121-041326DD

NORTH CAMPUS INFRASTRUCTURE EXTENSION

ROWAN-CABARRUS COMMUNITY COLLEGE
1333 Jake Alexander Blvd
Salisbury, NC 28146

ADDENDUM 1

DATE: April 29, 2026

NOTICE TO BIDDERS

This addendum is issued prior to receipt of bids, proposals, and its contents do hereby become a part of the documents for the above referenced project. All trade contractor bidders are responsible for assuring that their subcontractors and vendors are properly apprised of the contents of this Addendum. All information contained in this Addendum supersedes and takes precedence over any conflicting information in the documents. All bidders must acknowledge receipt of this Addendum.

This addendum serves to clarify, revise and supersede information in the original Notice to Bid posted April 13, 2026.

This bid addendum does not have to be returned with the bid documents but must be noted on the Bid Form.

REMINDERS

The **Bid Name** and **IFB # 121-041326DD** shall be referenced as the subject line of all emails.

Bids shall be submitted via email (pdf format only) no later than **2:00 pm**, local prevailing time on **Thursday, May 07, 2026** to **collegeenvironment@rccc.edu** Bids will be opened and read via a ZOOM meeting immediately after the receipt of the bids. The link follows.

RESPONSE TO QUESTIONS

1. C100, Note 14 mentions abandonment of existing wells. Cost is dependent on circumstances, and no such wells are identified. Are there wells to abandon?

   RESPONSE: No wells will be demolished as a part of this project.

2. C100, Note 15 indicates no heavy equipment in tree protection zone without approval of forester. No such areas are designated on clearing plan. Did you intend to identify tree protection areas on demo sheet?

   RESPONSE: The proposed clearing limit is shown on C100. The tree protection zone will be behind the proposed clearing limits. Note 15 updated for clarity.

3. C301–302 "TP" is indicated running along the tree line. There is no explanation for TP in the legend for this page or on C000. Is this intended to be tree protection fence?

   RESPONSE: Yes, tree protection fence has been added to the erosion control plan legend.

4. C301 inset match line does not line up with match line for main drawing on page.

   RESPONSE: Match lines adjusted on erosion control plans.

5. C402, Grading Plan B does not appear to have any final contour lines. We see no grading indicated here. Did you wish to include grading instructions on this sheet?

   RESPONSE: C402 includes the sidewalk grading. Will remove this sheet and add the sidewalk continuation as a separate view on Sheet C401.

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6. C403, Storm Drain Table has information for EX1, 2, 3, 4, 5, 6, 7, and 8. EX1 is shown connecting to A3 via A2. EX1 is the only structure identified in the plans. You have given rim, invert, and pipe lengths for these structures. What, if any, work is contemplated for these structures (other than coring into EX1) and where are they located?

   RESPONSE: The existing structure and pipe extend to the existing wet pond on site. There will be no modifications to these pipes and structures and are shown for information only. Additional view added to C403.

7. C404 Alternate FM has an open-cut street crossing on one end of the FM replacement but crosses another paved surface at the other end (parking lot driveway). Do you intend open cut or some sort of bore here? No instruction is given for this crossing.

   RESPONSE: This second crossing will also be an open cut. Additional information provided on C201 and C404.

8. C404 Alternate FM planned route crosses within 1 foot, as measured on plan, to three existing tree trunks. This will likely kill the trees by destroying the root ball. Did you intend to route the proposed FM this close to the existing trees?

   RESPONSE: FM has been adjusted to provide clearance from tree root zone.

9. C404 Alternate FM indicates connection to existing pump station gravity sewer, but no connection is depicted in plans. What is required for connection to pump station and where is pump station located?

   RESPONSE: Pump station location added to C404.5.

10. 10.C405 Proposed 3-inch DIP and 6-inch DIP water and fire lines under Navigation Way connect to two existing boxes per plan. What are these boxes and what is needed for connection to them?

    RESPONSE: Those boxes are backflow assemblies and will be constructed with a separate project. They are not part of this scope.

11. 11.C405 waterline station numbers are listed as 10+00 and 10+50 on 8-inch line. These numbers do not make sense based on what is shown on the sheet. Are we missing a sheet with other waterline?

    RESPONSE: Intent of this profile is only to show the waterline crossing under the road and the crossing information from the proposed storm pipe. The name of the profiles depicts the information being presented in them. The alignment starts at 10+00.

12. 12.C405 waterline branches under Navigation Way have station numbers that do not make sense unless they are a continuation from waterline station numbers from a previous line.

    RESPONSE: The profiles show what the intent is at each end of the crossing. The alignment starts at 10+00.

13. Bid Form – Unit price alternates #6 and #9 are identical. Did you intend these to match unit pricing on 01 22 00-1?

    RESPONSE: The bid form has been updated to match 01 2200.

14. C500 – The typical for the roundabout shows stone under the 24-inch curb and gutter. The detail for 24-inch curb and gutter on sheet C500 shows curb on grade. Does all 24-inch curb and gutter outside the points of curvature of the roundabout get installed on grade, and all curb and gutter in the roundabout get installed on stone?

    RESPONSE: All 24" curb and gutter outside of roundabout will be installed on compacted subgrade per detail on sheet C500. Curb and gutter for roundabout will be installed on aggregate base course per typical section detail.

15. Is there a subsurface report that can be shared for the subject property?

    RESPONSE: Geotechnical evaluation was not provided for this specific project, but an evaluation was performed for the adjacent Technology Education Complex project and has been included with Addendum 1.

16. C100: When clearing, how wide do the utility corridors need to be? Some of the clearing lines are clouded tree lines which do not allow for precision measurement.

    RESPONSE: Minimum clearing with for utility corridors added to C100.

17. Is there a place to waste earth material on site?

    RESPONSE: Soils stockpile area added to erosion control plans.

18. Can you provide a seeding specification for lawn areas and utility corridors?

    RESPONSE: Seeding specs have been included in revised Spec Section 32 9200.

19. Can you provide a landscape plan for seeding, mulching, or any other actions?

    RESPONSE: Landscape plan updated with site seeding locations.

20. C500: You have included a street paving detail. Is all paving on the job Heavy Duty?

    RESPONSE: Yes, heavy duty pavement is shown on sheet C200.

21. C200–201: Can you clarify the note calling out proposed pavement and curb and gutter replacement?

    RESPONSE: The curb and gutter replacement will be necessary for the installation of the proposed storm pipe running under the existing curb. Additional detail added to the callout.

22. Will there be a temporary construction entrance required on this project? None is shown on the erosion control plans.

    RESPONSE: Construction entrance added to the Phase 1 Erosion Control Plan.

23. Will a concrete washout be required? If so, please provide a detail.

    RESPONSE: No, can use one on adjacent project Technology Education Complex if needed.

24. C500: At the roundabout, is the curb on the interior (adjacent to the central island) 9"x12", 9"x18", 8"x12", or 8"x18" stand-up concrete curb per NCDOT 846.01? The curb type is not indicated.

    RESPONSE: Roundabout typical section updated with curb dimensions.

25. C500: At the roundabout truck apron, what is the depth of concrete for the truck apron? This is not indicated in the detail.

    REPONSE: Truck apron concrete depth added to roundabout typical section detail.

26. C500: At the roundabout, is the modified curb and gutter 2'-9" or 1'-6" curb and gutter per NCDOT detail 846.01?

    RESPONSE: The modified curb and gutter will be 24”. Detail added to C500

27. Alternate: What is the typical section for pavement being removed and replaced as part of the Alternate Force Main work?

    RESPONSE: Standard trench and pavement repair section detail added to sheet C503.

ATTACHMENTS

1. April 22, 2026 Pre-Bid Meeting Sign-In Sheet
2. Geotechnical Engineering Evaluation

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ZOOM BID OPENING LINK

Join Zoom Meeting
https://rccc-edu.zoom.us/j/95448590425

Meeting ID: 954 4859 0425

One tap mobile
+16469313860,,95448590425# US
+13017158592,,95448590425# US (Washington DC)

Join instructions
https://rccc-edu.zoom.us/meetings/95448590425/invitations?signature=W14pXPwLC7buM_o1EQqKx7ZVq-EI74x5k9r9E3X1rEg

END OF ADDENDUM 1

Sign In Sheet

Rowan-Cabarrus Community College North Campus Infrastructure Extension

1333 Jake Alexander Blvd, Salisbury, NC 28146

Name	Company Name	MBE/WBE	Phone	Email Address
Brian Crutchfield	Timmons Group		704-376-1073	brian.crutchfield@timmons.com
[redacted]	[redacted]		[redacted]	[redacted]
DENNIS DAVIDSON	RCCC		704.640.5901	DENNIS.DAVIDSON@RCCC.EDU
Chad Carter	Triangle Grading		(336-584-1745) 9199819339	sbass@tgandp.com
* ALAN PACE	HEARTLAND		704-507-0031	APACE@HEARTLANDNC.COM
Madeleine Estridge	Ike's Construction		980 407 8398	madeleine@ikesconstruction.com
JF Harward	Anson Contractors		(704) 694 6450	jf@ ansoncontractorsinc.com

CESI

Civil – Geotechnical – Surveying

March 22, 2024

Mr. Danny Carpenter
Executive Director of Planning & Capital Projects
Rowan-Cabarrus Community College
PO Box 1595
Salisbury, North Carolina 28145

Reference: Geotechnical Engineering Evaluation
Proposed RCCC North Campus TEC and FAC Expansion
Salisbury, Rowan County, North Carolina
CESI Job Number 240103.000

Mr. Carpenter,

Concord Engineering & Surveying, Inc. (CESI) has performed a geotechnical engineering evaluation for the proposed Technology Education Complex and Future Automotive Center Expansion on the Rowan-Cabarrus Community College North Campus in Salisbury, North Carolina. We completed this geotechnical engineering evaluation per your request and our proposal dated February 21, 2024.

We understand the proposed development will include the construction of new education buildings, asphalt paved parking lots and roadways, associated underground utilities, and required stormwater management structures. Currently the proposed development area consists of undisturbed woodlands.

Between the dates of March 7 and 13, 2024, thirty-eight soil test borings were advanced within the entire proposed development area.

- Sixteen soil test borings were slated to be advanced to a depth of 20’ below existing ground surface (BGS) within the footprints of the proposed buildings, with two additional borings slated to be advanced to a depth of 40’ BGS for seismic purposes,

- Fourteen soil test borings were slated to be advanced to a depth of 10’ BGS within the proposed parking and drive lanes,

- Two borings were slated to be advanced 15’ BGS in the proposed stormwater BMP ponds,

- Four preliminary borings were slated to be advanced to 20’ BGS in a proposed future building site.

Each of the borings were advanced to their proposed depths, and no auger refusal was encountered at the depths explored.

The borings were performed using an ATV mounted CME 550X drill rig slated to be advanced to above noted depths. Soil Test Boring Location Plans and Test Boring Termination Depth Plans are attached to this cover.

Below is a table summarizing our findings encountered at the soil test boring locations.

Table 1: Summary of Test Boring Data

Test Boring	Topsoil Depth *(Inches below Existing Ground Surface)*	Previously Placed FILL Encountered Depth *(Feet below Existing Ground Surface)*	Depth to WEATHERED ROCK *(Feet below Existing Ground Surface)*	Groundwater Depth *(Feet below Existing Ground Surface)*	Termination Depth *(Feet below Existing Ground Surface)*
B-1	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-2	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-3	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 40’
B-4	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-5	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-6	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-7	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-8	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-9	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-10	5”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-11	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-12	7”	Not Encountered	Not Encountered	6” BGS after 48 Hours	Terminated at 15’
B-13	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-14	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-15	6”	Up to 1.5’	Not Encountered	Not Encountered	Terminated at 10’
B-16	9”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-17	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-18	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-19	5”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’

B-20	9”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-21	7”	Not Encountered	33.5’ to 38.92’	Not Encountered	Terminated at 38’-11”
B-22	7”	Not Encountered	13.5’ to 18.83’	Not Encountered	Terminated at 18’-10”
B-23	8”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-24	8”	Not Encountered	Not Encountered	Dry after 48 Hours	Terminated at 15’
B-25	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-26	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-27	5”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-28	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-29	5”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-30	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-31	7”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-32	5”	Not Encountered	Not Encountered	Not Encountered	Terminated at 10’
B-33	6”	Up to 3.5’	Not Encountered	Not Encountered	Terminated at 10’
B-34	5”	Up to 6’	Not Encountered	Not Encountered	Terminated at 10’
B-35	5”	Up to 3.5’	Not Encountered	Not Encountered	Terminated at 20’
B-36	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-37	12”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’
B-38	6”	Not Encountered	Not Encountered	Not Encountered	Terminated at 20’

At the surface of each of the soil test boring locations, a layer of topsoil and clearing/organic debris or grass measuring between 5” and 12” was present.

Beneath the grass, topsoil and organic debris, previously placed FILL soils were encountered at four of the soil test borings, specifically soil test boring locations B-15 and B-33 through B-15. Where encountered, the previously placed FILL soils ranged in depths between 1.5’ to 6’ BGS. Texturally the previously placed FILL soils consisted of stiff clayey SILT (ML) and soft to stiff silty CLAY (CL), both containing varying amounts of fine to coarse SAND (SM), OLD TOPSOIL, and fine GRAVEL.

Weathered in place (residual) soils were encountered beneath the previously placed FILL soils where encountered, and beneath the topsoil at soil test boring locations B-4 through B-14, B-16 through B-32, and B-36 through B-38. Texturally the residual soils consisted of:

- Soft to very hard SILT (ML) containing varying amounts of CLAY (CL), mica, fine to coarse SAND (SM) and fine GRAVEL,
- Soft to stiff CLAY (CL) containing varying amounts of SILT (ML), fine to coarse SAND (SM) and fine GRAVEL,
- Dense fine to coarse SAND (SM) containing varying amounts of SILT (ML) and fine GRAVEL.

It should be noted that some of the residual SILT (ML) soils and slightly plastic CLAY (CL) soils exhibited slightly elastic/plastic characteristics at the surface of soil test boring B-27 and B-28. These soils should be closely monitored if used for structural support or as structural FILL soils elsewhere in the development area. FAT CLAY (CH) soils were encountered at the surface of soil test borings B-37 and B-38 up to 3.5' BGS. The FAT CLAY (CH) soils should be thoroughly stripped from areas to provide structural support and used in non structural areas of the site.

NRCS has listed the site as having the following primary soil series: Appling Sandy Loam (ApB), and Rion-Wedowee Complex (RnC). Based on NRCS published documents, Appling Sandy Loam (ApB) soil series is known to contain FAT CLAY (CH) between 10" to 39" BGS, and the Rion-Wedowee Complex (RnC) soil series is known to contain ELASTIC SILT (MH) soils from 15" to 29" BGS. **ELASTIC SILT (MH) soils were not directly encountered at any boring locations. However**, **ELASTIC SILT (MH) soils may be encountered at other unexplored areas of the site. FAT CLAY (CH) soils were directly encountered at two test boring locations, specifically soil test boring B-37 and B-38 between 1.5' and 3.5' BGS.** ***ELASTIC SILT (MH) and FAT CLAY (CH) soils have a high shrink-swell potential and are unsuitable for direct footing, slab, and pavement support.*** Slightly to moderately elastic SILT (ML), and slightly to moderately plastic CLAY (CL) soils were encountered at several of the test pit locations. We anticipate these soils will be suitable for structural fill or mixed with suitable soils to provide structural support as long as they remain stable during grading and construction operations.

GROUNDWATER was not encountered at any of the boring locations after reaching termination depths. Based on these observations, we do not anticipate complications due to groundwater during grading and construction operations, nor do we anticipate additional underslab drainage systems be required. If shallow groundwater is encountered during foundation or utility installation, CESI should be contacted for engineering recommendations.

SEASONAL HIGH-WATER TABLE (SHWT) determinations were performed at two locations on the site during our soil test boring investigation. Soil test borings B-12 (approximately 779' elevation) and B-24 (approximately 775' elevation) were performed within the proposed stormwater BMP pond locations.

- **SHWT Location B-12:** The boring was dry at the time of drilling. However, after 48 hours CESI returned and the water within the excavation was 6" from the surface of the boring. Our field engineer noted that it appeared that the B-12 area was a 'bowl' and water from the adjacent roadway and wooded area tended to migrate toward the boring location. Based on our boring and field observations, water encountered should be considered 'trapped water' and the seasonal high water table should be near elevation 767.
- **SWHT Location B 24:** The boring was dry at the time of drilling and dry 48 hours after drilling. Based on our boring and field observations, the seasonal high water table should be deeper than elevation 760.

WEATHERED ROCK was encountered at two soil test boring locations, specifically soil test boring B-21 and B-22 at 33.5' BGS and 13.5' BGS, respectively. Texturally the WEATHERED ROCK consisted of very dense silty fine to coarse SAND (SM). Based on our observations, and depths of the WEATHERED ROCK encountered, we do not anticipate complications with WEATHERED ROCK during grading and construction operations.

AUGER REFUSAL rock was not encountered at any of the test boring locations. Based on our observations, we do not anticipate complications due to auger refusal rock during site development. However, some isolated BOULDERS may be encountered in areas of deeper cuts during grading operations or foundation / utility installation.

Recommendations

Site Grading

Existing plans of the construction area should be reviewed, and the site should be should have any existing underground utilities marked and located. Conflicting utilities such as water, sewer, power, and gas should be removed, relocated, or protected. Any utilities encountered in the proposed development area should be properly disconnected and moved prior to grading operations.

Construction must be scheduled carefully to maximize the benefits of seasonal weather conditions and minimize downtime for soil modification or remediation. For maximum benefit, it is recommended that mass grading operations be performed during the summer months. Grading and building operations should not occur during or immediately following periods of heavy precipitation.

It was noted that small isolated seams of OLD TOPSOIL or organic stained soils were encountered within the previously placed FILL soil matrix during drilling operations. The presence of additional soils containing elevated amounts of organics may be encountered during grading and building construction operations, especially in the cleared, grassy area around soil test borings B-33 and B-34. Several piles of previously stockpiled soils were observed in this area as well. If soils containing elevated organic matter are encountered during grading and foundation construction operations, the condition should be thoroughly evaluated prior to continued construction. After stripping, we anticipate any soils cut down to grade may be used as structural fill where required. However, based on the fine texture of the on-site soils, lightweight appearance, and the lack of granular structure encountered, we anticipate these soils will be sensitive to moisture. Additionally, we do not anticipate the residual soils will be suitable for retaining wall backfill. Soils containing OLD TOPSOIL, organic matter, ELASTIC SILT (MH), or FAT CLAY (CH) soils should not be used as structural fill or placed in areas to provide structural support.

After stripping, we recommend that the areas to receive fill, or provide structural or pavement support be carefully evaluated for the presence of soft surficial soils by

proofrolling with a 25-ton, four-wheeled, rubber-tired roller, a loaded dump truck, or similar approved equipment. The proofroll operation should be carefully monitored by our Engineer. Areas that wave, rut, or deflect excessively and continue to do so after several passes of the proofroller may need to be undercut to stiffer soils. The undercut areas should be backfilled in thin lifts with approved structural fill materials listed below. CESI recommends our Engineer be present to evaluate these areas during preparation for site development. Areas that are to be cut down to grade should be thoroughly evaluated by proofrolling after achieving design elevations.

Cut slopes or embankment slopes should not exceed 1:1 plus 5' beyond structure edge to retain soil stability, and 3:1 plus 5' for areas requiring grounds maintenance. Any deep cuts or confined excavations, if required for utility installation or foundation construction, should conform to applicable OSHA regulations and North Carolina State Building Codes

Due to the nature of the onsite soils, we recommend that positive surface drainage be maintained during grading operations to prevent water from ponding and deteriorating the graded surface. The surface should be rolled smooth to enhance drainage if precipitation is expected. Subgrades damaged by construction equipment should be immediately repaired to avoid further degradation in adjacent areas and to help prevent water ponding.

Fill Material and Placement

Recommended criteria for soil fill characteristics and compaction procedures are listed below. The project design documents should include the following recommendations to address proper placement and compaction of project fill materials. We do not recommend the use of soils of high plasticity, with a PI greater than 25 as structural fill. Earthwork operations should not begin until representative borrow soil samples are collected and tested (allow 3 to 4 days for sampling and testing).

Earth Fill Materials

- General guidelines for project fill should control properties such as Plasticity Index (PI), gradation, and organic content. The use of the following USCS soil types, as defined by ASTM D 2487, should be satisfactory for use as project fill: GW, GP, GM, GC, SW, SP, SM, SC, CL, ML, MH (provided the PI is 25 percent or less for MH soils), or combinations thereof.
- Organic content should be no greater than 5 percent by weight, and no large roots should be allowed. Additionally, maximum particle sizes should be limited to 4 inches or less.

Compaction Recommendations

- One standard Proctor compaction test and one Atterberg limits test for each soil type used as project fill. Atterberg as well as gradation tests should be performed at the Project Geotechnical Engineer's discretion.
- Maximum loose lift thickness – 8 inches.
- Compaction requirements – 95 percent of the maximum dry density as determined by the standard Proctor compaction test at all depths with 100 percent of the maximum dry density for the top 12 inches.
- Soil moisture content at time of compaction – within plus 3 percent to minus 3 percent of the optimum moisture content.
- One density test every 2,500 square feet for *each lift* or two tests *per lift*, whichever is greater (for preliminary planning only; the test frequency should be determined by our Geotechnical Engineering staff).
- Trench fill areas – one density test every 75 linear feet at vertical intervals of 2 feet or less.

Shallow Foundations

The building foundations should be sized for a maximum net allowable bearing pressure of 2,500 pounds per square foot. The exploration findings indicate the building may be supported by shallow spread footings bearing on stiff to very hard residual soils and newly placed structural fill soil. Based on our subsurface findings, we anticipate a total settlement potential of the footings to be less than 1" and maximum differential settlement to be less than a 1/2". All footings should bear at a minimum depth of 12 inches below exterior grades for frost protection. Properly reinforced building footings with adequate slab control joints are recommended to handle slight differential settlements, if they occur.

Building Foundation Construction

Based on our findings, we anticipate the on site residual and properly placed FILL soils will be suitable for conventional foundation construction, pending they do not contain elevated amounts of organics, or ELASTIC SILT (MH) or FAT CLAY (CH). Excavated foundation bearing surfaces should be inspected by our Engineering Technician under our Engineer's review prior to concrete placement to confirm that suitable soils are present at the bearing elevation. We recommend that bearing surfaces be evaluated by hand auger borings with Dynamic Cone Penetrometer (DCP) testing equipment prior to concrete placement to determine whether the foundation bearing soils encountered during construction are similar to those found during our geotechnical exploration.

DCP testing is a verification tool to be used for an economical bearing grade evaluation during construction. It will help detect isolated areas of soft residual soils or loosely compacted soils. Unsuitable soil detected during this evaluation should be repaired as directed by the geotechnical engineer. Footing bearing grades identified as having soft

soils should be undercut and replaced with properly compacted structural fill soils or compacted aggregate base course stone. The depth and width of undercutting should be recommended by our Engineer.

Bearing surfaces for shallow spread foundations should not be disturbed or left exposed during inclement weather. Saturation of the on-site soils will cause a loss of strength and increased compressibility. Excavations for footings in stiff residual soils or newly placed structural fill should be completed with a smooth bucket backhoe following excavation to reduce disturbance of the subgrade soils. Confined excavations should conform to applicable OSHA regulations and North Carolina State Building Codes. Upon their exposure, bearing grades should have excess and loosened material removed. The final grades should be firm and stable, and free of loose soil, rock, mud, water, or frost. If construction occurs during inclement weather and concreting of the foundation is not possible at the time it is excavated, a layer of lean concrete should be placed on the over excavated bearing surface subsequent to testing for protection. Also, concrete should not be placed on frozen subgrades.

Slab on Grade Construction

Based on our findings and anticipated loading, standard slab on grade with turndown footing or foundation walls may be utilized. Due to the presence of lightweight, moisture sensitive soils on the site, we recommend a minimum of 5” layer of compacted aggregate base course (ABC) stone be installed between the finished soil subgrade and concrete slab. The ABC stone should be placed on a thoroughly proofrolled and approved building pad subgrade. Expansion and crack control joints should be properly cut and spaced based on slab designer recommendations. A recommended subgrade modulus (modulus of subgrade reaction) of 150 psi/in should be utilized based on the predominantly SILT (ML) and clayey SILT (ML) soils encountered on the site.

Seismic Information

In accordance with the International Building Code (IBC) as adapted by North Carolina and Chapter 20, Table 20.3-1 of the American Society of Civil Engineers (ASCE) 7-16 Design Standards, a Site Class “D” should be assigned to the site for seismic design purposes. Site specific subsurface data was determined to the boring termination depth of up to 40 feet below existing grade. The Seismic Site Class is derived from the standard penetration test data recorded during drilling.

Retaining Wall Parameters

It is our understanding that retaining walls may be required on the site. The walls should be designed using active earth pressure parameters. Walls that will be prevented from rotating and not free to deflect should be designed to resist the at-rest lateral earth pressure. Soils behind the retaining walls are assumed to exert a triangular stress distribution, which can be modeled in terms of an equivalent fluid weight. Passive earth pressure of soil adjacent to the footing, as well as soil friction at the footing base, may be used to resist sliding. The following table contains values of earth pressure coefficients and equivalent fluid unit weights for the active, at-rest, and passive earth pressure conditions.

Lateral Earth Pressure Parameters
Soil Type: Clayey Fine Sandy SILT (ML)

Frictional Resistance Coefficient F_R	Earth Pressure Coefficients			Total Unit Weight γ_τ (pcf)	Equivalent Fluid Unit Weight		
	Active K_A	At-rest K_O	Passive K_P		EFW_A (Active) (pcf/f)	EFW_O (At-rest) (pcf/f)	EFW_P (Passive) (pcf/f)
0.30	**0.4**	**0.5**	**2.8**	**115**	**46**	**57**	**322**

In addition to the above, we recommend retaining walls be designed not to exceed a foundation bearing of 2,500 psf.

Pavement Recommendations

Based on our understanding of proposed construction, asphalt pavement will be used in parking and drive lanes, with the potential for some amount of concrete drive pavement within ancillary areas on the site. Below are the recommendations for asphalt and concrete pavement sections.

Standard Duty Asphalt Pavement Section

Recommended Thickness	Recommended Pavement Section
2 inches	Asphalt Surface Course — Type S 9.5C
8 inches	Aggregate Base Course (ABC)
10.0 inches	**Total Recommended Section**

Heavy Duty Asphalt Pavement Section – Drive Lanes

Recommended Thickness	Recommended Pavement Section
1.5 inches	Asphalt Surface Course — Type S 9.5C
2.5 inches	Asphalt Intermediate Course — Type I 19.0C
10 inches	Aggregate Base Course (ABC)
14.0 inches	**Total Recommended Section**

Concrete Pavement Section

Recommended Thickness	Recommended Pavement Section
6 inches	4,000 psi Air Entrained Concrete
6 inches	Aggregate Base Course (ABC)
12.0 inches	**Total Recommended Section**

The above asphalt and concrete sections are for a properly prepared surface, thoroughly proofroll under the direction of CESI. Placement of asphalt sections should be in accordance with NCDOT guidelines. Placement of concrete sections should be in accordance with NCDOT and ACI guidelines.

FOLLOW-UP SERVICES

Field observations, monitoring, and quality assurance testing during earthwork and pavement construction are an extension of the geotechnical design. As a result, we recommend the following:

- Proofroll observations of stripped areas prior to structural fill placement,
- Verification of removal of unstable soils identified by proofrolling efforts,
- Drive tube and nuclear density testing of structural fill and utility trench backfill operations,
- Dynamic cone penetrometer testing within excavated footings,
- Reinforcing steel inspections within excavated footings and slabs on grade,
- Sampling and testing of fresh concrete for footings, slabs on grade and paving,
- Structural steel and structural masonry inspections,
- Proofroll observations within pavement areas prior to aggregate base course stone, asphalt and concrete placement,
- Nuclear density testing of soil subgrades, aggregate base course stone and hot mix asphalt.

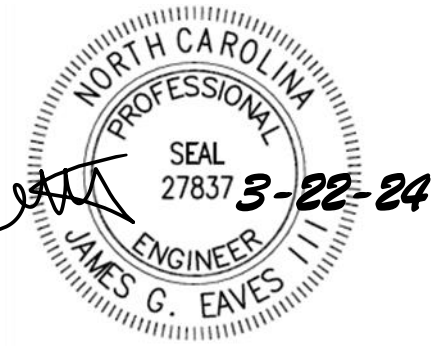
Limitations of Report

This report has been prepared for the exclusive use of Rowan-Cabarrus Community College and their designers for specific application to the proposed project described in this report using generally accepted standards of geotechnical engineering practice in the State of North Carolina. No other warranty is expressed or implied. This company is not responsible for the conclusions, opinions, or recommendations of others based on this data, nor do we accept any responsibility for others' job-site safety, which is the sole responsibility of each contractor.

Our conclusions and recommendations are based on the design information furnished to us, the assumptions outlined above, and our past experience. They do not reflect variations in the subsurface conditions, which are likely to exist between our test borings in unexplored areas of the site. If such variations become apparent during construction, it will be necessary for us to re-evaluate our conclusions and recommendations based upon on-site observation of the conditions.

CESI appreciates the opportunity to participate in this phase of the proposed RCCC North Campus Technology Education Complex and Future Automotive Center located in Salisbury, North Carolina. Please contact us if you have any questions regarding this report or if we may be of further service.

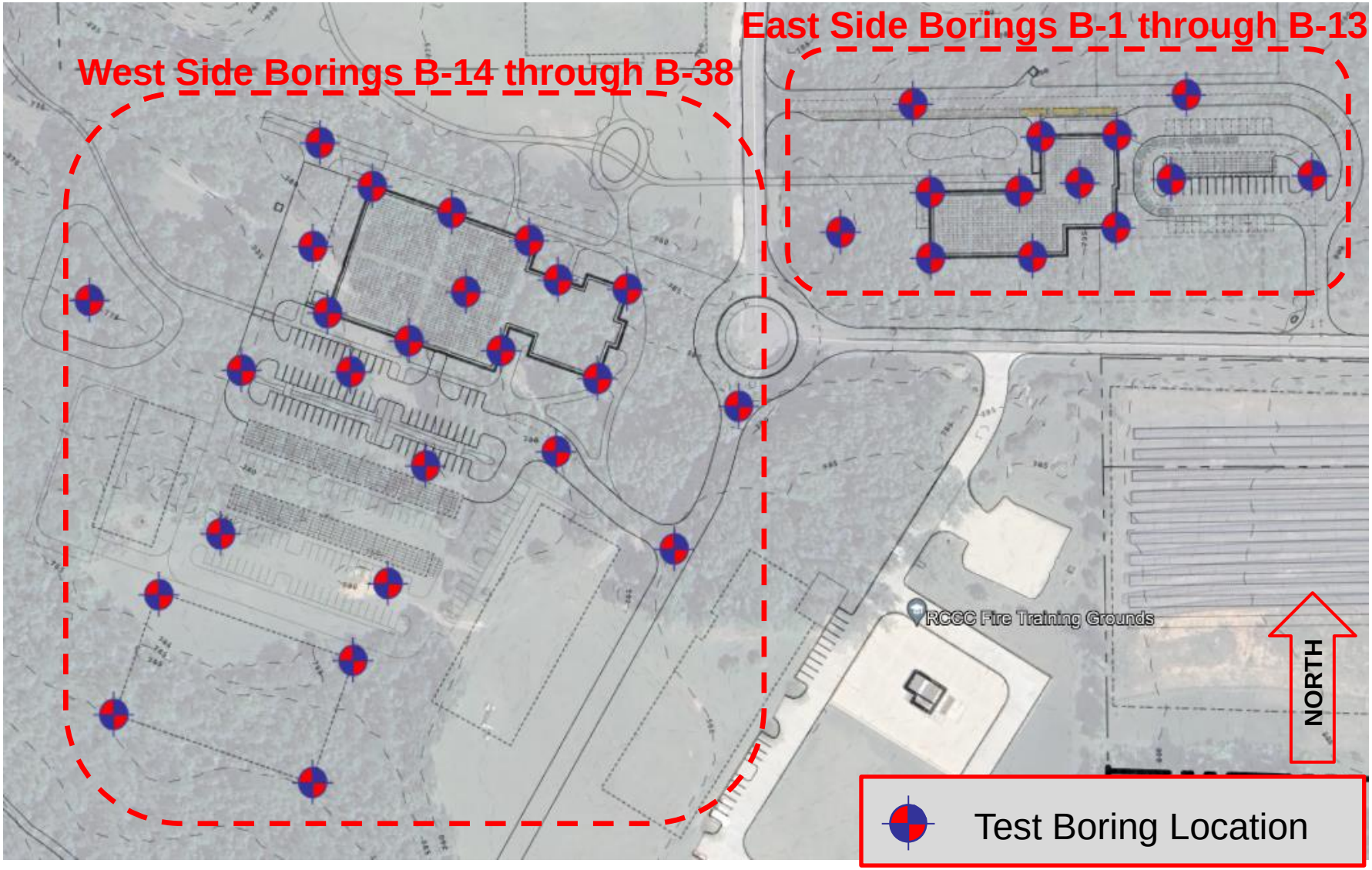
Respectfully submitted,
CESI



Thomas Gray
Field Engineer

James G. Eaves III, P.E.
Vice President Geotechnical
N.C. Registration Number 27837

ATTACHMENTS:
- SOIL TEST BORING LOCATION PLAN – OVERALL (with conceptual overlay)
- SOIL TEST BORING LOCATION – EAST PLAN
- SOIL TEST BORING LOCATION PLAN – EAST PLAN (with conceptual overlay)
- SOIL TEST BORING LOCATION – WEST PLAN
- SOIL TEST BORING LOCATION PLAN – WEST PLAN (with conceptual overlay)
- PREVIOUSLY PLACED FILL ENCOUNTERED – WEST PLAN (with conceptual overlay)
- TEST BORING TERMINATION DEPTH – EAST PLAN (with conceptual overlay)
- TEST BORING TERMINATION DEPTH – WEST PLAN (with conceptual overlay)
- KEYS TO SYMBOLS
- LOGS OF AUGER BORING
- BORING PROCEDURES



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PO Box 268
Concord, North Carolina, 28026-0268
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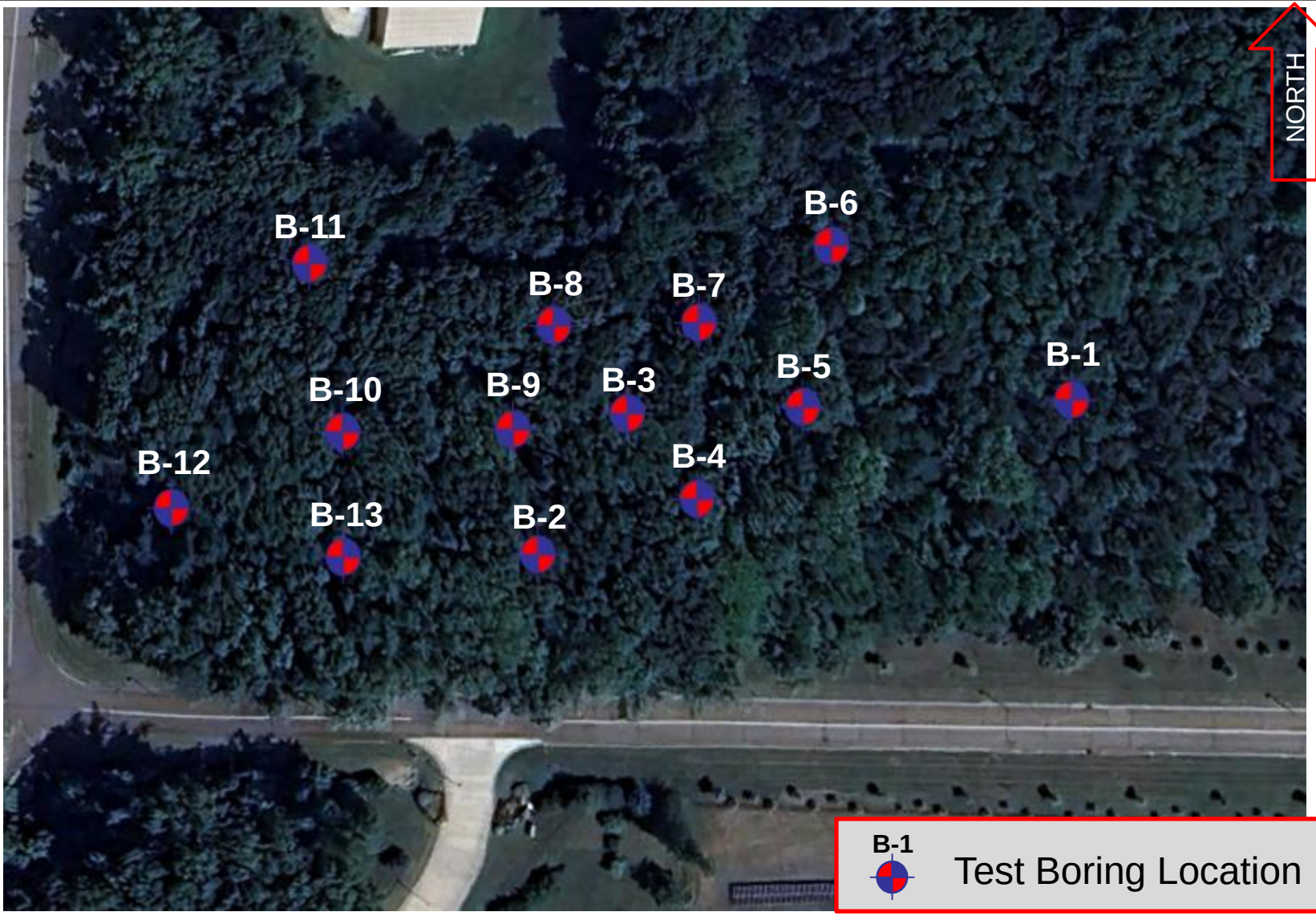
SOIL TEST BORING LOCATION – OVERALL

RCCC (North Campus) TEC and FAC Expansion

Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
DRAWING NO.:	1



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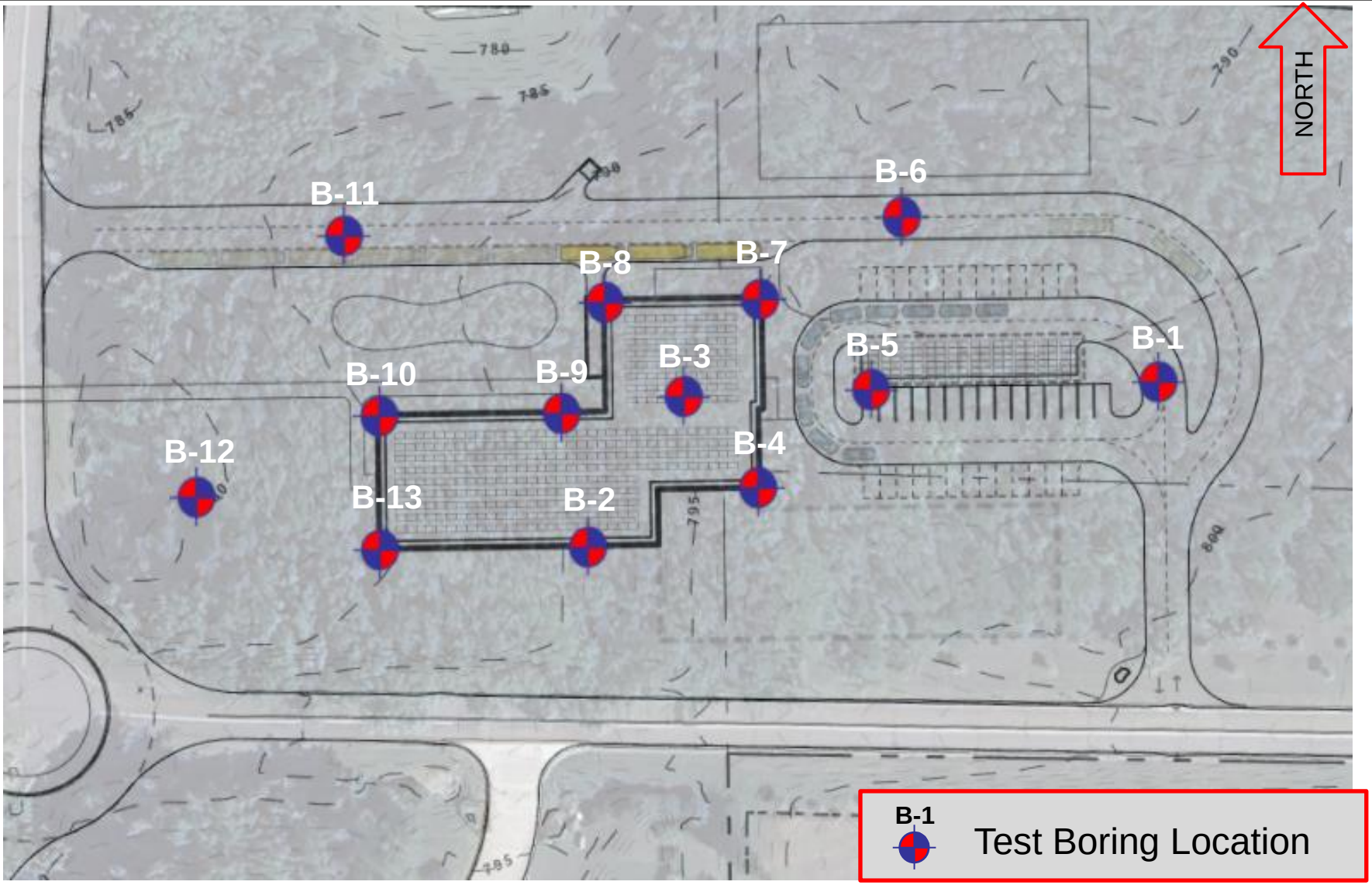
SOIL TEST BORING LOCATION – EAST PLAN

RCCC (North Campus) TEC and FAC Expansion

Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
DRAWING NO.:	2



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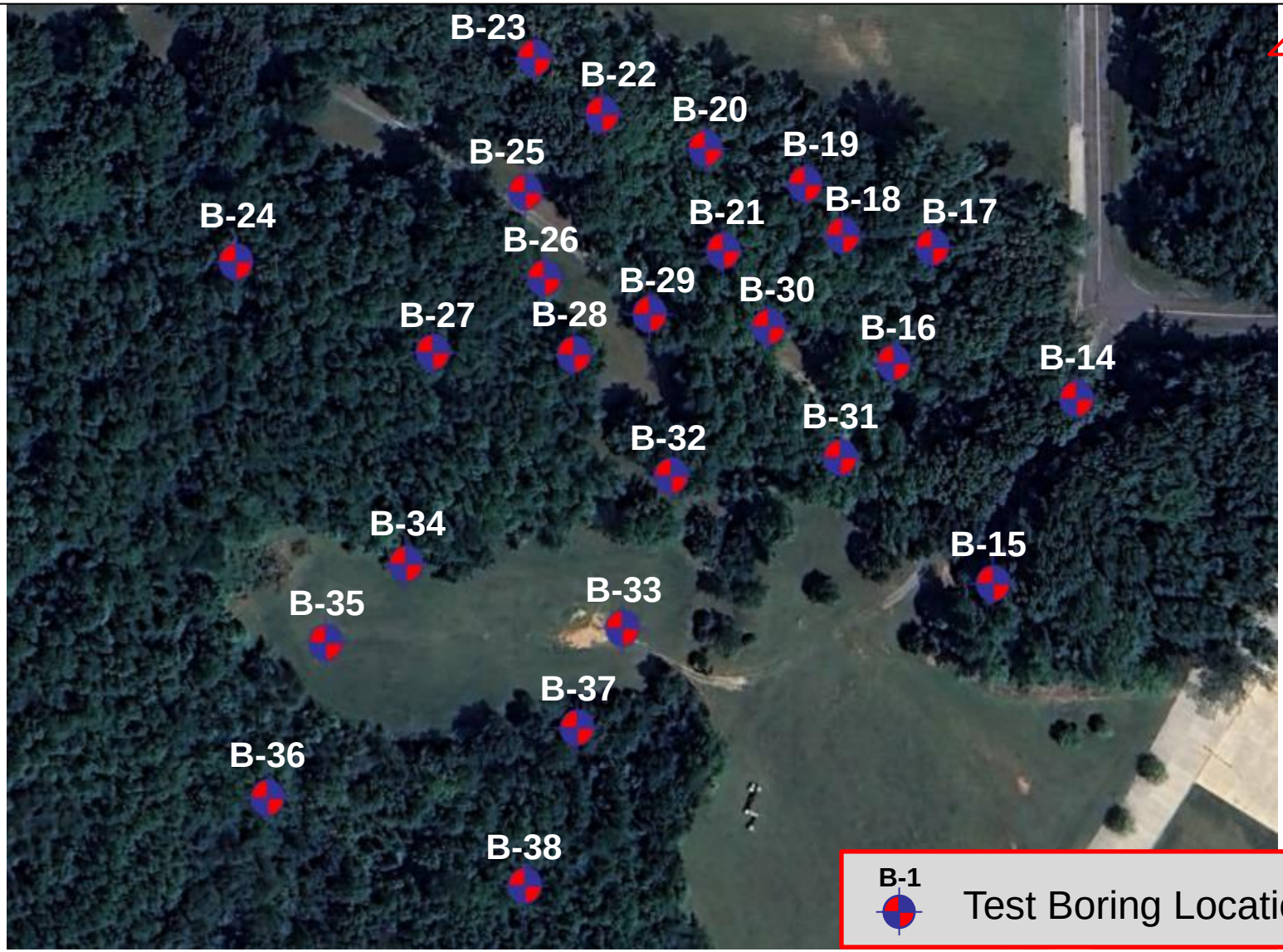
SOIL TEST BORING LOCATION – EAST PLAN
With Conceptual Overlay
RCCC (North Campus) TEC and FAC Expansion
Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
DRAWING NO.:	3



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SOIL TEST BORING LOCATION – WEST PLAN

RCCC (North Campus) TEC and FAC Expansion

Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
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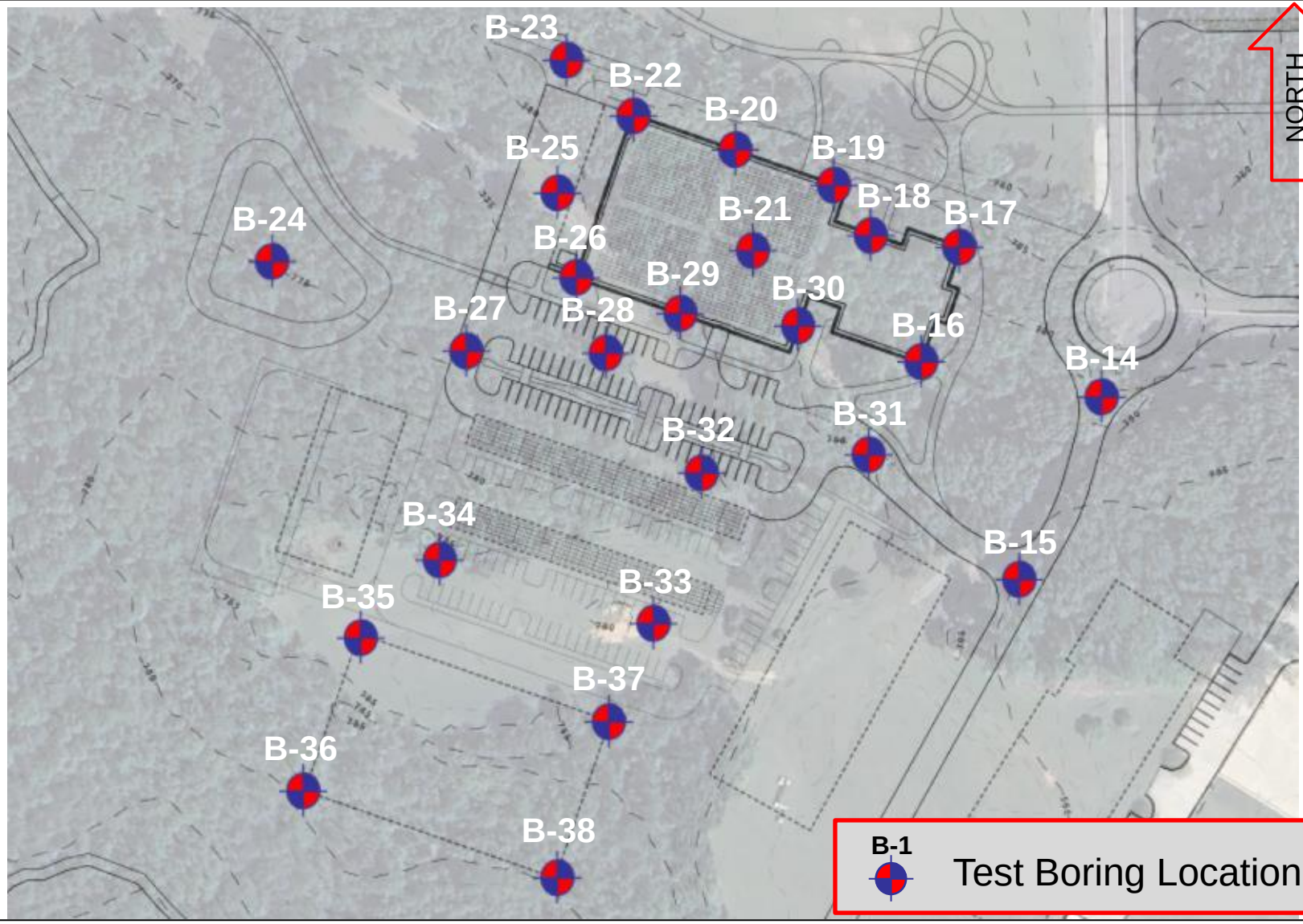

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SOIL TEST BORING LOCATION – WEST PLAN
With Conceptual Overlay
RCCC (North Campus) TEC and FAC Expansion
Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
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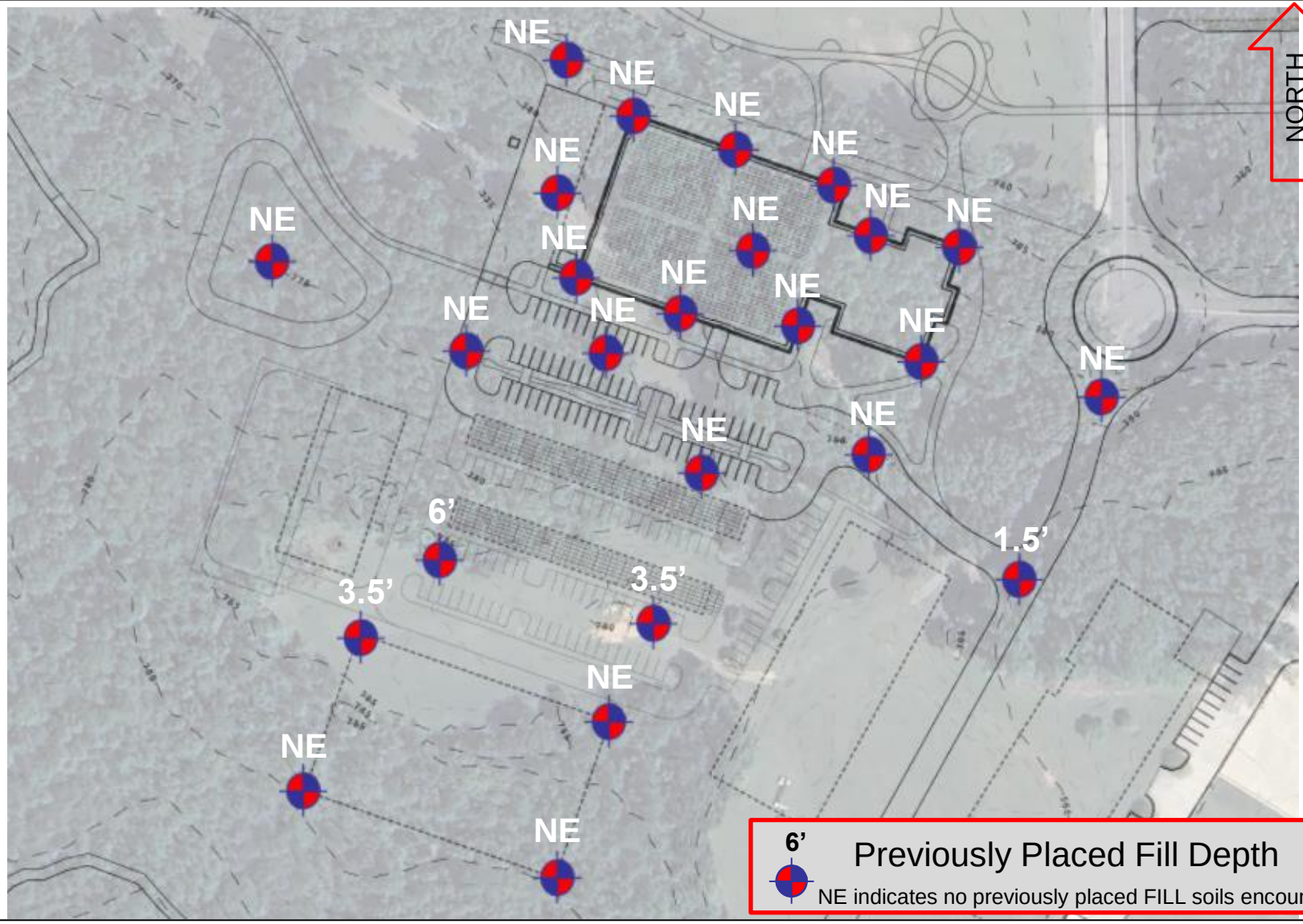

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PREVIOUSLY PLACED FILL ENCOUNTERED – WEST PLAN
With Conceptual Overlay
RCCC (North Campus) TEC and FAC Expansion
Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
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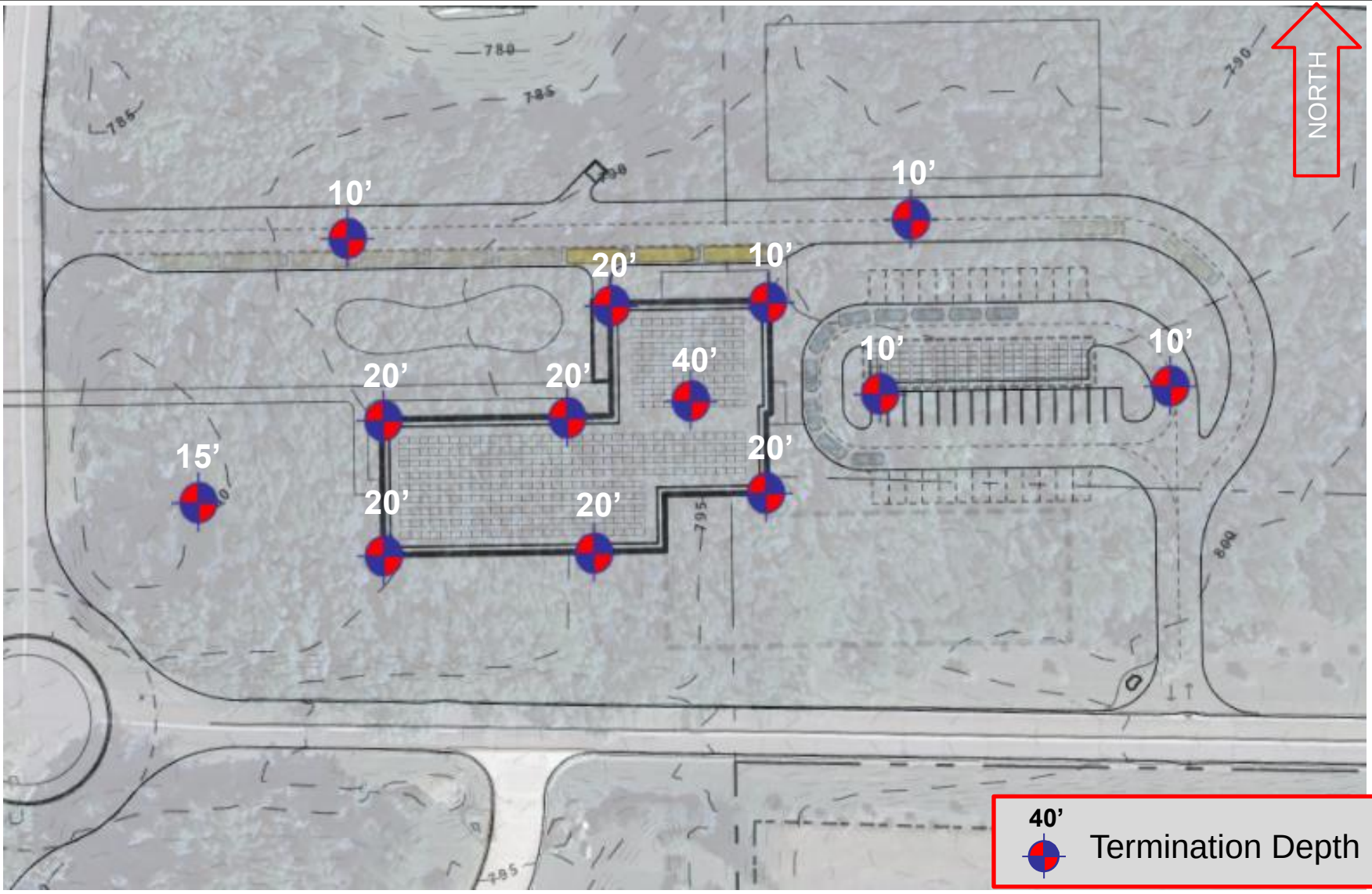

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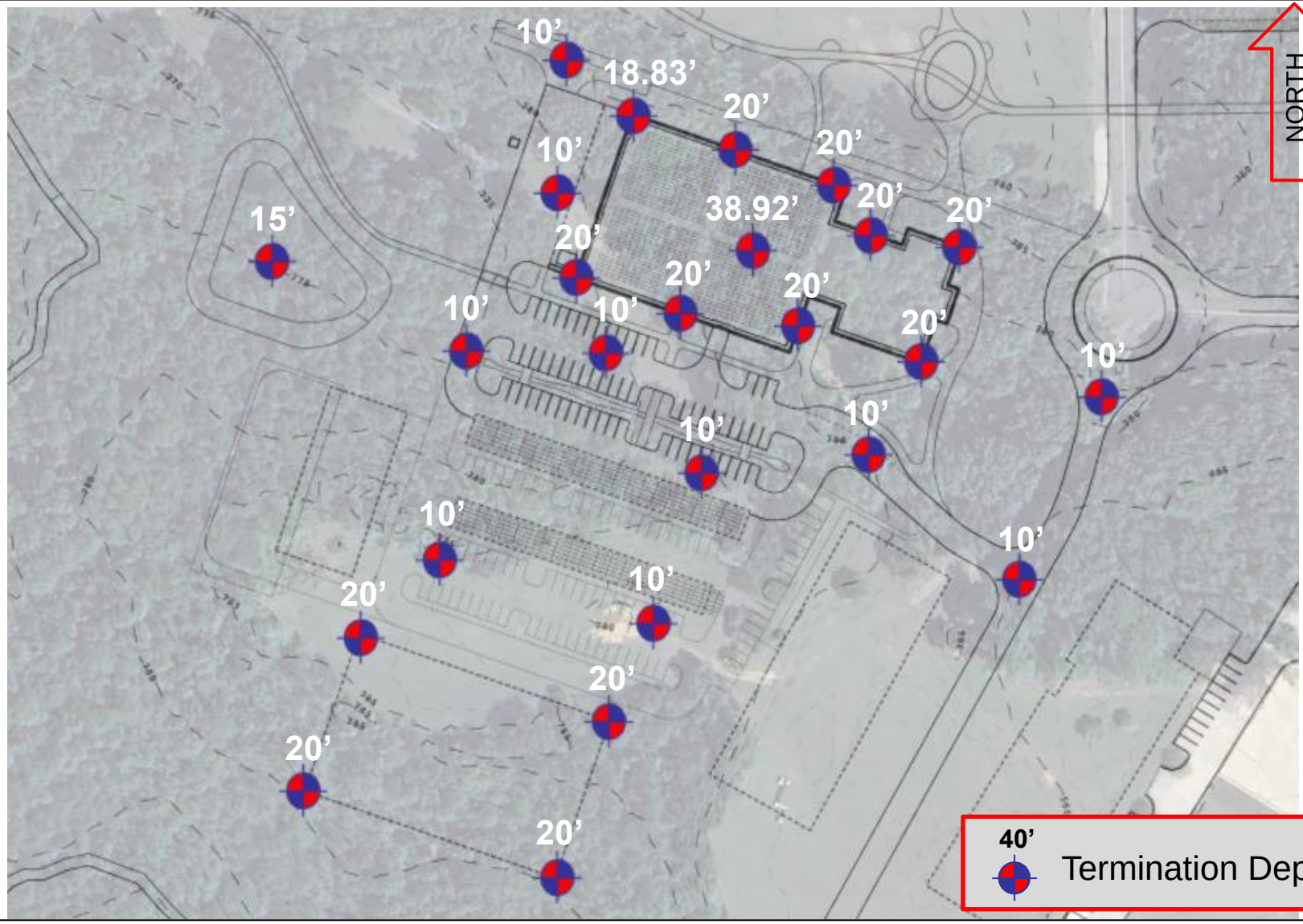
TEST BORING TERMINATION DEPTH – EAST PLAN
With Conceptual Overlay
RCCC (North Campus) TEC and FAC Expansion
Salisbury, North Carolina

DATE:	3-12-24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
DRAWING NO.:	7



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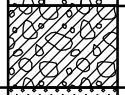
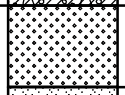
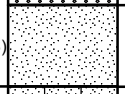
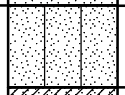
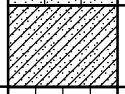
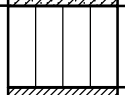
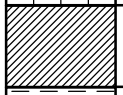
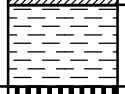
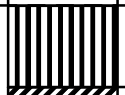
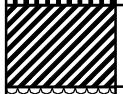
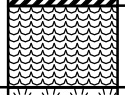
TEST BORING TERMINATION DEPTH – WEST PLAN
With Conceptual Overlay
RCCC (North Campus) TEC and FAC Expansion
Salisbury, North Carolina

DATE:	3/12/24
DRAWN BY:	TG
PROJECT #:	240103.000
SCALE:	NTS
DRAWING NO.:	8

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS GRAPH	SYMBOLS LETTER	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS	CLEAN GRAVELS		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	(LITTLE OR NO FINES)		GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	SAND AND SANDY SOILS	CLEAN SANDS		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
	MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	(LITTLE OR NO FINES)		SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES		SM	SILTY SANDS, SAND - SILT MIXTURES
		(APPRECIABLE AMOUNT OF FINES)		SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

CORRELATION OF STANDARD PENETRATION RESISTANCE WITH RELATIVE DENSITY AND CONSISTENCY

Sand and Gravel

Standard Penetration Resistance Blows per Foot	Approximate Relative Density
0-4	Very Loose
5-10	Loose
11-20	Firm
21-30	Very Firm
31-50	Dense
Over 50	Very Dense

Silt and Clay

Standard Penetration Resistance Blows per Foot	Approximate Consistency
0-1	Very Soft
2-4	Soft
5-8	Firm
9-15	Stiff
16-30	Very Stiff
31-50	Hard
Over 50	Very Hard

CESI

Key to Symbols and Descriptions

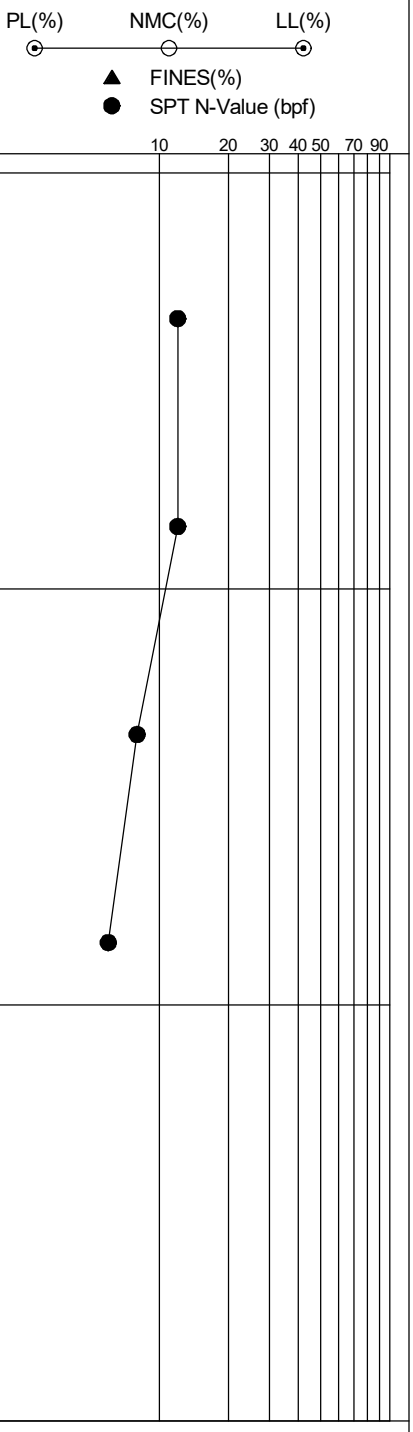
Log of Auger Boring No. B-1

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 4.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist stiff light brown, yellow, and red fine to medium sandy clayey SILT (ML)				4-5-7
		Moist stiff light brown, yellow, red, and gray clayey SILT (ML) with some fine to coarse SAND (SM)				3-5-7
	5					
		Moist firm light brown, yellowish brown, white, and red slightly elastic slightly clayey SILT (ML)				1-4-4
		Moist firm light brown, yellow, white, and light red fine sandy SILT (ML) with some medium SAND (SM)				2-3-3
	10	Boring terminated at 10'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-2

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 15.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist light stiff light brown and yellowish brown clayey SILT (ML) with trace fine to medium SAND (SM)				2-4-7
		Moist firm light brown, yellow, and red slightly elastic slightly clayey SILT (ML)				1-3-4
	5	Moist firm light brown, yellow, red, and light gray slightly elastic SILT (ML)				2-3-4
						2-2-3
	10					
		Moist to damp soft red, light brown, yellowish brown, and gray SILT (ML)				2-2-2
	15					
		Damp soft brownish yellow, light brown, light red, light gray, and black SILT (ML)				1-1-3
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

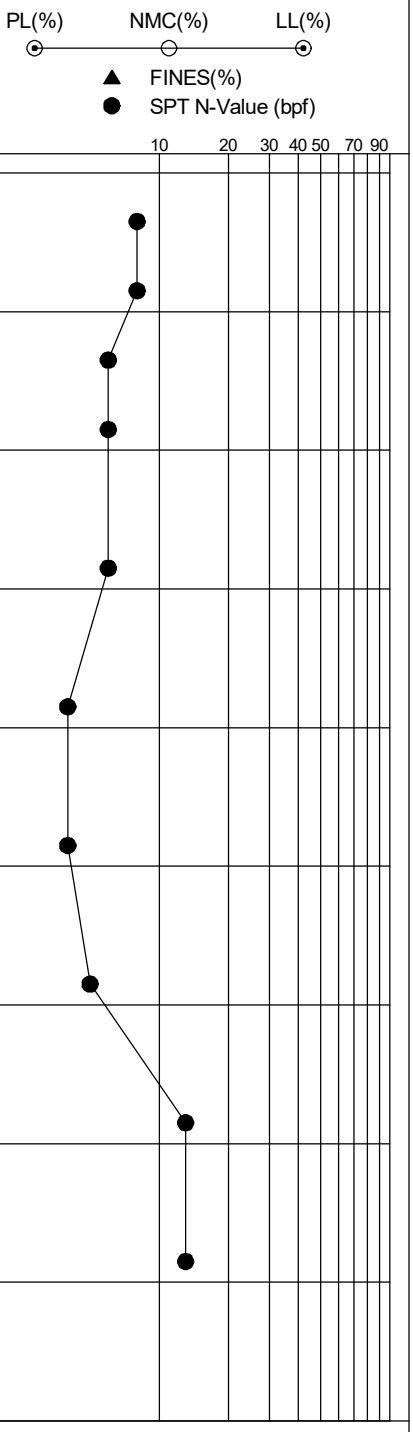
Log of Auger Boring No. B-3

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 35.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist firm light brown, yellowish brown, and white clayey fine sandy SILT (ML) with some medium SAND (SM)				3-3-5
	5	Moist firm yellow, light red, light brown, white, and black fine sandy SILT (ML) with little medium SAND (SM)				2-4-4
						2-3-3
	10					2-3-3
						2-3-3
	15					
		Damp soft light red, white, black, and light brown SILT (ML) with some fine to medium SAND (SM)				1-2-2
	20	Damp soft light brown, red, and white SILT (ML) with trace fine to medium SAND (SM)				2-2-2
	25	Damp firm light brown, gray, and white SILT (ML) with trace fine to coarse SAND (SM)				2-2-3
	30	Moist to damp stiff light brown, white, yellow, and black SILT (ML) with trace fine to medium SAND (SM)		▽		4-5-8
	35	Moist stiff white, gray, light brown, and yellow SIL T(ML) with trace fine to coarse SAND (SM)				3-6-7
	40	Boring terminated at 40'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-4

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.7 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		RESIDUUM: Moist firm light brown, yellow, red, and gray silty CLAY (CL) with some fine to coarse SAND (SM)				3-3-5
	5	Moist stiff light brownish gray, white, red, and light brown clayey fine to medium sandy SILT (ML) with some coarse SAND (SM)				4-5-6
		Moist stiff white, light red, yellow, and light brown slightly clayey SILT (ML) with trace fine to coarse SAND (SM)				3-4-6
		Moist firm light red, yellow, white, and gray SILT (ML) with little fine to coarse SAND (SM)				2-3-3
	10					
	15	Moist firm light brown, gray, light red, and yellow fine to coarse sandy SILT (ML)				2-3-3
		Moist firm red, light brown, and yellow SILT (ML) with some fine to coarse SAND (SM)				2-3-4
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

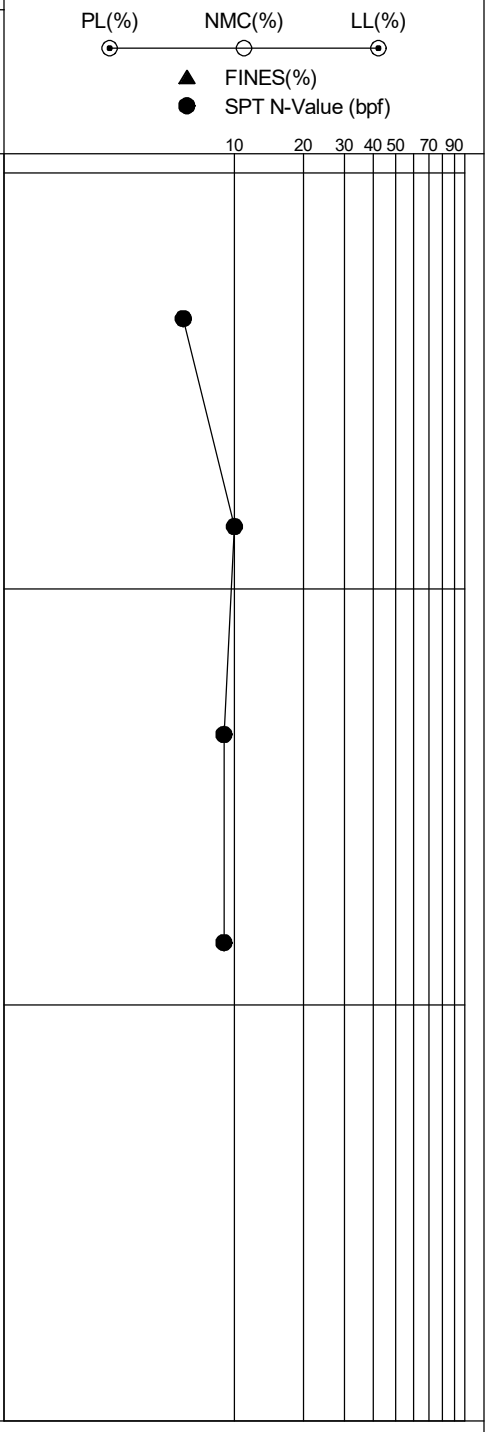
Log of Auger Boring No. B-5

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 7.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist firm white, light brown, yellowish brown, and red fine to medium sandy SILT (ML)				2-3-3
		Moist stiff white, red, yellow, and light brown SILT (ML) with some fine to coarse SAND (SM)				3-4-6
	5	Moist stiff red, white, and yellow SILT (ML) with some fine to coarse SAND (SM)				3-4-5
		Moist stiff white, yellow, light brown, and red fine sandy SILT (ML) with some medium to coarse SAND (SM)				3-4-5
	10	Boring terminated at 10'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-6

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 7.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		RESIDUUM: Moist firm light brown, yellowish brown, and reddish brown silty CLAY (CL) with some fine to coarse SAND (SM)				2-3-4
		Moist stiff yellow, red, and light brown SILT (ML) with trace fine to coarse SAND (SM)				3-4-6
	5					
		Moist firm yellow, light brown, white, and red SILT (ML) with trace fine to medium SAND (SM)				2-2-4
						2-3-3
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-7

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 16.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		Damp firm light brown and brownish yellow fine sandy SILT (ML) with some medium to coarse SAND (SM)				1-2-3
		Moist stiff red, light brown, and yellowish brown clayey SILT (ML) with some fine to coarse SAND (SM)				3-5-6
	5	Moist firm red, yellow, and light brown SILT (ML)				2-4-4
						3-3-4
	10					
		Moist soft yellow, light red, white, and black SILT (ML) with some fine to coarse SAND (SM)				2-1-3
	15			▽		
		Damp red, yellowish brown, and light brown slightly elastic SILT (ML)				2-2-3
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
▲ FINES(%)
● SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-8

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/07/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 16.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		RESIDUUM: Moist firm yellowish brown, light brown, and red silty CLAY (CL)				2-3-4
		Moist firm red, light brown, and yellow clayey SILT (ML)				2-3-4
	5	Moist firm red, dark red, and light brown clayey SILT (ML) with pockets of same color silty CLAY (CL)				2-3-3
						2-3-3
	10					
		Moist soft red, yellowish red, light brown, and black slightly elastic SILT (ML)				2-2-2
	15					
		Damp soft light brown, red, and black slightly elastic SILT (ML)				2-2-2
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-9

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist firm light brown, yellow, and reddish brown silty CLAY (CL)				3-3-4
		Moist stiff yellow, light brown, red, and gray clayey SILT (ML)				3-4-5
	5	Moist firm red, light brown, yellow, and gray slightly elastic slightly clayey SILT (ML)				2-3-4
		Moist firm red, reddish brown, yellow, and light gray slightly elastic SILT (ML)				2-2-4
	10					
						2-2-3
	15					
		Moist firm reddish brown, red, yellow, light brown, and black SILT (ML)				2-2-3
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-10

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil and clearing debris				
		RESIDUUM: Damp firm pale light brown, light gray, yellowish brown, and reddish brown silty CLAY (CL)				1-2-3
	5	Moist stiff olive, light brown, reddish brown, and brown clayey SILT (ML)				3-4-7
		Moist stiff olive, light brown, reddish brown, and brown slightly elastic SILT (ML)				3-4-5
	10	Moist firm olive, white, light brown, and black slightly elastic SILT (ML)				2-3-4
		Damp stiff light brown, olive, yellow, and gray SILT (ML)				1-2-3
	15					
		Damp firm light brown, olive, yellow, and gray SILT (ML) with seam of light brown fine to coarse sandy SILT (ML)				2-5-5
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-11

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 9.7 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil and clearing debris, standing water on surface				
		RESIDUUM: Stiff light brown, olive, and white SILT (ML) with trace fine to medium SAND (SM)				3-5-9
		Hard light brown, reddish brown, yellow, and yellowish red SILT (ML)				5-14-17
	5	Stiff reddish yellow, light brown, reddish brown, and olive SILT (ML)				3-5-8
		Very stiff reddish yellow, brownish yellow, and light brown SILT (ML)				6-8-9
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

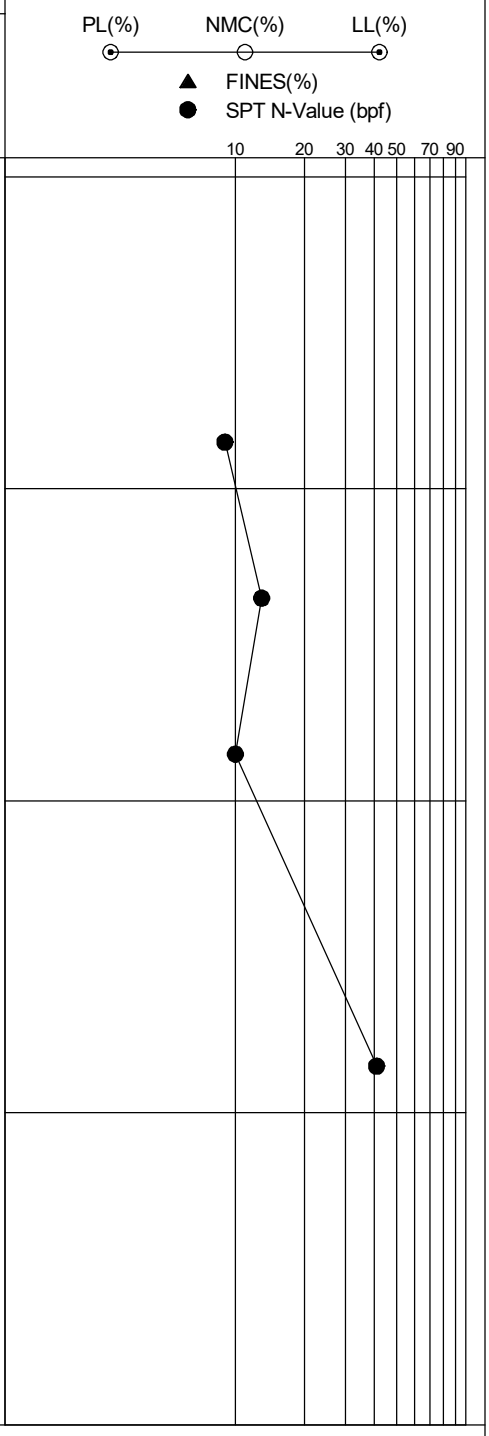
Log of Auger Boring No. B-12

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation : Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 12.0 ft.
Delayed GWL : 0.5 ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris, standing water on surface				
		RESIDUUM: Damp soft gray and brownish yellow clayey SILT (ML)				WOH-WOH-2
		Moist stiff light brown, gray, and brownish yellow silty CLAY (CL) with seam of light brown silty fine to medium SAND (SM)				2-4-5
	5	Damp stiff brownish yellow slightly clayey SILT (ML)				3-5-8
		Damp stiff gray and light brown silty CLAY (CL)				
		Moist stiff light brown, light gray, yellowish brown, and reddish brown silty fine to medium sandy CLAY (CL)				3-4-6
	10	Moist hard gray, yellowish brown, and light brown clayey SILT (ML)				10-17-24
		Moist hard light brown, white, brown, and reddish brown fine to coarse sandy SILT (ML) with fine GRAVEL				
	15	Boring terminated at 15'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

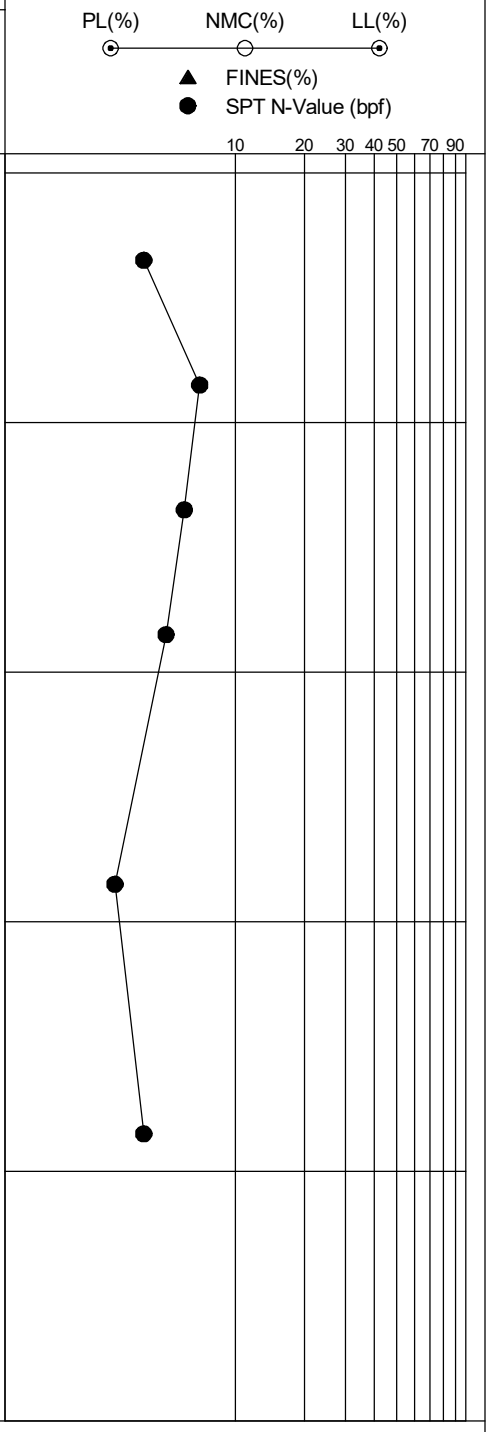
Log of Auger Boring No. B-13

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.2 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist soft light brown, brownish yellow, yellowish red, and light gray clayey SILT (ML) with little fine to medium SAND (SM)				1-2-2
		Damp firm pale light brown, light gray, and pale yellow silty CLAY (CL) with seams of same color wet fine to medium sandy CLAY (CL)				2-2-5
	5	Moist to damp firm pale yellow, pale light brown, and yellowish red clayey SILT (ML) with trace fine GRAVEL				2-2-4
		Moist firm pale light brown, light gray, and reddish brown slightly elastic SILT (ML)				2-2-3
	10					
		Damp soft yellowish red, yellow, black, and white SILT (ML) with little fine to coarse SAND (SM) and fine GRAVEL				2-1-2
	15			▽		
		Damp soft light brown, yellow, black, and white SILT (ML) with trace fine to coarse SAND (SM) and fine GRAVEL				1-2-2
	20	Boring terminated at 20'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-14

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 6.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		RESIDUUM: Moist stiff reddish brown, yellow, and light brown clayey SILT (ML) with some fine SAND (SM)				3-3-7
						3-3-6
	5	Moist stiff reddish brown, yellow, and light brown SILT (ML) with trace fine to medium SAND (SM)				3-4-6
		Moist stiff light brown, yellow, reddish brown, and black SILT (ML)				3-3-6
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-15

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 6.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		FILL: Moist stiff reddish brown silty CLAY (CL) with some fine GRAVEL				
		RESIDUUM: Moist stiff reddish brown, yellow, and red silty CLAY (CL) with trace fine to coarse SAND (SM)				3-4-5
		Moist stiff reddish brown, yellow, and light brown silty CLAY (CL)				4-6-8
	5					
		Moist firm red, reddish brown, yellow, and light brown slightly elastic SILT (ML)				3-3-4
						2-2-3
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-16

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 16.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	9" Topsoil and clearing debris				
		RESIDUUM: Moist stiff reddish brown and light brown silty CLAY (CL)				3-3-6
		Moist stiff light brown, yellowish brown, and reddish brown slightly clayey SILT (ML) with seam of fine quartz GRAVEL				4-5-6
	5	Moist firm brownish yellow, light brown, and reddish brown SILT (ML)				3-3-5
						3-3-5
	10					
		Moist firm yellowish brown, light brown, and reddish brown SILT (ML)				2-3-3
	15					
		Moist stiff light brown, yellowish brown, gray, and black SILT (ML)				3-5-6
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

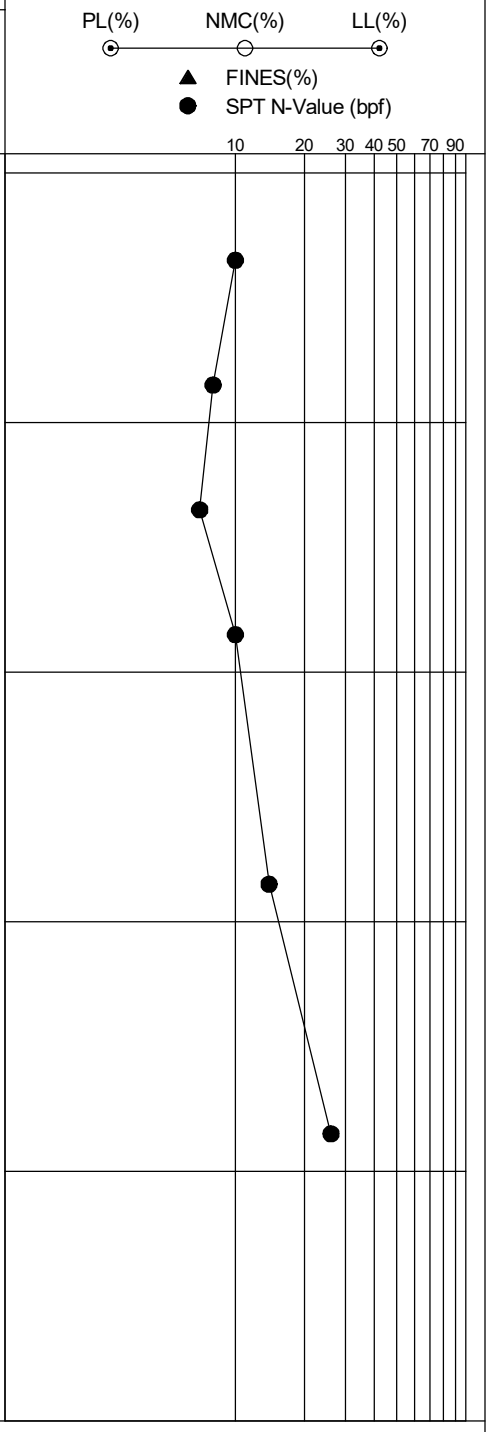
Log of Auger Boring No. B-17

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 16.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist stiff reddish brown, yellow, and light brown silty fine to coarse sandy CLAY (CL)				3-4-6
		Moist firm light brown, yellow, and reddish brown slightly clayey fine to coarse sandy SILT (ML) with trace fine GRAVEL				3-4-4
	5	Moist firm light brown, yellow, gray, light red, and yellowish red fine to coarse sandy SILT (ML)				3-3-4
		Moist stiff light brown, yellow, yellowish red, light red, and gray fine to coarse sandy SILT (ML)				3-4-6
	10					
		Moist stiff light brown, white, olive, yellow, yellowish red, and light red fine to coarse sandy SILT (ML) with fine GRAVEL				4-5-9
	15					
		Very stiff light brown, yellowish brown, white, gray, and yellowish red fine to coarse sandy SILT (ML)				8-12-14
	20	Boring terminated at 20'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

Log of Auger Boring No. B-18

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil and clearing debris				
		RESIDUUM: Moist firm reddish brown, yellow, and brownish yellow silty fine to coarse sandy CLAY (CL)				3-3-3
		Moist firm yellowish red, light brown, and reddish brown slightly clayey SILT (ML) with little fine to coarse SAND (SM)				3-3-5
	5	Moist firm light brown, yellow, reddish brown, yellowish red, and white SILT (ML) with little fine to coarse SAND (SM)				2-4-4
		Moist yellowish red, light brown, yellowish brown, and white SILT (ML) with some fine to coarse SAND (SM)				3-3-3
	10					
		Moist firm white, light brown, gray, reddish brown, and yellowish red coarse sandy SILT (ML) with some fine to medium SAND (SM)				3-4-4
	15			▽		
		Moist firm white, light brown, yellow, and gray coarse sandy SILT (ML) with trace fine to medium SAND (SM)				4-3-4
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

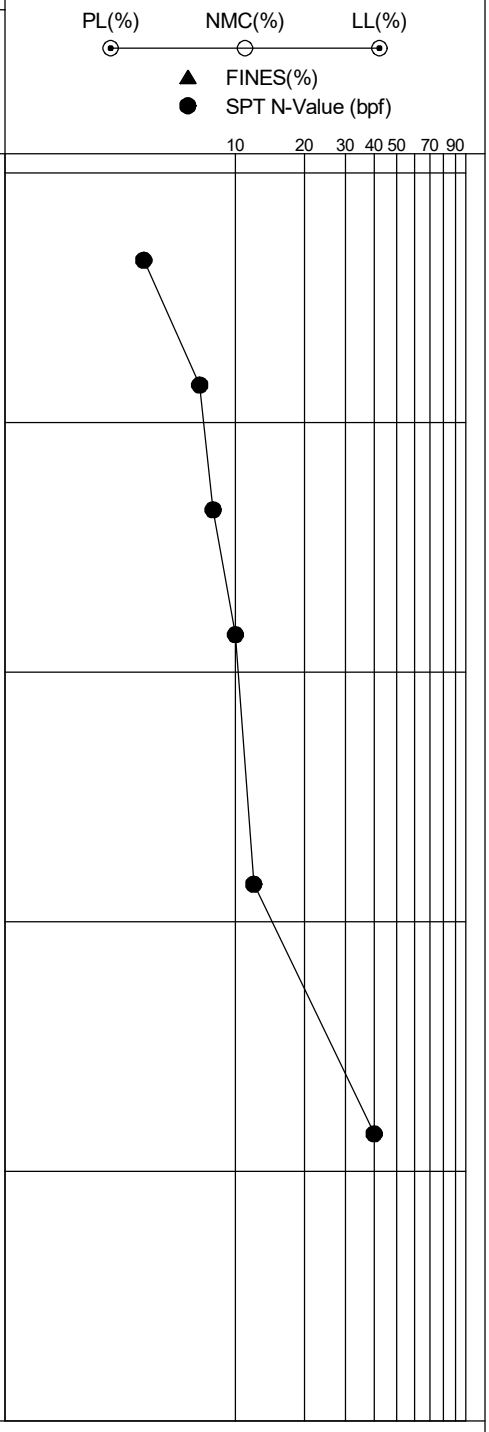
Log of Auger Boring No. B-19

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil and clearing debris				
		RESIDUUM: Moist soft light brown and reddish brown fine to coarse sandy CLAY (CL)				2-2-2
		Moist firm light brown, yellow, light gray, and reddish brown silty fine to coarse sandy CLAY (CL)				2-3-4
	5	Moist stiff red, light brown, reddish brown, and yellow coarse sandy clayey SILT (ML) with little fine to medium SAND (SM)				2-4-4
		Moist stiff white, light brown, and yellow slightly clayey coarse sandy SILT (ML) with little fine to medium SAND (SM)				2-4-6
	10	Moist stiff light gray, white, yellowish red, light red, and light brown SILT (ML) with little fine to coarse SAND (SM)				3-5-7
	15	Moist hard yellowish red, light brown, and gray fine to coarse sandy SILT (ML)				8-15-25
	20	Moist dense yellowish red, light brown, and gray silty fine to coarse SAND (SM) with fine GRAVEL				
		Boring terminated at 20'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

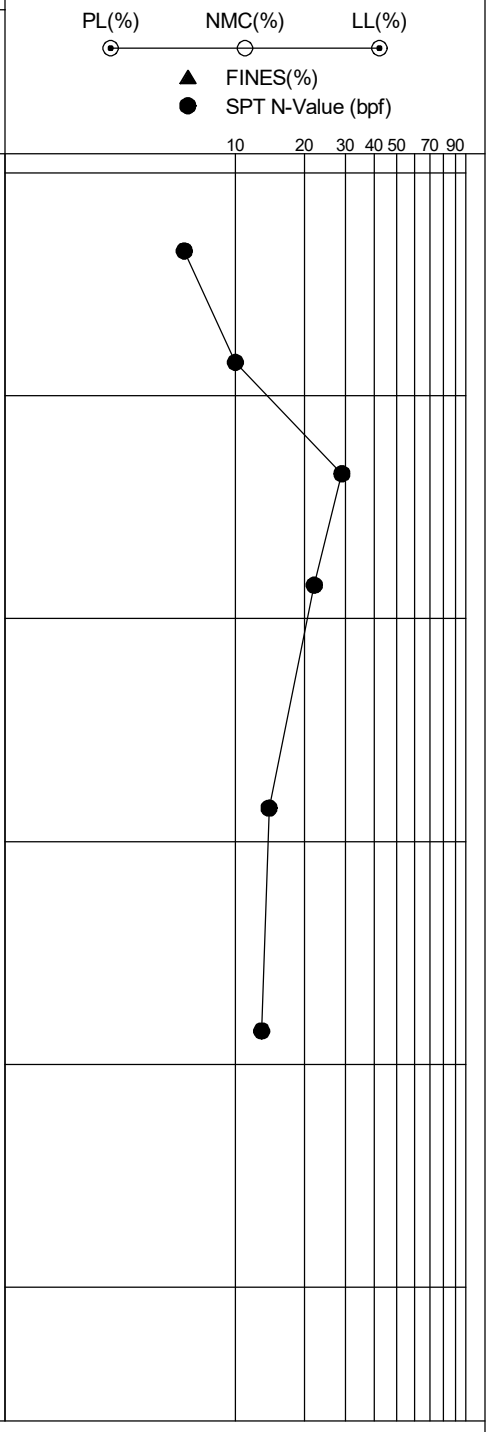
Log of Auger Boring No. B-20

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/08/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 15.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	9" Topsoil and clearing debris				
		RESIDUUM: Moist firm brownish yellow, light brown, and reddish brown fine to coarse sandy CLAY (CL)				2-2-4
		Moist stiff white, light brown, yellow, and yellowish red fine to coarse sandy silty CLAY (CL) with some fine GRAVEL				3-4-6
	5	Very stiff light brown, white, gray, brownish yellow, and yellowish red fine to coarse sandy SILT (ML) with trace fine GRAVEL				13-13-16
		Very stiff light brown, white, yellow, and yellowish red very fine sandy SILT (ML)				5-10-12
	10					
		Stiff light brown, pale brownish gray, brownish yellow, and reddish brown SILT (ML) with little fine to coarse SAND (SM)				4-6-8
	15					
		Moist stiff yellow, light brown, gray, and black SILT (ML) with seams of dark red and brown fine to coarse sandy SILT (ML)				5-5-8
	20	boring terminated at 20'				
	25					



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

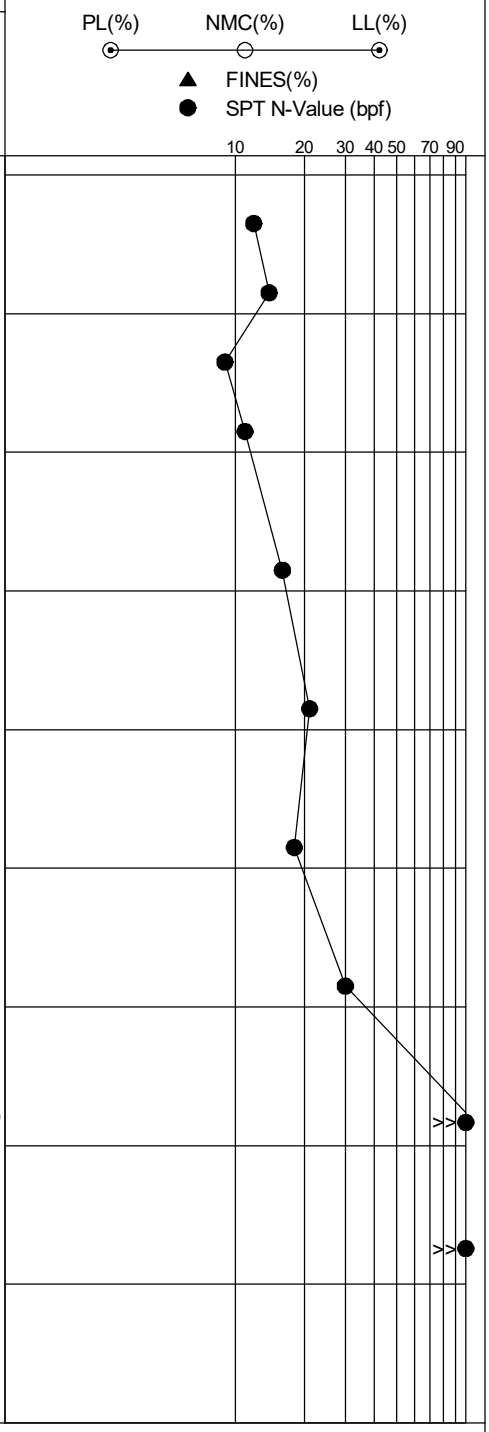
Log of Auger Boring No. B-21

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 21.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		RESIDUUM: Moist stiff light brown and yellow silty fine to coarse sandy CLAY (CL)				2-5-7
	5	Moist stiff light brown, yellow, and red clayey SILT (ML)				5-6-8
		Moist stiff red, light brown, yellow, and white clayey SILT (ML) with some fine to coarse SAND (SM) and fine GRAVEL				3-4-5
	10	Moist stiff light brown and yellow clayey SILT (ML) with some fine to coarse SAND (SM)				3-4-7
	15	Very stiff white, light brown, yellow, and light red SILT (ML) with little fine to coarse SAND (SM)				6-7-9
	20	Very stiff light brown, white, light red, yellow, and black fine to coarse sandy SILT (ML) with fine GRAVEL				7-9-12
	25	Very stiff white, black, light brown, and yellow fine to coarse sandy SILT (ML) with fine GRAVEL, seam of gray and brown SILT (ML)				7-6-12
	30					10-10-20
	35	HEAVILY WEATHERED ROCK sampled as very dense light brown, white, and black silty fine to coarse SAND (SM) with fine GRAVEL				10-30-50/4"
	40	WEATHERED ROCK sampled as very dense light brown, yellow, white, and red silty fine to coarse SAND (SM) with fine GRAVEL				50/5"
		Boring terminated at 38'-11"				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

Log of Auger Boring No. B-22

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 12.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil and clearing debris				
		RESIDUUM: Moist firm light brown and yellow fine to coarse sandy clayey SILT (ML)				3-3-4
		Moist stiff white, light gray, yellow, and light brown clayey fine to coarse sandy SILT (ML)				3-6-7
	5	Very stiff white, yellow, light brown, and light gray fine to coarse sandy SILT (ML)				7-13-15
		Very hard white, light brown, and yellow fine to coarse sandy SILT (ML) with fine GRAVEL				7-22-50/5"
	10					
		WEATHERED ROCK sampled as very hard white, light brown, and yellow silty fine to coarse SAND (SM) with fine GRAVEL				50/6"
	15					
						50/4"
		Boring terminated at 18'-10"				
	20					

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

Log of Auger Boring No. B-23

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 2.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil				
		RESIDUUM: Moist firm reddish brown, light brown, and red silty CLAY (CL) with trace fine GRAVEL				2-3-4
		Moist stiff red, light brown, and brownish yellow clayey SILT (ML) with trace fine GRAVEL				5-6-8
	5					
		Very stiff white, light brown, and yellow slightly elastic SILT (ML)				6-9-14
		Very stiff brownish yellow, light brown, brown, and white SILT (ML)				6-8-11
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

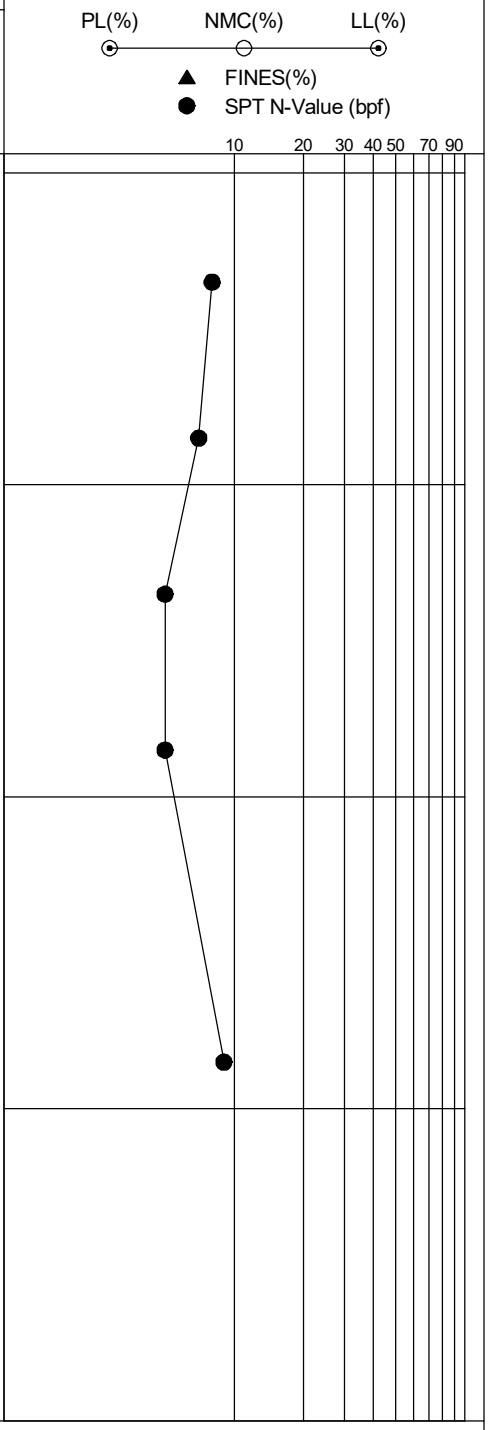
Log of Auger Boring No. B-24

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 12.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	8" Topsoil and clearing debris				
		RESIDUUM: Moist to damp firm yellow and light brown clayey fine to coarse sandy SILT (ML)				3-3-5
						3-3-4
	5					
		Damp firm light brown, reddish brown, yellowish brown, and black slightly clayey fine to coarse sandy SILT (ML)				2-2-3
						2-2-3
	10					
		Moist to damp stiff light brown, white, olive, yellow, and gray fine to coarse sandy SILT (ML)				4-4-5
	15	Boring terminated at 15'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-25

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 4.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil				
		RESIDUUM: Moist firm light brown and yellow clayey fine to coarse sandy SILT (ML)				2-3-3
		Moist to damp firm light brown, white, and yellow slightly clayey fine to coarse sandy SILT (ML)				2-4-4
	5					
		Moist firm light brown, white, yellow, and red slightly clayey SILT (ML) with little fine to coarse SAND (SM)				2-3-3
						2-2-3
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

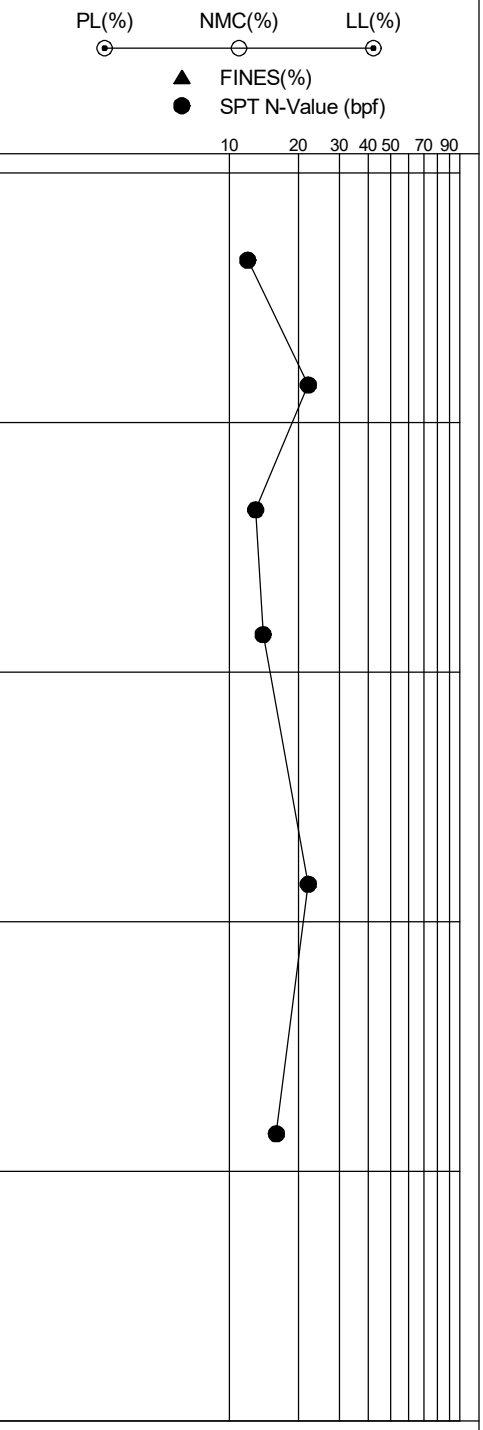
Log of Auger Boring No. B-26

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 15.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		RESIDUUM: Moist stiff light brown, gray, yellowish red, brown, and white fine to coarse sandy clayey SILT (ML)				2-3-9
		Very stiff white, light brown, yellow, brown, and gray SILT (ML) with little fine to coarse SAND (SM)				7-9-13
	5	Stiff light brown, white, brown, and yellowish brown fine to coarse sandy SILT (ML)				3-6-7
		Stiff light brown, yellowish brown, white, and gray SILT (ML) with little fine to coarse SAND (SM)				5-6-8
	10					
		Very stiff yellow, light brown, gray, and white fine to coarse sandy SILT (ML)				6-10-12
	15					
		Very stiff brownish yellow, light brown, gray, and reddish brown SILT (ML) with some fine to coarse SAND (SM)				5-7-9
	20	Boring terminated at 20'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

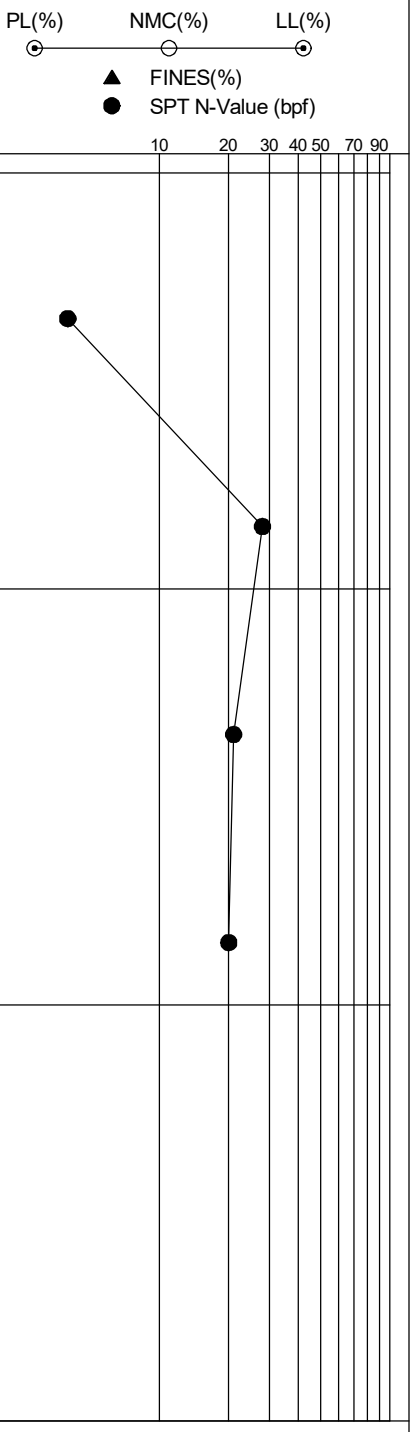
Log of Auger Boring No. B-27

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 4.5 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil and clearing debris				
		RESIDUUM: Moist soft light brown and yellow silty fine to medium sandy moderately plastic CLAY (CL)				2-2-2
		Very stiff white, light gray, bluish gray, and light brown fine to medium sandy SILT (ML)				8-12-16
	5	Very stiff white, light brown, yellow, black, and brown fine to coarse sandy SILT (ML)				6-8-13
		Very stiff white, light brown, yellowish brown, and reddish brown fine to coarse sandy SILT (ML)				5-8-12
	10	Boring terminated at 10'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-28

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 4.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		RESIDUUM: Moist firm light brown silty slightly plastic CLAY (CL)				1-3-5
		Moist very stiff light brown, white, and brownish yellow fine to medium sandy SILT (ML)				
		Very stiff white, light brown, light gray, and yellow fine to coarse sandy SILT (ML)				3-8-10
	5					
		Firm white and light brown fine to medium sandy SILT (ML)				3-4-4
		Firm light brown, yellow, white, and gray SILT (ML) with little fine to coarse SAND (SM)				2-3-4
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-29

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 17.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil				
		RESIDUUM: Moist firm slightly micaceous fine to coarse sandy silty CLAY (CL)				2-3-4
		Moist firm yellow, light brown, yellowish red, and light gray slightly micaceous slightly clayey SILT (ML) with little fine to coarse SAND (SM)				3-3-5
	5					2-3-4
		Moist firm light brown, yellow, gray, and yellowish red slightly micaceous SILT (ML) with little fine to coarse SAND (SM)				2-3-4
	10					
		Stiff white, light brown, yellow, and gray slightly micaceous SILT (ML) with little fine to coarse SAND (SM)				3-4-5
	15			▽		
		Stiff white, light brown, and gray slightly micaceous fine to coarse sandy SILT (ML)				3-5-6
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
▲ FINES(%)
● SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-30

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 15.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		RESIDUUM: Moist firm reddish brown and yellow fine to coarse sandy CLAY (CL)				3-2-4
	5	Moist stiff yellowish red, yellow, and light brown slightly micaceous fine to coarse sandy SILT (ML)				4-5-7
		Stiff yellow, light brown, white, and red slightly micaceous fine to coarse sandy SILT (ML) with little fine to coarse SAND (SM)				3-4-6
	10	Stiff light brown, yellow, light red, and white slightly micaceous SILT (ML) with little fine to coarse SAND (SM)				3-4-6
	15	Firm light brown, white, yellow, and light red slightly micaceous fine to coarse sandy SILT (ML)				3-4-4
	20	Stiff light brown, white, gray, yellow, and light red slightly micaceous SILT (ML) with little fine to coarse SAND (SM)				4-4-5
		Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

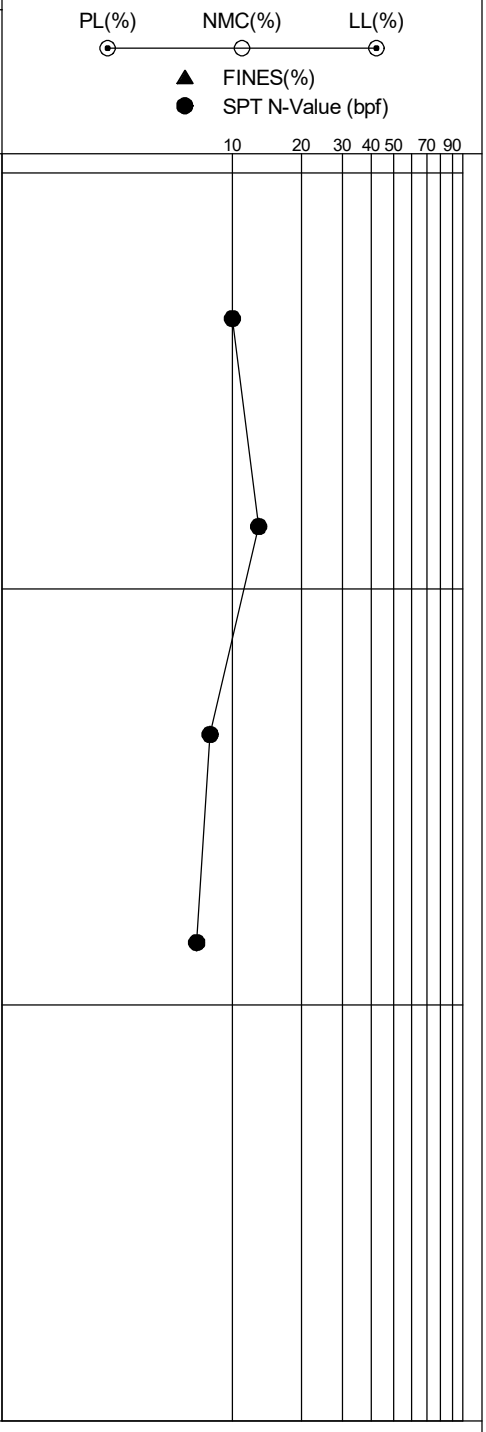
Log of Auger Boring No. B-31

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 3.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	7" Topsoil				
		RESIDUUM: Moist stiff reddish brown and yellow silty CLAY (CL) with trace fine to coarse SAND (SM)				4-4-6
		Stiff red, yellowish red, yellow, and light brown clayey SILT (ML)				3-5-8
	5					
		Firm light brown, reddish brown, and yellow SILT (ML) with trace fine to coarse SAND (SM)				2-3-5
						3-3-4
	10	Boring terminated at 10'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

Log of Auger Boring No. B-32

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 3.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil				
		RESIDUUM: Moist light brown, yellow, and reddish brown slightly micaceous clayey SILT (ML) with trace fine to coarse SAND (SM)				2-3-4
		Moist firm brownish yellow, light brown, reddish brown, and yellowish red slightly micaceous slightly clayey SILT (ML) with trace fine to medium SAND (SM)				2-2-4
	5	Moist firm brownish yellow, light gray, and brown slightly elastic SILT (ML)				2-3-4
		Damp soft brownish yellow, light gray, and brown slightly elastic SILT (ML)				2-2-2
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-33

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 3.6 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil				
		FILL: Stiff reddish brown and brown clayey SILT (ML) with OLD TOPSOIL				3-5-5
		RESIDUUM: Very stiff gray, white, and light brown SILT (ML) with slight organic staining/smell				4-7-11
	5	Very stiff light brown, yellow, white, black, and yellowish red fine to coarse sandy SILT (ML)				4-7-11
		Hard light brown and yellow very fine sandy SILT (ML)				7-14-23
		Dense yellow, light brown, and white micaceous silty fine to coarse SAND (SM)				
	10	Boring terminated at 10'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

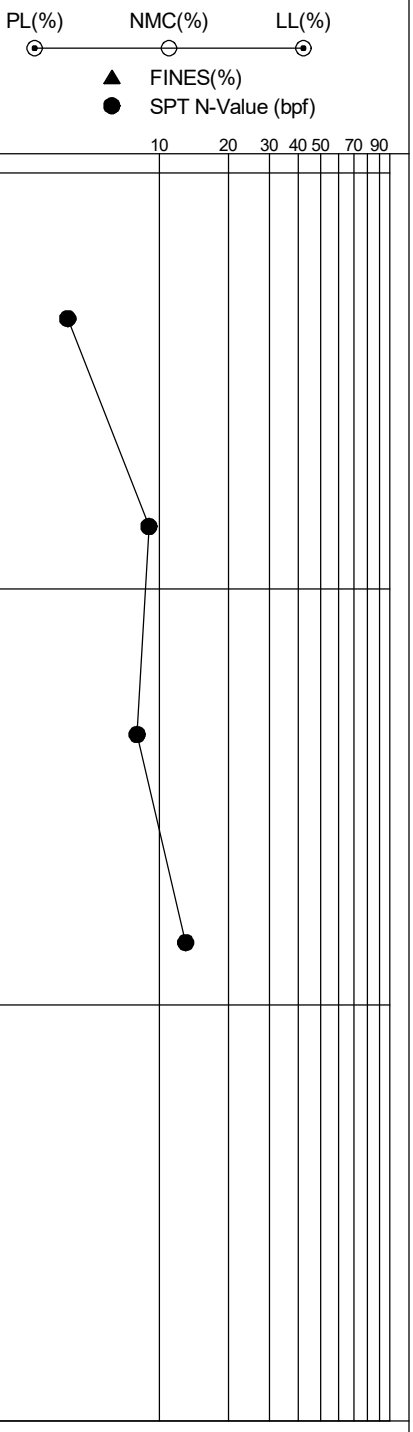
Log of Auger Boring No. B-34

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/11/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 3.8 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil				
		FILL: Soft reddish brown silty CLAY (CL) with trace fine to coarse SAND (SM) and little OLD TOPSOIL				3-1-3
		FILL: Moist stiff light brown moderately plastic CLAY (CL)				3-4-5
	5	RESIDUUM: Moist firm light brown, light yellow, brown, and gray slightly micaceous SILT (ML) with trace fine to coarse SAND (SM)				3-3-5
		Moist stiff light brown, yellow, brown, and gray slightly micaceous SILT (ML) with trace fine to carse SAND (SM)				3-5-8
	10	Boring terminated at 10'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

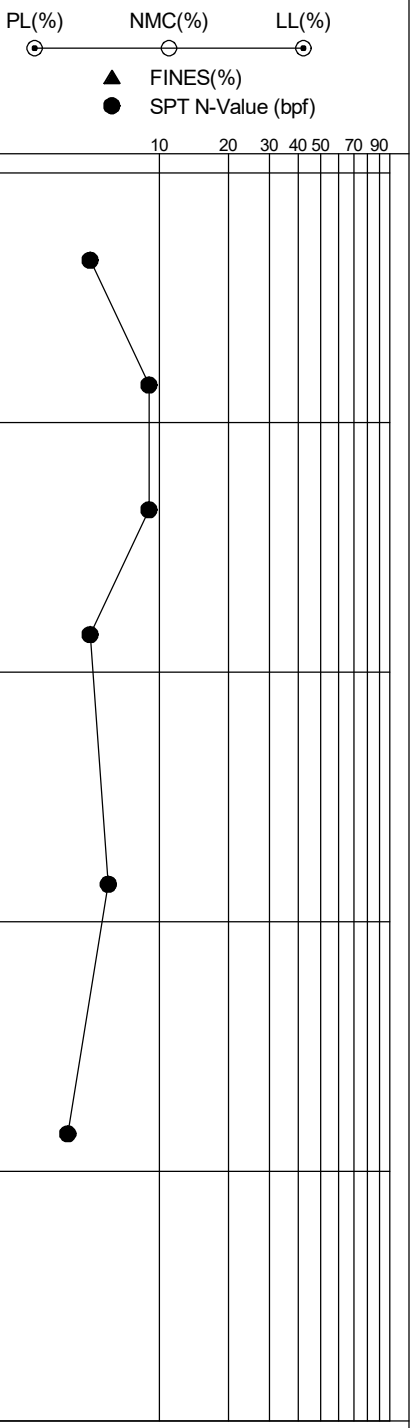
Log of Auger Boring No. B-35

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/13/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 15.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	5" Topsoil				
		FILL: Moist firm reddish brown and light brown silty CLAY (CL) with trace fine to coarse SAND (SM)				2-2-3
		RESIDUUM: Stiff reddish brown, light brown, and white clayey SILT (ML) with trace fine to coarse SAND (SM)				3-4-5
	5	Stiff reddish brown, brownish yellow, and light brown slightly micaceous clayey SILT (ML)				4-4-5
		Firm yellowish red, yellowish brown, reddish brown, light brown, and yellow slightly clayey SILT (ML)				2-2-3
	10					
		Firm red, reddish brown, yellowish brown, black, and yellow slightly micaceous SILT (ML)				2-2-4
	15					
		Moist soft light brown, yellow, and black slightly micaceous SILT (ML) with trace fine to medium SAND (SM)				2-2-2
	20	Boring terminated at 20'				



Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-36

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/13/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 13.0 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil and clearing debris				
		RESIDUUM: Moist stiff light brown, brownish yellow, and gray clayey fine to coarse sandy SILT (ML)				3-5-8
		Very hard light brown, yellowish brown, gray, and yellow fine to coarse sandy SILT (ML)				14-29-34
	5					15-27-45
		Very hard brownish yellow, light brown, gray, and yellow fine to medium sandy SILT (ML) with some coarse SAND (SM)				21-34-46
	10					
		Very stiff brown, light brown, yellow, and gray fine to coarse sandy SILT (ML)				6-9-12
	15					
		Very stiff light brown, gray, and white SILT (ML) with little coarse SAND (SM)				10-12-14
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-37

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/13/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 12.4 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	12" Topsoil and clearing debris, standing water on surface				
		RESIDUUM: Moist hard light brown silty FAT CLAY (CH)				7-12-21
		Hard light brown, white, and yellow fine sandy SILT (ML)				8-9-11
	5	Very stiff light brown, white, and gray fine sandy SILT (ML) with little medium to coarse SAND (SM)				5-7-11
		Very stiff light brown, gray, and yellow slightly micaceous fine to medium sandy SILT (ML) with little coarse SAND (SM)				5-6-7
	10	Stiff gray, light brown, and yellow slightly micaceous fine to coarse sandy SILT (ML)				4-5-8
		Stiff light grayish brown, brown, and yellowish brown SILT (ML)				8-11-13
	15	Very stiff brown, light brown, white, and gray fine to coarse sandy SILT (ML)				
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

Log of Auger Boring No. B-38

Project : RCCC North TEC and FAC Additions
Location : Salisbury, NC
Date Drilled : 03/13/2024
Project No. 240103.000

Drilling Method : Auger Rig Type : CME 550X
Boring Diameter : 6 Hammer : Automatic
Surface Elevation Not Determined ft.
Initial GWL : Not Encountered ft.
Northing: ft.
Cave-in Depth : 11.3 ft.
Delayed GWL : N/A ft.
Easting: ft.

SAMPLE TYPE: DISTURBED | SPT SAMPLE | SHELBY TUBE | NO RECOVERY | CORE

ELEV (ft)	DEPTH (ft)	MATERIAL CLASSIFICATION AND REMARKS	LITH	GWL	SAMPLES TYPE	SAMPLES BLOWS PER 6 IN.
	0	6" Topsoil and clearing debris				
		RESIDUUM: Moist stiff light brown, yellow, and gray fine to medium sandy FAT CLAY (CH) with seam of fine quartz GRAVEL				8-6-5
		Hard light brown, yellowish brown, gray, and white SILT (ML)				10-16-20
	5	Moist very stiff light brown, yellowish brown, brown, and reddish brown SILT (ML)				6-11-13
		Moist very stiff brown, gray, and light brown fine sandy SILT (ML) with fine GRAVEL				6-9-12
	10					
		Moist stiff yellowish brown, brown, light brown, and black SILT (ML) with some fine GRAVEL				3-4-9
	15					
		Hard light brown, gray, white, and brown fine to medium sandy SILT (ML) with little coarse SAND (SM)				9-14-18
	20	Boring terminated at 20'				

PL(%) NMC(%) LL(%)
FINES(%)
SPT N-Value (bpf)
10 20 30 40 50 70 90

Key to Abbreviations

GWL - Groundwater Level
LITH - Lithologic Symbol
PL - Plastic Limit
LL - Liquid Limit
NMC - Natural Moisture Content
SPT - Standard Penetration Test

AUGER BORING LOG RCCC (NORTH) TEC AND FAC.GPJ CONCORD ENGINEERING.GDT 3/15/24

FIELD PROCEDURE

SOIL TEST BORINGS
ASTM D-1586

The borings were made by advancing 6 inch diameter solid stem augers. At regular intervals, soil samples were obtained with a standard 1.4" ID, 2.0" OD, and 18" long split-barrel sampler.

The sampler was initially seated 6 inches to penetrate any loose cuttings; then driven an additional foot with blows of a 140-pound hammer falling 30 inches. The number of hammer blows required to drive the sampler the final foot was recorded and is designated as the *standard penetration resistance*. Penetration resistance, when properly evaluated, is an index to the soil's strength and density.

The samples were classified in the field by the driller as they were obtained. Representative portions of each soil sample were then sealed in labeled sample bags and transported to our laboratory. The samples were also examined by our geologist at the time of collection to check visually the field classification. All boring data, including sampling intervals, penetration resistances, soil classifications, and groundwater level are shown on the attached Test Boring Logs.