

**Impact Assessment Statement
Mammoth Grove Mine
For
PH Citrus LLC.**

An Impact Assessment Statement is required for all Level 3 and Level 4 Reviews, with the exception of text amendment requests. The purpose of an Impact Assessment Statement is to provide information on the effects a proposed development or land use action will have on the existing neighborhood and general area; on the transportation facilities; on the environment and natural resources of the County; on the public facilities for water, sewer, solid waste disposal, fire, police, public education, parks, recreation, and other utilities; and any other aspect with an identified impact of the development and deemed appropriate for concern.

A sufficient Impact Assessment Statement must address all of the following (*Note: N/A is an insufficient comment, if N/A an explanation must be included*):

Land and Neighborhood Characteristics

Assess the compatibility of the requested land use with adjacent properties and evaluate the suitability of the site for development. At a minimum, address the following specific questions in your response:

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

The location of the Mammoth Grove Mine and associated parcels are depicted on attached Figure 1, 2 and 3. The PH Citrus project area is a suitable location for non-phosphate mining for various reasons, which are listed below:

A. The site contains the high-quality critical sand resource used for commercial construction aggregates, concrete, asphalt, clean fill material, FDOT and other critical regional infrastructure projects. The primary resource on this site is coarse-grained sand, which is a strategic resource that is only located and available for extraction in specific locations throughout the region. Though most of Polk County is covered with fine-grained sandy materials, few areas contain the coarse sand that meets commercial and FDOT Specifications.

B. The Polk County Comprehensive Plan states the specialized use of non-phosphate mining is authorized in all land use locations per Policy 2.125-A2 and more specifically is listed as one of the allowable uses in the A/RR district. The subject property is located in the Agricultural Residential Rural (A/RR) land use district and the Rural Development Area. In addition, there are no utilities (water/sewer) from the City of Lake Wales currently available or planned for expansion in the area in the immediate future to support elevated residential densities. The site is also directly adjacent to and contiguous to the Mineral Resource Protection Area”.

C. The request is compatible with the surrounding area as the Rural Development (RDA) does not support dense residential or non-residential development.

Therefore, the non-phosphate mining will not adversely affect the citizens of the immediate surrounding area. Non-phosphate mining is a Specialized Use which is allowed in all future land use classifications in accordance with Section 2.125 of the Comprehensive Plan so long as the project meets the compatibility and development requirements of the Land Development Code. Also, The site is also directly adjacent and contiguous to the Mineral Resource Protection Area.

D. The site is strategically located in an area of the County and region that allows for the efficient and optimal use of existing transportation corridors for delivery of the product to the local and regional markets. The location of the site, off of Mammoth Grove Road, will allow for quick and easy access to State Road 60, all of which represents a large and appropriate roadway for delivery of the product to the regional markets. Logistics is a critical factor in selecting a location for a sand mine, for economic and environmental reasons. The minimization of transport distance yields economic and environmental benefits to the County and to the applicant by reducing trip length, road usage, vehicle maintenance, vehicle fuel, and reducing air pollution via reduction of carbon footprints. Based on the Traffic Impact Assessment (TIA) included with this application, the surrounding roadway network, which has adequately served the existing, adjacent non-phosphate mining facilities, will continue to do so without causing any failures in service.

E. The proposed mining areas consist almost entirely of active and inactive citrus groves. Mining will be carried out via an environmentally friendly methodology known as closed-loop hydraulic dredging, which does not require dewatering and therefore results in no negative effects to the either offsite, or nearby wetland areas.

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

As previously stated, the Polk County Comprehensive Plan states the specialized use of non-phosphate mining is authorized in all land use locations per Policy 2.125-A2 and more specifically is listed as one of the allowable uses in the A/RR district. Also, a majority of the immediate land use around this property is A/RR and non-phosphate mining to the west, and the request is for a Conditional Use Permit to operate a non-phosphate mining operation, which was previously deemed consistent with the Comprehensive Plan and compatible with the surrounding area on the adjacent properties to the west. Further, the request is compatible with the surrounding area as the Rural Development (RDA) does not support dense residential or non-residential development. Therefore, there are no issues related to incompatibility and no special efforts are needed to minimize any differences in the proposed use with adjacent uses. See Adjacent Properties on attached Figure 4.

Access to Roads and Highways

Assess the impact of the proposed development on the existing, planned and programmed road system. At a minimum, address the following specific questions in your response:

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.**

The projected traffic from the proposed Mammoth Grove Mine is not anticipated to significantly impact the surrounding classified transportation network. Per the Polk County Traffic Impact Study Methodology and Procedures guidelines, a Minor Traffic Study is required. The attached analysis evaluates additional adjacent roadways and intersections than that required for a minor TIA.

Please see the attached TIA, which provides the number of vehicle trips to be generated daily and the PM peak hour based on the latest Institute of Traffic Engineers (ITE), including detailed methodology and calculations.

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

Based on the results of the attached traffic impact analysis, the existing roadway configuration is sufficient to support project traffic conditions at maximum operating capacity. Turn lanes into the site are not warranted along State Road 60 at Mammoth Grove Road due to the minimal projected ingress traffic volumes during the peak hours. Therefore, no additional improvements on State Road 60 are proposed at the intersection with Mammoth Grove Road.

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

Section 708 of the Land Development Code requires 1 parking space per employee, plus 5 visitor spaces. The proposed sand mine will average 7 to 10 employees, therefore the total amount of parking spaces required will be (15) fifteen. (15) fifteen parking spots will be designated within the graded areas adjacent to the office trailer. See attached Figure 9 which show the approximate location of the office and processing area.

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

Access to the site will be via State Road 60 to Mammoth Grove Road, which will allow for quick and easy access to US Highway 27, Interstate 95 and the Florida Turnpike. See attached Figure 1.

NOTE: Applications for projects attributing 50 or fewer Average Annual Daily Trips (AADT) according to the latest Institute of Transportation Engineers (ITE) manual may provide a written explanation and justification of why impacts will not be significant in lieu of the required information for “Infrastructure Impacts” items 3 through 9 above.

Sewage

Determine the impact caused by sewage generated from the proposed development. At a minimum, address the following specific questions in your response:

1. **What is the amount of sewage in gallons per day (GPD) expected to be generated by the proposed development? (Response may be based on Section 703.F of the LDC).**

Approximately 200 GPD of sewage will be generated per day.

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?**

Sewage will be treated by way of an on-site septic tank.

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

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing off site treatment to the site has not been established to date. Sewage will be treated by way of an on-site septic tank.

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*)?**

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing off site treatment to the site has not been established to date. Sewage will be treated by way of an on-site septic tank. There is no service provider that can serve the site.

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

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing off site treatment to the site has not been established to date. Sewage will be treated by way of an on-site septic tank.

6. **What is the anticipated date of connection?**

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing off site treatment to the site has not been established to date. Sewage will be treated by way of an on-site septic tank. This site is located in a Rural Development area and under the Polk County Comprehensive Plan county utilities services will not be extended to provide potable water and/or wastewater services. Sewage will be treated in an on-site septic tank as there are no plans for the City to extend utilities to this area in the immediate future. There is no service provider that can serve the site.

7. **What improvements to the providers system are necessary to support the proposed request (e.g., lift stations, line extensions/expansions, interconnects, etc.)?**

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing off site treatment to the site has not been established to date. Sewage will be treated by way of an on-site septic tank. However, Improvements would at a minimum include significant line extensions to be available in the vicinity of the project site.

Water Supply

Determine the amount of water to be used, how it will be distributed, and the impact on the surrounding area. At a minimum, address the following specific questions in your response:

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

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing potable water to the site has not been established to date. Potable water will be supplied from on-site wells which will be permitted for the appropriate use with SWFWMD and the Polk County Health Department. Process water for use in sand processing will be withdrawn from the mine lake. All process water will be recycled as part of the closed loop system.

2. **What is the estimated volume of consumption in gallons per day (GPD)? (*Response may be based on Section 703 of the LDC*)**

Water consumption will be in the form of water retained in the product hauled off site and potable water use. The moisture content of the sand product is generally less than six (6) percent by weight. At approximately four (4) percent moisture by weight, each ton of product contains +/- 80 pounds, or approximately +/- 10 gallons, of water.

Typically, water use with exported product is approximately +/- 10 gallons per ton of product.

The water removed from the recirculation system in the product is replenished through inflow of water to the mine lake through the surficial aquifer. Assuming 1,000,000 tons of product is hauled off site per year, the quantity of water use withdrawn from the surficial aquifer is less than +/- 30,000 gallons per day.

Potable water for sanitary purposes will be obtained from the upper Floridan aquifer and is expected to be on the order of 4,000 gallons per day.

The mining activities will have no measurable impact on the normal supply of ground water and surface water. As mining progresses, the existing irrigation wells will be permanently abandoned and those irrigation uses will be permanently eliminated.

Elimination of the irrigation demands, as mining progresses, will have an overall long term positive impact on the normal supply of ground water.

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

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing a potable water and/or reclaimed water connection to the site has not been established to date.

4. **Who is the service provider?**

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing a potable water and/or reclaimed water connection to the site has not been established to date.

5. **What is the anticipated date of connection?**

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing a potable water and/or reclaimed water connection to the site has not been established to date. There are no plans for the City to extend utilities to this area in the immediate future.

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

The site falls outside of the City of Lake Wales Utility Service Area. The necessary infrastructure for providing a potable water and/or reclaimed water connection to the site has not been established to date. There are no plans for the City to extend utilities to this area in the immediate future.

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

Yes, see below:

Yes What type? Agricultural (19 wells)
Permit Capacity 1,072,800 Gallons Per Day (GPD)

No

Location: Groves

Water Use Permit #: 20012392.005

Constructed prior to Water Management District Permitting: Yes No

Type of Use: Ag Public Industrial or

Commercial Recreation or Aesthetic Mining

Permitted Daily Capacity: 1,072,800 gpd

Average Peak Monthly Withdrawal Rate: 5,606,700 gpd

Location: Groves (19 wells)

Casing Diameter: 10 & 12 inches

Mainline Diameter: NA

Note that as mining progresses, irrigation quantities will decrease eventually to zero because groves will be removed.

Surface Water Management and Drainage

Determine the impact of drainage on the groundwater and surface water quality and quantity caused by the proposed development. At a minimum, address the following specific questions in your response:

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 areas proposed to be mined consist entirely of uplands and with a handful of isolated wetlands on the property.

The soil within the uplands is sandy with high infiltration rates, as shown on Soils Map in the attached Environmental Report. meaning that there is little surface runoff to offsite properties or surface waters and wetlands. When runoff occurs, the surface drainage varies and is from the topographic high in the uplands to the topographic lows within the property. The topography of the property is shown on attached Figures 6 and 7.

The property lies within the Catfish Creek Basin, Tiger Creek Basin, and the Tiger-Weyohyakapka-Ros Basin. Surface water runoff is direction varies throughout the site.

The property occupies a very small area within the drainage basins, the surface water flow in these basins will not be measurably impacted. See Basin Map attached as Figure 8.

The majority of the property is situated within the Zone X flood zone as shown on Figure 8. Zone X is the area determined to be outside the 500-year flood.

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

A portion of the uplands will be removed by the mining operations. Post development conditions will include lakes where the mining has occurred.

The underlying sand is highly permeable. Because little surface runoff presently occurs from the sandy uplands, the presence of mine lakes will not measurably impact runoff to wetlands. As mentioned above, the property lies within the Catfish Creek Basin , Tiger Creek Basin, and Weyohyakapka-Ros Basin.

At this time, it is anticipated that after reclamation the mine will result in +/-502 acres of open water lakes.

The project will retain rainfall events up to the 100-year, 24-hour event in the reclaimed lakes.

After reclamation, the water in the open water lakes will consist of ground water and rainfall, because the reclaimed lakes will extend into the surficial aquifer, and rain that falls directly into the reclaimed lakes.

The reclaimed lakes, therefore, will not significantly affect downstream receiving systems, other existing legal users, base flows, or hydration in offsite natural systems, lakes and wetlands. See attached Reclamation Plan on Figure 10 and the Post Closure Plan on Figure 11.

Environmental Analysis

Provide an analysis of the character of the subject property and surrounding properties, and further assess the site's suitability for the proposed land use classification based on soils, topography, and the presence of wetlands, floodplain, aquifer recharge areas, scrub or other threatened habitat, and historic resources, including, but not limited to:

- 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 project area lies on the Lake Wales Ridge physiographic province (White, 1970). The Lake Wales Ridge is characterized by land surface elevations ranging up to approximately 300 feet (NAVD 88) and coarse clastic sediment disturbed by dissecting streams and karst activity. The Lake Wales Ridge is the most prominent topographic feature in peninsular Florida. Elevations of the ridge crest range from 150 to 305 feet NAVD 88 and are highest at Lake Wales and Babson Park (Stewart) 1966). The ridge is a highland composed primarily of coarse clastic material dissected by streams and karst activity and “straightened on its flanks by coastal erosion to produce its present western bounding scarp and a probable burled former eastern bounding scarp” (White 1970). The preservation of the Lake Wales Ridge as a present day highland is thought to be due to the presence of the clayey, gravelly, coarse quartz sand that has limited, but not completely prevented, the dissolution of the underlying limestone.

Physiographically, the project area is on the Wicomico Terrace. The Wicomico Terrace is an ancient Atlantic shoreline scarp that extends from Virginia to Florida. In Florida, the terrace has been modified by erosional processes (Healy, 1975).

The site includes a topographic high, with elevations ranging between approximately 100 and 150 feet NGVD. Sand extracted at the Mammoth Grove Mine is the surficial, Quaternary, silica sand overlying the Miocene Hawthorn Group. Overburden (unusable material overlying the sand body) is essentially nonexistent and the surface soils consist of sand with traces of natural organic material.

The environmental sensitivity of the site and adjacent properties is relatively low, almost entirely impacted by existing and historical agricultural activities. The project area was evaluated for the potential occurrence of Critical Habitat as defined by the Endangered Species Act of 1973, as amended and 50 Code of Federal Regulations (CFR) and other publicly protected lands.

The Project is located in a rural setting consisting of primarily agricultural land uses, characterized by citrus groves, with several existing sand mines directly adjacent and contiguous to and in the general vicinity.

General land use was determined utilizing publicly available data from SWFWMD, FWS NWI, infrared and true color aerial imagery, and aerial interpretation of the study area.

Upland and wetland land uses were classified using the 1999 Florida Department of Transportation (FDOT) FLUCCS. The FLUCCS land use types are described below and are depicted on the enclosed Land Use Map.

Upland Land Use Communities

Tree Crops (FLUCCS 210/220)

This land use category is comprised of the agricultural operations onsite consisting of citrus production. This is the predominant existing land use, consisting of approximately 758 acres or 89% of the study area.

Other Open Lands (FLUCCS 260)

There are other open lands interspersed within the citrus groves. Other open lands consist of agricultural lands of indeterminate use.

Upland Hardwood-Coniferous Mixed (FLUCCS 434)

There is a small (15 acre) mapped area of this land use type along the eastern perimeter of the study area. This land use type includes areas with a mixed assemblage of hardwood and pine trees where neither type is dominant in the canopy.

Wetland Land Use Communities

Lakes (FLUCCS 520)

There are several open surface waters scattered throughout the northern portion of study area totaling approximately 16 acres. Based on aerial interpretation they appear to be mostly natural karst lakes.

Vegetated Non-Forested Wetlands (FLUCCS 640)

There are herbaceous wetlands scattered throughout the study area totaling approximately 32 acres. This land use type consists of marshes, flooded basins, and meadows with little to no tree cover. Within this land use category are three sub-categories found within the study area: Freshwater Marshes (FLUCCS 641)

Freshwater marshes are relatively level and seasonally flooded areas dominated with wetland emergent vegetation such as sawgrass, arrowhead, and cattail.

Wet Prairie (FLUCCS 643)

This is also a relatively level and seasonally flooded wetland land use but with a shorter annual hydroperiod than freshwater marshes. They often occur along the perimeters of the deeper marshes. Vegetation is often dominated by grasses, sedges, and St. Johns wort.

Emergent Aquatic Vegetation (FLUCCS 644)

This land use type typically occurs along lake or river shores and is vegetated mostly with floating plants such as water lilies or spatterdock.

Mining will not change the semi-confining unit characteristics, the surficial aquifer water table level, nor the potentiometric level of the Intermediate aquifer. Therefore, mining in the

project area will not reduce the recharge volume to the Intermediate and Upper Floridan aquifers.

Since the dredge pond water levels will be maintained at levels similar to the surficial aquifer water table levels, the Mammoth Grove Mine basically maintains the ambient water table conditions. Maintaining the dredge pond elevation at approximately the ambient, natural water table level will preclude off site drawdown effects.

The mining plan coupled with a highly favorable geologic and hydrologic setting ensures that the Mammoth Grove Mine will not adversely affect ground water and surface water, nor cause off-site sedimentation.

All process water will be re circulated to the dredge pond so that the addition of water from the Intermediate nor the Upper Floridan aquifer as make-up water is not necessary. No wells are planned for the project area.

All process water will be re-circulated to the dredge pond so that the addition of water from the Intermediate nor the Upper Floridan aquifer as make-up water is not necessary.

Stormwater will be retained on site in the mine lakes and all process water will be recirculated to the mine lakes. All fine sediment separated during the sand processing and created during stormwater runoff will be trapped in the mine lake and retained on the site.

No surface streams will be affected by this operation. All surplus precipitation (less evapotranspiration) becomes internal drainage, and no offsite surface water discharge will occur.

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

Lakes (FLUCCS 520)

There are several open surface waters scattered throughout the northern portion of study area totaling approximately 16 acres.

Vegetated Non-Forested Wetlands (FLUCCS 640)

There are herbaceous wetlands scattered throughout the study area totaling approximately 32 acres. This land use type consists of marshes, flooded basins, and meadows with little to no tree cover. Within this land use category are three sub-categories found within the study area:

Freshwater Marshes (FLUCCS 641)

Freshwater marshes are relatively level and seasonally flooded areas dominated with wetland emergent vegetation such as sawgrass, arrowhead, and cattail.

Wet Prairie (FLUCCS 643)

This is also a relatively level and seasonally flooded wetland land use but with a shorter annual hydroperiod than freshwater marshes.

They often occur along the perimeters of the deeper marshes. Vegetation is often dominated by grasses, sedges, and St. Johns wort.

Emergent

Aquatic Vegetation (FLUCCS 644)

This land use type typically occurs along lake or river shores and is vegetated mostly with floating plants such as water lilies or spatterdock.

The initial review indicates that the study area contains approximately 32 acres of jurisdictional wetlands and surface waters (Land Use Map and NWI Map).

Dredge or fill impacts to these areas would require a permit from the Florida Department of Environmental Protection along with compensatory mitigation.

A permit from the U.S. Army Corps of Engineers may also be required if they are considered to be Waters of the United States.

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

The nearest public well, the Saddlebag Owners Well is +/- 6,200 feet from the site.

The closest public well field is Southeast Regional Utility Service Area which is +/-2 miles southeast.

There are numerous private wells located on properties adjacent to the proposed mining property. Each well is completed in the upper Floridan aquifer. There is no anticipated impact to these wells.

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

There are no airports within the vicinity of the project area.

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

Based on the USDA/NRCS Soil Survey for Polk County (1990), eight soil types are mapped within the Mammoth Grove Mine area (Soil Map). Only one of the soil types is considered hydric soils according to the *Hydric Soils of Florida Handbook*. Below are the soil types mapped for the site, their corresponding NRCS reference number for soils of Polk County, and a general description of their characteristics.

(15) Tavares fine sand, 0 to 5 percent slopes – This unit consists of nearly level, to gently sloping, moderately well drained soil, and derived sandy marine deposits. Slopes are convex to linear. Typically, the surface layer is very dark grayish brown fine sand about six inches thick. The underlying layers are fine sand to a depth of 80 inches or more. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil.

(17) Smyrna and Myakka fine sands – This unit consists of level, poorly drained soil. This soil type is found on sandy marine deposits. Typically, the surface layer is fine sand about five inches thick. The underlying layers are fine sand to a depth of 80 inches or more. Depth to water table is typically between 6 to 18 inches. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil.

(31) Adamsville fine sand, 0 to 2 percent slopes – This unit consists of level to slightly sloping, somewhat poorly drained sands derived from sandy marine deposits. The surface layer is typically 7 inches thick and consists of fine sand. The underlying layers are fine sand to a depth of 80 inches or more. Depth to water table is between 18 to 42 inches. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil.

(36) Basinger mucky fine sand, frequently flooded – This unit consists of nearly level, very poorly drained sands derived from sandy marine deposits. The surface layer is typically 7 inches thick and consists of mucky fine sand. The underlying layers are fine sand to a depth of 80 inches or more. Depth to water table is about 0 inches and flooding is frequent. According to the *Hydric Soils of Florida Handbook*, this is a hydric soil; however, it only accounts for approximately 6 acres (<1%) of the study area.

(46) Astatula sand, 0 to 5 percent slopes– This unit consists of very deep, excessively drained soils on uplands that formed in eolian and marine sands. These soils are on low knolls and ridges in the flatwoods areas of central, southern, and a few areas of the eastern gulf coast of Florida. Slopes range from zero to five percent. Permeability is very rapid. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil. This is by far the dominant soil type present, accounting for approximately 658 acres (77%) of the study area.

(59) Arents-Urban Land Complex, 0 to 5 percent slopes– This unit consists of nearly level to slightly sloping, somewhat poorly drained sands derived from altered marine deposits. The soil surface profile consists of sand to a depth of 80 inches or more. Depth to water table is between 18 to 36 inches. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil.

(74) Narcoossee sand– This unit consists of nearly level, somewhat poorly drained sands derived from sandy marine deposits. The surface layer is typically 5 inches thick and consists of sand. The underlying layers are sand or fine sand to a depth of 80 inches or more. Depth to water table is between 24 to 42 inches. According to the *Hydric Soils of Florida Handbook*, this is not a hydric soil.

(88) Astatula sand, 5 to 8 percent slopes–This soil is moderately sloping and excessively drained. It is on uneven side slopes and upland ridges. The mapped areas are irregular in shape and range from 5 to about 100 acres. Typically, the surface layer is gray fine sand 2 inches thick. The underlying material to a depth of 80 inches is brownish yellow and yellow fine sand. Permeability.

What is the nearest location (travel distance), provider, capacity or general response time, and estimated demand of the provision for the following services:

- 1. Parks and Recreation;**

The closest parks to the site are Golfview Park, and Highland Manor Park, 3 miles west and 5.5 miles southwest, respectively.

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

The closest education facilities are as follows:

+/-5 miles west

Hillcrest Elementary School
1051 State Road 60 East
Lake Wales, Florida 33853

+/-6 miles west

McLaughlin Middle and Fine Arts Academy
800 South 4th Street
Lake Wales, Florida 33853

+/-5 miles west

Lake Wales Senior High School
1009 North 6th Street
Lake Wales, Florida 33853

This proposed mining operation will not create additional demand on the Polk County education system and the resulting impact will be negligible.

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

Advent Health Lake Wales facility at 410 S 11th St Lake Wales, FL 33853.

4. Fire Protection;

Fire response and Emergency Services to this project will dispatch from the Golfview Station 10 located at 2902 Florida 60 Lake Wales, Florida, 33898.

5. Police Protection and Security;

The responding Polk County Sheriff's substation is located at Southeast District Office at 4011 Sgt Mary Campbell Way Lake Wales, FL 33859.

6. Emergency Medical Services (EMS);

The nearest EMS location is the Golfview Station 10 located at 2902 Florida 60 Lake Wales, Florida, 33898.

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

There will be a de minimus demand for solid waste collection services for the sand mine. The existing solid waste collection is through the Polk County Solid Waste Department.

8. How may this request contribute to neighborhood needs?

Commercial sand is a raw material used for the critical infrastructure needs for local and regional projects.

The proposed operation will also provide employment opportunities and contribute to the downstream job creation for third party vendors that will be required for construction, operation and maintenance of the site.

The post closure use will include reservoirs, passive recreation, and conservation lands.

Maps

Maps shall be used to give the public agencies a clear graphic illustration and visual understanding of the proposed development and the potential positive and negative impacts resulting from the development. Maps shall be of sufficient type, size, and scale to facilitate complete understanding of the elements of the proposed development. Scale shall be clearly indicated on each map and the dates of preparation and revisions shall be included. The project boundaries shall be overlaid on all maps. The following **maps shall 8 1/2" x 11"** and accompany Impact Assessment Statements:

Map A: A location map (center the site on the map) showing the relationship of the development to cities, highways, and natural features;

See attached Figure 1.

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

See attached Figure 2.

Map C: A site plan consistent with *Site Plan Standards*² (multiple sheets may be used). In addition to the required number of copies please **include an 8½" x 11" copy**. Applications for district changes alone are not required but are encouraged to submit a Development Plan; and

See attached Figures 9, 10 and 11.

NOTE: Applications for text amendments are not required to submit a complete Impact Assessment Statement, however, all relevant information requested must be addressed. Use this form and the "Demonstration of Need" form as a guide for assessing the impact of a text amendment.

² See *Site Plan Standards* checklist form (GM LDD 11).