ADDENDUM 2

July 27, 2020

ITB AP 63-20

CONSTRUCT PARKING LOT AT BOB SIKES AIRPORT

Please find attached the Document and information below, for the above referenced Addendum No. 2. This Addendum is hereby made a part of the Contract Documents and Specifications of the above referenced project. All other requirements of the original Contract Documents and Specifications shall remain effective in their respective order. The purpose of Addendum No. 2 is to set forth changes and/or additional information as referenced herein.

The County received two (2) questions after the non-mandatory pre-bid meeting and before the last day for questions. The questions are summarized in Item 1. below.

I. **Question:** "On sheet E4.00 Electrical Site Plan, appears to show some work that might have been left on a previous set of drawing and might not have gotten deleted, see attached red lines."

Answer: The project plans (9 sheets) are included at the end of the bid manual within Addendum #1 at the Purchasing Website. See Addendum No. 1.

Question: "Is a geo report available for the existing site?"

Answer: The geo report is attached to this Addendum No. 2. See below attached document.

Note: The ITB Opening Date & Time remains unchanged.

Pre-Bid Meeting Minutes
Construct Parking Lot at Bob Sikes Airport
ITB AP 63-20

I. Welcome / Attendee Sign-In

Tracy Stage, Airports Director – provided opening comments

Dr. Paul Hsu – provided greeting, importance of project partnership

Chad Rogers, Deputy Director Plans and Programs – discussed sign-in process and general project overview

II. Project Description

ITB AP 63-20, the '***CONSTRUCT PARKING LOT AT BOB SIKES AIRPORT"*** project generally includes construction of a roughly 108-space parking lot consisting of clearing and grubbing (approximately 2-acre site), maintenance of traffic, construction of subgrade improvements, base material and asphalt, concrete curb and sidewalk, grading, stormwater improvements, pavement markings, signage and site lighting.

As alternates the bid schedule includes options to relocate a water main from underneath the future lot, as well as landscaping.

Contract time = 90 days to substantial completion (BF-2 of 6, SFA-1) / 120 to final

Liquidated Damages – sliding scale, expected $1,584-$1,924 per day based on contract value

Last day for Questions - 30 July

Bid Opening - 12 Aug

Detailed Overview: Mark Siner, Choctaw Engineering (Engineer of Record) – further detailed the scope and permitting details below.

- Parking/Curbing
- Asphalt/Landscaping
- Possible move of waterline along Airport Road

- Due to grading on the site (County to ensure parking lot does not interfere with future maintenance on waterline)
- Contractor needs to coordinate with Okaloosa County Public Works as part of the process of getting the "Right-of-way" Permit

- Remainder of project is on Airport property
- Control maintenance of traffic to/from site on Airport Road
- Contractor required to get state permits including NPDES
- Engineer will obtain NWFL water management district permit and county development order

III. Plans and Specifications

Contract documents are available by electronic delivery at the Okaloosa County Purchasing Website: http://www.co.okaloosa.fl.us/purchasing/home

IV. Bidding Requirements Date, Time and Location

The Respondent must submit one original and two complete copies of the bid. All bids will be opened and read aloud. All bids must be in sealed envelopes reflecting on the outside thereof the Respondent's name and "***CONSTRUCT PARKING LOT AT BOB SIKES AIRPORT***". The Board of County Commissioners will consider all bids properly submitted at its scheduled bid opening in the Okaloosa County Purchasing Department located at opening located at 5479A Old Bethel Rd., Crestview, FL 32536. Bids may be submitted at the Purchasing department prior to bid opening or delivered to the Okaloosa County Purchasing Department, 5479A Old Bethel Rd., Crestview, FL 32536. **NOTE**: Crestview, FL, is not a next day guaranteed delivery location by most delivery services. Respondents using mail or delivery services assume all risks of late or non-delivery. The bid, with blue-ink original signatures, and two (2) additional copies are to be submitted in a sealed envelope, and the sealed envelope shall be marked as follows: BID ENCLOSED – ITB AP 63-20 CONSTRUCT PARKING LOT AT BOB SIKES AIRPORT.

The bid manual includes all mandatory forms, bid schedule, insurance requirements, draft agreement, bonding requirements, general conditions, and additional instructions to contractors.

Please allow 2 days shipping; Overnight delivery is not guaranteed. Late bids will not be accepted.

Purchasing Point of Contact
Jesica Darr-Contracts & Lease Coordinator
Okaloosa County Purchasing Department
Tel: 850-689-5960
jdarr@myokaloosa.com

Note: To ensure fair competition, prevent protests, and abide by the County Purchasing Policy, all communications related to the project should go through the Purchasing POC.

V. Safety and Security

Project site shall be kept neat and clean as construction continues. Dust control will be the biggest item of concern to flight safety and the proximity of the site to Airport Road in terms of public and worker safety. Access cards or keys to the Airport fenced boundary will not be required nor badging—only a detailed list of POCs for coordination of activities.

Airport procedures will be outlined in the pre-construction meeting, but the project is 'outside the fence' of the main operating area. The Contractor's activities will be coordinated a minimum weekly or daily as plans or activities require.

VI. Questions and Answers

No questions were asked during the meeting but a Q&A log will be kept for questions received by Purchasing and posted for the public through final addendum no later than August 5, 2020.

Purchasing did receive one question in writing after the meeting regarding the location of the project plans. As explained in the meeting but understand complications with the Zoom screen share, project plans (9 sheets) are included at the end of the bid manual within Addendum #1 at the Purchasing Website.

PRE-BID CONFERENCE SIGN-IN SHEET

July 22, 2020 at 2:00 p.m. Central
ITB AP 63-20

Construct Parking
Lot Bob Sikes Airport

NAME	REPRESENTING	TELEPHONE	E-MAIL ADDRESS
Tracy Stage	Okaloosa County Airports	850-651-7160	tstage@myokaloosa.com
Mike Stenson	Okaloosa County Airports	850-651-7160	mstenson@myokaloosa.com
Allyson Oury	Okaloosa County Airports	850-651-7160	aoury@myokaloosa.com
Chad Rogers	Okaloosa County Airports	850-651-7160 x01055	rrogers@myokaloosa.com
Ray Beasley	Okaloosa County Airports	850-380-0659	rbeasley@myokaloosa.com
Jesica Darr	Okaloosa County Purchasing	850-689-5960 x6972	jdarr@myokaloosa.com
Mike Siner	Choctaw Engineering		msiner@choctaweng.com
Dr. Paul Hsu			paul.hsu@totalpartsplus.com
Amanda Negron			amanda.negron@hsu-foundation.org
Karen Dubose	Bullard Excavating, Inc.	334-222-4332	kdubose.bei@gmail.com

PRE-BID CONFERENCE SIGN-IN SHEET

July 22, 2020 at 2:00 p.m. Central
ITB AP 63-20

Construct Parking
Lot Bob Sikes Airport

NAME	REPRESENTING	TELEPHONE	E-MAIL ADDRESS
Jason Floyd	JDF Architecture, LLC	850-496-2166	j.floyd@jdfarchitecture.com
Gary Bearden	Bearden Electric, Inc.	850-863-2131	gary@beardenelectric.com
Unknown Name		850-306-2092	
Unknown Name		18505	
David Wilson	GCF	850-401-9085	davidwgcf@gmail.com
Perry Bell	GCF	850-892-0291	perrygcfbell@yahoo.com

Panama City Office

7500 McElvey Road, Suite A
Panama City Beach, FL 32408

Tel: (850) 769-4773
Fax: (850) 872-9967
www.soearth.com

FL Certificate of Authorization #3737

SOUTHERN EARTH SCIENCES, INC.

Geotechnical, Environmental & Construction Materials Testing

Triple R Construction, Inc.
8010 Sleepy Bay Blvd.
Navarre, FL 32556

March 6, 2020
File No: P20-0072

Attention: Rick Rausch

Subject: Geotechnical Services for the Proposed Shop Door and Office Additions at 5795 John Givens Road in Crestview, Florida

Dear Mr. Rausch:

Southern Earth Sciences, Inc., has completed the geotechnical services for the Proposed Shop Door and Office Additions at 5795 John Givens Road in Crestview, Florida. Our services were performed per your request. This report presents the results of our field and laboratory testing and includes recommendations with regard to the construction of the foundation and stormwater design.

FIELD INVESTIGATIVE PROCEDURES:

On February 7, 2020, personnel with our firm traveled to the project site and completed the field testing for the above referenced project. For our geotechnical investigation, three (3) cone penetration test (CPT) soundings were performed to a depth of 30 feet below the existing ground surface. The cone penetrometer is track mounted and rather than sampling and testing at five-foot intervals, as normally done with standard penetration borings, the cone penetrometer is an electronic device that provides continuous evaluation of the soils bearing capacity through point and frictional resistances. The cone penetrometer is hydraulically pushed into the soil with point and frictional resistances obtained continuously on a computer printout. This testing equipment provides an accurate definition of the soil strength characteristics and the changes in stratification. Cone soundings were performed in general accordance with ASTM D5778.

At test locations C-1 and SW-1 direct push borings were performed to depths ranging from 10 to 15 feet below the existing ground surface. The direct push borings were performed with our Geoprobe 6622 and the DT22 soil sampling system. This is a closed-piston sampler, with an inner piston rod and outer drive casing, and is driven to the top of the sampling interval. The inner piston rod is removed and the sampler is driven to collect a soil sample. The soil samples are collected in a clear 5-foot PVC liner and are delivered back to our laboratory for soil classifications and laboratory testing.

For our stormwater testing one (1) double ring infiltrometer test (DRI) was performed at the location indicated on the attached Figure as SW-1.

Test locations were determined in the field using a 100-ft tape and estimating right angle to existing landmarks. See the attached Figure for our approximate test locations.

LABORATORY TESTING PROCEDURES:

Laboratory investigative work consisted of physical examination of samples obtained during the soil test boring operation. Soil samples were visually classified in the laboratory in accordance with the Unified Soil Classification System. Evaluation of these samples, in conjunction with cone penetration resistances, have been used to estimate soil characteristics.

Natural Moisture: One (1) sample was selected for determination of its natural moisture content. In the laboratory, the samples were weighed, dried, and their moisture content was calculated in general accordance with ASTM D2216.

Percent Passing 200 Mesh Sieve: One (1) sample was selected to determine the percent of materials, by dry weight, finer than the U.S. Number 200 Mesh Sieve. This test was performed in general accordance with ASTM D1140.

The laboratory test results are shown on the boring logs at the depth of the tested sample. Abbreviations of laboratory data are shown below:

NM = Natural Moisture Content (%)
-200 = Percent Finer than the U.S. No. 200 Mesh Sieve

CONE SOUNDINGS:

The CPT Logs graphically indicates the cone tip resistance, friction ratio, equivalent N-value and interpreted soil type at each sounding location. Soil classifications and data were interpreted from methods recommended by Robertson and Campanella and/or the Swedish Geotechnical Institute Information Publication No. 15E. Correlations between Cone Resistance values and Standard Penetration Testing "N" values were performed according to the methods developed by Robertson, Campanella and Wightman.

The soil types and stratigraphy shown on the CPT Log sheets are based upon material parameters measured and evaluated as the cone is advanced. The CPT Log sheets were developed for general information only.

SITE AND SOIL CONDITIONS:

The additional shop doors will be located on the north and west side of the existing building at 5795 John Givens Road in Crestview, Florida. The building is located to the southeast of the intersection of John Givens Road and Airport Road. The parcel is bound to the north by Airport Road, the west by John Givens Road, and to the south and east by existing

metal buildings. Topographic information has not been provided, therefore the elevations at our boring locations should be considered unknown. The logs of our borings are attached.

The soils encountered within the depths of our borings were sands. The sands varied in color and texture, ranging from clayey, to clean. The sands in the top foot were generally loose with some organics. It should be noted that at test location C-1 loosed sands were encountered to a depth of three feet below the existing ground surface. The sands then become clean and medium dense to dense to depths of approximately 6 to 9 feet below the existing ground surface. The sands then became clayey and medium dense to dense to a depth of approximately 15 feet below the existing ground surface. The sands were dense to very dense for the remainder of our borings.

On the date of our field testing (February 7, 2020), the groundwater level was greater than 10 feet below existing ground surface at all boring locations. Fluctuations in the water table depths will occur due to changes in gradient and seasonal precipitation/evapotranspiration. Therefore, it is highly recommended that the groundwater levels be verified prior to any excavations on the site.

STRUCTURAL INFORMATION:

After conversations with you we understand a sliding door will be added to the west side of the building. A stem wall with approximately three feet of fill will be constructed on the west side of the building extending out from the building approximately four (4) feet. The sliding door will be supported on a rial system mounted to the floor. On the north side of the building a lobby and work area will extend out approximately 20 feet from the center of the existing building. The addition will be approximately 35 feet wide and supported on a conventional monolithic slab tied into the existing slab. At this time structural information is not available for the lobby addition, we have assumed wall loading of 2 kips per lineal feet, we have also assumed 3 kips per lineal feet on the sliding door addition. If more than three (3) feet of fill is brought onsite we must revise our recommendations.

SHALLOW FOUNDATION RECOMMENDATIONS:

Our evaluation of foundation conditions has been based on structural information presented in this report and subsurface data obtained during our investigation.

Based upon the results of our cone soundings and direct push borings, it is our opinion the new additions may be supported by a shallow foundation system with the following site and soil preparations. We recommend footings may be proportionally designed for an allowable soil contact pressure of 1500 pounds per square foot, or less. If more than three (3) feet of fill is used, we must revise our recommendations. We recommend wall footings have a minimum width of 18 inches and a minimum embedment depth of 18 inches from the bottom of the

footings to the outside finished grade. Prior to foundation construction we recommend the following site and soil preparations.

It should be noted that extreme care should be used when excavating next to the existing building to not undermine the existing foundations. Also, if any underground utilities are removed/relocated to outside the additions footprints, those utility trenches should be backfilled with clean fill soils and compacted as described below.

1. Clear and grub the surface soils, extending at least five (5) feet beyond the building perimeter, to remove all topsoil, organics, and other deleterious materials.

2. Prior to the addition of fill soils compact the existing soils until a density of 95% of the Modified Proctor (ASTM D-1557) maximum dry density is achieved to a depth of twenty-four (24) inches below compacted grade. Due to the proximity to the existing buildings a vibratory roller should not be used. The static weight of the roller and/or hand equipment should be used.

3. Fill soils used to raise the building area shall be sands to slightly silty sands containing no more than 12%, by dry weight, finer than the U.S. No. 200 mesh sieve. Fill should be placed in thin level lifts not to exceed twelve (12) inches, loose, and compacted to a density of 95% of the Modified Proctor maximum dry density throughout its full depth.

4. Once footings have been excavated, compact the soils at the bottom of the footings until a density of 95% of the Modified Proctor (ASTM D-1557) maximum dry density is achieved to a depth of twelve (12) inches below the bottom of footings.

5. Laboratory moisture-density relationships (Proctors) and in-place density tests should be performed to verify compliance with the foregoing compaction recommendations. At a minimum, we anticipate one density test per 50 lineal feet of continuous footing, and one density test per 1500 square feet of existing soils and for each foot of fill soils.

FIELD TESTING FOR STORMWATER DESIGN:

While the borings performed for this project are representative of subsurface soil conditions at their respective locations/depths and for their respective vertical reaches, local variations of the subsurface materials, and permeability rates are anticipated. Soil descriptions and permeability rates are representative of subsurface conditions at the designated locations, depths, and density.

At test location SW-1, the seasonal high groundwater level could not be determined by characteristics such as soil colors and soil mottles. Based upon the results of our borings we anticipate the seasonal high groundwater level is greater than 10 feet below existing ground surface at SW-1. It may be advisable to have a Professional Surveyor obtain the elevations of

our test locations which would help further define the elevation of the seasonal high groundwater elevations. During periods of above average rainfall, groundwater levels may rise above the seasonal high depths indicated above.

VERTICAL INFILTRATION RATES:

To estimate the vertical infiltration rates a double-ring infiltrometer test was performed at the location marked SW-1 on the attached Figure at 0.5 feet below the existing ground surface. The double ring infiltrometer test was performed in general accordance with ASTM D-3385 "Infiltration Rate of Soils in Field Using Double-Ring Infiltrometers". The soils were pre-saturated prior to performing the test. The double ring infiltration test does not include the effect of long-term saturation and groundwater mounding.

The results for the double-ring infiltrometer test is graphically illustrated as accumulated intake (inches) versus time (min) and infiltration rate (in/hr) versus time (min) for the test period on the attached graph. Based upon the results of our double-ring infiltrometer test, the unsaturated vertical infiltration rate at test location marked SW-1 on the attached Figure is approximately 42 inches per hour. We should note the infiltration rate is not factored and should be used with an appropriate factor of safety.

The vertical infiltration rate stated above should not be considered the drawdown rate of the exfiltration system. The drawdown rate is a complex 3-dimensional phenomenon dependent upon numerous factors including pond/system geometry, vertical and horizontal infiltration rates, groundwater mounding, etc. The prediction of the drawdown rate is made more difficult by varying soil/groundwater conditions. The Northwest Florida Water Management District recommends a correlation factor between unsaturated vertical infiltration rates and horizontal hydraulic conductivity of 1.5.

TESTING:

The effectiveness of the foundation and stormwater structures will depend significantly on the proper preparation of the soils, as indicated previously. Therefore, we recommend Southern Earth Sciences, Inc., be employed as the testing laboratory to perform construction testing services. If we are not employed to provide construction testing services, Southern Earth Sciences, Inc., cannot accept any responsibility for any conditions, which deviate from those described in this geotechnical report. Southern Earth Sciences, Inc., should be invited to the pre-construction conference to discuss the project with all interested parties so that the project may be completed expeditiously and to the intent of our geotechnical report. We would be pleased to review the plans and specifications as they relate to the soil preparation and provide a fee proposal for construction testing.

GENERAL COMMENTS:

Professional judgments on design criteria are presented in this letter. These are based partly on our evaluations of technical information provided, partly on our understanding of the characteristics of the project being planned, and partly on our general experience with subsurface conditions in the area. We do not guarantee performance of the project in any respect, only that our judgments meet the standard of care of our profession.

This information is exclusively for the use and benefit of the addressee(s) identified on the first page of this report and is not for the use or benefit of, nor may it be relied upon by any other person or entity. The contents of this letter may not be quoted in whole or in part or distributed to any person or entity other than the addressee(s) hereof without, in each case, the advance written consent of the undersigned.

This report has been prepared in order to aid in the evaluation of this property and to assist the architects and engineers in the foundation and stormwater design. It is intended for use with regard to the specific project discussed herein, and any substantial changes in the buildings, loads, locations, or assumed (or reported) grades shall be brought to our attention immediately so that we may determine how such changes may effect our conclusions and recommendations. We would appreciate the opportunity to review the plans and specifications for the foundation and floor construction to verify that our conclusions and recommendations are interpreted correctly. Our report does not address environmental issues which may be associated with the subject property.

While the borings performed for this project are representative of subsurface soil conditions at their respective locations and for their respective vertical reaches, local variations of the subsurface materials are anticipated and may be encountered. The boring logs and related information are based on the driller's logs and visual examination of selected samples in the laboratory. Delineation between soil types shown on the boring logs is approximate, and soil descriptions represent our interpretation of subsurface conditions at the designated boring location on the particular date driller.

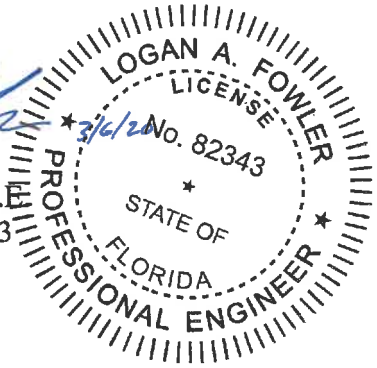
We appreciate the opportunity to assist you. If you have any questions or if we may be of further assistance, please call at your convenience.

Yours Very Truly,

SOUTHERN EARTH SCIENCES, INC.

R. Collins Thomas, E.I.
Eng. Reg. No. 1100020518
State of Florida

Logan A. Fowler, P.E.
Eng. Reg. No. 82343
State of Florida

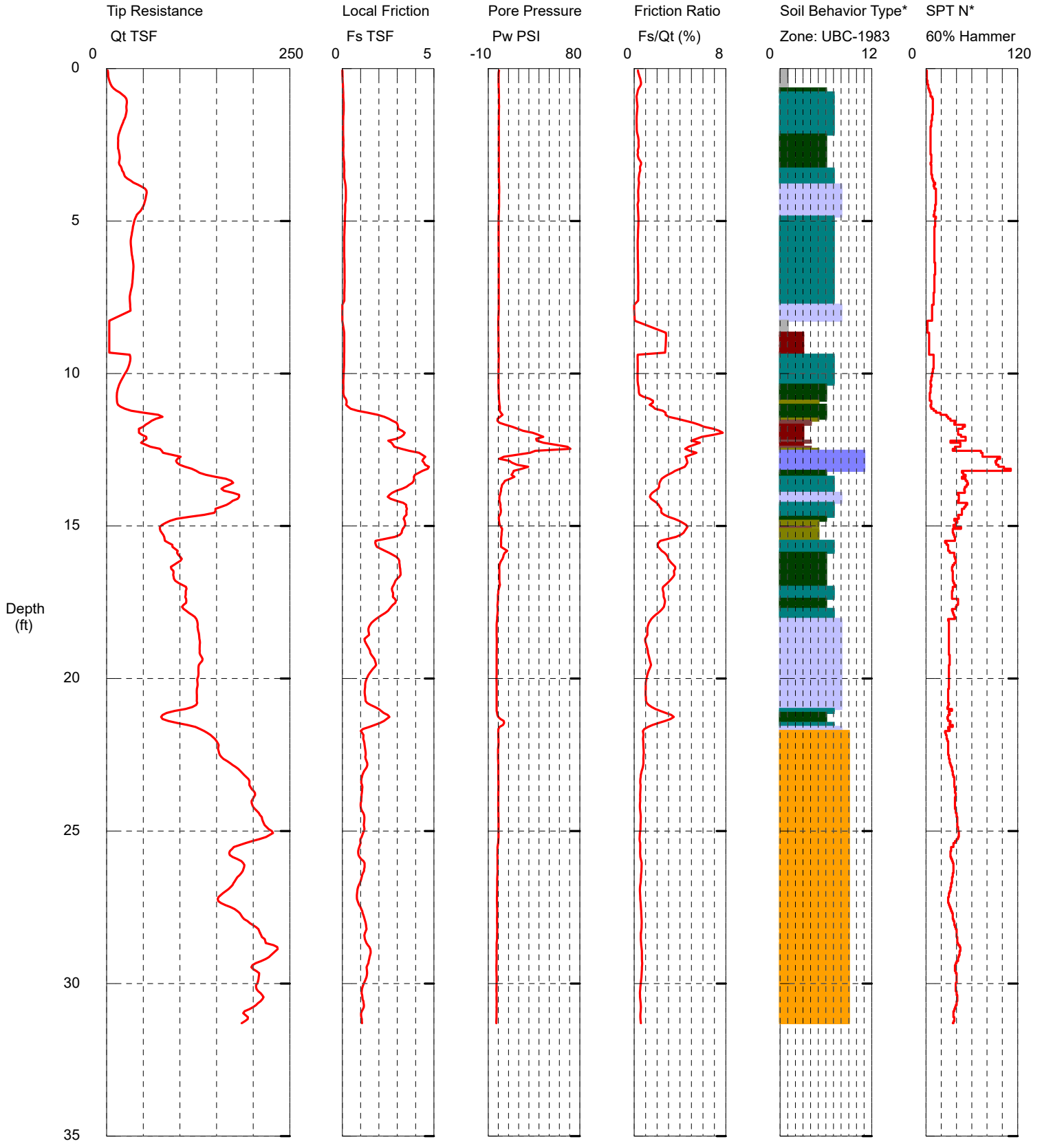


SESI FILE NO: P20-0072	SOUTHERN EARTH SCIENCES, INC. Geotechnical, Environmental & Construction Materials Testing	DRAWN BY:	CT	FIGURE 1
		CHECKED BY:	LF	
Proposed Shop Door Additions 5795 John Givens Road Crestview, Florida		DATE:	2/25/2020	Site Map
		SCALE:	1:80	

Southern Earth Sciences Inc.

Operator: Jamison Short
Sounding: C-1
Cone Used: DDG1485
Elevation: Unknown

CPT Date/Time: 2/7/2020 11:27:34 AM
Location: Crestview Tech Park Shop Door Additions
Job Number: P20-0072
Groundwater Not Encountered



Maximum Depth = 31.30 feet

Depth Increment = 0.066 feet

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

C-2
C-2
Center

*Soil behavior type and SPT based on data from UBC-1983

LOG OF BORING C-1

PROJECT: Shop Door Additions 5795 John Givens Road
LOCATION: Crestview, FL
PROJECT NO.: P20-0072
DATE: 02/07/20

METHOD: Direct Push
DRILLER: JS
ENGR / GEOL: RCT
SURFACE ELEVATION: Unknown

Elevation / Depth	Soil Symbols Sampler Symbols and Field Test Data	USCS	LOCATION / MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 / Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0		SC	Per Plan Orange and Red Clayey Fine SAND						
1		SP	Brown Fine SAND						
2									
3		SP	Tan Fine SAND						
4									
5									
6									
7									
8									
9		SC	Orange and Tan Clayey Fine SAND	●	13				25
10									
11									
12									

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**
Water Observations: Groundwater Not Encountered

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)
Sample Key: ◪ SPT ■ Shelby Tube

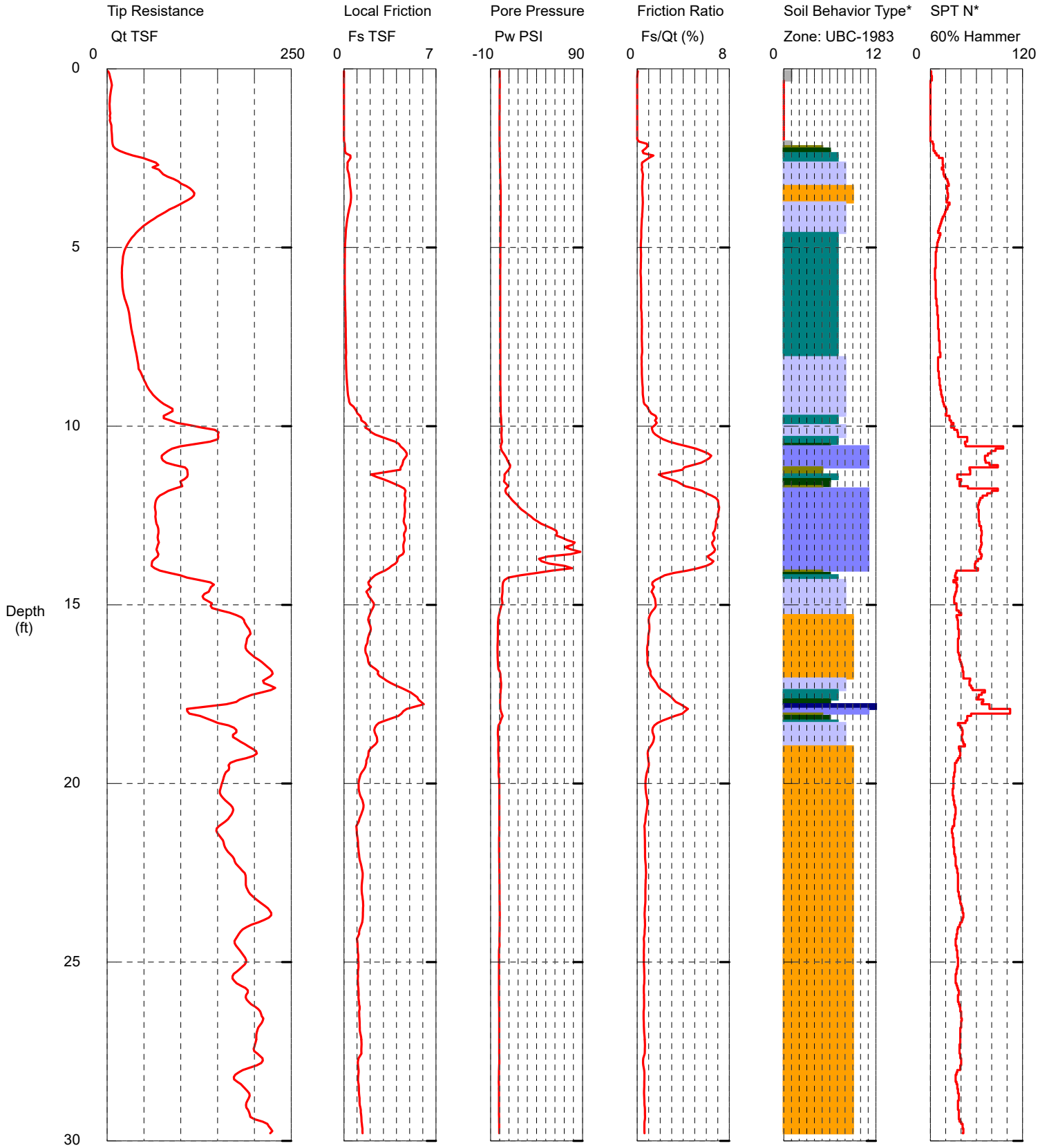
SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P20-0072.GPJ SES PC FL.GDT 3/3/20

Southern Earth Sciences Inc.

Operator: Jamison Short
Sounding: C-2
Cone Used: DDG1485
Elevation: Unknown

CPT Date/Time: 2/7/2020 11:53:17 AM
Location: Crestview Tech Park Shop Door Additions
Job Number: P20-0072
Groundwater Not Encountered



Maximum Depth = 29.79 feet

Depth Increment = 0.066 feet

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

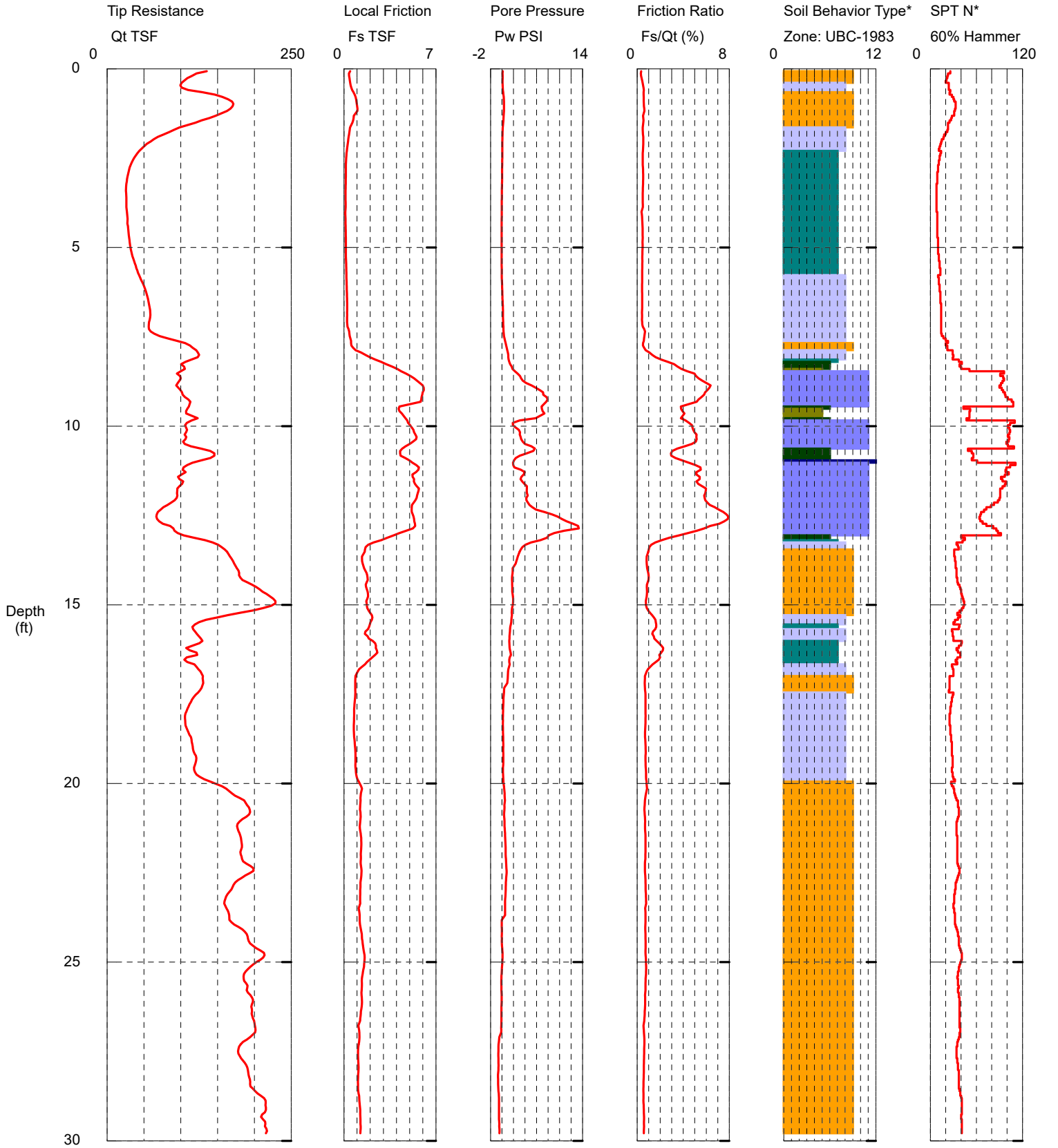
C-2
C-2
Center

*Soil behavior type and SPT based on data from UBC-1983

Southern Earth Sciences Inc.

Operator: Jamison Short
Sounding: C-3
Cone Used: DDG1485
Elevation: Unknown

CPT Date/Time: 2/7/2020 12:23:47 PM
Location: Crestview Tech Park Shop Door Additions
Job Number: P20-0072
Groundwater Not Encountered



Maximum Depth = 29.79 feet

Depth Increment = 0.066 feet

1 sensitive fine grained
2 organic material
3 clay
4 silty clay to clay
5 clayey silt to silty clay
6 sandy silt to clayey silt
7 silty sand to sandy silt
8 sand to silty sand
9 sand
10 gravelly sand to sand
11 very stiff fine grained (*)
12 sand to clayey sand (*)

C-2
C-2
Center

*Soil behavior type and SPT based on data from UBC-1983

LOG OF BORING SW-1

PROJECT: Shop Door Additions 5795 John Givens Road
METHOD: Direct Push
LOCATION: Crestview, FL
DRILLER: JS
PROJECT NO.: P20-0072
ENGR / GEOL: RCT
DATE: 02/07/20
SURFACE ELEVATION: Unknown

Elevation / Depth	Soil Symbols Sampler Symbols and Field Test Data	USCS	LOCATION / MATERIAL DESCRIPTION	▲ N Value (blows/ft) 20 40 60 80 / Atterberg Limits Natural Moisture PL MC LL 20 40 60 80	NATURAL MOISTURE (%)	ATTERBERG LIMITS (%) LIQUID LIMIT LL	PLASTIC LIMIT PL	PLASTICITY INDEX PI	PASSING #200 SIEVE (%)
0		SP-	Per Plan Brown Fine SAND with Trace Organics						
		SC	Brown Fine SAND with Some Root						
		SP	Tan Fine SAND						
		SP							
5		SC	Orange and Tan Clayey Fine SAND						
10									
15									

Water Level Est. Seasonal High GWL: ▽ Measured: ▼ Perched: ▼ **Notes:**
Water Observations: Groundwater Not Encountered

Seasonla High Grondwater Level Greater Than 10.0 Feet

N - SPT Data (Blows/Ft) P - Pocket Penetrometer (tsf)
Sample Key: ◪ SPT ■ Shelby Tube

SOUTHERN EARTH SCIENCES, inc.

LOG OF BORING P20-0072.GPJ SES PC FL.GDT 3/3/20

Important Information About Your

Geotechnical Engineering Report

Subsurface problems are a principal cause of construction delays, cost overruns, claims, and disputes.

The following information is provided to help you manage your risks.

Geotechnical Services Are Performed for Specific Purposes, Persons, and Projects

Geotechnical engineers structure their services to meet the specific needs of their clients. A geotechnical engineering study conducted for a civil engineer may not fulfill the needs of a construction contractor or even another civil engineer. Because each geotechnical engineering study is unique, each geotechnical engineering report is unique, prepared *solely* for the client. No one except you should rely on your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you —* should apply the report for any purpose or project except the one originally contemplated.

Read the Full Report

Serious problems have occurred because those relying on a geotechnical engineering report did not read it all. Do not rely on an executive summary. Do not read selected elements only.

A Geotechnical Engineering Report Is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of unique, project-specific factors when establishing the scope of a study. Typical factors include: the client's goals, objectives, and risk management preferences; the general nature of the structure involved, its size, and configuration; the location of the structure on the site; and other planned or existing site improvements, such as access roads, parking lots, and underground utilities. Unless the geotechnical engineer who conducted the study specifically indicates otherwise, do not rely on a geotechnical engineering report that was:

- not prepared for you,
- not prepared for your project,
- not prepared for the specific site explored, or
- completed before important project changes were made.

Typical changes that can erode the reliability of an existing geotechnical engineering report include those that affect:

- the function of the proposed structure, as when it's changed from a parking garage to an office building, or from a light industrial plant to a refrigerated warehouse,
- elevation, configuration, location, orientation, or weight of the proposed structure,
- composition of the design team, or
- project ownership.

As a general rule, *always* inform your geotechnical engineer of project changes—even minor ones—and request an assessment of their impact. *Geotechnical engineers cannot accept responsibility or liability for problems that occur because their reports do not consider developments of which they were not informed.*

Subsurface Conditions Can Change

A geotechnical engineering report is based on conditions that existed at the time the study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the report to determine if it is still reliable. A minor amount of additional testing or analysis could prevent major problems.

Most Geotechnical Findings Are Professional Opinions

Site exploration identifies subsurface conditions only at those points where subsurface tests are conducted or samples are taken. Geotechnical engineers review field and laboratory data and then apply their professional judgment to render an opinion about subsurface conditions throughout the site. Actual subsurface conditions may differ—sometimes significantly—from those indicated in your report. Retaining the geotechnical engineer who developed your report to provide construction observation is the most effective method of managing the risks associated with unanticipated conditions.

A Report's Recommendations Are *Not* Final

Do not overrely on the construction recommendations included in your report. *Those recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations only by observing actual

subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing construction observation.

Do Not Redraw the Engineer's Logs

Geotechnical engineers prepare final boring and testing logs based upon their interpretation of field logs and laboratory data. To prevent errors or omissions, the logs included in a geotechnical engineering report should *never* be redrawn for inclusion in architectural or other design drawings. Only photographic or electronic reproduction is acceptable, *but recognize that separating logs from the report can elevate risk.*

Give Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors that the report was not prepared for purposes of bid development and that the report's accuracy is limited; encourage them to confer with the geotechnical engineer who prepared the report (a modest fee may be required) and/or to conduct additional study to obtain the specific types of information they need or prefer. A prebid conference can also be valuable. *Be sure contractors have sufficient time* to perform additional study. Only then might you be in a position to give contractors the best information available to you, while requiring them to at least share some of the financial responsibilities stemming from unanticipated conditions.

Read Responsibility Provisions Closely

Some clients, design professionals, and contractors do not recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations" many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental findings, conclusions, or recommendations; e.g., about the likelihood of encountering underground storage tanks or regulated contaminants. *Unanticipated environmental problems have led to numerous project failures.* If you have not yet obtained your own geoenvironmental information, ask your geotechnical consultant for risk management guidance. *Do not rely on an environmental report prepared for someone else.*

Obtain Professional Assistance To Deal with Mold

Diverse strategies can be applied during building design, construction, operation, and maintenance to prevent significant amounts of mold from growing on indoor surfaces. To be effective, all such strategies should be devised for the *express purpose* of mold prevention, integrated into a comprehensive plan, and executed with diligent oversight by a professional mold prevention consultant. Because just a small amount of water or moisture can lead to the development of severe mold infestations, a number of mold prevention strategies focus on keeping building surfaces dry. While groundwater, water infiltration, and similar issues may have been addressed as part of the geotechnical engineering study whose findings are conveyed in this report, the geotechnical engineer in charge of this project is not a mold prevention consultant; ***none of the services performed in connection with the geotechnical engineer's study were designed or conducted for the purpose of mold prevention. Proper implementation of the recommendations conveyed in this report will not of itself be sufficient to prevent mold from growing in or on the structure involved.***

Rely, on Your ASFE-Member Geotechncial Engineer for Additional Assistance

Membership in ASFE/The Best People on Earth exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you ASFE-member geotechnical engineer for more information.

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