

# TECHNICAL MEMORANDUM

**DATE:** October 4, 2023

**TO:** Project File - Cuscowilla Fire Station – AC Zoning Application Z23-000006

**FROM:** Alachua County Environmental Protection Department  
Natural Resources Division

**SUBJECT:** Environmental Resource Assessment (ERA)  
Cuscowilla Fire & Rescue Station  
Alachua County ULDC- Regulated Natural Resources

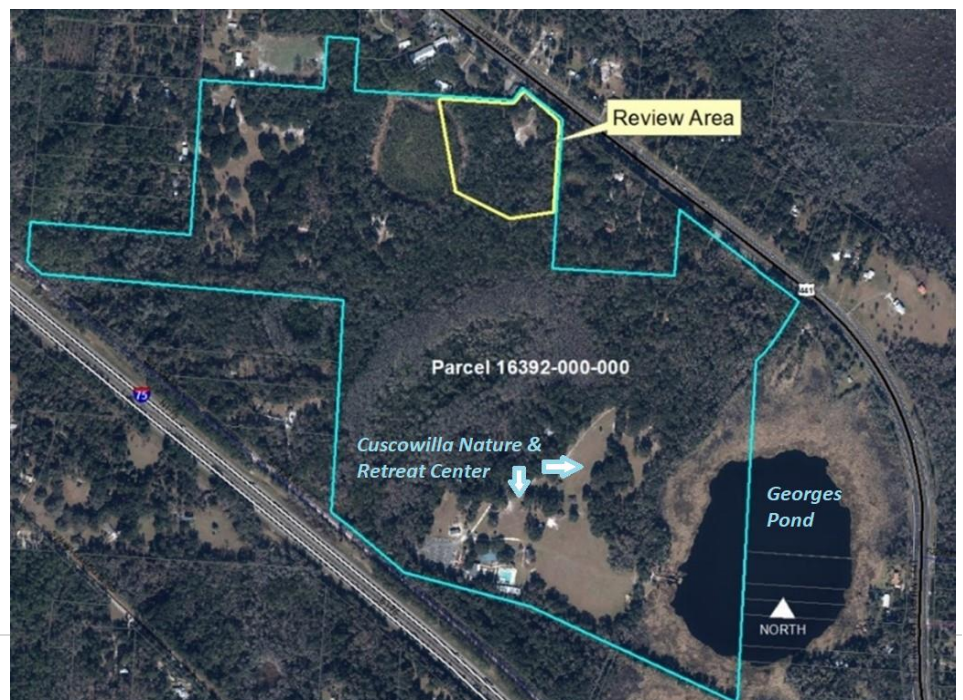
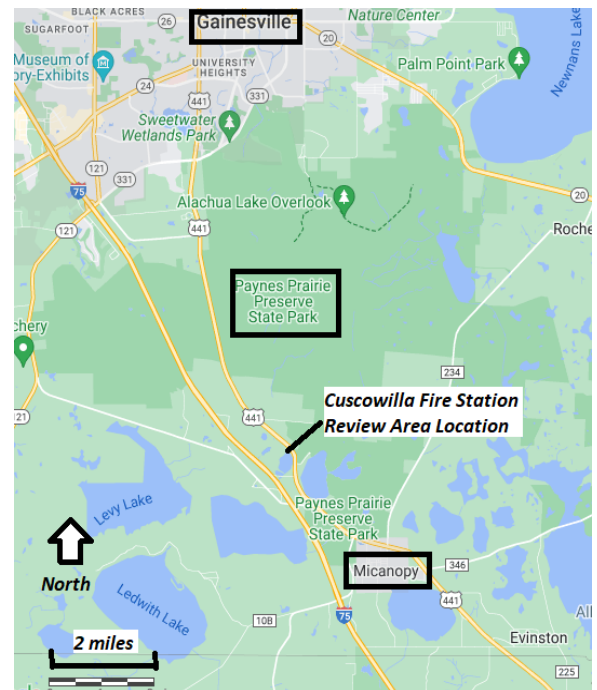
## Background & Review Area

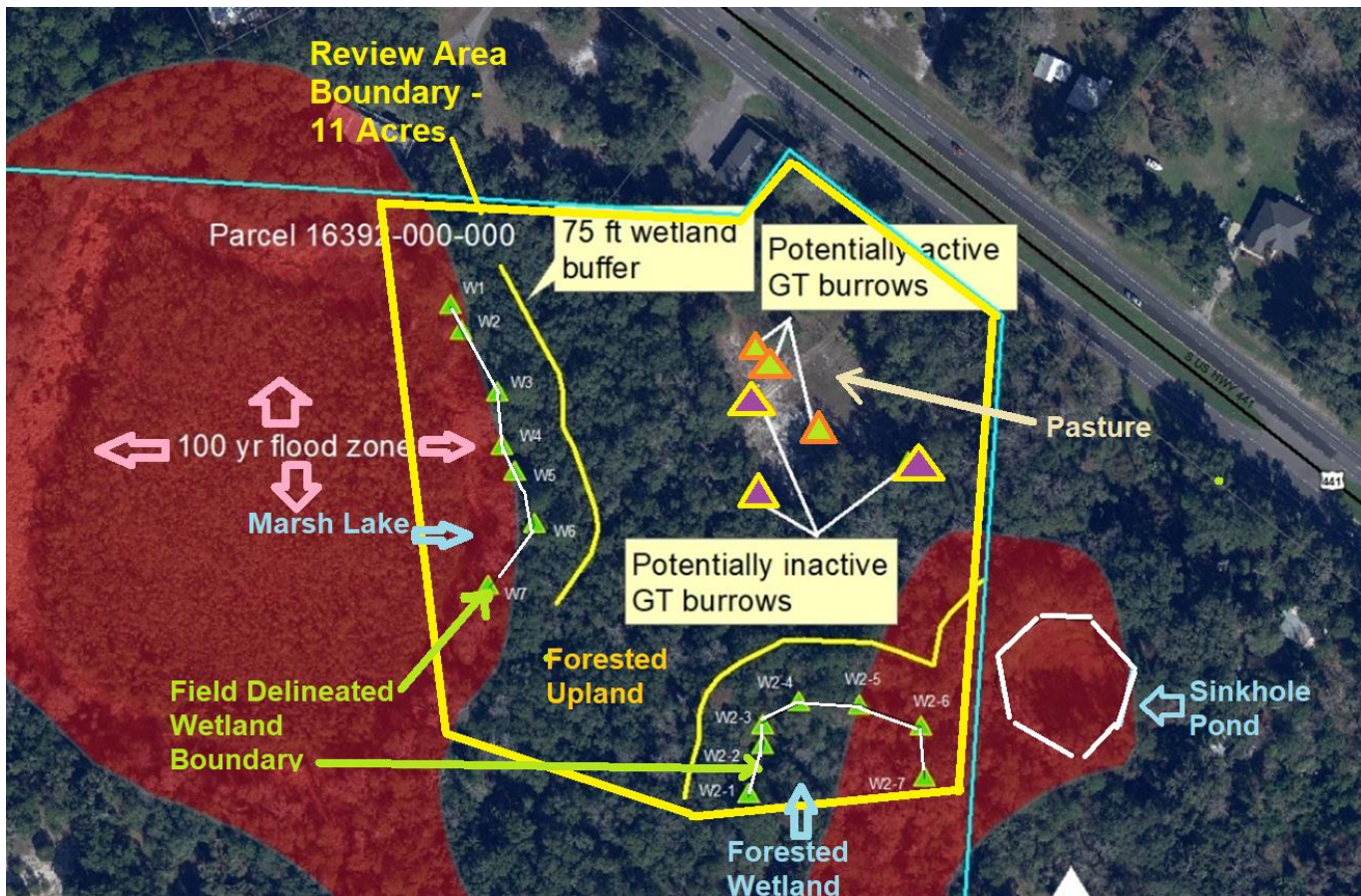
This memorandum was prepared to provide information concerning Alachua County ULDC regulated natural resources for an approximately 11-acre **“review area”** located within the north-central boundary of PN 16392-000-000; a 211-acre parcel owned and managed by Alachua County that includes Cuscowilla Park and associated Cuscowilla Nature and Retreat Center. The review area location is depicted on the right figure and associated parcel and review area boundaries located on the below aerial. Available GIS-related information for the property is available through the following Alachua County MapGenius website link:

(<https://mapgenius.alachuacounty.us/#parcelid=16392-000-000>).

A Special Use Permit (SUP) application has been submitted by EDA Consultants, Inc. on behalf of Alachua County; requesting approval to construct a proposed County-owned and operated fire and rescue station that will primarily serve an area within Micanopy and the southern portion of Alachua County. A new station is necessary due to the closure of the fire station located and owned by the Town of Micanopy.

EPD Natural Resource staff members (Emily Rodriguez, Sandy McGee) conducted an on-site evaluation of the depicted review area on June 27th, 2023. The area contains a residential house, 1-acre pasture/old field habitat, upland forest, and the perimeter zones of two wetlands. The residence is a modular mobile home installed in 2023 over an existing homesite, well and septic system. These features are depicted on an aerial (next page).

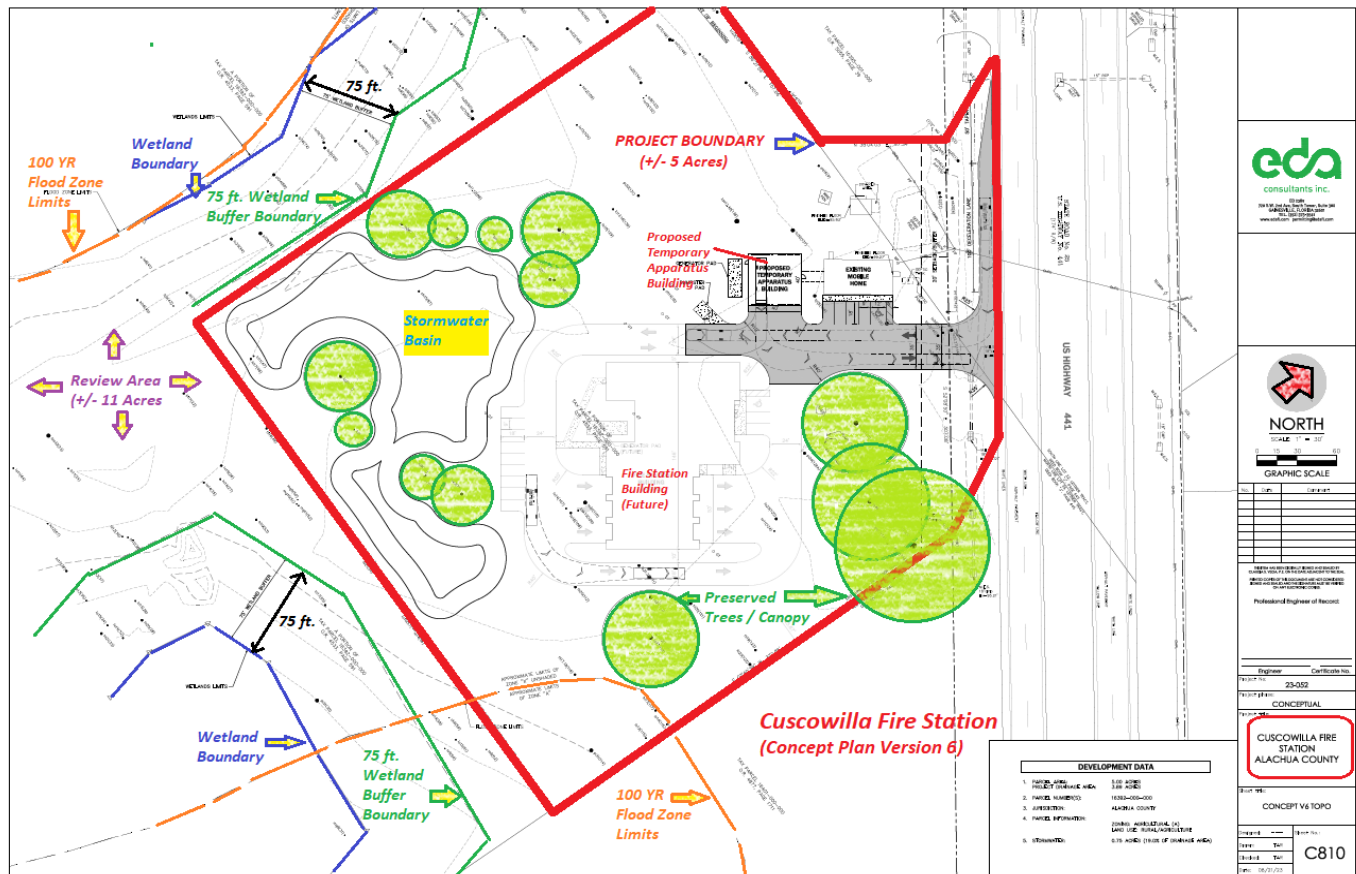




## Surface Waters, Wetlands, and Floodplains

The aerial above depicts the GPS points of the two wetland boundary delineations, locations of adjacent 75 ft. wetland buffer boundaries, and the 100-year floodplain within the 11-acre review area. The two wetlands within the review area and the third wetland identified offsite are regulated under Article VI, Chapter 406, ULDC. The wetland boundaries within proximity of the project boundary were delineated by Ms. Rodriguez and Ms. McGee based on the uniform statewide methodology adopted by the Florida Department of Environmental Protection and Water Management Districts to delineate wetlands [FAC Rule 62-340.300]. For the offsite "Sinkhole Pond" wetland, they confirmed during the site evaluation the wetland limits are sufficiently accurate as depicted on GIS to buffer and protect the resource.





## Concept Design Plan & Site Photos

The wetland GPS locations and adjacent wetland buffer boundaries are depicted on the proposed 5-acre project area that is imbedded within the northeastern portion of the 11-acre review area. This designated project boundary and associated conceptual design (version 6) for the fire station and other facilities are depicted above and last page of the memo. To provide additional wetland and buffer protection, the designated project boundaries were delineated based on ensuring the two wetlands and associated 75 ft. buffers are beyond the project boundary.

The pasture/old field area covers approximately 1-acre with dominant coverage of bahia grass (*Paspalum notatum*) and scattered native grasses and forbs; including broomsedge (*Andropogon spp.*), fleabane (*Erigeron spp.*), and prickly pear cactus (*Opuntia mesacantha*). The location of "Proposed Temporary Apparatus Building" and associated parking area (gray highlight on plan sheet) will be adjacent to the existing mobile home. This pasture is also where the permanent "Fire Station Building (Future)" and associated parking and loop drive will be constructed within the near future (reference photo above).



The proposed stormwater basin will be excavated within the northwest area of the 5-acre project boundary. This area currently includes forested upland habitat, with canopy dominated by live oak (*Quercus virginiana*), with understory of scattered saw palmetto (*Serenoa repens*), grapevine (*Vitis spp.*), and laurel oak, live oak, and sweetgum tree saplings (right photo). As depicted on the plan, larger oak specimens have been proposed for protection by having the basin excavation perimeter limited to the drip line on the canopy.



## Listed Species/Listed Species Habitats

As depicted in a previous aerial and site photo, potential gopher tortoise burrows (6) were identified within the review area. The proposed project must follow all Florida Fish and Wildlife Conservation Commission (FWC) guidelines and obtain any required state permits regarding gopher tortoise protection, prior to clearing vegetation, grading or filling the site [Sec. 406.05, ULDC; Sec. 406.28, ULDC]. The one acre of pasture /old field is insufficient to qualify for “*Listed Species Habitat*” according to Sec. 406.28, ULDC. However, there is sufficient gopher tortoise habitat located elsewhere on the 211-acre property, so in coordination with FWC, relocation of gopher tortoise would be recommended to appropriate upland habitat areas within the property.

## Historical and Paleontological Resources

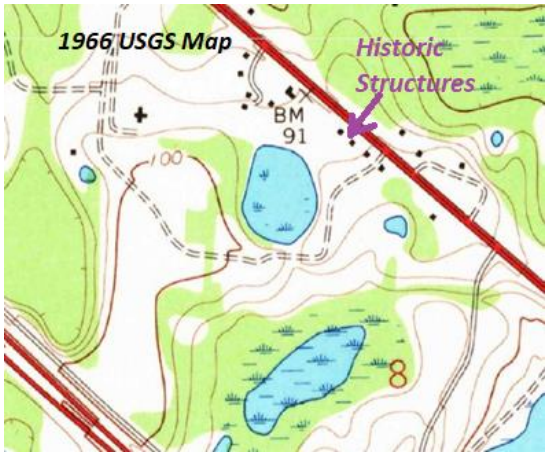
The 211-acre Cuscowilla Park property is named after the Seminole community documented by William Bartram during his travels through Florida in the 18<sup>th</sup> Century. The exact location of the Cuscowilla community has not been located or documented, however it is believed to be within the vicinity between Paynes Prairie and the Town of Micanopy.

Review of the Florida Master Site File (FMSF) records indicate no archaeological surveys have been previously conducted within the subject 211-acre property. However, the presence of several wetlands and nearby George’s Pond are indicators that archaeological resources could be within the vicinity. Given the project site’s proximity to water resources, Paynes Prairie, and Micanopy; it is possible additional archaeological surveying, Cultural Resources Assessment (CRA) and/or construction monitoring may be recommended by the State Division of Historical Resources [Sec. 406.77, ULDC; Sec. 406.82, ULDC]. EPD staff will coordinate with DHR and provide related documentation to the appropriate County departments.

There are no historic structures recorded in the FMSF on the subject property, however there are three such structures adjacent to the review area. These three resources are listed on the following table and associated locations depicted on the aerial (next page).

FMSF No.	Address	Year Built	Style	Survey evaluation notes
AL03809	12212 US 441	1935	Frame Vernacular	Ineligible as a contributor to NR district
AL04590	12341 US 441	1910	Georgian Revival	Potential contributor to NR district
AL03810	12410 US 441	1945	Minimal Traditional	Potential contributor to NR district





Additionally, the 1966 USGS topographic quadrangle above references two historic-aged structures were at one time present within the review area.

### High Aquifer Recharge Areas

The review area is near the boundary of “Stream-to-Sink Basin” area and within a “Vulnerable” area, according to the Alachua County Floridan Aquifer High Recharge Area map provided by the Alachua County Department of Growth Management and defined in Chapter 406, Article 8 (Springs and High Aquifer Recharge Areas) of the ULDC. Applications may be required to comply with the Stormwater Element of the Comprehensive Plan and Chapters 407 (General Development Standards) and 353 (Hazardous Materials) of the ULDC.

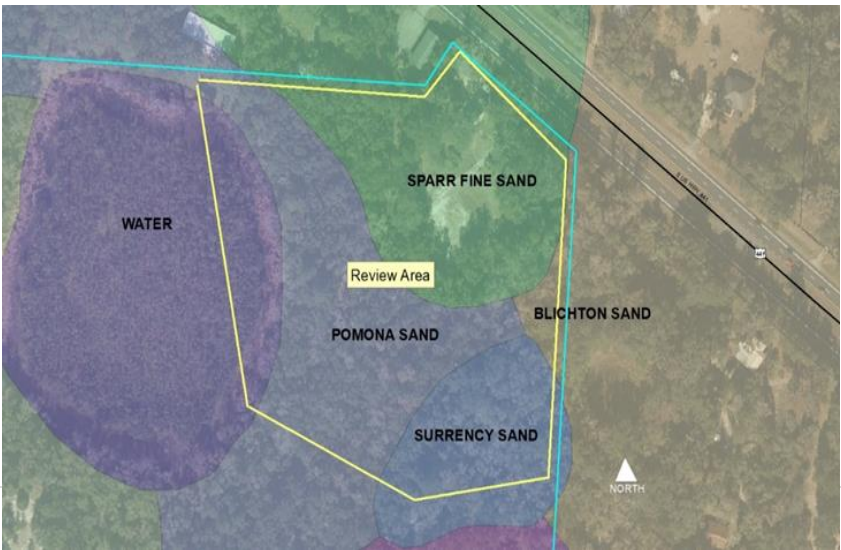
([https://growthmanagement.alachuacounty.us/maps/Floridan\\_Aquifer\\_High\\_Recharge\\_Area\\_Map.pdf](https://growthmanagement.alachuacounty.us/maps/Floridan_Aquifer_High_Recharge_Area_Map.pdf))

### Wells

A single well was identified within the review area, apparently to supply the nearby residence. The well is currently proposed to be retained, however if the well is to be abandoned, it will require to be plugged and documentation of that action in the form of a completed well registration form or well completion report sent to ACEPD [Article XI, Chapter 406, ULDC].

### Soils

The following NRCS Soil Survey of the review area and associated table summarize the soil drainage classes. Hydric characteristics associated with soil map unit such as Surrency sand and the “water” designation are typically associated with wetlands and/or surface waters.



Soil Type	Drainage Characteristic	Hydric Rating
Sparr fine sand, 0 to 8 percent slopes	Somewhat poorly drained	No
Pomona sand, 0 to 2 percent slopes	Poorly drained	No
Water	N/A	N/A
Surrency sand, 0 to 1 percent slopes	Very poorly drained	Yes
Blichton sand, 2 to 5 percent slopes	Poorly drained	No

## Topography/Steep Slopes

Elevations within the review area range from approximately 96 feet in the northeast and central portion to 88 feet in the marsh lake. No steep slopes were observed in the review area.

## Special Area Study Resource Protection Areas, Strategic Ecosystems, and Significant Habitat

No special area study resource protection areas, strategic ecosystems, or significant habitat were identified within the review area. The nearest strategic ecosystem is Barr Hammock – Levy Lake SES, located approximately 3,600 ft. to the southwest.

## Significant Geological Features

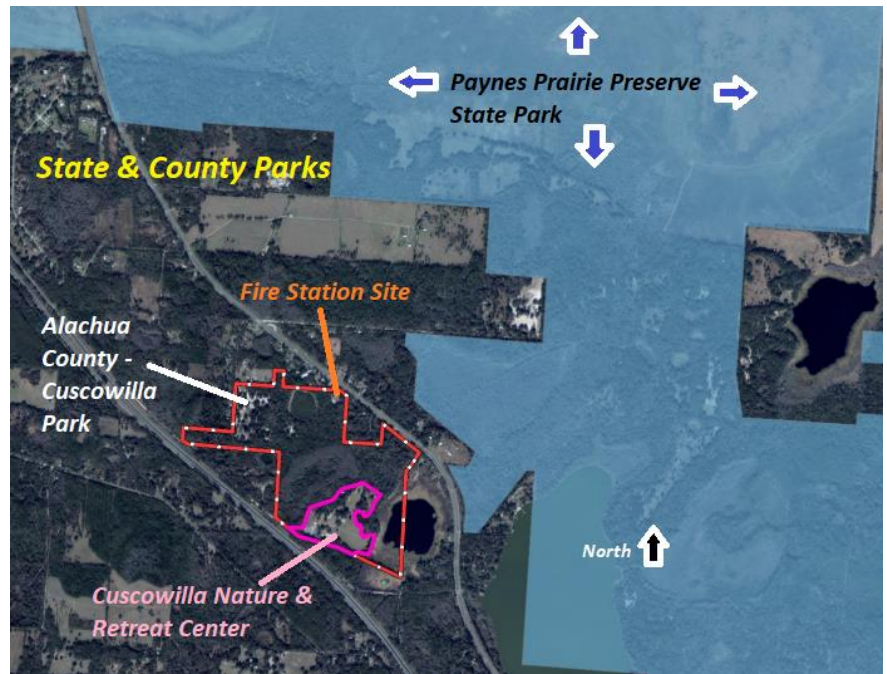
No significant geological features (caves, sinkholes, springs, etc.) occur within the review area.

## Non-native Invasive Species

Non-native invasive species were not observed within the review area.

## Recreation/Conservation/Preservation Lands

The proposed fire station site is within the northeastern boundary of Alachua County's 211-acre Cuscowilla Park and across US Hwy. 441 from the 21,000-acre Paynes Prairies Preserve State Park. Access to and from the fire station will only be to Hwy. 441, and not near any public access locations into the parks.



<https://www.alachuacounty.us/Depts/parks/Pages/Details.aspx?park=Cuscowilla>

## Wellfield Protection Areas

The Project Site is not located within or near the Murphree Well Field Management Zones according to the Alachua County Murphree Well Field Management Zones map provided by the Alachua County Department of Growth Management.

([https://growthmanagement.alachuacounty.us/maps/cons\\_murphree\\_well\\_field.pdf](https://growthmanagement.alachuacounty.us/maps/cons_murphree_well_field.pdf)).




## Mineral Resource Areas

There was no evidence of mining activity within the review area.

## Hazardous Materials Storage Facilities, Contaminated Soil

The locations of hazardous materials storage facilities currently monitored by Alachua County are depicted on the right aerial. There are no documented storage facilities or contaminated soil areas depicted on the available FDEP maps and none were observed during the field survey.





**Alachua County Board of County Commissioners**  
**Department of Growth Management**  
 10 SW 2<sup>nd</sup> Ave., Gainesville, FL 32601  
[Website: https://growth-management.alachuacounty.us](https://growth-management.alachuacounty.us)

Submit application to: **Development Review**  
 Tel. 352.374.5249  
[Email: developmentreview@alachuacounty.us](mailto:developmentreview@alachuacounty.us)

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### ENVIRONMENTAL RESOURCES ASSESSMENT CHECKLIST

Pursuant to Alachua County Comprehensive Plan 2002, as amended, Conservation Open Space Element Policy 3.4.1, applications for land use change, zoning change, and development approval shall be required to submit an inventory of natural resource information. The inventory shall include site specific identification, analysis and mapping of each resource present on or adjacent to the site. The identification and analysis shall indicate information sources consulted.

**Natural Resources Checklist:**  
 Check "Yes" for each resource or resource characteristic identified and discuss and provide supporting material.  
 Check "N/A" for each resource or resource characteristic not present or otherwise relevant to the application.

Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Surface Waters (ponds, lakes, streams, springs, etc.)
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Wetlands
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Surface Water or Wetland Buffers
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Floodplains (100-year)
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Special Area Study Resource Protection Areas (Cross Creek, Idylwild/Serenola, etc.)
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Strategic Ecosystems (within or adjacent to mapped areas)
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Significant Habitat (biologically diverse natural areas)
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Listed Species/Listed Species Habitats (FNAI S1, S2, & S3; State or Federally E, T, SSC)
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Non-native Invasive Species
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Recreation/Conservation/Preservation Lands
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Significant Geological Features (caves, springs, sinkholes, etc.)
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	High Aquifer Recharge Areas
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Wellfield Protection Areas
Yes	<input checked="" type="checkbox"/>	N/A	<input type="checkbox"/>	Wells
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Soils
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Mineral Resources Areas
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Topography/Steep Slopes
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Historical and Paleontological Resources
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Hazardous Materials Storage Facilities
Yes	<input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>	Contamination (soil, surface water, ground water)

**Signed:** EPD - NR Division - Mark Brown *MB* **Project #:** Cuscowilla Fire Station **Date:** 9-20-2023

For assistance in completing this form, please visit the Alachua County Environmental Protection Department (ACEPD) website at <http://alachuacounty.us/Depts/EPD/Pages/EPD.aspx> or contact ACEPD at (352) 264-6800.

Form revised on August 2019.

# Alachua County - Cuscowilla Fire Station - Concept Plan (Version Six – Dated 8/21/23)

