EW Consultants, Inc. Natural Resource Management, Wetland, and Environmental Permitting Services



MEMORANDUM

TO: Josh Long Morris Crady

FROM: Ed Weinberg

DATE: October 4, 2023

RE: South Florida Gateway - Agriculture to Industrial Parcel 1 - Agricultural Evaluation

The purpose of this memorandum is to provide supporting information regarding the proposed conversion of designated agricultural land to commercial or industrial land use in accordance with Policy 4.13A.1(2) of the Martin County Comprehensive Plan for the South Florida Gateway – Ag to Industrial Parcel 1 property.

Property Description -

The subject property (32.26 +/- acres) is comprised of previously disturbed land that has been altered from its natural condition at different points in time, and currently, the property is an inactive tree nursery. Analysis of historic aerial photography indicates agricultural improvements and activities on the property as far back as 1940. The property was improved in the 1980s as a cattle ranch, and as a tree farm between 1986 and 1992. There has been continuous agricultural use of the property for at least 60 years. The unmanaged areas of the property include remnants of the irrigation system, weed fabric, shade cloth, various pots and other nursery supply materials. Agricultural use and active management of the property is not currently ongoing.

The Environmental Assessment completed for the property indicates that there are no wetland present (subject to verification by South Florida Water Management District) and there are no native upland habitats present on the property. There is no surface water management treatment system present on the property.

Any proposed industrial development of the property would require a permitted surface water management system that would provide water quality treatment and attenuation in accordance with current standards. A permitted surface water management system constructed to current standards for water quality treatment and runoff attenuation will ultimately benefit downstream water quality when compared to the current system which does not provide for water quality treatment or runoff attenuation in accordance with current regulations.

<u> Agricultural Assessment -</u>

According the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS), the only soil type that occurs within the property is Pineda-Riviera Fine Sand (soil unit symbol 21). The USDA Soil Survey of Martin County Area, Florida (issued 1981) provides descriptions of soil types that occur within Martin County for the purposes of land planning and highlights soil limitations and improvements required to overcome the limitations of the various soil types for selected land uses. According to the USDA, Pineda - Riviera Fine Sand has low natural fertility and "very severe limitations for cultivated crops". Agricultural practices that may be supported by this soil type include citrus and improved pasture grasses, however, a carefully designed water control system and regular applications of fertilizer and lime would be necessary for successful production and control of overgrazing is recommended. This soil type is also characterized as poorly drained with rapid permeability in surface soils and changing to very slow in the subsoil.

Control of overgrazing by livestock is accomplished by regular rotation of the cattle between pastures. However, the property size and location would be limiting factors in maintaining successful grazing, because raising livestock on the subject property would require subdividing the property into several individual and fenced off pasture areas. According to IFAS, stocking density for Florida pasture systems is dependent on the quality of the pasture and ranges from 1.5-4 acres per cow on intensively managed land to 5-25 acres per cow on native range.

With only 32 +/- acres of contiguous agricultural land for improved pasture, the limited capacity of the property for livestock would not be economically viable. Furthermore, the regular application of fertilizers and lime that would be required for improving the pastures for sustaining livestock or citrus agricultural practices combined with the poor drainage and permeability characteristics of the soil could ultimately lead to downstream water quality impacts.

Conversely, a surface water management system engineered for industrial development would include water retention systems that are designed for filtering and storing runoff from the development before reaching downstream waters.