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MEMORANDUM

To: Polk County Planning Dept. Date: June 12, 2025

From: Mitchell Mason, PE Project: TNC's Tiger Creek Preserve

Subject: Level 3 Conditional Use Impact Assess

Cabins

The following Impact Statement is provided in accordance with Polk County requirements for a Level 3 Conditional Use application for the above-referenced project. The subject parcel for which the Conditional Use Permit Application is sought is identified as Polk County Property Appraiser's Parcel No. 28310200000021010, which is an approximately 60-acre parcel of land in unincorporated Polk County located within The Nature Conservancy's Tiger Creek Preserve. Tiger Creek Preserve is one of The Nature Conservancy in Florida's flagship nature preserves focusing on advancing conservation through education and training, outreach and volunteerism, science and research, and land stewardship. The Tiger Creek Preserve consists of approximately 4,980 acres of land with over ten miles of hiking trails which are open year-round during daylight hours for visitors to enjoy Florida's natural habitat within the Lake Wales Ridge. The location of the 60-acre subject parcel within the larger Tiger Creek Preserve is delineated in red on the attached map. The proposed improvements to the subject parcel are the installation of five 12'x42' modular cabins that will be delivered to the site to provide housing for support workers, scientists, seasonal interns and volunteers that assist the preserve with habitat restoration activities, research, wildfire response, and providing aid to lost hikers. Other improvements associated with these cabins include a private well and onsite septic system. The cabins will not be used by the general public. Per discussions with County staff, Lodges and Retreats was determined to be the most applicable conditional use for the project, which requires a Level 3 review in the A/RR zoning district.

Land and Neighborhood Characteristics

- 1. How and why is the location suitable for the proposed uses?
 - The site is located within The Nature Conservancy's Tiger Creek Preserve, within the same tax parcel as the preserve's office and main parking area. The cabins will be utilized to house staff, volunteer workers, scientists and seasonal interns who perform land conservation and maintenance activities within the Preserve on a short-term and temporary basis.
- 2. What are, if any, the incompatibility and special efforts needed to minimize the differences in the proposed use with adjacent uses?
 - The subject parcel is bound on the east, west and north by the additional approximately 4,920 acres of property owned by The Nature Conservancy located within the Tiger Creek Preserve. To the south of the subject parcel is a subdivision of rural character and compatible with the proposed use. The cabins will be located within the middle of the subject parcel at a distance from the southerly property boundary.

- 3. How will the request influence the future development of the area?
 - The proposed conditional use for the five cabins will have no impact on future development of the area. Installation of the cabins will enable The Nature Conservancy's staff to more efficiently operate and maintain the onsite natural conservation lands by providing on-site short-term/temporary housing for some of the workers, scientists, interns and volunteers. These improvements will not generate any additional traffic or trips to the preserve and in fact will reduce the number of trips on the road network because the workers who utilize the short-term/temporary housing will no longer have to travel to and from the preserve to engage in their on-site activities.

Access to Roads and Highways

- 1. What is the number of vehicle trips to be generated daily and at the PM peak hour based on the latest Institute of Traffic Engineers (ITE)? Please provide a detailed methodology and calculations.
 - The requested improvements are an ancillary use to the existing operations that are currently in place at the Tiger Creek Preserve and will be used for short-term/temporary lodging of workers (land managers, interns, volunteers and scientists). These workers currently commute to the site from nearby hotels, thus no additional trips are anticipated. Utilizing the proposed on-site short-term/temporary lodging will reduce the number of trips on the nearby road network by removing the commute of these individuals from surrounding areas.
- 2. What modifications to the present transportation system will be required as a result of the proposed development?
 - No modifications to the transportation system are required. The site is served by access from Pfundstein Rd and access to the cabins will be provided from the existing roads within the subject property.
- 3. What is the total number of parking spaces required pursuant to Section 708 of the Land Development Code?
 - Per Sec. 708, Lodges and Retreats warrants a site-specific determination. A total of 5
 parking spaces are proposed to accommodate the 5 cabins, each of which is a onebedroom unit.
- 4. What are the proposed methods of access to existing public roads (e.g., direct frontage, intersecting streets, and frontage roads)?
 - Access will be provided from an existing driveway connection on Pfundstein Rd.

Sewage

Determine the impact caused by sewage generated from the proposed development. At a minimum, address the following specific questions in your response:

1. What is the amount of sewage in gallons per day (GPD) expected to be generated by the



proposed development? (Response may be based on Section 703.F of the LDC)

- Municipal sewer connection is not available; the cabins will utilize a shared septic system onsite.
- 2. If on-site treatment is proposed, what are the proposed method, level of treatment, and the method of effluent disposal for the proposed sewage?
 - The onsite septic system will comply with all applicable DEP and DoH requirements.
- 3. If offsite treatment, who is the service provider?
 - No offsite treatment will occur.
- 4. Where is the nearest sewer line (in feet) to the proposed development (Sanitary sewer shall be considered available if a gravity line, force main, manhole, or lift station is located within an easement or right-of- way under certain conditions listed in Section 702E.3 of the Land Development Code)
 - The nearest sewage line is approximately 13,200 feet away from the site.
- 5. What is the provider's general capacity at the time of application?
 - No connection to municipal sewer is proposed.
- 6. What is the anticipated date of connection?
 - No connection to municipal sewer is proposed.
- 7. What improvements to the providers system are necessary to support the proposed request (e.g., lift stations, line extensions7expansions, interconnects, etc.)?
 - No connection to municipal sewer is proposed.

Water Supply

- 1. What is the proposed source of water supply and/or who is the service provider?
 - Water will be provided by a private well located onsite. No municipal connection is proposed.
- 2. What is the estimated volume of consumption in gallons per day (GPD)? (Response may be based on Section 703 of the LDC)
 - Water will be provided by a private well located onsite. No municipal connection is proposed.
- 3. Where is the nearest potable water connection and re-claimed water connection, including the distance and size of the line?
 - The project site is located over 2 miles away from the nearest potable water line in Babson Park.
- 4. Who is the service provider?



- Water will be provided by a private well located onsite. No municipal connection is proposed.
- 5. What is the anticipated date of connection?
 - Water will be provided by a private well located onsite. No municipal connection is proposed.
- 6. What is the provider's general capacity at the time of application?
 - Water will be provided by a private well located onsite. No municipal connection is proposed.
- 7. Is there an existing well on the property(ies)?
 - No existing well on the project site. A new well is proposed to serve the cabins.

Surface Water Management and Drainage

- 1. Discuss the surface water features, including drainage patterns, basin characteristics, and flood hazards, (describe the drainage of the site and any flooding issues)
 - The site currently slopes downhill to the south to a small lake south of the project site.
 The proposed cabins and associated parking will result in a de minimis increase in impervious area to the site and will not cause any adverse impacts to the flood stage of the pond.
- 2. What alterations to the site's natural drainage features, including wetlands, would be necessary to develop the project?
 - No alterations to the site's natural drainage features are expected. The project will
 maintain its current natural drainage patterns and will utilize sedimentation and
 erosion control measures during construction to protect the water quality of the
 onsite pond. No wetland impacts are proposed.

Environmental Analysis

- 1. Discuss the environmental sensitivity of the property and adjacent property in basic terms by identifying any significant features of the site and the surrounding properties.
 - There are wetlands associated with a small lake located south of the project site which will remain undisturbed by this project. Wildlife surveys for listed species were conducted and one active sand skink burrow was identified, and the project proposes to meet the required undisturbed buffer zone for this burrow.
- 2. What are the wetland and floodplain conditions? Discuss the changes to these features which would result from the development of the site.
 - No existing wetlands within the project area, wetlands south of the project site will remain undisturbed.



- 3. Discuss location of potable water supplies, private wells, public well fields (discuss the location, address potential impacts)
 - No public water infrastructure exists within several miles of the project site. The rural
 residences to the south are likely served by private wells, the nearest of which would
 be ±0.25 miles from the project site. Due to distance and low consumption there are
 no anticipated impacts from this project.
- 4. Discuss the location of Airport Buffer Zones (if any) (discuss the location and address, potential impacts).
 - There are no airport buffer zones located near the subject property.
- 5. Provide an analysis of soil types and percentage of coverage on site and what effect it will have on development.
 - Per the NRCS soil survey, the site is comprised of Astatula Sand, which is well-drained and anticipated to be suitable for compaction to support the proposed cabins.

Infrastructure Impact Information

What is the nearest location (travel distance), provider, capacity or general response time, and estimated demand of the provision for the following services:

- 1. Parks and Recreation;
 - The Nature Conservancy's Tiger Creek Preserve, no impact to demand.
- 2. Educational Facilities (e.g., preschool, elementary, middle school, high school);
 - No impact, no permanent residences are proposed.
- 3. Health Care (e.g., emergency, hospital);
 - Advent Health, Lake Wales, 12 miles, approximately 20 minutes, no impact to demand.
- 4. Fire Protection;
 - Polk County Fire Rescue Station 1, 4 miles away, 10 minutes, will need to serve the 5 proposed cabin structures in case of emergency.
- 5. Police Protection and Security;
 - Lake Wales Police Dept., approx. 12 miles, 20 minutes, no impact to demand.
- Emergency Medical Services (EMS);
 - Polk County Fire rescue Station 1, 4 miles away, 10 minutes, no impact to demand.
- 7. Solid Waste (collection and waste generation);
 - PCSW SE Landfill, additional solid waste generation for 5 one-bedroom cabins when occupied.



- 8. How may this request contribute to neighborhood needs?
 - The proposed cabins will cut down on lengthy travel times to Tiger Creek Preserve for workers (land managers, scientists, seasonal interns and volunteers) and enable The Nature Conservancy Staff to more effectively manage conservation lands.

Maps

• Please refer to the provided site plans for site location and project limits.



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