

## **GREEN SWAMP AREA OF CRITICAL STATE CONCERN**

### **IMPACT ASSESSMENT STATEMENT**

#### **A. "FLOODPLAIN-PROTECTION AREAS" REQUIREMENTS UNDER POLK COUNTY COMPREHENSIVE PLAN SECTION 2.123-B, WHERE APPLICABLE;**

The applicant should state if the project contains any areas subject to flooding in accordance with FEMA, SWFWMD, SJWMD, SFWMD and best available (existing) data. If the project is within the 100 year floodplain, then the applicant shall:

Level 3 or Level 4 Review\*

1. Delineate the areas subject to flooding on a base map, including topography;
2. Describe graphically and in writing how the drainage will be handled; and
3. Describe, in general terms, how the natural flow will be altered by development of the site and how adverse impacts, if any, will be addressed.
4. Generally describe how development of the site will meet the development criteria requirements of Policy 2.123-B2 of the Polk County Comprehensive Plan.

*The Property does not have any areas of flooding in accordance with FEMA and the SWFWMD.*

#### **B. "WETLAND-PROTECTION AREAS" REQUIREMENTS UNDER POLK COUNTY COMPREHENSIVE PLAN SECTION 2.123-C, WHERE APPLICABLE;**

The applicant should state if the project contains any areas identified by the Army Corps of Engineers, FDEP, SWFWMD, SFWMD, SJWMD, and/or Polk County as wetlands. If the project contains any wetlands then the applicant shall:

Level 3 or Level 4 Review\*

1. Delineate the wetland areas on-site, and those affected by the drainage patterns on the site, in both a pre- and post-development condition on a base map;
2. List those agencies which the applicant believes have wetlands jurisdiction on the site and locate agencies by specific wetland if more than one wetland;
3. Impacts to the wetlands shall be avoided. If impacts are unavoidable, describe proposed impacts and reasons impacts cannot be avoided. Include a discussion (include graphics) on how impacts will be minimized; and
4. Describe, in general terms, how the natural flow regime will be affected by this development, and how any changes will affect wetlands on and off-site.

*The Property does not have any areas of wetland in accordance with the Army Corps of Engineers, FDEP, SWFWMD and Polk County.*

#### **C. ALL DEVELOPMENT, AS DEFINED IN SECTION 380.04, FS, SHALL BE REVIEWED FOR CONSISTENCY WITH THE FOLLOWING OBJECTIVES:**

## **1. MINIMIZE THE ADVERSE IMPACTS OF DEVELOPMENT ON RESOURCES OF THE FLORIDIAN AQUIFER, WETLANDS, AND FLOOD-DETENTION AREAS.**

Applicant shall provide the following information:

### **Level 3 or Level 4 Review\***

a. Will the proposed development have any adverse impacts to the Floridian Aquifer, wetlands, or flood-detention areas? If yes, describe how the adverse impacts will be minimized, including data and analysis.

The proposed development is not anticipated to have any adverse impacts to the FLoridan Aquifer. The site will utilize on site-detention in accordance with Polk County and SWFWMD regulations. The proposed development will connect to existing public utilities installed adjacent to the site.

b. An estimate, using best available (existing) data, of the depth to the Floridian Aquifer confining layer to surface topology. Provide the data used to make this estimate.

Approximately 120 to 170 feet. Data provided by SJRWMD.

c. Any contaminants (biological or chemical) expected to be stored on the site should be listed, and proposed containment/treatment measures in case of spill or leakage should be described.

None anticipated.

d. Describe, in general terms, the Best Management Practices (BMPs) that will be used to manage hydrological and/or biological resources.

The hydrological regimes will be maintained via a stormwater management plan meeting all state and county regulations. Stormwater ponds will receive area planting to act as biological filter and be owned and maintained by the Property Owners Association as required by the SWFWMD. Periodic inspections per SWFWMD regulations will be conducted periodically. BMPs will be for maintenance of the stormwater facility only.

e. Using best available (existing) data, provide a soil survey of the site.

SCS soils map is attached.

## **2. PROTECT OR IMPROVE THE NORMAL QUANTITY, QUALITY, AND FLOW OF GROUND WATER AND SURFACE WATER WHICH ARE NECESSARY FOR THE PROTECTION OF RESOURCES OF STATE AND REGIONAL CONCERN.**

Applicant will provide the following information:

### **Level 3 or Level 4 Review**

a. State which surface and ground water standards will be met are applicable, and how they will be met.

FDEP, SWFWMD and Polk County Standards (17.25, 40D, 3.101-A)

b. Whether water from the site (both surface and groundwater) is necessary for the protection of resources of state and regional concern. Identify those resources and describe, in general terms, how development of the site will impact those resources.

No impacts to the groundwater flow are anticipated.

c. How impacts to resources of state or regional concern will be minimized

The stormwater management plan collects, stores and treats the runoff from this project and maintains the volume of clean water which percolates into the soil and eventually into the lower aquifers.

### **3. PROTECT OR IMPROVE THE WATER AVAILABLE FOR AQUIFER RECHARGE.**

Applicant shall provide the following information:

#### **Level 3 or Level 4 Review\***

a. A topographic site plan that shows the location of recharge areas based on water management district and SCS data.

No recharge areas are located on the site.

### **4. PROTECT OR IMPROVE THE FUNCTIONS OF THE GREEN SWAMP POTENTIOMETRIC HIGH OF THE FLORIDIAN AQUIFER.**

Applicant shall provide the following information:

#### **Level 3 or Level 4 Review\***

a. Estimate of the amount of water that will be withdrawn and how this withdrawal may affect the potentiometric high. Also the time frame for water withdrawal - daily, weekly, monthly.

No groundwater withdrawals are expected.

b. Graphically identify any Floridian Aquifer outcroppings on-site and off-site which may be affected by the proposed development.

No Floridan Aquifer outcroppings (on-site or off-site) are expected to be affected by the proposed development.

### **5. PROTECT OR IMPROVE THE NORMAL SUPPLY OF GROUND AND SURFACE WATER.\*\***

Applicant shall provide the following information:

#### **Level 3 or Level 4 Review**

a. An estimate of the normal supply of ground and surface water would be for the site. Provide data source or assumptions made to reach this estimate.

*This site is not using any groundwater resources.*

b. A description of how development of the site is expected to impact the normal supply of surface and ground water.

*The development will not adversely impact the normal supply however it will maintain or improve the normal supply, via grassed areas allowing initial abstraction and retention ponds that will catch runoff and allow for vertical and horizontal infiltration of groundwater.*

c. A description of the method or techniques which are proposed to maintain the normal water supply.

*Normal water supply will at a minimum be maintained via retention ponds. These ponds are located in area that will allow for rapid horizontal and vertical infiltration. These factors will assure that the pre-development volume will be maintained and in all probability be exceeded.*

d. Any plans to improve the normal water supply. Describe the proposed method(s)/techniques.

*Normal water supply could be increased due to attenuation volume required that will eventually infiltrate into the subsurface groundwater.*

e. The local standards for surface water and groundwater quantity and quality that will be met.

*40D, 17.25 and 3.104-A*

f. A description of any additional methods that are to be used to protect or improve water supply not mentioned in the statements above.

*Water supply will also be protected due to SWFWMD implementing water restrictions which will insure conservation methods are followed within the development.*

## **6. PREVENT FURTHER SALT-WATER INTRUSION INTO THE FLORIDIAN AQUIFER.**

Applicant shall provide the following information:

### **Level 3 or Level 4 Review**

Is a SWFWMD, SJWMD, or SFWMD consumptive use permit required? If yes, the applicant shall notify Development Engineering Services Division within 5 working days of when the

application was submitted.

The proposed project does not require a consumptive use permit.

## **7. PROTECT OR IMPROVE EXISTING GROUND AND SURFACE WATER QUALITY.**

Applicant shall provide the following information:

### **Level 3 or Level 4 Review**

a. Local, regional, and state standards for surface water and groundwater that are applicable and how they will be met.

40D, 17.25 and Polk County 3.104-A.

b. Identify the methods and techniques proposed to be used to protect surface and ground water quality.

Existing stormwater management provides stormwater runoff attenuation and water quality treatment.

## **8. PROTECT OR IMPROVE THE WATER-RETENTION CAPABILITIES OF WETLANDS.\*\***

Applicant shall provide the following information:

### **Level 3 or Level 4 Review**

a. The BMPs which will be used to protect the water-retention capabilities of wetlands found on-site.

There are no wetlands on site.

b. Any plans to improve the water retention capabilities of wetlands found on-site. If yes, describe in general terms.

There are no wetlands on site.

c. Identify any wetlands found off-site whose water-retention capabilities are dependent upon the current water drainage patterns found on-site.

This site contains flatwood soils which are somewhat poorly drained. These soils are nearly level not allowing any significant overland runoff

d. How development of the site impact the water-retention capabilities of wetlands found off-site.

This site contains flatwood soils. There are no wetland impacts proposed. No impact to the water retention capabilities is expected from our site. Subsurface flow regimes will not be impacted, therefore allowing pre-development conditions to remain the same.

## **9. PROTECT OR IMPROVE THE BIOLOGICAL-FILTERING CAPABILITIES OF WETLANDS.\*\***

Applicant shall provide the following information:

### **Level 3 or Level 4 Review**

a. The BMPs which the applicant will employ to meet in protecting the existing biological-filtering capabilities of wetlands.

No development or mitigation in the wetlands are proposed onsite. No adverse impacts are therefore expected.

b. Any plans to improve the biological filtering capabilities of wetlands found on site. If yes, describe in general terms how the improvements will be made.

Site has been designed as to not have a direct impact on the existing wetland area in order to set aside contiguous and hydraulically connected wetlands that are located within a specific tract for ease of maintenance.

## **10. PROTECT OR IMPROVE THE NATURAL FLOW REGIME OF DRAINAGE BASINS.**

Applicant shall provide the following information:

### **Level 3 or Level 4 Review\***

A drainage basin map showing the natural flow and the flow during construction and after construction of the project.

Please see USGS map, SWFWMD map and existing site plan.

## **11. PROTECT OR IMPROVE THE DESIGN CAPACITY OF FLOOD DETENTION AREAS AND THE WATER-MANAGEMENT OBJECTIVES OF THESE AREAS THROUGH THE MAINTENANCE OF HYDROLOGIC CHARACTERISTICS OF DRAINAGE BASINS**

### **Level 3 or Level 4 Review**

Provide a description of the stormwater quantity and quality practices to be adhered to by the developer, and the approximate location and size of areas for detention or retention of water.

ALL MAPS SHOULD USE BEST AVAILABLE DATA AND, WHENEVER POSSIBLE, BE DRAWN AT THE SAME SCALE. ALL MAPS FOR LEVEL 2 REVIEWS, UNLESS OTHERWISE SPECIFIED, SHOULD BE DRAWN AT A 1" =200' SCALE. CONTOURS, IF AVAILABLE FROM SWFWMD OR ANOTHER SOURCE, SHOULD BE DRAWN AT 1' OR 2' INTERVALS, OTHERWISE THEY SHOULD BE DRAWN AT NO LESS THAN 5' INTERVALS USING BEST AVAILABLE INFORMATION.

\*\* REHYDRATING HYDRIC SOILS MAY BE COUNTED AS AN IMPROVEMENT TO:  
GROUND/SURFACE WATER, WATERRETENTION CAPABILITIES OF WETLANDS, AND/OR  
BIOLOGICAL-FILTERING CAPABILITIES OF WETLANDS.

Location and size can be located on the attached site plan. The stormwater ponds will treat water as  
previously noted in accordance with state and county regulations. The ponds will provide retention capacity  
for a 100 year/ 24 hour event which is the level of surface required by Polk County.