PRWC Southeast Water Well Network additions

The Southeast Wellfield was permitted on October 2, 2024 for a 30 MGD of high-quality potable water production facility on Parcel 293008-000000-033020 with the following well sites:

- Well Site 1, Parcel 293121-000000-041010
- Well Site 2, Parcel 293120-000000-021010
- Well Site 10, Parcel 293032-993000-000181
- Well Site 11, Parcel 293032-000000-032080
- Well Site 12, Parcels 293029-992880-011010, 011020, 012010, & 012020

The PRWC is requesting Level 3 approval of two more well sites:

- Future Well Site 9, portion of Parent Parcel 293105000000031140
- Future Wells Site 14, portions of Parent Parcel 293008000000042010

These well sites will contain at least one well with a casing that reaches a minimum of 1,400 feet below the surface and extends to a depth of approximately 1,900 feet. The wells will be drilled to a depth of approximately 2,500 feet and then backfilled with cement grout to plug the base of the hole to prevent mineral intrusion (See Exhibit 2). There will also be test wells drilled to the Upper Floridan Aquifer depth (75-400 feet) to monitor any potential impacts (See Exhibit 3). The well sites will be unmanned and operated through a communication network called the SCADA system which stands for system control and data acquisition. This is a protected internal communication system accessible only by the system operators. There will be back-up generators at each well site and some electronics (See Exhibit 1).

Exhibit 1

Photo of Typical Well Site and Site Plan

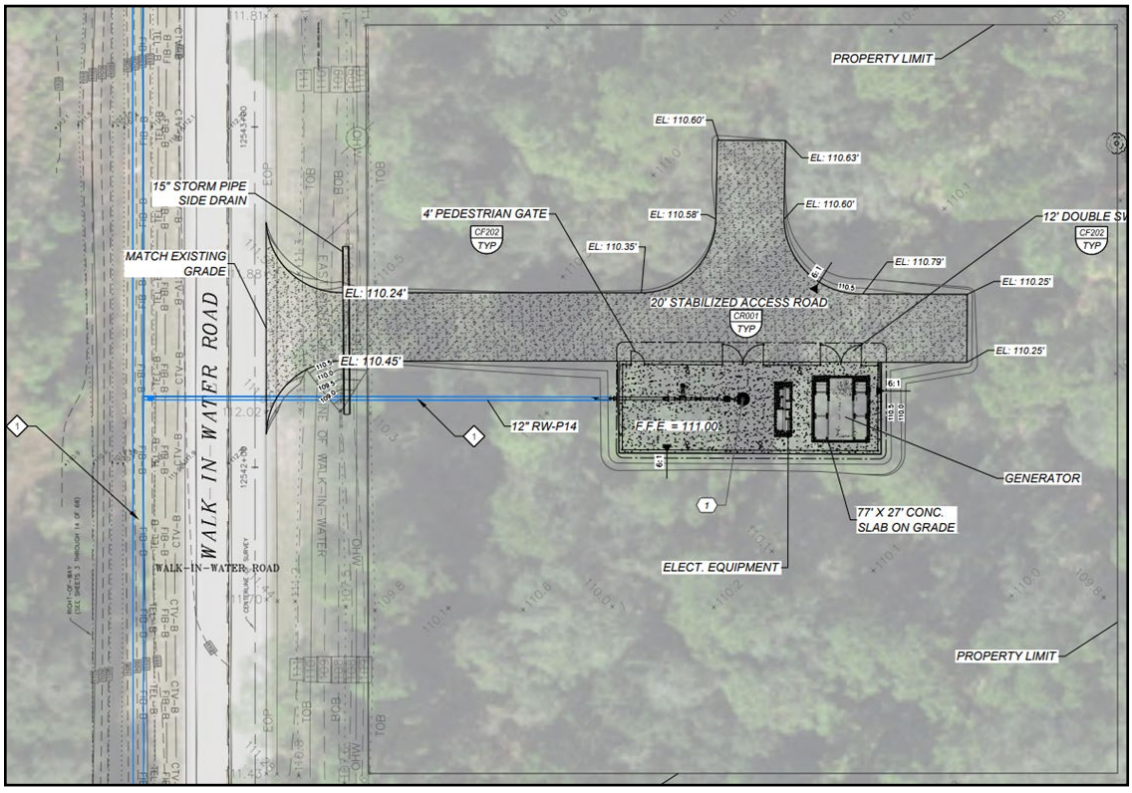
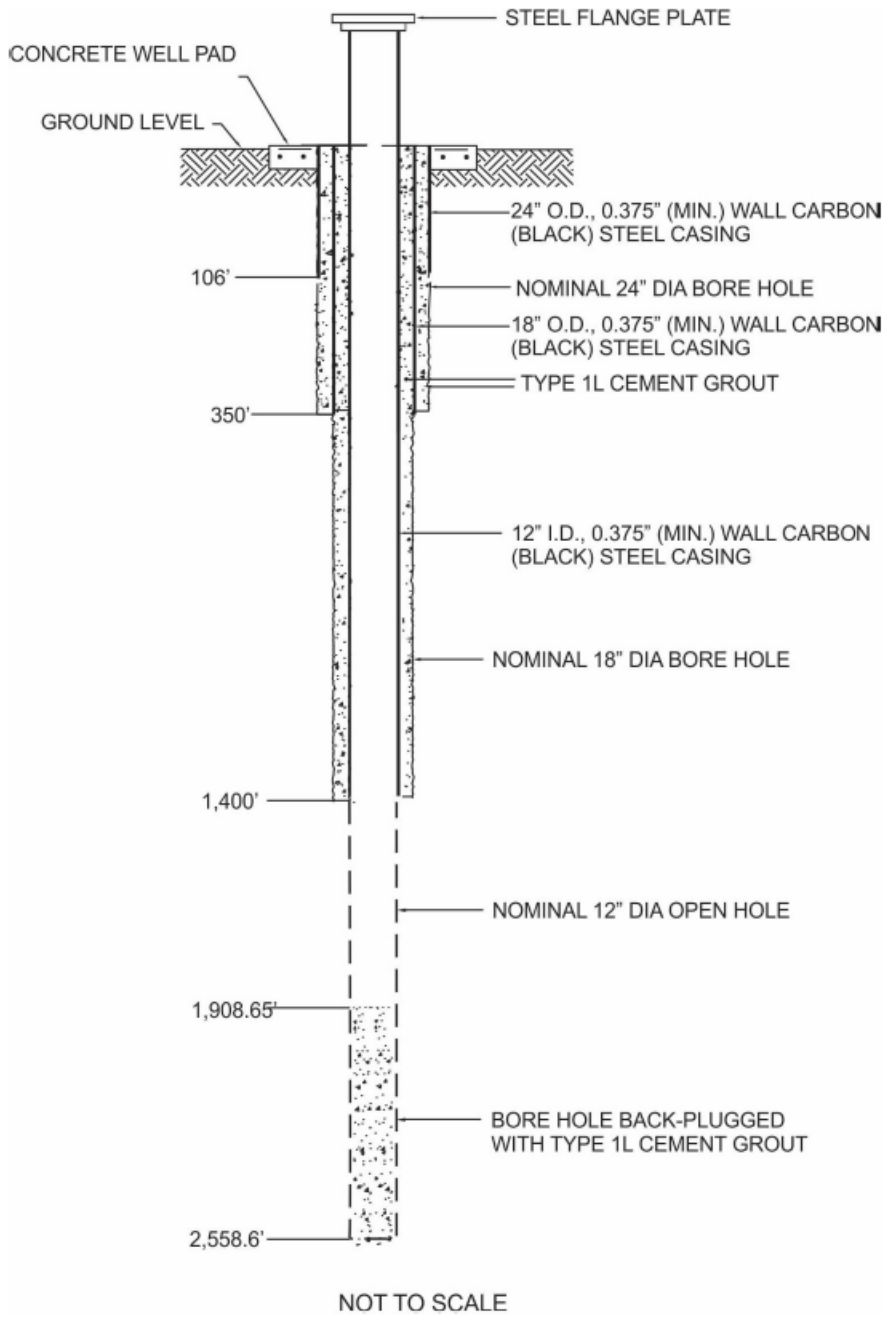


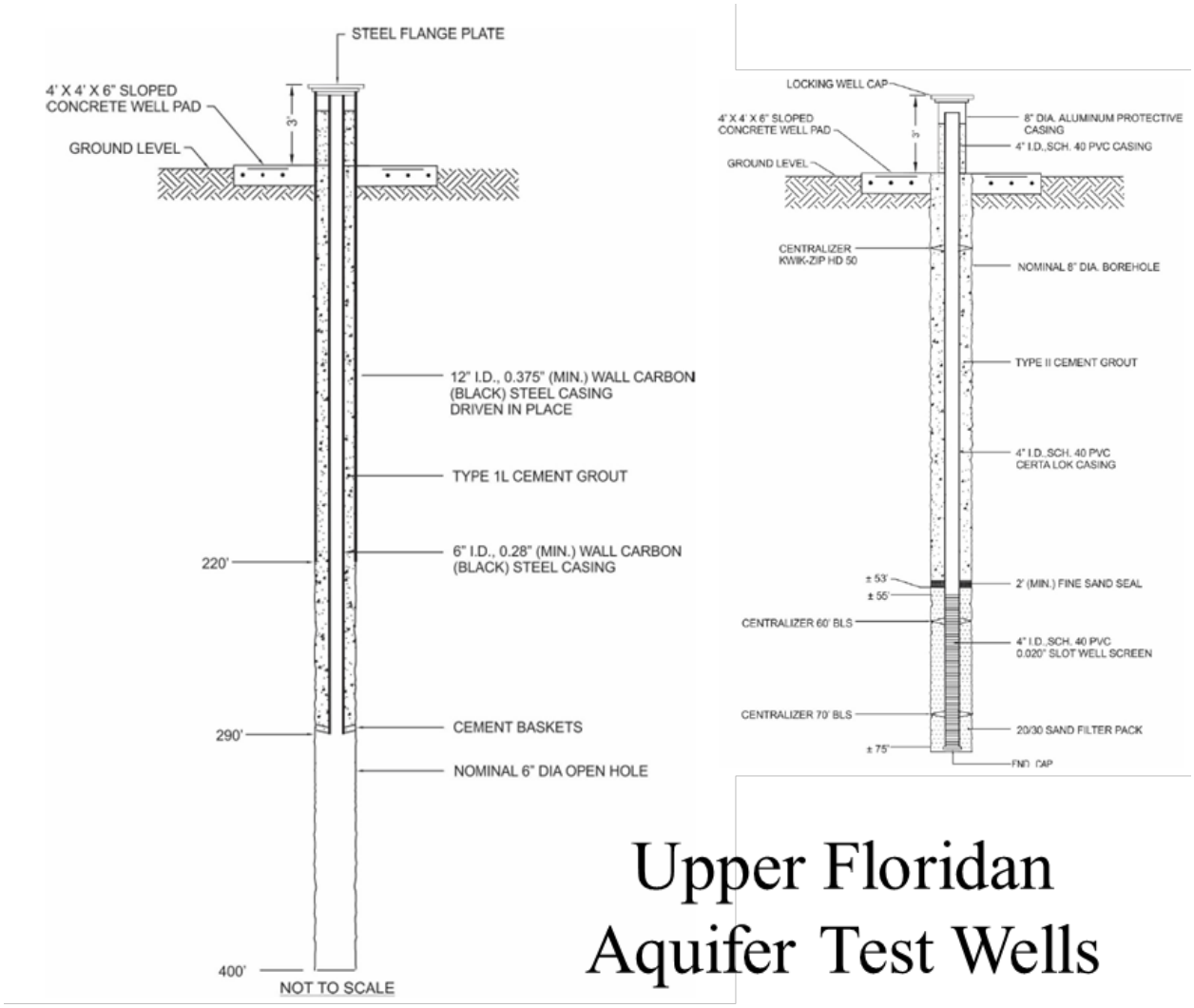
Exhibit 2

An as-built construction diagram of SE-TPW3-LFA is provided as **Figure 2-4.**



Typical Lower Floridan Aquifer Well

Exhibit 3



Upper Floridan Aquifer Test Wells

Impact Assessment Statement

Land and Neighborhood Characteristics

1. How and why is the location suitable for the proposed uses?

Located in a rural area but able to access the Lower Floridan Aquifer without adversely impacting other environmental assets or people.

2. What are, if any, the incompatibility and special efforts needed to minimize the differences in the proposed use with adjacent uses?

Locating the treatment plant far from residential. The raw water wells will have low impacts.

3. How will the request influence future development of the area?

It will provide water to support growth in urban areas.

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 detailed1 methodology and calculations.

Less than 50 AADT at the treatment site, 10 PM peak. Only an occasional trip to the raw water wells for maintenance and testing.

2. What modifications to the present transportation system will be required as a result of the proposed development?

Commercial driveway entrance.

3. What is the total number of parking spaces required pursuant to Section 708 of the Land

10-15 and storage of maintenance vehicles at the plant site.

4. What are the proposed methods of access to existing public roads (e.g., direct frontage, intersecting streets, and frontage roads)?

Direct frontage

Sewage

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

Not much more than 1 ERC at the plant site. None at the well sites.

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?

Septic tank and drain field.

3. If offsite treatment, who is the service provider?

n/a

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)

n/a

5. What is the provider's general capacity at the time of application?

n/a

6. What is the anticipated date of connection?

n/a

7. What improvements to the providers system are necessary to support the proposed request

n/a

Water Supply

1. What is the proposed source of water supply and/or who is the service provider?

Polk Regional Water Cooperative (PRWC). This facility.

2. What is the estimated volume of consumption in gallons per day (GPD)?

Not much more than 1 ERC at the plant site. None at the well sites.

3. Where is the nearest potable water connection and re-claimed water connection, including the distance and size of the line?

Onsite.

4. Who is the service provider?

Polk Regional Water Cooperative (PRWC).

5. What is the anticipated date of connection?

2026

6. What is the provider's general capacity at the time of application?

12.5 MGD to 30 MGD

7. Is there an existing well on the property(ies)?

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 highest point on the WTP site is 141 MSL in the northwest corner, the lowest point is 110 MSL in the southeast corner. No flood hazard areas. Most of the site is Pomello Fine Sand, the rest is Astatula Sand. Pomello has a shallow water table. Astatula is well drained.

2. What alterations to the site's natural drainage features, including wetlands, would be necessary to develop the project?

There will be some site grading necessary to place all of the facilities.

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.

The PRWC has commissioned species studies of all the sites, water modeling studies, and conducted numerous soils and well testing and analysis.

2. What are the wetland and floodplain conditions? Discuss the changes to these features which would result from development of the site.

No wetlands or floodplains.

3. Discuss location of potable water supplies, private wells, public well fields (discuss the location, address potential impacts), and;

The project is nothing but wells.

4. Discuss the location of Airport Buffer Zones (if any) (discuss the location and address, potential impacts).

No impact. Most facilities will be at grade. The highest are the ground storage tanks that are less than 40 feet above average adjacent grade.

5. Provide an analysis of soil types and percentage of coverage on site and what effect it will have on development.

Most of the site is Pomello Fine Sand, the rest is Astatula Sand. Pomello has a shallow water table. Astatula is well drained.

Infrastructure Impact Information

1. Parks and Recreation;

Sumica Preserve is the closest environmental land. Closest parks are in Lake Wales.

2. Educational Facilities (e.g., preschool, elementary, middle school, high school);

Closest schools are in Lake Wales.

3. Health Care (e.g., emergency, hospital);

Lake Wales Hospital (Baycare)

4. Fire Protection;

A fire station will be built onsite (see site plan)

5. Police Protection and Security;

PCSO

6. Emergency Medical Services (EMS);

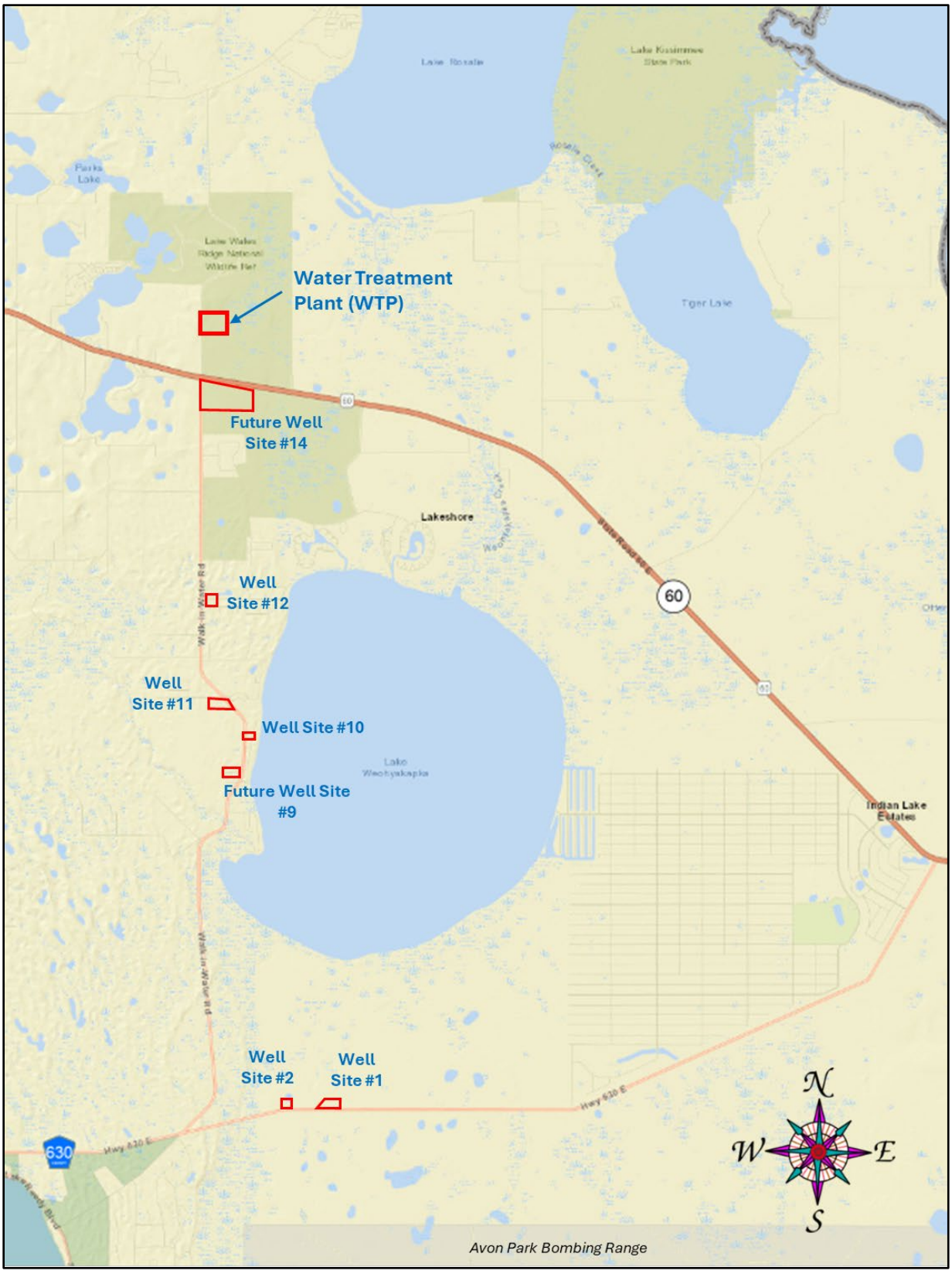
Onsite

7. Solid Waste (collection and waste generation); and

Not much. Brin is contained within the facility beneath the ground.

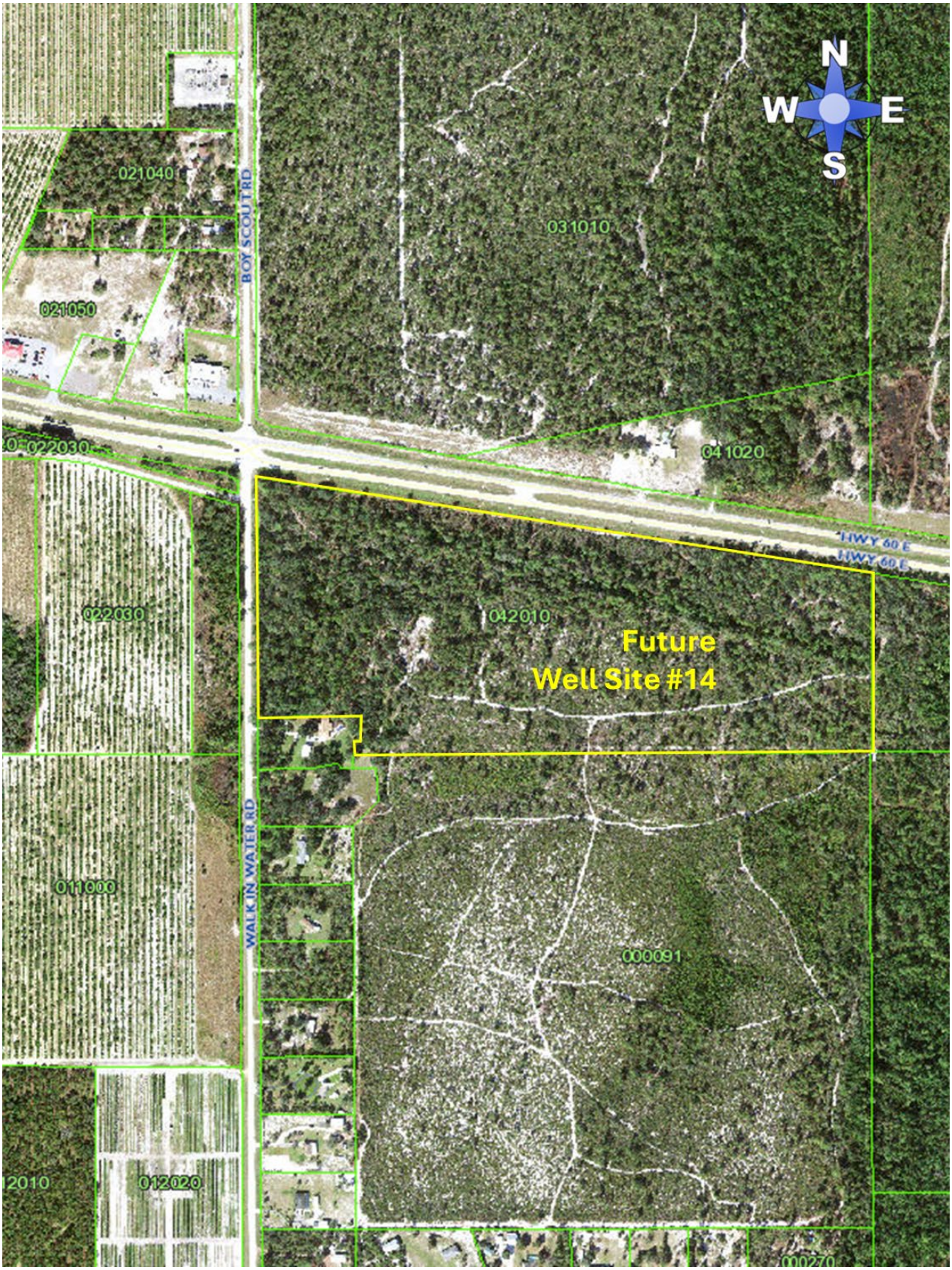
8. How may this request contribute to neighborhood needs?

It will provide a future water supply.



Map A: Location Map

Map B: Map depicting the site boundary (properties included in the request)



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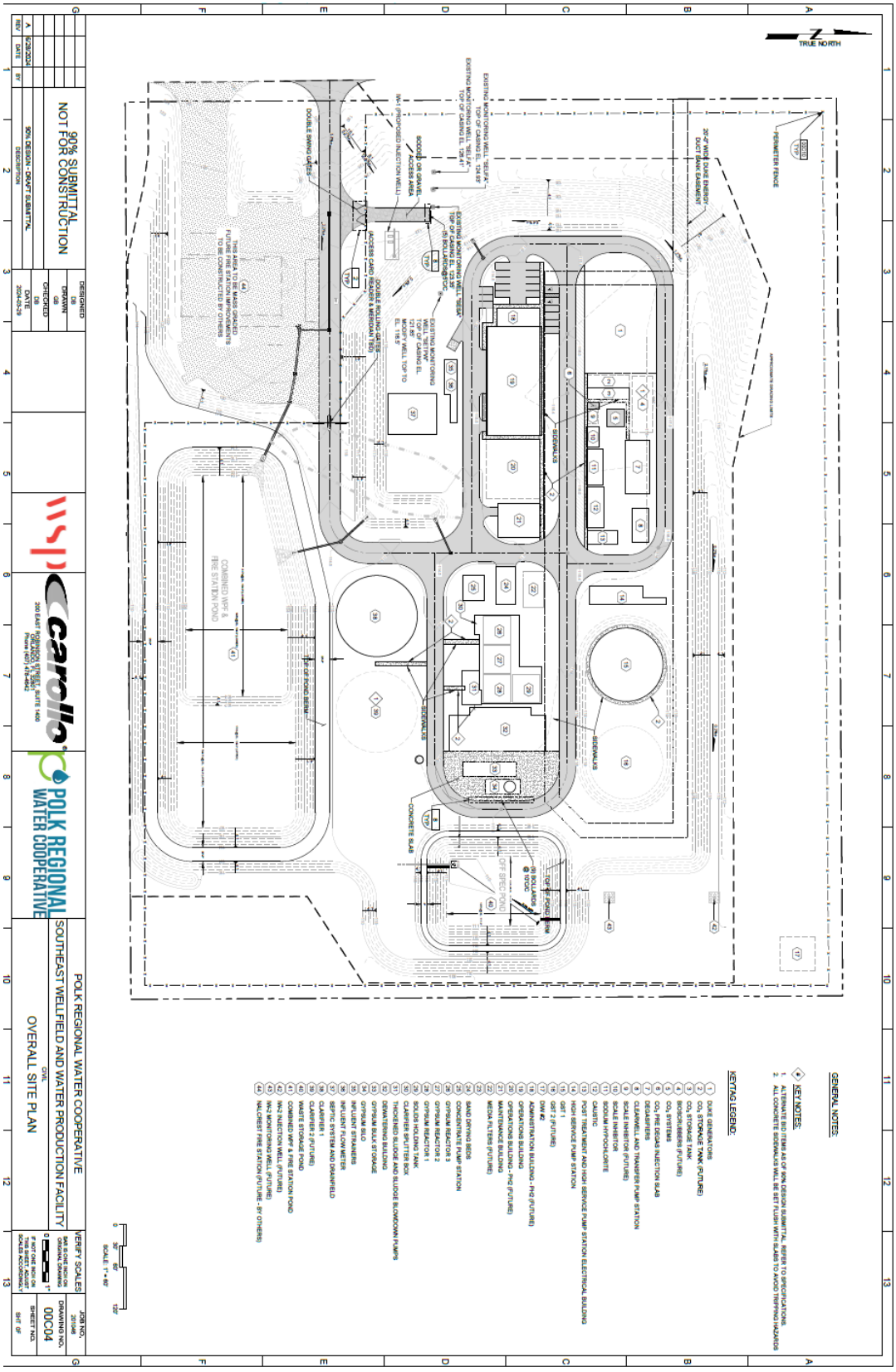

Map C: A site plan