August 6, 2019

Mr. James S. Guentert, PG  
Solid Waste Management Program  
GA Dept of Natural Resources  
Environmental Protection Division  
Land Protection Branch  
42244 International Parkway  
Suite 104  
Atlanta, GA 30354  

RE:  Burke County – Sunbelt Medical Services  
     Solid Waste Handling Facility  
     APL 410230

Subject: Jurisdictional Wetlands

Dear Mr. Guentert:

Please be advised that on August 6, 2019, I performed a site reconnaissance of properties owned by Sunbelt Medical Services located at 639 Vestal Road (0.50 acre parcel) and Charles Perry Avenue (2.89 acre parcel), Sardis, GA. I did not observe any indicators of wetland hydrology, hydric soils, or hydrophytic vegetation at either site that support jurisdictional wetlands as defined by the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual and Regional Supplements.

Sincerely,

EMC ENGINEERING SERVICES, INC.

George D. McDavid, CPESC, CPSWQ  
Sr. Project Manager  
Certified Wetland Delineator
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CRITERIA FOR SOLID WASTE HANDLING FACILITY

Sunbelt Medical Services, Inc. submitted an Application for Solid Waste Handling Permit and Request for Site Suitability on April 18, 2019 to the Georgia Environmental Protection Division (EPD) for their Processing Facility located at 639 Vestal Road in Sardis, Burke County, Georgia (Latitude 32°58'28.41", Longitude 81°45'18.96"). Per the EPD’s review of the information submitted, it was determined that a Site Assessment Report be prepared in accordance with Chapter 391-3-4-.05 of the Solid Waste Management Rules.

EMC Engineering Services, Inc. (EMC) performed a complete site assessment and report of findings per Chapter 391-3-4-.05 of the Solid Waste Management Rules for the processing facility for Sunbelt Medical Services, Inc. to be used for the permitting process to obtain a Solid Waste Handling Permit and Request for Site Suitability.

The following criteria must be met for a site proposed as a solid waste handling facility:

ZONING

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, the site must conform to all local zoning/land use ordinances. Written verification must be submitted to the Division by the applicant demonstrating that the proposed site complies with local zoning and land use ordinances, if any. This verification shall include a letter from the local governmental authority stating that the proposed site complies with local zoning or land use ordinances, if any. This verification shall be provided at the time of submission of a permit application and reaffirmed by the governmental authority prior to permit issuance.

On October 5, 2018 a letter from the City of Sardis was sent to the Georgia Department of Natural Resources - Environmental Protection Division stating that Doug Sayers (owner of Sunbelt Medical Services, Inc.) had advised the City of Sardis of his intentions to acquire additional EPD permits for his facility. It goes on to state that the City of Sardis has “no zoning” requirements within the city limits, and that Sunbelt Medical Services, Inc. abides by all local ordinances and/or regulations. A copy of this letter can be found in the Appendix of this report.

DISPOSAL FACILITY SITING DECISION

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, whenever any county, municipality group of counties, or authority begins a process to select a site for a municipal solid waste disposal facility, documentation shall be submitted which demonstrates compliance with O.C.G.A. 12-8-26(a), and whenever the governing authority of any county or municipality takes action resulting in a publicly – or privately-owned municipal solid waste disposal facility siting decision, documentation shall be submitted which demonstrates compliance with O.C.G.A. 12-8-26(b).

On May 30, 2019 a letter from the Burke County Board of Commissioners was sent to the Georgia Department of Natural Resources – Environmental Protection Division stating that Sunbelt Medical Services, Inc. meets all requirements for Burke County, Georgia, and is consistent with the County’s Solid Waste Management Plan. A copy of this letter can be found in the Appendix of this report.
AIRPORT SAFETY

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, the following criteria must be met concerning airport safety:

1. New MSWLF units or lateral expansions of existing units shall not be located within 10,000 feet (3,048 meters) of any public-use or private-use airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public-use or private-use airport runway end used by only piston-type aircraft.

2. Owners or operators of existing MSWLF units, that are located within 10,000 feet (3,048 meters) of any public-use or private-use airport runway end used by turbojet aircraft or within 5,000 feet (1,524 meters) of any public-use or private-use airport runway end used by only piston-type aircraft must demonstrate that the units are designed and operated so that the MSWLF units do not pose a bird hazard to aircraft.

3. Owners or operators proposing to site new MSWLF units and lateral expansions within a five-mile radius of any public-use or private-use airport runway end used by turbojet or piston-type aircraft must notify the affected airport and the Federal Aviation Administration (FAA).

4. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record not later than October 1, 1993.

5. For purposes of this section:
   (a) “Public-use airport” means an airport open to the public without prior permission and without restrictions within the physical capacities of available facilities.
   (b) “Private-use airport” means an airport that is not open to the public and which may not be used without prior permission of the airport owner and which has restrictions other than the physical capacities of available facilities and such airport is shown on the Sectional Aeronautical Charts published by the U.S. Department of Commerce for Atlanta, Jacksonville, or New Orleans, which charts are dated at least one year prior to the submission of a MSWLF permit or major permit modification application.
   (c) “Bird hazard” means an increase in the likelihood of bird/aircraft collisions that may cause damage to the aircraft or injury to its occupants.

A radius search of all FAA registered airports (public-use and private-use) was conducted at 10,000 feet (3,048 meters) and 5,000 feet (1,524 meters). No airports were found to be within the search radius from the site. An illustration of the radius search can be found in the Appendix of this report.

FLOODPLAINS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, a solid waste handling facility located in the 100-year floodplain shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste so as to pose a hazard to human health and the environment. The owner or operator must place a demonstration of compliance in the operating record and notify the Director that it has been placed in the operating record.

1. For the purpose of this section:
   (a) “Floodplains” means the low land and relatively flat areas adjoining inland and coastal waters, including flood-prone areas of offshore islands that are inundated by the 100-year flood.
(b) “100-year flood” means a flood that has a 1-percent or greater chance of recurring in any given year or a flood of a magnitude equaled or exceeded once in 100 years on the average over a significantly long period.
(c) “Washout” means the carrying away of solid waste by waters of the base flood.

A FEMA Flood Map search was conducted for the site. According to the National Flood Hazard Layer FIRMette, the site falls within Zone X, area of minimal flood hazard (13033C0535C eff. 12/17/2010). A copy of the FEMA Flood Map can be found in the Appendix of this report.

WETLANDS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, a solid waste handling facility shall not be located in wetlands, as defined by the U.S. Corps. Of Engineers, unless evidence is provided to the Director, by the applicant, that use of such wetlands has been permitted or otherwise authorized under all other applicable state and federal law and rules. The owner or operator must place a demonstration or compliance in the operating record and notify the Director that it has been placed in the operating record.

A search of the site was conducted within the National Wetlands Inventory (NWI) to determine if the site was located in any wetland areas. The search concluded that no wetlands exist on or near the site. A copy of the NWI map can be found in the Appendix of this report.

FAULT AREAS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, new landfill units and lateral expansions of existing landfills shall not be located within 200 meters (60 meters) of a fault that has had displacement in Holocene time unless the owner or operator demonstrates to the Director that an alternative setback distance of less than 200 feet (60 meters) will prevent damage to the structural integrity of the landfill unit and will be protective of human health and the environment.

For the purpose of this section:
(a) “Fault” means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.
(b) “Displacement” means the relative movement of any two sides of a fault measured in any direction.
(c) “Holocene” means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch to the present.

A United States Geological Survey (USGS) search was conducted for the site to determine if any fault areas were nearby. The search concluded that no fault areas were on or near the site. A copy of the USGS Quaternary Faults Map can be found in the Appendix of this report.

SEISMIC IMPACT ZONES

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, new landfill units and lateral expansions shall not be located in seismic impact zones, unless the owner or operator demonstrates to the Director that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record.
For the purpose of this section:

(a) Seismic impact zone means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull will exceed 0.10g in 250 years.

(b) Maximum horizontal acceleration in lithified earth material means the maximum expected horizontal acceleration depicted on a seismic hazard map, with a 90 percent or greater probability that the acceleration will not be exceeded in 250 years, or the maximum expected horizontal acceleration based on a site-specific seismic risk assessment.

(c) Lithified earth material means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

The United States Geological Survey (USGS) Unified Hazard Tool was used to determine the maximum expected horizontal acceleration in lithified earth material. The results showed that the predicted ground motion was 0.0316g, and that the site is not located in a seismic impact zone (exceeds 0.10g). A copy of the USGS Unified Hazard Tool report can be found in the Appendix of this report.

In addition, EMC also performed a Standard Penetration Test Boring (SPT) to a depth of 20 feet for seismic classification. Although building structures can be seismically designed to survive predicted earthquake conditions, alteration of subsurface conditions as a result of seismic activity is of greater concern with regard to structural failure. Liquefiable sediments are young, loose, water-saturated, well sorted, and are either fine sands or slightly silty sands. The sediments are seldom older than Holocene, and are usually only present on floodplains of creeks, rivers, and coastal geologies. Although historical data generally indicates that a significant seismic event has not occurred in the immediate area of the subject site, and soil and groundwater conditions for liquefaction do not exist.

SPT N-values were obtained from the 20 foot deep boring. The data provided allowed us to determine a weighted "N" Value for correlation with Seismic Classification Data as listed in the IBC. See below for weighted "N" values. See attached weighted average determination.

As determined by the 2015 International Building Code, data collected from the aforementioned boring, our previous experience in the area and the USGS Earthquake Hazards Program's, Seismic Design for Buildings, the structure should be designed utilizing a Seismic Site Class "D" criteria. See attached USGS Design Map Summary Report for additional seismic details.

Risk Category = I and S_05 = 0.312 g, Seismic Design Category = B
Risk Category = I and S_01 = 0.182 g, Seismic Design Category = C

Where a structure is assigned to Seismic Design Category D, E, or F in accordance with IBC Section 1613, the individual spread footings that are founded on soils classified as Seismic Site Class E or F shall be interconnected by ties. Ties shall be capable of carrying, in tension or compression, a force equal to the product of the larger footing load times the seismic coefficient, S_D, divided by 10, unless it is demonstrated that equivalent restraint is provided by reinforced concrete beams within slabs on grade or reinforced concrete slabs on grade.
UNSTABLE AREAS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, owners or operators of new landfill units, existing landfill units, and lateral expansions located in an unstable area must demonstrate that engineering measures have been incorporated into the landfill unit’s design to ensure that the integrity of the structural components of the landfill unit will not be disrupted. The owner or operator must place the demonstration in the operating record and notify the Director that it has been placed in the operating record. The owner or operator must consider the following factors, at a minimum, when determining whether an area is unstable:

(a) On-site or local soil conditions that may result in significant differential settling;
(b) On-site or local geological or geomorphologic features; and
(c) On-site or local human-made features or events (both surface and subsurface).

For the purpose of this section:
(a) “Unstable area” means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity of some or all of the landfill structural components responsible for preventing releases from a landfill. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.
(b) “Structural components” means liners, leachate collection systems, final covers, run-on/run-off systems, and any other component used in the construction and operation of the landfill that is necessary for protection of human health and the environment.
(c) “Poor foundation conditions” means those areas where features exist which indicate that a natural or man-induced event may result in inadequate foundation support for the structural components of a landfill unit.
(d) “Areas susceptible to mass movement” means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where the movement of earth material at, beneath, or adjacent to the landfill unit, because of natural or man-induced events, results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil slution, block sliding, and rock fall.
(e) “Karst terrains” means areas where karst topography, with its characteristic surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terrains include, but are not limited to, sinkholes, sinking streams, caves, large springs, and blind valleys.

EMC performed two (2) Standard Penetration Test (SPT) borings on site to determine subsurface conditions and site suitability. Borings indicated that the top 5 feet consisted of Brown/Orange/Red Clayey Sands (SC) with SPT N-values ranging from 4 to 15 blows per foot (bpf). From 5 to 15 feet, soils were determined to be White/Red/Brown Mottled Lean Clays (CL) with SPT N-values ranging from 18 to 21 bpf. Below 15 feet was White Clayey Sands (SC) with an average SPT N-value of 27 bpf. SPT N-values indicate bearing capacities ranging from 983 psf to 3,688 psf within the top 5 feet, and 4,425 psf to 6,450 psf from 10 to 20 feet.

Site soils appear to be good, suitable materials with fairly high bearing capacities. The slab foundation appears to be in good condition with no visible signs of cracking or settling. No foreseen on-site or local geological or geomorphologic features were found that would affect the site. In addition, no foreseen on-site or local human-made features or events (both surface and subsurface) were found that would affect the site. Overall the site appears to be a very stable area.
SIGNIFICANT GROUNDWATER RECHARGE AREAS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, a new municipal solid waste landfill or lateral expansion of an existing municipal solid waste landfill shall not have any part of such site located within two miles of any area that has been designated by the Director as a significant groundwater recharge area unless such municipal solid waste landfill will have a liner and leachate collection system. In the case of a regional landfill which accepts solid waste generated outside the counties or special districts constituting the region or a municipal solid waste landfill which accepts solid waste generated outside the county in which the landfill is located, no part of such site shall be within any area that has been designated as a significant groundwater recharge area.

Maps of groundwater recharge areas of Georgia provided by the Department of Natural Resources, the Environmental Protection Division, and the Georgia Geologic Survey were studied to determine if the site was in or nearby (within two miles) a significant groundwater recharge area. After mapping the site, it was determined that no significant groundwater recharge areas are on or nearby (within two miles) the site. Maps of significant groundwater recharge areas can be found in the Appendix of this report.

HYDROGEOLOGICAL ASSESSMENT

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, a hydrogeological site investigation shall be conducted with the following factors, as a minimum, evaluated:

1. Distance to nearest point of public or private drinking water supply: all public water supply wells or surface water intakes within two miles and private (domestic) water supply wells within one-half mile of a landfill must be identified;
2. Depth to the uppermost aquifer: for landfills, the thickness and nature of the unsaturated zone and its ability for natural contamination control must be evaluated;
3. Uppermost aquifer gradient: for landfills, the direction and rate of flow of groundwater shall be determined in order to properly evaluate the potential for contamination at a specific site. Measurements for water levels in site exploratory borings and the preparation of water table maps are required. Borings to water are required to estimate the configuration and gradient of the uppermost aquifer;
4. Topographic setting: features which shall be provided include, but are not limited to, all upstream and downstream drainage areas affecting or affected by the proposed site, floodplains, gullies, karst conditions, wetlands, unstable soils, and percent slope;
5. Geologic setting: for landfills, the depth to bedrock, the type of bedrock and the amount of fracturing and jointing in the bedrock shall be determined. In limestone or dolostone regions, karst terrain shall not be used for waste disposal. This consideration does not preclude the siting of landfills in limestone terrains, but rather is intended to prevent landfills from being sited in or adjacent to sink-holes, provided, however, that the demonstration required by subparagraph (h) has been made.
6. Hydraulic conductivity: evaluation of landfill sites shall take into consideration the hydraulic conductivity of the surface material in which the wastes are to be buried, as well as the hydraulic conductivity of the subsurface materials underlying the fill;
7. Sorption and attenuation capacity: for landfills, the sorptive characteristics of an earth material and its ability to absorb contaminants shall be determined; and
8. Distance to surface water: municipal solid waste landfill shall not be situated within two miles up gradient of any surface water intake for a public drinking water source unless engineering modifications such as liners and leachate collection systems and groundwater monitoring systems are provided.
A map of all public and private drinking water supply wells and surface water intakes within a two mile radius of the site can be found in the Appendix of this report.

The City of Sardis has a drinking water well supply less than 2 miles away from the project site. No other records regarding any public or private drinking water wells could be found.

All waste that is brought on-site is re-packaged and sent to other facilities to be disposed of. No waste is kept on-site for more than a few days at a time before being sent out. Spill prevention measures are also maintained all throughout the facility. Please refer to Sunbelt Medical Services’ Spill Prevention Plan for more information on containment.

Water-bearing units near the site were related to previously defined hydrogeologic units by comparing borehole data collected near the site to other interpreted borehole data from nearby sites. This comparison indicates that several equivalent hydrogeologic units are present at the site. In descending order from the ground surface, these are the Upper Three Runs aquifer, Gordon aquifer, Millers Pond aquifer, the upper and lower Dublin aquifers, and the upper and lower Midville aquifers.

The uppermost aquifer is the Upper Three Runs aquifer, which is approximately 72 feet below ground surface (bgs). This aquifer consists of loosely consolidated sand calcareous sand of Eocene age. It is mostly composed of sediments of the Barnwell Group. Mostly, these sediments are highly permeable fine to medium, well-sorted sand with lenses of clay.

Groundwater flowed from recharge areas to the northwest where water levels are higher to discharge areas to the southeast where water levels are lower. Groundwater levels in the area were determined to range from 35 feet to 90 feet.

In nearby studies, bedrock was found to be present between 520 to 850 feet deep, with evidence of fracturing.

Laboratory analyses of nearby sites indicate that the vertical hydraulic conductivity of confining units is low, with all values less than $9.07 \times 10^{-5}$ ft/day.

**FEDERALLY RESTRICTED MILITARY AIR SPACE**

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, new MSWLF units shall not be located within two miles of a federally restricted military air space which is used for a bombing range.

The Federal Aviation Administration (FAA) UAS Facility Maps were searched to ensure that no federally restricted military air spaces were nearby (within 2 miles) the site. It was concluded that no restricted areas were nearby the site. A copy of the FAA UAS Facility Map can be found in the Appendix of this report.

**CONSTRUCTION/DEMOLITION WASTE LANDFILLS**

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, construction/demolition waste landfills must comply with the siting criteria specified in “Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia”, Circular 14, Appendix B.
Sunbelt Medical Services, Inc. is not a construction/demolition waste landfill. Therefore, the siting criterion does not apply.

INDUSTRIAL WASTE LANDFILLS

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, industrial waste landfills permitted to receive only a single type industrial waste (monofill) or receive only a single industry’s waste, must comply with the siting criteria specified in “Criteria for Performing Site Acceptability Studies for Solid Waste Landfills in Georgia”, Circular 14, Appendix A. Commercial industrial waste landfills must meet the same siting criteria as municipal solid waste landfills.

All siting criteria has been met and determined to be suitable per the City of Sardis and Burke County, Georgia. All letters pertaining to such matters can be found in the Appendix of this report.

SITE ASSESSMENT REPORT

Per Chapter 391-3-4-.05 of the Solid Waste Management Rules, a site assessment report addressing the criteria listed above shall be prepared by a geologist registered in Georgia or a geotechnical engineer registered in Georgia and submitted to the Division for review at the time of submitting a permit application. The site assessment report shall be prepared in accordance with Circular 14, 1991, (amended 1997) as published by the Georgia Geologic Survey, Georgia Environmental Protection Division.

EMC performed a complete site assessment and report of findings per Chapter 391-3-4-.05 of the Solid Waste Management Rules for the processing facility for Sunbelt Medical Services, Inc. located at 637 Vestal Road in Sardis, Burke County, Georgia.

This report is to be used for the permitting process for Sunbelt Medical Services, Inc. to obtain a Solid Waste Handling Permit and Request for Site Suitability.

Prepared By: Ashton Byrne
Geotechnical Engineer

Reviewed By: Robert L. Titus, PE
Principal / Senior Vice President

Reviewed By: Vin Pinkston, PG
Geotechnical Manager
October 5th, 2018

Georgia Department of Natural Resources
Environmental Protection Division
East Central District
3525 Walton Way Extension
Augusta, Georgia 30909

Attn: Ms. Delaine Scott, Environmental Specialist

Re: Sunbelt Medical Services, Inc. – Request for additional Permits
639 Vestal Road
Sardis, GA 30456

Dear Ms. Scott:

Please be advised that Mr. Doug Sayers, owner of Sunbelt Medical Services has advised the City of Sardis of his intentions to acquire additional EPD Permits for his facility.

The City of Sardis has “no zoning” requirements within the city limits.

Sunbelt Medical Services, Inc. abides by all local ordinances and/or regulations.

The City is also aware of Sunbelt’s practices and procedures and has no problem with Mr. Sayer’s request for additional EPD Permits.

Please feel free to call me if you have additional questions or need further information.

Yours truly,

L. Carol Edmonds, Mayor

cc: Mr. Doug Sayers, Sunbelt Medical Services, Inc.

"The Friendly Little City"
An Equal Opportunity Employer
May 30, 2019

Georgia Department Of Natural Resources
Environmental Protection Division
Land Protection Branch
4244 International Parkway
Suite 104
Atlanta, GA 30354

Dear Mr. Hall,

Sunbelt Medical Services meets all requirements for Burke County. It is consistent with the County’s Solid Waste Management Plan. If you have any questions please contact me at merv.waldrop@burkecounty-ga.gov or 706-554-2324.

Sincerely,

Merv Waldrop
Administrator
This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper website.
# Unified Hazard Tool

Please do not use this tool to obtain ground motion parameter values for the design code reference documents covered by the [U.S. Seismic Design Maps web tools](https://earthquake.usgs.gov/hazards/interactive/) (e.g., the International Building Code and the ASCE 7 or 41 Standard). The values returned by the two applications are not identical.

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^ Hazard Curve

Hazard Curves

Annual Frequency of Exceedence

Ground Motion (g)

Uniform Hazard Response Spectrum

Ground Motion (g)

Spectral Period (s)

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View Raw Data
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**STP, WEIGHTED AVERAGE OF N**

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</table>

**SITE CLASS** D
**Log of Boring**

**Date:** 5/29/2019  
**Boring No.:** B-1  
**Job No.:** 19-8581  
**Drill Type:** Hollow Stem Auger  
**Client:** Sunbelt Medical Services, Inc.  
**Project:** Sunbelt Bio Waste  
**Location:** 639 Vestal Road, Sardis, GA

<table>
<thead>
<tr>
<th>ELEV. (ft)</th>
<th>DESCRIPTION</th>
<th>DEPTH IN FEET</th>
<th>SAMPLES</th>
<th>&quot;N&quot; Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Surface cover: GRAVEL; GRASSES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BROWN SILTY SAND</td>
<td>1</td>
<td>S S</td>
<td>SM</td>
</tr>
<tr>
<td></td>
<td>BROWN/ORANGE CLAYEY SAND</td>
<td>2</td>
<td>S S</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>ORANGE CLAYEY SAND</td>
<td>3</td>
<td>S S</td>
<td>SC</td>
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<tr>
<td></td>
<td>RED/ORANGE CLAYEY SAND</td>
<td>4</td>
<td>S S</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>RED CLAYEY SAND</td>
<td>5</td>
<td>S S</td>
<td>SC</td>
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<tr>
<td></td>
<td></td>
<td>6</td>
<td>S S</td>
<td>SC</td>
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<tr>
<td></td>
<td></td>
<td>8</td>
<td>S S</td>
<td>SC</td>
</tr>
</tbody>
</table>

Boring Terminated @ 30.0’

**Notes:** Groundwater not encountered at time of drilling.

**Hand Auger = HA**  
**Split Spoon = SS**  
**Drive Tube = UD**
**LOG OF BORING**

**DATE:** 5/29/2019  
**BORING NO.:** B-2  
**JOB NO.:** 19-8581  
**DRILL TYPE:** Hollow Stem Auger  
**CLIENT:** Sunbelt Medical Services, Inc.  
**PROJECT:** Sunbelt Bio Waste  
**LOCATION:** 639 Vestal Road, Sardis, GA

<table>
<thead>
<tr>
<th>ELEV. (ft)</th>
<th>DESCRIPTION</th>
<th>DEPTH IN FEET</th>
<th>SAMPLES</th>
<th>&quot;N&quot; Value</th>
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</thead>
<tbody>
<tr>
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<td>Surface cover: GRASSES</td>
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</tr>
<tr>
<td></td>
<td>LIGHT BROWN SILTY SAND</td>
<td>1</td>
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<td>SM</td>
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<td></td>
<td>BROWN SILTY SAND</td>
<td>2</td>
<td>SS</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td>BROWN/ORANGE CLAYEY SAND</td>
<td>3</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>RED/PINK CLAYEY SAND</td>
<td>4</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td>Boring Terminated @ 20.0'</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>SS</td>
<td>SC</td>
</tr>
</tbody>
</table>

**NOTES:** Groundwater not encountered at time of drilling. Y

Hand Auger = HA  
Based on "N" Values = *  
Split Spoon = SS  
Drive Tube = UD
<table>
<thead>
<tr>
<th>ELEV. (ft)</th>
<th>DESCRIPTION</th>
<th>DEPTH IN FEET</th>
<th>SAMPLES</th>
<th>&quot;N&quot; Value</th>
</tr>
</thead>
<tbody>
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<td>Surface cover: 4&quot; GRAVEL</td>
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</tr>
<tr>
<td>1</td>
<td>BROWN CLAYEY SAND</td>
<td>1</td>
<td>SS</td>
<td>SM</td>
</tr>
<tr>
<td>2</td>
<td>BROWN/YELLOW CLAYEY SAND</td>
<td>2</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>3</td>
<td>BROWN/ORANGE CLAYEY SAND</td>
<td>3</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>4</td>
<td>RED CLAYEY SAND</td>
<td>4</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>5</td>
<td>RED/PINK CLAYEY SAND</td>
<td>5</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>6</td>
<td>BROWN/RED CLAYEY SAND</td>
<td>6</td>
<td>SS</td>
<td>SC</td>
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<tr>
<td></td>
<td>Boring Terminated @ 20.0'</td>
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**NOTES:** Groundwater not encountered at time of drilling.

Hand Auger = HA
Based on "N" Values = *
Split Spoon = SS
Drive Tube = UD
**LOG OF BORING**

**DATE:** 5/29/2019  
**BORING NO.:** B-4  
**JOB NO.:** 19-8581  
**DRILL TYPE:** Hollow Stem Auger  
**CLIENT:** Sunbelt Medical Services, Inc.  
**PROJECT:** Sunbelt Bio Waste  
**LOCATION:** Sardis, GA

<table>
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<tr>
<th>ELEV. (ft)</th>
<th>DESCRIPTION</th>
<th>DEPTH IN FEET</th>
<th>SAMPLES</th>
<th>&quot;N&quot; Value</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Surface cover: GRAVEL; GRASSES</td>
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</tr>
<tr>
<td>1-2</td>
<td>BROWN/ORANGE CLAYEY SAND</td>
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<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>3</td>
<td>WHITE/PINK/RED LEAN CLAY</td>
<td>2</td>
<td>SS</td>
<td>SC</td>
</tr>
<tr>
<td>4-5</td>
<td>WHITE/BROWN/RED MOTTLED CLAY</td>
<td>3</td>
<td>SS</td>
<td>CL</td>
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<td>6-7</td>
<td>WHITE CLAYEY SAND</td>
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<tr>
<td>8</td>
<td>Boring Terminated @ 20.0'</td>
<td>5</td>
<td>SS</td>
<td>SC</td>
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<tr>
<td>11</td>
<td></td>
<td>6</td>
<td>SS</td>
<td>SC</td>
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</tbody>
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**NOTES:** Groundwater not encountered at time of drilling.

Hand Auger = HA  
Based on "N" Values = *  
Split Spoon = SS  
Drive Tube = UD
SOIL TEST BORING SPT LOG DATA

<table>
<thead>
<tr>
<th>Location</th>
<th>B-4</th>
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<tbody>
<tr>
<td>Depth</td>
<td>Blows</td>
</tr>
<tr>
<td>0' to 1.5'</td>
<td>2</td>
</tr>
<tr>
<td>2.5' to 4'</td>
<td>2</td>
</tr>
<tr>
<td>5' to 6.5'</td>
<td>4</td>
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<tr>
<td>8.5' to 10.0'</td>
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<td>13.5' to 15.0'</td>
<td>7</td>
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<tr>
<td>18.5' to 20.0'</td>
<td>7</td>
</tr>
</tbody>
</table>

NOTE: Approximate allowable soil pressure for footings as a function of penetration resistance (the number of blows of a 140 lb hammer falling 30 inches required to drive a standard split spoon sampler 1 foot).

Soil Type 1
Plastic Silt, partially saturated clay

Soil Type 2
Sandy silts, residual silts and sands

Soil Type 3
Saturated clay, square footings

Soil Type 4
Sands and gravels, dry

Soil Type 5
Saturated clays for wall footings, sands and gravels, floodplains and fill
Georgia's Groundwater Recharge Areas

Data Source: Georgia Geologic Survey
Produced by the Georgia Department of Community Affairs
MOST SIGNIFICANT
GROUND-WATER RECHARGE AREAS
OF GEORGIA

by

Kenneth R. Davis, John C. Donahue, Robert H. Hutcheson, and Deborah L. Waldrop

The preparation of this atlas was financed in part through a grant from the U.S. Environmental Protection Agency under the provisions of Section 108 of the Federal Water Pollution Control Act of 1972, as amended.

Department of Natural Resources
Joe D. Tanner, Commissioner
Environmental Protection Division
Harold F. Rehels, Director
Georgia Geologic Survey
William H. McLemore, State Geologist

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