PRWC Receiving Facility IAS

Land and Neighborhood Characteristics

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

The site is strategically located where Polk County's Northeast Utility service area, Haines City service area and town of Davenport's service areas come together. It is a site that is ideal for utility infrastructure because it is an isolated tract set far from a major roadway and adjacent to a future city park.

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

The site abuts existing residential development on three sides. Not likely to be incompatible with neighboring residential development. There will be the 50' compatibility setbacks and the stormwater and landscaping buffers of the residential developments lie in between.

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

It will help support more of it. Without the PRWC water supply, the County and cities will have to cease development approvals when they run out of water capacity.

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.

Table 5

Subject Property	**Estimated Impact Analysis**		
9.91 ± acres	**Demand as Currently Permitted**	**Maximum Permitted in the PD**	**Proposed Plan**
Permitted Density	RL-3 3 du/ac SF = 29 units	INST-1 400 Student Elementary School	Water Interconnect and Ground Storage Reservoirs
Average Annual Daily Trips (AADT)	228	908	6
PM Peak Hour Trips	29	57	3

Source: Polk County Concurrency Manual

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

None.

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

3

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

There is no public road frontage. Staff is negotiating with Town of Davenport for an entrance through the new city park.

Sewage

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

Table 4

Subject Property	**Estimated Impact Analysis**		
9.91 ± acres	**Demand as Currently Permitted**	**Maximum Permitted in the PD**	**Proposed Plan**
Permitted Density	RL-3 3 du/ac SF = 29 units	INST-1 400 Student Elementary School	Water Interconnect and Ground Storage Reservoirs
Potable Water Consumption (GPD)	10,440	6,000	360
Wastewater Generation (GPD)	7,830	4,800	270

Source: Polk County Concurrency Manual

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 or share facilities with Davenport's park.

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

n/a

4. Where is the nearest sewer line (in feet) to the proposed development?

Manhole abutting the south side. 8" gravity line.

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

1.23 MGD

6. What is the anticipated date of connection?

When an office is constructed onsite. Early phases may be unmanned.

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

Very few if connection can be made to the gravity line.

Water Supply

1. What is the proposed source of water supply and/or who is the service provider? **This request is for a water supply improvement.**

2. What is the estimated volume of consumption in gallons per day (GPD)? **360 GPD**

3. Where is the nearest potable water connection and re-claimed water connection, including

the distance and size of the line?

Abutting the site:

4. Who is the service provider?

Polk County

5. What is the anticipated date of connection?

When it gets built.

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

2.286 MGD

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

No.

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);

Site drains to the northeast into a wetland. 8½ acres is well drained. Only ¼ acre is wetlands and 100-year flood.

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

Detention will be needed to filter stormwater from impervious surfaces prior to discharge into the wetlands.

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.

85% Candler Sand very few limitations. No impacts necessary to wetlands or floodplains.

2. What are the wetland and floodplain conditions?

Minor and avoidable.

3. Discuss location of potable water supplies, private wells, public well fields?

Not near them.

4. Discuss the location of Airport Buffer Zones (if any)

Over 10 miles away

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

85% Candler Sand, <10% Tavares Fine Sand, 2.4% Samsula Muck. Development will be on sand and avoid the muck.

Infrastructure Impact Information

1. Parks and Recreation – **Will be next door in the future.**

2. Educational Facilities – **Horizons Elementary, Davenport School of the Arts Middle and Ridge Community High School**

3. Health Care – **Heat of Florida Hospital**

4. Fire Protection – **Cottonwood Station**

5. Police Protection and Security – **Dunson Road NE Command Center**

6. Emergency Medical Services (EMS) – **Cottonwood Station**

7. Solid Waste (collection and waste generation) – **County picks it up.**

8. How may this request contribute to neighborhood needs? – **Provides them more services.**