



March 12, 2024  
Revised August 7, 2024

Mr. Ian Burton  
MidAtlantic Engineering Partners  
1971 Highway 34, Suite 201  
Wall Township, NJ 07719

ECS Project Number: 44-2006-A

Reference: Results of Infiltration Testing – Additional Test Pits  
**Lawrenceville Office Park Redevelopment - Revised**  
3131 Princeton Pike  
Lawrence Township, Mercer County, New Jersey

Dear Mr. Burton:

ECS Mid-Atlantic, LLC (ECS) is pleased to present the revised interpreted subsurface profiles and results from the infiltration testing completed at the referenced project site location to include those from the additional test pits performed on July 30, 2024. The purpose of the additional test pits was to allow a Lawrence Township representative to observe additional soil profiling test pit excavations and infiltration testing in areas representative of the initial exploration. Our initial services were provided in accordance with our proposal dated January 23, 2024 (ECS Proposal No. 44:1991-GP), which was authorized on February 2, 2024. This report has been revised based on the additional services performed in general accordance with our proposal dated July 1, 2024 (ECS Proposal No. 44:2125-GP), which was authorized on July 19, 2024 under the existing Professional Services Agreement between MidAtlantic Engineering Partners (MEP) and ECS.

### **PROJECT UNDERSTANDING**

The project site is located at 3131 Princeton Pike, Lawrence County, New Jersey. The testing locations were selected by MEP to explore the potential for infiltration at proposed storm water facility locations.

Our initial soil profiling and infiltration test program were based on the information provided by MEP via email, including the file named "Survey w Geotech Locations (006)" provided by Ian Burton on February 14, 2024.

After the submission of our initial report, the Township of Lawrence requested additional testing be performed so a township representative could be present to observe the field operations. Four additional test pits and infiltration tests were requested, each to be representative of the stormwater management areas being evaluated.

## **SUBSURFACE EXPLORATION AND TESTING**

Prior to intrusive activities at the project site, our exploration subcontractor made notification for mark-out of public utilities via New Jersey One Call. Our exploration procedures are explained in greater detail in Appendix B in the insert titled Subsurface Exploration Procedure. A rubber tracked mini excavator was used, and the Exploration Location Diagram in Appendix A depicts the approximate as-completed locations of the test pit excavations. Soil profiling and field infiltration testing was performed in general accordance with Chapter 12 of the BMP Manual. The Single Ring Infiltration Test (Subsection A5 of the Chapter 12 Appendix) was used.

Upon completion of the infiltration testing, the test pits were backfilled with the excavation spoils. The spoils were placed in consecutive, generally horizontal lifts of relatively uniform thickness and tamped with the excavator bucket. Excess spoils were mounded above the backfilled test pit footprint and smoothed and firmed with the excavator bucket.

Test Pit TP-12 was originally placed at south of TP-11 at the east side of the property. Due to the existing ponding condition at the ground surface, TP-12 was relocated to the location shown on the attached Test Pit Location Diagram with the permission of MEP. Perched water was observed at TP-5; therefore, infiltration testing was not performed at this test pit location. MEP was notified about this prior to abandonment. Bucket refusal likely due to bedrock was encountered at a depth of 8.5 feet below ground surface (bgs) at TP-101.

## **SUBSURFACE CHARACTERIZATION**

Soils encountered were visually classified during logging on the basis of texture in general accordance with the United States Department of Agriculture (USDA) Textural Classification System per the requirements of the BMP Manual. After classification, the samples were grouped in the major zones noted on the exploration logs contained in Appendix B. Divisions between soil strata/soil horizons on the exploration logs are approximate; in-situ, the transitions may be gradual. Additionally, index property tests were performed on select soil samples collected to confirm USDA classifications made in the field. Each laboratory test was completed in general accordance with the applicable ASTM Standard Test Method as indicated on the laboratory testing sheets included in Appendix C.

The subsurface conditions encountered were generally consistent with the published geologic mapping available from the New Jersey Geological and Water Survey via NJ-GeoWeb and the United States Department of Agriculture Natural Resources Conservation Service (USDA-NRCS) via Web Soil Survey for the general site vicinity. Refer to Attachment 1 for geologic maps for the general vicinity of the project site.

| TESP PIT DESIGNATION | INFILTRATION TEST ID | APPROXIMATE TEST ELEVATION | USDA TEXTURAL CLASSIFICATION AT TEST ELEVATION |
|----------------------|----------------------|----------------------------|--|
| TP-01                | TP-01A               | ±68.0                      | LOAM   |
| TP-02                | TP-02A               | ±68.0                      | Sandy Clay                                     |
| TP-03                | TP-03A               | ±71.5                      | SANDY CLAY LOAM                                |
| TP-04                | TP-04A               | ±71.4                      | SILT LOAM                                      |
| TP-05                | TP-05A               | ±78.0                      | -  |
| TP-06                | TP-06A               | ±75.0                      | Silty Clay Loam                                |
| TP-07                | TP-07A               | ±74.0                      | SILT LOAM                                      |
| TP-08                | TP-08A               | ±72.5                      | LOAM   |
| TP-09                | TP-09A               | ±65.0                      | SANDY LOAM                                     |
| TP-10                | TP-10A               | ±65.0                      | SANDY LOAM                                     |
| TP-11                | TP-11A               | ±65.0                      | SANDY LOAM                                     |
| TP-12                | TP-12A               | ±71.0                      | SILT LOAM                                      |
| TP-101               | TP-101A              | ±72.0                      | Sandy Loam                                     |
| TP-102               | TP-102A              | ±73.0                      | Clayey Loam                                    |
| TP-103               | TP-103A              | ±69.0                      | Silty Clayey Loam                              |
| TP-104               | TP-104A              | ±66.0                      | Clayey Loam                                    |

**GROUNDWATER**

During the initial exploration, groundwater was observed within test pit TP-2, TP-3, TP-4, TP-5, TP-6, TP-9, TP-10, and TP-11. Depth of groundwater ranged from 5.0 to 8.0 feet. Perched water was also observed in test pit TP-5 at depth of 1.5 feet, possibly due to the adjacent infiltration from snow melting. Mottling was not observed in each of the other test pits during excavation and no water was observed entering the test pits; however, each of the test pits were not left open for 24-hour to monitor the seasonal high-water determination (SHWT).

During the additional explorations, groundwater was not observed within the test pits with the exception of TP-104 where water seepage was observed at a depth of 8.5 feet below ground surface after about three hours of the test pit being open.

The possibility of groundwater level fluctuations should be considered in stormwater design development. Variations in perched groundwater levels and long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, construction activities, and other factors.

**INFILTRATION TEST RESULTS**

As previously indicated, field infiltration testing were performed within the test pits in general accordance with the Appendix to Chapter 12 of the BMP Manual, Subsection A5, Single Ring Infiltration Test. Findings from our field infiltration testing are reported on the Single Ring Infiltrometer Test Logs contained in Appendix B. Listed in the following table present the hydraulic conductivity rate of the soil layers tested as determined by the procedure outlined in Subsection A5.

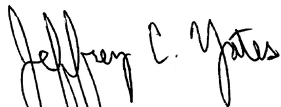
| BASIN DESIGNATION | INFILTRATION<br>TEST ID | TESTED SOIL                                |
|-------------------|-------------------------|--|
|                   |                         | HYDRAULIC CONDUCTIVITY RATE<br>(inch/hour) |
| TP-01             | TP-01A                  | < 0.3                                      |
| TP-02             | TP-02A                  | < 0.3                                      |
| TP-03             | TP-03A                  | < 0.3                                      |
| TP-04             | TP-04A                  | < 0.3                                      |
| TP-05             | TP-05A                  | -  |
| TP-06             | TP-06A                  | 2.46                                       |
| TP-07             | TP-07A                  | < 0.3                                      |
| TP-08             | TP-08A                  | < 0.3                                      |
| TP-09             | TP-09A                  | < 0.3                                      |
| TP-10             | TP-10A                  | < 0.3                                      |
| TP-11             | TP-11A                  | < 0.3                                      |
| TP-12             | TP-12A                  | < 0.3                                      |
| TP-101            | TP-101A                 | < 0.3                                      |
| TP-102            | TP-102A                 | < 0.3                                      |
| TP-103            | TP-103A                 | < 0.3                                      |
| TP-104            | TP-104A                 | < 0.3                                      |

**CLOSING**

It has been our pleasure to be of service during this phase of the project. Please note, ECS is not responsible for the conclusions, opinions, or recommendations of others based on the data contained in this letter and its associated attachments. Should you have any questions concerning the information contained herein, or if we can be of further assistance to you, please contact us.

Respectfully,

**ECS MID-ATLANTIC, LLC**



Jeffrey C. Yates, P.E.

**Geotechnical Department Manager**  
[jcyates@ecslimited.com](mailto:jcyates@ecslimited.com)



Stephen F. Patt, P.E.  
**Geotechnical Principal Engineer**  
[spatt@ecslimited.com](mailto:spatt@ecslimited.com)

Attachments: Appendix A – Diagrams and Reports  
Appendix B – Field Operations  
Appendix C – Laboratory Testing

## **Appendix A - Drawings and Reports**

Site Location Diagram

Test Pit Location Diagram(s)

Geologic/Soil Survey Maps



Service Layer Credits: World Boundaries and Places: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © 68A



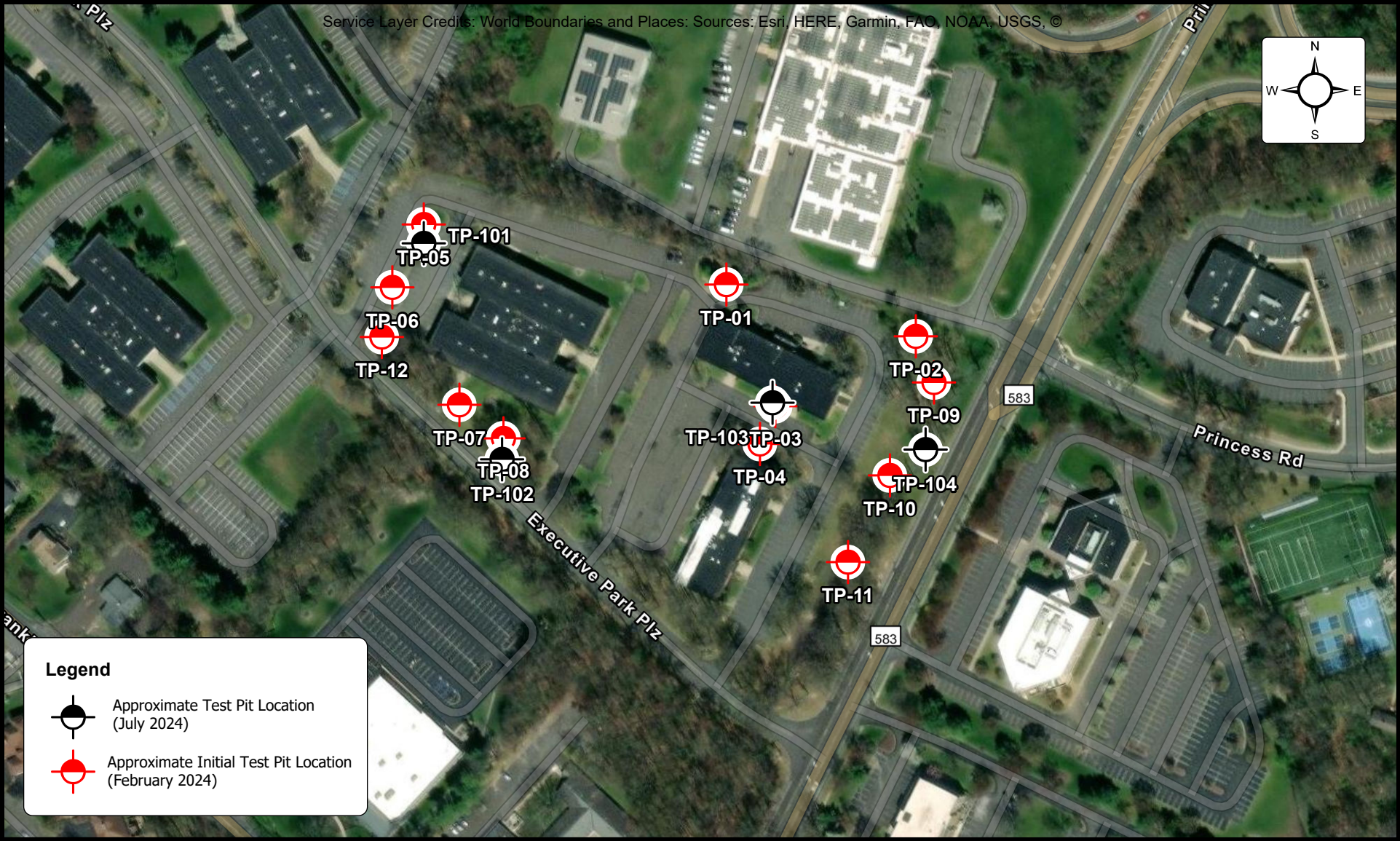
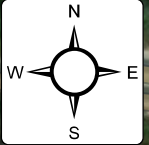
# SITE LOCATION DIAGRAM

## Lawrenceville Office Park Redevelopment - Additional TP



3131 Princeton Pike, Township of Lawrence, New Jersey  
MidAtlantic Engineering Partners

|                          |
|--------------------------|
| ENGINEER<br>JCY          |
| SCALE<br>1" = 300'       |
| PROJECT NO.<br>44:2006-A |
| SHEET                    |
| DATE<br>8/7/2024         |





**Legend**

-  Approximate Test Pit Location (July 2024)
-  Approximate Initial Test Pit Location (February 2024)



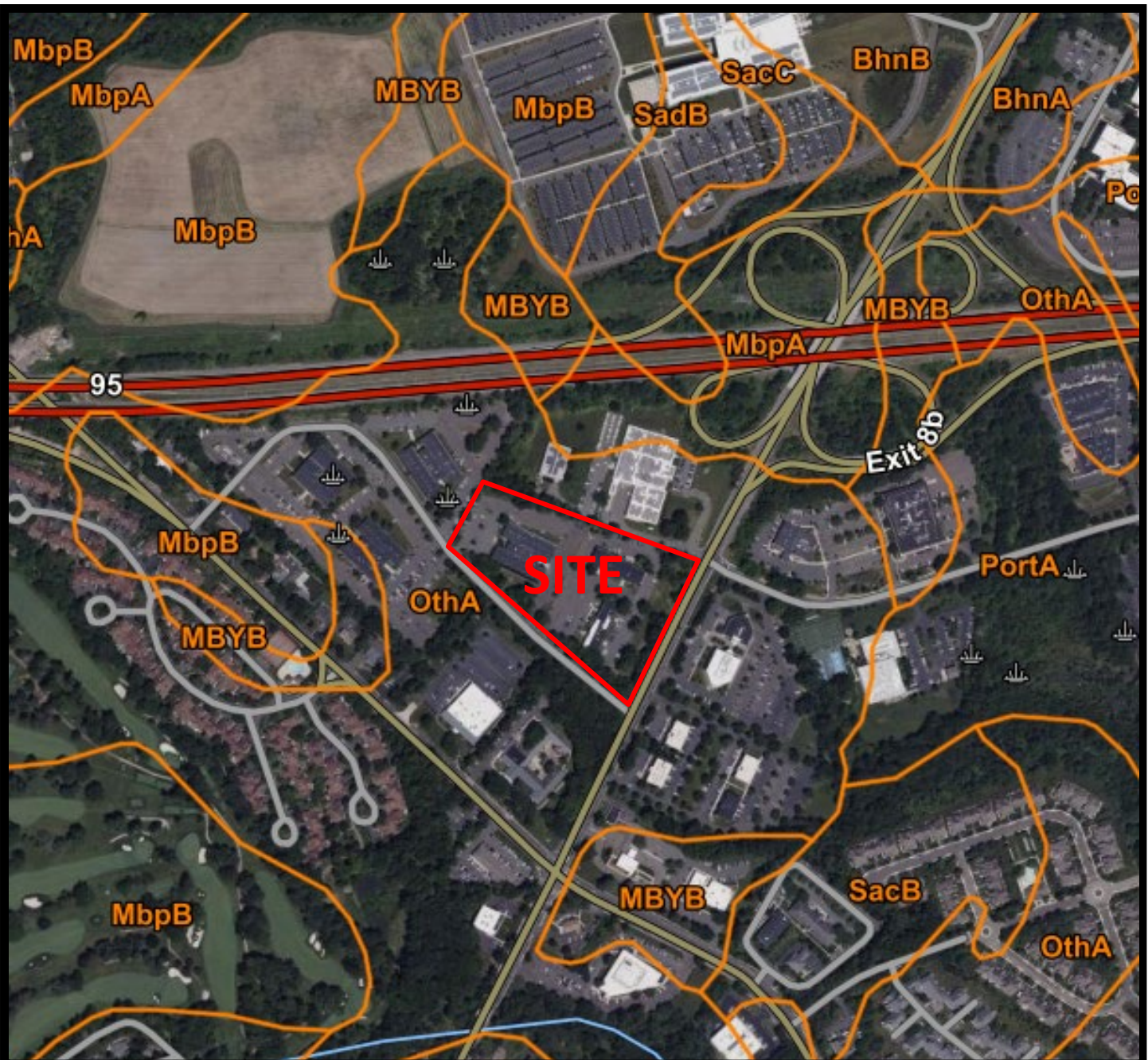
# BORING LOCATION DIAGRAM

## Lawrenceville Office Park Redevelopment - Additional TP

3131 Princeton Pike, Township of Lawrence, New Jersey  
MidAtlantic Engineering Partners

|                          |
|--------------------------|
| ENGINEER<br>JCY          |
| SCALE<br>1" = 200'       |
| PROJECT NO.<br>44:2006-A |
| SHEET                    |
| DATE<br>8/7/2024         |





| Map Unit Symbol | Map Unit Name   |
|-----------------|---|
| OthA            | Othello silt loams, 0 to 2 percent slopes, northern coastal plain |
| MbpA            | Matapeake loam, 0 to 2 percent slopes                             |
| MBYB            | Mattapex and Bertie loams, 0 to 5 percent slopes                  |

Source: Web Soil Survey



**LAWRENCEVILLE OFFICE PARK  
REDEVELOPMENT**

3131 Princeton Pike,  
Lawrence Township, New Jersey

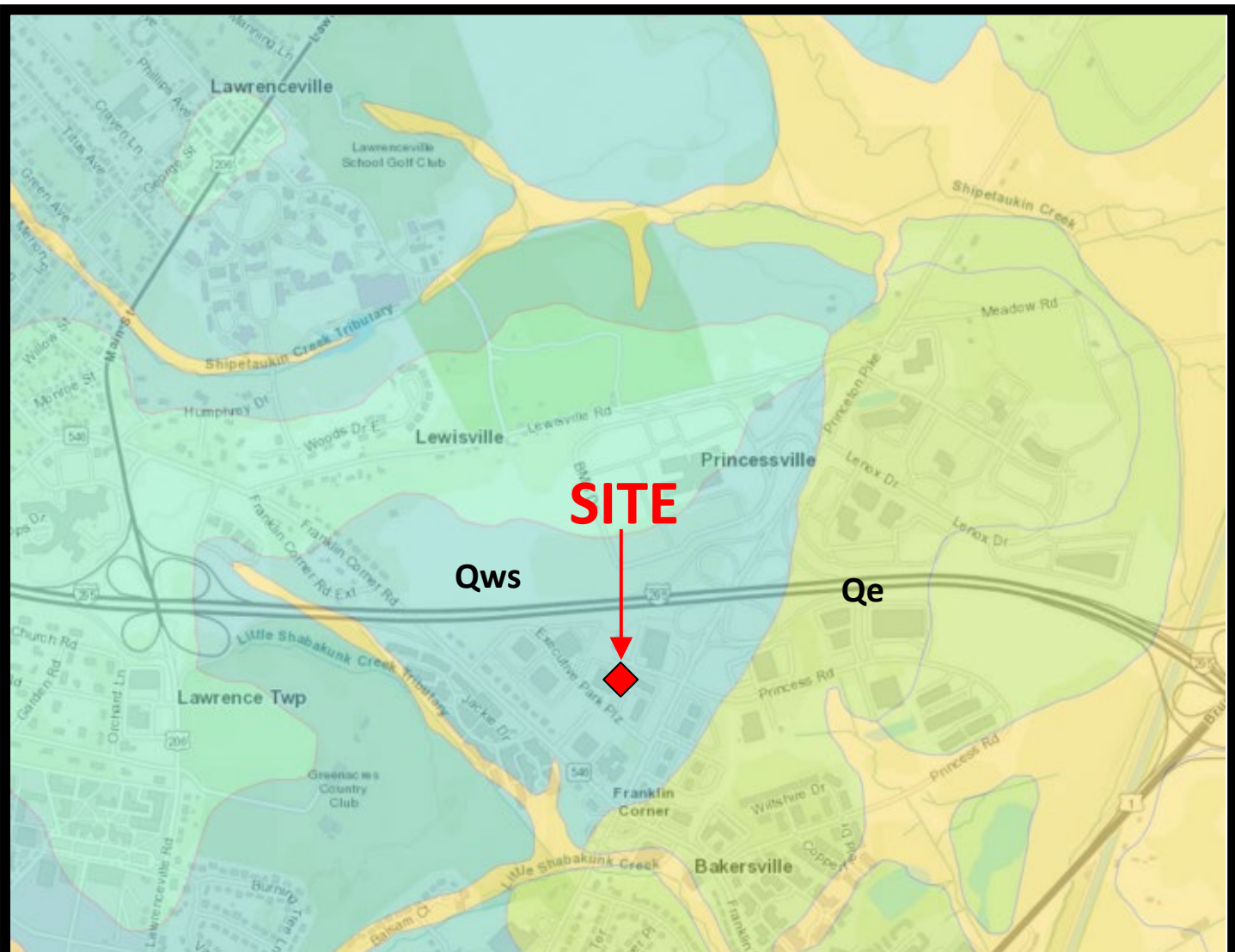
**MidAtlantic Engineering Partners**



**SOIL SURVEY MAP**

ECS Project 44:2006-A  
August 7, 2024





| Geologic Formation Name (Abbreviation)         | Lithology   | Notes                                 |
|--|---|---------------------------------------|
| Weathered shale, mudstone, and sandstone (Qws) | Silty sand to silty clay with shale, mudstone, or sandstone fragments; reddish brown, yellow, light gray. As much as 10 feet thick on shale and mudstone, 30 feet thick on sandstone. |                                       |
| Eolian Deposits (Qe)                           | Windblown fine sand and silt; very pale brown, yellowish brown. As much as 15 feet thick.   | Form sand sheets and, locally, dunes. |

Source: NJ-Geoweb (Surficial Geology)



**LAWRENCEVILLE OFFICE PARK REDEVELOPMENT**

3131 Princeton Pike,  
Lawrence Township, New Jersey

**MidAtlantic Engineering Partners**



**SURFICIAL GEOLOGY MAP**

ECS Project 44:2006-A  
August 7, 2024



| Stratigraphic Unit Name<br>(Abbreviation) | Stratigraphic Unit<br>Number | Lithology  |
|---|------------------------------|--|
| Stockton Formation<br>(Trs)               | 5,400                        | sandstone, mudstone, silty mudstone, argillaceous siltstone, and shale |

Source: NJ-Geoweb (Regional Geology)



**LAWRENCEVILLE OFFICE PARK  
REDEVELOPMENT**

3131 Princeton Pike,  
Lawrence Township, New Jersey

**MidAtlantic Engineering Partners**



**REGIONAL GEOLOGY MAP**

ECS Project 44:2006-A  
August 7, 2024

## **Appendix B – Field Operations**

Reference Notes

Exploration Procedures

Test Pit Logs

Infiltration/Permeability/Hydraulic Test Results

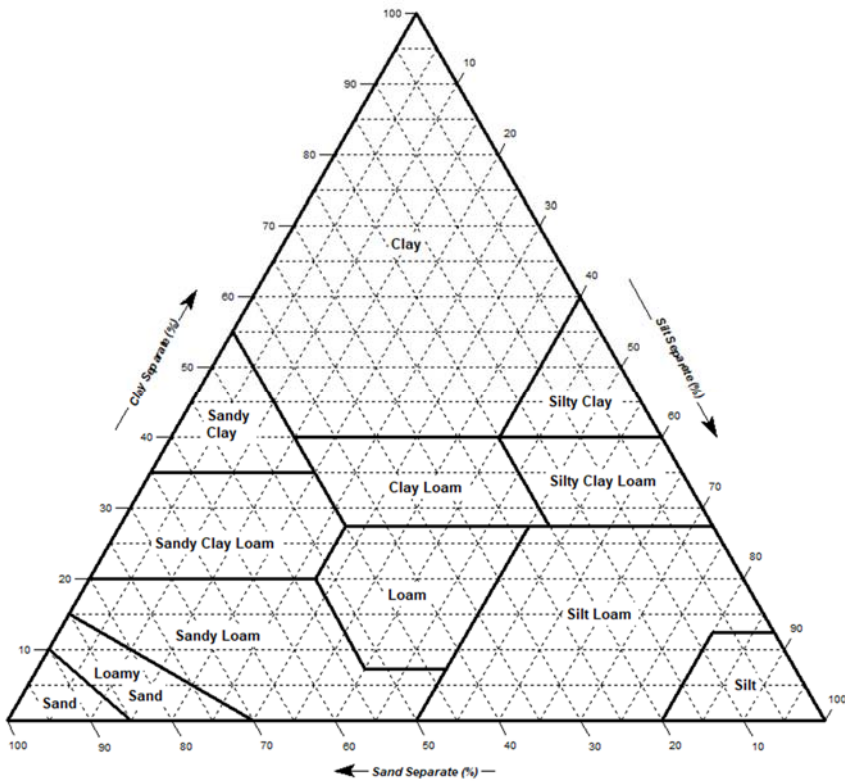




# U.S. Department of Agriculture (USDA) Soil Classification System

## Texture Triangle

Fine Earth Texture Classes (—)



## Texture Class

| Texture Class or Subclass | Code  |       |
|---------------------------|-------|-------|
|                           | Conv. | NASIS |
| Coarse Sand               | cos   | COS   |
| Sand                      | s     | S     |
| Fine Sand                 | fs    | FS    |
| Very Fine Sand            | vfs   | VFS   |
| Loamy Coarse Sand         | lcos  | LCOS  |
| Loamy Sand                | ls    | LS    |
| Loamy Fine Sand           | lfs   | LFS   |
| Loamy Very Fine Sand      | lvfs  | LVFS  |
| Coarse Sandy Loam         | cosl  | COSL  |
| Sandy Loam                | sl    | SL    |
| Fine Sandy Loam           | fsl   | FSL   |
| Very Fine Sandy Loam      | vfsl  | VFSL  |
| Loam                      | l     | L     |
| Silt Loam                 | sil   | SIL   |
| Silt                      | si    | SI    |
| Sandy Clay Loam           | scl   | SCL   |
| Clay Loam                 | cl    | CL    |
| Silty Clay Loam           | sicl  | SICL  |
| Sandy Clay                | sc    | SC    |
| Silty Clay                | sic   | SIC   |
| Clay                      | c     | C     |

**Texture Modifiers – Conventions for using “Rock Fragment Texture Modifiers” and for using textural adjectives that convey the “% volume” ranges for Rock Fragments – Size and Quantity.**

| Fragment Content % By Volume | Rock Fragment Modifier Usage   |
|------------------------------|--|
| < 15                         | No texture adjective is used (noun only; e.g., <i>loam</i> ).  |
| 15 to < 35                   | Use adjective for appropriate size; e.g., <i>gravelly</i> .  |
| 35 to < 60                   | Use “very” with the appropriate size adjective; e.g., <i>very gravelly</i> .   |
| 60 to < 90                   | Use “extremely” with the appropriate size adjective; e.g., <i>extremely gravelly</i> .   |
| ≥ 90                         | No adjective modifier. If ≤ 10% fine earth, use the appropriate noun for the dominant size class; e.g., <i>gravel</i> . <b>Use terms in lieu of texture.</b> |

## Texture Modifiers – (Adjectives)

| Rock Fragments: Size and Quantity                     | Code  |           | Criteria: Percent (by volume) of total rock fragments and dominated by ( <i>name size</i> ): |
|---|-------|-----------|--|
|   | Conv. | PDP/NASIS |  |
| <b>Rock Fragments (&gt; 2mm; ≥ Strongly Cemented)</b> |       |           |  |
| Gravelly  | GR    | GR        | ≥ 15% but < 35% gravel   |
| Fine Gravelly   | FGR   | GRF       | ≥ 15% but < 35% fine gravel  |
| Medium Gravelly                                       | MGR   | GRM       | ≥ 15% but < 35% med. gravel  |
| Coarse Gravelly                                       | CGR   | GRC       | ≥ 15% but < 35% coarse gravel  |
| Very Gravelly   | VGR   | GRV       | ≥ 35% but < 60% gravel   |
| Extremely Gravelly                                    | XGR   | GRX       | ≥ 60% but < 90% gravel   |
| Cobbly  | CB    | CB        | ≥ 15% but < 35% cobbles  |
| Very Cobbly   | VCB   | CBV       | ≥ 35% but < 60% cobbles  |
| Extremely Cobbly                                      | XCB   | CBX       | ≥ 60% but < 90% cobbles  |
| Stony   | ST    | ST        | ≥ 15% but < 35% stones   |
| Very Stony  | VST   | STV       | ≥ 35% but < 60% stones   |
| Extremely Stony                                       | XST   | STX       | ≥ 60% but < 90% stones   |
| Bouldery  | BY    | BY        | ≥ 15% but < 35% boulders   |
| Very Bouldery   | VBY   | BYV       | ≥ 35% but < 60% boulders   |
| Extremely Bouldery                                    | XBY   | BYX       | ≥ 60% but < 90% boulders   |
| Channery  | CN    | CN        | ≥ 15% but < 35% channers   |
| Very Channery   | VCN   | CNV       | ≥ 35% but < 60% channers   |
| Extremely Channery                                    | XCN   | CNX       | ≥ 60% but < 90% channers   |
| Flaggy  | FL    | FL        | ≥ 15% but < 35% flagstones   |
| Very Flaggy   | VFL   | FLV       | ≥ 35% but < 60% flagstones   |
| Extremely Flaggy                                      | XFL   | FLX       | ≥ 60% but < 90% flagstones   |



## SUBSURFACE EXPLORATION PROCEDURE: TEST PIT EXCAVATION

A test pit is an excavation of subsurface materials to characterize the composition and rippability/excavation efforts. Test pit exploration allows observation of the boundary relationships within a soil and rock profile and is useful to identify existing fill composition, disturbed material or the depth of soft sediments. Both track mounted excavators and backhoes are used in a variety of ground conditions allowing for difficult terrain to be accessed. The excavation process also provides access for in-situ and field testing and acquisition of samples for laboratory testing.

### TEST PIT Procedure:

- Involves excavation subsurface material to observe composition and physical characteristics
- Recording the approximate depth of subsurface strata
- Excavation is continued as prescribed or to limits of equipment and subsurface conditions
- The exploration is typically carried out with an excavator or backhoe, with the depth dependent on machine size and ground



## Soil Profile Report

|                          |   |                      |                       |
|--------------------------|---|----------------------|-----------------------|
| <b>Project Name/#:</b>   | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b> | Lawrence Township, NJ |
| <b>Project Location:</b> | 3131 Princeton Pike                           | <b>Block/Lot:</b>    |                       |
| <b>Driller:</b>          | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>    | Yuze Zhang / ECS      |

|                             |           |   |      |
|-----------------------------|-----------|---|------|
| <b>Date of Observation:</b> | 2/16/2024 | <b>Lowest point in BMP (ft) =</b>           | -    |
| <b>Prepared by:</b>         | YZ        | <b>Maximum Impounded Water Depth (ft) =</b> | -    |
|                             |           | <b>Required Soil Profile Depth (ft) =</b>   | 12.0 |

|   |      |                       |  |
|---|------|-----------------------|--|
| <b>Exploration ID:</b>                  | TP-1 |                       |  |
|   |      | <b>Elevation (ft)</b> |  |
| <b>Existing Ground Level:</b>           |      | 73.5                  |  |
| <b>Proposed SWM Basin Bottom Level:</b> |      | -                     |  |
| <b>Seasonal High Water Table:</b>       |      | -                     |  |
| <b>Termination:</b>                     |      | 61.5                  |  |

Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners.

| USDA Soil Texture | Mark Most Hydraulically Restrictive | Top Elevation/Bottom Elevation (ft.) | Observed Water Table Elevation (ft.) | Soil Morphological Observations                                      | Note                         |
|-------------------|-------------------------------------|--------------------------------------|--------------------------------------|--|------------------------------|
|                   |                                     | 73.5/73.0                            |                                      | Asphalt  |                              |
|                   |                                     | 73.0/72.5                            |                                      | Sand with gravel   | subbase material             |
| loamy sand        |                                     | 72.5/70.5                            |                                      | 7.5YR 5/3 brown, massive, moist, firm, medium                        |                              |
| LOAM              | X                                   | 70.5/66.5                            |                                      | 5YR 7/1 light gray, massive, moist, firm, 5% gravel, sub-rounded     | infiltration testing at 68.0 |
| loamy sand        |                                     | 66.5/61.5                            |                                      | 7.5YR 5/3 brown, single grain, moist, loose, 10% gravel, sub-rounded |                              |



## Soil Profile Report

|   |   |  |   |  |                              |
|---|---|--|---|--|------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |  |                              |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |  |                              |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Yuze Zhang / ECS                            |  |                              |
| <b>Date of Observation:</b>             |   | 2/12/2024  |   | <b>Lowest point in BMP (ft) =</b>                                      |                              |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>                            |                              |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>                              |                              |
|   |   |  |   | 8.0  |                              |
| <b>Exploration ID:</b>                  | TP-2  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |  |                              |
| <b>Elevation (ft)</b>                   |   |  |   |  |                              |
| <b>Existing Ground Level:</b>           | 72.0  |  |   |  |                              |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |  |                              |
| <b>Seasonal High Water Table:</b>       | -   |  |   |  |                              |
| <b>Termination:</b>                     | 64.0  |  |   |  |                              |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                                 | <b>Note</b>                  |
| sandy clay                              | X   | 72.0/67.0  |   | 5YR 7/1 light gray, massive, moist, firm, fine, 5% gravel, sub-rounded | infiltration testing at 68.0 |
| LOAM                                    |   | 67.0/64.0  | 64.0  | 5YR 4/3 reddish brown, massive, moist, loose, 10% gravel, sub-rounded  |                              |
|   |   |  |   |  |                              |
|   |   |  |   |  |                              |
|   |   |  |   |  |                              |
|   |   |  |   |  |                              |

## Soil Profile Report

|   |   |  |   |  |                              |
|---|---|--|---|--|------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |  |                              |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |  |                              |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Maddie Trudnak / ECS                        |  |                              |
| <b>Date of Observation:</b>             |   | 2/16/2024  |   | <b>Lowest point in BMP (ft) =</b>  |                              |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>  |                              |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>  |                              |
|   |   |  |   | 10.0   |                              |
| <b>Exploration ID:</b>                  | TP-3  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |  |                              |
|   |   |  |   |  |                              |
| <b>Elevation (ft)</b>                   |   |  |   |  |                              |
| <b>Existing Ground Level:</b>           | 71.5  |  |   |  |                              |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |  |                              |
| <b>Seasonal High Water Table:</b>       | -   |  |   |  |                              |
| <b>Termination:</b>                     |   | 61.5   |   |  |                              |
|   |   |  |   |  |                              |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>   | <b>Note</b>                  |
| Clay Loam                               |   | 71.5/71.0  |   | 7.5YR 4/2 brown, granular, moist, friable, medium  | topsoil                      |
| Silty Clay Loam                         |   | 71.0/69.5  |   | 7.5YR 4/4 brown, blocky, moist, friable, medium, 30% gravel, sub-rounded                   |                              |
| SANY CLAY LOAM                          | X   | 69.5/68.2  |   | 5YR 4/6 yellowish red, blocky, moist, firm, fine   | infiltration testing at 68.8 |
| Silty Clay Loam                         |   | 68.2/64.5  |   | 2.5Y 4/1 dark gray, platy, moist, friable, medium  |                              |
| Silt Loam                               |   | 64.5/61.5  | 64.5  | 2.5YR 3/4 dark reddish brown, blocky, wet, non-sticky, medium, 90% rock fragments, angular | weathered bedrock, siltstone |

## Soil Profile Report

|   |   |  |   |   |                                     |
|---|---|--|---|---|-------------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |   |                                     |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |   |                                     |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Maddie Trudnak / ECS                        |   |                                     |
| <b>Date of Observation:</b>             |   | 2/16/2024  |   | <b>Lowest point in BMP (ft) =</b>   |                                     |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>   |                                     |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>   |                                     |
|   |   |  |   | 8.5   |                                     |
| <b>Exploration ID:</b>                  | TP-4  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |   |                                     |
| <b>Elevation (ft)</b>                   |   |  |   |   |                                     |
| <b>Existing Ground Level:</b>           | 71.4  |  |   |   |                                     |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |   |                                     |
| <b>Seasonal High Water Table:</b>       | -   |  |   |   |                                     |
| <b>Termination:</b>                     | 62.9  |  |   |   |                                     |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>  | <b>Note</b>                         |
| Clay Loam                               |   | 71.4/70.9  |   | 7.5YR 4/2 brown, granular, moist, friable, medium   | topsoil, roots and organics         |
| Clay Loam                               |   | 70.9/69.9  |   | 10YR 4/2 dark grayish brown, blocky, moist, firm medium, 5% gravel, angular                 | roots                               |
| SILT LOAM                               | X   | 69.9/66.4  |   | 10YR 5/2 grayish brown, blocky, moist, firm, very fine, 20% gravel, sub-rounded             | infiltration testing at 69.4        |
| Silt Loam                               |   | 66.4/62.9  | 64.4  | 2.5 YR 3/4 dark reddish brown, blocky, wet, non-sticky, medium, 60% rock fragments, angular | highly weathered bedrock, siltstone |



## Soil Profile Report

|                          |   |                      |                       |
|--------------------------|---|----------------------|-----------------------|
| <b>Project Name/#:</b>   | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b> | Lawrence Township, NJ |
| <b>Project Location:</b> | 3131 Princeton Pike                           | <b>Block/Lot:</b>    |                       |
| <b>Driller:</b>          | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>    | Maddie Trudnak / ECS  |

|                             |           |   |     |
|-----------------------------|-----------|---|-----|
| <b>Date of Observation:</b> | 2/16/2024 | <b>Lowest point in BMP (ft) =</b>           | -   |
| <b>Prepared by:</b>         | YZ        | <b>Maximum Impounded Water Depth (ft) =</b> | -   |
|                             |           | <b>Required Soil Profile Depth (ft) =</b>   | 8.5 |

|   |      |
|---|------|
| <b>Exploration ID:</b>                  | TP-5 |
| <b>Elevation (ft)</b>                   |      |
| <b>Existing Ground Level:</b>           | 78.0 |
| <b>Proposed SWM Basin Bottom Level:</b> | -    |
| <b>Seasonal High Water Table:</b>       | -    |
| <b>Termination:</b>                     | 69.5 |

Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners.

| USDA Soil Texture | Mark Most Hydraulically Restrictive | Top Elevation/Bottom Elevation (ft.) | Observed Water Table Elevation (ft.) | Soil Morphological Observations   | Note                                   |
|-------------------|-------------------------------------|--------------------------------------|--------------------------------------|---|--|
|                   |                                     | 78/77.5                              |                                      | GLE1 3/N very dark gray   | Asphalt                                |
|                   |                                     | 77.5/76.5                            | 76.5                                 | 10YR 3/3 dark brown, 2.5YR 4/1 dark gray, massive, moist to wet, very firm, coarse              | subbase material, likely perched water |
| SANDY LOAM        | X                                   | 76.5/73.0                            |                                      | GLE1 6/10Y greenish gray, blocky, wet to moist, friable, medium                                 |  |
| Sandy Loam        |                                     | 73.0/71.2                            |                                      | 5YR 3/3 dark reddish brown, single grained, moist, loose, coarse                                |  |
| Sand Loam         |                                     | 71.2/69.5                            |                                      | 5YR 4/3 reddish brown, blocky, moist to wet, very firm, coarse, 90% rock fragments, sub-angular | weathered bedrock, sandstone           |

## Soil Profile Report

|   |  |   |  |   |  |  |  |
|---|--|---|--|---|--|--|--|
| <b>Project Name/#:</b>                  |  | Lawrenceville Office Park Redevelopment /2006 |  | <b>Municipality:</b>                        |  | Lawrence Township, NJ  |  |
| <b>Project Location:</b>                |  | 3131 Princeton Pike                           |  | <b>Block/Lot:</b>                           |  |  |  |
| <b>Driller:</b>                         |  | Raymond Makowski / Accurate Drilling          |  | <b>Inspector:</b>                           |  | Maddie Trudnak / ECS   |  |
| <b>Date of Observation:</b>             |  |   |  | 2/16/2024                                   |  | <b>Lowest point in BMP (ft) =</b>  |  |
| <b>Prepared by:</b>                     |  |   |  | YZ  |  | <b>Maximum Impounded Water Depth (ft) =</b>  |  |
|   |  |   |  |   |  | <b>Required Soil Profile Depth (ft) =</b>  |  |
| <b>Exploration ID:</b>                  |  |   |  | TP-6  |  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |  |
|   |  |   |  | <b>Elevation (ft)</b>                       |  |  |  |
| <b>Existing Ground Level:</b>           |  |   |  | 75.0  |  |  |  |
| <b>Proposed SWM Basin Bottom Level:</b> |  |   |  | -   |  |  |  |
| <b>Seasonal High Water Table:</b>       |  |   |  | -   |  |  |  |
| <b>Termination:</b>                     |  |   |  | 65.0  |  |  |  |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b> | <b>Top Elevation/Bottom Elevation (ft.)</b>   |  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>   | <b>Note</b>  |  |
|   |  | 75.0/75.4                                     |  |   | GLE1 3/N very dark gray  | Asphalt  |  |
|   |  | 74.5/74.0                                     |  |   | 10YR 3/3 dark brown, massive, moist, very firm, coarse                               | subbase material   |  |
| Silty Clay Loam                         | X  | 74.0/73.3                                     |  |   | 7.5YR 7/2 pinkish gray, blocky, moist, friable, fine, 20% gravel, sub-rounded        |  |  |
| LOAMY SAND                              |  | 73.3/65.5                                     |  | 67.0  | 5YR 4/4 reddish brown, single grain, moist to wet, loose, fine 40% gravel, sub-round | infiltration testing at 70.5   |  |
| Silt Loam                               |  | 65.5/65.0                                     |  |   | 2.5YR 3/2 dusky red, blocky, wet, firm, fine 5% gravel, sub-round                    |  |  |

## Soil Profile Report

|   |   |  |   |  |                                     |
|---|---|--|---|--|-------------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |  |                                     |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |  |                                     |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Maddie Trudnak / ECS                        |  |                                     |
| <b>Date of Observation:</b>             |   | 2/15/2024  |   | <b>Lowest point in BMP (ft) =</b>  |                                     |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>  |                                     |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>  |                                     |
|   |   |  |   | 11.0   |                                     |
| <b>Exploration ID:</b>                  | TP-7  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |  |                                     |
|   |   |  |   |  |                                     |
| <b>Elevation (ft)</b>                   |   |  |   |  |                                     |
| <b>Existing Ground Level:</b>           | 74.0  |  |   |  |                                     |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |  |                                     |
| <b>Seasonal High Water Table:</b>       | -   |  |   |  |                                     |
| <b>Termination:</b>                     | 63.0  |  |   |  |                                     |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>   | <b>Note</b>                         |
| Silty Clay Loam                         |   | 74.0/73.0  |   | 7.5YR 3/2 dark brown, granular, moist, friable, fine   | topsoil, roots                      |
| SILT LOAM                               | X   | 73.0/69.0  |   | 10YR 5/2 grayish brown, platy, very moist, firm, very fine, 20% gravel, sub-round                      | infiltration testing at 71.0        |
| Silt Loam                               |   | 69.0/63.0  |   | 10YR 2.5/2 very dusky red, blocky, moist, friable, 50% gravel, sub-angular, 5% rock fragments, angular | highly weathered bedrock, siltstone |

## Soil Profile Report

|                          |   |                      |                       |
|--------------------------|---|----------------------|-----------------------|
| <b>Project Name/#:</b>   | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b> | Lawrence Township, NJ |
| <b>Project Location:</b> | 3131 Princeton Pike                           | <b>Block/Lot:</b>    |                       |
| <b>Driller:</b>          | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>    | Maddie Trudnak / ECS  |

|                             |           |   |      |
|-----------------------------|-----------|---|------|
| <b>Date of Observation:</b> | 2/16/2024 | <b>Lowest point in BMP (ft) =</b>           | -    |
| <b>Prepared by:</b>         | YZ        | <b>Maximum Impounded Water Depth (ft) =</b> | -    |
|                             |           | <b>Required Soil Profile Depth (ft) =</b>   | 11.3 |

|   |      |                       |
|---|------|-----------------------|
| <b>Exploration ID:</b>                  | TP-8 |                       |
|   |      | <b>Elevation (ft)</b> |
| <b>Existing Ground Level:</b>           | 72.5 |                       |
| <b>Proposed SWM Basin Bottom Level:</b> | -    |                       |
| <b>Seasonal High Water Table:</b>       | -    |                       |
| <b>Termination:</b>                     | 61.3 |                       |

Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners.

| USDA Soil Texture | Mark Most Hydraulically Restrictive | Top Elevation/Bottom Elevation (ft.) | Observed Water Table Elevation (ft.) | Soil Morphological Observations  | Note                                |
|-------------------|-------------------------------------|--------------------------------------|--------------------------------------|--|-------------------------------------|
| Silty Clay Loam   |                                     | 72.5/71.0                            |                                      | 7.5YR 3/2 dark brown, granular, moist, friable, fine   | topsoil, roots and organics         |
| LOAM              | X                                   | 71.0/68.5                            |                                      | GLE Y1 6/N gray, 10YR 5/8 yellowish brown, blocky, moist, friable, fine, 30% gravel, sub-round | infiltration testing at 70.0        |
| Sand Loam         |                                     | 68.5/67.5                            |                                      | 7.5YR 5/8 strong brown, single grain, moist, loose, medium, 5% gravel, sub-round               |                                     |
| Sandy Loam        |                                     | 67.5/63.5                            |                                      | 7.5YR 4/2 brown, single grain, wet, loose, medium, 40% gravel, sub-angular                     |                                     |
| Silt Loam         |                                     | 63.5/61.3                            |                                      | 10R 2.5/2 very dusky red, blocky, wet, very friable, fine, 40% gravel, angular                 | highly weathered bedrock, siltstone |



## Soil Profile Report

|   |   |  |   |   |                              |
|---|---|--|---|---|------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |   |                              |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |   |                              |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Yuze Zhang / ECS                            |   |                              |
| <b>Date of Observation:</b>             |   | 2/12/2024  |   | <b>Lowest point in BMP (ft) =</b>                                       |                              |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>                             |                              |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>                               |                              |
|   |   |  |   | 9.0   |                              |
| <b>Exploration ID:</b>                  | TP-9  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |   |                              |
| <b>Elevation (ft)</b>                   |   |  |   |   |                              |
| <b>Existing Ground Level:</b>           | 70.0  |  |   |   |                              |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |   |                              |
| <b>Seasonal High Water Table:</b>       | -   |  |   |   |                              |
| <b>Termination:</b>                     | 61.0  |  |   |   |                              |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                                  | <b>Note</b>                  |
| silt                                    |   | 70.0/67.0  |   | 10YR 7/1 light gray, massvie, moist, firm, fine, 5% gravel, sub-rounded |                              |
| SANDY LOAM                              | X   | 67.0/63.0  |   | 5YR 7/1 light gray, massive, moist, firm, 10% gravel, sub-rounded       | infiltration testing at 65.0 |
| loamy sand                              |   | 63.0/61.0  | 62.0  | 7.5YR 5/3 brown, single grain, moist, loose, 10% gravel, sub-rounded    |                              |
|   |   |  |   |   |                              |
|   |   |  |   |   |                              |
|   |   |  |   |   |                              |

## Soil Profile Report

|   |   |  |   |   |                              |
|---|---|--|---|---|------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   | Lawrence Township, NJ                       |   |                              |
| <b>Project Location:</b>                | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |   |                              |
| <b>Driller:</b>                         | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  | Yuze Zhang / ECS                            |   |                              |
| <b>Date of Observation:</b>             |   | 2/12/2024  |   | <b>Lowest point in BMP (ft) =</b>   |                              |
| <b>Prepared by:</b>                     |   | YZ   |   | <b>Maximum Impounded Water Depth (ft) =</b>                               |                              |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>                                 |                              |
|   |   |  |   | 7.0   |                              |
| <b>Exploration ID:</b>                  | TP-10   | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |   |                              |
| <b>Elevation (ft)</b>                   |   |  |   |   |                              |
| <b>Existing Ground Level:</b>           | 67.0  |  |   |   |                              |
| <b>Proposed SWM Basin Bottom Level:</b> | -   |  |   |   |                              |
| <b>Seasonal High Water Table:</b>       | -   |  |   |   |                              |
| <b>Termination:</b>                     | 60.0  |  |   |   |                              |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>    | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                                    | <b>Note</b>                  |
| SANDY LOAM                              | X   | 67.0/64.0  |   | 5YR 4/3 reddish brown, massvie, moist, firm, fine, 5% gravel, sub-rounded | infiltration testing at 65.0 |
| loamy sand                              |   | 64.0/60.0  | 62.0  | 5YR 4/3 reddish brown, massive, moist, firm, 10% gravel, sub-rounded      |                              |
|   |   |  |   |   |                              |
|   |   |  |   |   |                              |
|   |   |  |   |   |                              |
|   |   |  |   |   |                              |

## Soil Profile Report

|   |  |   |  |   |                              |
|---|--|---|--|---|------------------------------|
| <b>Project Name/#:</b>                  |  | Lawrenceville Office Park Redevelopment /2006 | <b>Municipality:</b>   |   | Lawrence Township, NJ        |
| <b>Project Location:</b>                |  | 3131 Princeton Pike                           | <b>Block/Lot:</b>  |   |                              |
| <b>Driller:</b>                         |  | Raymond Makowski / Accurate Drilling          | <b>Inspector:</b>  |   | Yuze Zhang / ECS             |
| <b>Date of Observation:</b>             |  | 2/12/2024                                     | <b>Lowest point in BMP (ft) =</b>  |   | -                            |
| <b>Prepared by:</b>                     |  | YZ  | <b>Maximum Impounded Water Depth (ft) =</b>  |   | -                            |
|   |  |   | <b>Required Soil Profile Depth (ft) =</b>  |   | 8.0                          |
| <b>Exploration ID:</b>                  |  | TP-11   | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |                              |
|   |  | <b>Elevation (ft)</b>                         |  |   |                              |
| <b>Existing Ground Level:</b>           |  | 66.5  |  |   |                              |
| <b>Proposed SWM Basin Bottom Level:</b> |  | -   |  |   |                              |
| <b>Seasonal High Water Table:</b>       |  | -   |  |   |                              |
| <b>Termination:</b>                     |  | 58.5  |  |   |                              |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b> | <b>Top Elevation/Bottom Elevation (ft.)</b>   | <b>Observed Water Table Elevation (ft.)</b>  | <b>Soil Morphological Observations</b>                                  | <b>Note</b>                  |
| SANDY LOAM                              | X  | 66.5/63.5                                     |  | 10YR 7/1 light gray, massive, moist, firm, fine, 5% gravel, sub-rounded | infiltration testing at 65.0 |
| silt                                    |  | 63.5/60.5                                     | 60.5   | 5YR 4/3 reddish brown, massive, moist, firm, 15% gravel, sub-rounded    |                              |
| loamy sand                              |  | 60.5/58.5                                     |  | 7.5YR 5/3 brown, single grain, moist, loose, 10% gravel, sub-rounded    |                              |
|   |  |   |  |   |                              |
|   |  |   |  |   |                              |
|   |  |   |  |   |                              |

## Soil Profile Report

|   |  |  |   |   |                              |                       |
|---|--|--|---|---|------------------------------|-----------------------|
| <b>Project Name/#:</b>                  |  | Lawrenceville Office Park Redevelopment /2006  | <b>Municipality:</b>                        |   | Lawrence Township, NJ        |                       |
| <b>Project Location:</b>                |  | 3131 Princeton Pike  | <b>Block/Lot:</b>                           |   |                              |                       |
| <b>Driller:</b>                         |  | Raymond Makowski / Accurate Drilling   | <b>Inspector:</b>                           |   | Yuze Zhang / ECS             |                       |
| <b>Date of Observation:</b>             |  | 2/16/2024  | <b>Lowest point in BMP (ft) =</b>           |   | -                            |                       |
| <b>Prepared by:</b>                     |  | YZ   | <b>Maximum Impounded Water Depth (ft) =</b> |   | -                            |                       |
|   |  |  | <b>Required Soil Profile Depth (ft) =</b>   |   | 12.0                         |                       |
| <b>Exploration ID:</b>                  | TP-12                                      | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |   |                              |                       |
|   |  |  |   |   |                              | <b>Elevation (ft)</b> |
| <b>Existing Ground Level:</b>           |  |  |   |   |                              | 75.5                  |
| <b>Proposed SWM Basin Bottom Level:</b> |  |  |   |   |                              | -                     |
| <b>Seasonal High Water Table:</b>       |  |  |   |   |                              | -                     |
| <b>Termination:</b>                     |  | 63.5   |   |   |                              |                       |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b> | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                                    | <b>Note</b>                  |                       |
| loamy sand                              |  | 75.5/73.5  |   | 7.5YR 5/3 brown, massvie, moist, firm, 5% gravel, sub-rounded             |                              |                       |
| SILT LOAM                               | X  | 73.5/70.5  |   | 10YR 7/1 light gray, massvie, moist, firm, 5% gravel, sub-rounded         | infiltration testing at 71.0 |                       |
| silt                                    |  | 70.5/67.5  |   | 7.5YR 5/3 brown, massive, moist, slightly sticky, 10% gravel, sub-rounded |                              |                       |
| loamy sand                              |  | 67.5/63.5  |   | 7.5YR 5/3 brown, single grain, moist, loose, 5% gravel, sub-rounded       |                              |                       |
|   |  |  |   |   |                              |                       |
|   |  |  |   |   |                              |                       |



## Soil Profile Report

|   |   |   |   |  |                                      |
|---|---|---|---|--|--------------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Infiltration Testing / 2006-A | <b>Municipality:</b>                        | Lawrence, NJ                                |  |                                      |
| <b>Project Location:</b>                | 3131 Princeton Pike                                     | <b>Block/Lot:</b>                           | 3801/2                                      |  |                                      |
| <b>Driller:</b>                         | Ray Makowski, Jr./ Accurate Drilling                    | <b>Inspector:</b>                           | Scott Hansson / ECS                         |  |                                      |
|   |   |   |   |  |                                      |
| <b>Date of Observation:</b>             |   | 7/30/2024                                   |   | <b>Lowest point in BMP (ft) =</b>  |                                      |
| <b>Prepared by:</b>                     |   | JCY   |   | <b>Maximum Impounded Water Depth (ft) =</b>  |                                      |
|   |   |   |   | <b>Required Soil Profile Depth (ft) =</b>  |                                      |
|   |   |   |   | 12.0   |                                      |
| <b>Exploration ID:</b>                  |   | TP 101                                      |   | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |                                      |
|   |   | <b>Elevation (ft)</b>                       |   |  |                                      |
| <b>Existing Ground Level:</b>           |   | 76.0  |   |  |                                      |
| <b>Proposed SWM Basin Bottom Level:</b> |   | -   |   |  |                                      |
| <b>Seasonal High Water Table:</b>       |   | -   |   |  |                                      |
| <b>Termination:</b>                     |   | 67.5  |   |  |                                      |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>              | <b>Top Elevation/Bottom Elevation (ft.)</b> | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>   | <b>Note</b>                          |
| Asphalt/<br>Asphalt base                |   | 76.0/74.5                                   | Did not observe water table elevation       | 7.5 YR 3/2 dark brown, 30% gravel, friable, moist  |                                      |
| Clayey loam                             | x   | 74.5/73.5                                   |   | 2.5 Y 6/2 light brownish gray, 5% gravel, moderately friable, moist  |                                      |
| Sandy loam                              |   | 73.5/67.5                                   |   | 10 YR 4/3 brown, 5% gravel, friable, moist   | Infiltration testing at 72.0.        |
| Bedrock                                 |   | 67.5  |   |  | Bedrock encountered at 8.5 feet-bgs. |

## Soil Profile Report

|   |   |  |   |   |                               |
|---|---|--|---|---|-------------------------------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Infiltration Testing / 2006-A | <b>Municipality:</b>   | Lawrence, NJ                                |   |                               |
| <b>Project Location:</b>                | 3131 Princeton Pike                                     | <b>Block/Lot:</b>  | 3801/3                                      |   |                               |
| <b>Driller:</b>                         | Ray Makowski, Jr./ Accurate Drilling                    | <b>Inspector:</b>  | Scott Hansson / ECS                         |   |                               |
| <b>Date of Observation:</b>             |   | 7/30/2024  |   | <b>Lowest point in BMP (ft) =</b>                           |                               |
| <b>Prepared by:</b>                     |   | JCY  |   | <b>Maximum Impounded Water Depth (ft) =</b>                 |                               |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>                   |                               |
|   |   |  |   | 10.0  |                               |
| <b>Exploration ID:</b>                  | TP-102  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |   |                               |
|   |   |  |   |   |                               |
| <b>Elevation (ft)</b>                   |   |  |   |   |                               |
| <b>Existing Ground Level:</b>           |   |  |   |   |                               |
| <b>Proposed SWM Basin Bottom Level:</b> |   |  |   |   |                               |
| <b>Seasonal High Water Table:</b>       |   |  |   |   |                               |
| <b>Termination:</b>                     |   |  |   |   |                               |
|   |   | 65.0   |   |   |                               |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>              | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                      | <b>Note</b>                   |
| Silty loam                              |   | 75.0/74.0  | Did not observe water table elevation       | 2.5Y 5/2 grayish brown, 40% gravel, friable, moist          |                               |
| Clayey loam                             | x   | 74.0/69.0  |   | 2.5Y 6/2 light brownish gray, 5% gravel, moderately friable | Infiltration testing at 73.0. |
| Sandy clayey loam                       |   | 69.0/67.0  |   | 5Y 3/2 dark olive gray, 5% gravel, friable, moist           |                               |
| Silty loam                              |   | 67.0/65.0  |   | 10YR 2/2 very dark brown, 5% gravel, friable, moist         |                               |

## Soil Profile Report

|   |   |  |   |  |                              |       |
|---|---|--|---|--|------------------------------|-------|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Infiltration Testing / 2006-A | <b>Municipality:</b>   | Lawrence, NJ                                |  |                              |       |
| <b>Project Location:</b>                | 3131 Princeton Pike                                     | <b>Block/Lot:</b>  | 3801/2                                      |  |                              |       |
| <b>Driller:</b>                         | Ray Makowski, Jr./ Accurate Drilling                    | <b>Inspector:</b>  | Scott Hansson / ECS                         |  |                              |       |
| <b>Date of Observation:</b>             |   | 7/30/2024  |   | <b>Lowest point in BMP (ft) =</b>                          |                              |       |
| <b>Prepared by:</b>                     |   | JCY  |   | <b>Maximum Impounded Water Depth (ft) =</b>                |                              |       |
|   |   |  |   | <b>Required Soil Profile Depth (ft) =</b>                  |                              |       |
|   |   |  |   | 10.0   |                              |       |
| <b>Exploration ID:</b>                  | TP-103  | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |   |  |                              |       |
| <b>Elevation (ft)</b>                   |   |  |   |  |                              |       |
| <b>Existing Ground Level:</b>           |   |  |   |  |                              | 72.00 |
| <b>Proposed SWM Basin Bottom Level:</b> |   |  |   |  |                              | -     |
| <b>Seasonal High Water Table:</b>       |   |  |   |  |                              | -     |
| <b>Termination:</b>                     |   |  |   |  |                              | 62.00 |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>              | <b>Top Elevation/Bottom Elevation (ft.)</b>  | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>                     | <b>Note</b>                  |       |
| Silty loam                              |   | 72.0/69.0  | Did not observe water table elevation       | 2.5Y 6/8 olive brown, 15% gravel, friable, moist           |                              |       |
| Silty clayey loam                       | x   | 69.0/68.0  |   | 2.5Y 8/4 pale yellow, 5% gravel, moderately friable, moist | Infiltration testing at 69.0 |       |
| Clayey loam                             |   | 68.0/66.0  |   | 10YR 5/2 grayish brown, 5% gravel, blocky, moist           |                              |       |
| Silty loam                              |   | 66.0/62.0  |   | 10YR 3/3 dark brown, 5% gravel, friable, wet               |                              |       |

## Soil Profile Report

|   |   |   |   |  |  |
|---|---|---|---|--|--|
| <b>Project Name/#:</b>                  | Lawrenceville Office Park Infiltration Testing / 2006-A | <b>Municipality:</b>                        | Lawrence, NJ                                |  |  |
| <b>Project Location:</b>                | 3131 Princeton Pike                                     | <b>Block/Lot:</b>                           | 3801/2                                      |  |  |
| <b>Driller:</b>                         | Ray Makowski, Jr./ Accurate Drilling                    | <b>Inspector:</b>                           | Scott Hansson / ECS                         |  |  |
| <b>Date of Observation:</b>             |   | 7/30/2024                                   |   | <b>Lowest point in BMP (ft) =</b>  |  |
| <b>Prepared by:</b>                     |   | JCY   |   | <b>Maximum Impounded Water Depth (ft) =</b>  |  |
|   |   |   |   | <b>Required Soil Profile Depth (ft) =</b>  |  |
| <b>Exploration ID:</b>                  |   | TP-104                                      |   | Elevations are approximate and based on the topographic information shown on the survey plan provided by MidAtlantic Engineering Partners. |  |
|   |   | <b>Elevation (ft)</b>                       |   |  |  |
| <b>Existing Ground Level:</b>           |   | 68.0  |   |  |  |
| <b>Proposed SWM Basin Bottom Level:</b> |   | -   |   |  |  |
| <b>Seasonal High Water Table:</b>       |   | -   |   |  |  |
| <b>Termination:</b>                     |   | 59.5  |   |  |  |
| <b>USDA Soil Texture</b>                | <b>Mark Most Hydraulically Restrictive</b>              | <b>Top Elevation/Bottom Elevation (ft.)</b> | <b>Observed Water Table Elevation (ft.)</b> | <b>Soil Morphological Observations</b>   | <b>Note</b>                              |
| Silty loam                              |   | 68.0/67.0                                   |   | 10YR 6/4 light yellowish brown, 15% gravel, friable, moist   |  |
| Clayey loam                             | x   | 67.0/64.0                                   |   | 7.5Y 4/4 brown, 5% gravel, blocky, moderately friable  | Infiltration testing at 66.0.            |
| Sandy clayey loam                       |   | 64.0/62.0                                   |   | 7.5Y 3/4 dark brown, 5% gravel, blocky, moderately friable   |  |
| Silty loam                              |   | 62.0/59.5                                   | 60.0  | 7.5Y 3/4 dark brown, 5% gravel, blocky, moderately friable, wet  | Water at 8.5 feet-bgs after three hours. |



## Single Ring Infiltrometer Test Log

**ECS Project No.:** 44:2006

**Project Location:** 3131 Princeton Pike

**Project Name:** Lawrenceville Office Park Redevelopment

Lawrenceville, NJ

**Township:** Lawrence

**Block/Lot:**

*Testing per New Jersey Stormwater Best Management Practices Manual, Chapter 12, Subsection A5 (April 2022)*

|                  |    |    |     | TEST ID: | TP-01A                | Soil Layer Classification:     |   |   | LOAM                                   | Infiltration Test Elev.:                     |  | 68.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 2/6/2024              |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 1.00             |    |    |     | 1        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 1.00             |    |    |     | 2        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     |          |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-02A                | Soil Layer Classification:     |   |   | sandy clay                             | Infiltration Test Elev.:                     |  | 68.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 2/6/2024              |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 1.00             |    |    |     | 1        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 1.00             |    |    |     | 2        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     |          |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-03A                | Soil Layer Classification:     |   |   | SANDY CLAY LOAM                        | Infiltration Test Elev.:                     |  | 68.8 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 2/14/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 1.00             |    |    |     | 1        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 1.00             |    |    |     | 2        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     |          |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-04A                | Soil Layer Classification:     |   |   | SILT LOAM                              | Infiltration Test Elev.:                     |  | 69.4 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 2/14/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 1.00             |    |    |     | 1        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 1.00             |    |    |     | 2        | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     | 7        |                       |                                |   |   |  |  |  |      |
|                  |    |    |     | 8        |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-05A                | Soil Layer Classification:     |   |   |  | Infiltration Test Elev.:                     |  |  |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|--|
|                  |    |    |     | Date:    | 2/15/2024             |                                |   |   |  |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |  |
|                  |    |    |     |          |                       |                                | No infil ran, water pooling in TP                   |   |  |  | <b>N/A</b>                                       |  |
|                  |    |    |     |          |                       |                                |   |   |  |  |  |  |

|                  |    |    |     | TEST ID: | TP-06A                | Soil Layer Classification:     |   |   | silty clay loam                        | Infiltration Test Elev.:                     |  | 70.5 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 2/15/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 1.00             | 07 | 20 | 50  | 1        | 1.0                   | 07:20.50                       | 7.34  | 0.14                                    | 8.17                                   | 2.78   | <b>2.46</b>                                      |      |
| 1.00             | 08 | 18 | 88  | 2        | 1.0                   | 08:18.88                       | 8.31  | 0.12                                    | 7.22                                   | 2.45   |  |      |
| 1.00             | 08 | 28 | 61  | 3        | 1.0                   | 08:28.61                       | 8.48  | 0.12                                    | 7.08                                   | 2.41   |  |      |
| 1.00             | 08 | 35 | 68  | 4        | 1.0                   | 08:35.68                       | 8.59  | 0.12                                    | 6.98                                   | 2.37   |  |      |
| 1.00             | 08 | 35 | 45  | 5        | 1.0                   | 08:35.45                       | 8.59  | 0.12                                    | 6.98                                   | 2.37   |  |      |
| 1.00             | 08 | 37 | 32  | 6        | 1.0                   | 08:37.32                       | 8.62  | 0.12                                    | 6.96                                   | 2.37   |  |      |
|                  |    |    |     |          |                       |                                |   |   |  |  |  |      |



## Single Ring Infiltrometer Test Log

**ECS Project No.:** 44:2006

**Project Location:** 3131 Princeton Pike

**Project Name:** Lawrenceville Office Park Redevelopment

Lawrenceville, NJ

**Township:** Lawrence

**Block/Lot:**

*Testing per New Jersey Stormwater Best Management Practices Manual, Chapter 12, Subsection A5 (April 2022)*

| TEST ID: TP-07A  |    |    |     | Soil Layer Classification: |                       | SILT LOAM                      |   | Infiltration Test Elev.:                |  | 71.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/14/2024  |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |

| TEST ID: TP-08A  |    |    |     | Soil Layer Classification: |                       | LOAM                           |   | Infiltration Test Elev.:                |  | 70.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/14/2024  |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |

| TEST ID: TP-09A  |    |    |     | Soil Layer Classification: |                       | SANDY LOAM                     |   | Infiltration Test Elev.:                |  | 65.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/6/2024   |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |

| TEST ID: TP-010A |    |    |     | Soil Layer Classification: |                       | SANDY LOAM                     |   | Infiltration Test Elev.:                |  | 65.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/6/2024   |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |

| TEST ID: TP-011A |    |    |     | Soil Layer Classification: |                       | SANDY LOAM                     |   | Infiltration Test Elev.:                |  | 65.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/6/2024   |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |

| TEST ID: TP-012A |    |    |     | Soil Layer Classification: |                       | SILT LOAM                      |   | Infiltration Test Elev.:                |  | 71.0   |  |
|------------------|----|----|-----|----------------------------|-----------------------|--------------------------------|---|---|--|--|--|
| Date: 2/6/2024   |    |    |     |                            |                       |                                |   |   |  |  |  |
| Water Level Drop | MM | SS | .ss | Trial #                    | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |
| 1.00             |    |    |     | 1                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |
| 1.00             |    |    |     | 2                          | 1.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |
|                  |    |    |     |                            |                       |                                |   |   |  |  |  |



## Single Ring Infiltrometer Test Log

**ECS Project No.:** 44:2006-A

**Project Location:** 31312 Princeton Pike

**Project Name:** Lawrenceville Office Park Redevelopment - Revised

Lawrence, NJ

**Township:** Lawrence

**Block/Lot:** 3801/2

*Testing per New Jersey Stormwater Best Management Practices Manual, Chapter 12, Subsection A5 (April 2022)*

|                  |    |    |     | TEST ID: | TP-101A               | Soil Layer Classification:     |   | Sandy loam                              | Infiltration Test Elev.:               |  |  | 72.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 7/30/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 0.00             | 60 | 00 | 00  | 1        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 0.00             | 60 | 00 | 00  | 2        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     | 3        |                       |                                |   |   |  |  |  |      |
|                  |    |    |     | 4        |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-102A               | Soil Layer Classification:     |   | Clayey loam                             | Infiltration Test Elev.:               |  |  | 73.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 7/30/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 0.00             | 60 | 00 | 00  | 1        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 0.00             | 60 | 00 | 00  | 2        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     | 3        |                       |                                |   |   |  |  |  |      |
|                  |    |    |     | 4        |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-103A               | Soil Layer Classification:     |   | Silty clayey loam                       | Infiltration Test Elev.:               |  |  | 69.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 7/30/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 0.00             | 60 | 00 | 00  | 1        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 0.00             | 60 | 00 | 00  | 2        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     | 3        |                       |                                |   |   |  |  |  |      |
|                  |    |    |     | 4        |                       |                                |   |   |  |  |  |      |

|                  |    |    |     | TEST ID: | TP-104A               | Soil Layer Classification:     |   | Clayey loam                             | Infiltration Test Elev.:               |  |  | 66.0 |
|------------------|----|----|-----|----------|-----------------------|--------------------------------|---|---|--|--|--|------|
|                  |    |    |     | Date:    | 7/30/2024             |                                |   |   |  |  |  |      |
| Water Level Drop | MM | SS | .ss | Trial #  | Water Level Drop (in) | Field Recorded Time (MM:SS.ss) | Calculated Time Per 1-inch Water Level Drop (MM.mm) | Field Observed Intake Rate (inches/min) | Field Observed Intake Rate (inches/hr) | Converted Hydraulic Conductivity (inches/hr) | Averaged Hydraulic Conductivity Rate (inches/hr) |      |
| 0.00             | 60 | 00 | 00  | 1        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  | <b>&lt; 0.3</b>                                  |      |
| 0.00             | 60 | 00 | 00  | 2        | 0.0                   | > 1 hour                       | > 1 hour  | < 0.017                                 | < 1                                    | < 0.3  |  |      |
|                  |    |    |     | 3        |                       |                                |   |   |  |  |  |      |
|                  |    |    |     | 4        |                       |                                |   |   |  |  |  |      |



## **Appendix C – Laboratory Testing**

Laboratory Testing Summary  
Grain Size Analysis/Analyses  
Textural Triangle USDA Test(s)



## Laboratory Testing Summary

| Sample Location | Sample Number | Depth (ft) | ^MC (%) | Soil Type | Atterberg Limits |    |    | **Percent Passing No. 200 Sieve | Moisture - Density     |                       | CBR (%) |         | #Organic Content (%) |
|-----------------|---------------|------------|---------|-----------|------------------|----|----|---------------------------------|------------------------|-----------------------|---------|---------|----------------------|
|                 |               |            |         |           | LL               | PL | PI |                                 | <Maximum Density (pcf) | <Optimum Moisture (%) | 0.1 in. | 0.2 in. |                      |
| TP-01           | TP-01A        | 5.0-5.5    | 16.1    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-02           | TP-02A        | 6.0-6.5    | 12.7    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-03           | TP-03A        | 3.0-3.5    | 13.3    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-04           | TP-04A        | 2.0-2.5    | 18.1    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-05           | TP-05A        | 3.5-4.0    | 14.6    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-06           | TP-06A        | 4.5-5.0    | 14.0    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-07           | TP-07A        | 3.0-3.5    | 15.4    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-08           | TP-08A        | 3.5-4.0    | 16.0    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-09           | TP-09A        | 5.0-5.5    | 12.3    |           |                  |    |    |                                 |                        |                       |         |         |                      |
| TP-10           | TP-10A        | 2.0-2.5    | 10.0    |           |                  |    |    |                                 |                        |                       |         |         |                      |

**Notes:** See test reports for test method, ^ASTM D2216-19, \*ASTM D2488, \*\*ASTM D1140-17, #ASTM D2974-20e1 < See test report for D4718 corrected values

**Definitions:** MC: Moisture Content, Soil Type: USCS (Unified Soil Classification System), LL: Liquid Limit, PL: Plastic Limit, PI: Plasticity Index, CBR: California Bearing Ratio, OC: Organic Content

Project: Lawrenceville Office Park Redevelopment  
Client: MidAtlantic Engineering Partners

Project No.: 44:2006  
Date Reported: 3/8/2024



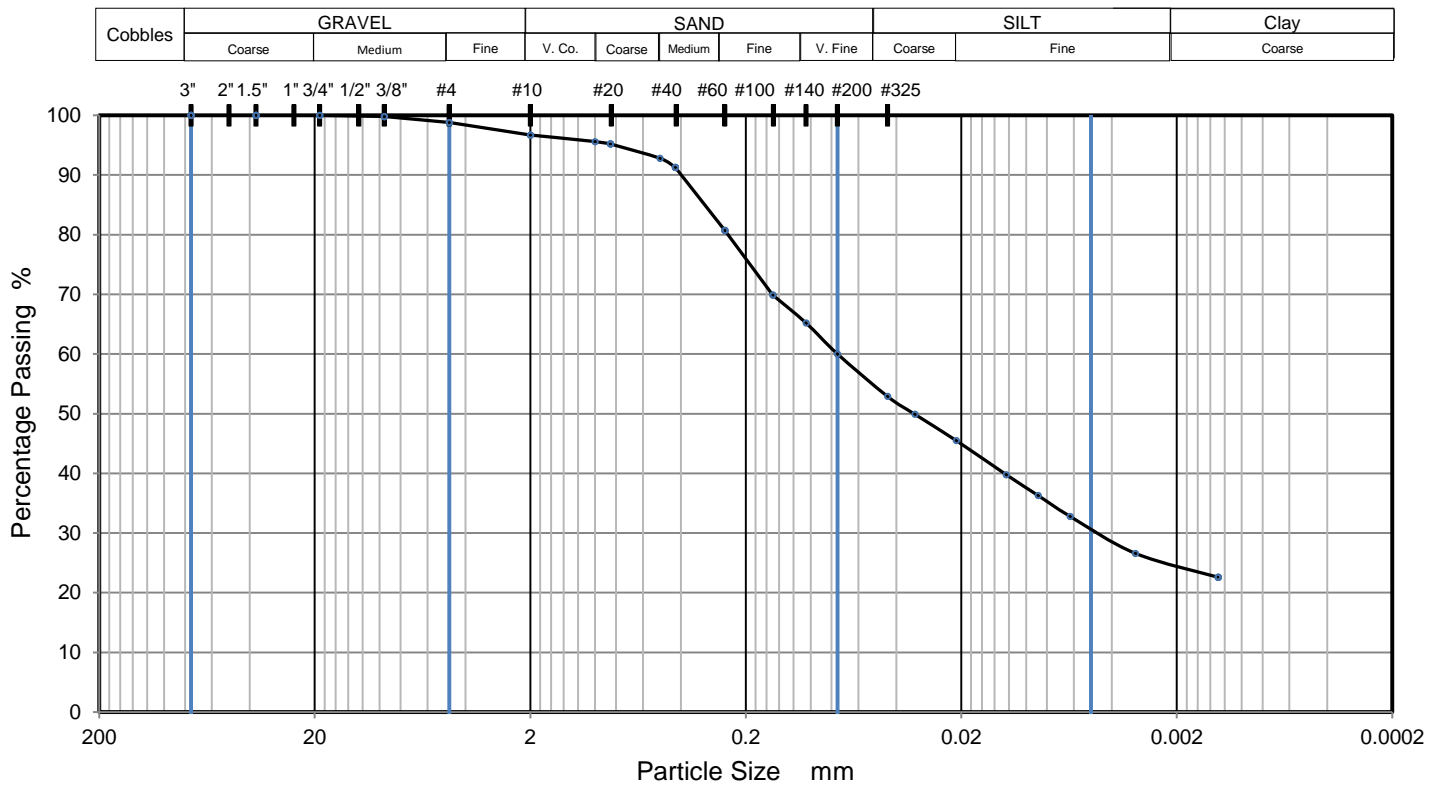
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2 Executive Drive  
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| Tested by | Checked by | Approved by | Date Received |
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |

## PARTICLE SIZE DISTRIBUTION



### TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0328                                | 21.86                 | 49.9      |
| 37.5             | 0.00             | 100.0     | 0.0211                                | 32.06                 | 45.5      |
| 19               | 0.00             | 100.0     | 0.0124                                | 41.53                 | 39.8      |
| 9.5              | 1.63             | 99.8      | 0.0088                                | 25.50                 | 36.3      |
| 4.75             | 8.49             | 98.8      | 0.0063                                | 25.50                 | 32.8      |
| 2                | 23.88            | 96.7      | 0.0031                                | 45.18                 | 26.6      |
| 1                | 0.57             | 95.6      | 0.0013                                | 29.15                 | 22.6      |
| 0.85             | 0.78             | 95.2      |                                       |                       |           |
| 0.5              | 2.00             | 92.8      |                                       |                       |           |
| 0.425            | 2.78             | 91.3      |                                       |                       |           |
| 0.25             | 8.14             | 80.7      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 13.67            | 69.9      |                                       |                       |           |
| 0.105            | 16.03            | 65.2      |                                       |                       |           |
| 0.075            | 18.69            | 60.0      |                                       |                       |           |
| 0.044            | 22.29            | 52.9      |                                       |                       |           |

Dry Mass of sample, g

728.7

#### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 3.30  |
| <b>% SAND</b>      | 42.10 |
| % Very Coarse Sand | 1.10  |
| % Coarse Sand      | 2.80  |
| % Medium Sand      | 12.10 |
| % Fine Sand        | 16.25 |
| % Very Fine Sand   | 9.84  |
| <b>% SILT</b>      | 30.01 |
| % Coarse Silt      | 9.70  |
| % Fine Silt        | 20.30 |
| <b>% CLAY</b>      | 24.60 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 5 - 5.5

Sample Description: Very Pale Brown 10YR-7/3

Sample No.: TP-01A

Sample Source: TP-01

Date Reported: 3/8/2024



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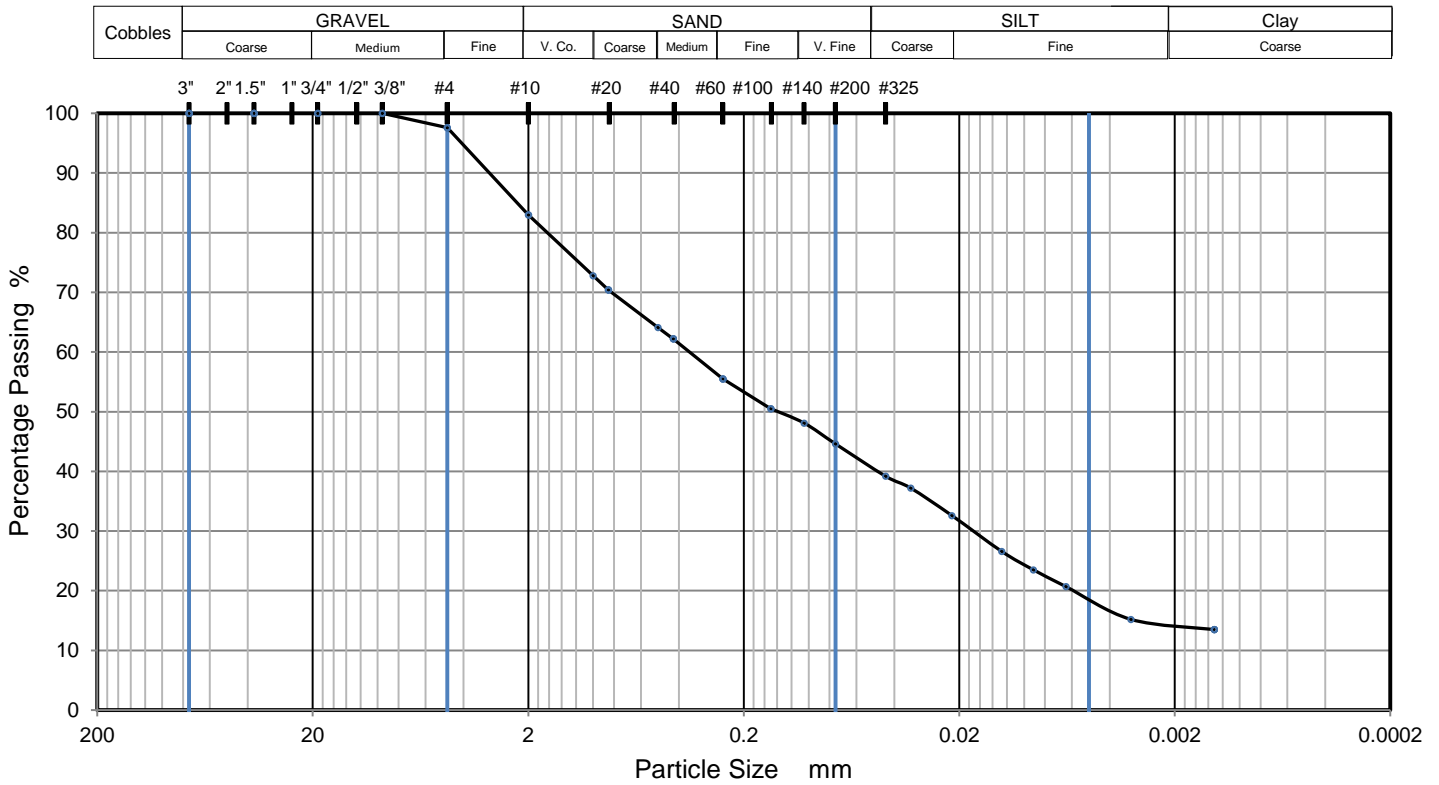
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| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B)

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0336                                | 14.90                 | 37.2      |
| 37.5             | 0.00             | 100.0     | 0.0216                                | 34.27                 | 32.6      |
| 19               | 0.00             | 100.0     | 0.0127                                | 44.70                 | 26.6      |
| 9.5              | 0.00             | 100.0     | 0.0091                                | 23.09                 | 23.5      |
| 4.75             | 18.03            | 97.6      | 0.0064                                | 20.86                 | 20.7      |
| 2                | 126.63           | 83.0      | 0.0032                                | 40.97                 | 15.2      |
| 1                | 6.07             | 72.8      | 0.0013                                | 12.66                 | 13.5      |
| 0.85             | 7.52             | 70.4      |                                       |                       |           |
| 0.5              | 11.25            | 64.1      |                                       |                       |           |
| 0.425            | 12.40            | 62.2      |                                       |                       |           |
| 0.25             | 16.35            | 55.5      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 19.35            | 50.5      |                                       |                       |           |
| 0.105            | 20.74            | 48.1      |                                       |                       |           |
| 0.075            | 22.83            | 44.6      |                                       |                       |           |
| 0.044            | 26.05            | 39.2      |                                       |                       |           |

Dry Mass of sample, g

745.0

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 17.00 |
| <b>% SAND</b>      | 42.51 |
| % Very Coarse Sand | 10.20 |
| % Coarse Sand      | 8.70  |
| % Medium Sand      | 8.60  |
| % Fine Sand        | 7.91  |
| % Very Fine Sand   | 7.10  |
| <b>% SILT</b>      | 26.19 |
| % Coarse Silt      | 8.79  |
| % Fine Silt        | 17.40 |
| <b>% CLAY</b>      | 14.30 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 6 - 6.5

Sample Description: Weak Red 10YR-5/4

Sample No.: TP-02A

Sample Source: TP-02

Date Reported: 3/8/2024



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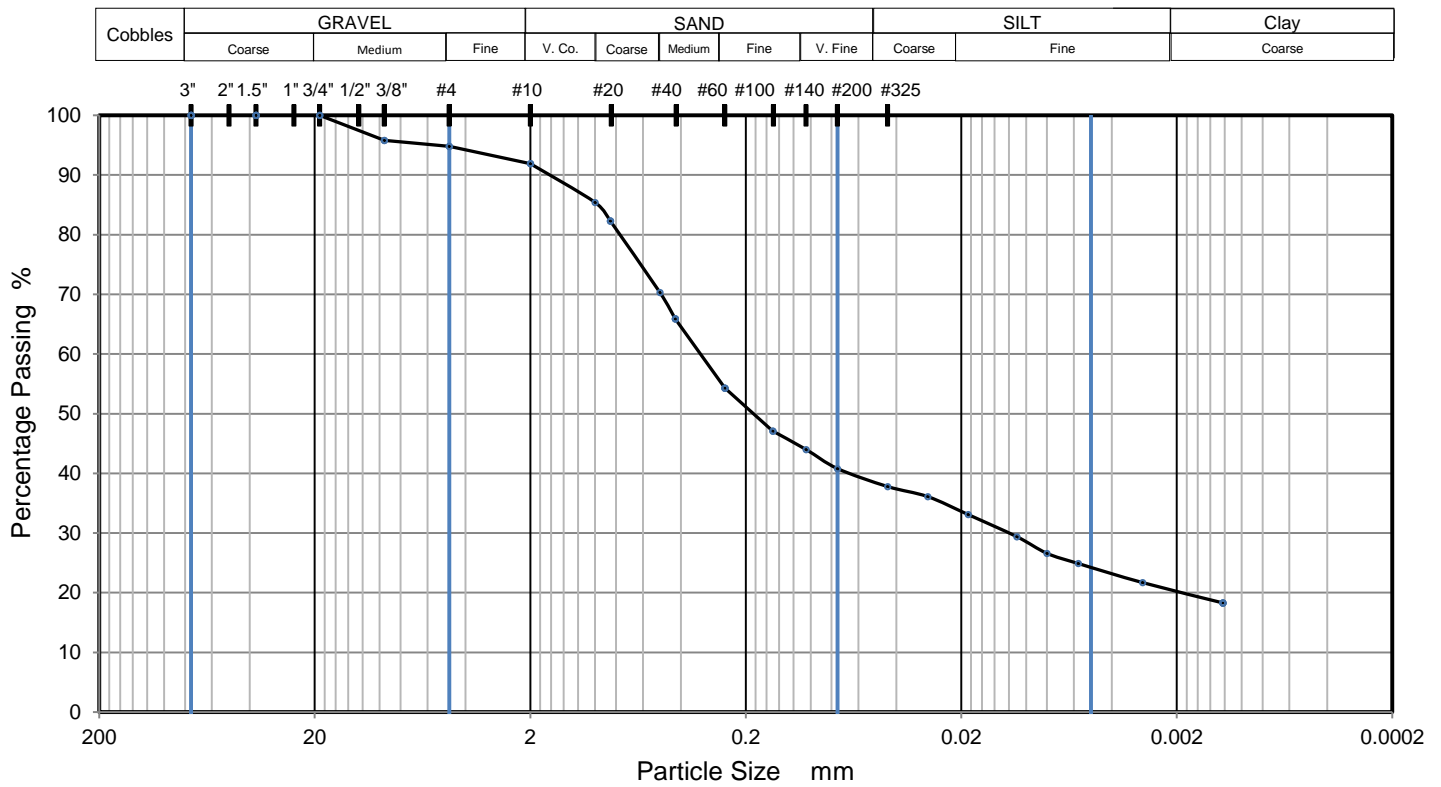
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| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0286                                | 10.26                 | 36.1      |
| 37.5             | 0.00             | 100.0     | 0.0186                                | 18.10                 | 33.1      |
| 19               | 0.00             | 100.0     | 0.0111                                | 22.32                 | 29.4      |
| 9.5              | 25.63            | 95.8      | 0.0080                                | 16.89                 | 26.6      |
| 4.75             | 31.16            | 94.8      | 0.0057                                | 10.26                 | 24.9      |
| 2                | 49.12            | 91.9      | 0.0029                                | 19.31                 | 21.7      |
| 1                | 6.98             | 85.4      | 0.0012                                | 20.51                 | 18.3      |
| 0.85             | 10.30            | 82.3      |                                       |                       |           |
| 0.5              | 23.27            | 70.3      |                                       |                       |           |
| 0.425            | 28.05            | 65.9      |                                       |                       |           |
| 0.25             | 40.52            | 54.3      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 48.32            | 47.1      |                                       |                       |           |
| 0.105            | 51.62            | 44.0      |                                       |                       |           |
| 0.075            | 55.14            | 40.8      |                                       |                       |           |
| 0.044            | 58.36            | 37.8      |                                       |                       |           |

Dry Mass of sample, g

603.3

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 8.10  |
| <b>% SAND</b>      | 53.38 |
| % Very Coarse Sand | 6.50  |
| % Coarse Sand      | 15.10 |
| % Medium Sand      | 16.00 |
| % Fine Sand        | 10.76 |
| % Very Fine Sand   | 5.02  |
| <b>% SILT</b>      | 18.27 |
| % Coarse Silt      | 4.92  |
| % Fine Silt        | 13.30 |
| <b>% CLAY</b>      | 20.25 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3 - 3.5

Sample Description: Light Brown 7.5YR-6/3

Sample No.: TP-03A

Sample Source: TP-03

Date Reported: 3/8/2024



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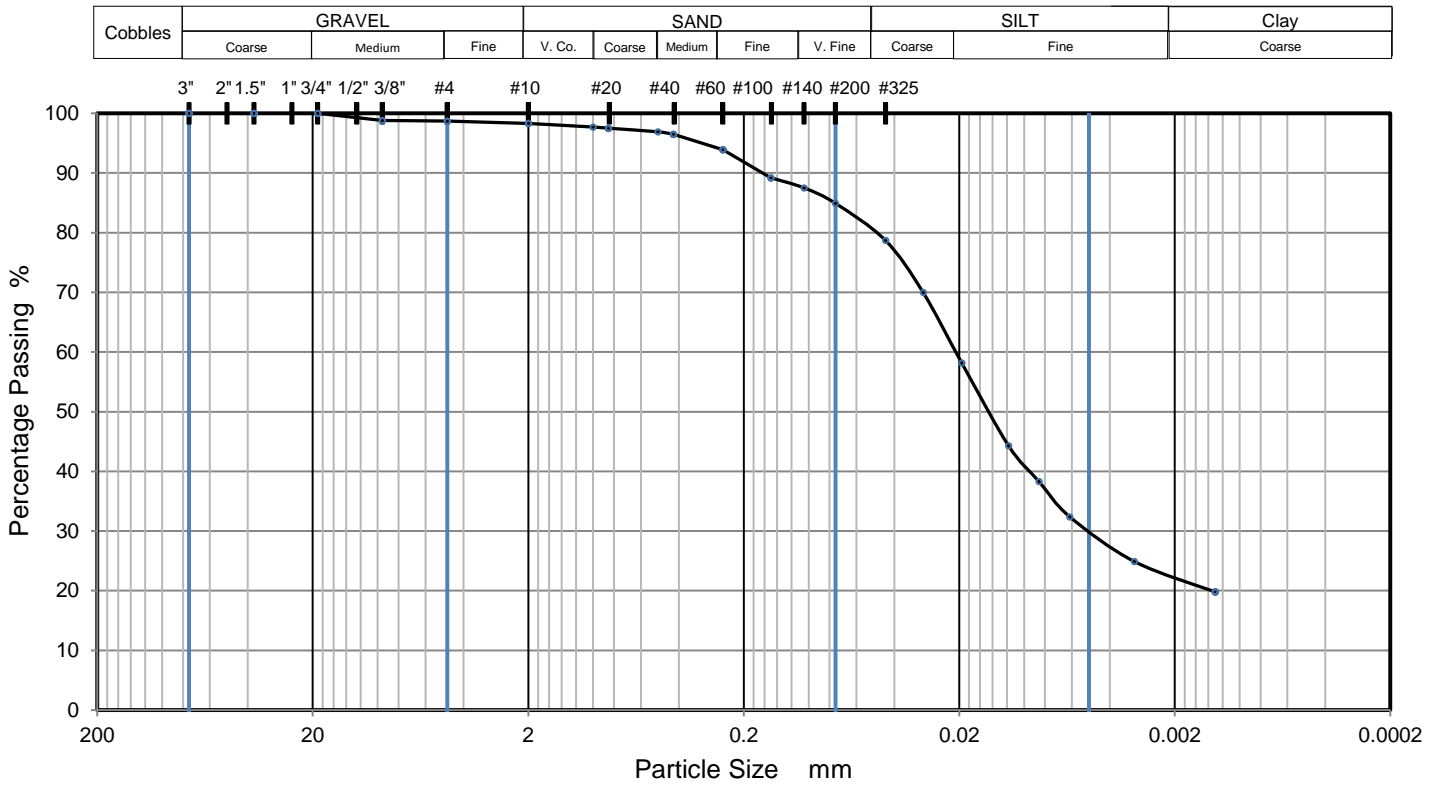
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| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0294                                | 47.59                 | 70.0      |
| 37.5             | 0.00             | 100.0     | 0.0195                                | 64.55                 | 58.2      |
| 19               | 0.00             | 100.0     | 0.0118                                | 76.04                 | 44.3      |
| 9.5              | 6.46             | 98.8      | 0.0085                                | 32.82                 | 38.3      |
| 4.75             | 7.37             | 98.7      | 0.0061                                | 32.28                 | 32.4      |
| 2                | 9.26             | 98.3      | 0.0031                                | 41.03                 | 24.9      |
| 1                | 0.32             | 97.7      | 0.0013                                | 27.90                 | 19.8      |
| 0.85             | 0.39             | 97.5      |                                       |                       |           |
| 0.5              | 0.70             | 96.9      |                                       |                       |           |
| 0.425            | 0.93             | 96.5      |                                       |                       |           |
| 0.25             | 2.24             | 93.9      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 4.59             | 89.2      |                                       |                       |           |
| 0.105            | 5.47             | 87.5      |                                       |                       |           |
| 0.075            | 6.81             | 84.9      |                                       |                       |           |
| 0.044            | 9.94             | 78.7      |                                       |                       |           |

Dry Mass of sample, g

547.0

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 1.70  |
| <b>% SAND</b>      | 18.11 |
| % Very Coarse Sand | 0.60  |
| % Coarse Sand      | 0.80  |
| % Medium Sand      | 3.00  |
| % Fine Sand        | 6.78  |
| % Very Fine Sand   | 6.94  |
| <b>% SILT</b>      | 57.84 |
| % Coarse Silt      | 21.29 |
| % Fine Silt        | 36.60 |
| <b>% CLAY</b>      | 22.35 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 2 - 2.5

Sample Description: Pinkish White 5YR-8/2

Sample No.: TP-04A

Sample Source: TP-04

Date Reported: 3/8/2024



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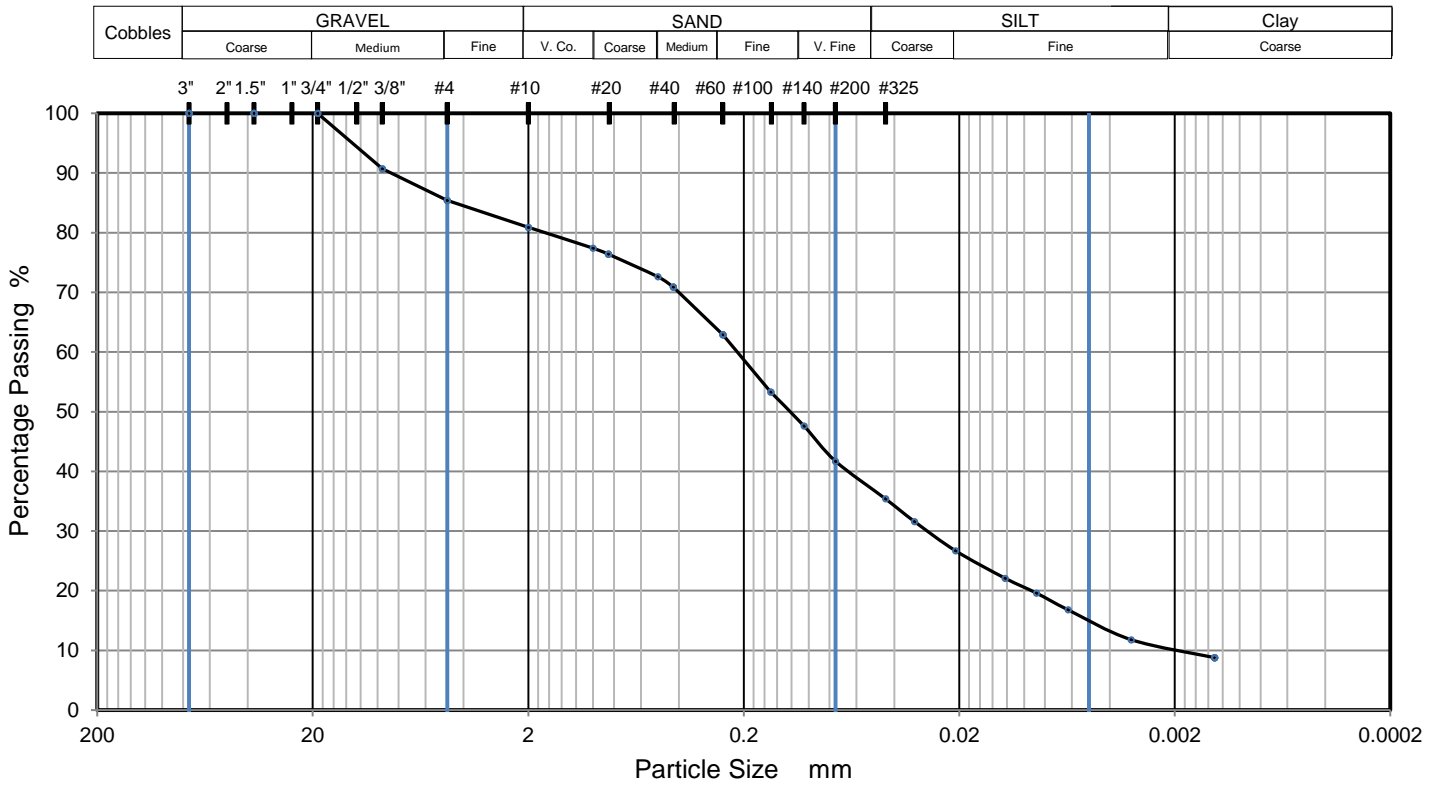
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| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0323                                | 24.81                 | 31.6      |
| 37.5             | 0.00             | 100.0     | 0.0208                                | 31.99                 | 26.7      |
| 19               | 0.00             | 100.0     | 0.0123                                | 30.03                 | 22.1      |
| 9.5              | 60.93            | 90.7      | 0.0088                                | 16.32                 | 19.6      |
| 4.75             | 95.01            | 85.4      | 0.0063                                | 18.28                 | 16.8      |
| 2                | 124.79           | 80.9      | 0.0032                                | 32.64                 | 11.8      |
| 1                | 2.11             | 77.4      | 0.0013                                | 19.58                 | 8.8       |
| 0.85             | 2.75             | 76.4      |                                       |                       |           |
| 0.5              | 5.11             | 72.6      |                                       |                       |           |
| 0.425            | 6.14             | 70.9      |                                       |                       |           |
| 0.25             | 11.05            | 62.9      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 16.91            | 53.3      |                                       |                       |           |
| 0.105            | 20.43            | 47.6      |                                       |                       |           |
| 0.075            | 24.08            | 41.7      |                                       |                       |           |
| 0.044            | 27.94            | 35.4      |                                       |                       |           |

Dry Mass of sample, g

652.8

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 19.10 |
| <b>% SAND</b>      | 43.99 |
| % Very Coarse Sand | 3.50  |
| % Coarse Sand      | 4.80  |
| % Medium Sand      | 9.70  |
| % Fine Sand        | 16.16 |
| % Very Fine Sand   | 9.83  |
| <b>% SILT</b>      | 26.68 |
| % Coarse Silt      | 10.51 |
| % Fine Silt        | 16.20 |
| <b>% CLAY</b>      | 10.23 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3.5 - 4

Sample Description: Very Pale Brown 10YR-7/3

Sample No.: TP-05A

Sample Source: TP-05

Date Reported: 3/8/2024



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Address

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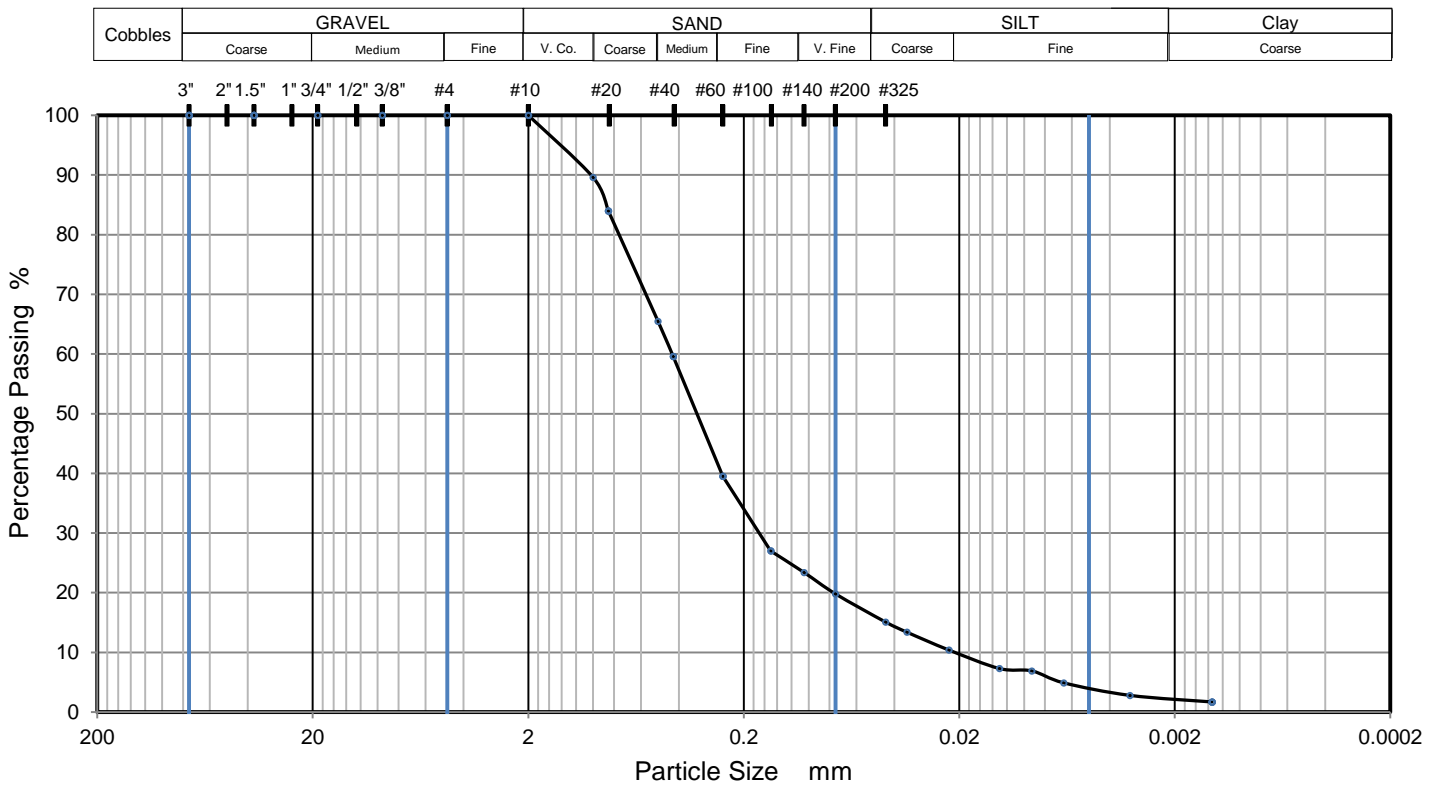
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# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0350                                | 11.89                 | 13.4      |
| 37.5             | 0.00             | 100.0     | 0.0223                                | 20.99                 | 10.4      |
| 19               | 0.00             | 100.0     | 0.0130                                | 21.69                 | 7.3       |
| 9.5              | 0.00             | 100.0     | 0.0092                                | 2.80                  | 6.9       |
| 4.75             | 0.10             | 100.0     | 0.0065                                | 13.99                 | 4.9       |
| 2                | 0.26             | 100.0     | 0.0032                                | 14.69                 | 2.8       |
| 1                | 5.18             | 89.6      | 0.0013                                | 7.70                  | 1.7       |
| 0.85             | 7.97             | 84.0      |                                       |                       |           |
| 0.5              | 17.22            | 65.5      |                                       |                       |           |
| 0.425            | 20.19            | 59.6      |                                       |                       |           |
| 0.25             | 30.23            | 39.5      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 36.46            | 27.0      |                                       |                       |           |
| 0.105            | 38.30            | 23.4      |                                       |                       |           |
| 0.075            | 40.10            | 19.8      |                                       |                       |           |
| 0.044            | 42.42            | 15.1      |                                       |                       |           |

Dry Mass of sample, g

699.6

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 0.00  |
| <b>% SAND</b>      | 83.77 |
| % Very Coarse Sand | 10.40 |
| % Coarse Sand      | 24.10 |
| % Medium Sand      | 26.00 |
| % Fine Sand        | 16.62 |
| % Very Fine Sand   | 6.65  |
| <b>% SILT</b>      | 14.03 |
| % Coarse Silt      | 6.43  |
| % Fine Silt        | 7.60  |
| <b>% CLAY</b>      | 2.20  |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment  
 Client: MidAtlantic Engineering Partners  
 Sample Description: Reddish Brown 2.5YR-5/4  
 Sample Source: TP-06

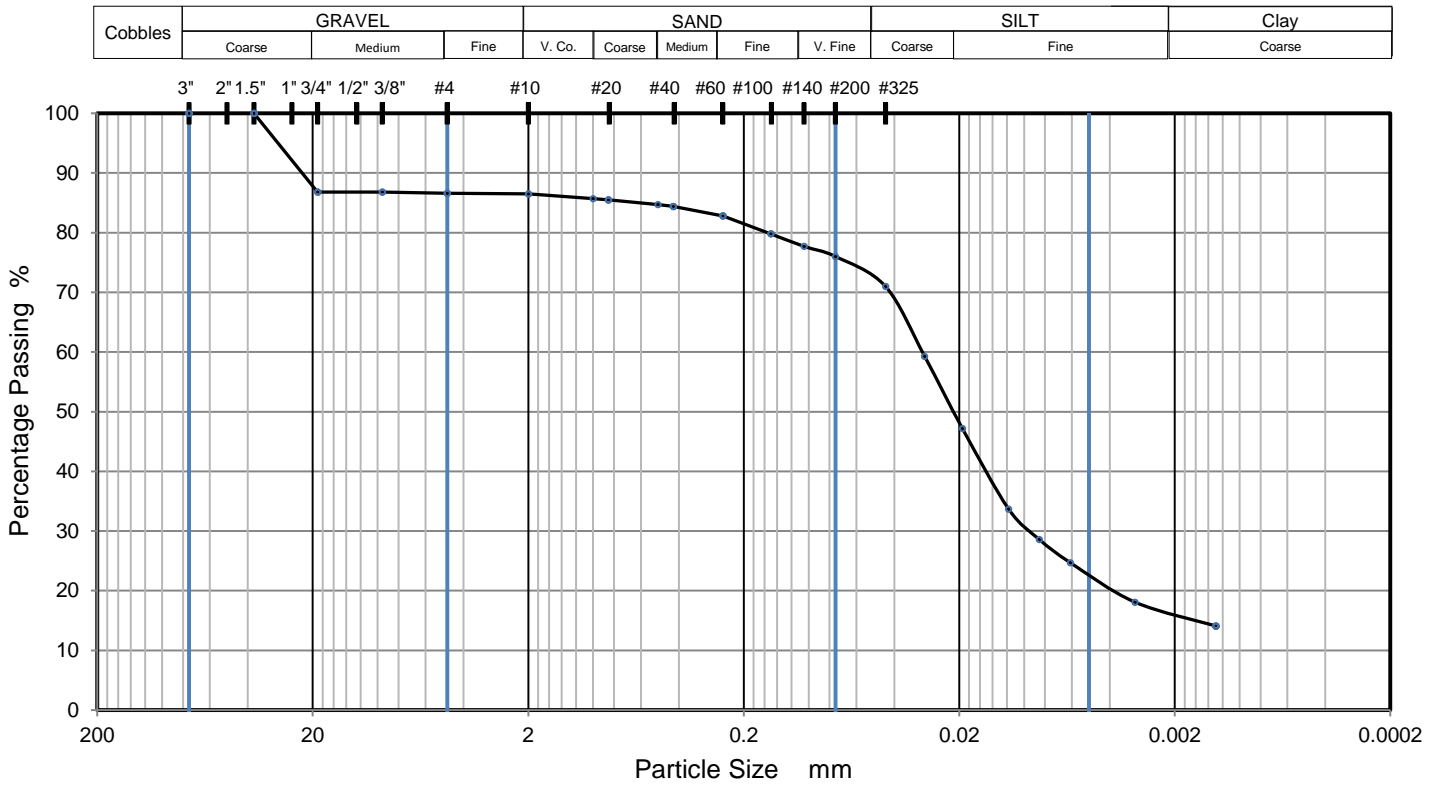
Project No.: 44:2006  
 Depth (ft): 4.5 - 5  
 Sample No.: TP-06A  
 Date Reported: 3/8/2024



|                                     |   |                                    |
|-------------------------------------|---|------------------------------------|
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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0290                                | 80.02                 | 59.3      |
| 37.5             | 0.00             | 100.0     | 0.0194                                | 82.76                 | 47.2      |
| 19               | 90.59            | 86.8      | 0.0118                                | 92.33                 | 33.7      |
| 9.5              | 90.59            | 86.8      | 0.0085                                | 34.88                 | 28.6      |
| 4.75             | 91.64            | 86.6      | 0.0061                                | 26.67                 | 24.7      |
| 2                | 92.43            | 86.5      | 0.0031                                | 45.14                 | 18.1      |
| 1                | 0.44             | 85.7      | 0.0013                                | 27.36                 | 14.1      |
| 0.85             | 0.59             | 85.5      |                                       |                       |           |
| 0.5              | 1.02             | 84.7      |                                       |                       |           |
| 0.425            | 1.18             | 84.4      |                                       |                       |           |
| 0.25             | 2.13             | 82.8      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 3.90             | 79.8      |                                       |                       |           |
| 0.105            | 5.07             | 77.7      |                                       |                       |           |
| 0.075            | 6.06             | 76.0      |                                       |                       |           |
| 0.044            | 8.95             | 71.0      |                                       |                       |           |

Dry Mass of sample, g

683.9

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 13.50 |
| <b>% SAND</b>      | 14.30 |
| % Very Coarse Sand | 0.80  |
| % Coarse Sand      | 1.00  |
| % Medium Sand      | 1.90  |
| % Fine Sand        | 5.35  |
| % Very Fine Sand   | 5.25  |
| <b>% SILT</b>      | 56.07 |
| % Coarse Silt      | 24.00 |
| % Fine Silt        | 32.10 |
| <b>% CLAY</b>      | 16.13 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3 - 3.5

Sample Description: Pinkish White 5YR-8/2

Sample No.: TP-07A

Sample Source: TP-07

Date Reported: 3/8/2024



Office / Lab

Address

Office Number / Fax

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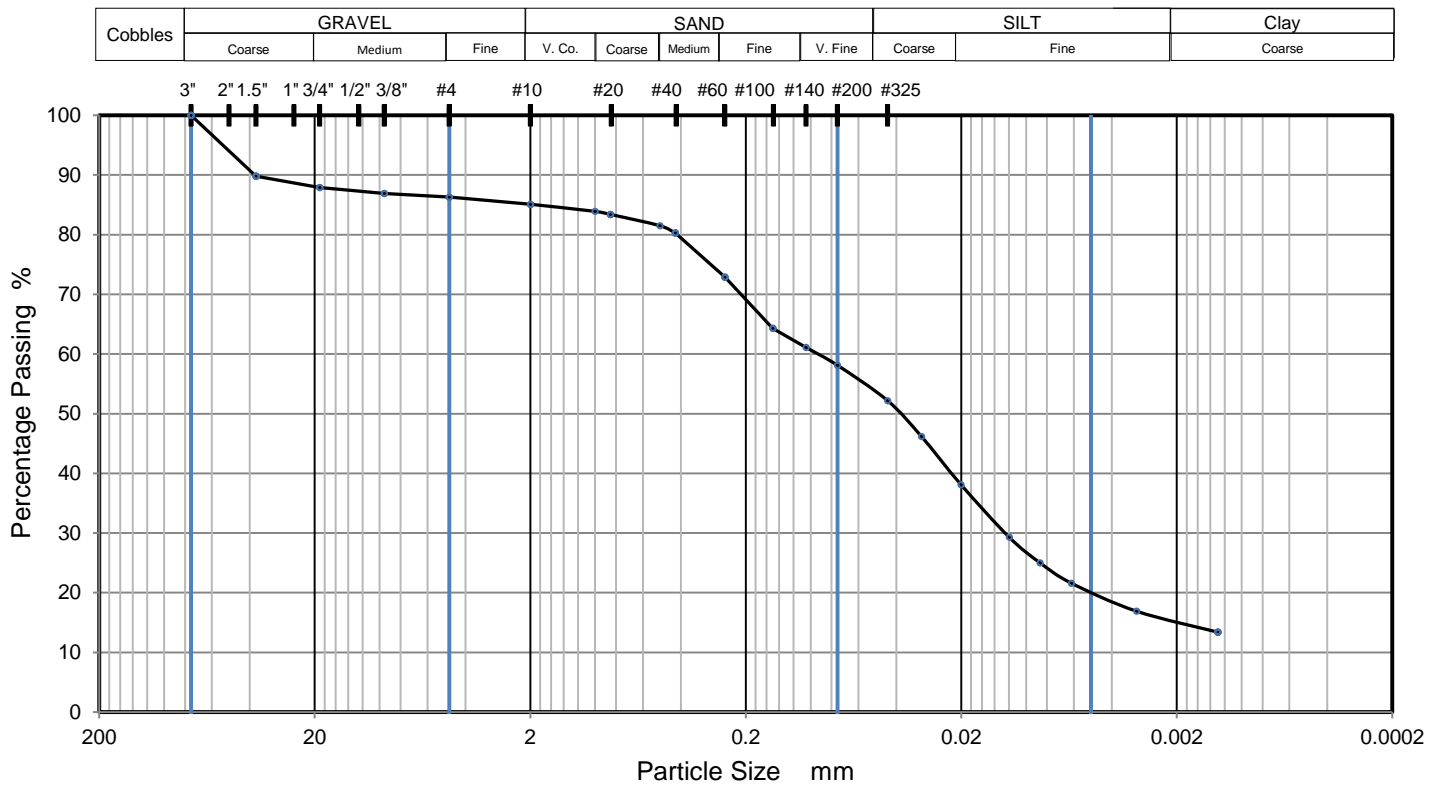
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(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0306                                | 43.01                 | 46.2      |
| 37.5             | 73.22            | 89.8      | 0.0200                                | 58.06                 | 38.1      |
| 19               | 87.02            | 87.9      | 0.0120                                | 63.08                 | 29.3      |
| 9.5              | 94.05            | 86.9      | 0.0086                                | 30.82                 | 25.0      |
| 4.75             | 98.44            | 86.3      | 0.0062                                | 24.37                 | 21.6      |
| 2                | 106.64           | 85.1      | 0.0031                                | 33.69                 | 16.9      |
| 1                | 0.74             | 83.9      | 0.0013                                | 25.09                 | 13.4      |
| 0.85             | 0.99             | 83.4      |                                       |                       |           |
| 0.5              | 2.12             | 81.5      |                                       |                       |           |
| 0.425            | 2.83             | 80.3      |                                       |                       |           |
| 0.25             | 7.23             | 72.9      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 12.28            | 64.3      |                                       |                       |           |
| 0.105            | 14.17            | 61.1      |                                       |                       |           |
| 0.075            | 15.98            | 58.1      |                                       |                       |           |
| 0.044            | 19.45            | 52.2      |                                       |                       |           |

Dry Mass of sample, g

716.8

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 14.90 |
| <b>% SAND</b>      | 31.49 |
| % Very Coarse Sand | 1.20  |
| % Coarse Sand      | 2.40  |
| % Medium Sand      | 8.60  |
| % Fine Sand        | 12.24 |
| % Very Fine Sand   | 7.05  |
| <b>% SILT</b>      | 38.45 |
| % Coarse Silt      | 15.51 |
| % Fine Silt        | 22.90 |
| <b>% CLAY</b>      | 15.17 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3.5 - 4

Sample Description: Pale Brown 10YR-6/3

Sample No.: TP-08A

Sample Source: TP-08

Date Reported: 3/8/2024



Office / Lab

Address

Office Number / Fax

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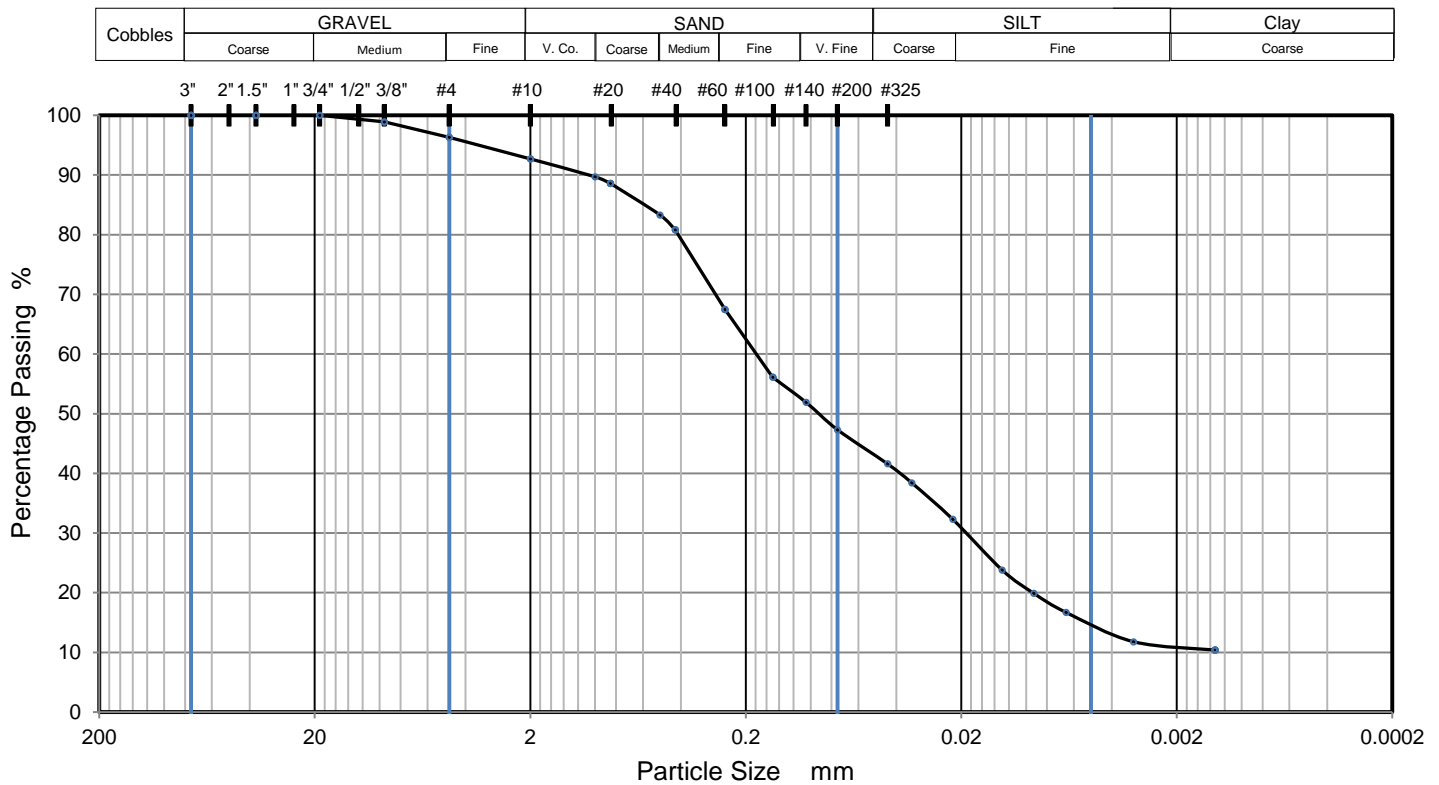
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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0339                                | 23.69                 | 38.4      |
| 37.5             | 0.00             | 100.0     | 0.0219                                | 45.16                 | 32.3      |
| 19               | 0.00             | 100.0     | 0.0129                                | 62.93                 | 23.8      |
| 9.5              | 8.40             | 98.9      | 0.0092                                | 28.87                 | 19.9      |
| 4.75             | 27.26            | 96.3      | 0.0065                                | 23.69                 | 16.7      |
| 2                | 54.36            | 92.7      | 0.0032                                | 36.27                 | 11.8      |
| 1                | 1.58             | 89.7      | 0.0013                                | 10.36                 | 10.4      |
| 0.85             | 2.14             | 88.6      |                                       |                       |           |
| 0.5              | 5.00             | 83.3      |                                       |                       |           |
| 0.425            | 6.33             | 80.8      |                                       |                       |           |
| 0.25             | 13.41            | 67.5      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 19.48            | 56.1      |                                       |                       |           |
| 0.105            | 21.73            | 51.9      |                                       |                       |           |
| 0.075            | 24.15            | 47.3      |                                       |                       |           |
| 0.044            | 27.21            | 41.6      |                                       |                       |           |

Dry Mass of sample, g

740.3

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 7.30  |
| <b>% SAND</b>      | 49.73 |
| % Very Coarse Sand | 3.00  |
| % Coarse Sand      | 6.40  |
| % Medium Sand      | 15.80 |
| % Fine Sand        | 16.27 |
| % Very Fine Sand   | 8.27  |
| <b>% SILT</b>      | 31.91 |
| % Coarse Silt      | 12.17 |
| % Fine Silt        | 19.70 |
| <b>% CLAY</b>      | 11.06 |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment  
 Client: MidAtlantic Engineering Partners  
 Sample Description: Yellowish Brown 10YR-5/4  
 Sample Source: TP-09

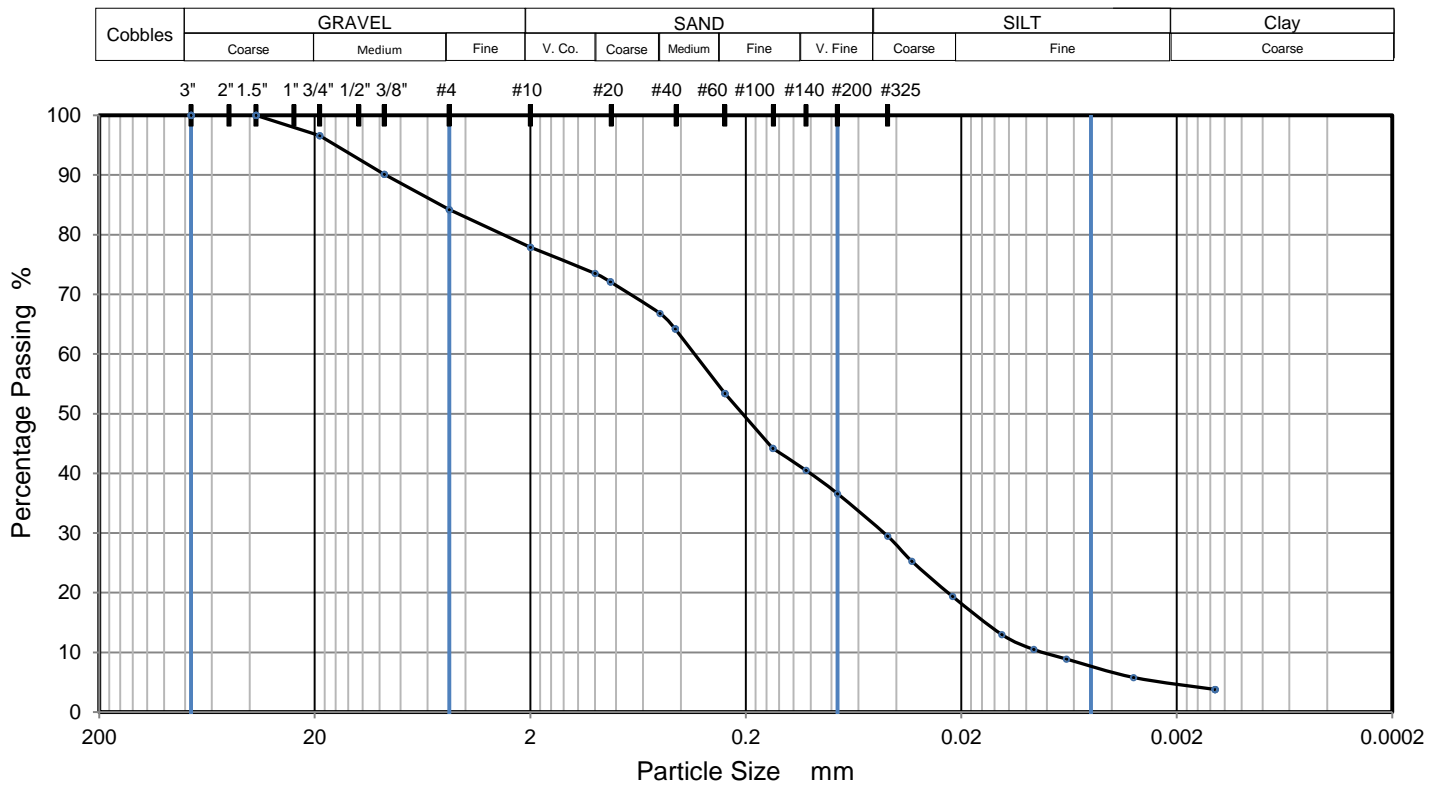
Project No.: 44:2006  
 Depth (ft): 5 - 5.5  
 Sample No.: TP-9A  
 Date Reported: 3/8/2024



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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0340                                | 32.02                 | 25.3      |
| 37.5             | 0.00             | 100.0     | 0.0220                                | 44.97                 | 19.4      |
| 19               | 25.68            | 96.6      | 0.0130                                | 48.79                 | 13.0      |
| 9.5              | 75.58            | 90.1      | 0.0092                                | 19.06                 | 10.5      |
| 4.75             | 120.26           | 84.2      | 0.0065                                | 12.20                 | 8.9       |
| 2                | 168.38           | 77.9      | 0.0032                                | 23.63                 | 5.8       |
| 1                | 2.82             | 73.5      | 0.0013                                | 15.25                 | 3.8       |
| 0.85             | 3.70             | 72.1      |                                       |                       |           |
| 0.5              | 7.09             | 66.8      |                                       |                       |           |
| 0.425            | 8.70             | 64.2      |                                       |                       |           |
| 0.25             | 15.57            | 53.4      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 21.44            | 44.2      |                                       |                       |           |
| 0.105            | 23.82            | 40.5      |                                       |                       |           |
| 0.075            | 26.29            | 36.6      |                                       |                       |           |
| 0.044            | 30.82            | 29.5      |                                       |                       |           |

Dry Mass of sample, g

762.3

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 22.10 |
| <b>% SAND</b>      | 46.70 |
| % Very Coarse Sand | 4.40  |
| % Coarse Sand      | 6.70  |
| % Medium Sand      | 13.40 |
| % Fine Sand        | 13.47 |
| % Very Fine Sand   | 8.73  |
| <b>% SILT</b>      | 26.46 |
| % Coarse Silt      | 12.90 |
| % Fine Silt        | 13.60 |
| <b>% CLAY</b>      | 4.74  |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment  
 Client: MidAtlantic Engineering Partners  
 Sample Description: Dark Yellowish Brown 10YR-4/6  
 Sample Source: TP-10

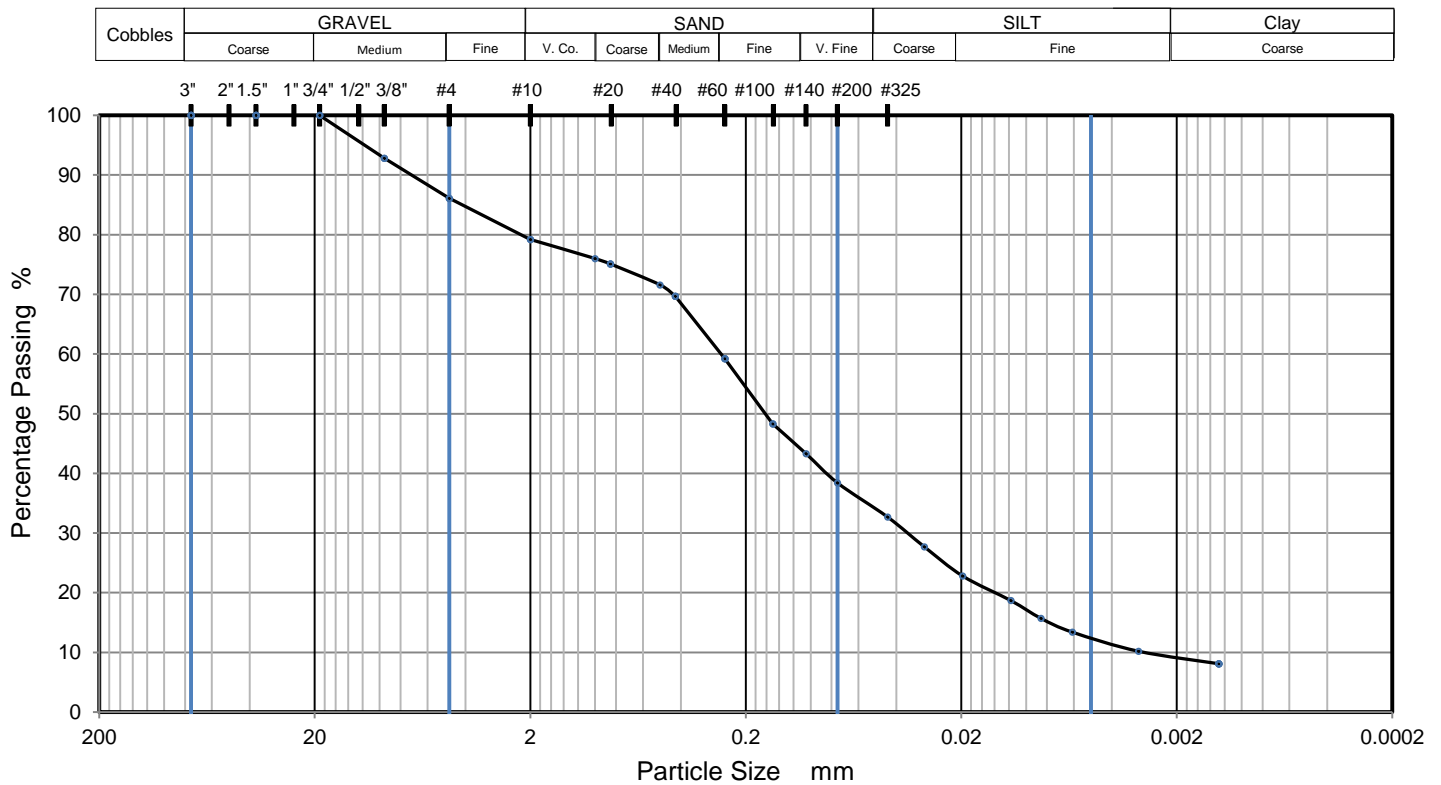
Project No.: 44:2006  
 Depth (ft): 2 - 2.5  
 Sample No.: TP-10A  
 Date Reported: 3/8/2024



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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0297                                | 36.94                 | 27.7      |
| 37.5             | 0.00             | 100.0     | 0.0197                                | 36.20                 | 22.8      |
| 19               | 0.00             | 100.0     | 0.0118                                | 30.29                 | 18.7      |
| 9.5              | 53.56            | 92.8      | 0.0085                                | 22.16                 | 15.7      |
| 4.75             | 102.79           | 86.1      | 0.0061                                | 16.99                 | 13.4      |
| 2                | 153.53           | 79.2      | 0.0030                                | 23.64                 | 10.2      |
| 1                | 3.99             | 76.0      | 0.0013                                | 15.51                 | 8.1       |
| 0.85             | 5.07             | 75.1      |                                       |                       |           |
| 0.5              | 9.44             | 71.6      |                                       |                       |           |
| 0.425            | 11.84            | 69.7      |                                       |                       |           |
| 0.25             | 24.80            | 59.2      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 38.32            | 48.3      |                                       |                       |           |
| 0.105            | 44.55            | 43.3      |                                       |                       |           |
| 0.075            | 50.61            | 38.4      |                                       |                       |           |
| 0.044            | 57.72            | 32.7      |                                       |                       |           |

Dry Mass of sample, g

738.8

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 20.80 |
| <b>% SAND</b>      | 45.13 |
| % Very Coarse Sand | 3.20  |
| % Coarse Sand      | 4.40  |
| % Medium Sand      | 12.40 |
| % Fine Sand        | 16.61 |
| % Very Fine Sand   | 8.52  |
| <b>% SILT</b>      | 24.87 |
| % Coarse Silt      | 11.07 |
| % Fine Silt        | 13.80 |
| <b>% CLAY</b>      | 9.20  |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment  
 Client: MidAtlantic Engineering Partners  
 Sample Description: Light Gray 10YR-7/2  
 Sample Source: TP-11

Project No.: 44:2006  
 Depth (ft): 1.5 - 2  
 Sample No.: TP-11A  
 Date Reported: 3/8/2024

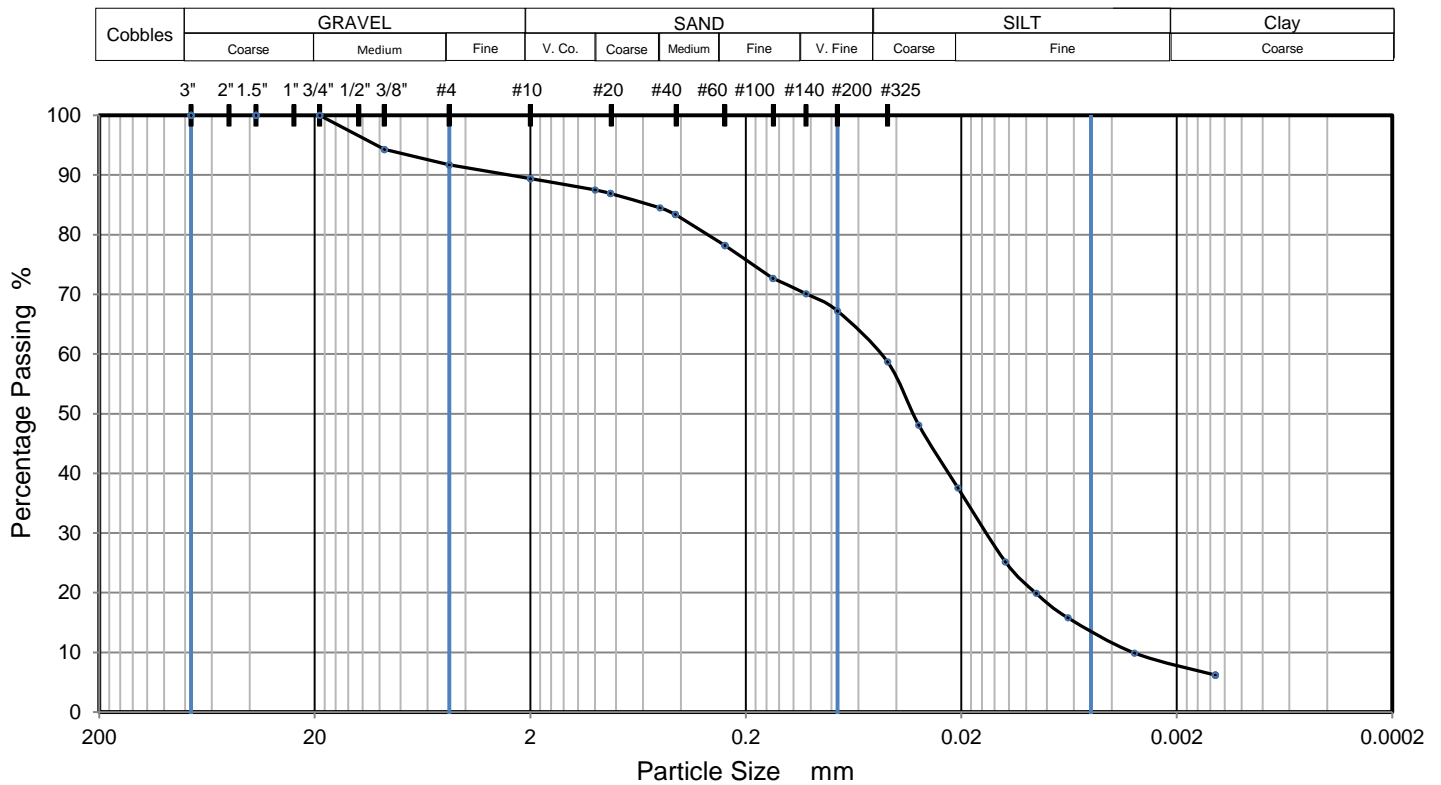


|                                     |   |                                    |
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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |



# PARTICLE SIZE DISTRIBUTION



## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

| Sieving          |                  |           | Hydrometer Sedimentation              |                       |           |
|------------------|------------------|-----------|---------------------------------------|-----------------------|-----------|
| Particle Size mm | Wgt. Retained, g | % Passing | Particle Size mm                      | Calc. Wt. Retained, g | % Passing |
| 75               | 0.00             | 100.0     | 0.0315                                | 79.88                 | 48.1      |
| 37.5             | 0.00             | 100.0     | 0.0208                                | 79.12                 | 37.6      |
| 19               | 0.00             | 100.0     | 0.0125                                | 93.44                 | 25.2      |
| 9.5              | 42.81            | 94.3      | 0.0090                                | 39.94                 | 19.9      |
| 4.75             | 62.73            | 91.7      | 0.0064                                | 30.90                 | 15.8      |
| 2                | 79.60            | 89.4      | 0.0031                                | 44.46                 | 9.9       |
| 1                | 1.07             | 87.5      | 0.0013                                | 27.88                 | 6.2       |
| 0.85             | 1.42             | 86.9      |                                       |                       |           |
| 0.5              | 2.73             | 84.5      |                                       |                       |           |
| 0.425            | 3.31             | 83.4      |                                       |                       |           |
| 0.25             | 6.18             | 78.2      | Specific Gravity (Historical)<br>2.65 |                       |           |
| 0.15             | 9.22             | 72.7      |                                       |                       |           |
| 0.105            | 10.67            | 70.1      |                                       |                       |           |
| 0.075            | 12.26            | 67.2      |                                       |                       |           |
| 0.044            | 16.95            | 58.7      |                                       |                       |           |

Dry Mass of sample, g

753.5

### Uncorrected USDA Soil Percentages:

|                    |       |
|--------------------|-------|
| <b>% GRAVEL</b>    | 10.60 |
| <b>% SAND</b>      | 28.66 |
| % Very Coarse Sand | 1.90  |
| % Coarse Sand      | 3.00  |
| % Medium Sand      | 6.30  |
| % Fine Sand        | 8.52  |
| % Very Fine Sand   | 8.94  |
| <b>% SILT</b>      | 52.77 |
| % Coarse Silt      | 24.04 |
| % Fine Silt        | 28.70 |
| <b>% CLAY</b>      | 7.97  |
| % Coarse Clay      |       |
| % Fine Clay        |       |

Project: Lawrenceville Office Park Redevelopment  
 Client: MidAtlantic Engineering Partners  
 Sample Description: Light Gray 2.5YR-7/1  
 Sample Source: TP-12

Project No.: 44:2006  
 Depth (ft): 4.5 - 5  
 Sample No.: TP-12A  
 Date Reported: 3/8/2024



|                                     |   |                                    |
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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     | 2/25/2024     |         |

# USDA Classification

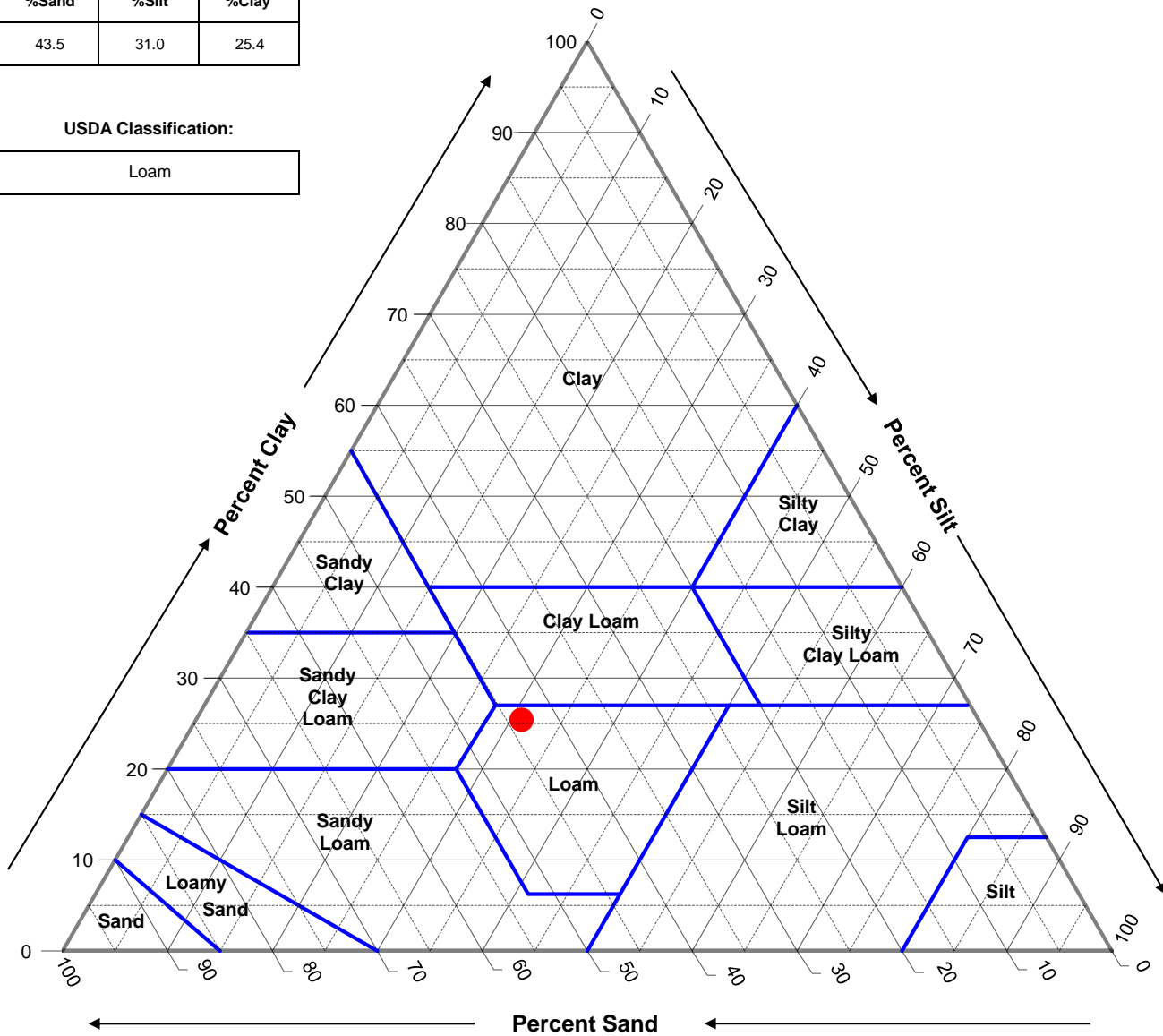
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 43.5  | 31.0  | 25.4  |

USDA Classification:

|      |
|------|
| Loam |
|------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 5 - 5.5

Sample Description: Very Pale Brown 10YR-7/3

Sample No.: TP-01A

Sample Source: TP-01

Date Reported: 3/8/2024



Office / Lab

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

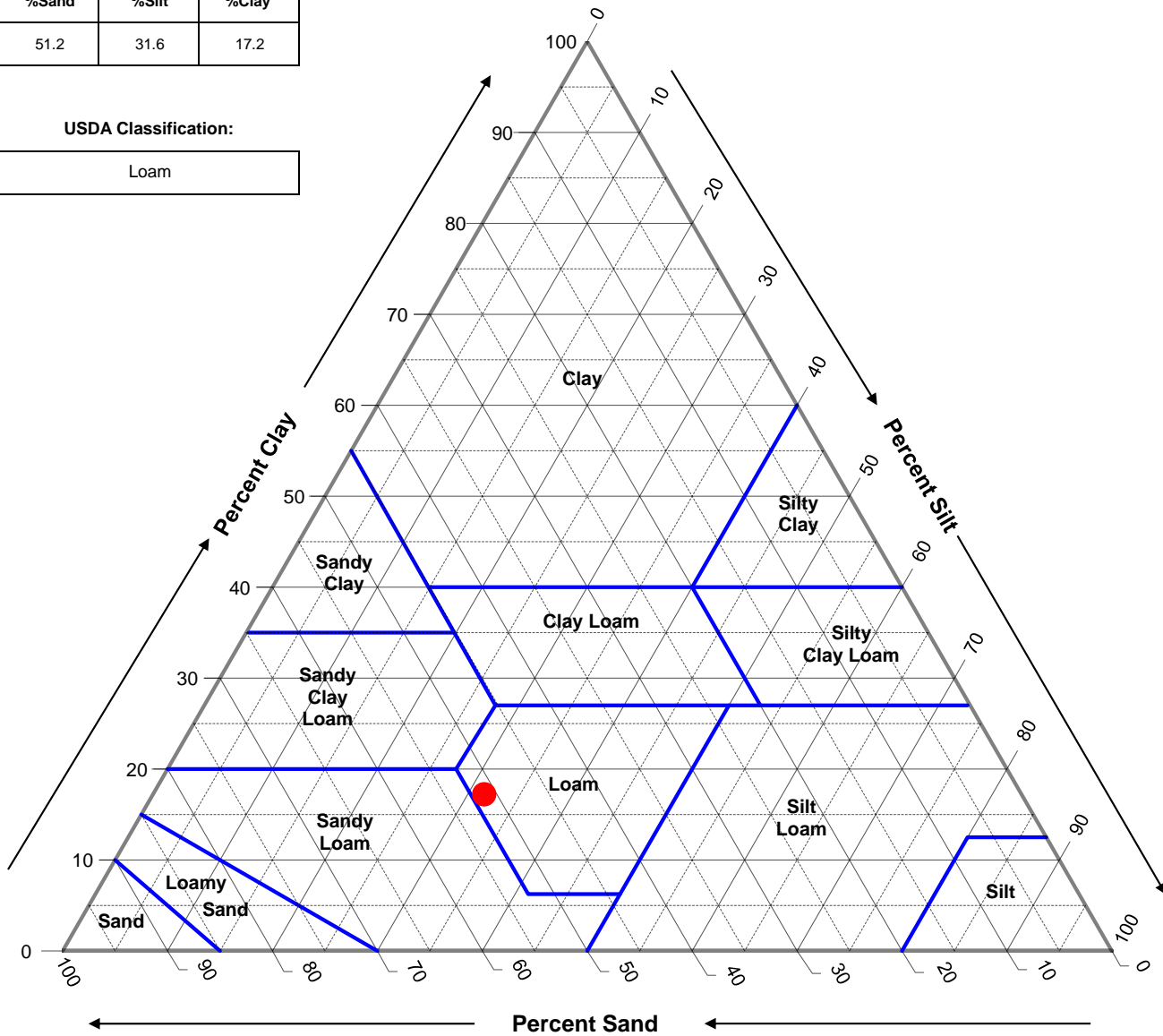
## TEST RESULTS (ASTM D6913M-17-METHOD B)

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 51.2  | 31.6  | 17.2  |

USDA Classification:

|      |
|------|
| Loam |
|------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 6 - 6.5

Sample Description: Weak Red 10YR-5/4

Sample No.: TP-02A

Sample Source: TP-02

Date Reported: 3/8/2024



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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

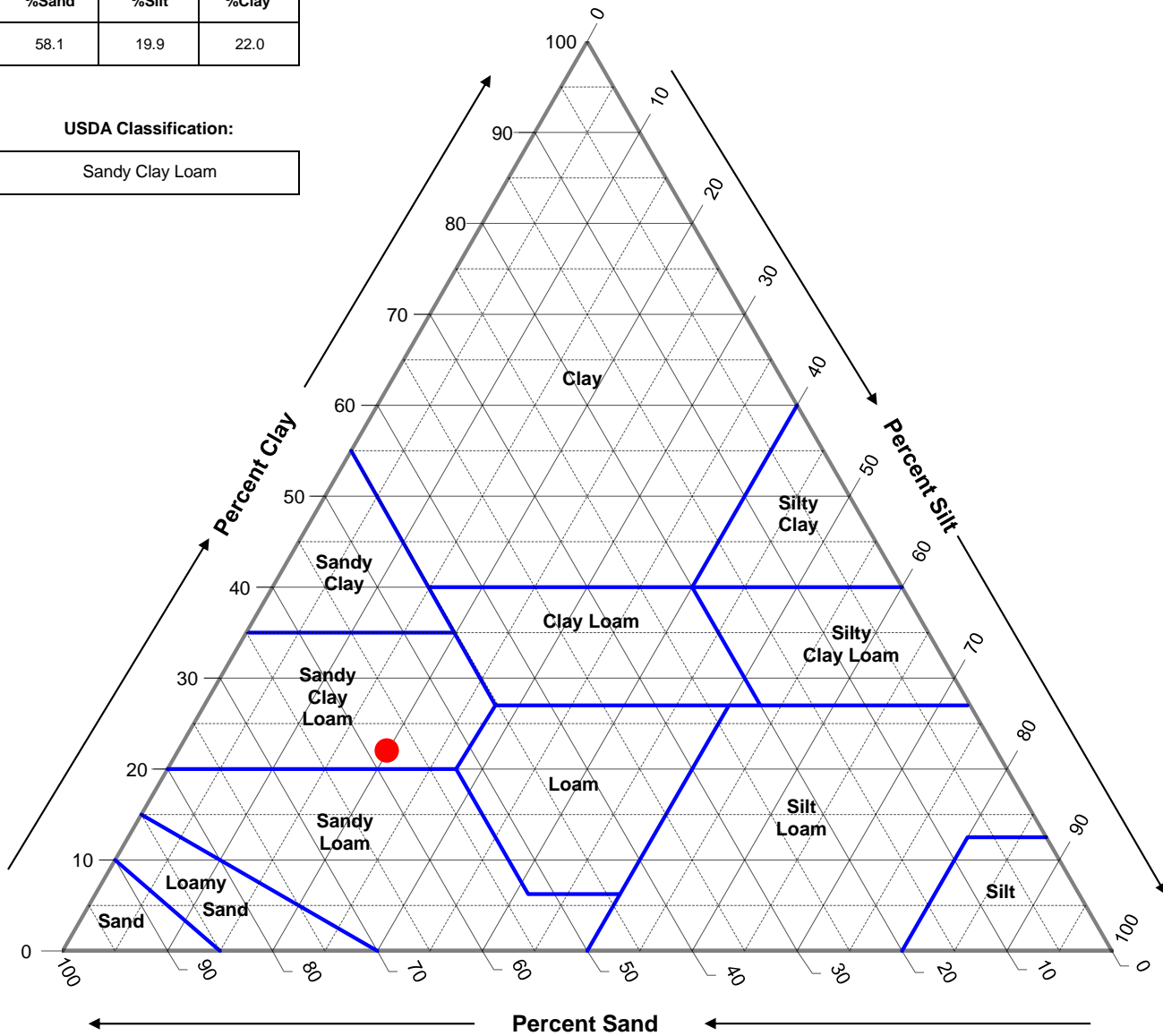
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 58.1  | 19.9  | 22.0  |

USDA Classification:

|                 |
|-----------------|
| Sandy Clay Loam |
|-----------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3 - 3.5

Sample Description: Light Brown 7.5YR-6/3

Sample No.: TP-03A

Sample Source: TP-03

Date Reported: 3/8/2024



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| Tested by | Checked by | Approved by | Date Received | Remarks |
|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

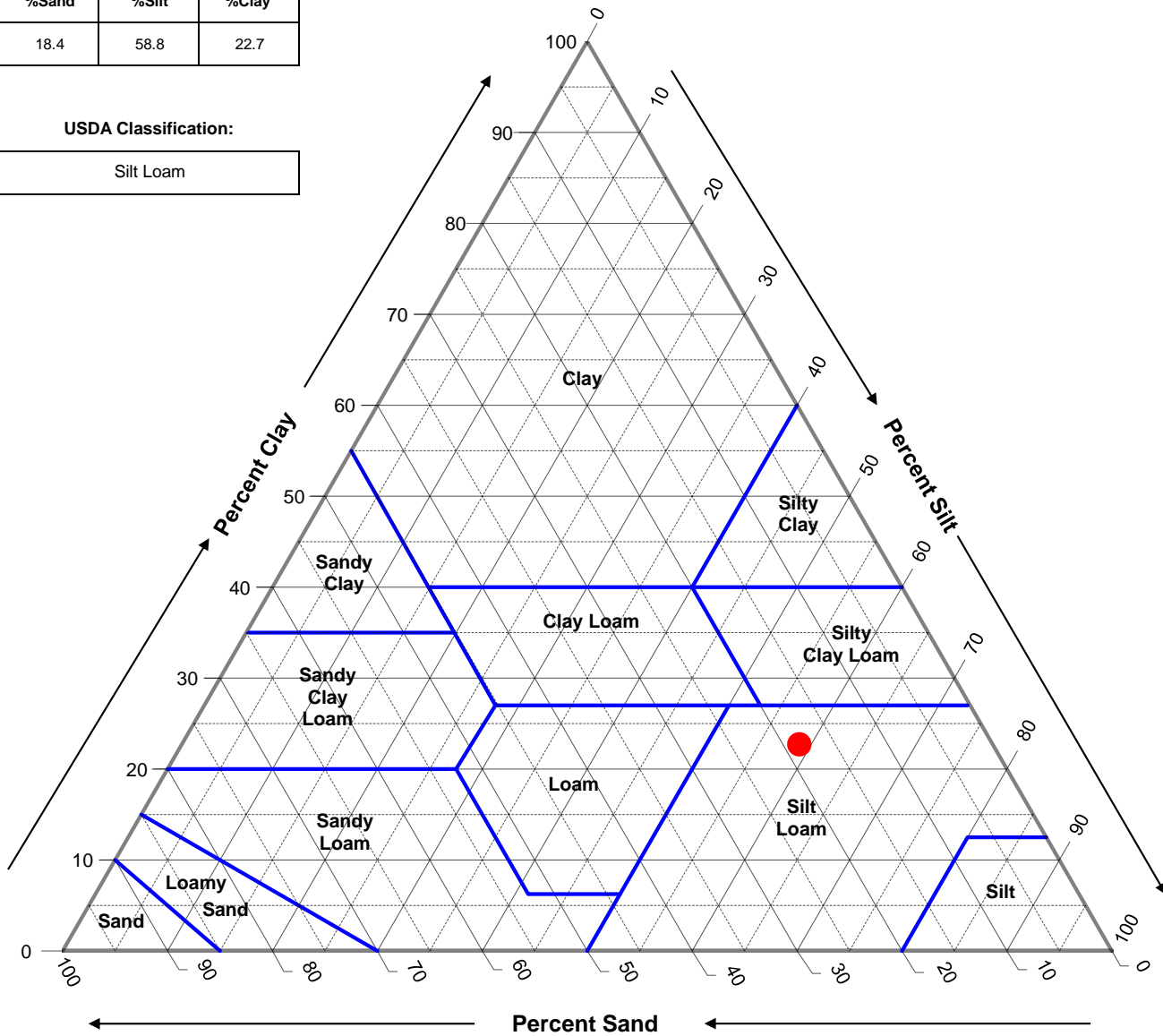
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 18.4  | 58.8  | 22.7  |

USDA Classification:

|           |
|-----------|
| Silt Loam |
|-----------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 2 - 2.5

Sample Description: Pinkish White 5YR-8/2

Sample No.: TP-04A

Sample Source: TP-04

Date Reported: 3/8/2024



Office / Lab

ECS Mid-Atlantic LLC - Philadelphia

Address

2 Executive Drive  
Suite 11  
Moorestown, NJ 08057

Office Number / Fax

(609)832-3910  
(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

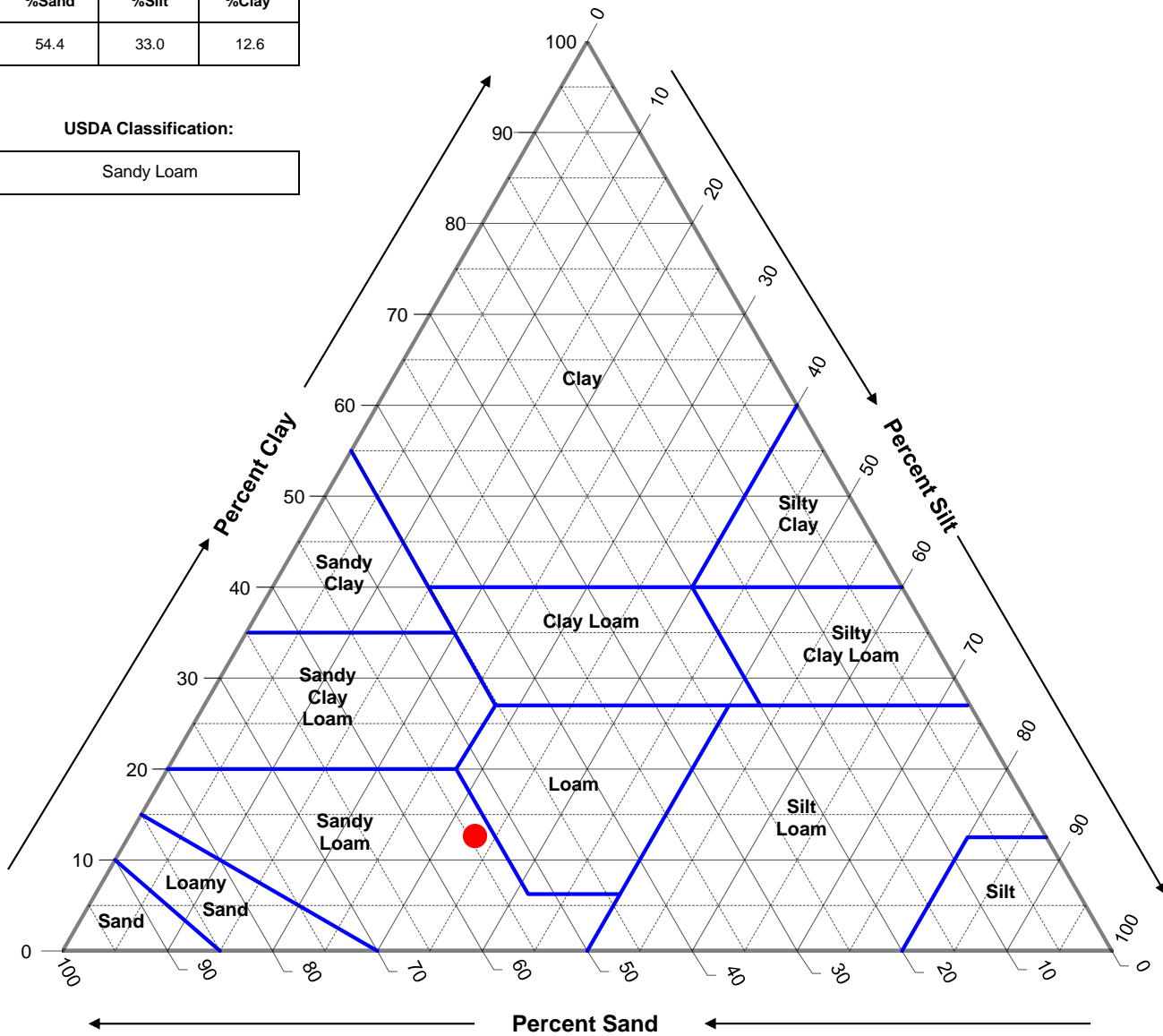
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 54.4  | 33.0  | 12.6  |

USDA Classification:

|            |
|------------|
| Sandy Loam |
|------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3.5 - 4

Sample Description: Very Pale Brown 10YR-7/3

Sample No.: TP-05A

Sample Source: TP-05

Date Reported: 3/8/2024



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Suite 11  
Moorestown, NJ 08057

Office Number / Fax

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| J Gross   | Y Zhang    | J Yates     |               |         |



# USDA Classification

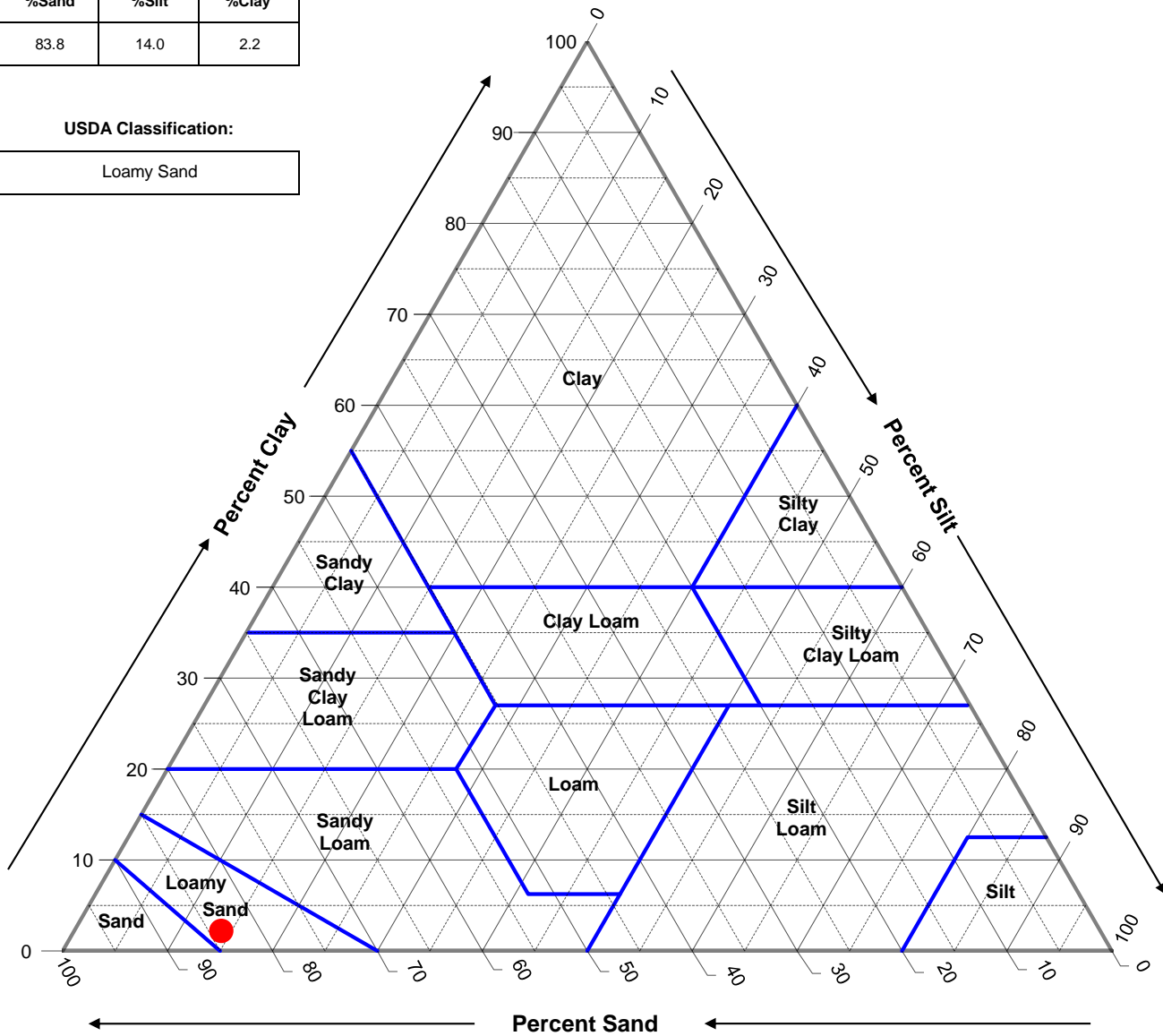
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 83.8  | 14.0  | 2.2   |

USDA Classification:

|            |
|------------|
| Loamy Sand |
|------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 4.5 - 5

Sample Description: Reddish Brown 2.5YR-5/4

Sample No.: TP-06A

Sample Source: TP-06

Date Reported: 3/8/2024



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Suite 11  
Moorestown, NJ 08057

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

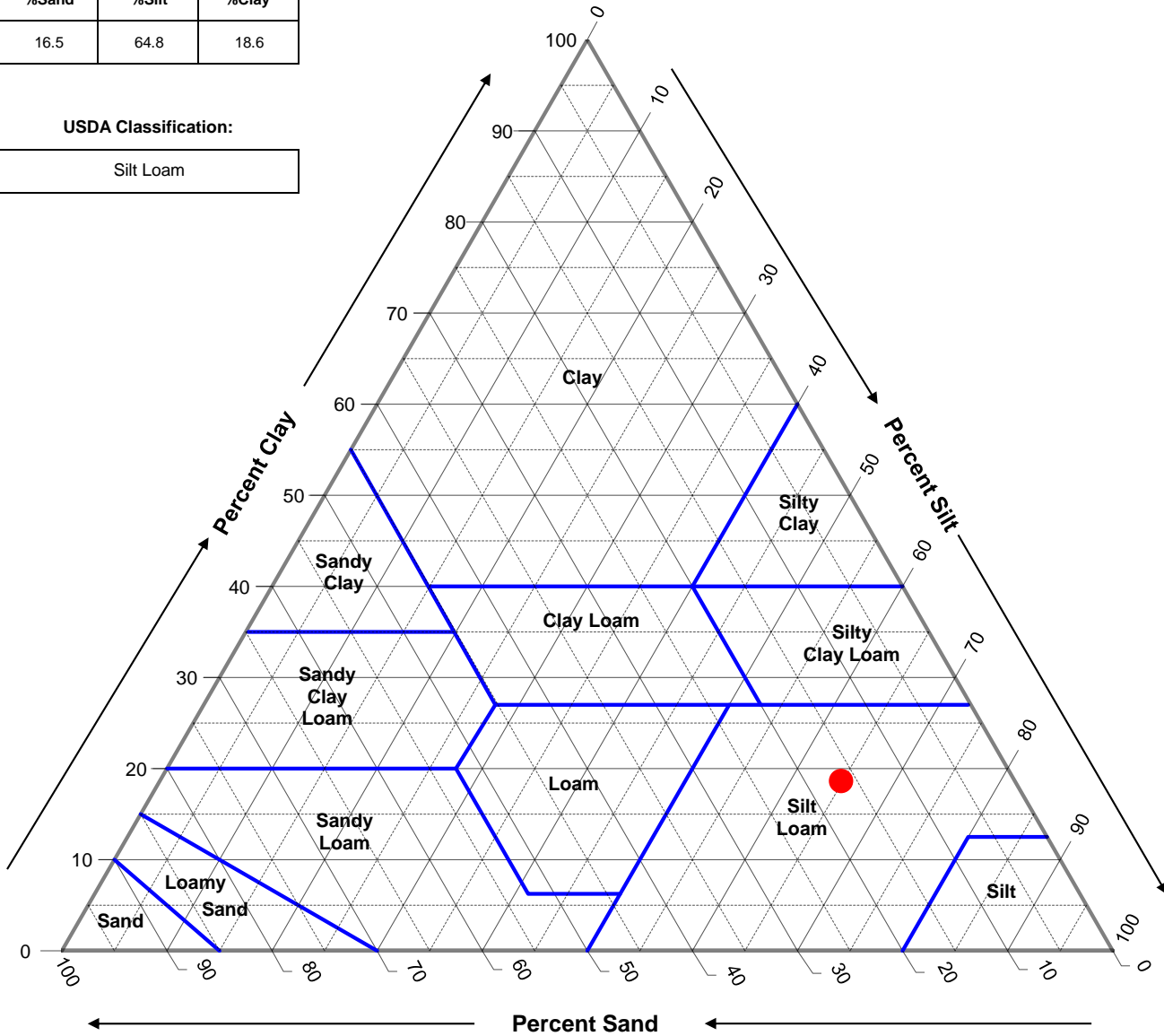
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 16.5  | 64.8  | 18.6  |

USDA Classification:

|           |
|-----------|
| Silt Loam |
|-----------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3 - 3.5

Sample Description: Pinkish white 5YR-8/2

Sample No.: TP-07A

Sample Source: TP-07

Date Reported: 3/8/2024



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Suite 11  
Moorestown, NJ 08057

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(609)832-3910  
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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

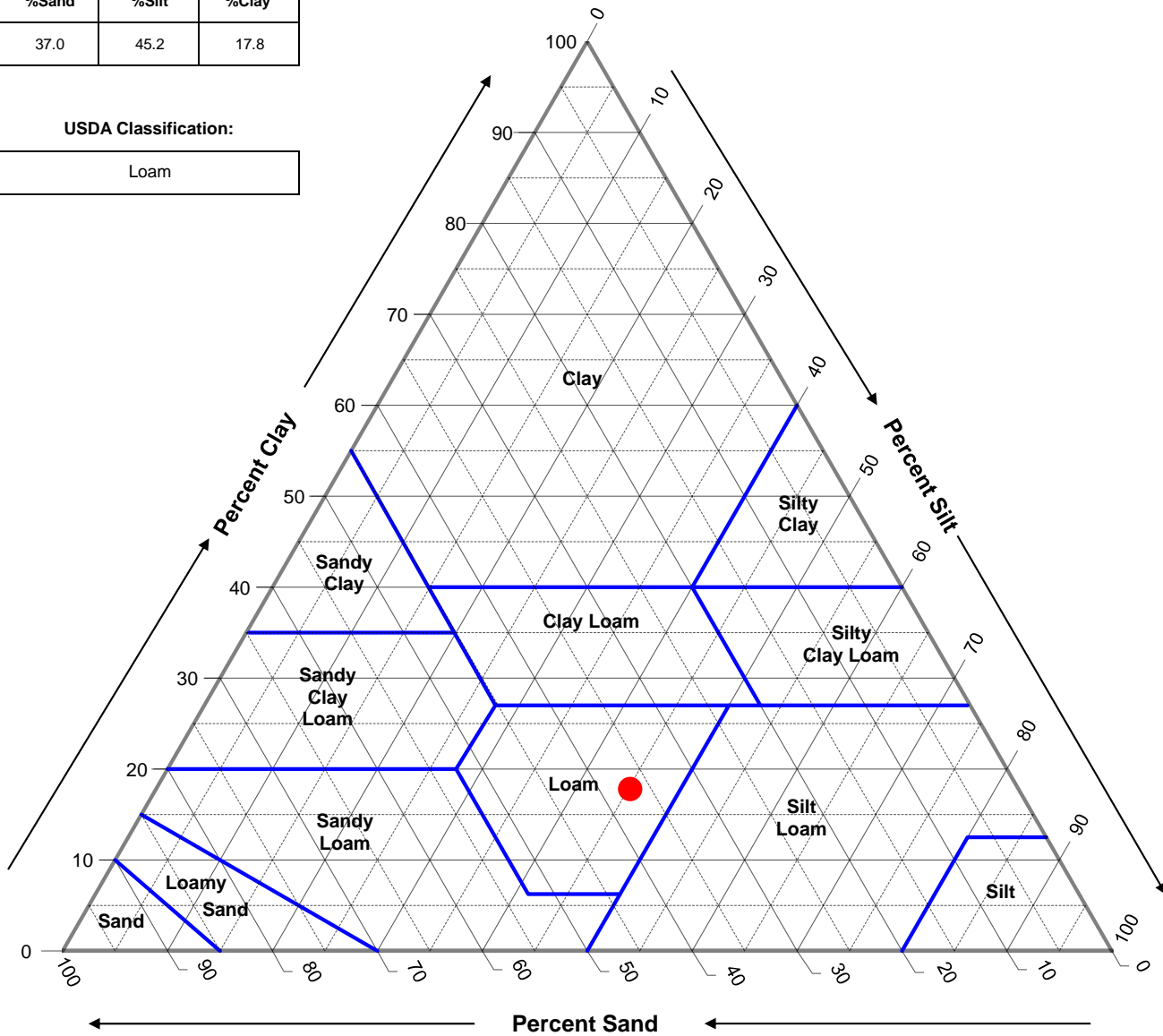
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 37.0  | 45.2  | 17.8  |

USDA Classification:

|      |
|------|
| Loam |
|------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 3.5 - 4

Sample Description: Pale Brown 10YR-6/3

Sample No.: TP-08A

Sample Source: TP-08

Date Reported: 3/8/2024



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Suite 11  
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Office Number / Fax

(609)832-3910  
(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

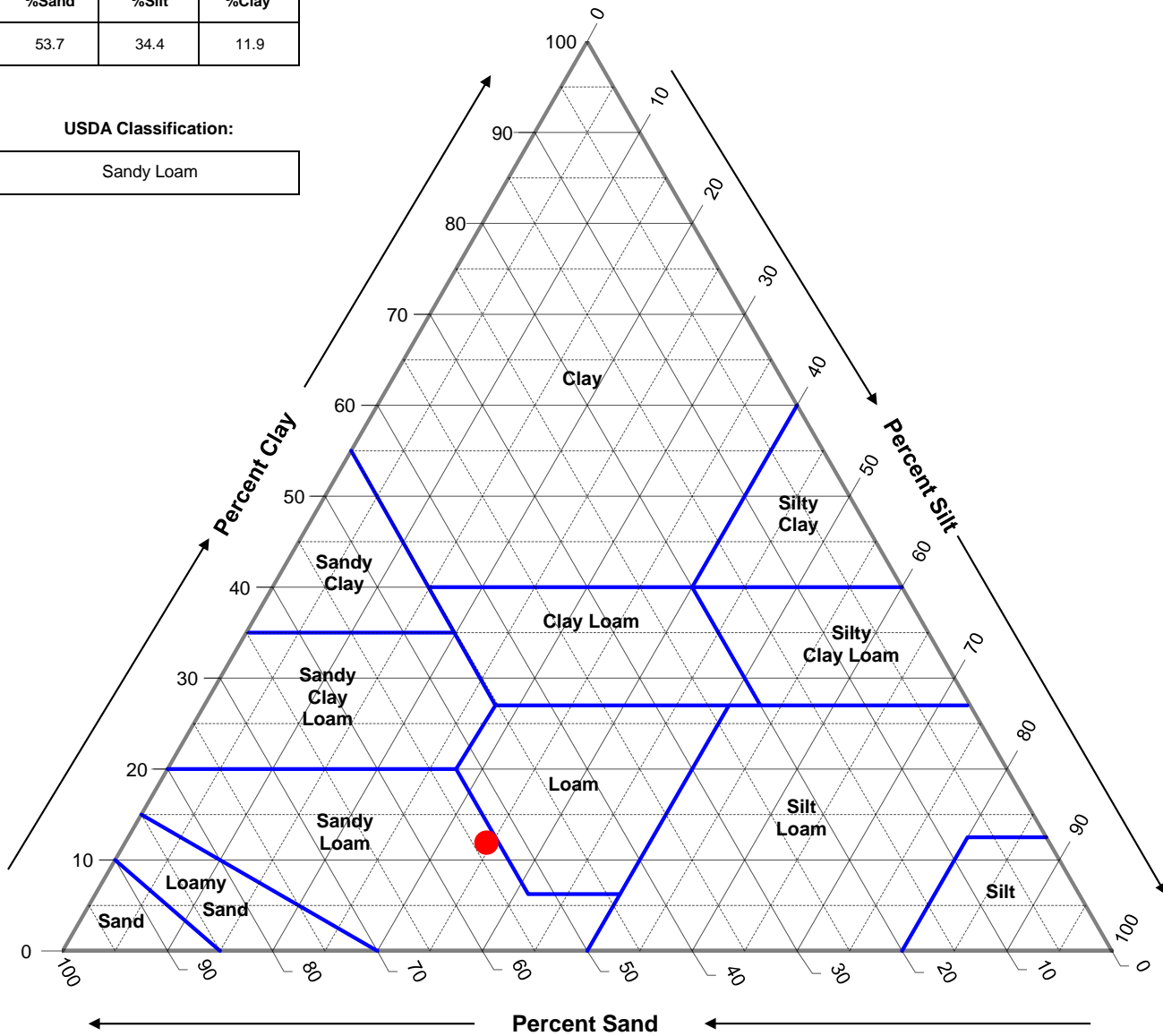
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 53.7  | 34.4  | 11.9  |

USDA Classification:

|            |
|------------|
| Sandy Loam |
|------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 5 - 5.5

Sample Description: Yellowish Brown 10YR-5/4

Sample No.: TP-9A

Sample Source: TP-09

Date Reported: 3/8/2024



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Suite 11  
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Office Number / Fax

(609)832-3910  
(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

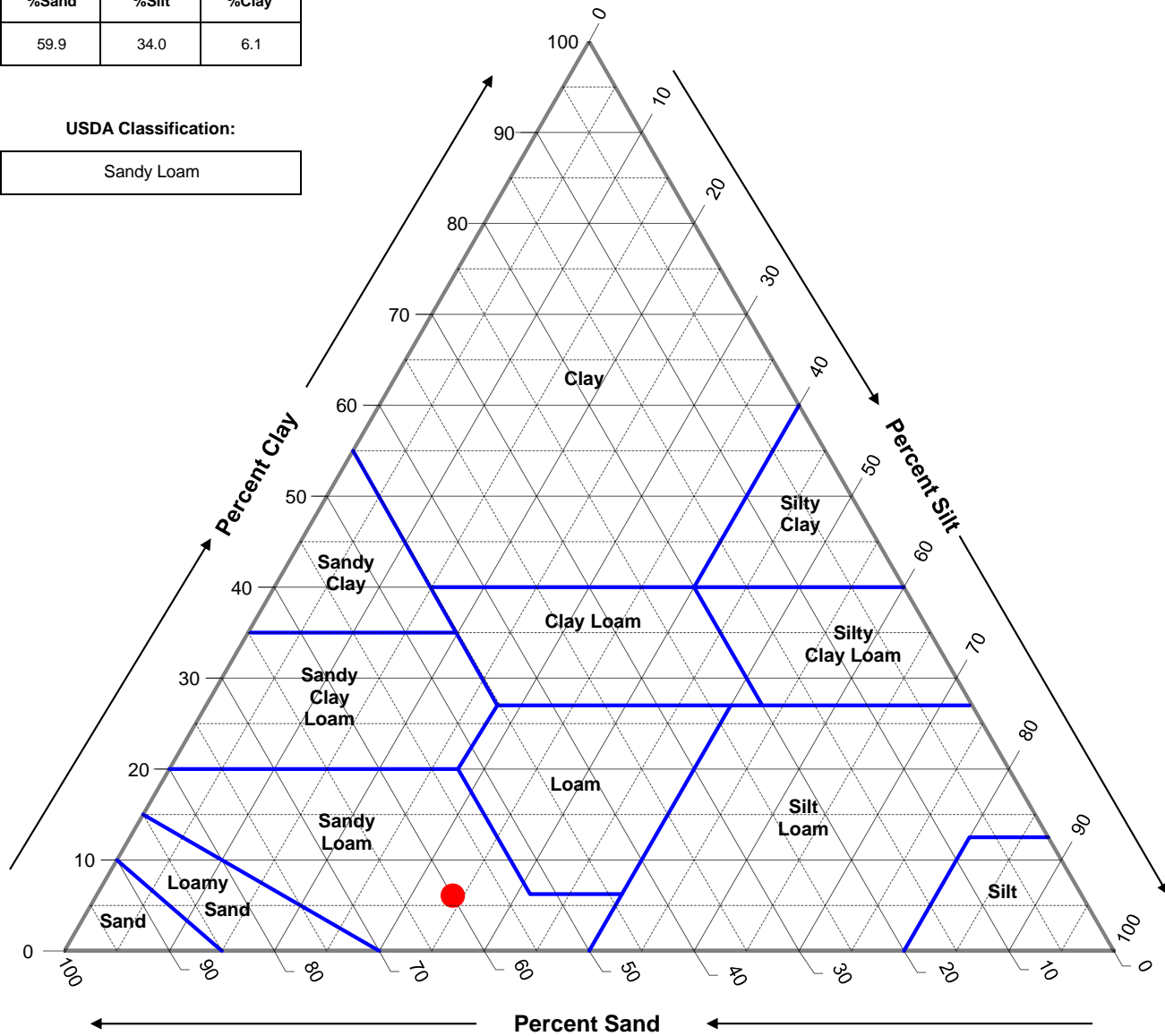
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 59.9  | 34.0  | 6.1   |

USDA Classification:

|            |
|------------|
| Sandy Loam |
|------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 2 - 2.5

Sample Description: Dark Yellowish Brown 10YR-4/6

Sample No.: TP-10A

Sample Source: TP-10

Date Reported: 3/8/2024



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2 Executive Drive  
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Moorestown, NJ 08057

Office Number / Fax

(609)832-3910  
(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |

# USDA Classification

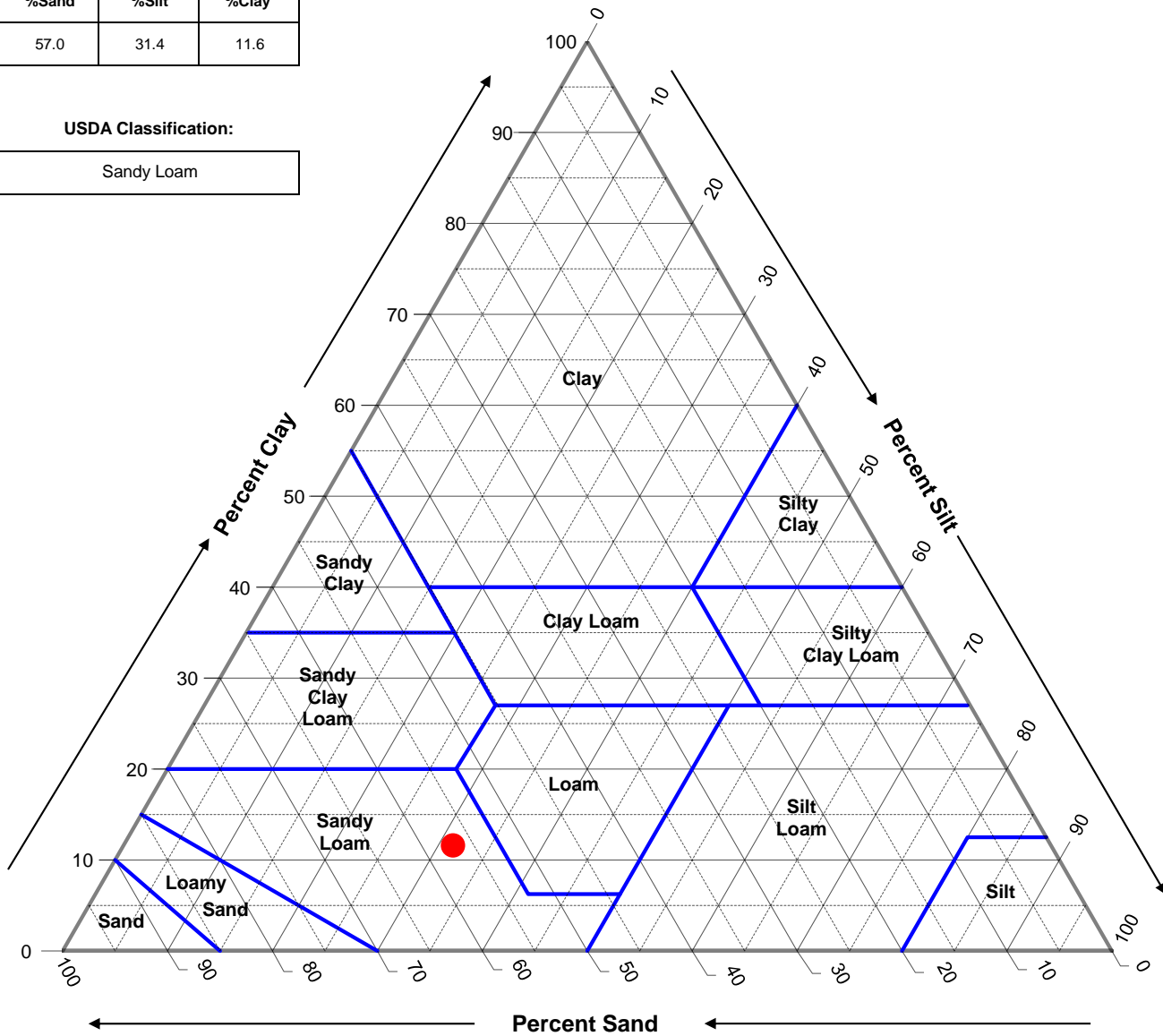
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 57.0  | 31.4  | 11.6  |

USDA Classification:

|            |
|------------|
| Sandy Loam |
|------------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 1.5 - 2

Sample Description: Light Gray 10YR-7/2

Sample No.: TP-11A

Sample Source: TP-11

Date Reported: 3/8/2024



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ECS Mid-Atlantic LLC - Philadelphia

Address

2 Executive Drive  
Suite 11  
Moorestown, NJ 08057

Office Number / Fax

(609)832-3910  
(484)840-5586

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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |



# USDA Classification

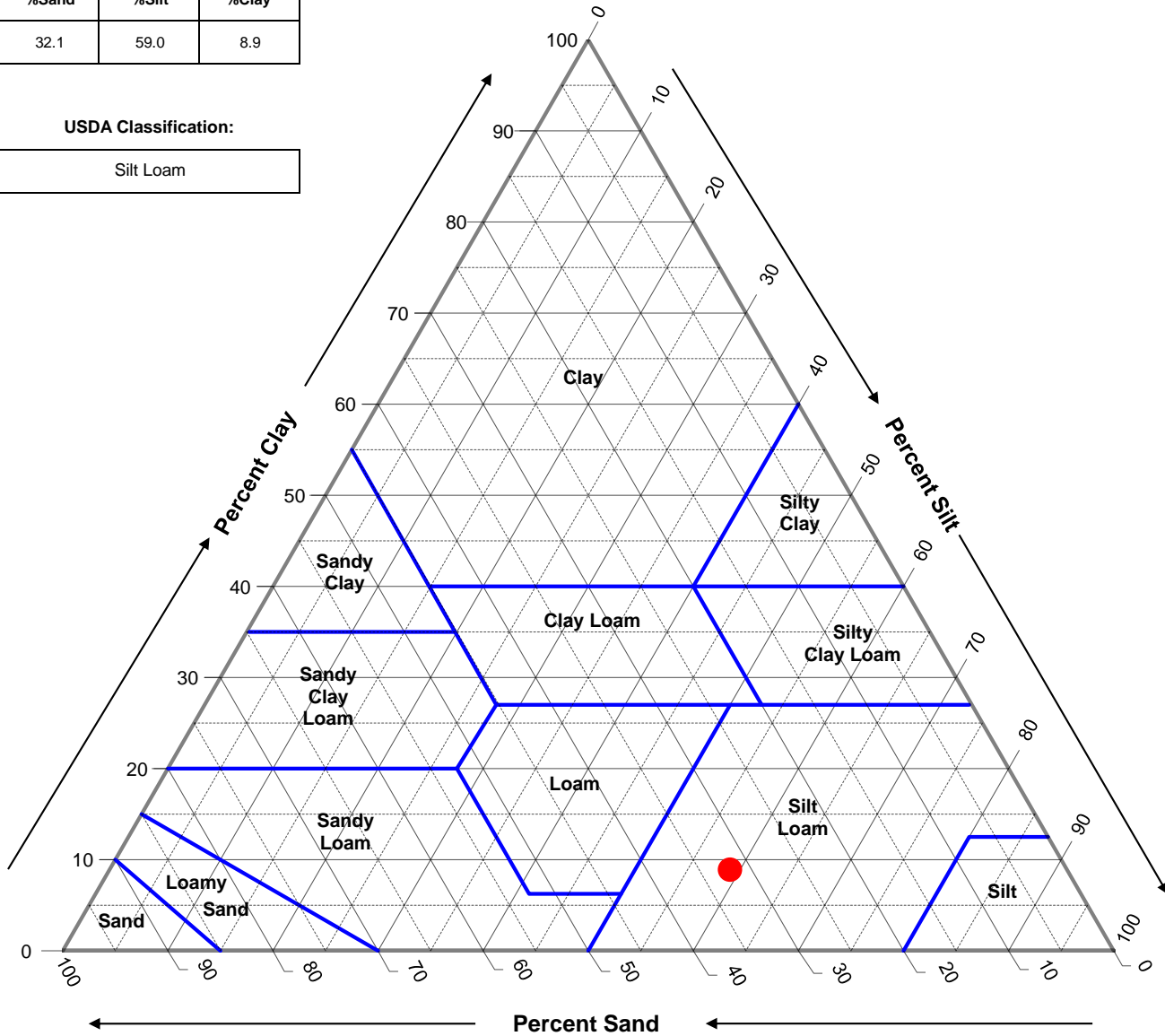
## TEST RESULTS (ASTM D6913M-17-METHOD B & ASTM D422-63(2007))

USDA Soil Percentages  
(Corrected for Gravel):

| %Sand | %Silt | %Clay |
|-------|-------|-------|
| 32.1  | 59.0  | 8.9   |

USDA Classification:

|           |
|-----------|
| Silt Loam |
|-----------|



Project: Lawrenceville Office Park Redevelopment

Project No.: 44:2006

Client: MidAtlantic Engineering Partners

Depth (ft): 4.5 - 5

Sample Description: Light Gray 2.5YR-7/1

Sample No.: TP-12A

Sample Source: TP-12

Date Reported: 3/8/2024



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|-----------|------------|-------------|---------------|---------|
| J Gross   | Y Zhang    | J Yates     |               |         |