



TECHNICAL MEMORANDUM

To: Micah Smart, P.E.
Tohopekaliga Water Authority

Date: January 28, 2026

From: Brian Megic, P.E., BC.WRE

Reference: Huron WTP
Expansion

Subject: Toho Water Authority Huron Water Treatment Plant
Wells 5-5 and 5-7 Property Rezoning
Population Evaluation

BACKGROUND

Tohopekaliga Water Authority (Toho) owns and operates a potable water distribution system throughout most of Osceola County within the Urban Growth Boundary, and small portions of Orange County and Polk County. The portion of Toho's service area within Polk County is part of Poinciana, a Census Designated Place (CDP) in Florida. Toho owns and operates one water treatment plant (WTP), the Huron WTP, within Polk County.

Toho is currently in the process of expanding the Huron WTP from 4.81 MGD to 7.5 MGD to meet projected demands within the Poinciana area. As part of this expansion, Toho is planning to install two new groundwater supply wells, both of which are already authorized by the South Florida Water Management District under Toho's Water Use Permit (WUP) #49-00103-W. The original permitted location of proposed Well 5-7 is within a road right-of-way (ROW) not under the control of Toho. Furthermore, Toho prefers not to construct supply wells within a road ROW in case the road is ever expanded and due to Toho's limited rights within the ROW owned and controlled by other entities. As such, Toho identified and is in the process of purchasing a land parcel (Parcel ID 28-28-02-934710-147060) immediately east of the Huron WTP site, as shown in **Figure 1**.

It is planned to utilize the site depicted in **Figure 1** for new Well 5-7, and as a potential future site for Well 5-5 should it ever need to be relocated. Currently, Well 5-5 is located immediately east of the parcel Toho is in the process of purchasing. The utility company that originally owned and operated the Poinciana Water System (Toho purchased the system in the late-2000s) installed Well 5-5 within the ROW of Marigold Avenue. Toho plans to make accommodations on the parcel being purchased to relocate Well 5-5 should Marigold Avenue ever be widened and the existing well is in conflict with infrastructure associated with the road widening. A raw water main from the wells to the Huron WTP would also be installed on the parcel.

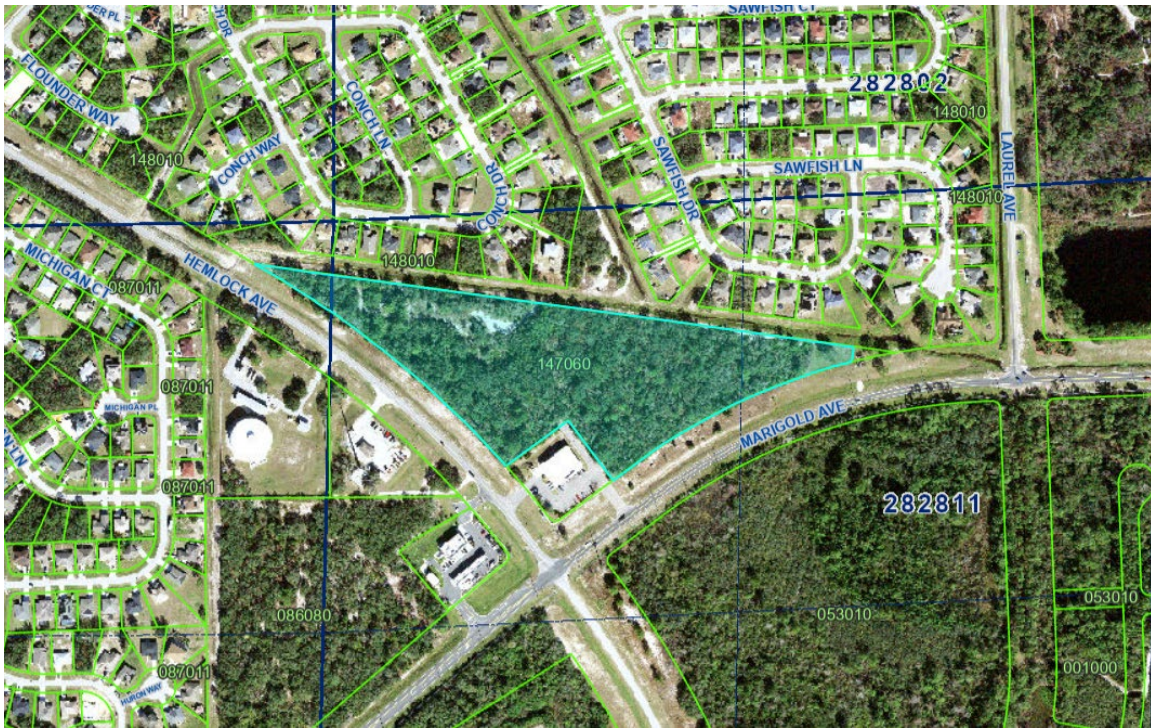


Figure 1. Planned Huron WTP Expansion Site

As part Toho's due diligence associated with purchasing the parcel, Toho developed a layout of the infrastructure planned for the site (**Figure 2**). As shown in **Figure 2**, the parcel is larger than Toho needs to accommodate its planned infrastructure. As such, Toho desires to subdivide the property and sell the portion of the property not required for its facilities (pink area shown in **Figure 2**).

The parcel is currently zoned for residential development. It is our understanding that as part of the process to subdivide the parcel that Polk County has indicated that the parcel should be rezoned for commercial use. Polk County further indicated that in order to rezone the parcel as commercial use, that a study would need to be performed to demonstrate that a population of 5,000 people live within 1.5 miles of the parcel. This memo summarizes the results of the population evaluation required by Polk County.

POPULATION EVALUATION

Liquid Solutions Group, LLC (LSG) worked with Toho to perform a Geographic Information System (GIS) screening analysis to identify all residential parcels within 1.5 miles (7,920 feet) of the property boundary of the parcel. Based on this screening evaluation, it was identified that 6,853 residential parcels are located within 1.5 miles of the subject property. Toho's customer service data was then used to identify that 5,454 of these parcels are active Toho customers. The results of this GIS screening are presented in **Figure 3**. Based on this information, it was determined that 5,454 residential parcels have existing dwelling units (DUs), and that 1,399 DUs could be constructed in the future.

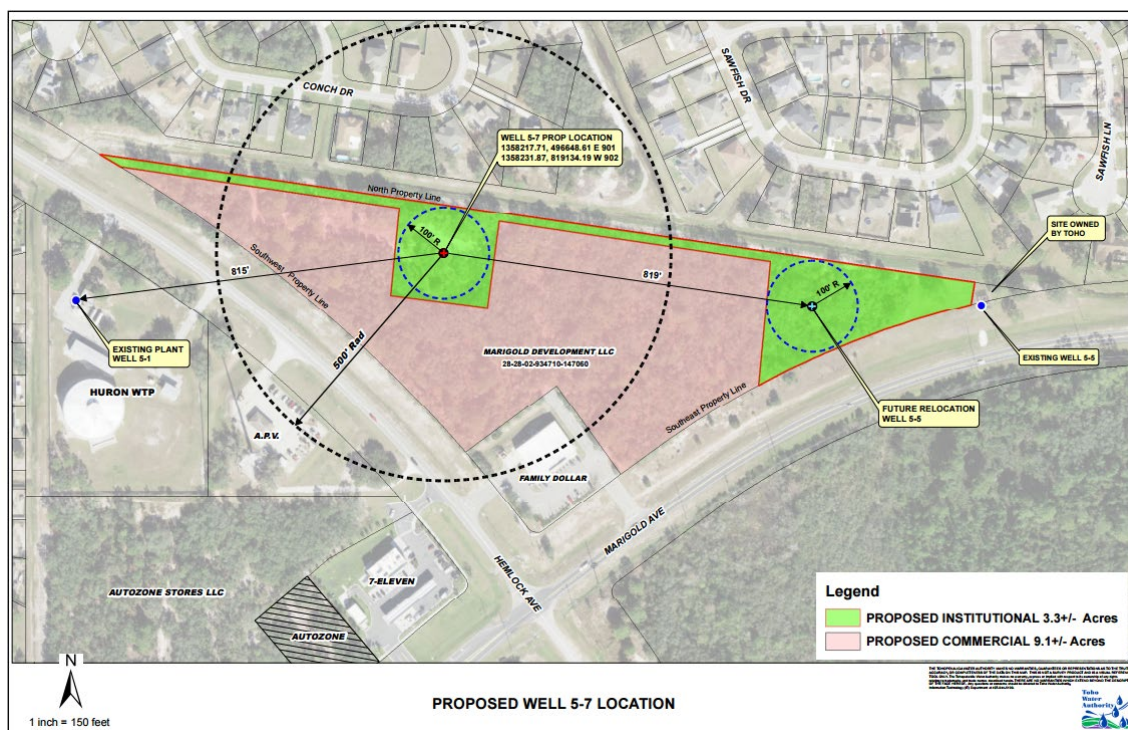


Figure 2. Huron WTP Expansion Well Infrastructure Layout

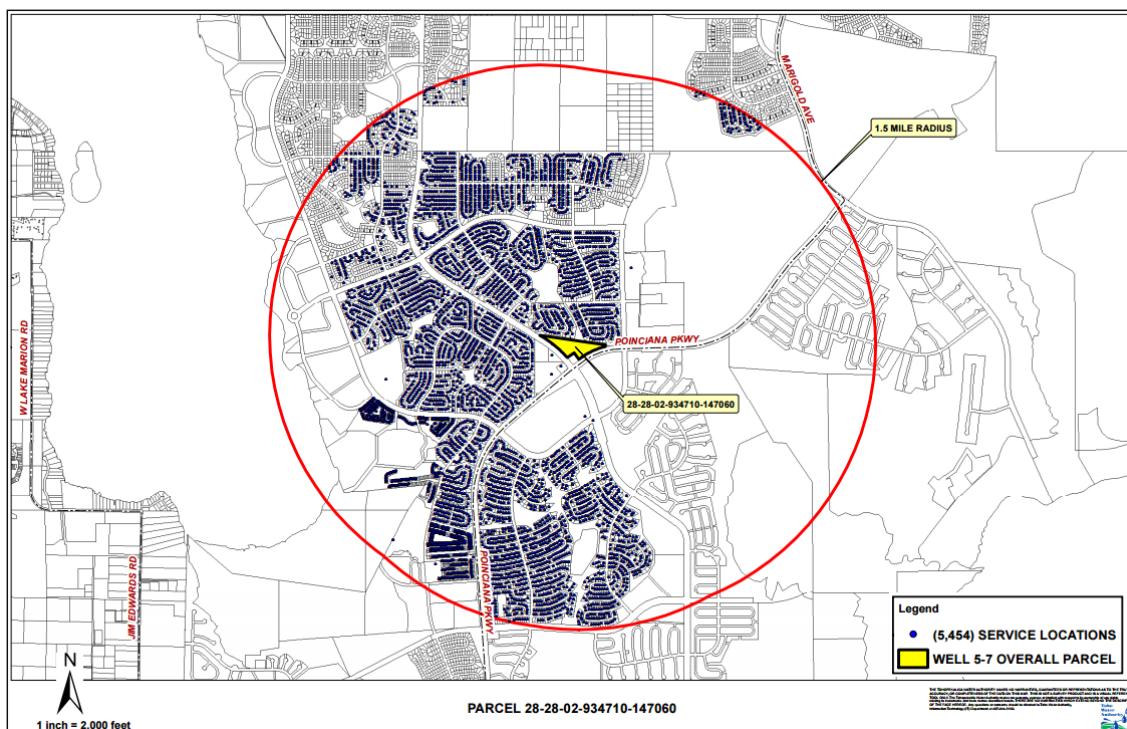


Figure 3. Population Evaluation Results

The 2020 United States Census indicates that the average persons per household in the Poinciana CDP is 3.08. Based on this, it is estimate that the current population that lives within 1.5 miles of the subject property is 16,798 (5,454 DUs x 3.08 people per DU). It is further estimated that this population could increase to 21,107 in the future based on residential lots that are currently platted but not yet developed. This information indicates that in excess of 5,000 people reside within 1.5 miles of the subject property; therefore, this parcel meets the Polk County population requirement associated with being rezoned for commercial use.

It is also of note that two large developments have been planned on the eastern side of the 1.5-mile buffer shown in **Figure 3**. These developments are planned, but are not yet platted. However, the planned development on Marigold Avenue that is furthest to the east in the 1.5-mile buffer on **Figure 3** is currently in Toho's Private Development Review process. Based on this, these areas could develop in the near future increasing the population within 1.5 miles of the subject property to well over 20,000 people.

SUMMARY AND CONCLUSIONS

Toho is expanding its Huron WTP from 4.81 to 7.5 MGD AADF. As part of this expansion, Toho is in the process of purchasing property immediately to the east of the Huron WTP to install a new groundwater well and raw water main required to expand the WTP. Toho is also planning to accommodate the potential future relocation of an existing Huron WTP well onto this property.

The property being purchased is larger than required for Toho's planned infrastructure. As such, Toho desires to subdivide the parcel and sell the resulting surplus land. As part of pursuing the subdivision of this parcel, Polk County has informed Toho that the property should be rezoned from residential to commercial use and that an evaluation needed to be performed to demonstrate that at least 5,000 people live within 1.5 miles of the site.

LSG performed a population evaluation to support the rezoning of the subject parcel from residential to commercial use. It was identified that 5,454 residential parcels with an estimated population of 16,798 existing within 1.5 miles of the property. Furthermore, an additional 1,399 residential parcels are platted but not yet developed within 1.5 miles of the property. If these parcels are developed in the future, the population within 1.5 miles of the property will increase to approximately 21,107. There are also two large planned developments that have not yet been platted within 1.5 miles of the property. These developments will further increase the population near the site.

In summary, the evaluation performed herein demonstrates that at least 5,000 people reside within 1.5 miles of the property, thereby meeting Polk County's requirement to rezone the property for commercial use.