

Christina Fire Station IAS

Land and Neighborhood Characteristics

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

Larger property for larger facility and more strategic location to serve the highest population amount. Also, this new site should be recognized on the map.

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

South side of site abuts 7+ homes. Depth of site will enable lesser incompatibility. The station location will be closer to CR 540A. Stormwater will likely be located in the rear.

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

The area is built out. This station will improve service to existing development and relieve the overburden on other stations located in growing 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 detailed methodology and calculations.

Table 5

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Maximum Permitted in the PD	Proposed Plan
4.57 ± acres			
Permitted Density	RL-4 3 du/ac SF = 13 units	INST-1 400 Student Elementary School	Fire Rescue Station Water Treatment Plant
Average Annual Daily Trips (AADT)	103	908	476
PM Peak Hour Trips	13	57	9

Source: Polk County Concurrency Manual

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

Slight intersection improvement to Malcomb Drive/ CR540A likely.

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

25

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

A Type 1 Driveway and extension of Gladman Road to south.

Sewage

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

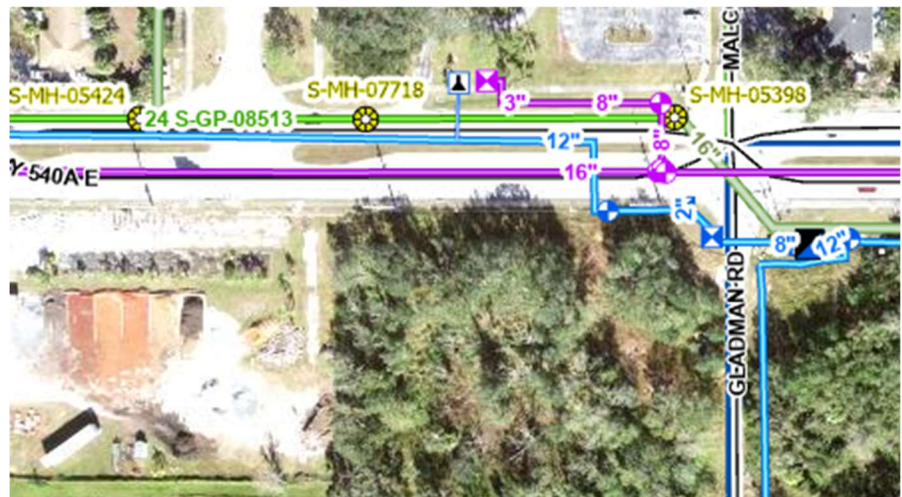
Table 4

Subject Property	Estimated Impact Analysis		
	Demand as Currently Permitted	Maximum Permitted in the PD	Proposed Plan
4.57 ± acres			
Permitted Density	RL-4 3 du/ac SF = 13 units	INST-1 400 Student Elementary School	Fire Rescue Station Water Treatment Plant
Potable Water Consumption (GPD)	4,680	6,000	1,080
Wastewater Generation (GPD)	3,510	4,800	810

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?

Connection to Polk County Utilities manhole across the street:



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

Polk county Utilities

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

Across CR 540A.

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

1.726 MGD

6. What is the anticipated date of connection?

C/O

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

Maybe a private lift station.

Water Supply

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

Polk County Utilities

2. What is the estimated volume of consumption in gallons per day (GPD)? **1,080 GPD**

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

Abutting the east side of the site is an 8" line

4. Who is the service provider?

Polk County Utilities

5. What is the anticipated date of connection?

C/O.

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

2.344 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);

Tavares Fine Sand and Smyrna-Myakka soils are difficult, but we'll figure it out.

Small drainage ditch in the middle of the site is a 100-year flood zone.

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

We will need to grade parts of the site and redirect drainage flow across the site.

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.

Groundwater table is high. Soils suck. Otherwise, it's perfect.

2. What are the wetland and floodplain conditions?



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

We will treat before discharge into Christina Basin Drainage network.

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.

Tavares Fine Sand 40% north side, Smyrna-Myakka 60%. This forces the station to be closer to CR 540A on the north side.

Infrastructure Impact Information

1. Parks and Recreation – **Christina Park one mile, Loyce Harp Park 2 ½ miles**
2. Educational Facilities – **Scott Lake Elementary, Lakeland Highlands Middle, and George Jenkins High School**
3. Health Care – **Lakeland Hospital**
4. Fire Protection – **That's us.**
5. Police Protection and Security – **U.S. Highway 98, 5 miles**
6. Emergency Medical Services (EMS) – **Eventually onsite.**
7. Solid Waste (collection and waste generation) – **County picks it up.**
8. How may this request contribute to neighborhood needs? – **Provides them more services.**