

## Exhibit 8

### Alachua County Department of Environmental Protection recommendations for the subject property

1. Overall, design of this site should leave the ecological integrity of the ecosystems intact. This can be achieved by creating connectivity between habitats, minimizing natural area fragmentation, and protection of wetlands/associated uplands/floodplains.
2. The Strategic Ecosystem policies of Article 5 of Chapter 406, ULDC of Alachua County, or equivalent standards, should be upheld. For example, use of resource-based planning and design, clustering, limited density, and minimizing impacts to wetlands and associated uplands with adequate buffers.
3. Where appropriate, swales should be used instead of curb and gutter.
4. Clearance of vegetation and creation of impervious surfaces should be minimized through such practices as Low-Impact Development.
5. Storm basins should not be allowed in wetland buffers. Wetland buffers should be an average of 75 feet in width. Wetland avoidance is recommended, rather than mitigation.
6. Non-residential septic systems should not be allowed. Limit point sources such as large storm basins and hazardous materials sites, strictly limit use of fertilizers, pesticides and herbicides. Minimize construction of wells. Comply with Chapter 353 (Hazardous Materials), ULDC of Alachua County.
7. A survey of listed species should be a requirement for approval of a development plan. This study should identify habitat needs for maintaining species diversity and sustainability. Conservation easements and management plans (including exotics control and prescribed fire) should be required for areas to be preserved. Wildlife crossings and habitat corridors across CR 231 and SR 121 shall be established to maintain connectivity.
8. Impervious area for the entire site should not exceed 15 percent. All stormwater basins should be designed to provide at least 3 feet of unconsolidated solid materials between the surface of limestone bedrock and the bottom and sides of storm basins. Prohibit uses that involve handling or storage of hazardous materials.
9. All unused wells, wells that interconnect aquifers, and any wells that pose a threat to groundwater quality should be properly plugged and abandoned.
10. Require completion of a multi-disciplinary special area environmental study by a third party prior to any change in land use or development approval.

## Exhibit 9

### Comments from Lea Gabbay, Florida Department of Transportation (FDOT)

- 1 **Development Phases and Land Uses.** The Plum Creek PUD is a proposed mixed use development in north Alachua County within a recently annexed area of the City of Gainesville. The site is located east of US 441 and west of State Road 121. Access to the site will be via driveways from SR 121. The proposed Plum Creek development will be developed in two phases: Phase 1 (2009-2013) and Phase 2 (2013-Build-out). A build-out year was not given for the project so the Department's review of Phase 2 is limited to trip generation.

The Applicant's proposed land uses after completion of Phase 2 (Build-out), the development will contain the following uses:

- 1,620 Single-Family Dwelling Units (ITE Code 210)
- 270 Apartments (ITE Code 220)
- 270 Residential Townhouse/Condominiums (ITE Code 230)
- 20,000 square feet of Office (ITE Code 710)
- 80,000 square feet of Shopping Center (ITE Code 820)

2. **Insufficient Information and Analysis Submitted.** The analysis package [from the applicant] was insufficient to address the potential impacts on the road network. The application did not include a study area map with the analyzed links identified by number, existing LOS, area of influence, and estimated trip distribution. The applicant did not state how an area of influence around the project was determined. The Department recommends the area of influence is drawn on a map it is limited by calculating where the project traffic will contribute 5 percent or more to the adopted LOS maximum service volume (MSV).
3. **Trip Generation.** Base on the ITE Trip Generation, 7<sup>th</sup> edition, the Department has estimated the trips generated by the proposed development as follows. FDOT's **Table 1: Plum Creek PUD Trip Generation** (see Table 1 below) shows the trip estimates for the project. Both internal capture and pass-by trips have been estimated as well for the daily estimates and PM Peak hour. The Department has estimated that the proposed development will generate, in Phase 1, about 5,053 daily trips and about 501 PM Peak trips. The Department has also estimated that the cumulative new trips to be generated by the proposed development by the Phase 2 build-out date will be about 23,006 daily trips and about 1,927 PM Peak trips.

**Table 1: PLUM CREEK Trip Generation**

	FDOT		Applicant	
	PM Peak	Daily	PM Peak	Daily
Phase 1	501	5,053	538	5,189
Phase 2 (Cumulative)	1,927	23,006	1,885	19,441

The Department disagrees with the applicant's trip generation estimates presented in the application: *Tables 1 (page 2) and 1 (Appendix C)*. It appears that the applicant used the average rates from the ITE Trip Generation (7<sup>th</sup> Edition) for all land uses even when the average rate was not recommended. This resulted in the applicant having higher net trip generation in Phase 1 and lower net trip generation in Phase 2. The applicant should apply the correct trip generation rate based on the recommendations found in the Department's TIPS software which provides guidance for the appropriate use of the average rate versus the equation. In Phase 2 the applicant's residential trips were higher than recommended due to the incorrect use of the average rate, but the non-residential land uses produced lower net trips. Again, the applicant should follow the recommendations made by TIPS for the appropriate use of the average rate versus the equation. FDOT's **Table 2: Average Rate versus Equation** (see Table 2 below) shows the trip generation for using the average rate and the equation for the two non-residential land uses in the proposed project. In both instances TIPS recommends using the equation. The Department recommends that the applicant amend the trip generation tables for both phases for both the daily and the PM peak trip generation.

**Table 2: Average Rate versus Equation**

ITE Code	Land Use	Quantity	Units	Daily Trips	
				Average Rate	Equation
<b>Phase 2: 2013-Build-out</b>					
710	Office	20,000	Sq. Ft.	220	386
820	Shopping Center	80,000	Sq. Ft.	3,435	5,874

The Department approves of the internal capture rates shown in *Table 1 (Appendix C)* but the pass-by numbers are too high. The *Site Impact Handbook* states, "In general, the number of pass-by trips should not exceed 10 percent of the adjacent street traffic during the peak hour." The applicant should only consider the adjacent street traffic on State Road 121 for pass-by. Pass-by should be applied to Peak PM trip generation only. The FDOT Level of Service Report 2006 (draft May 2007) states the AADT on State Road 228 was 10,748 in 2006. The K<sub>100</sub> factor for this road segment is 0.097, so the peak hour traffic would be approximately 1043. Pass-by trips for the Peak PM should not exceed 104 trips.

4. **Existing Traffic Conditions.** The applicant included *Table 2* with maximum service volumes (MSVs) and existing traffic volumes. There are several segments that the Department disagrees with regarding the LOS standard and the MSV. The LOS for SR 121 from the Urban Boundary to NW 77<sup>th</sup> Avenue and from NW 77<sup>th</sup> Avenue to the south city limits of Lacrosse should be C, not D. The Department lists the correct MSV and 2006 traffic AADTs from the FDOT 2006 Level of Service Report (draft May 2007) in **Table 3: MSV and Daily Traffic Count Discrepancies**. A copy of the FDOT LOS Report 2006 has been provided for the applicant.

**Table 3: MSV and Daily Traffic Count Discrepancies**

FDOT Link ID	Roadway	Segment	FDOT MSV	Applicant MSV	FDOT 2006 Traffic Count	Applicant 2005 Traffic Count	Comments
109	SR 121	SR 222/W 39th Ave to US 441	15,400	26,400	12,700	10,000	MSV and traffic count are not correct.
110		US 441 to Urban Boundary	16,400	15,500	10,748	16,200	Applicant uses segment: US 441 to NW 62 <sup>nd</sup> Place
110.1		Urban Boundary to NW 77 <sup>th</sup> Avenue	11,000	15,500	10,748	7,271	Applicant uses segment: NW 77 <sup>th</sup> Ave to NW 62 <sup>nd</sup> Place
53		NW 77 <sup>th</sup> Avenue to SCL of Lacrosse	8,600	13,000	2,500	2,600	MSV and traffic count are not correct.

5. **Future Background and Project Traffic.** The applicant's *Table 2* does not grow existing traffic to determine 2013 background traffic. The growth rates from the FDOT LOS Report 2006 (draft May 2007) should be used in calculating future background traffic. These growth rates have been provided in the department's table (**Table 3**) When determining significant and adversely impacted links, we have suggested using peak hour volumes. The applicant used daily volumes and does not provide a column showing the project traffic as a percent of peak MSV, on which the determination of significant and adverse is typically made.

The Department used the following methodology to calculate background traffic for 2013:

- The 2006 AADT for each link was obtained from the FDOT LOS Report 2006 (draft May 2007).
- The appropriate  $K_{100}$  factor was multiplied by each AADT
- A growth factor was applied to find 2013 background traffic.

After calculating future background traffic the Department used the applicant's distribution applied to the PM peak hour trip generation in FDOT's Table 1 to test for significant and adverse links. The Department's results can be found in **Table 3: FDOT Calculation of Plum Creek PUD 2013 Significant and Adverse Links.**

6. **Project Trip Distribution & Assignment.** On page 3 of the traffic assessment, the applicant states, "*prior to utilizing a transportation computer model to define the project study area, a simple hand gravity model exercise that locates the principal origins and destinations of interacting land uses provides a general sense of the impact area and transportation facilities that require review*" From this statement, it is unclear as to whether the applicant used a computer model such as the Alachua County Cube Voyager Model to determine the distribution. The applicant should submit the model if one was employed or clarify how the distribution was determined.

Project assignment in *Table 2* needs to be adjusted based on the corrected trip generation. The Department used the trip generation in FDOT's **Table 1** (above) to determine trip assignment for the project. Project traffic numbers calculated by the Department are provided in **Table 4** (FDOT Calculations of Plum Creek PUD 2013 Significant and Adverse Links), attached

7. **Intersection Analysis.** The traffic study did not address the intersections in the area of influence. It is recommended that the applicant provides a list of the critical intersections and addresses the impacts.
8. **Financial Feasibility.** It is our understanding that local government must demonstrate a financial plan availability each time a land use amendment is approved consistent with F.S. Chapter 163.3180. And any proposed mitigation of impacts to the transportation system must be financially feasible and adopted into the capital improvement element of the local government comprehensive plan. It is important for local governments to plan for the 5- and 10-year horizon and to focus infrastructure and revenue where growth is occurring or is planned. The determination of financial feasibility should be based upon currently available funding or funding sources that could reasonably be expected to become available over the planning period

The current plan amendment proposal does not address the availability of financial plan to address the transportation impacts. Applicant should demonstrate how impacts on the transportation system will be addressed to meet the financial feasibility test.

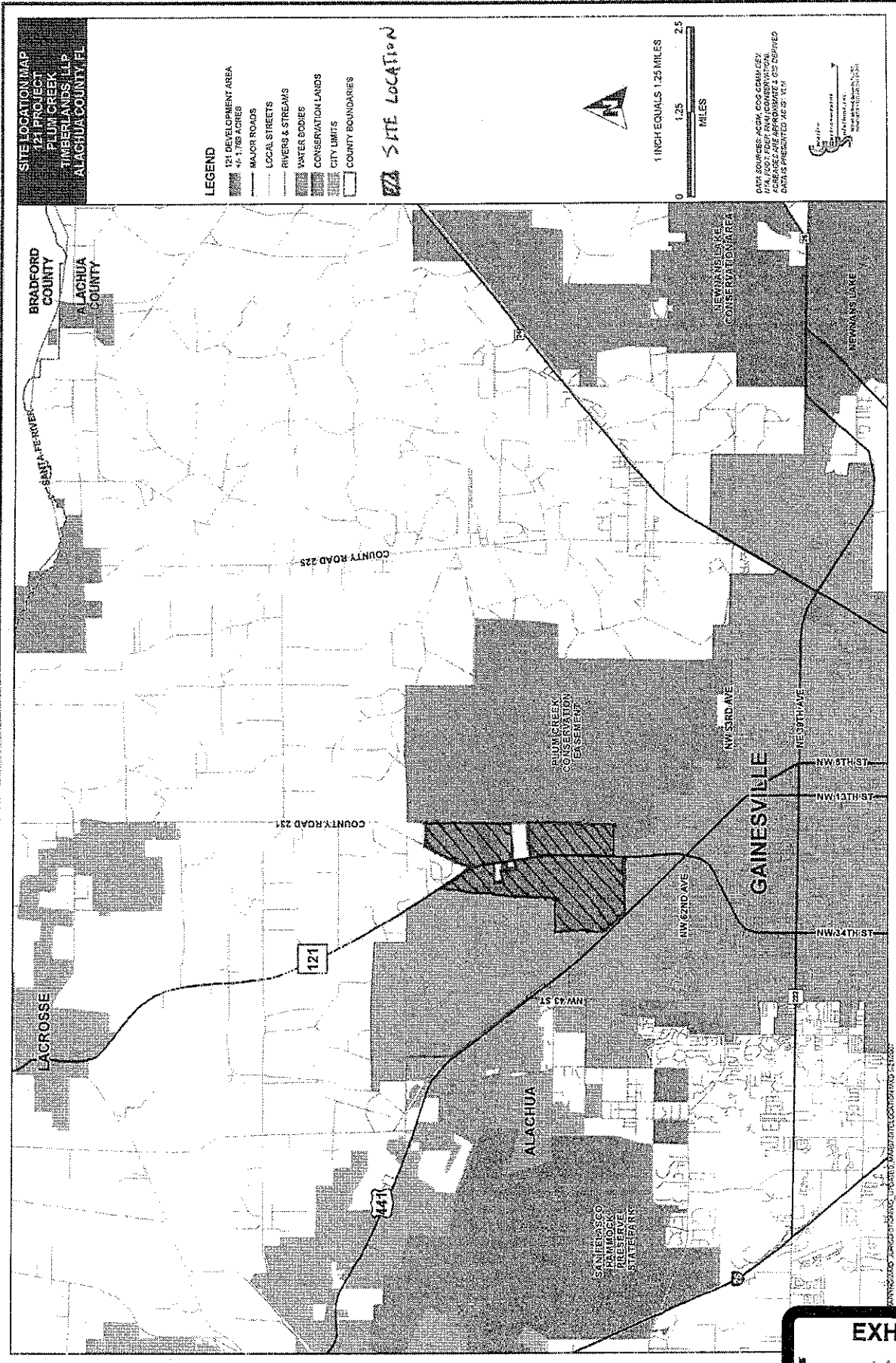
9. **Conclusion.** The information presented by the applicant only addressed Phase 1. It did not address the needs for the build-out of Phase 2. Therefore, our analysis in the attached Table 4 is limited to Phase 1 impacts. FDOT's **Table 4** (attached) shows that one segment of SR 121 from the Urban Boundary to NW 77<sup>th</sup> Avenue (Link 110.1) will be significantly and adversely impacted in 2013. Link 110 was identified by the applicant as failing and mitigation for the widening of the roadway will be provided by the applicant.

Applicant must provide the build-out date of the proposed development in **Phase 2**. The proposed development is anticipated to have major impacts on the roads due to the magnitude of the proposed size of the development. Thus, the applicant's mitigation costs could increase when Phase 2 impacts are reviewed. The applicant should provide a build-out year so that the future traffic analysis can be completed by the Department. The applicant should revise the traffic analysis consistent with all the recommendations above.

## Exhibit 10

### Comments from Jonathan Paul, Alachua County Growth Management

1. The Cost numbers provided, while based on FDOT numbers, are actually taken from my own impact fee analysis that I conducted for the County. The actual FDOT numbers for the specific roadway in question should be used, not the data from the County's impact fee analysis.
2. The roadway construction cost data does *not* include intersections. Given the tremendous amount of traffic at the intersection of US 441 and SR 121, significant improvements are needed to accommodate project traffic. Given the railroad crossing, this cost will be much higher. An above grade crossing may eventually be needed at full build-out in order to ensure that the intersection operates at the adopted LOS. The impact to this intersection should be evaluated further.
3. The proposed project will add additional traffic to NW 53rd Street at US 441 and additional improvements may be needed to ensure that the LOS standards are met.
4. The traffic analysis used townhomes (ITE Code 230) instead of Multi-Family (ITE Code 220). Since townhomes have less of an impact per ITE, you may wish to limit the type of residential development allowed. To me, townhomes are considered single-family attached, not multi-family. It may be more appropriate to use ITE Code 220 if the intent is to construct multi-family, otherwise the language should refer to 100 single-family attached units, not multi-family.

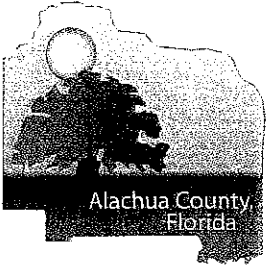


Regional Road Network

**EXHIBIT**

11





# Alachua County Environmental Protection Department

Chris Bird, Director



August 8, 2007

Chair Peter Polshek, Gainesville City Plan Board  
P.O. Box 490, Station 11  
Gainesville, FL 32602-0490

**RE: Proposed SR121 (Deerhaven / Landmar, Inc.) Comp Plan Amendment**

Dear Chair Polshek:

The Alachua County Environmental Protection Department (ACEPD) has serious concerns about the proposed Comprehensive Plan Amendment and recommends denial of the current application. This proposed Land Use change is simply too intense for this environmentally sensitive area.

ACEPD previously commented on this development proposal as part of the Alachua County Annexation Team response to the Urban Services Report (USR) for the proposed annexation. The annexation team sent a response to Mr. Blackburn, City Manager, in January 2007, which included an ACEPD memorandum detailing many environmental concerns with potential development in this area.

As noted in the Attachment, there are many environmentally sensitive issues associated with this land and it is our position that this it cannot handle any large-scale developments without hindering the environmental integrity and health of the area.

We greatly value the intergovernmental partnership between the City of Gainesville and Alachua County in protecting our local natural resources. Please do not hesitate to contact me or my staff if you have any questions or require additional information.

Sincerely,

Chris Bird  
Director

Xc: Board of County Commissioners  
Randall H. Reid, County Manager  
Rick Drummond, Growth Management Director  
Gainesville Mayor Hanrahan  
Gainesville City Commissioners

Erik Bredfeldt, Interim Gainesville Community Development Director  
Teresa Scott, Gainesville Public Works Director  
Ralph Hilliard, Gainesville Planning and Zoning  
David Coffey, P.A. Agent for Plum Creek Timberlands, LP



## Attachment

ACEPD recommends the completion of a special area study prior to any land use change and/or development approval due to the presence of Strategic Ecosystems, Murphree Wellfield Protection Zone, and extent of wetlands. We recommend the City provide for a comprehensive environmental review by a third party independent of the property owner/developer since ACEPD is no longer under contract to provide such review. Careful planning, identification of clear environmental perimeters, strict guidelines, and effective coordination among agencies is needed to optimize the protection of natural resources while providing for sustainable economic development in this area.

The project area is completely located within the two designated strategic ecosystems. These ecosystems contain major headwaters areas supporting Rocky Creek, Montechoa Creek, Rhuda Branch, Hatchet Creek, Little Hatchet Creek, Turkey Creek, and Hogtown Creek.

ACEPD estimated that approximately 60% - 80% of the surface area consists of wetlands and/or is within the 100-year floodplain. Hatchet Creek and little Hatchet Creek are the two largest tributaries to Newnans Lake, which is currently identified as an impaired waterbody. In addition to identifying Newnans Lake as impaired, the Florida Department of Environmental Protection has set a total maximum daily load (TMDL) for nutrients. Runoff with increased nutrients entering Newnans Lake from the Hatchet Creek and Little Hatchet Creek watersheds could further adversely impact Newnans Lake. Rocky Creek and Montechoa Creek are both tributaries to the Santa Fe River, another waterbody that has segments listed for nutrient impairment. The upland areas are mostly pine flatwoods with poorly to very poorly drained soils. The property is adjacent to the Murphree Wellfield Conservation Easement, is within the Tertiary Murphree Wellfield Protection Zone, and is a source of ground water recharge. The area contains many rare and endangered species, including black bears, wading birds, gopher tortoises, indigo snakes, rattlesnakes and several rare plants. The isolated wetlands are important amphibian breeding sites and provide feeding habitat for wading birds. As part of biological reconnaissance work conducted on Hatchet Creek in the vicinity of CR225, this stream segment was found to have the greatest in-stream biological diversity of the more than 20 sites evaluated throughout Alachua County.

Any large development in this area will likely have extensive impacts to this system. Because of the extensive scattering of wetlands over the entire area, any internal road network will likely directly impact and isolate many of these wetlands. Imperious areas created by a large development would exacerbate the flooding that currently and naturally exists in this area due to the poorly draining soils that characterize even the upland habitats of the project area. The loss and bisection of any headwater areas will also have a detrimental effect on the creeks in this area, which could also lead to further degradation of Newnan's Lake.

Should the City of Gainesville development in this area, it should be designed to leave the ecological integrity of the system intact. Connectivity of habitat, minimization of fragmentation of natural areas, protection of the wetlands, floodplains, and associated upland habitat should drive the design of any development in the area. We recommend that the Strategic Ecosystem policies in Article 5 of Chapter 406 Alachua County Unified Land Development Code (ULDC), or equivalent standards, be upheld. These standards should include; resource-based planning and design, clustering development, limiting density, minimizing impacts and protecting upland habitat, wetlands, and wetland buffers. Proposed developments should be designed with swales and native vegetation/ xeriscaping and avoid roads designed with curb and gutter. Require low percentage of impervious areas through clustering, narrow road widths, and recommend Low-Impact Development (LID) practices like site fingerprinting (only clear areas for structure, access, and defensible space only, leave the rest undisturbed), rain gardens, swales, cisterns to collect rain water and other practices and designs that will reduce flooding issues. Any proposed development should provide details demonstrating proper buffering to the Murphree Wellfield Conservation Easement which was put in place to protect water quality in this area.

Creeks, wetlands and their buffers should be kept intact, including the exclusion of stormwater ponds within the wetland buffers. Maintaining large intact natural buffers is crucial to protecting the quality of the creeks. Because of the extensive wetlands, any internal road network is likely to impact wetlands and wetland buffers. When roads are proposed to cross wetlands and go through wetland buffers, bridges should be required to minimize impacts. No non-residential septic systems or standard residential septic systems should be allowed within this watershed. Limit potential point sources (i.e. large stormwater ponds and hazardous materials sites), require strong restrictions on fertilizer, pesticide, and herbicide use, and limit well construction and septic tanks. Provide standards and protections equivalent or greater that what is in Chapter 353 (Hazardous Materials Code), Alachua County ULDC.

Require thorough evaluation of the property and survey for listed species. Identify habitat needs for maintaining species diversity and sustainability. Require conservation easements and management plans (include exotic control and prescribed fire) for areas to be preserved. Prescribed fire is an important component to maintaining and enhancing wildlife habitat and reducing the risk of wild fire. Require connectivity between habitats, minimize fragmentation, protect habitat and needs of listed species. Provide wildlife crossing and corridor on CR 231/ SR 121 to maintain connectivity of the Buck Bay and Hague Flatwoods Strategic Ecosystems