Alachua County
Board of County Commissioners

Michele Lieberman
County Manager

May 8, 2025

Mike DaRoza, City Manager
City of Alachua
15100 NW 142 Terrace
Alachua, FL 32615

via email: mdaroza@cityofalachua.org

RE: Tara April Project Near Mill Creek Sink

Dear Mr. DaRoza,

The Alachua County Board of County Commissioners appreciates the City of Alachua's continued dedication to sound planning and protection of our community's shared water resources. In furtherance of these shared goals, the County has serious concerns regarding stormwater management of the proposed Tara Forest April, Tara Forest West, and Tara Phoenicia projects and requests affected party status and opposes the proposed expansion of the stormwater system at Tara April, which is intended to accommodate the development of the Tara Phoenicia site. With the Tara Phoenicia application scheduled to be reviewed by the Suwannee River Water Management District (SRWMD) Governing Board meeting on May 13, 2025, we anticipate that Tara April and Tara Phoenicia may be coming to the Board for review in the next month or two.

The County is a substantially affected party due to its receivership and operation of the public water utility named the Santa Fe Hills Water System and its status as the beneficial holder of a conservation easement covering approximately 198 acres of Camp Kulaqua in northwestern Alachua County. In 2005 and 2006, a dye trace study was performed in the Mill Creek Sink area and demonstrated the direct hydrological connection between Mill Creek Sink and the Santa Fe Hills Water System, as well as Camp Kulaqua. Water quality impacts to the Mill Creek Sink associated with the proposed Tara April development could more directly or more significantly harm the County's property interests when compared to the general impacts on the public at large. A copy of the dye trace study has already been provided to the City of Alachua.

A site assessment of Tara Forest, Tara Phoenicia, and Tara Baywood performed by Wood in 2021 identified areas downslope (to the West) of the 75-foot contour elevation likely to be experiencing active subsidence. Wood recommended site-specific engineering and geological studies to determine if there is evidence of ground loss since the 1960's and if there is an unacceptable

likelihood of future subsidence or of the potential for sinkhole development. Wood additionally recommended avoiding development in areas shown to have an unacceptable likelihood of continuing ground loss or sinkhole formation. The geotechnical portion of this report and an email follow up from the geotechnical engineer has been attached to this letter (Attachment A).

Wood performed these recommended geotechnical and geophysical studies during the design and development of the Mill Creek Sink WQ Improvement project, which is adjacent to the Tara April Site and near the Tara Phoenicia development. The Mill Creek Sink WQ Improvement project illuminated the very active nature of continued karst formation in the area. As a result of these studies, the facility was redesigned and moved away from existing infrastructure to minimize the potential effects that it could have on adjacent properties. Wood's geotechnical report and a draft of G3's "Report of Geophysical Exploration Using the MERIT System" for Mill Creek Sink Water Quality Improvement Project from January 2020 have been attached to this letter (Attachment B).

During construction of the Mill Creek Sink Water Quality Improvement Project, a chimney opened onsite June 4, 2021. A chimney is a surficial expression of subsurface subsidence, a "warning sign" for sinkhole formation. Construction oversight logs and the subsequent geotechnical analysis surrounding this event were requested from the City of Alachua but were not received in time to include with this letter.

The National Speleological Society has performed extensive mapping of the Mill Creek Cave System and has shared the mapped extents with Alachua County. A figure is attached to this letter showing the extent of the proposed Tara Phoenicia development with relation to that 75-foot contour and the mapped cave system (Attachment C). This mapped cave system captures areas large enough for a diver to fit. It is very likely that this cave system is much more extensive and complex and extended by smaller conduits that do not allow human passage, but do allow the movement of water and any contaminants.

The 1977 Bureau of Geology's "The Geology of the Western Part of Alachua County, Florida" delineates what is known as the cross-county fracture zone, which can be seen in Attachment D. This cross-county fracture zone is described as follows, "This linear trend of solution features is considered to be a direct result of an extensively fractured zone both in the Crystal River and the Hawthorne Formations. Preferential solution occurred along this fractured zone in the Crystal River Formation. This was accentuated by downward percolation of ground water along joints and fractures in the Hawthorne Formation." This explains why there are so many subterranean voids in this area and such a short travel time to the Santa Fe River & Springs. Preferential solution/groundwater flow could result in the formation of much larger voids compared to other parts of Alachua County. The entirety of both the Tara April and Tara Phoenicia sites fall within the cross-county fracture zone.

Alachua County strongly encourages the City of Alachua to require the applicant to perform further geophysical investigation via Ground Penetrating Radar (GPR) and Electrical Resistivity

Imaging (ERI) surveys prior to commencement of construction activities and prior to approval of any site design expansion or development plan on this site, as recommended by Wood's site assessment report and geotechnical engineer. Because of the mapped Mill Creek Cave system, a significant geological feature under the City's Comprehensive Plan, and the known nature of active karst formation in the area, it is irresponsible to perform any significant land development and earth moving activities without thorough subsurface exploration. While sinkhole formation is a common consideration for land development within Alachua County, these known characteristics for this area warrant this additional data gathering to best protect public health and safety and requesting this analysis and investigation is consistent with Objective 1.7 *Geological Resources* of the Conservation and Open Space Element of the City's Comprehensive Plan, which states the City shall identify, protect and conserve significant geological resources and their natural functions.

If you have any questions, please contact me or Stephen Hofstetter, Director of our Environmental Protection Department. I look forward to hearing from you and working together to preserve our community and protect our water resources.

Sincerely,

Michele Lieberman
County Manager

Attachments – 3

cc: Board of County Commissioners
Sylvia Torres, County Attorney
Stephen Hofstetter, County Environmental Protection Department Director
Marian Rush, City Attorney