## **Attachment B**

# Drill-Hole Site Description and Location Maps Mercer 7.5-Minute Quadrangle, Mercer County

Note: This attachment contains the site description and location maps for two proposed sonic drilling sites (2 holes total) both in State Game Land - 284, Mercer County. To assist prospective bidders in understanding the probable subsurface geology and drilling conditions to be encountered, descriptions of the likely geologic formations and rock types to be penetrated by the borehole are included. These descriptions (assessments) are a reasonable attempt by the Department to provide objective geologic information about the work site. As such, they should be considered average probable conditions for the drill hole, including estimated footages, and should not be considered guarantees. Unanticipated rock types and/or drilling conditions may occur.

#### Site 1

Twp Rd 335, State Game Lands – 284 gate, Springfield Township, Mercer County, Pennsylvania.

-80.208748°W, 41.144661°N Well Number: MER085\_2591 Anticipated Total Depth: 120 feet

#### Access/Site Description

The work site is located off the north side of Township Road 335, within the boundaries of State Game Lands – 284. The property is owned by the Commonwealth of Pennsylvania. Access is a State Game Land road accessed by Township Road 335. Based on field inspection, there are no known underground orabove ground obstructions, and the terrain at the drilling site is flat (needs checked).

#### **Travel Directions**

The site is located in Springfield Township. Traveling north on Interstate-79 take State Route 208 exit west towards the Borough of Volant. Travel approximately 2.25 miles, and turn right on Twp Rd. 674 heading northwest, drive 0.4 miles. Turn left on Twp Rd. 335 headed west, drive 0.4 miles. Property is on right to the north of the road at State Game Lands gate. Alternately, property is approximately 0.85 miles east of State Route 19 on Twp Rd. 335.

Water Availability: Water can be obtained from ponds on this State Game Lands property.

#### Site 2

Pennsy Road, State Game Lands – 284 gate, Springfield Township, Mercer County, Pennsylvania.

-80.206749, 41.123840

Well Number: MER085\_2592
Anticipated Total Depth: 100 feet

#### Access/Site Description

The work site is located off the east side of Pennsy Road, within the boundaries of State Game Lands – 284. The property is owned by the Commonwealth of Pennsylvania. Access is a State Game Land road accessed by Pennsy Road. Based on field inspection, there are no known underground or above ground obstructions, and the terrain at the drilling site is flat (needs checked).

#### **Travel Directions**

The site is located in Springfield Township. Traveling north on Interstate-79 take State Route 208 exit west towards the Borough of Volant. Travel approximately 3.5 miles west to State Route 19 and turn left headed south 0.6 miles to the intersection of Pennsy Road and turn left headed southeast 0.5 miles to State Game Lands gate on left and east of the road. Access SGL road and drive west 0.3 mile until intersection of old railroad grade road. Site is in clearing at intersection. Water Availability: Water can be obtained from nearby pond on this State Game Lands property.

### **Geologic Setting**

The boreholes are located in up to 120 feet of glacial deposits. These layers could include glacialtill, glacial lake clays, and stratified sand and gravel.

Unless unforeseen geologic conditions occur or directed otherwise by the Department representative, the goal is to drill through the entire glacial profile and 5 feet into bedrock. The descriptions below are typical of materials found in this area:

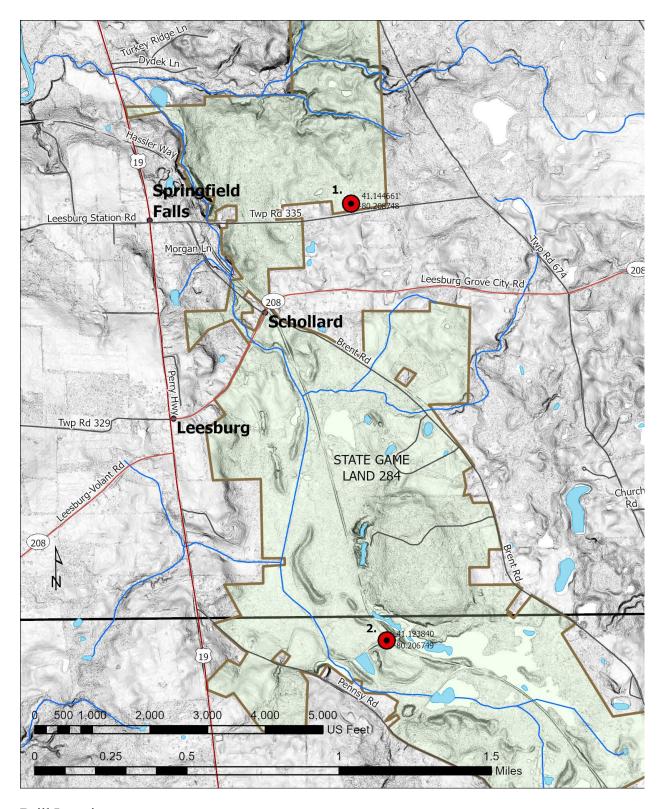
**Alluvium** (Stream and Flood Plain Deposits) - If present it will be the topmost layer of silt, sand, and gravel, ranging from 0 to 20 feet thick.

**Till** - Dominantly clayey silt intermixed with various sizes of gravel, some the size of small boulders.

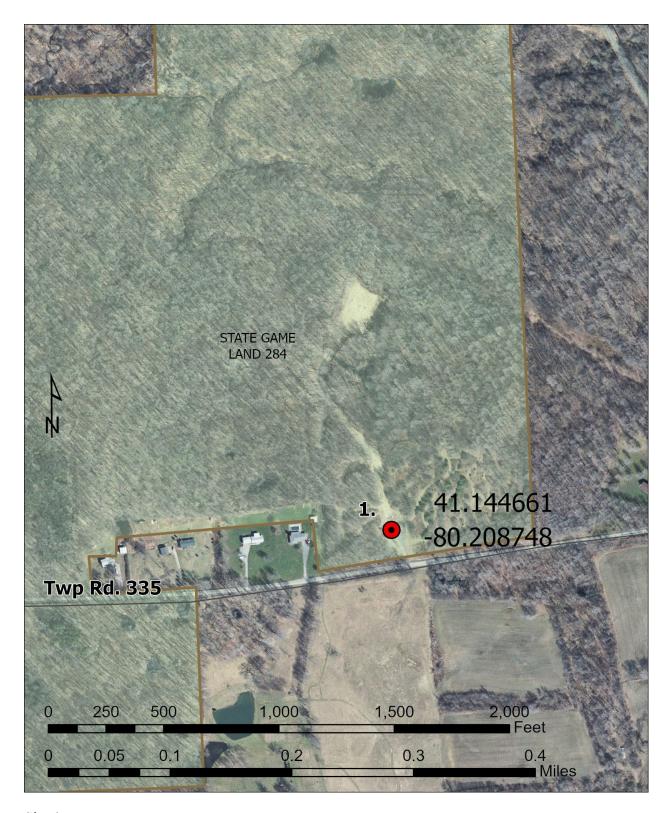
Clay – Dominantly clay to clayey silt layers could occur. Thicknesses are unknown.

**Sand and Gravel** – Stratified sand and gravel ranging in grain sizes from sand to boulder. Duethe impermeability of clay if above a lower sand, there can be sufficient groundwater pressure to cause quicksand conditions.

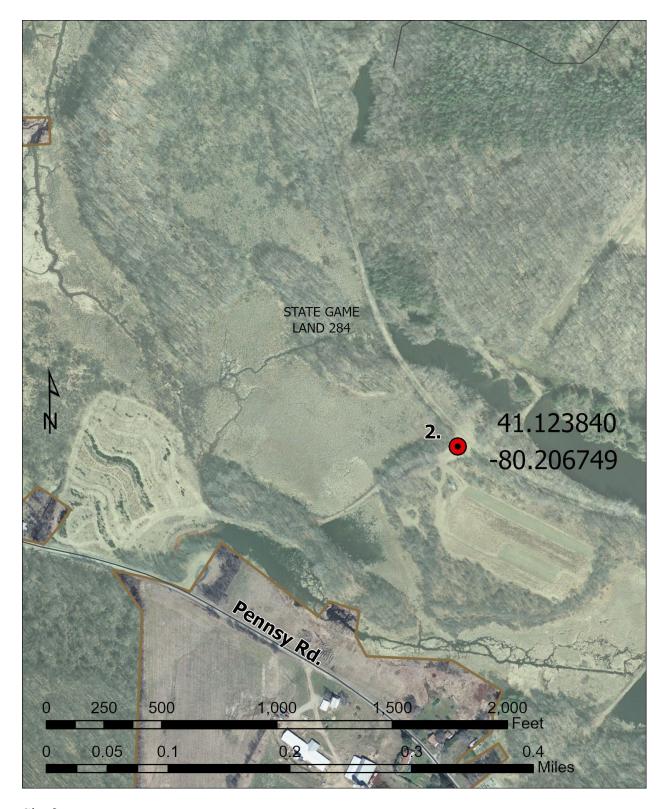
Bedrock - Dominantly gray shale and siltstone.



**Drill Locations:** 



Site 1:



Site 2: