

JUL 19 2017

Special Use Application SU 17-0510: Revised Narrative DescriptionDevelopment Services
Department

The applicant proposes a Wastewater Treatment Plant with an accessory spray irrigation field. This project has been modified to account for concerns of the Board of County Commissioners, community feedback, and staff questions regarding impacts to the Little Manatee River and its associated tributary and wetland systems. The most significant modifications are that all biosolids will be trucked offsite for disposal; only effluent wastewater will be used for onsite irrigation; and additional protections have been proposed for wetlands and waterbodies, such as the on-site relocation of the plant.

The following sections provide a detailed description of the location and design of the project and a review of the Special Use criteria provided by Section 6.11.102 of the Hillsborough County Land Development Code ("LDC"). A revised site plan is enclosed with this narrative.

I. Location and Appropriateness of Use

This project will be sited on an approximately 80-acre property on Grange Loop Road, south of SR 674 in Wimauma, approximately 3 miles north of the Manatee County line. The site is designated as Agricultural/Mining (AM) by the Comprehensive Plan. This category permits mining, industrial, agricultural, and large-lot residential uses (1 dwelling unit per 20 acres). The parcel is zoned as an enclave of Agricultural Rural (AR) within a much larger area zoned Agricultural Mining (AM). Three boundaries of the site touch AM, and the fourth boundary is only 1,300 feet from AM. The primary purpose of both zoning districts is to protect these lands "from urban and suburban encroachment by encouraging agriculture and related uses."

The property has been used for agricultural production for many years and is generally isolated from residential development. Mosaic Fertilizer, LLC owns and operates surrounding lands to the north, west and south, with no residential structures on these abutting parcels. The planning of this project accounts for a life estate for residents on the eastern fringe of the property. The owners of the citrus grove to the southeast have indicated that they have no objection to this project.

The general development pattern in the area is categorized by large-lot mining and agricultural holdings. There are some smaller residential properties in the area, but these uses will be protected by buffering and other conditions. Several active mining sites are within close proximity to the site. Similar to mining operations, the proposed uses will be closely monitored by EPC and FDEP and will include a number of monitoring wells. Considering the external impact of the proposed uses to a use such as an active mine, the proposed uses will be considerably quieter, will generate fewer trips, and will impact sensitive resources less.

Michael D. Horner, AICP, has reviewed this revised application and determined that the proposed uses are appropriate for this site, compatible with existing land uses, and consistent with the Comprehensive Plan and Land Development Code.

II. Description of Use

The Wastewater Treatment Plant will treat septic tank waste, portable toilet waste, restaurant grease and similar wastes. The plant will receive mixed wastes, pretreat the wastes, and separate biosolids from filtered wastewater.

The biosolids will be filtered mechanically and sent to an offsite disposal site or nearby County landfill. The filtered wastewater will then be biologically treated to Secondary Treatment Levels with basic disinfection through chlorination. Up to 100,000 gpd of treated effluent will be sprayed onsite with holding tanks and a central percolation evaporation pond in a process consistent with environmental permitting requirements of the Florida Department of Environmental Protection ("FDEP") and the Hillsborough County Environmental Protection Commission ("EPC") and consistent with industry practices.

This facility will be designed to meet FDEP permitting requirements for a Type III Domestic Wastewater Facilities. *See* Chs. 62-600, 62-610, Fla. Admin. Code. This treatment system is designed to minimize odors, noise, and aerosol drift, with no adverse lighting for neighboring properties. This facility and spray irrigation area will also be locked with advisory sign postings to prohibit public access. This will include setback criteria for the treatment facility and setbacks for the spray area from wells, neighboring properties, wetland and streams.

III. Access and Traffic Impacts

Access to the project is via Grange Hall Loop Road, a paved two-lane roadway in good condition, with a driveway location anticipated approximately 2,500 feet south of SR 674. All truck traffic will be directed to and from SR 674 to the north, with no southbound trips impacting the remainder of Grange Loop Road south of this existing access road.

Grange Hall Loop Road is a local road with no traffic count data registered by the County. The applicant has committed to a maximum of 20 truck deliveries per day. The applicant has also committed to restricting these truck trips to daylight hours.

Based on this information and these commitments, our understanding is that Hillsborough County staff's preliminary trip generation evaluations indicate that this project will generate fewer trips than the minimum threshold required to require a detailed transportation analysis.

IV. Environmental Impacts and Protections

The applicant retained Meryman Environmental, Inc to conduct a detailed wetland and environmental impact assessment report of the project on area waterways, which was previously provided. The report concludes that this site is a suitable location for the project based upon historical wetland and soil conditions, prior impacts of onsite and abutting agricultural uses, overall depth of groundwater, and distances from nearby waterbodies.

The report notes that the site contains some hydric soil and wetland system characteristics, which have been conservatively reflected on the site plan. This line will be

subject to final SWFWMD delineation, which is in process. The spray irrigation field (former grove) falls within SCS soil type #47 Seffner Fine Sand that has a seasonal high water table of 20 to 40 inches for 2 to 6 months then recedes to a depth of less than 60 inches outside of the rainy season. Thus, the project should meet a 24-inch separation from ground water even before re-sloping the site.

The report explains that a wetland system called the Howard Prairie Branch crosses the site in the southwest. The Howard Prairie Branch extends to the northwest as a tributary of the Little Manatee River. Florida law establishes the Little Manatee River as a Special Water and an Outstanding Florida Water, but tributaries such as the Howard Prairie Branch have been explicitly excluded. R. 62-302.700(9)(i)20, Fla. Admin. Code. This has been confirmed in multiple conversations with FDEP and SWFWMD staff and general counsel. Therefore, the northwest corner of the site is 1,690 feet and southwest corner of the site is 2,323 feet from the Outstanding Florida Water. In any case, there is no regulatory requirement related to this Outstanding Florida Water: while land application of Class A and Class B biosolids must be sited at least 1,000 feet from Outstanding Florida Waters, mere spray irrigation fields are not subject to this requirement. § 403.031, Fla. Stat.; R. 62-640.700(8)(2).

These wetlands and waterways will be impacted only a de minimis amount by the wastewater effluent irrigation field. In addition to regulatory standards that the Wastewater Treatment Plant must meet for the effluent wastewaters, further advanced physical safeguards will be provided; including swale treatment areas, setback placements, perimeter ditches, and the site will be regraded and contoured in order to ensure all slopes within designated spray irrigation areas do not exceed 2% in all directions. Historically, the prior orange grove was irrigated, which provided hydration to the wetland. The treated effluent will need to replace the historic hydration patterns.

To ensure these treatment standards and physical protections function properly, a detailed ground water monitoring program will be established by the applicant and approved by FDEP prior to any effluent disposal on site. A subsurface study will be completed to establish soil composition, groundwater flow direction and soil infiltration rates which will ultimately determine spray irrigation application capacity rates on site. Monitoring wells will be placed both upstream and downstream within the groundwater flows to monitor the project.

Finally, compared to earlier plans, the Wastewater Treatment Plant will be sited as far as possible away from sensitive areas of the site (to the northeast). Additional safeguards may be required during the FDEP, EPC, and SWFWMD permitting processes.

V. Other Impacts and Protections

This project will not generate any significant noise impacts. The aeration blowers used to treat wastewater will be housed in a small building with sound absorbing panels on the interior.

Further, it will not produce any significant odor impacts, since all incoming waste will be immediately treated and disinfected. Odors will be treated through the addition of lime, disinfectants, and air scrubbers. Treatment will be employed at critical water handling zones.

Moreover, based upon LDC Section 6.11.102B (Odor and Noise Control), the Wastewater Treatment Plant will be surrounded by a 6-foot lockable fence with 95% opacity and landscaped with 25 gallon trees planted 20-foot on center and 7 gallon shrubs planted 5 foot on center.

VI. Special Use Criteria

The LDC applies the following five criteria to Wastewater Treatment Plan Special Use permits. As described below, this application meets all relevant criteria.

- A. The Wastewater Treatment Plant and Facilities shall be secured from public access. A solid fence, a minimum of six feet in height, and berms and/or landscaping shall be required around the Wastewater Treatment Plant. A fence, a minimum of six feet in height, shall be required around ponds. Pump/Lift Stations shall be secured either by a fence six feet in height, by enclosing equipment in lockable buildings or enclosures, or by the use of other vandal proof construction measures which will provide protection against entry or damages. These requirements may be waived by the Administrator upon demonstration that protection to an equal or greater extent is provided.

Based upon LDC Section 6.11.102B (Odor and Noise Control), the Wastewater Treatment Plant will be surrounded by a 6-foot lockable fence with 95% opacity and landscaped with 25 gallon trees planted 20-foot on center and 7 gallon shrubs planted 5 foot on center.

- B. For all Wastewater Treatment Plants and Facilities, the Engineer of Record shall certify that the design plans for the Plant and Pump/Lift Stations include nuisance control (odor and noise control) mitigation measures approved by the Hillsborough County Departments of Engineering and Water and Wastewater Utilities and shall ensure that such measures are installed. The mitigation measures shall be designed relative to the facility's size, design, and intensity and may include, in part, landscaping measures. The mitigation measures shall also meet the performance standards set forth in 6.09.00.

Enclosed is a certification by Robert E. Wallace, P.E.

- C. The operation of a public or privately operated interim wastewater facility shall be discontinued and public wastewater service shall be utilized within six months of the availability of public wastewater service with adequate capacity at any project boundary unless otherwise provided for in an Interim Wastewater Treatment Agreement.

Not applicable.

- D. Prior to placement of any Wastewater Plant and Facility on-site, the developer shall provide evidence of approval from the applicable permitting agencies.

The applicant is prohibited by law from constructing the Wastewater Treatment Plant until it receives applicable permits from FDEP, EPC, and/or SWFWMD.

E. Distance requirements for Wastewater Treatment Plants shall be as follows:

1. Wastewater Treatment Plant Type 1
 - a. Interim Wastewater Treatment Plants under 500,000 gallons per day (g.p.d.)
 - b. For Type 1 Plants there shall be a distance requirement of 150 feet from the plant to any off-site agriculturally or residentially zoned or used land or to any onsite platted lot or dwelling unit.
2. Wastewater Treatment Plant Type 2
 - a. Permanent Wastewater Treatment Plants under 500,000 g.p.d.
 - b. For Type 2 Plants there shall be a distance of 250 feet from the plant to any off-site agriculturally or residentially zoned or used land or to any on-site platted lot or dwelling unit.
3. Wastewater Treatment Plant Type 3
 - a. Wastewater Treatment Plants of 500,000 g.p.d. or greater.
 - b. For Type 3 Plants there shall be a distance requirement of 500 feet from the Plant to the project boundary. There shall be no platted lots or dwelling units within this distance requirement. If the plant is located in the Industrial Category of the Comprehensive Plan, the distance requirement shall be 250 feet.

The applicant is proposing a Wastewater Treatment Plant Type 2, since the plant will be permanent and twill treat under 500,000 gpd. As shown on the site plan, the proposed Wastewater Treatment Plant will be sited 250 feet from the site's northern boundary and from the eastern residences.

4. Neighborhood Pump/Lift Stations serving less than 3,000 equivalent dwelling units (e.d.u.). There shall be no minimum distance requirement for Neighborhood Pump/Lift Stations.

Not applicable.

5. Master Pump/Lift Stations serving 3,000 e.d.u.s or greater. There shall be a distance requirement of 20 feet from the Master Pump/Lift Station to the edge of the lot. Only nonresidential or agricultural structures and parking may be located within the specified distance. There shall be a distance requirement of 50 feet from the Pump/Lift Station to any surrounding residential structures or building envelopes.

Not applicable.

6. A waiver of distance requirements for Wastewater Treatment Plants and Facilities may be approved by the Board of County Commissioners in cases involving practical difficulties, unnecessary hardship, or superior alternatives. These difficulties, hardships, and alternatives, may include but not be limited to adjacency to environmentally sensitive land, major rights-of-way or retention areas. The waiver request shall be heard using the procedure for a Special Use.

No waiver is proposed.

7. In instances where the distance requirements are modified, additional conditions of approval may be required.

No modification is proposed.

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