
 Jacksonville, Duval County, Florida
 2018-260 November 20, 2018

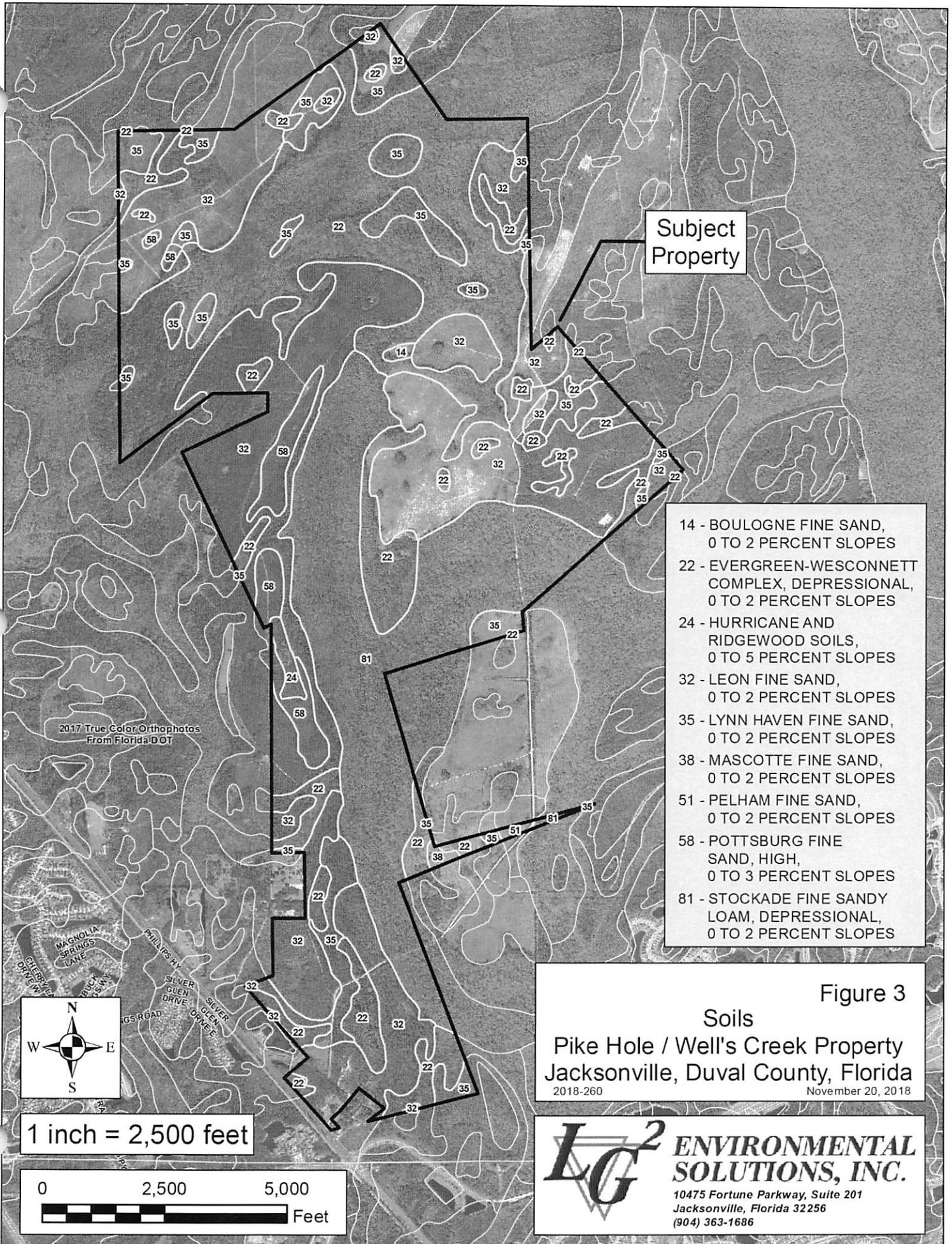


1 inch = 3,000 feet



2017 True Color Orthophotos
 From Florida DOT

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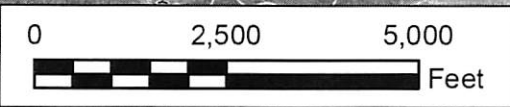
Subject Property

- 14 - BOULOGNE FINE SAND, 0 TO 2 PERCENT SLOPES
- 22 - EVERGREEN-WESCONNETT COMPLEX, DEPRESSIONAL, 0 TO 2 PERCENT SLOPES
- 24 - HURRICANE AND RIDGEWOOD SOILS, 0 TO 5 PERCENT SLOPES
- 32 - LEON FINE SAND, 0 TO 2 PERCENT SLOPES
- 35 - LYNN HAVEN FINE SAND, 0 TO 2 PERCENT SLOPES
- 38 - MASCOTTE FINE SAND, 0 TO 2 PERCENT SLOPES
- 51 - PELHAM FINE SAND, 0 TO 2 PERCENT SLOPES
- 58 - POTTSBURG FINE SAND, HIGH, 0 TO 3 PERCENT SLOPES
- 81 - STOCKADE FINE SANDY LOAM, DEPRESSIONAL, 0 TO 2 PERCENT SLOPES

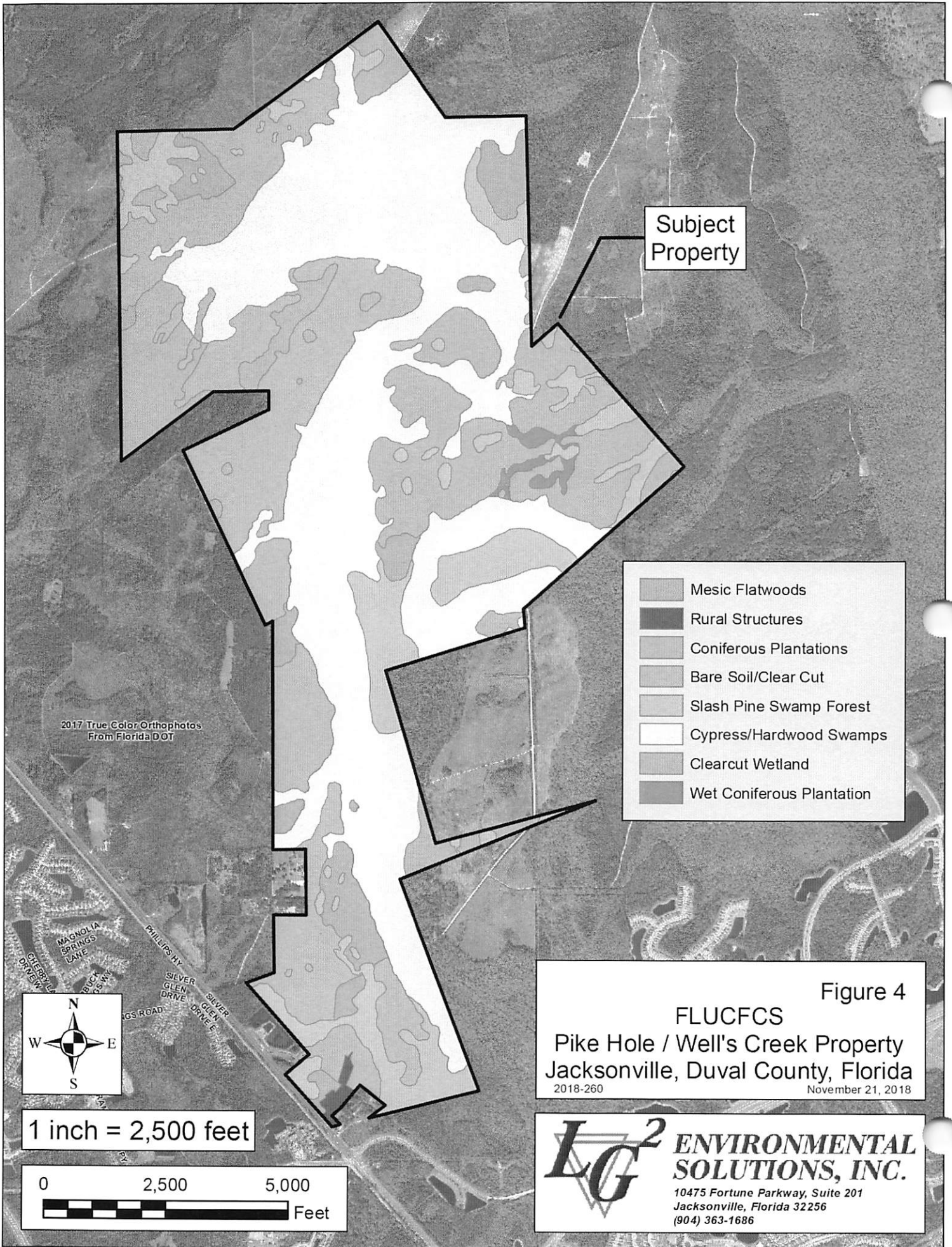
Figure 3
Soils
Pike Hole / Well's Creek Property
Jacksonville, Duval County, Florida
2018-260 November 20, 2018

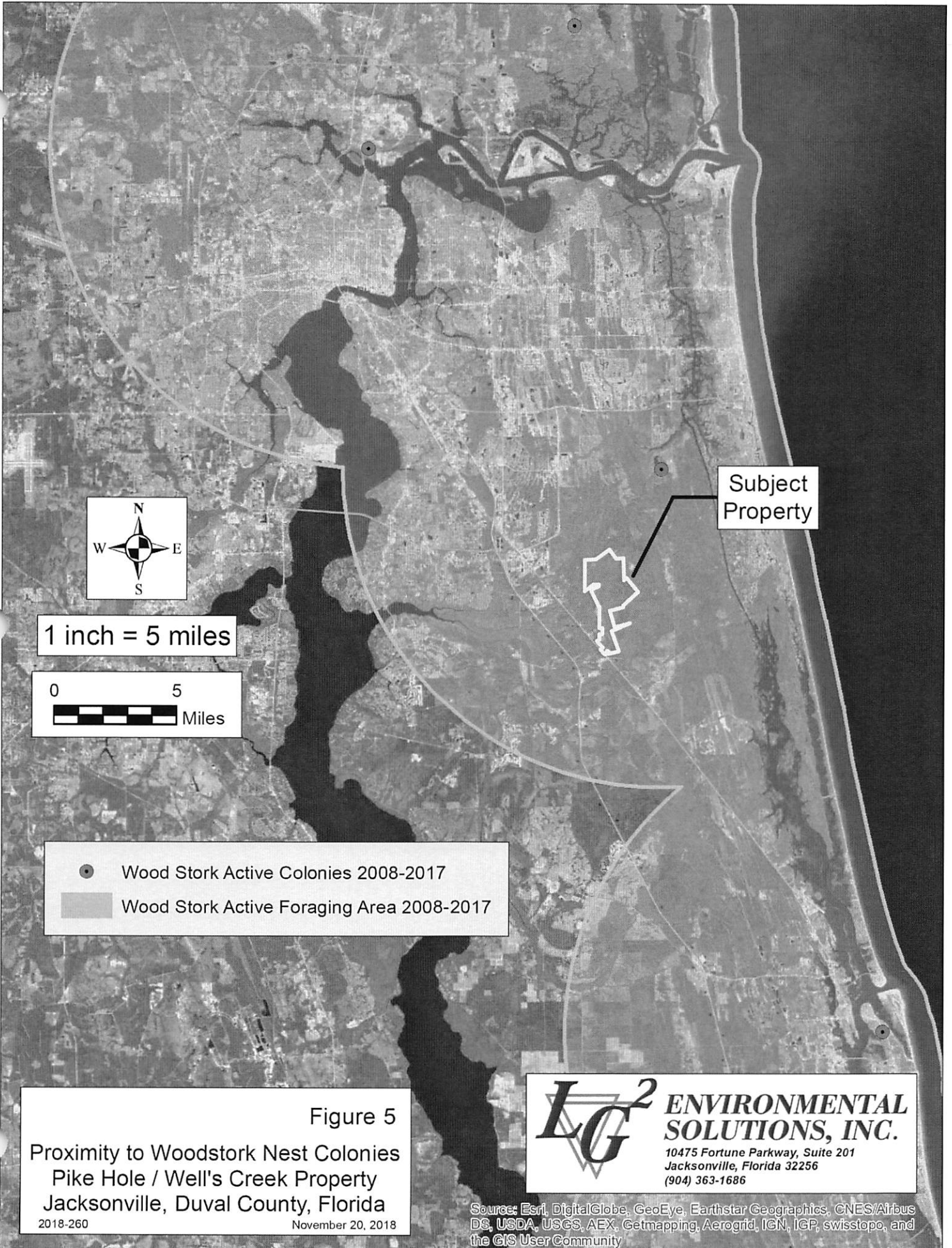


1 inch = 2,500 feet



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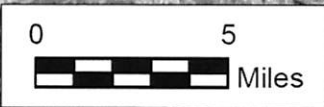




Subject Property



1 inch = 5 miles

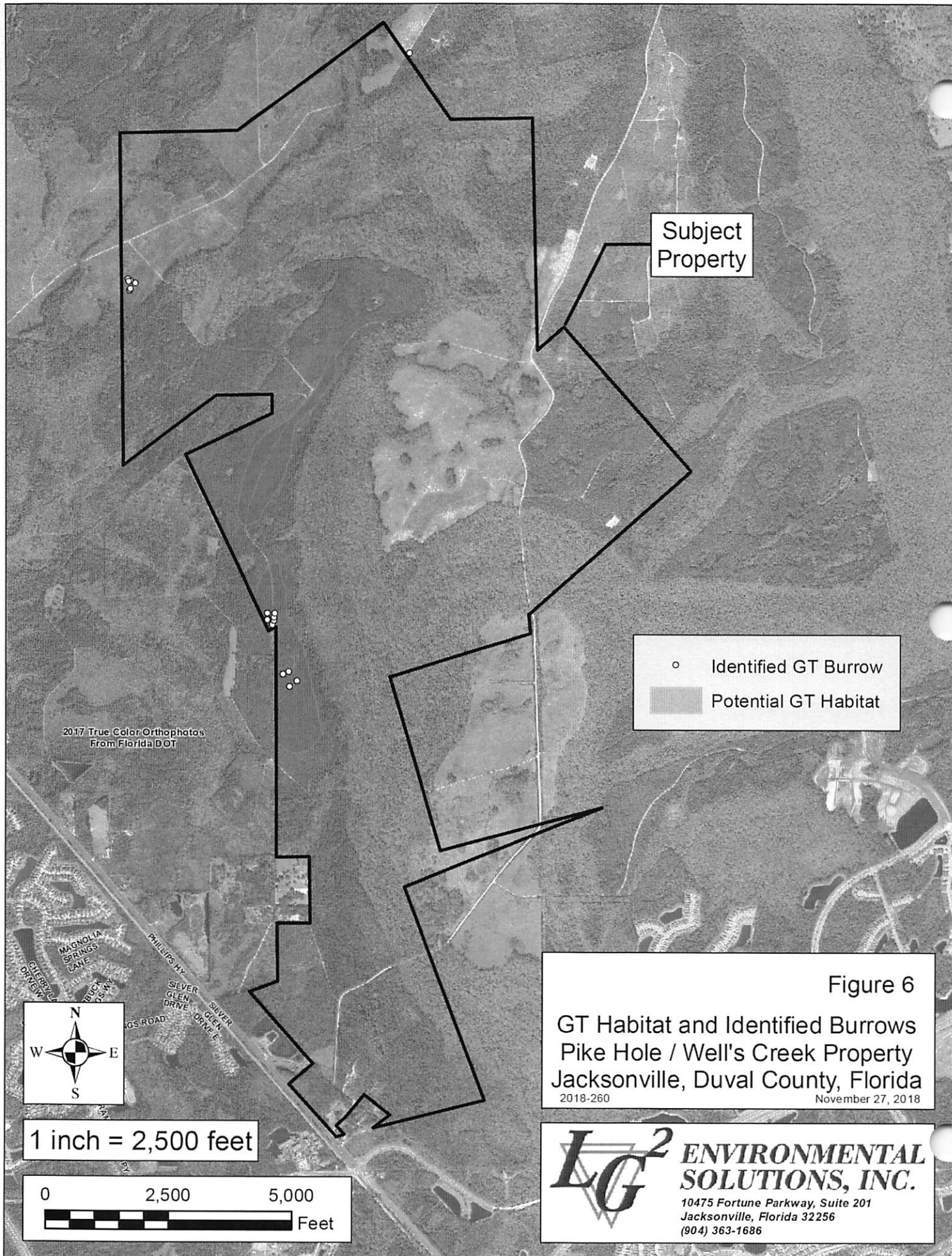


- Wood Stork Active Colonies 2008-2017
- Wood Stork Active Foraging Area 2008-2017

Figure 5
 Proximity to Woodstork Nest Colonies
 Pike Hole / Well's Creek Property
 Jacksonville, Duval County, Florida
 2018-260 November 20, 2018

LG² ENVIRONMENTAL SOLUTIONS, INC.
 10475 Fortune Parkway, Suite 201
 Jacksonville, Florida 32256
 (904) 363-1686

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Subject Property

○ Identified GT Burrow
 ■ Potential GT Habitat

2017 True Color Orthophotos From Florida DOT



1 inch = 2,500 feet

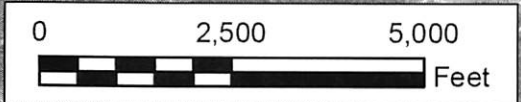


Figure 6
 GT Habitat and Identified Burrows
 Pike Hole / Well's Creek Property
 Jacksonville, Duval County, Florida
 2018-260 November 27, 2018

LG² ENVIRONMENTAL SOLUTIONS, INC.
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**APPENDIX B
FNAI Biodiversity Matrix Report**



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

Florida Natural Areas Inventory Biodiversity Matrix Query Results UNOFFICIAL REPORT

Created 10/29/2018

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

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

Report for 10 Matrix Units: 43782, 43783, 43784, 43785, 44153, 44154, 44155, 44156, 44157, 44526

	<p>Descriptions</p> <p>DOCUMENTED - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit.</p> <p>DOCUMENTED-HISTORIC - There is a documented occurrence in the FNAI database of the species or community within this Matrix Unit; however the occurrence has not been observed/reported within the last twenty years.</p> <p>LIKELY - The species or community is <i>known</i> to occur in this vicinity, and is considered likely within this Matrix Unit because:</p> <ol style="list-style-type: none"> 1. documented occurrence overlaps this and adjacent Matrix Units, but the documentation isn't precise enough to indicate which of those Units the species or community is actually located in; <i>or</i> 2. there is a documented occurrence in the vicinity and there is suitable habitat for that species or community within this Matrix Unit. <p>POTENTIAL - This Matrix Unit lies within the known or predicted range of the species or community based on expert knowledge and environmental variables such as climate, soils, topography, and landcover.</p>
--	--

Matrix Unit ID: 43782

0 Documented Elements Found

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<i>Mycteria americana</i> Wood Stork	G4	S2	LT	FT

Matrix Unit ID: 43783

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Procambarus pictus</i></u> Black Creek Crayfish	G2	S2	N	SSC

Matrix Unit ID: 43784

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Procambarus pictus</i></u> Black Creek Crayfish	G2	S2	N	SSC

Matrix Unit ID: 43785

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Procambarus pictus</i></u> Black Creek Crayfish	G2	S2	N	SSC

Matrix Unit ID: 44153

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Ursus americanus floridanus</i></u> Florida Black Bear	G5T2	S2	N	N

Matrix Unit ID: 44154

0 Documented Elements Found

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT

Matrix Unit ID: 44155

0 Documented Elements Found

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT

Matrix Unit ID: 44156

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Procambarus pictus</i></u> Black Creek Crayfish	G2	S2	N	SSC

Matrix Unit ID: 44157

0 Documented Elements Found

0 Documented-Historic Elements Found

3 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Mesic flatwoods</i>	G4	S4	N	N
<u><i>Mycteria americana</i></u> Wood Stork	G4	S2	LT	FT
<u><i>Procambarus pictus</i></u> Black Creek Crayfish	G2	S2	N	SSC

Matrix Unit ID: 44526

0 Documented Elements Found

0 Documented-Historic Elements Found

2 Likely Elements Found

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
-----------------------------	-------------	------------	----------------	---------------

<i>Mesic flatwoods</i>	G4	S4	N	N
<i>Mycteria americana</i> Wood Stork	G4	S2	LT	FT

Matrix Unit IDs: 43782, 43783, 43784, 43785, 44153, 44154, 44155, 44156, 44157, 44526**23 Potential Elements Common to Any of the 10 Matrix Units**

Scientific and Common Names	Global Rank	State Rank	Federal Status	State Listing
<i>Arnoglossum diversifolium</i> Variable-leaved Indian-plantain	G2	S2	N	T
<i>Asclepias viridula</i> Southern Milkweed	G2	S2	N	T
<i>Asplenium heteroresiliens</i> Wagner's Spleenwort	GNA	S1	N	N
<i>Balduina atropurpurea</i> Purple Honeycomb-head	G2	S1	N	E
<i>Calydorea coelestina</i> Bartram's Ixia	G2G3	S2S3	N	E
<i>Corynorhinus rafinesquii</i> Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Ctenium floridanum</i> Florida Toothache Grass	G2	S2	N	E
<i>Drymarchon couperi</i> Eastern Indigo Snake	G3	S3	LT	FT
<i>Gopherus polyphemus</i> Gopher Tortoise	G3	S3	C	ST
<i>Litsea aestivalis</i> Pondspice	G3?	S2	N	E
<i>Lythrum curtissii</i> Curtiss' Loosestrife	G1	S1	N	E
<i>Matelea floridana</i> Florida Spiny-pod	G2	S2	N	E
<i>Monotropsis reynoldsiae</i> Pygmy Pipes	G1Q	S1	N	E
<i>Nemastylis floridana</i> Celestial Lily	G2	S2	N	E
<i>Neovison vison lutensis</i> Atlantic Salt Marsh Mink	G5T3	S3	N	N
<i>Orbexilum virgatum</i> Pineland Scurfpea	G1	S1	N	E
<i>Picooides borealis</i> Red-cockaded Woodpecker	G3	S2	LE	FE
<i>Pycnanthemum floridanum</i> Florida Mountain-mint	G3	S3	N	T
<i>Rhynchospora thornei</i> Thorne's Beaksedge	G3	S1S2	N	N
<i>Rudbeckia nitida</i> St. John's Blackeyed Susan	G3	S2	N	E
<i>Salix floridana</i> Florida Willow	G2	S2	N	E
<i>Ursus americanus floridanus</i> Florida Black Bear	G5T2	S2	N	N
<i>Verbesina heterophylla</i> Variable-leaf Crownbeard	G2	S2	N	E

Disclaimer

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

on these data. Inventory data are designed for the purposes of conservation planning and scientific research and are not intended for use as the primary criteria for regulatory decisions.

Unofficial Report

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

APPENDIX C
USFWS IPaC Endangered Species Resource List

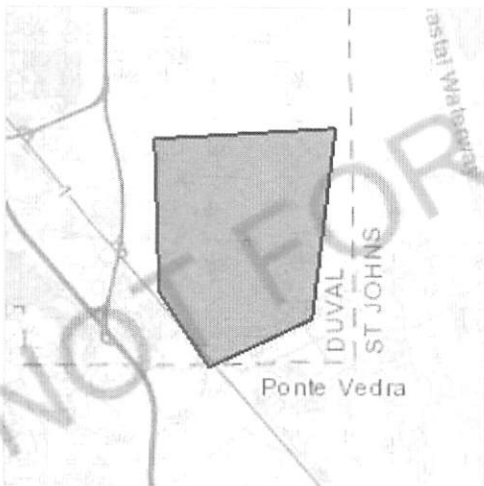
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Duval and St. Johns counties, Florida



Local office

North Florida Ecological Services Field Office

☎ (904) 731-3336

📠 (904) 731-3045

7915 Baymeadows Way, Suite 200
Jacksonville, FL 32256-7517

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Mammals

NAME

STATUS

Anastasia Island Beach Mouse *Peromyscus polionotus phasma* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/5522>

West Indian Manatee *Trichechus manatus* Threatened
 There is **final** critical habitat for this species. Your location is outside
 the critical habitat. Marine mammal
<https://ecos.fws.gov/ecp/species/4469>

Birds

NAME STATUS

Piping Plover *Charadrius melodus* Threatened
 There is **final** critical habitat for this species. Your location is outside
 the critical habitat.
<https://ecos.fws.gov/ecp/species/6039>

Red Knot *Calidris canutus rufa* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/1864>

Red-cockaded Woodpecker *Picoides borealis* Endangered
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/7614>

Wood Stork *Mycteria americana* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/8477>

Reptiles

NAME STATUS

Eastern Indigo Snake *Drymarchon corais couperi* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/646>

Green Sea Turtle *Chelonia mydas* Threatened
 No critical habitat has been designated for this species.
<https://ecos.fws.gov/ecp/species/6199>

Hawksbill Sea Turtle *Eretmochelys imbricata* Endangered
 There is **final** critical habitat for this species. Your location is outside
 the critical habitat.
<https://ecos.fws.gov/ecp/species/3656>

"Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

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

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

■ probability of presence ■ breeding season | survey effort — no data

SPECIES JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

Leatherback Sea Turtle *Dermochelys coriacea*

Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1493>

Loggerhead Sea Turtle *Caretta caretta*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/1110>

Amphibians

NAME

STATUS

Frosted Flatwoods Salamander *Ambystoma cingulatum*

Threatened

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/4981>

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>

- Nationwide conservation measures for birds

<http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the **PROBABILITY OF PRESENCE SUMMARY** at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Common Ground-dove *Columbina passerina exigua*
 This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

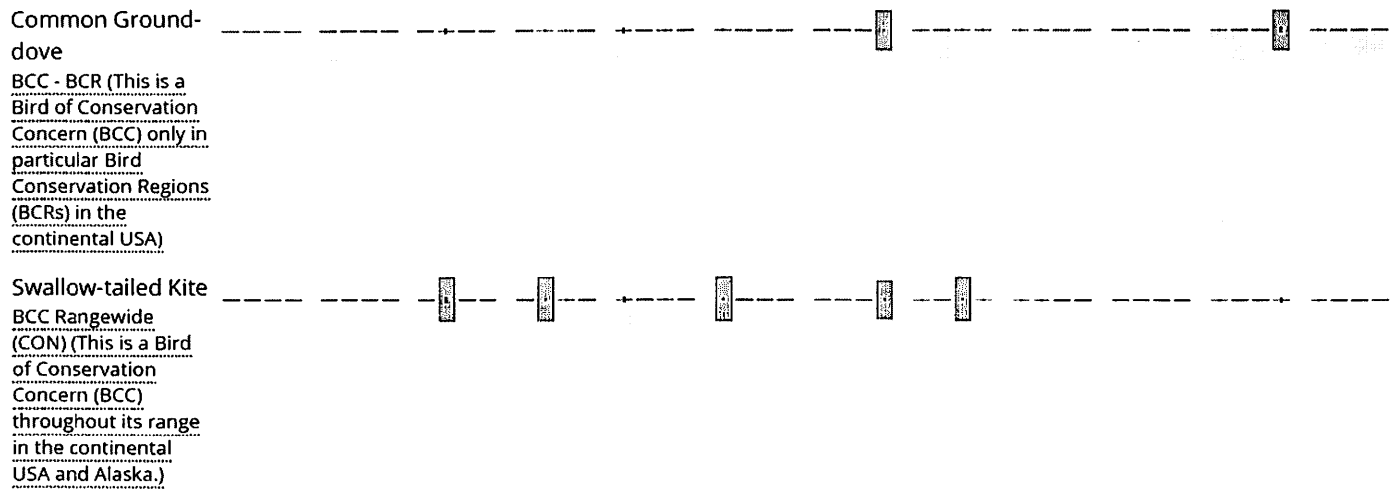
Breeds Feb 1 to Dec 31

Swallow-tailed Kite *Elanoides forficatus*
 This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
<https://ecos.fws.gov/ecp/species/8938>

Breeds Mar 10 to Jun 30

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds:

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to

confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

**APPENDIX D
FWC Eagle Nest Locator Report**



- [Fishing](#)
- [Boating](#)
- [Hunting](#)
- [Licenses & Permits](#)
- [Wildlife Viewing](#)
- [Wildlife & Habitats](#)
- [Research](#)
- [Education](#)
- [Conservation](#)

FWC Home : [Wildlife & Habitats](#) : [Managed Species](#) : [Bald Eagle Management](#) : [Eagle Nest Locator](#)

Eagle Nest Locator

Welcome to the Florida Fish and Wildlife Conservation Commission Bald Eagle Nest Locator. The search features below may be used to locate FWC documented bald eagle nesting territories and to view their locations in map and spreadsheet form.

New Survey Protocol: In 2008 the statewide bald eagle nesting territory survey protocol changed. Here is the map showing what counties are being surveyed during the 2015-2016 breeding season. The protocol change reduces annual statewide survey effort and increases the amount of information gained from the nests that are visited during the survey season. Nest productivity is now determined for a sub-sample of the nests that are surveyed annually. Nest activity and productivity information are critical to determining if the goals and objectives of the Bald Eagle Management Plan are being met.

Attention: The information contained within this database is current through the 2016-2017 nesting season; nests were surveyed by FWC from November 2016 to April 2017. Accuracy of the nest locations is estimated to be within 0.1 miles of the true location. Not all eagle nests in Florida have been documented by FWC. Non-documented nests receive the same level of protections as FWC documented nests.

Locate Nests By:

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Nest Map:

1 nest was found that meet the search criteria.



Google

Map data ©2018 Google

Bald Eagle Nest Data Search Results:

Results per page:

	Nest ID	County	Latitude	Longitude	Known Active	Last Survey	Distance
View History	SJ017	St. Johns	30 06.24	81 23.92	2002	2010	5.41

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Please direct any questions, comments, or suggestions about this page to BaldEagle@MyFWC.com. To learn more about eagles in Florida please visit the FWC bald eagle website.