



Alachua County Staff Report

Project Name: Hickory Sink Strategic Ecosystem/Lee Property Special Area Study (SAS-01-22)

Applicant/Agent: Lindsay Haga, England-Thims & Miller

Landowner: FCL Timber, Land & Cattle, LLLP

Staff Contacts: Jeff Hays, Growth Management Department
Stephen Hofstetter, Environmental Protection Department

Parcel Numbers: 4411, 4419, 4432, 4434, 4435, 4479, 4481, 4488, 4491, 4492, 4492-1, 4492-1-1, 4492-2, 4493, 4493-1, 4493-2, 4493-1-1, 4495, 4495-1, 4496-1, 7074, 7074-1, 7074-2, 7074-3, 4501, and 4498

Future Land Use Designation: Rural/Agriculture

Zoning: Agriculture ('A')

Acreage: Approximately 4,068 acres

Application Description and Requested Action:

In accordance with the Alachua County Comprehensive Plan and Chapter 402, Article 16 "Special Area Plans" of the Alachua County Unified Land Development Code (ULDC), the applicant/agent on behalf of the landowner has submitted a Special Area Study report for approximately 4,068 acres of land in southwestern Alachua County.

The 4,068-acre subject property comprises much of the Hickory Sink Strategic Ecosystem as designated and mapped generally in the Alachua County Comprehensive Plan. Pursuant to Policies 4.10.2 and 4.10.3 of the Comprehensive Plan, Conservation and Open Space Element, a Special Area Plan must be completed prior to approval of any land use change, zoning change, or development approval on land within Strategic Ecosystems.

The special area planning process involves 3 steps: (1) Scope of Work, (2) Special Area Study (current step), and (3) Special Area Plan. The purpose of the Special Area Study for a Strategic Ecosystem is to ground-truth the location and characteristics of protected natural resources within these areas to ensure that the ecological integrity of the Strategic Ecosystem is protected and managed in accordance with the requirements of the Comprehensive Plan and ULDC. The Study must also provide an analysis of land use, public infrastructure and services, and recommendations and strategies for follow-up actions.

Pursuant to Section 402.101(f) of the ULDC, the draft Special Area Study shall be presented to the Board of County Commissioners, and the Board shall consider whether to accept the Study and whether to authorize any specific follow-up recommendations or strategies that have been identified as part of the study. If the Special Area Study is accepted by the Board of County Commissioners, then the next step in the process would be a Special Area Plan where the applicant may apply for proposed Comprehensive Plan amendments and zoning changes to implement the recommendations of the Special Area Study.

Special Area Planning: General Purpose and Process Steps

The general purpose of special area planning within the Alachua County Comprehensive Plan is to address specific planning needs and circumstances at a more detailed level than may be possible through the application of generally applicable policies and regulations as part of the development plan review process. Special area planning may be used to evaluate and protect unique natural resource features, preserve the character of neighborhoods, or plan for public infrastructure and facility needs within a sub-area of the County. Special area planning is intended to be a collaborative planning process with broad participation by the community.

The Alachua County Comprehensive Plan provides that a Special Area Plan must be completed for development within areas designated as Strategic Ecosystems and for subdivisions of greater than 100 lots in the “Rural/Agriculture” areas of the County. The majority of the “Hickory Sink” Strategic Ecosystem as designated and mapped generally in the County’s Comprehensive Plan is comprised of lands owned by FCL Timber, Land & Cattle LLLP. Given the property’s location relative to the mapped Strategic Ecosystem and the size of the property (~4,068 acres), a special area planning process is required prior to any development of the site.

ULDC Chapter 402 Article 16 spells out the process for special area planning. The process includes three steps:

1. Scope of Work
2. Special Area Study (current step)
3. Special Area Plan

Each step in the process must be completed before proceeding to the next step.

1. The Scope of Work is required to identify the geographic areas included in the Special Area Study/Plan and the issues and process to be used for the Study. The Scope of Work must be presented to the Board of County Commissioners, and the Board may approve, deny, or approve with modifications.

On May 1, 2020, the applicant submitted a letter to the County and a proposed Scope of Work for a special area planning process for its ~4,068-acre property. The Scope of Work was presented to the Board of County Commissioners and approved on June 9, 2020.

2. The Special Area Study is required to include an analysis of existing conditions, infrastructure, and natural resources relevant to the issues or circumstances identified in the scope of work, and to provide recommendations for potential strategies or actions to be pursued as part of the Special Area Plan in the next step of the process. The detailed requirements for the Special Area Study are provided in Section 402.101 of the ULDC. Each of these requirements are addressed later in this report.

Pursuant to Section 402.101(f) of the ULDC, the draft Special Area Study shall be presented to the Board of County Commissioners. The Board shall consider whether to accept the study and whether to authorize any specific follow-up recommendations or strategies that have been identified as part of the study.

3. If the Special Area Study is accepted by the Board of County Commissioners, then the next step in the process is the Special Area Plan. The Special Area Plan may include specific actions to implement the recommendations that are identified as part of Special Area Study.

At the Special Area Plan stage, the applicant may apply for Comprehensive Plan amendments to establish new or revised goals, objectives, and policies in the Plan and/or revisions to the Future Land Use Map for the property. Such amendments will be based on the information and recommendations contained within the Special Area Study and must also be based on appropriate supporting data and analysis for the specific amendments that are proposed. The applicant may also apply for zoning changes for the property to implement any amendments to the Comprehensive Plan. Both the Comprehensive Plan amendment process and the rezoning process require Neighborhood Workshops, public hearings of the Local Planning Agency/Planning Commission, and BoCC public hearings.

Special Area Study Documents Submitted by Applicant

The Special Area Study that has been submitted by the applicant for the County's consideration includes the following documents, all of which collectively comprise the Special Area Study.

1. **Special Area Study Original Report dated April 11, 2022**, which contains the following exhibits:

- a. Overview, Special Area Study Report dated April 11, 2022
- b. Composite Exhibit A (First and Second Stakeholder Workshop mail-outs, newspaper ads,
- c. CHW proof of publication, Stakeholder Workshop minutes and presentations)
- d. Exhibit B – ECT Report of Significant Geologic Features
- e. Exhibit C – Cardno Special Area Study Report
- f. Exhibit D – CHW Planning Report (including Map Set and Appendix)
- g. Exhibit E – Excerpt of KBN/Golder Report (Hickory Sink Strategic Ecosystem)

2. **First Supplement to Special Area Study Report dated July 5, 2022**

The First Supplement document was prepared and submitted in response to County's staff's initial review comments on the applicant's original Special Area Study Report dated April 11, 2022. The First Supplement clarifies and builds upon the original Special Area Study Report.

3. **Second Supplement to Special Area Study dated September 19, 2023**

The Second Supplement report builds upon the previous Special Area Study reports, but it proposes key modifications to the potential land use scenarios for the subject property. The revised land use scenarios

presented in the Second Supplement report are intended to replace the land use scenarios that were presented in the original Special Area Study Report and the First Supplement.

The Second Supplement proposes two potential land use scenarios for the 4,068-acre property. The first scenario, **“Local and State Conservation”**, would potentially establish a conservation easement over approximately 85% of the 4,068 acres, including “Conceptual Conservation Easement” identified for all areas of the property west of Parker Road and those areas east of Parker Road and south of SW 46th Blvd./SW 56th Place. This scenario proposes to establish an Institutional land use designation on the approximately 580 acres of the subject property east of Parker Road, south of Oakmont, and west of Haile Plantation as Phase 1 of a Special Area Plan. This Institutional land use designation is proposed for a University of Florida golf course, accessory cottages and related golf course support and institutional buildings as described in the Second Supplement report. County staff’s recommended conservation management areas and “development standard open space areas” are encompassed within both the 580-acre Institutional/golf course area and the Conceptual Conservation Easement Area.

The second potential land use scenario identified in the Second Supplement report, **“Collaborative Planning”**, is identical to the Local and State Conservation scenario for the 580 acres of Institutional/UF golf course area east of Parker Road, south of Oakmont and west of Haile Plantation. The Collaborative Planning scenario differs in that it includes a substantial amount of area identified for “Residential Future SAP” for the areas south of the Institutional/golf course area and west of Parker Road in place of the “Conceptual Conservation Easement” identified in the first scenario. The Collaborative Planning scenario includes County staff’s recommended conservation management areas and areas where “strategic ecosystem development standard apply”.

Each of the two scenarios is described in further detail in the applicant’s Second Supplement and later in this staff report.

Overview of Comprehensive Plan Land Use Policy Framework

The County’s land use policy framework for the unincorporated area of Alachua County, as articulated in the Alachua County Comprehensive Plan, involves focusing urban development within a defined area known as the Urban Cluster and providing the necessary levels of services and infrastructure to support urban development within that area. The unincorporated areas outside of the Urban Cluster are designated to remain rural, with land uses that primarily include agriculture and related uses, lower density residential, and preservation areas.

As a land use planning tool, the Urban Cluster is intended to help contain urban sprawl and ensure that urban expansion is phased and planned based on reasonable projections of population growth and the efficient provision of public infrastructure and services. The Urban Cluster also helps to protect the County’s valuable agricultural lands and large-scale natural resource conservation areas from encroachment by urban development.

The Urban Cluster line is designated on the Future Land Use Map, and it includes the unincorporated areas immediately surrounding the City of Gainesville. Policies in the Comprehensive Plan require urban types of development, such as residential uses at densities >1 unit per acre, commercial, industrial, and mixed-use development to be located within the Urban Cluster where it can be most efficiently served by an urban level of public services and infrastructure including roads, transit, centralized water and wastewater systems, emergency services, solid waste curbside collection, activity-based parks, and public schools.

The land that is the subject of the Special Area Study is located outside of the Urban Cluster boundary and is therefore subject to the policies for Rural and Agricultural areas under the County's adopted Comprehensive Plan. The Comprehensive Plan calls for the protection of rural and agricultural areas in a manner consistent with the retention of agriculture, open space, and rural character, the preservation of environmentally sensitive areas, and efficient use of public services and facilities.

The subject property currently has a Future Land Use designation of "Rural/Agriculture". Within Rural/Agriculture areas, the Comprehensive Plan generally limits allowable land uses to agriculture, silviculture, residential at maximum densities of 1 unit per 5 acres, preservation, heritage and ecotourism, and limited commercial uses related to agriculture activities. Outdoor activity-based recreation (including golf courses) are allowable uses in the Rural/Agriculture areas. The currently adopted Comprehensive Plan does not provide for urban levels of public services and infrastructure outside of the Urban Cluster (within Rural/Agriculture areas) because it is generally not economically efficient to do so.

As part of the Special Area Study, the applicant has proposed two potential land use scenarios for the subject property ("Local and State Conservation" and "Collaborative Planning"). Each of these scenarios would require an amendment to the Comprehensive Plan in order to establish a Special Area Plan for the subject property, which would include maps and policies that would govern future development and conservation management.

Both scenarios provide for Institutional land use on the 580-acre Phase 1 Special Area Plan golf course area east of Parker Road, south of Oakmont and west of Haile Plantation. Golf courses are generally an allowable land use outside the Urban Cluster and within the Rural Agriculture future land use designation, however, staff believes that an Institutional future land use designation would be necessary for the overall combination of the golf course with related land uses such as cottages and other University of Florida institutional buildings that are identified for the property in the Special Area Study. The Institutional Future Land Use designation may be allowed outside the Urban Cluster through a Comprehensive Plan amendment.

The Collaborative Planning scenario could potentially involve a more significant departure from the County's overall land use planning framework, as this scenario identifies significant areas for residential land use. The types and densities of residential land use that are being considered under the Collaborative Planning scenario are not discussed in the Special Area Study Second Supplement report but would be proposed through the Comprehensive Plan amendment process as a follow-up to the Special Area Study. To the extent that urban types of land uses, densities, or intensities of development are proposed, and would need to be served by urban levels of public services, the Special Area Plan would need to address the County's Urban Cluster policies as well as the policies for extension of potable water and sanitary sewer, and potentially various policies dealing with levels of service and necessary capital improvements for public facilities.

Strategic Ecosystem Background and Evaluation

The location and extent of specific natural resources, as well as the higher and lower valued portions of the strategic ecosystem are delineated in the applicant's Special Area Study and further clarified and identified in the additional information provided below.

Proposed Conservation Management Set-Aside Areas

County staff worked with the applicant to identify and select the portions of the strategic ecosystem and other identified regulated natural resources that are included in the priority recommended set-aside areas based on the information provided in the Study as well as information gathered from several onsite visits and additional reference materials (see Appendix B, reference list).

The critical strategic ecosystem and water resources that are recommended for protection as conservation management area open space are identified in Figure 1 of this Staff Report. Additional strategic ecosystem areas that are lower priority set-aside but still recognized as within the mapped strategic ecosystem are also identified as areas that shall contain specific standards for development that are consistent with comprehensive plan and ULDC. These specific standards and practices will be further spelled out in the special area plan. The areas found not to contain strategic ecosystem resources or regulated resources will be eligible for consideration for development as part of the special area plan. Additional open space areas will be integrated into the development strategies consistent with the County's ULDC open space requirements and the protection of the ecological integrity of the strategic ecosystem as a whole.

The areas recommended for set aside include a large tract west of the Flint Rock subdivision (west of Parker Road) that contains strong remnants of a sandhill/high pine community with a somewhat intact diverse ground cover that supports a large gopher tortoise population. With proper management and the planting of longleaf pine, this area can continue to support a diverse population of plants and animals that are rare in this area of north Florida. There is a wetland area to the southwest of this habitat that is also recommended to be protected that also provides connectivity to the southwest where large tracts of natural areas and farmland still exist.

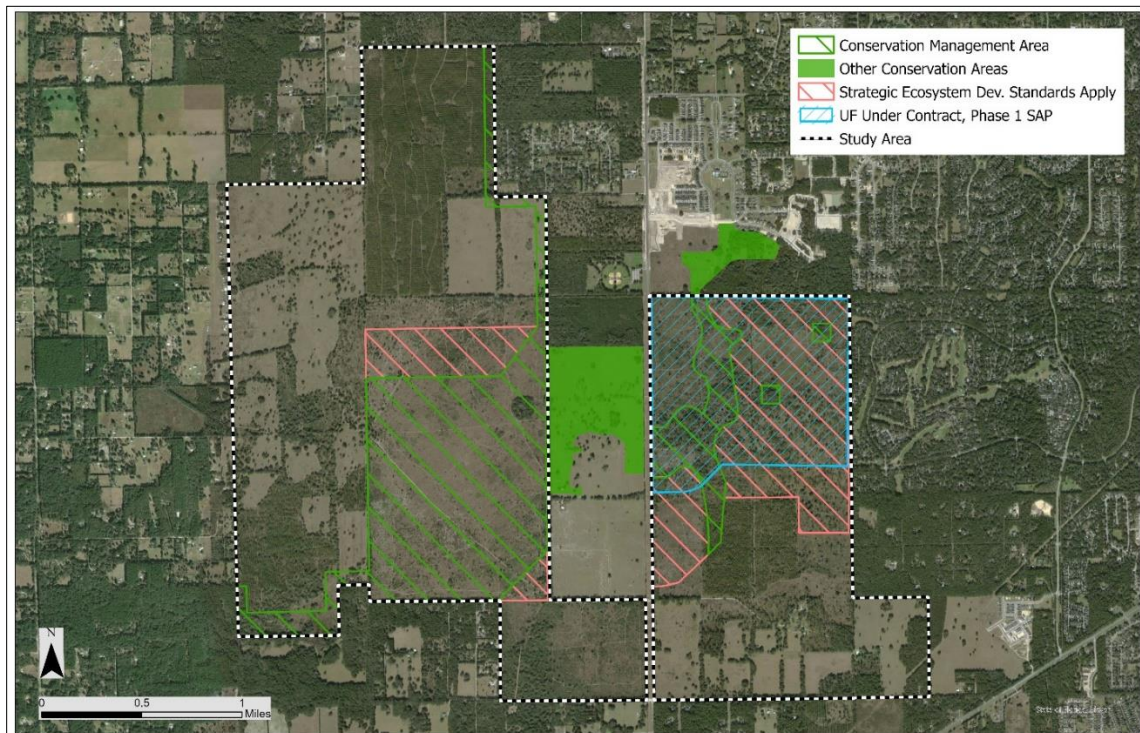
There is a cluster of sinkholes, caves, and other depressional features located in the northeast portion of the project area (east of Parker Road) that is recommended as a conservation management area as well as two other isolated features that are significant and are to be protected with at least a 5-acre set-aside area surrounding each of them. Based on the sensitivity of these features, there are development standards and recommendations that will be included in the Special Area Plan (SAP) to ensure the protection of these features and their associated hydrology. Based on the September 2023 application, this northeast section is where the proposed UF golf course is to be located.

Based on the best available data and onsite evaluations, staff has determined that there are 1,490 acres of strategic ecosystem as depicted in the map below (Figure 1 of Staff Report), which include the green hatch area identified as the minimum Priority Conservation Management Areas (CMAs), as well as additional strategic ecosystem resources identified in the pink hatching.

Staff agrees with the applicant that the areas identified as CMAs in the Master Planning Scenario (map shown in Attachment A Page 3 of Special Area Study First Supplement dated July 5, 2022) along with Figure 17 of the Cardno report (which includes the isolated geologic features), represent the highest quality and priority areas for protection, and the *minimum* conservation management areas to be protected regardless of other land uses identified or proposed in the SAP. The Conservation Management Areas (CMA) in Figure 1 of this Staff Report are similar to what is shown in *Figure 17. Proposed Set Aside Map* in the applicant’s Special Area Study Report. The CMA area is approximately 850 acres and consists of approximately 681 acres of Sandhill/High Pine habitat and 166 acres of Upland Mixed Forest, and 3 acres of Marsh habitat. The significant geologic features are located within the Upland Mixed Forest areas.

Staff has identified additional lower priority habitat areas in Figure 1 of this Staff Report in the salmon/pink hatching as areas where Strategic Ecosystem Development and Open Space Standards will apply. These areas add up to approximately 640 acres and consist of somewhat lower quality habitat that is adjacent to or surrounds higher quality or more sensitive habitat and geologic features. Under the current land use and zoning designation for SEs, development within these areas shall be consistent with Section 406.03(b)(1)(2), which limit density and intensity in SE resources outside the set-aside area. If more intense land use options are considered, additional open space and set-aside areas may be necessary to properly protect the integrity of the strategic ecosystem and associated water and natural resources on the property. For areas where a golf course is proposed, strategies will need to be demonstrated at the Special Area Planning stage that are protective of the resources as described later in this report.

Figure 1. Staff Recommended Conservation Management Areas Map. This map depicts proposed Conservation Management Areas (Green hatching) to be set aside and additional areas (salmon/pink hatching), that if developed, are recommended by staff to follow specific development standards consistent with the County’s Strategic Ecosystem policies.



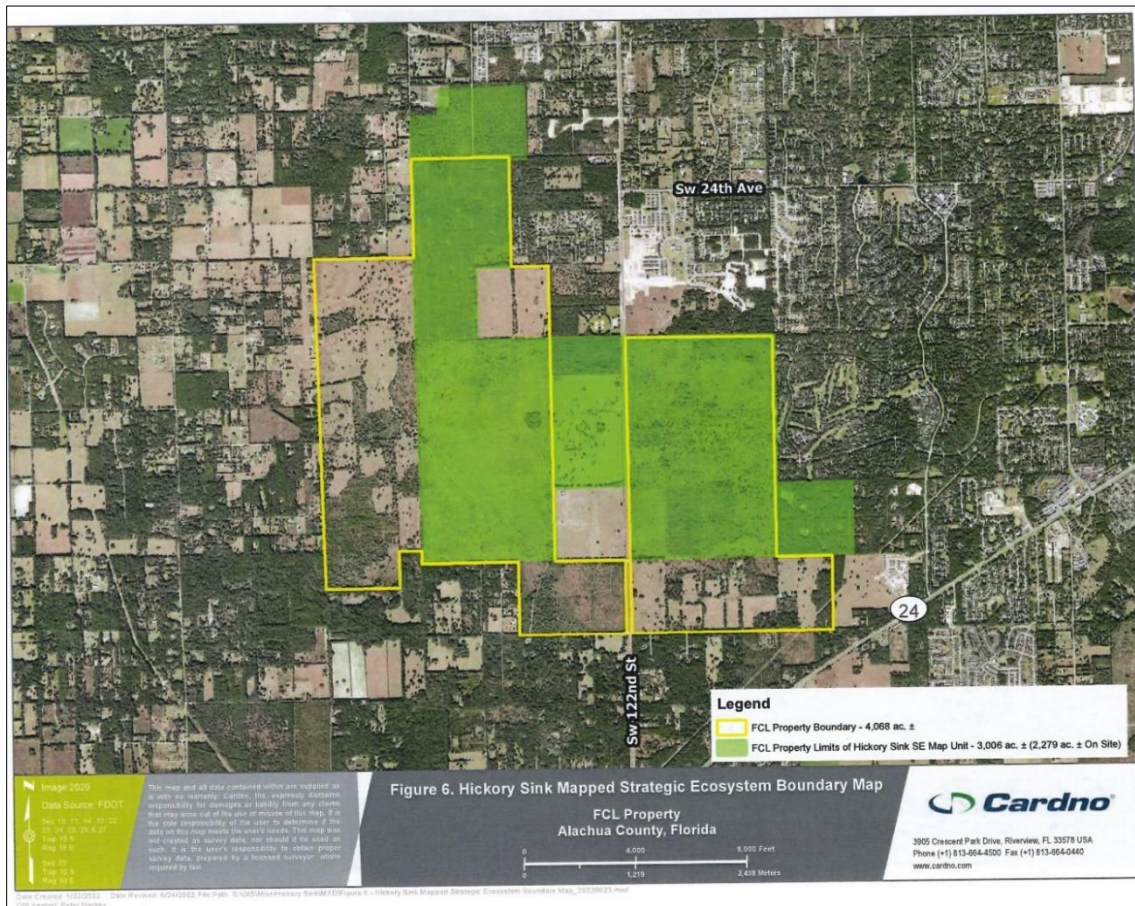
Strategic Ecosystems Background

Strategic Ecosystems are defined in the Comprehensive Plan and ULDC as sites that are identified in the KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996). The purpose of the Report prepared by KBN Engineering and Applied Sciences, Inc. was to identify, inventory, map, describe, and evaluate the most significant natural biological communities, both upland and wetland, that remain in private ownership in Alachua County and made recommendations for protecting these natural resources. The Report identified 47 sites based on six ecological, hydrological, and management parameters. The study did not focus on the public water bodies and publicly owned lands in the county.

The KBN/Golder Associates report is further referred to in this document as the KBN or KBN report. The KBN report identified the strategic ecosystem (SE) on the parcel as the Hickory Sink Strategic Ecosystem.

Figure 2 below is a Hickory Sink Mapped Strategic Ecosystem Boundary Map from the applicant's Special Area Study Report (Figure 6 of Cardno Report) that shows the strategic ecosystem area as identified in the KBN report prior to ground-truthing.

**Figure 2. Hickory Sink Mapped Strategic Ecosystem Boundary Map
(from Applicant's Special Area Study Original Report, Figure 6 of Cardno Report)**



As depicted in Figure 2 above (Cardno report Figure 6), the subject property contains approximately 2,279 acres that are within the mapped 3,006-acre strategic ecosystem. The KBN report describes this strategic ecosystem as having the following values:

- Species diversity was identified as very low based on the vegetation recorded or estimated at the site. *The KBN staff had limited access to the site to complete their report. However, based on staff's site visits there are higher species diversity in portions of the property than described by the KBN report. Habitat conditions are further discussed in the next section.*
- In relation to exotic (nonnative) species, some exotics are present and the property is conducive for introduction of exotic plants and animals based on the surrounding properties and prior management practices. *Staff observed some nonnative species on the property, but generally low in percent cover for most areas.*
- The KBN described the wildlife habitat value as having moderate cover, medium edge to cover ratio, and commonly used by game and non-game animals. *Based on the management and prior use of the site, staff found that the majority of the site fits this description.*
- The KBN identified this property as an area of great importance for aquifer recharge, with some karst features with high vulnerability of the Floridan Aquifer. Based on the limited number of wetlands on the property, the report identified the property as having little value for water storage or protection of surface water quality. *Staff agrees with the assessment of this property having a high importance for aquifer recharge and high vulnerability for the aquifer. Protecting the groundwater from pollutants and retaining open space for recharge should be a major consideration for any future uses on the property.*
- At the landscape ecology level, the KBN reports one to three communities in good quality but with most community types in poor condition, isolated with no functional connections. However, the report also recognizes the existence of rare habitats on site. *Staff notes that during the evaluation for the 1996 KBN report, there was a higher percentage of pine plantations present on the property that were subsequently clear-cut with only minor re-establishment of the plantations. Natural recruitment and generation of native species post-logging resulted in habitat improvements to the referenced "Upland Pine Forest" and "Upland Mixed Forest" categories that were previously rated as "poor" condition (table below).*
- Based on the location and surrounding uses this is a difficult location for management, however, some habitats could be maintained in or restored to good condition, but would require vigilant management. *The Lee family noted to staff that for various reasons, prescribed fire applications were conducted by burning larger contiguous acreages (referred to as "burn units"). Resource land agencies such as Alachua Conservation Forever (ACF) and Alachua Conservation Trust (ACT) routinely apply prescribed fire to smaller burn unit areas where appropriate and necessary. In many situations with smaller units, there are increases in fire effectiveness resulting in enhanced habitat benefits; and the same prescribed fire method could be applied within the subject property.*

Based on the site assessment of the property by the County’s Environmental Protection Department, staff concludes that the values described in the KBN report are still relatively accurate and the site as a whole has not changed dramatically since the report was completed in 1996.

The KBN report identified the Hickory Sink Strategic Ecosystem with the following bio-community types and acreages:

<u>BIO-COMMUNITY TYPES</u>	<u>ACRES</u>	<u>CONDITION OF BIO-COMMUNITY</u>
Upland Mixed Forest	81	poor (pioneer hammock)
Upland Pine Forest	2560	poor
Sinkhole	56	good to fair
Sinkhole Pond	1	good
Cave (dry)		good
Old Field Pine Plantation	205	[not an ecological community]
Improved Pasture	103	[not an ecological community]

Strategic Ecosystems and Ground Truthing

The KBN report states that site boundaries generally conform to property boundaries, roads, section lines, or other surveyed lines. Therefore, under the requirements of the Comprehensive Plan and ULDC, and specifically Section 406.33 ULDC, *the specific location and extent of strategic ecosystem resources shall be determined through ground-truthing using the KBN/Golder Associates report as a guide to determine the location and extent of the ecological community or communities described, generally, in the KBN/Golder report or of other natural resources generally consistent with the pertinent site summary in the KBN/Golder report.* So, following this approach, the non-ecological communities, like the old field pine plantation, improved pasture, and other areas that at the time of ground truthing do not consist of one of the bio-communities described above (i.e., upland mixed forest, upland pine forest, sinkhole, sinkhole pond, and cave) may be excluded from the SE and be eligible for development outside of any SE requirements.

The remaining areas that still consist of the ecological communities listed above would then be recognized as within the SE and would then need to be evaluated to determine what areas should be protected to maintain the integrity of the system and what areas could be considered appropriate for potential development. As stated in Section 406.33 ULDC, *variability of community quality shall not be a basis for delineation but may be a basis for determining the most appropriate locations for development and conservation, respectively.* Then the code goes on to state, *those areas found not to contain strategic ecosystem resources (again those areas that do not contain natural communities listed above for this specific strategic ecosystem) shall be eligible for consideration for development as part of a development plan or special area plan provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected.*

As previously stated, the ULDC and Comprehensive Plan define strategic ecosystems as sites that are identified in the KBN/Golder Associates report. Per Section 406.33 ULDC, the specific location and extent of strategic ecosystem (SE) resources shall be determined through ground-truthing using the KBN/Golder Associates report as a guide and can be implemented through the special area planning process. Variability of habitat community quality shall not be a basis for the delineation (*underlined for emphasis*) but may be a basis for determining the most appropriate locations for development and conservation.

The project area owned by the applicant is approximately, 4,068 acres (includes both sides of Parker Rd) and the mapped (prior to ground-truthing) SE portion of the project area is approximately 2,278.9 acres (see Figure 2 of Staff Report).

Based on the data provided in the report and the information provided in the KBN/Golder Associates report, the property meets the designation of the strategic ecosystem based on average to high values for endangered species habitat, wildlife habitat, community rarity, vulnerability and protection of the Floridan aquifer, and the presence of sink features and caves. Based on a lack of management in areas of the site, some of the site has reduced species diversity and quality, but as mentioned above, that would not disqualify these areas from retaining their SE designation (underlined for emphasis).

The location and extent of specific natural resources, as well as higher and lower valued portions of the SE, were delineated within the study area, and with respect to surrounding resources. Any development within the designated SE that is outside of the protected set-aside shall have development densities governed by subsections 406.03(b)(1)(2) ULDC. Those areas found not to contain SE resources are eligible for consideration for development as part of a special area plan (SAP) provided the ecological integrity of the SE as a whole is sufficiently protected (see Sec. 402.101(b) ULDC).

Additional Natural Resources of the Strategic Ecosystem

Significant Plant and Wildlife Habitat (Chapter 406, Article III, ULDC)

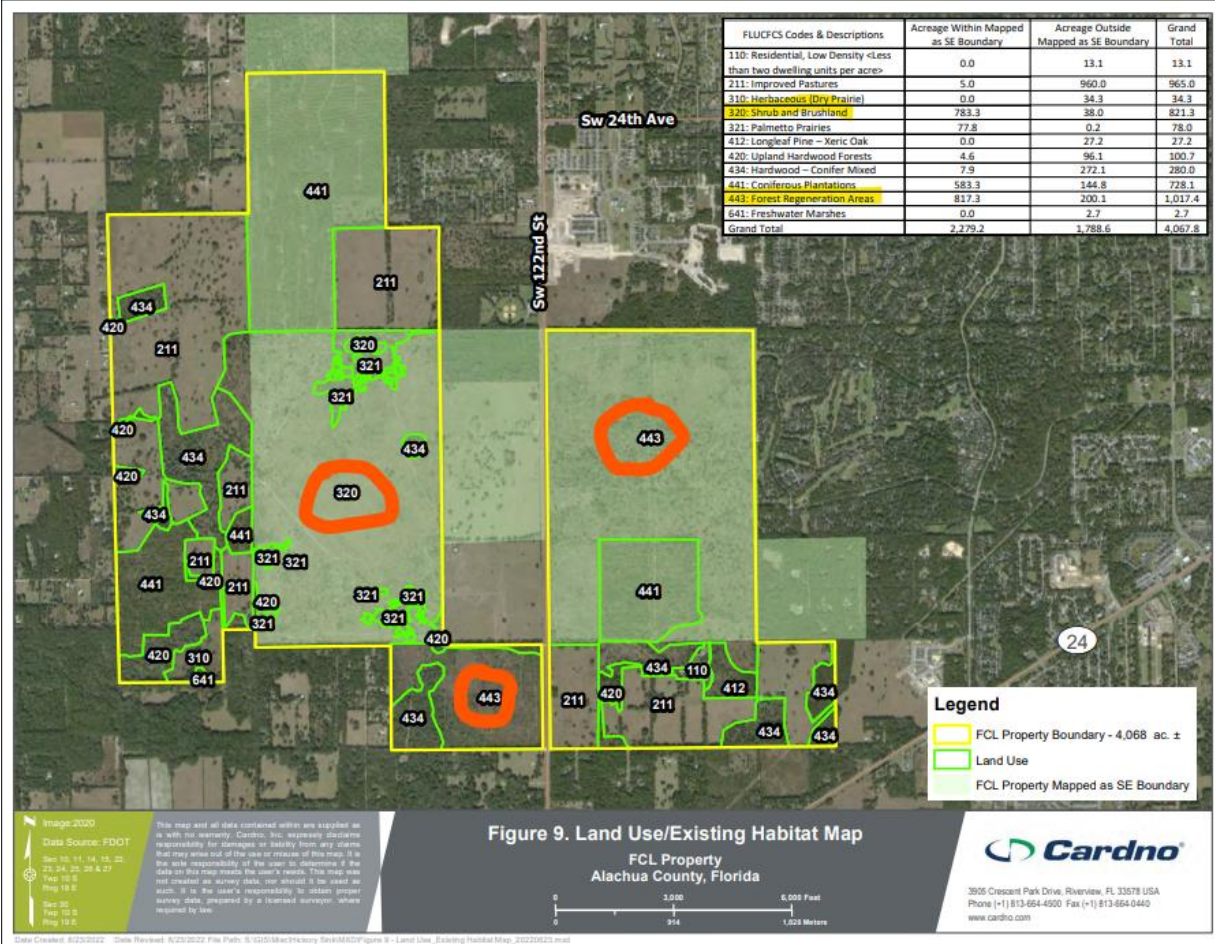
Based on the best available data and onsite evaluations, staff has determined that portions of the property qualify as significant plant and wildlife habitat, as described below.

As circled and highlighted in Figure 3 of this Staff Report (Figure 9 of Applicant's Special Area Study), the highest quantities of natural habitats are associated with two referenced land use/cover designations; #320-Shrub & Brushland (821 acres) and #443 – Forest Regenerative Areas (1,017 acres).

In addition to designating appropriate classification, evaluations of the various habitats on the property are critical in determining where areas would qualify as Significant Plant & Wildlife Habitat (SH). Based on the referenced Florida Land Use, Cover and Forms Classification System (FDOT- FLUCFCS, 1999), the definition of 320-Shrub & Brushland is categorized as having “saw palmetto, gallberry, wax myrtle, coastal scrub and other shrubs and brush. Generally, saw palmetto is the most prevalent plant cover intermixed with a wide variety of other woody scrub species as well as wide variety of short herbs and grasses.” Unfortunately, there are not sufficient quantities or types of FLUCFCS categories to provide more appropriate and accurate description of some habitat conditions in Florida. This limitation has been recognized by the State resource agencies so the Florida Fish & Wildlife Conservation Commission (FWC) prepared an additional FLUCFCS in 2018 that incorporates a “Sandhill” category (#1240). Due to the unique and rare habitat conditions associated with the western area designated as #320, the “Sandhill” classification is a more appropriate and accurate description compared to “Shrub & Brushland.” For the definition of 443-Forest Regenerative Areas, the FLUCFCS states “these are areas in which it is clearly evident that harvested stands will be reforested through one of the various silvicultural practices prescribed in Florida’s forests rather than being allocated for another land use or abandonment.” Over the last decade, harvesting of pine plantations within the Lee

property have not been followed with re-establishment of planted pine. It is referenced in the Cardno evaluation that these areas were historically sandhill communities.

**Figure 3. Land Use/Existing Habitat Map
(from Applicant's Special Area Study Original Report, Figure 9 of Cardno Report)**



However, it is also accurately reported that less frequent application of prescribed fire has resulted in dominance and dense generation of hardwood species in these areas that have yet to achieve maturity. As a result, vegetation and habitat conditions are not similar to the sandhill habitat within the referenced west area. Granted, the diversity of habitat conditions within these #443 areas results in a few various alternative FLUCFCS categories that could provide a more appropriate classification (e.g. #412-Longleaf Pine-Xeric Oak, #421-Xeric Oak). Probably the most appropriate would be #423-Oak-Pine-Hickory, that has the following definition: “This is a mixed forest community in which no single species is consistently dominant. However, this is a predominantly hardwood forest type in which various southern pine are major associate species. Major component species of this community may include southern red oak, post oak, chestnut oak, black oak, live oak, loblolly pine, shortleaf pine, slash pine, mockernut hickory and pignut hickory in addition to numerous minor associated species.”

With the unique and rare vegetative and habitat components, the referenced Sandhill and Oak-Pine-Hickory areas would qualify for Significant Habitat (SH). However, there are other habitats within and beyond the mapped Strategic Ecosystem that have components that could also qualify as SH. Examples could include portions of areas delineated in Figure 3 (Cardno Report Figure 9) as #321-Palmetto Prairies, #412-Longleaf Pine-Xeric Oak, #420-Upland Hardwood Forests and #434-Hardwood-Conifer Mixed. Additional evaluation may be necessary as part of any future development review or special area plan process to determine which areas would appropriately qualify for additional protection or set aside.

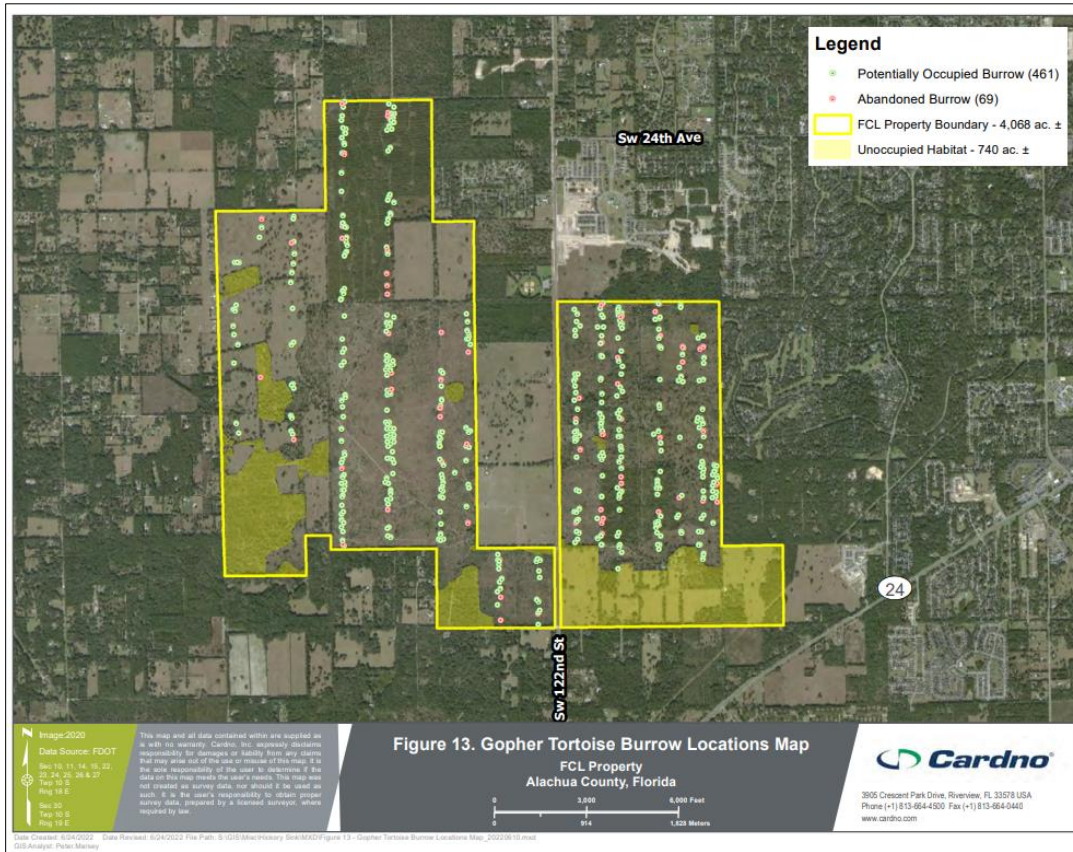
Listed Plant and Animal Species Habitat (Chapter 406, Article IV, ULDC)

Based on the best available data and onsite evaluations, staff has determined that portions of the property qualify as listed plant and animal species habitat, as described below.

History of listed species habitat on site – Based on the KBN 1986 report, this property contained one of the largest intact pieces of restorable longleaf pine/southern red oak community left in peninsular Florida in the 1980s. Since then, and as mentioned in the KBN 1997 report, the site has had the majority of its mature pines harvested, but remnants of this prior community still exist on site. There are also karst features on site that likely support (and have historically documented) rare aquatic invertebrates and bats. This site supports habitat for other rare terrestrial wildlife as well. As mentioned in the SAS report, there is a large population of gopher tortoises, and the Southeastern American kestrel, Bachman’s sparrow, Southeastern fox squirrel, Northern bobwhite, Eastern diamondback rattlesnake, and other wildlife have been observed recently on site, while the brown-headed nuthatch, Florida pine snake, Eastern indigo snake and Florida sandhill crane have all been observed on the property in the past (see KBN Report 1986; FDACS, Florida Forest Service, Kanapaha Ranch 2017 Project Evaluation Report (for the Rural & Family Lands Protection Program). Listed plant species that have been documented on site include woodland poppy-mallow (*Callirhoe papaver*), angularfruit milkvine (*Gonolobus suberosus*), and giant orchid (*Orthochilus ecristatus*).

For evaluating the presence of gopher tortoise (GT), Cardno surveyed approximately 608 acres of the 4,015 acres of what they determined is suitable habitat, representing 15% of the total acreage (reference Figure 4 below, Gopher Tortoise Burrow Locations Map; from Special Area Study Figure 13 of Cardno report). Their survey resulted in a total of 461 potentially occupied burrows and 69 abandoned burrows. Based on the FWC population density calculation of 50% occupancy of the located burrows, Cardno reports the property is estimated to have approximately 3,063 burrows and 1,532 tortoises.

Figure 4. Gopher Tortoise Burrow Locations Map
(from Applicant's Special Area Study Report, Figure 13 of Cardno Report)



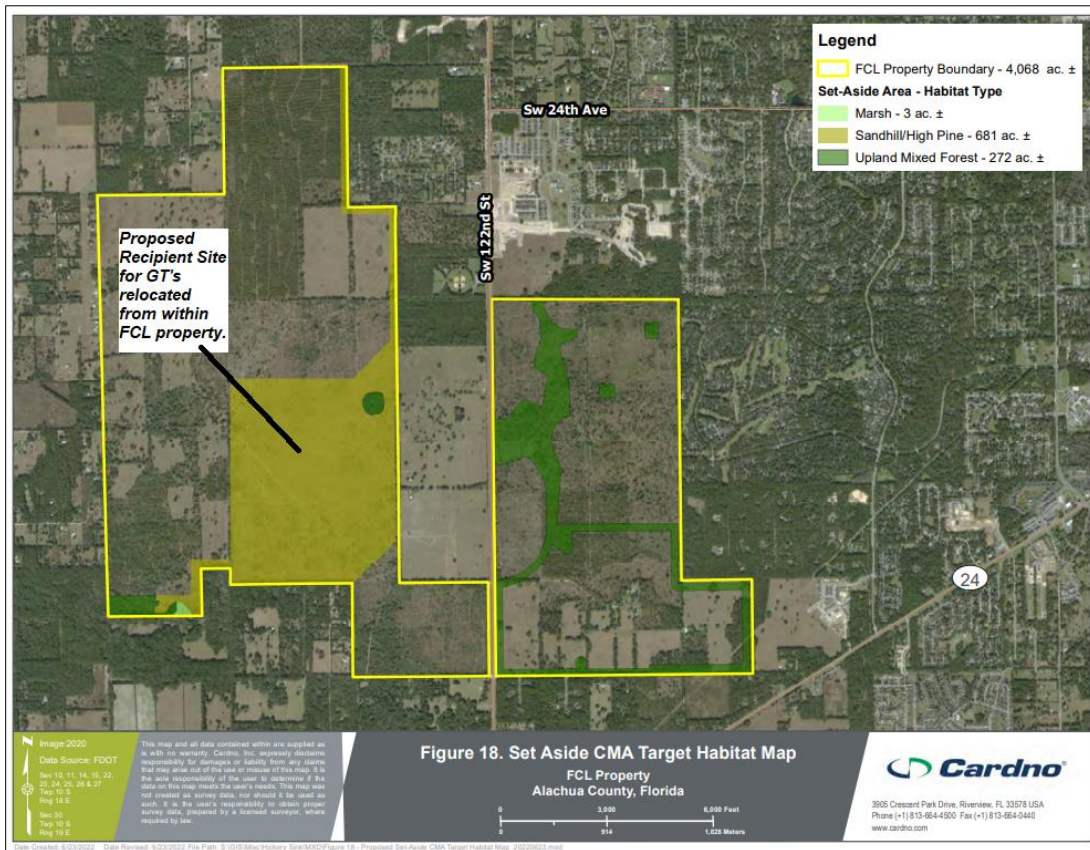
As indicated by the aerial map in Figure 5 below (from Special Area Study, Cardno Report Figure 18 and 2022 application), the applicant proposed conservation of approximately 70% of the sandhill habitat (681 acres) located within the western portion of the property, and a small percentage of the mixed forested habitat (141 acres are included as set-aside within the proposed golf course area) where the sinkhole features are more concentrated east of Parker Road. If Option 1 of the current proposal is not viable and the applicant moved forward with Option 2, the proposal is to designate the sandhill as the recipient site to relocate the majority of GTs from the proposed non-conservation areas of the property. The following concerns for this proposal have been expressed by Environmental Protection Department staff:

- The transects were spaced further apart within the western sandhill area compared to the eastern mixed forested area. As a result, considering the habitat and vegetative conditions, there are concerns that there is an under-estimation of the GT population within the sandhill habitat.
- Based on the preliminary survey, approximately 30-40% of the GT population can be expected to occur within the two proposed conservation areas; with the remaining GTs located in areas proposed for other land uses. Assuming there are approximately 1,500 GTs on the property, if the proposed relocation site was deemed acceptable by FWC & Alachua County, that would mean that potentially 700-1000 GTs could be eventually relocated to the 681-acre sandhill area. If the sandhill area is already at or near carrying capacity with the existing GT population, this presents concerns of not

only sufficient habitat/foraging conditions to support this increased concentrated population, but also could result in conditions that would increase GT stress and the risk of tortoises transmitting Upper Respiratory Tract Disease (URTD). URTD is a contagious disease affecting GTs, as well as other tortoise and turtle species. There is no cure for URTD and typically results in mortality of the tortoise.

Environmental Protection Department staff recognize that reduced availability of authorized recipient sites presents major problems for relocation of GTs, and there could be some benefits compared to the potential of relocating GTs substantial distances from the Lee property. However, any large-scale development proposal for this property could also result in substantial unintended consequences not only affecting the GTs but also wildlife species who depend on GT burrows for protection and denning (referred to as “commensal species”). Therefore, in consultation with FWC staff and through the SAP process, additional upland habitat may need to be set aside to meet State requirements for the protection of GTs and other wildlife species, and could also help reduce the necessity to relocate what could be a substantial population of GTs.

Figure 5. Set Aside Conservation Management Area Target Habitat Map (from Applicant’s 2022 Special Area Study Report, Figure 18 of Cardno Report)

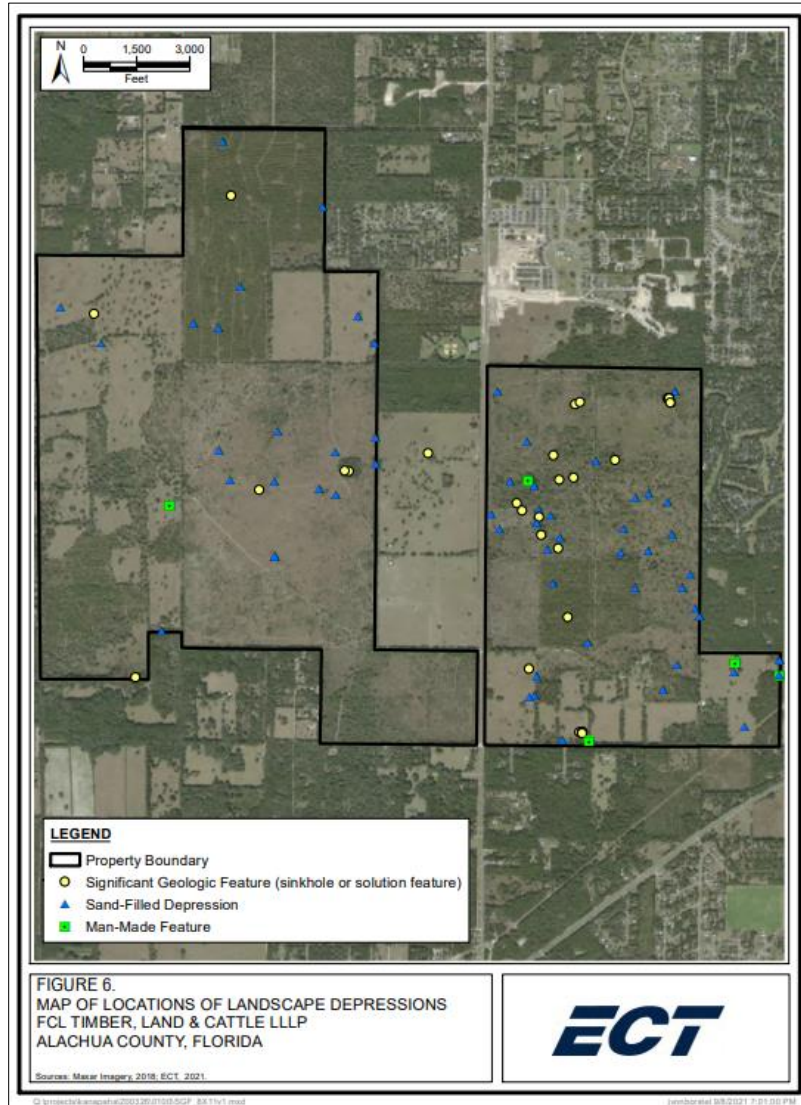


Significant Geologic Features (Chapter 406, Article XVI)

The geotechnical consultant (ECT) referenced that “Significant geologic features were identified as landscape depressions with steep walls and exposed limestone and/or clay in the walls. The distribution of significant geologic features is shown in Figure 6 below. These features represent areas of enhanced connectivity to the

Floridan aquifer. These features require setback protection, not only to prevent discharge of potentially poor-quality water to the Floridan aquifer, but also due to their uncertain stability, their uniqueness, and possible unique ecologic value. Those features identified as sand-filled depressions may represent relict karst features; however, to evaluate their connectivity to the Floridan aquifer and subsurface structure, ground penetrating radar surveys across these features, coupled with site-specific stratigraphic data will be necessary. In the absence of additional data, these features are not considered significant geologic features.”

**Figure 6. Map of Locations of Landscape Depressions
(from Applicant’s Special Area Study Report, Figure 6 of ECT Report)**



Staff have expressed concerns about the higher risk for potential water quality impacts to the Floridan aquifer depending on the structures and activities proposed within a substantial concentration of geologic features located in the northeast portion of the property. These concerns also extend to include increased risk of structural integrity issues associated with infrastructure and other facilities if constructed in that area. As recommended by ECT, County staff concur that site specific evaluations such as ground penetrating radar and

geotechnical borings should be conducted at appropriate locations before considering if and where construction-related activities and facilities are proposed in the northeast area.

The sensitive karst features in the northeast quadrant of the project will require further evaluation to ensure they are not adversely impacted by the currently proposed institutional land uses that include a golf course, 200,000 square feet of additional UF facilities and 30 residential units. Lower impact design strategies like LID, water conservation policies and clear limits on irrigation and water use, and retention of wildlife corridors will need to be considered in any future development for this area.

Springs and High Aquifer Recharge Areas (Chapter 406, Article VIII)

The entire property is located in the High Aquifer Recharge Area, and the vast majority of the property is also located in the Sensitive Karst Area (SKA) of Alachua County. The “Collaborative Planning” Scenario, identifies a significant portion of the subject property as “Residential Future SAP LEE PROPERTY” without providing any information regarding the density or numbers of units proposed in those areas. This Scenario could have the potential to increase residential density on the property above the 1 unit per 5 acres that is allowable under the currently adopted Comprehensive Plan future land use designation of Rural/Agriculture (approximately 800 residential units). In weighing the merits of this proposal, staff must consider the potential nutrient pollution and water use. Below are some calculations to help illustrate such.

Residential water use is largely driven by outdoor water use and irrigable area. The current trend in new development is to install permanent irrigation on all new lots. According to a recent UF publication (Florida H2OSAV insights: Home Water Use in the Gainesville Regional Utilities Service Territory), a home with an in-ground irrigation system, on a typical ¼-acre lot, uses over 2,000 gallons of water each time the lawn is watered. Current irrigation restrictions allow for 86 irrigation cycles per year for a total of 172,000 gallons used per year per lot. If 800 lots were developed and irrigated, the estimated water use would be .38 million gallons per day/138 million gallons per year.

Using the FDEP Springs BMAP Residential OTDS calculation method, 800 traditional septic systems would result in an estimated 8,240 pounds of Total Nitrogen per year. As with the Flint Rock development, the County would require new septic systems in this region to be nutrient reducing systems. The FDEP tool assumes a 65% treatment level for these systems, which would bring the Total Nitrogen loading down to 2,880 lbs/year. However, wastewater is not the only source of nitrogen to be considered, as landscape fertilizer is another significant source of nutrient pollution. Irrigation contributes to fertilizer leaching and runoff.

In addition to a potential increase in residential units, both Scenario 1 and 2 show a 580-acre Institutional land use area labeled “Phase 1 SAP Institutional Use UF PROPERTY” that includes a golf course, 200,000 square feet of additional UF facilities and 30 residential units (four bedroom attached cottages).

While current code provisions require water conservation strategies for developments in the High Aquifer Recharge Area, as well as additional stormwater water quality treatment for properties within an SKA, staff recommends that additional policies and strategies be considered during the SAP process as described in the recommended conditions, which include the following:

1. Set specific limits on permanent landscape irrigation (including reclaimed water), irrigable area, and adhere to a water budget
2. Account for all nutrient inputs (e.g., fertilizer, reclaimed water, soil amendments, etc.) in a comprehensive nutrient management plan for the golf course. Use soil and tissue tests to establish nutrient baseline levels and deviations from reported reference ranges when available. All other Institutional Areas (i.e. accessory clubhouse amenity, cottages and maintenance area) shall be managed consistent with Chapter 77, Article IV.
3. Minimize clearing of existing vegetation, soil compaction, and earthwork during construction.
4. Retain existing vegetation and design landscapes to mitigate impacts of climate change. Consider no-mow landscaping.
5. Employ advanced stormwater treatment and low impact design throughout the project.

Proposed Golf Course and Water Quality Considerations for Phase 1 UF Property

The Second Supplemental Special Area Study document (SAS 01-22 dated September 19, 2023) proposes a golf course on the northeast quadrant of the Special Area Plan. Staff continues to have significant concerns about locating a new golf course in western Alachua County and the potential impacts on the Floridan Aquifer and water quality. Golf courses can be a significant source of nutrient pollution and can contribute to the over pumping of groundwater, necessitating careful consideration of design standards and management plans, with an emphasis on landscaping and greens. If a golf course is proposed in this area, there will need to be water quality and quantity management and monitoring plans and landscape design standards that address strategies to minimize impacts to water resources. Possible strategies would include soil amendments, preservation of existing vegetation, use of native vegetation in landscaping, non-irrigated landscapes, limited chemical (fertilizer, herbicide, and pesticide) inputs, particularly fertilizer since the applicant proposes re-use water for irrigation, LID techniques, and site-specific best management practices to limit water quality problems and address biological health concerns as outlined in Sec 404.66.5 ULDC.

This area is in the high aquifer recharge area and any proposed golf course shall be designed and operated to be protective of springs and minimize the potential for nutrients to degrade the Floridan aquifer, our drinking water, and springs (Sec. 406.59.1(e) ULDC). The project also falls within the Santa Fe River BMAP, which addresses future nonagricultural growth through the development and implementation of County codes and ordinances. Based on House Bill 967 (which was passed during this past legislative session), staff that manage a golf course and have obtained an UF IFAS golf course best management practices certification are exempt from local ordinances relating to water and fertilizer use. The Bill does not exempt the management entity from having to comply with the rules and requirements for basin management action plans (BMAP) set forth in Section 403.067(7) F.S., allowing the County to implement its codes and ordinances on golf courses. Staff recommends that protection strategies and standards are included as conditions of the SAP, so that these conditions are incorporated into the project even if the property is added to the UF Campus Master Plan in the future.

Proposed Golf Course and Water Conservation Considerations for Phase 1 UF Property

Under both Scenario 1 and 2, the application indicates that peak water demand for landscape irrigation is estimated at 1 MGD (million gallons per day) in May/June, with an average demand of 650,000 GPD year-round. This demand is intended to be met by a combination of rainwater harvesting and reuse, with an additional well to supplement irrigation supply if GRU re-use water is unavailable. While stormwater reuse is preferable to reclaimed or potable water use, the development of stormwater reuse lakes in the western part of the county can be challenging due to the prevalence of karst features and the risk of sinkhole collapse with concentrating large amounts of water in one area. A better practice would be to minimize irrigated areas and minimally develop the course by maintaining as much of the existing vegetation intact as possible and framing the fairways with native vegetation that can thrive on rainfall alone. To put into perspective the 650,000 GPD estimated average daily water demand for irrigation on this project, below is a list of comparable consumptive use permits in Alachua County. The proposed use is greater than the use of the entire community of Waldo and approaching the amount of water used by Newberry:

1. Gulf-N-Shots (Meadowbrook Golf Course, approximately 100 acres, 18 holes), 157,000 GPD.
2. City of Waldo, 210,700 GPD
3. City of Newberry, 838,000 GPD (2022 numbers)

As the availability of reuse water diminishes, with higher and more beneficial uses such as groundwater recharge soon becoming available (a wetlands recharge area park is currently under review just northwest of the proposed golf course), stormwater reuse alone is unlikely to suffice to meet the irrigation demand indicated in the application, placing additional strain on our groundwater supply. Should this application be approved, the water use should be monitored by metering the well, installing leak detection technology and regularly auditing and maintaining the irrigation systems to minimize water waste.

Evaluation of Special Area Study Based on Requirements in ULDC

Section 402.101(a) through (f) of the ULDC provides the specific requirements for the process and content of a Special Area Study. Each of these requirements are listed below in italics followed by staff's evaluation of how the Special Area Study addresses each requirement.

402.101 (a) Stakeholders workshop.

All property owners within the area defined by the scope of the special area study, as well as other registered stakeholders, shall be notified in writing of the intent to conduct a study for the area, and shall be encouraged to participate in the process. As part of the development of the special area study the county shall conduct a minimum of one stakeholders workshop in accordance with Article 4, Neighborhood Workshops, of this chapter.

In March 2022, the applicant held two stakeholder public workshops on the Special Area Study. The first workshop was held on March 23, 2022 in-person. All property owners whose property was located within 1,320 ft. (one-quarter mile) of the subject property boundary were notified of this workshop by mail. There were approximately 714 separate tax parcels included in the mailout. A follow-up virtual workshop was held by the applicant on March 30, 2022. In addition to the required stakeholder workshops in 2022, the applicant also reached out directly to numerous interested residents and organizations and had individual meetings to discuss the Special Area Study and plans for the property.

The Alachua County Board of County Commissioners held a public workshop on September 20, 2022 to discuss the Special Area Study. For that workshop, the County notified all property owners whose property was located within 1,320 feet of the subject property boundaries by mail. The County also notified citizens and organizations by email and County press release.

On October 2, 2023, the applicant held an in-person neighborhood workshop to review and discuss the proposed new scenarios described in the Second Supplement to the Special Area Study. The applicant provided mailed notice of this workshop to property owners within 1,320 feet of the subject property boundary (mailing list provided by County); emailed notice of the workshop was also provided to the stakeholder email list supplied to the applicant by the County.

402.101(b) Ground-truthing of site.

Where relevant to the specific issues or circumstances identified as part of the scope of work, site-specific ground-truthing of natural resources shall be conducted to evaluate critical system functions and values in accordance with the requirements of the natural and historic resources assessment (see Chapter 406, § 406.04). For special area studies within strategic ecosystems, site-specific ground-truthing shall be conducted using the KBN/Golder report, background mapping and historical data, and other specific factors identified in Article 4 of Chapter 406, as a guide to develop a current scientific assessment of the systems involved. The location and extent of specific natural resources, as well as higher and lower valued portions of the strategic ecosystem(s), shall be delineated within the study area, and with respect to surrounding ecosystems. Those areas found not to contain strategic ecosystem resources shall be eligible for consideration for development as part of a development plan or special area plan provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected.

The Special Area Study (Original Report and First and Second Supplements) provide the results and analysis of the applicant's ground-truthing of the site, and recommendations for Strategic Ecosystem conservation set aside areas. The previous sections of this staff report provide an evaluation of the applicant's Strategic Ecosystem analysis and recommendations (refer to previous sections of Staff Report).

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402.101(c) Public infrastructure and services.

The study shall identify potential access to public infrastructure and services, and issues and needs related to public infrastructure and services.

The Special Area Study original report and First Supplement confirm that relevant providers have the capacity to serve potential urban development on portions of the property with centralized potable water and sanitary sewer, electricity, natural gas, fiber optic/cable and reclaimed water, and indicate that it is beneficial for the stubbed utilities at the property lines to be connected into the subject property for greater efficiency of services. The Second Supplement provides new and supplemental information and analysis regarding transportation, potable water, wastewater (sewer), reuse water, public schools, recreation, solid waste, drainage, and stormwater (see pages 5-8 of Second Supplement report).

With the exception of potable water and sanitary sewer, there are no specific limitations in the County's Comprehensive Plan on the extension of utilities or public services within or outside the Urban Cluster.

The Second Supplement report confirms that connection to Gainesville Regional Utilities (GRU) potable water, sanitary sewer, and reuse water services will be proposed to serve the land uses within the 580-acre Institutional/golf course area.

Policies 3.1.5 and 3.1.6 of the Potable Water and Sanitary Sewer Element (PWSSE) and Policy 6.2.2 of the Future Land Use Element (FLUE) limit extensions of potable water and sanitary sewer lines outside the Urban Cluster and into Rural/Agriculture areas. Policy 6.2.2 FLUE provides that central water and sanitary sewer lines shall not be extended into the Rural/Agricultural area, unless these services are needed to correct a public or environmental health threat, or as necessary for the efficient delivery of services to the Urban Cluster, as provided in the PWSSE. Policy 3.1.5 of the PWSSE provides that proposed extensions of potable water and sanitary sewer lines outside of the Urban Cluster shall be subject to approval by the Board of County Commissioners based on one of several factors, including among others, the service of institutional land uses. The policies regarding extension of potable water and sanitary sewer lines outside the Urban Cluster will need to be addressed at the Special Area Plan stage, including providing a rationale and relevant data & analysis to support the extension.

The Second Supplement report provides an analysis of the potential transportation impacts for the proposed institutional land use program contemplated under both land use scenarios (pgs. 5-6 of Second Supplement). This analysis indicates that sufficient capacity exists on the surrounding roadway network to accommodate the institutional land uses proposed for the 580-acre Institutional/golf course area. The study indicates that an extension of the Southwest Urban Mobility District to include the proposed 580-acre Institutional area will be proposed as part of the Special Area Plan. Both of the land use scenarios identified in the Study depict three potential project entrances along Parker Road as well as one potential project entrance where SW 46th Blvd. intersects the subject property boundary in the southwest corner of Haile Plantation. The potential for

extension of SW 46th Blvd. through the subject property and west to Parker Road is not being recommended as part of the Special Area Study and is not included in the County's adopted 2040 Multimodal Transportation Capital Improvements Plan as part of the Comprehensive Plan. Such extension may need to be evaluated and considered if SAPs propose greater densities of development for the Phase 2 portion of the property than would be permitted under the current Rural/Agriculture future land use designation.

The Second Supplement report indicates that the proposed 580-acre Institutional land use area will not contain any land uses that would generate new public school students, therefore, there is no anticipated demand for additional public school infrastructure. The Study provides that, should the future Special Area Plans for the lands not included as Institutional Use seek residential development, then a review of school capacity will be completed at that time.

The Second Supplement report indicates that the first phase of both land use scenarios includes land use types that do not create additional demand on Recreation facilities. Typically, only new residential land uses create demand on recreation facilities. If future residential land uses are proposed under the Collaborative Planning scenario, then there may be impacts to recreation facilities levels of service. These impacts would need to be analyzed and addressed at the time of the Special Area Plan.

The Second Supplement report indicates that solid waste generation and demand is handled by the County's solid waste provider. Additional data and analysis will be necessary at the Special Area Plan stage to determine the extent of impacts to the solid waste system, and how those impacts will be addressed.

The Second Supplement report indicates that Alachua County does not maintain a public stormwater management system, and that individual developments are required to be consistent with the requirements of the ULDC and the SRWMD regulations for pre and post drainage design and permitting. Additionally, the Second Supplement report notes that stormwater facility design will thoughtfully consider the karst geology, where located within the subject property. Potential design solutions will include lining ponds to retain water and avoid adverse geological effects. It is intended that the 580-acre Institutional/golf course area will use on-site wet ponds for storage of rainwater harvesting and irrigation supply.

It should be noted that the County's Comprehensive Plan includes level of service (LOS) standards or guidelines for storm water management, solid waste, recreation facilities, arterial and collector roads, bicycle facilities, pedestrian facilities, transit facilities, potable water, sanitary sewer, public schools, correctional facilities, emergency medical services, fire services, law enforcement, preservation lands, and other governmental facilities. These facilities typically involve significant capital costs and should be evaluated with supporting data and analysis as part of the Special Area Plan in order to further define potential amendments to the Capital Improvements Element goals, objectives policies and project schedules that would be needed to support any potential long-term development on the property. This will necessarily include collaboration with the agencies responsible for providing these facilities and services.

Sec. 402.101 (d) Land use analysis.

The study shall analyze the existing and future land uses within the study area. For strategic ecosystem special area studies, the study participants shall identify one or more scenarios for the future uses of land within the area of study and identify the most appropriate locations for various types of land use, including as applicable, agriculture or silviculture activities, conservation areas, and development areas. Parcel ownership and

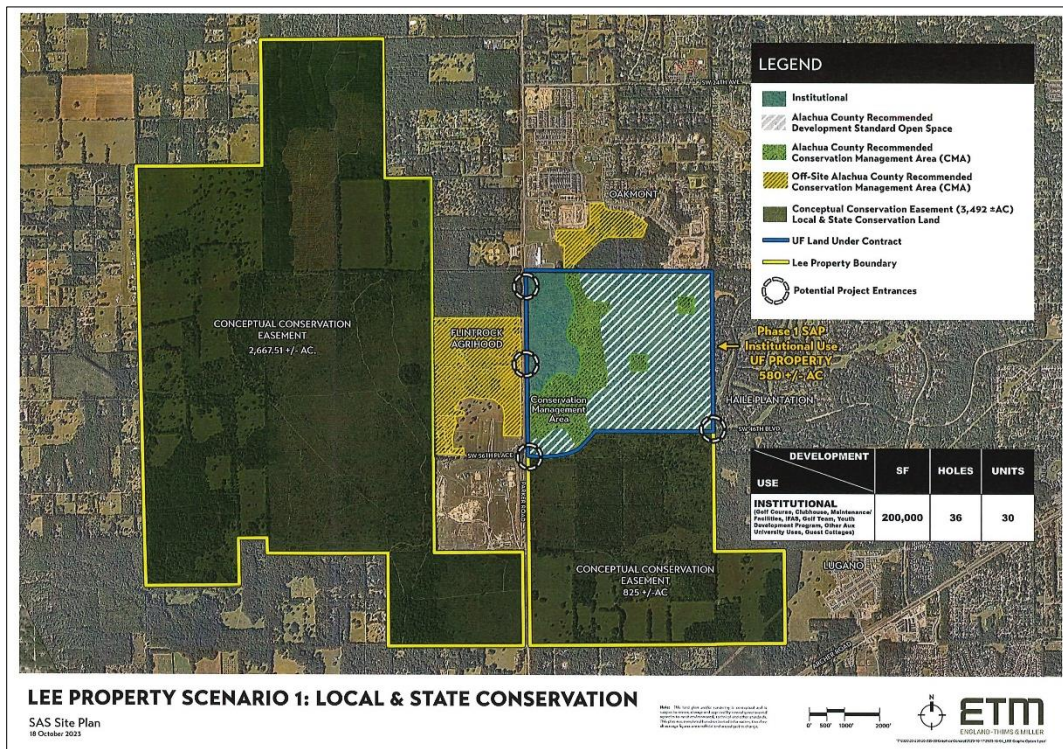
management considerations shall be evaluated in order to develop a scenario that balances protection of the natural and historic resources with ownership interests and protection of private property rights.

The applicant’s Special Area Study documents include an analysis of the existing and future land uses within the Study Area and the surrounding areas. The Second Supplement report identifies two potential land use scenarios for the subject property, including: (1) “Local and State Conservation” and (2) “Collaborative Planning”. Each of the scenarios is summarized below with additional staff analysis where appropriate.

1. “Local and State Conservation”

The Local and State Conservation scenario, shown in Figure 7 below and on the map in Figure 1 of Special Area Study Second Supplement report dated September 19, 2023, seeks to put approximately 85% of the 4,068-acre site into a conservation easement with the remaining 580 acres east of Parker Road, south of Oakmont and west of Haile Plantation being designated for Institutional land uses for the purpose of a University of Florida golf course and related facilities.

**Figure 7. “Local and State Conservation” Scenario Map
(from Applicant’s Special Area Study Report Second Supplement, Figure 1)**



As part of Phase 1 of the Special Area Plan, the applicant intends to seek an Institutional future land use designation for the 580 acres with specific policies that apply to that area. As described in the Second Supplement report, the proposed development within the Phase 1 Institutional area would include a 36-hole golf course, clubhouse, maintenance facilities, IFAS facilities, UF golf team facilities, youth development program facilities, auxiliary university land uses, and 30 guest cottages. The maximum floor area given for all institutional facilities is 200,000 square feet. County staff’s recommended conservation management

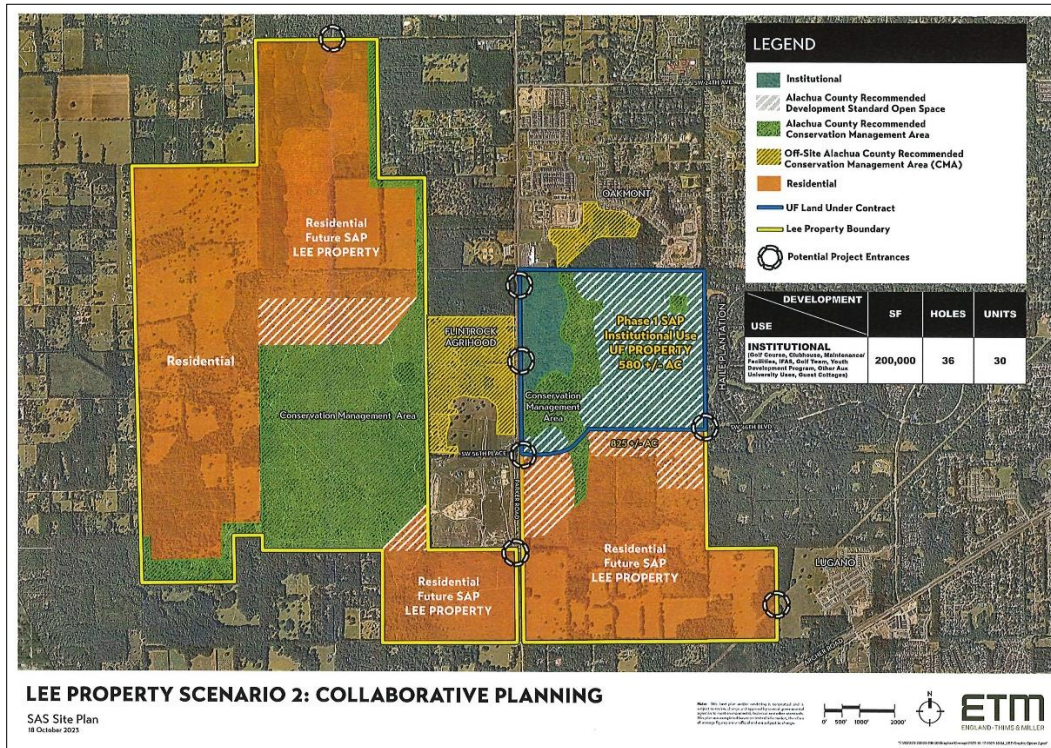
areas and development standard open space areas are included within the Institutional area. The remainder of the subject property (3,483 +/- acres) is identified for Local & State Conservation Land (“Conceptual Conservation Easement”).

As noted previously, the proposed Institutional area is located outside of the County’s designated Urban Cluster. The Special Area Study documents do not contemplate a proposed expansion of the Urban Cluster boundary as part of the Special Area Plan. Golf courses are generally an allowable land use outside the Urban Cluster and within the Rural Agriculture future land use designation, however, staff believes that the Institutional future land use designation would be more appropriate for the overall combination of the University golf course with the related cottages and University institutional buildings. The Institutional Future Land Use designation may be allowed outside the Urban Cluster through a Comprehensive Plan amendment. Extension of potable water or sanitary sewer lines outside the Urban Cluster to serve the Phase 1 SAP Institutional/golf course area would require separate approval by the Board of County Commissioners in accordance with the requirements of the Comprehensive Plan as part of the Special Area Plan.

2. Collaborative Planning Scenario

The “Collaborative Planning” land use scenario is shown in Figure 8 below and on the map in Figure 2 of the applicant’s Special Area Study Second Supplement dated September 19, 2023.

**Figure 8. “Collaborative Planning” Scenario Map
(from Applicant’s Special Area Study Second Supplement, Figure 2)**



As shown on the map in Figure 8 above, the plan for the Phase 1 SAP 580-acre Institutional/golf course area located east of Parker Road, south of Oakmont, and west of Haile Plantation is identical to the Local and State Conservation scenario. In addition, the Collaborative Planning scenario also includes a substantial amount of area identified for “Residential Future SAP”. There are no details provided in the Study documents about the proposed number of residential units, density, or intensity for the Residential Future SAP areas. Such details would be proposed at the time of application for subsequent phases of the Special Area Plan.

As discussed previously in this staff report, the subject property is located outside of the Urban Cluster and within the Rural/Agriculture future land use designation as provided in the County’s adopted Comprehensive Plan. If future phases of the Special Area Plan propose residential densities greater than those that would normally be allowed within the Rural Agriculture future land use designation (1 dwelling unit per 5 acres), or mixed-use development, then this would require either an expansion of the Urban Cluster line or proposed new policies for this area that address how any new areas of urban development would relate to the County’s adopted Urban Cluster policies.

The County’s Comprehensive Plan provides a specific methodology and process for evaluating the Urban Cluster’s capacity to accommodate projected population growth for a ten- and twenty-year planning period (Policy 7.1.3, FLUE), and then for potentially considering expansions of the Urban Cluster. According to the policies, if the evaluation shows that additional land area is needed within the Urban Cluster to accommodate future urban development, then there are specific measures that must be considered before expanding the Urban Cluster. These measures include increases to residential density ranges within the Urban Cluster or working with municipalities to allocate more growth within municipal boundaries. If the evaluation shows that expansion of the Urban Cluster is warranted, then there are specific factors that must be taken into account in identifying appropriate locations for expansion, including impact on agricultural uses and rural character, economic development considerations including affordable housing, relationship to existing and planned urban services and infrastructure, conservation and preservation land uses, and planned recreation/open space and greenway systems.

The County’s Urban Cluster policy framework is complemented by related policies regarding the extension of potable water and sanitary sewer lines. Potable water and sanitary sewer lines may be extended to serve new urban development within the Urban Cluster; such lines, however, may not be extended outside the Urban Cluster line and into the Rural/Agriculture area without receiving approval from the Board of County Commissioners based on certain criteria (Policy 6.2.2, FLUE, Policies 3.1.5 and 3.1.6, PWSSE). Those criteria include factors such as: the extension is needed to correct a public health threat; the extension is needed to enhance safe, effective, and efficient delivery of services within the Urban Cluster; the extension would serve a purpose consistent with the Comprehensive Plan such as serving existing or new business and industry in accordance with the Economic Element or the service of institutional or tourist/entertainment uses; or that the extension is needed as part of a comprehensive expansion of public services to encourage urban development in a new area as part of a comprehensive plan amendment.

The Special Area Study reports do not indicate that an expansion of the Urban Cluster boundary would be proposed as part of the Special Area Plan for the property, so it is not clear at this time how the Urban Cluster policies and related water and sewer extension policies might be addressed at the next stage of this process. These policies do not need to be addressed at the Special Area Study stage, but they would need to be addressed as part of any Special Area Plans that propose greater residential density or land use types that

would generally not be permitted outside the Urban Cluster and in Rural/Agriculture areas. Staff has recommended a condition for acceptance of the Special Area Study to ensure that subsequent Special Area Plans address these key policies within the County's adopted Comprehensive Plan.

3. Other Scenario: Currently Adopted Comprehensive Plan

The Special Area Study Second Supplement report does not identify a potential land use scenario based on the currently adopted Comprehensive Plan. The following discussion is provided by County staff for informational purposes about the general land use scenario that would be allowable pursuant to the goals, objectives, and policies in the adopted Comprehensive Plan.

Potential development of the property under the adopted Comprehensive Plan would include primarily residential uses at rural densities in accordance with the future land use designation of "Rural/Agriculture" and the current zoning of "Agricultural" ("A"). This scenario would still require the completion of the Special Area Study and Plan to evaluate and protect the Hickory Sink Strategic Ecosystem resources pursuant to Objective 4.10 and its subsequent policies of the Comprehensive Plan's Conservation and Open Space Element, and also because the resulting development would involve more than 100 residential units within the Rural/Agriculture area pursuant to Policy 6.2.8 of the Comprehensive Plan's Future Land Use Element.

Under the adopted Comprehensive Plan, the property would be required to be developed in accordance with the clustered rural residential subdivision provisions under Policies 6.2.9 through 6.2.14 of the Future Land Use Element. Clustered design is required for any residential subdivision of 10 or more lots in the Rural/Agriculture area. The policies for clustered design require that a minimum of 50% of the development site must be preserved as open space, with the residential lots being clustered on the remaining portion of the property. The policies also provide for bonus density as an incentive for utilizing clustered design. A total of 2 units in addition to the number units based on the base density of 1 unit per 5 acres are permitted, plus 1 additional unit per every 10 acres of conservation area set aside as open space; plus 1 additional unit per every 20 acres non-conservation area set aside as open space.

The Comprehensive Plan provides for residential development at a maximum density of 1 dwelling unit per 5 acres in the Rural/Agriculture area. As a hypothetical calculation, it is estimated that, if the entire 4,068-acre subject property were to be developed for residential use, there could be approximately 813 dwelling units developed on the site based on the maximum base density of 1 dwelling unit per 5 acres for the Rural/Agriculture area applied across the entire property (subject to consistency with other requirements of the Comprehensive Plan). Additional bonus units could also be achieved depending on the number of acres of conservation area and non-conservation area set aside as open space, thereby potentially increasing the total number of allowable dwelling units above 900, depending on the specific proposal.

Pursuant to Policy 6.2.12(c) of the Future Land Use Element, golf courses are not an allowable land use within clustered rural residential subdivisions; therefore, residential density cannot not be derived from the acreage used for a golf course as part of a clustered rural residential subdivision (golf courses are allowable as separate land uses in the Rural/Agriculture area subject to specific standards).

Under the adopted Comprehensive Plan, there cannot be an expansion of urban development outside the Urban Cluster line. This policy approach reinforces a focus on infill development and redevelopment within the Urban Cluster, where that development can be provided with a full array of urban services in an efficient

manner. The adopted Comprehensive Plan scenario also helps to ensure a continued separation of urban and rural areas within the unincorporated portion of the County.

One consideration with the adopted Comprehensive Plan scenario is that any future clustered rural residential development on this property would likely be served by individual wells and septic systems because the County's Comprehensive Plan does not generally allow for extension of centralized potable water and sanitary sewer lines outside of the Urban Cluster and into the Rural/Agriculture area without County Commission approval based on certain criteria. Concentration of wells and septic systems could potentially have long term adverse impacts on the County's water resources. It is noted, however, that the Board of County Commissioners could potentially approve an extension of water and sewer infrastructure to serve areas of clustered rural residential development under the Rural/Agriculture future land use designation in accordance with the criteria in the Comprehensive Plan (Policy 6.2.2 FLUE and Policies 3.1.5 and 3.1.6, PWSSE).

402.101(e) Recommendations and strategies. *The study shall include recommendations and strategies for follow-up action to address the specific issues or circumstances that have been analyzed as part of the study. Such recommendations and strategies may include, but are not limited to, proposed comprehensive plan amendments, proposed unified land development code amendments, proposed capital improvement needs identification, or other initiatives by the county or through public/private partnerships.*

The applicant's Special Area Study Second Supplement report includes ten specific recommendations for follow-up action as part of a Special Area Plan. These recommendations are listed below. In addition, County staff recommends conditions for acceptance of the Special Area Study which are listed in the subsequent section of this report under "County Staff Recommendation and Conditions".

1. Phased Special Area Plan (SAP)

The state and local conservation planning vision shall be supported by creating a Phased Special Area Plan, focusing the Phase 1 SAP Development Policies on the Institutional Lands, described as 580 acres in the area east of Parker Road.

2. Limit on Development

Under the phased SAP, a development timing condition shall be placed on the lands subject to conservation easement, limiting any new development until a SAP is adopted by Alachua County. All existing silviculture and agricultural uses will continue under the conservation easement.

3. Institutional Uses

The development program shall not exceed 200KSF, 36 holes and 30 cottages. A new land use category shall be created "Hickory Sink Institutional Land Use". This category will modify the Alachua County Future Land Use Map to identify the 580 acres and attach specific land use goals, objectives and policies. The land use category will identify consistency with other applicable policies of the Comprehensive Plan. The policies will address ecological compatibility, best management practices, and utility infrastructure at a minimum.

4. Best Management Practices (BMPs) for Institutional/ golf course recreational uses

The Special Area Plan will define best management practices for reuse water, buffers, stormwater, materials, irrigation, karst topography, fertilizer and the like. The SAP policies will consider how the golf course design conserves sensitive habitat, can retain native vegetation, protects wildlife corridors and habitat connectivity and protects natural drainage patterns.

5. Conservation Management Area Road & Other Crossings

Roadway and other crossings for golf carts and/or pedestrians will be permitted through the designated Conservation Management Area and shall be constructed to minimize impacts to the set aside. The SAP will address techniques such as minimum width, landscaping materials and/or habitat restoration.

6. Utility Connection

The Special Area Plan will include policies to address the connection to existing potable water and sanitary sewer as part of the proposed “Hickory Sink Institutional” Land Use category. Unique to the specific use and location of the 580 acres of Institutional Use, this new Land Use category will permit connection to public utilities. This concept is largely supported by the synergy between the Institutional Use demand for reuse and the available capacity by GRU with adjacent infrastructure already in place.

7. Transportation Mobility

The Special Area Plan will include a map amendment to extend the SW Mobility District and policies addressing transportation mobility applicable to the Institutional Use lands.

8. Public Access to Open Space designed with Golf Course

The staff report, dated September 7, 2022, requested the SAP address public access to common open space associated with the wildlife corridor and/or golf course facilities. Institutional Uses will have a variety of University-based functions and uses that attract students, staff, and alumni to the property. Further, it is intended to operate a youth development program on the property.

9. Additional Natural Resource Protection

The concept plans depict the “Alachua County recommended Development Standard Open Space” – an area defined as low-quality habitat with markers of habitat history. In this area, future Land Development Code Regulations via a policy(s) in the Phase 1 SAP will address how development and potential restoration will occur within this area.

10. Significant Geologic features

The Special Area Plan and best practices for the golf facilities include at a minimum lining stormwater ponds, appropriate buffering of geological features, water conservation techniques like reuse, irrigation limitations and use of wildlife corridor overlapping with the golf course elements.

In addition to the applicant's Study recommendations above, County staff recommends several conditions for acceptance of the Special Area Study (see County Staff Recommendation and Conditions below).

402.101(f) Presentation to Board of County Commissioners. *The draft special area study shall be presented to the board of county commissioners. The board shall consider whether to accept the study and whether to authorize any specific follow-up recommendations or strategies that have been identified as part of the study.*

The original Special Area Study report and the First Supplement were presented to the Board of County Commissioners on September 20, 2022. The Special Area Study, including the new information provided in the Second Supplement is scheduled to be presented to the Board of County Commissioners on November 7, 2023.

County Staff Recommendation and Conditions

Accept the Special Area Study and authorize the process for a Special Area Plan based on the recommendations contained in the applicant's Special Area Study Second Supplement Report and with the following conditions recommended by County staff. To the extent that the Special Area Study Second Supplement Report recommendations conflict with any conditions recommended by staff, the staff-recommended conditions shall prevail.

1. The Special Area Plan(s) shall be based on, and generally consistent with data, recommendations, and maps contained in the Special Area Study and conditions recommended in this staff report, as well as additional data and analysis that may be produced and submitted during preparation of the Special Area Plan(s). Acceptance of the Special Area Study does not guarantee any specific future land use designations or development program will be approved by the Board of County Commissioners as part of any Comprehensive Plan Amendments at the Special Area Plan stage.
2. The Special Area Plan may be prepared, submitted and approved in two phases. The first phase may include the 580 acres area identified in Figure 1 of this Staff Report as *Phase 1 SAP Institutional Use UF Property*. The second phase may include the remaining acreage identified in Figure 1 of this Staff Report as *Lee Property*. The second phase of the Special Area Plan for the *Lee Property* may be submitted for consideration by the County within 3 years following approval of first phase. If the second phase of the Special Area Plan for the Lee Property is submitted more than 3 years following approval of the first phase, an updated natural resources assessment of the property may be required at that time.

3. Figure 1 of this Staff Report identifies only the minimum conservation management areas to be set aside based on recommendations in the Special Area Study. Additional open space or conservation areas may be required as part of the Special Area Plan and development review process to meet all County policies, regulations and standards.
4. Conservation Management Areas located within the Phase 1 SAP Institutional Use UF Property area depicted in Figure 1 of this Staff Report shall receive permanent protection and a management plan limiting impacts, uses and the number of crossings prior to any site improvement or as part of the first approved final development plan within the boundaries of the *Phase 1 SAP Institutional Use UF Property*, whichever first occurs.
5. The Conservation Management Areas depicted in Figure 1 of this Staff Report and not located within the Phase 1 SAP Institutional Use UF Property Area, and any additional conservation areas that may be identified during preparation of the second phase of the Special Area Plan, shall be protected consistent with Section 406.103 ULDC prior to any site improvement or as part of the first approved final development plan within the boundaries of the second phase of the Special Area Plan occurs.
6. Any development proposed within areas identified in Figure 1 of this Staff Report as 'Strategic Ecosystem Development Standards Apply', shall be consistent with the ULDC and governed by subsections 406.03(b)(1) and (2). Alternatively, any proposed development within each of these areas shall be required to be developed in accordance with the Clustered Rural Residential Subdivision standards in Policies 6.2.9 through 6.2.13 of the Alachua County Comprehensive Plan Future Land Use Element or other alternative protective measures acceptable to the County for ensuring compatibility with the Conservation Management Areas.
7. An historical/archaeological resources assessment shall be completed for the Special Area Plan and address any historical/archaeological resources requiring protection prior to or as part of the development of the property.
8. Any Comprehensive Plan amendments proposed as part of the Special Area Plan for the Phase 2 areas shown on the Collaborative Planning Scenario Map as *Residential Future SAP Lee Property* that would allow land use types that are not generally allowable pursuant to the Rural/Agriculture future land use designation, or gross residential densities greater than those allowable pursuant to the Rural/Agriculture future land use designation, shall be based on the following parameters and address the following considerations through appropriate goals, objectives, policies, maps, or data & analysis:
 - a. Such Comprehensive Plan amendments shall provide for the arrangement and clustering of proposed development areas in a manner that, (1) prioritizes the protection of Conservation Management Areas and (2) clusters any areas of urban development in as close proximity as possible to the Urban Cluster in order to minimize the geographic extent of necessary expansions of urban infrastructure, facilities, and services; minimize areas of urban/rural land

- use interaction; and ensure that land uses, densities and intensities are consistent and compatible with surrounding existing and future land uses.
- b. Such Comprehensive Plan amendments shall address, with appropriate data and analysis, the requirements of Policy 7.1.3 of the Future Land Use Element regarding evaluation and expansion of the Urban Cluster.
 - c. Proposed development areas shall be served by urban infrastructure, facilities, and services, including roads, transit, centralized potable water and sanitary sewer, fire and EMS, recreation, solid waste collection, stormwater management, public schools and law enforcement at the same levels of service that are provided within the Urban Cluster in accordance with the Comprehensive Plan's Capital Improvements Element. Data and analysis shall be provided on needs and costs for all necessary capital improvements to serve any proposed development areas. Necessary capital improvements and their funding sources shall be proposed for inclusion in the Comprehensive Plan.
 - d. Proposed development areas shall be served by centralized potable water and sanitary sewer services in order to minimize proliferation of individual wells and septic systems, subject to approval of the extension of potable water and sanitary sewer lines outside the Urban Cluster by the Board of County Commissioners in accordance with Policy 3.1.5 of the Comprehensive Plan, Potable Water and Sanitary Sewer Element.
 - e. The transportation system for proposed development areas shall be designed consistent with the Urban Transportation Mobility District policies in the Transportation Mobility Element, including connectivity with the surrounding road network and existing development within the Urban Cluster.
 - f. Proposed development areas shall provide for urban design concepts that are supportive of non-automotive modes of transportation in addition to automotive modes.
 - g. As part of the Special Area Plan, a percentage of the total proposed residential units shall be designated as affordable in accordance with the County Comprehensive Plan affordable housing requirements in effect at the time of submittal of any Special Area Plan phase that includes residential units.
9. Any phase of the Special Area Plan which proposes extension of potable water and sanitary sewer lines outside the Urban Cluster, shall address the requirements of Policy 6.2.2 of the Future Land Use Element and Policies 3.1.5 and 3.1.6 of the Potable Water and Sanitary Sewer Element regarding the extension of potable water and sanitary sewer lines outside the Urban Cluster.
 10. The Special Area Plan shall identify water conservation and low-water use landscaping practices for all phases of the Special Area Plan and Phase 1 Institutional Uses (e.g., accessory clubhouse amenity, cottages, and maintenance area, excluding the golf course) such as, but not limited to:
 - a. Set specific limits on permanent landscape irrigation (including reclaimed water), irrigable area, and adherence to a water budget
 - b. Prohibit permanently irrigated private residential lots

- c. Retain existing vegetation and design landscapes to mitigate impacts of climate change
 - d. Use of native vegetation in landscaping and promote no-mow landscaping
11. The Special Area Plan shall identify nutrient management practices for Institutional Uses (e.g., accessory clubhouse amenity, cottages, and maintenance area) such as, but not limited to:
- a. Nutrient management shall be consistent with Chapter 77, Article IV, recognizing that the use of reclaimed water should result in reduced fertilizer application.
 - b. Minimize clearing of existing vegetation, soil compaction, and earthwork during construction.
12. The Special Area Plan shall address the requirements of Sections 404.66.5 and 406.59.1(e), ULDC, for the UF Golf Course and identify best management practices, utilizing *Best Management Practices for the Enhancement of Environmental Quality on Florida Golf Courses* (www.flgolfbmp.com) as a guide, such as but not limited to:
- a. Address how the golf course design and associated facilities conserve sensitive habitat and karst topography, retain native vegetation, protect wildlife corridors and habitat connectivity and protect natural drainage patterns.
 - b. Limit excavation and fill throughout the site to protect the shallow karst topography and prevent sinkhole formation.
 - c. Evaluate the feasibility of stormwater reuse for irrigation, and limit irrigation need for all water sources and specifically the supplemental well water.
 - d. Account for all nutrient inputs (e.g., fertilizer, reclaimed water, soil amendments, etc.) in a comprehensive nutrient management plan for the golf course. Use soil and tissue tests to establish nutrient baseline levels and deviations from reported reference ranges when available.
 - e. Provide a plan for Water Quality Monitoring consistent with Section 404.66.5(b). An annual report shall be submitted to the County documenting water quality monitoring.
13. The Special Area Plan shall identify stormwater treatment and management practices such as, but not limited to:
- a. Employ LID, as required by Chapter 77, Article 3 (Stormwater Treatment Code) distributed throughout the project. LID that stores and infiltrates runoff to meet the requirements of the Stormwater Treatment Code should, at minimum, preserve the underlying in-situ soil or be backfilled with on-site soils with sufficient fines to retain moisture and encourage denitrification. Where high nitrogen loads are expected in runoff, the use of engineered media/soil designed for denitrification is encouraged.
 - b. LID approaches that reduce runoff, such as disconnecting impervious surfaces, rain gardens or rainwater harvesting on lots, pervious pavements, vegetated natural buffers, and filter strips should be used to the greatest extent possible.

APPENDIX A

COMPREHENSIVE PLAN POLICY AND UNIFIED LAND DEVELOPMENT CODE REFERENCES

The following is a compilation of selected goals, objectives, policies, and other provisions of the Alachua County Comprehensive plan 2019-2040 and the Alachua County Unified Land Development Code that relate most directly to the issues being considered as part of the Special Area Study. The portions of the Comprehensive Plan and ULDC listed here are provided for ease of reference and are not intended as a representation of all relevant or applicable portions of the Comprehensive Plan or Unified Land Development Code. The Special Area Study and Plan should take into account the Comprehensive Plan and ULDC in their entirety.

FUTURE LAND USE ELEMENT

GOAL

ENCOURAGE THE ORDERLY, HARMONIOUS, AND JUDICIOUS USE OF LAND, CONSISTENT WITH THE FOLLOWING GUIDING PRINCIPLES.

PRINCIPLE 1

PROMOTE SUSTAINABLE LAND DEVELOPMENT THAT PROVIDES FOR A BALANCE OF ECONOMIC OPPORTUNITY, SOCIAL EQUITY INCLUDING ENVIRONMENTAL JUSTICE, AND PROTECTION OF THE NATURAL ENVIRONMENT.

PRINCIPLE 2

BASE NEW DEVELOPMENT UPON THE PROVISION OF NECESSARY SERVICES AND INFRASTRUCTURE. FOCUS URBAN DEVELOPMENT IN A CLEARLY DEFINED AREA AND STRENGTHEN THE SEPARATION OF RURAL AND URBAN USES.

PRINCIPLE 3

RECOGNIZE RESIDENTIAL NEIGHBORHOODS AS A COLLECTIVE ASSET FOR ALL RESIDENTS OF THE COUNTY.

PRINCIPLE 4

CREATE AND PROMOTE COHESIVE COMMUNITIES THAT PROVIDE FOR A FULL RANGE AND MIX OF LAND USES.

General Strategies to implement these Principles include:

GENERAL STRATEGY 1

Minimize the conversion of land from rural to urban uses by maximizing the efficient use of available urban infrastructure, while preserving environmentally sensitive areas, according to the following:

- Designate and maintain on the Future Land Use Map an urban cluster that sets a boundary for urban growth.
- Provide incentives for higher average densities for residential development and mixed uses in the urban cluster, including density bonuses and transfer of development rights.
- Provide a range of urban residential densities with the highest densities located in or near urban activity centers, and lower densities located in outlying rural areas or areas of the County which have physical limitations to development.
- Utilize mechanisms such as land acquisition, conservation easements, variable lot sizes, and conservation subdivisions.
- Preserve ecosystems of a given area and incorporate hazard-resilient land planning.
- Time development approval in conjunction with the economic and efficient provision of supporting community facilities, urban services, and infrastructure, such as streets, utilities, police and fire protection service, emergency medical service, mass transit, public schools, recreation and open space, in coordination with policies in the Capital Improvements Element.

GENERAL STRATEGY 2

Promote land development that maximizes the use of public investments in facilities and services, ensures a proper level of public services for all new development, and preserves existing amenities. Land use decisions shall be made consistent with public facility improvements which shall be provided in accordance with the following priorities:

- in areas where the lack of public facilities threatens the health and safety of the community;
- in urban areas that are lacking adequate public facilities to meet the needs of existing development and to encourage infill development, and mixed-use redevelopment;
- in new areas which are part of a planned expansion of public services to encourage growth; and
- to extend individual services to meet the demands created by a specific development.

GENERAL STRATEGY 3

Promote the spatial organization of neighborhoods, districts, and corridors through urban design codes, incorporating graphics that serve as predictable guides for community development. Implementation shall

be through a combination of standard requirements and incentives, creating a planning framework that includes provisions to:

- Create neighborhoods that are compact, connected to adjacent development, have limited mixed uses at centers, and have interconnected, mixed modal streets with pedestrian, bicycle, and transit friendly areas.
- Integrate civic, institutional, and commercial activity in neighborhoods and districts, not isolated in remote, single-use complexes.
- Avoid large areas of single-use, similar densities, and similar types of units. A diverse mix of land uses, housing types and costs and densities shall be promoted. Identify locations or districts where special or single use activities shall be allowed or restricted (e.g., large scale retail or industrial areas).
- Link corridors that are regional connectors of neighborhoods and districts, ranging from parkways and transit lines to watersheds and greenways.
- Provide for infill where appropriate.

OBJECTIVE 1.3 – DENSITY

Gross residential densities shall be established to serve as a guideline for evaluating development in Alachua County.

Policy 1.3.2 The following classification of gross residential densities shall serve as a standard for evaluating development in Alachua County, unless specific provisions are otherwise provided in the Plan (DU/Acre = Dwelling Units per Acre), such as for Transit Oriented Developments and Traditional Neighborhood Developments. Policy 1.3.2.1 Urban Residential Densities - Areas designated on the Future Land Use Map for gross residential densities of one unit per acre or greater shall be considered as urban in character. There shall be four gross residential density ranges as follows:

(a) Low Density: One to Four dwelling units per acre

(b) Medium Density: Greater than Four to less than or equal to Eight dwelling units per acre

(c) Medium-High Density: Greater than Eight to less than or equal to 14 dwelling units per acre

(d) High Density: Greater than 14 to less than or equal to 24 dwelling units per acre

Policy 5.3.10 University of Florida properties which are designated in the Campus Master Plan shall be identified on the Alachua County Future Land Use Map. Development of these properties shall be in accordance with the Campus Master Plan and Campus Development Agreement as provided in Policy 1.1.7 of the Intergovernmental Coordination Element.

6.0 RURAL AND AGRICULTURAL POLICIES

OBJECTIVE 6.1 - GENERAL

Rural and agricultural areas shall be protected in a manner consistent with the retention of agriculture, open space, and rural character, and the preservation of environmentally sensitive areas, and efficient use of public services and facilities.

OBJECTIVE 6.2 - RURAL/AGRICULTURE

Areas identified for Rural/Agriculture on the Future Land Use Map are for agricultural activities including forestry and other agricultural uses, such as cattle grazing, cultivation of field crops, vegetable crops, dairies and those commercial or other uses on a limited scale serving or ancillary to agricultural activities, such as farm equipment and supplies, sales or service, farmers' markets, agritourism activities, composting, limited agricultural processing and wood product processing and wood manufacturing as provided in Policy 6.1.8 above, and agricultural products distribution. Rural residential uses, home-based businesses, rural event centers, heritage tourism and ecotourism activities, resource-based recreation and outdoor activity-based recreation are also allowed. Other uses involving animals not normally associated with agricultural activities, which would be suitable in the Rural/Agricultural areas, such as animal sanctuaries, kennels, and commercial animal raising, may be approved by the County Commission. New residential uses at a maximum density of one dwelling unit per five acres shall be permitted subject to the restrictions in Policy 6.2.7, except that the total allowable dwelling units may be increased pursuant to the Planned Development-Transfer of Development Rights program in accordance with 6.2.5.1 or the incentive bonuses for clustering of rural residential subdivisions in accordance with Policies 6.2.9 - 6.2.14.

Policy 6.2.1 Road construction to support new development in the Rural/Agricultural area shall be the responsibility of the private land developer. Public funds may be allocated to roads designated as part of the State primary and County road system or those roads determined to be needed for the benefit of the general public and designated for construction by the State or Board of County Commissioners. The County shall only assume operation and maintenance responsibilities for a road that is dedicated to the County and that meets the standards of the Subdivision Regulations and the Transportation Mobility Element.

Policy 6.2.1.1 Safety improvements shall be appropriate in any area of the County.

Policy 6.2.2 Central water and sanitary sewer lines shall not be extended into the Rural/Agricultural area, unless these services are needed to correct a public or environmental health threat, or as necessary for the efficient delivery of services to the Urban Cluster, as provided in the adopted Potable Water and Sanitary Sewer element.

Policy 6.2.3 Stormwater facilities consistent with the level of service standards for drainage shall be required as a condition of new development.

Policy 6.2.4 The land development regulations shall insure adequate internal traffic circulation on dedicated local roads and shall minimize driveway access to rural collector and arterial roads.

Policy 6.2.5 Parcels containing natural resource areas as identified in the Conservation and Open Space Element shall be conserved in accordance with those policies, such that the natural functions of the resource area are not significantly altered. This shall be accomplished either through clustering of new developments in accordance with Policy 6.2.9 through 6.2.14 below, or for developments of less than 10 lots that might not be clustered in accordance with these policies, through a development plan that assures the permanent protection of natural resources consistent with the requirements of the Conservation and Open Space Element; the land development regulations shall detail the requirements for management and permanent protection of the ecological value of natural resources in those developments that are not clustered through legally enforceable mechanisms that provide protection of those resources equivalent to the protection under Policies 6.2.12(c) through 6.2.12(e).

Policy 6.2.5.1 In order to implement COSE Policy 4.10.6, Planned Developments with Transfers of Development (PD-TDR) may be proposed for two or more separate parcels under the same ownership to facilitate transfers of development rights from regulated conservation areas, as defined in Conservation and Open Space Element Policy 3.1.1, to less sensitive areas designated as Rural/Agriculture on the Future Land Use Map. The PD-TDR will allow units of density to be transferred from one or more contiguous parcels (sending parcels) to one or more geographically separate parcels (receiving parcels). All parcels involved shall be rezoned as PD-TDR-S or PD-TDR-R. As a result of the transfer, receiving parcels may be developed at a gross density that exceeds that provided on the receiving parcel by the Rural/Agriculture land use category. The process and standards for PD/TDR developments shall be consistent with rural clustering policies with the following additional requirements:

- (a) The parcel (s) from which density will be transferred shall be designated PD-TDR-S on the zoning map. The parcel receiving the density shall be designated PD-TDR-R. The sending parcel shall be so designated in perpetuity unless both the sending and receiving parcels are considered for rezoning simultaneously and the overall density in the rural area is not increased.
- (b) The maximum number of units that can be transferred shall be the lesser of:
 - (1) The number of units that could be developed on the sending parcel(s) under the Rural/Agriculture maximum gross density of 1 units per 5 acres, plus bonus units consistent with Policy 6.2.10(d); or
 - (2) The number of upland acres, excluding wetlands and wetland buffers, on the sending parcel(s).
- (c) The sending parcel(s) must be at least 50% field-verified conservation areas, as defined in Conservation and Open Space Element Policy 3.1.1. The sending parcels shall include all individual parcels that have been created after the

adoption of this amendment to the Alachua County Comprehensive Plan or from a date 5 years prior to the application for a PD-TDR, whichever is later.

- (d) Units not transferred to an initial receiving parcel(s) as part of the original PD-TDR approval shall remain with the sending parcel(s). At a subsequent time, the remaining units may only be directed to additional receiving parcels by way of a major amendment to the approved PD-TDR Master Plan. All sending and receiving parcels shall be identified on the PD-TDR Master Plan.
- (e) Sending parcels shall be designated as conservation management areas on the PD-TDR Master Plan. Residential densities of one dwelling unit per 40 acres to one dwelling unit per 200 acres may be retained on the sending areas where consistent with a Conservation Management Plan. Retained density must be clustered on the least sensitive portion of the property. The amount of density to be retained shall be based on what is necessary to protect the integrity of the ecological system and conservation resources.
- (f) Development of receiving parcels shall be consistent with COSE policies 3.1.1 - 3.1.3 and the objectives and policies in COSE 3.6.
- (g) An area equal to at least 50% of the combined acreage of the sending and receiving areas for a PD-TDR shall be permanently set aside as open space on the sending parcel(s). Additionally, a minimum of 20% of the receiving parcel(s) shall be designated as open space consistent with COSE Policy 5.2.2.
- (h) The maximum density allowed on the receiving parcel will be the number of units based on the Rural/Agriculture land use designation for the receiving area, plus the additional units transferred from the sending area, subject to the minimum lot size requirements for developed areas of rural clustered subdivisions specified in Policy 6.2.13. Allowance of this maximum density shall be subject to an evaluation of factors, including: proximity to developed areas; availability and capacity of public infrastructure and services; environmental suitability; and compatibility with surrounding land uses. A finding shall be made whether or not the receiving parcel location and proposed density are appropriate based on these factors.
- (i) The land development regulations shall include provisions to assure implementation of the planned development as a unified development plan.

RURAL RESIDENTIAL SUBDIVISIONS

Policy 6.2.7 The Development Review Committee shall not authorize more than 150 lots smaller than eight acres in the Rural/Agricultural area in any calendar year except for lots that are clustered according to the provisions of 6.2.9 – 6.2.14.

Policy 6.2.8 New rural residential subdivisions of parcels legally created prior to October 2, 1991, which contain more than 100 lots, including cumulative phases or continued subdivision of land in common ownership or partnership as of October 2, 1991, shall be allowed only after adoption of a comprehensive plan amendment based on a

completed special area study. This study, developed through the Community Planning Program, shall address factors such as transportation impacts, community services, fire protection, impacts on surrounding land uses, and environmental issues. This requirement for a comprehensive plan amendment is not applicable to a rural residential subdivision that exceeds 100 lots as a result of incentive density bonuses for clustering.

Policy 6.2.9 Clustering

The preferred design for new rural residential subdivisions is that they be clustered in order to protect the characteristics and features of rural areas through the following goals:

- (a) Protect natural and historic resources.
- (b) Support continued agricultural activities by preserving viable soils and effective land masses.
- (c) Provide opportunities for agriculture areas such as community gardens.
- (d) Minimize land use conflicts.
- (e) Provide recreational and habitat corridors through linked open space networks.
- (f) Achieve flexibility, efficiency, and cost reduction in the provision of services and infrastructure.
- (g) Reduce natural hazard risks to life and property.

Policy 6.2.10 Density and Intensity

The overall development density shall not exceed the maximum gross density of one dwelling unit per five acres for the Rural/Agriculture land use category, except as a result of the provisions for accessory dwelling units found in Policy 6.2.10.1, family homestead exceptions found in Policy 6.2.14(c), temporary permits issued by the Growth Management Department or as a result of incentive bonuses for clustering as provided under subsection (d) below, subject to the resource protection standards in the Conservation and Open Space Element. These standards include the following requirements:

- (a) Impacts to wetlands and surface waters shall be avoided, minimized, and mitigated in accordance with Conservation and Open Space Element Policies 4.7.4. and 4.6.6.
- (b) Density and open space requirements for new rural residential subdivisions shall be consistent with requirements for adequate protection of conservation areas in Conservation and Open Space Element Objective 3.6.
- (c) Development of property that is determined to be a strategic ecosystem shall require a special area plan pursuant to Conservation and Open Space Element

Objective 4.10 unless it is determined that sufficient protection can be achieved through clustering.

- (d) As an incentive to cluster new residential subdivisions, if a new residential subdivision in the Rural/Agriculture area is clustered with a minimum of 50% of the development in open space, a total of 2 units in addition to the number of units based on the gross density of 1 unit per 5 acres are allowed, plus 1 additional unit per every 10 acres of conservation area or agriculture area such as community gardens set aside as open space; plus 1 additional unit per every 20 acres of other non-conservation area set aside as open space.

Policy 6.2.11 Design Sequence

The design of rural residential clustered subdivisions shall be sequenced according to the following four-step process:

- (a) Identify open space area, including natural resources consistent with Conservation and Open Space Element Section 3, agricultural areas, and potential open space network connections consistent with Conservation and Open Space Element Section 6.3.
- (b) Identify developed area and locate home sites.
- (c) Align streets and trails.
- (d) Delineate lot lines.

Policy 6.2.12 Open Space Area in Clustered Subdivisions

A portion of a clustered rural residential subdivision shall be designated and maintained as undeveloped open space area.

- (a) Percentage of site. Clustered Rural residential subdivisions shall designate a minimum of 50% of the site as open space area.
- (b) Design Principles. Open space shall be selected and designed according to the following principles, consistent with Conservation and Open Space Element policies for the identification and protection of natural resources:
 - (1) Protect natural, historic, and paleontological resources and agricultural areas of the site identified through a site specific inventory.
 - a. Conservation areas shall receive top priority for inclusion as part of the designated open space area, and may only be impacted in accordance with Conservation and Open Space Element policies specific to the resource.
 - b. Agricultural areas with viable soils and effective land masses shall be evaluated for inclusion as part of the designated open space area after resource protection criteria are met. Agricultural uses consistent with 6.2.12(c) Permitted and Prohibited Uses and in accordance with requirements for management plans in 6.2.12(e)(3) are encouraged to be included as part of the designated open space area.

- c. Historic and paleontological resources shall be included as part of the designated open space area when appropriate in accordance with the Historic Preservation Element.
 - (2) Design the open space area as a single contiguous area with logical, straightforward boundaries to eliminate or minimize fragmentation.
 - (3) Form linked open space networks with existing or potential open space areas on adjacent properties, other developments, or greenways, consistent with Conservation and Open Space Element Section 6.3.
- (c) Permitted and Prohibited Uses.
 - (1) Permitted uses in the open space area are natural resource conservation areas, non-intensive agriculture for food production including community gardens, non-intensive silviculture consistent with (3) below, common open space, resource-based recreation uses which maintain the undeveloped area in a natural state, permeable stormwater facilities consistent with Stormwater Element Policy 5.1.9, community energy systems, and common water supply systems and common septic system drainfields.
 - (2) More intensive agriculture uses such as concentrated animal density generally associated with milking barns, feed lots, chicken houses, or holding pens shall not be allowed in any clustered rural residential subdivision.
 - (3) Intensive silviculture uses of planted monoculture “plantation” forests, with intensive management regimes that include practices that are adverse to the natural resource values and functions of a natural forest system, shall not be allowed in any clustered rural residential subdivision. Only natural forest management in accordance with provisions of the applicable open space management plan consistent with 6.2.12(e)(3) may be considered.
- (d) Permanent protection. All future development in designated open space areas is prohibited.
 - (1) All open space shall be maintained and remain undeveloped in perpetuity using a legal instrument that runs with the land to set forth conditions and restrictions on use.
 - (2) All open space area and lots shall be restricted from further subdivision through an instrument in a form acceptable to the county and duly recorded in the public record which assures the preservation and continued maintenance of the open space.
 - (3) The boundaries of designated open space areas shall be clearly delineated on plans, including record plats, and marked in the field to distinguish these areas from developed areas.
- (e) Ownership, maintenance, and management plan.

- (1) Ownership methods. Ownership and maintenance of open space shall be by one or a combination of the following:
 - a. Original landowner with provision for transition of ultimate ownership and control to one of the entities below
 - b. Homeowners association
 - c. Established land trust
 - d. Non-profit conservation or agricultural organization
 - e. Alachua County, with county approval
 - f. Other public agency (e.g. Water Management District)
- (2) Maintenance. Unless otherwise agreed by the County, the cost and responsibility of maintaining common facilities, including but not limited to open space, private roads, shared water systems, and stormwater systems, shall be borne by the owner(s) of the open space. If the open space is not properly maintained, the County may assume responsibility of maintenance and charge the property owner or homeowners association a fee which covers maintenance and administrative costs.
- (3) Management plan. An open space management plan shall be required to accompany the development plan, subject to county review and approval. The management plan shall establish management objectives consistent with Conservation and Open Space Element objectives and policies for preservation, enhancement, and restoration of natural resource values, protection of public health and safety, and outline procedures and define the roles and responsibilities for managing the open space. The management plan shall identify how any agriculture and silviculture operations shall avoid impacts to conservation resources according to standards in the land development regulations. Management shall include wildfire mitigation and any existing silviculture operations are required to be managed to a point where they can be made an acceptable fire risk and must transition to natural forest management.

The land development regulations for open space ownership, maintenance, and management in clustered rural subdivisions shall be updated consistent with applicable Goals, Objectives, and Policies in the Comprehensive Plan. Criteria for the timing of transfer of ownership and maintenance from original landowner to the homeowners association, such as some percentage of the lots sold or built upon, consistent with Florida Statutes 720.307 shall be specified in the land development regulations. As part of the update of these regulations, recommended practices for any agricultural activities within the open space, from sources such as University of Florida Institute of Food and Agricultural Sciences (UF IFAS) (e.g., for things such as animal stocking and crop planting rates), and principles of regenerative

agriculture, shall be considered to the extent they are consistent with policies in the Comprehensive Plan including natural resource protection.

Policy 6.2.13 Developed Area

The developed area of the clustered rural residential subdivision shall be located outside the open space area. The land development regulations shall prescribe in detail design standards for the configuration of lots and homes, the provision of water and wastewater, roads, stormwater, and buildings and structures. At a minimum, all developed areas must be designed to comply with the following principles, to the extent feasible considering the location and protection of natural resources:

- (a) Flexible home siting and lot sizes. Diversity and originality in home siting, lot size and design are encouraged to achieve the best possible relationship between the development and the features on the land through the following strategies:
 - (1) Ownership lines should follow existing features, such as tree lines or contours.
 - (2) Lots smaller than one acre may be allowed provided that well and septic System configuration, location, and operation and maintenance comply with public health and environmental quality standards, subject to the following:
 - a. The number of lots less than one acre shall be determined and located consistent with Conservation and Open Space Element Policies 3.6.11 and 4.5.5(f).
 - b. Common septic systems may be utilized to serve lots less than one acre, consistent with Conservation and Open Space Element Policy 4.5.5(f), subject to performance criteria in the land development regulations specifying criteria such as system configuration, location, and management.
- (b) Development impacts within developed area. Development impacts and disturbance caused by buildings or construction to topography and existing site features within the developed area shall be minimized through the following strategies:
 - (1) Locating residences and structures adjacent to tree lines and wooded field edges and avoiding placement in open fields, consistent with Firewise principles.
 - (2) Preserving the maximum amount of natural vegetation by careful siting of development.
 - (3) Limiting the size of building envelopes and locating them in areas most suitable for development.

- (4) Locating roads to minimize cut and fill (follow existing features, e.g. tree lines, access roads, contours).
 - (5) Providing buffers and setbacks from wetlands and surface waters.
 - (6) Use of common driveways.
 - (7) Encouraging community wells and septic systems within the most suitable soils.
 - (8) Designing stormwater to maximize overland flow through natural drainage systems and grassed overland (roadside and lot line) swales. The use of plants and natural land forms shall be required to slow, hold, and treat runoff from development.
- (c) Development impacts to open space and adjacent offsite areas. The total amount of impacts and disturbance to the site, including the open space area, and to adjacent areas offsite shall be minimized through strategies such as:
- (1) Providing buffers and setbacks to protect resources and natural vegetation from development impacts consistent with Conservation and Open Space Element Section 3.6.
 - (2) Providing buffers and setbacks to protect the ability to engage in agricultural activities in neighboring areas. The width and type of buffer shall be based on the scale of the agricultural activity and other site specific factors such as topography, and shall include a minimum buffer width of two hundred feet when the developed area is adjacent to intensive agricultural uses.
 - (3) Locating developed areas and providing buffers and setbacks to eliminate or minimize the presence of development from adjacent properties.
- (d) Development impacts to adjacent public roads shall be minimized through the following strategies:
- (1) Providing internal paved local roads, or private easements that serve no more than nine lots consistent with Future Land Use Element Policy 6.2.6, which meet County standards and minimize access to adjacent public roads.
 - (2) Minimizing the number of driveways accessing adjacent public roads and the number of lots with direct frontage on adjacent public roads.
 - (3) Locating developed areas and providing buffers and setbacks to minimize the presence of development from adjacent public roads.

Policy 6.2.14 Applicability

- (a) New rural residential developments of 10 or more lots shall be developed as clustered rural residential subdivisions in accordance with the policies and requirements under this section and implementing land development regulations.

- (b) New rural residential subdivisions meeting all requirements for cluster development may be allowed through the development review process, provided they are consistent with Comprehensive Plan policies and land development regulations.
- (c) Exceptions to the density and intensity standards in the Rural/Agriculture area may be granted for use of a parcel as a homestead by family members that meet the family relationship criteria under Future Land Use Element Policy 7.1.20 as provided in the Land Development Regulations.
- (d) Alternatives to the requirements for Rural/Agricultural areas may be established by special area plans adopted jointly by Alachua County and a municipality pursuant to Interlocal agreements under Section 1.5 of the Alachua County Charter and Policy 1.1.1 of the Intergovernmental Coordination Element of the County Comprehensive Plan. Such special area plans shall establish policies for land use and other relevant issues such as provision of infrastructure and services within areas delineated in such joint special area plans. In order for these alternative policies to apply, the joint special area plan with a municipality must be adopted as part of the Comprehensive Plans of the both the County and the applicable municipality.

Policy 7.1.3 As part of the periodic update of the Comprehensive Plan and any proposed amendments to the Urban Cluster, determine a sufficient and non-excessive amount of land within the Urban Cluster to accommodate urban uses for a ten year and twenty year time frame.

- (a) The determination (methodology is shown in Appendix A) shall be based on a comparison of:
 - (1) a forecast need for land for urban residential and non-residential development based on projected population, average household size, a residential vacancy rate, and a market factor. The market factor for the ten year time frame shall be 2.0. The market factor for the 20 year time frame shall be 1.5.
 - (2) land available in the Urban Cluster for urban residential and non-residential uses. Mapping of environmentally sensitive areas shall be utilized as a factor for determining land availability.
- (b) If the comparison shows that the land available is less than the forecast need for land, the following measures shall be considered:
 - (1) revisions to density standards and land development regulations, or other measures, to accommodate greater population within the existing Urban Cluster
 - (2) coordination with municipalities regarding possible reallocation of forecast need to the incorporated areas
 - (3) phased expansion of the Urban Cluster
- (c) If the forecast need for one type of land use exceeds the supply of land for that particular use, a revision to the allocation of land uses within the Urban Cluster shall be considered before the Urban Cluster is expanded.

- (d) If this methodology determines expansion of the Urban Cluster is warranted, the evaluation of appropriate location shall be subject to analysis including the following economic, infrastructure, transportation, and conservation and recreation criteria:
- (1) rural character and viable agriculture land and the potential impact of expansion of the Urban Cluster on existing agricultural uses.
 - (2) economic development considerations including affordable housing
 - (3) relationship to existing and planned future urban services and infrastructure
 - (4) access to the regional transportation network and multi-modal transportation systems
 - (5) Conservation and Preservation land uses
 - (6) planned recreation/open space or greenway systems
- (e) In addition to meeting the requirements identified above, any proposed amendment to expand the Urban Cluster must include a commitment to purchase development rights at a rate equivalent to or greater than the proposed increase in density or intensity through the Transfer of Development Rights program in accordance with Section 9.0 of this Element

Policy 7.1.6 Areas designated for urban residential densities are identified on the Future Land Use Map within the urban cluster shown on the map, and certain additional areas representing existing development at urban residential densities. The policies and densities applicable to the Low Density Residential category shall also apply to that portion of any lot of record existing as of October 2, 1991, which was partially within and partially outside of the urban cluster provided that the area of the lot outside of the urban cluster does not exceed five (5) acres. The development must be contiguous to the area identified for low density residential land use on the Future Land Use Map and provide the equivalent infrastructure and services. For purposes of this policy, roadway, conservation, or utility easements shall not preclude contiguity. Development must be consistent with all Comprehensive Plan policies.

Policy 7.1.11 All new development shall meet level of service requirements for roadways, potable water and sanitary sewer, stormwater, solid waste, mass transit, public schools, and improved recreation in accordance with LOS standards adopted in the elements addressing these facilities.

Policy 7.1.23 All amendments shall be considered based on the applicable policies and objectives of this Element, shall be considered in light of the Basic Principles upon which the Plan is based, and shall be consistent with all Elements of the Plan.

FUTURE LAND USE ELEMENT DEFINITIONS

Urban Cluster: An area designated on the Future Land Use Map for urban development, which includes residential densities ranging from one unit per acre to 24 units per acre or greater, non-residential development, and is generally served by urban services.

CONSERVATION AND OPEN SPACE ELEMENT

Policy 3.1.1 Conservation areas shall consist of natural resources that, because of their ecological value, uniqueness and particular sensitivity to development activities, require stringent protective measures to sustain their ecological integrity. These areas shall include:

- (a) Wetlands;
- (b) Surface waters;
- (c) 100-year floodplains;
- (d) Listed species habitat;
- (e) Significant geologic features; and
- (f) Strategic ecosystems.

Policy 3.1.3 Conservation areas shall be developed only in a manner consistent with protection of the ecological integrity of natural resources, and in accordance with standards which are outlined subsequently in this Element.

Policy 3.6.3 Parcels that include or are adjacent to conservation or preservation areas shall not receive planning and zoning designations that are higher in density or intensity than the currently adopted designations unless adequate natural resources protection is ensured.

OBJECTIVE 4.10 - STRATEGIC ECOSYSTEMS

Protect, conserve, enhance, and manage the ecological integrity of strategic ecosystems in Alachua County.

Policy 4.10.1 Conserve strategic ecosystems that are determined through ground-truthing using the KBN/Golder report as a guide to maintain or enhance biodiversity based on an overall assessment of the following characteristics:

- (a) Natural ecological communities that exhibit:
 - (1) Native biodiversity within or across natural ecological communities.
 - (2) Ecological integrity.
 - (3) Rarity.
 - (4) Functional connectedness.
- (b) Plant and animal species habitat that is:

- (1) Documented for listed species.
 - (2) Documented for species with large home ranges.
 - (3) Documented as a special wildlife migration or aggregation site for activities such as breeding, roosting, colonial nesting, or over-wintering.
 - (4) High in vegetation quality and species diversity.
 - (5) Low in non-native invasive species.
- (c) Size, shape, and landscape features that allow the ecosystem to be restored to or maintained in good condition with regular management activities, such as prescribed burning, removal of exotic vegetation, or hydrological restoration.

The Alachua County 2001 digital orthophotographic series (for purposes of this policy, the date of this photography is March 1, 2001) shall presumptively establish the baseline condition of the strategic ecosystem property as of the effective date of this policy. The County shall adopt land development regulations that set forth additional guidance for the determination of whether and the extent to which strategic ecosystems exist on a property.

Policy 4.10.2 Strategies shall be implemented through the land use planning and development review processes to ensure that each strategic ecosystem is evaluated and protected based on the integrity of the ecological unit.

- (a) The County shall create special area plans in cooperation with landowners to establish specific guidelines for strategic ecosystems prior to approval of land use change, zoning change, or development approval.
- (b) The County shall devise a schedule for creating special area plans, based on current development pressures and anticipated priorities.
- (c) The County shall create special area plans for each strategic ecosystem, in accordance with the schedule and with the standards under Objective 3.6.

Policy 4.10.3 If an applicant seeks development prior to the County's creation of a special area plan for a particular strategic ecosystem, the applicant has two avenues for pursuing development. A special area study may be conducted at the applicant's expense. Alternatively, if the applicant demonstrates that the ecological integrity of the strategic ecosystem will be sufficiently protected, the applicant may proceed according to the clustering provisions in policies under Objective 6.2 of the Future Land Use Element.

Policy 4.10.4 Management strategies for strategic ecosystems shall be developed with landowners in conjunction with special area plans or cluster developments and may include, but are not limited to:

- (a) Prescribed burning.
- (b) Control of invasive species.

- (c) Silvicultural activities according to BMPs, with particular emphasis on maintenance and improvement of water quality, biological health, and the function of natural systems.
- (d) Reduction in the intensity of site preparation activities, including bedding and herbicide application.
- (e) Provision for listed species habitat needs, including restricting, at appropriate times, intrusions into sensitive feeding and breeding areas.
- (f) Cooperative efforts and agreements to help promote or conduct certain management activities, such as cleanups, maintenance, public education, observation, monitoring, and reporting.
- (g) Land acquisition.

Policy 4.10.5 Each strategic ecosystem shall be preserved as undeveloped area, not to exceed 50% of the upland portion of the property without landowner consent and in accordance with the following:

- (a) Upland areas required to be protected pursuant to policies for significant geological features and wetland and surface water buffers shall be counted in calculation of the 50% limitation, however, the extent of protection of significant geological features and wetland and surface water buffers shall not be reduced by this limitation.
- (b) This limitation shall not apply to 100-year floodplains and wellfield protection areas, which are addressed independently through policies under Objectives 4.8 and 4.5, respectively.
- (c) This limitation shall not restrict in any way state and federal agency protections.

Policy 4.10.6 The County shall provide regulatory flexibility to facilitate planning across multiple parcels that protects the integrity of the strategic ecosystem as an ecological unit. Existing cluster and PUD ordinances shall be revised to enhance long-term protection of strategic ecosystems.

Policy 4.10.7 The County shall work with owners of agricultural and silvicultural lands to retain the ecological integrity and ecological value of strategic ecosystems through management plans and incentives. A management plan shall be required before any activity occurs in a strategic ecosystem that has not been used for agriculture or silviculture within the last 20 years, in accordance with the following:

- (a) The management plan shall provide for retention of the ecological integrity and ecological value of the strategic ecosystem.
- (b) The management plan shall be submitted to Alachua County for review and approval by appropriately qualified technical staff.
- (c) The management plan may be satisfied by Forest Stewardship Council certification, land acquisition, or participation in a conservation program sponsored by the USDA Natural Resources Conservation Service.
- (d) Passive recreational and ecotourism activities shall be encouraged where consistent with protection of the ecological integrity of the strategic ecosystem.

The County shall, through community outreach and collaboration, facilitate participation of landowners in forestry certification programs, land acquisition programs, and federal and state cost-share conservation programs, such as the Environmental Quality Incentive Program, the Conservation Reserve Program, the Wildlife Habitat Incentive Program, and the Farmland Protection Program.

Policy 4.10.8 Alachua County shall implement an ordinance that specifically addresses the preservation of strategic ecosystems, significant plant and wildlife habitat, habitat corridors, and vegetative communities.

TRANSPORTATION MOBILITY ELEMENT

GOAL

Establish a multi-modal transportation system that provides mobility for pedestrians, bicyclists, transit users, motorized-vehicle users, users of rail and aviation facilities, and is sensitive to the cultural and environmental amenities of Alachua County.

PRINCIPLE 3

Discourage sprawl and encourage the efficient use of the urban cluster by directing new development and infrastructure to areas where mobility can be provided via multiple modes of transportation.

OBJECTIVE 1.1 Urban Transportation Mobility Districts

Urban Transportation Mobility Districts encourage future land use and transportation patterns that emphasize mixed-use, interconnected developments, promote walking and biking, reduce vehicle miles of travel and per capita greenhouse gas emissions, and provide the densities and intensities needed to support transit.

Policy 1.1.1 The Urban Cluster Area as identified on the Future Land Use Map of the Comprehensive Plan shall serve as the boundary for the Urban Transportation Mobility Districts. Urban Transportation Mobility Districts shall be established for the Northwest, Southwest and Eastern portions of the Urban Cluster.

Policy 1.1.2 Urban Transportation Mobility Districts are designed to support compact, mixed-use developments provided for in the Future Land Use Element by developing an interconnected multi-modal transportation system that reduces per capita greenhouse gas emissions by encouraging walking, bicycling and driving short distances between residential, retail, office, educational, civic and institutional uses and utilizing transit to commute to regional employment, educational and entertainment destinations.

Policy 1.1.3 The intent of Urban Transportation Mobility Districts are:

- (a) To provide for mobility within urban areas through the development of an interconnected network of:

- (1) Roadways that provide multiple route choices, alternatives to the state road system and protect the Strategic Intermodal System (SIS).
 - (2) Rapid Transit and Express Transit Corridors that connect Transit Oriented Developments, Traditional Neighborhood Developments and Activity Centers and facilitate efficient and cost effective transit service to regional employment, educational and entertainment destinations.
 - (3) Bicycle lanes, sidewalks, and multi-use paths that connect residential, commercial, office, educational and recreation uses and provide multi-modal access to transit.
- (b) To recognize that certain roadway corridors will be congested and that congestion will be addressed by means other than solely adding capacity for motor vehicles and maintaining roadway level of service on those corridors.
 - (c) To utilize features of an alternative mobility funding system per F.S. 163.3180.
 - (d) Reduce vehicle miles of travel and per capita greenhouse gas emissions through compact, mixed-use, interconnected developments served by multiple modes of transportation.
 - (e) Reduce sprawl and encourage urban development by planning and constructing the necessary infrastructure to meet the demands for bicycle, pedestrian, transit and motor vehicle mobility.
 - (f) Reduce congestion within the Urban Cluster by capturing trips from surrounding rural areas, municipalities and adjacent counties through provision of park and ride facilities located within transit supportive developments in the Urban Cluster served by transit service that connects to regional employment and educational destinations.
 - (g) To provide for multi-modal cross-access and connectivity within and between uses to encourage walking and bicycling and reduce travel distances and impact to collector and arterial roadways.

Policy 1.1.6.12 Requests to expand the Urban Cluster Boundary, whether by public or private entities, shall require the entity to demonstrate that the adopted LOS guidelines for the affected Urban Transportation Mobility District are achieved and that additional required infrastructure is fully funded. The entity shall also be required to construct or fully fund bicycle and pedestrian facilities necessary to achieve the adopted LOS from the proposed newly included properties to an existing facility or a logical terminus within the existing Urban Cluster Boundary. Applicants may only include projects that are fully funded and scheduled to commence construction within one (1) year of approval of the request to expand the Urban Cluster Boundary. This requirement is in addition to all other conditions of the Comprehensive Plan, including Policy 7.1.3 of the Future Land Use Element in order amend the Comprehensive Plan to the expand the Urban Cluster.

OBJECTIVE 1.2 - Rural Transportation Mobility Districts

To protect and support agricultural activities, preserve the character of rural communities and encourage development in areas where infrastructure can be provided in a financially feasible manner, the unincorporated area outside the Urban Cluster as identified in the Comprehensive Plan shall be established as Rural Transportation Mobility Districts. Developments within Rural Transportation Mobility Districts are required to mitigate impacts to roadways within the Rural and Urban Transportation Mobility Districts as established in the adopted Mobility Fee.

Policy 1.2.1 Alachua County shall adopt the following level of service guidelines based on daily traffic for functionally classified roadways in order to maximize the efficient use and safety of roadway facilities:

Mode of Travel	Level of Service (LOS)
Motor Vehicle	C

Policy 1.2.2 Alachua County has established level of service guidelines for rural areas to coordinate capital improvement planning and land use to ensure that growth does not occur faster than the County's ability to provide for infrastructure in a financially feasible manner. The level of service guidelines shall not compel or require the County to widen or construct new roadways outside of the Urban Cluster in order to provide capacity to support new development or to address the unmitigated impact of development from adjacent municipalities and counties.

Policy 1.2.3 Amendments to the Future Land Use Element and/or Map, including Sector Plans and Special Area Plans, will be coordinated with the Transportation Mobility Element and the Capital Improvement Element through the evaluation of the impact of additional traffic projected to result from proposed land use plan amendments. This evaluation shall include assessment of the impact on the level of service of individual affected roads based on the roadway functional classification and number of lanes.

Policy 1.2.4 Where the evaluation of a proposed Future Land Use amendment indicates that the level of service on affected individual roads segments would be reduced below the adopted level of service guidelines, the amendment shall be accompanied by corresponding amendments to identify roadway modifications needed to maintain the existing individual segment by segment level of service guideline, as well as the scheduling of such modifications in Alachua County's Five Year Capital Improvement Program.

POTABLE WATER AND SANITARY SEWER ELEMENT

OBJECTIVE 3.1

To provide for the coordination of public potable water and sanitary sewerage facility extensions in the unincorporated area of Alachua County with the Alachua County Future Land Use Element and capital improvement planning and programming.

- Policy 3.1.1** Alachua County shall designate an urban service area for future land uses with densities and intensities which will provide for efficient operation of central potable water and sanitary sewer service facilities, as well as the enabling of efficient line sizing by any potable water supplier or sanitary sewer collector.
- Policy 3.1.2** Alachua County shall coordinate any expansions in municipal potable water systems, municipal sanitary sewer systems, the school system, the highway systems, the drainage system, and any other relevant publicly provided facility through intergovernmental coordination mechanisms consistent with the Intergovernmental Coordination Element policies.
- Policy 3.1.3** Alachua County will establish a timing, staging, and capacity program in conjunction with the municipalities in the County for the expansion of potable water and sanitary sewer facilities into unincorporated service areas. This shall be coordinated in accordance with the Intergovernmental Coordination Element, Policy 5.1.7. The Capital Improvement Programs/Elements of Alachua County and the municipalities shall specify such facility expansion programs.
- Policy 3.1.4** Extension of potable water or sanitary sewer lines within areas designated on the Future Land Use Map as the Urban Cluster shall be allowed by Alachua County provided there are no adverse impacts on environmentally-sensitive lands.
- Policy 3.1.5** Proposed extensions of potable water and sanitary sewer lines outside of the Urban Cluster designated by the Future Land Use Element shall be subject to approval by the Board of County Commissioners. Approval of such extensions shall be based on one or more of the following:
- (a) the Alachua County Board of County Commissioners finds that the absence of such facilities would result in a threat to the public health or safety; or
 - (b) the Alachua County Board of County Commissioners finds that the extension of such facilities is necessary to enhance the safe, effective, and efficient delivery of central potable water or sanitary sewer service within an existing urban service area; or
 - (c) the Alachua County Board of County Commissioners finds that the extension of such facilities would serve a purpose consistent with the Alachua County Comprehensive Plan, such as the retention and expansion of existing business and industry or the attraction of new business and industry in accordance with

the Economic Element of this Plan, or the service of institutional or tourist/entertainment uses consistent with the Future Land Use Element; or

- (d) the Alachua County Board of County Commissioners finds that the extensions of such facilities is needed as part of a comprehensive expansion of public services to encourage urban development in a new area as part of a comprehensive plan amendment. In this case, such a finding must be consistent with Policy 3.1.6 below.

Policy 3.1.6 Central potable water and sanitary sewer systems may be extended into new areas as part of a planned extension of urban services to that area based upon the following factors:

- (a) population growth rate;
- (b) maintenance of level of service standards for the potable water or sanitary sewer system;
- (c) adequacy of existing and planned supporting infrastructure;
Approval of such extensions would require the following:
- (d) Identification, scheduling, and designated funding for capital improvements to other public facilities needed to extend urban services. Such projects shall be incorporated into the five-year capital improvement program of the Alachua County Capital Improvement Element.
- (e) Adoption of necessary amendments to the Future Land Use map extending the urban cluster boundary.

ENERGY ELEMENT

3.0 ENERGY EFFICIENT LAND USE

OBJECTIVE 3.1

Promote energy-efficient land use patterns that reduce travel costs and encourage long-term carbon sequestration.

Policy 3.1.1 Promote energy efficient land use patterns through the policies of the Future Land Use Element, Transportation Mobility Element and this Element, including measures such as:

- (a) Mix of uses;
- (b) Transit supportive density;
- (c) Compact growth patterns;
- (d) Road connectivity and multimodal efficiency;
- (e) Pedestrian and transit oriented design techniques; and
- (f) Clustering techniques in the rural area.

Policy 3.1.4 Promote redevelopment and infill within the Urban Cluster, and within municipal boundaries consistent with Policy 1.1.7 of the Intergovernmental Coordination Element.

Unified Land Development Code (ULDC)

Sec. 406.03. - Use of sound environmental practices.

The provisions in this Chapter are intended to accommodate development while also protecting and preserving valuable natural and historic resources. In furtherance of this objective, applicants shall be required to use sound environmental practices, to plan for proposed activities and projects in the context of natural systems and historic features of the landscape. Applicants are encouraged to use conservation design techniques such as clustering and density transfer to produce marketable projects while protecting natural and historic resources.

(a) *Satisfaction of Open Space requirements.* When land development involves a parcel that contains regulated natural or historic resources, the County's Open Space requirements shall be fulfilled first with regulated natural or historic resources. These areas shall be protected as conservation management areas in accordance with Article XVII.

(b) *Minimized impact within upland conservation areas.* Avoidance or minimization shall be required for all conservation areas in accordance with [Section 406.113](#) of this Chapter. Where the applicant demonstrates that all reasonable steps have been taken in the attempt to avoid significant adverse impact to regulated natural and historic resources, and proposed impact is consistent with upland habitat limitations under Article III, Article IV, and Article V of this Chapter, development in regulated upland resource areas may be authorized as follows and shall not constitute a significant adverse impact:

- (1) Density will be calculated within the regulated upland resource area at the rate of one (1) unit per five (5) acres in the rural/agricultural land use.
- (2) In other land use designations, density will be calculated within the regulated resource area at the lowest density allowed by the established zoning district. ...

ARTICLE V. – STRATEGIC ECOSYSTEMS

Sec. 406.32. - Purpose.

The purpose of this Article is to implement the Alachua County Comprehensive Plan, to protect conserve, enhance, and manage the ecological integrity of natural systems in Alachua County that have aesthetic, ecological, economic, educational, historical, recreational, or scientific value due to the interrelationship of one or more landscape, natural community, or species scale characteristics. It is also the purpose of this Article to promote connectivity and minimize fragmentation of natural systems, and to protect wetlands, floodplains, and associated uplands in a broad systems context through resource-based planning,

including inter-jurisdictional and inter-agency coordination, across multiple parcels rather than individual parcel planning.

Sec. 406.33. - Identification.

Strategic ecosystems are identified in the KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996), and mapped generally by the KBN/Golder Ecological Inventory Map, which is an overlay to the Future Land Use Map, adopted and made a part of this Chapter by reference. The specific location and extent of strategic ecosystem resources shall be determined through ground-truthing using the KBN/Golder Associates report as a guide to determine the location and extent of the ecological community or communities described, generically, in the KBN/Golder report or of other natural resources generally consistent with the pertinent site summary in the KBN/Golder report. The ground-truthing process shall be implemented either as part of the development review process, or the special area planning process detailed in Article XVI of [Chapter 402](#). Variability of community quality shall not be a basis for the delineation but may be a basis for determining the most appropriate locations for development and conservation, respectively. Those areas found not to contain strategic ecosystem resources shall be eligible for consideration for development as part of a development plan or special area plan provided the ecological integrity of the strategic ecosystem as a whole will be sufficiently protected.

Sec. 406.34. - Agricultural and silvicultural activities.

The County shall work with owners of agricultural and silvicultural lands to retain the ecological integrity and ecological value of strategic ecosystems through management plans and incentives.

(a) For bona fide agricultural activities, including silvicultural activities, identification and verification of best management practices shall be required in accordance with [Section 406.05](#).

(b) A management plan shall be required before any activity occurs in a strategic ecosystem that has not been used for bona fide agriculture or silviculture within the last twenty (20) years, consistent with Subsection [406.05\(a\)](#) and in accordance with one of the following:

(1) The management plan shall provide for retention of the ecological integrity and ecological value of the strategic ecosystem.

(2) The management plan shall be submitted to Alachua County for review and approval by staff. Management plans not meeting the general template standards of Subsection [406.112\(e\)](#) will require review and approval through the development review process.

(3) The management plan may be satisfied by land acquisition, conservation easement, or participation in a conservation program sponsored by the United States Department of Agriculture Natural Resources Conservation Service.

(4) The management plan may be satisfied by any agricultural or silvicultural certification program's required management plan, provided it demonstrates that the ecological integrity and value of the system is protected.

Sec. 406.35. - Onsite habitat protection and set-aside limitations.

No more than fifty (50) percent of the upland portion of a parcel may be required to be preserved because it is or includes strategic ecosystem unless the landowner provides consent, or state or federal agencies require additional protection. This provision shall be applied as follows:

- (a) Upland areas required to be protected pursuant to Comprehensive Plan policies or regulations for significant geologic features and wetland and surface water buffers shall be counted in the calculation of the 50-percent limitation, however the extent of protection of significant geological features and wetland and surface water buffers shall not be reduced by this limitation.
- (b) If the strategic ecosystem in combination with any of the features identified in Subsection (a) above, equal less than fifty (50) percent of the upland portion of the parcel, the entire strategic ecosystem shall be protected.
- (c) The County shall work with the applicant to select that portion of the strategic ecosystem that will be included in the set-aside area, based on limitations and factors identified above and in accordance with criteria in [Section 406.97](#), Site selection and design for conservation management areas.
- (d) Where the strategic ecosystem alone or in combination with the features identified in Subsection (a) above, is greater than fifty (50) percent of the upland portion of the parcel, development densities on any portion of the strategic ecosystem outside of the set-aside area shall be governed by Subsections [406.03\(b\)\(1\)](#) and (2).
- (e) For developments that comply with all applicable provisions of this Article, the set-aside limitations in this Section shall constitute full compliance with conservation element policies addressing avoidance, minimization, and mitigation related to the protected resource.
- (f) The County shall encourage the applicant to protect the portions of the strategic ecosystem outside of the set-aside area through creative and flexible approaches to development of the property, using the provisions of Subsection [406.38\(c\)](#) for guidance.

Sec. 406.36. - Development activities.

The preferred planning mechanism for any new or expanded activity in, on or over a strategic ecosystem shall be a special area plan. If an applicant seeks development prior to the County's adoption of the scope of work for a special area plan within a particular strategic ecosystem, the applicant has three (3) options:

- (a) For all administrative activities, the applicant may proceed through the prescreening process for administrative permits in accordance with Article II, Common Development Application Elements, of [Chapter 402](#), subject to the development standards in Subsection [406.38](#)(c), where applicable.
- (b) A special area study or plan may be conducted at the applicant's expense, in accordance with Article XVI of [Chapter 402](#). All subsequent development shall be in compliance with the adopted special area plan.
- (c) If the applicant demonstrates that the ecological integrity of the strategic ecosystem will be sufficiently protected, the applicant may proceed as set forth in [Section 406.38](#).

Sec. 406.37. - Additional development application submittal requirements.

The following information shall be submitted with an application for development within a strategic ecosystem in order to evaluate whether the development may proceed before a special area plan has been adopted.

- (a) All information required by [Section 406.04](#) as part of a natural and historic resources assessment;
- (b) General analysis of adjacent properties sufficient to provide resource context;
- (c) Ownership and use information, including parcel numbers and acreage, for all land under common ownership or control within the strategic ecosystem or contiguous to the proposed development site; and
- (d) All proposed protection and management strategies for the natural and historic resources on the site and on any properties under common ownership and control as identified in Subsection (c) above.

Sec. 406.38. - Alternative to special area planning in strategic ecosystems.

As part of the development review process, County staff shall evaluate whether a proposal is sufficiently protective of the ecological integrity of the strategic ecosystem and a finding shall be made by the appropriate review body as to whether a special area study shall be required in accordance with Article XVI of [Chapter 402](#) or development may proceed in accordance with the provisions of this Section. The evaluation shall be made using the information required in [Section 406.37](#) that is based on consideration of natural resource and land use characteristics specific to the system as identified by the KBN/Golder Ecological Inventory Map and through ground-truthing in accordance with [Section 406.33](#).

- (a) *Evaluation.* The evaluation shall include an assessment as to whether the proposal protects resources within the project area and within the ecosystem as a whole, according to the following:
 - (1) Features that define the strategic ecosystem;

(2) Areas critical for system connectivity; important plant or wildlife habitat areas and characteristics;

(3) Feasibility of important management strategies, such as prescribed burning;

(4) Protection and management of additional resources for all properties under common ownership and control within the strategic ecosystem; and

(5) Density transfer opportunities in accordance with Subsection [406.03](#)(d).

(b) *Equal to or less than fifty (50) percent strategic ecosystem.* Where the evaluation shows that the strategic ecosystem comprises no more than fifty (50) percent of the upland portion of the subject property, development will be allowed to proceed prior to adoption of a special area plan.

(c) *More than fifty (50) percent strategic ecosystem.* Where the evaluation shows that the strategic ecosystem comprises more than fifty (50) percent of the subject property, development may be allowed to proceed prior to adoption of a special area plan provided that the following development standards are applied:

(1) Mechanisms to coordinate management activities with adjacent resources in the strategic ecosystem shall be provided, and management plans shall be required in accordance with Article XVI of [Chapter 402](#).

(2) Vegetation loss, grade change, and disturbance of the development site shall be minimized by careful site design fitted to the topography and soil; removal of vegetation shall be limited to only that necessary to develop the site.

(3) Access, infrastructure, stormwater management and utilities shall be sited with consideration to minimizing impacts across multiple properties, providing for wildfire mitigation, and maximizing opportunities for shared facilities such as common driveways, utility access, and building impact areas.

(4) Natural and historic resource protections required elsewhere in this ULDC or by federal, state, and regional permitting agencies shall be applied.

(5) No development or other adverse impact to the set-aside portion of the property shall be allowed, except where no other access is available, in which case impact may be allowed in the least sensitive portion of the system in accordance with Paragraph (3), subject to the mitigation requirements in Article XXI of this Chapter.

(6) Where impact is proposed in the remaining conservation area outside the required set-aside, the following shall apply:

- a. The applicant shall locate development on buildable area outside of the strategic ecosystem to the greatest extent practicable.
- b. Parcels, lots, building areas, and driveways shall be configured to minimize overall impact to ecosystem integrity.
- c. Subdivisions and non-residential development shall meet requirements for rural clustered subdivisions set forth in [Section 407.77](#) and [Section 407.78](#).

Sec. 406.90. - Protection strategies for karst features and topography.

Strategies for protection shall be based on the unique characteristics of the resource and shall be tailored to address diverse geometries, connections to surface water and ground water, habitat functions and values, and the dynamics of natural systems processes. Avoidance, minimization, and mitigation of significant adverse impacts shall be required. Strategies may include but are not limited to the following.

(a) *Onsite protection.*

- (1) Significant geologic features shall be designated and protected as conservation management areas in accordance with the requirements of Article XVII of this Chapter.
- (2) Other features may be incorporated as Open Space or common area elements in project design.
- (3) Natural topographic features may be retained through lot layout and infrastructure siting.

(b) *Buffers for significant geologic features.* Perimeter edge buffering shall be required around protected significant geologic features in order to maintain natural context, edge vegetation, and structural protection. Buffers for sinkholes shall be measured from the outermost distinct closed contour associated with the feature. Buffers for caves, lineaments, ridges, escarpments, limestone outcrops, springs, and swallets shall be determined based on evaluation of the unique characteristics of the particular geologic feature and the contributing watershed. For the following features, absent scientific information which demonstrates that another buffer width is appropriate, the following default buffer widths shall be applied:

- (1) Sinkholes: an average of seventy-five (75) feet, but no less than fifty (50) feet.
- (2) Springs, quarries, karst windows, or other karst features with a direct connection to the Floridan aquifer; significant geologic features located within Outstanding Florida Springs Priority Focus Areas (PFAs); and caves: an average of one hundred fifty (150) feet, but no less than one hundred (100) feet.

APPENDIX B

ADDITIONAL REFERENCES AND MATERIALS USED OR REVIEWED TO COMPLETE THIS STAFF REPORT

Alachua County, Supporting Data and Analysis for Evaluation & Appraisal Based Update of Alachua County Comprehensive Plan (November 2019).

Cardno, Inc., FCL Timber, Land & Cattle LLLP Property Special Area Study Report (June 2022)

CHW Professional Consultants, Request to Initiate Special Area Study and Proposed Scope of Work (May 1, 2020)

Digital aerial imagery from 1938 to present.

ECT Report of Significant Geologic Features, Hickory Sink Strategic Ecosystem for FCL Timber, Land & Cattle, LLLP, Gainesville, Alachua County, Florida dated October 2021

FDACS, Florida Forest Service, Kanapaha Ranch 2017 Project Evaluation Report (for the Rural & Family Lands Protection Program)

GIS data layers available to the county... includes contour layers, FLUCFCS layers, FWC layers...

Hickory Sink Kanapaha Timber Land and Cattle Site Evaluation dated June 22, 2017 (completed by Alachua County Forever staff)

Hickory Sink Rapid Ecological Project Assessment, June 23, 2005 by Alachua County Forever

KBN Engineering and Applied Sciences, Final Report Comprehensive Inventory of Natural Ecological Communities in Alachua County (November 30, 1987).

KBN/Golder Associates report, "Alachua County Ecological Inventory Project" (1996).

USDA, Natural Resources Conservation Service (NRCS) Soil of Survey of Alachua, Florida (1983)