City of Tampa
Jane Castor, Mayor

Contract Administration Department
306 East Jackson Street, 4N
Tampa, FL 33602

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ADDENDUM 3
DATE: April 7, 2023

Contract: **22-C-00001; Tampa Multimodal Network and Safety Improvements Project (West River District BUILD)**

Item 1 – Schedule update; The Committee meeting originally scheduled for April 10, 2023 has been moved to April 13, 2023. Since only two submissions were received, the meeting will simply certify/"short-list" the two firms.

Item 2 – Attached as a Reference Document is a copy of the Geotechnical Data Report from the Tampa Hillsborough Expressway Authority.

All parts of the RFQ & RFP not in conflict with this Addendum shall remain in full force and effect.

Questions are to be e-mailed to ContractAdministration@tampagov.net.

Jim Greiner

Jim Greiner, P.E., Contract Management Supervisor

July 18, 2022

HNTB Corporation
One Tampa City Center
201 North Franklin Street, Suite 1200
Tampa, Florida 33602

Attn: Mr. James E. Drapp, P.E.

RE: Geotechnical Data Report
Tampa Hillsborough Expressway Authority
South Selmon Capacity Project Design-Build
From Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-011

Mr. Drapp:

Tierra has completed geotechnical data collection for the above referenced project. The results of our field exploration program and laboratory testing performed are presented herein.

Tierra appreciates the opportunity to be of service to HNTB and THEA on this project. If you have any questions or comments regarding this report, please contact our office at your earliest convenience.

Sincerely,

TIERRA, INC.

Dylan A. Nelson, E.I.
Geotechnical Engineering Intern

Kevin H. Scott, P.E.
Senior Geotechnical Engineer
Florida License No. 65514

Larry P. Moore, P.E.
Principal Geotechnical Engineer
Florida License No. 47673

Tierra, Inc.
7351 Temple Terrace Highway • Tampa, Florida 33637
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Table of Contents
Page 1 of 3

Table of Contents
Page 2 of 3

Table of Contents
Page 3 of 3

1.0 PROJECT INFORMATION

1.1 Project Authorization

Authorization to proceed with this project was issued by HNTB in accordance with the Subconsultant Agreement.

1.2 Project Description

The project consists of preparing conceptual plans that will support a Design-Build RFP for Selmon Expressway (SR 618) improvements from Himes Avenue to Whiting Street in Hillsborough County, Florida. Based on our understanding, the project improvements consist of approximately 26 bridge structures, retaining wall structures, roadway improvements and drainage improvements.

The objective of this study was to obtain information concerning the existing subsurface conditions at the bridge locations, retaining wall locations and requested roadway locations within the project limits. This report will be included in the Design-Build RFP and will be provided to the short-listed design-build teams as a reference document.

2.0 PURPOSE AND SCOPE OF SERVICES

The geotechnical study was performed to obtain information on the existing subsurface conditions at the proposed bridge locations, retaining wall locations and requested roadway locations for inclusion in the Design-Build RFP. The following services were provided:

1. Reviewed published potentiometric information obtained from the “Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida” maps published by the United States Geological Survey (USGS).

2. Reviewed existing geotechnical data provided by the Tampa Hillsborough Expressway Authority (THEA).

3. Conducted a visual reconnaissance of the project site and coordinated utility clearance via Sunshine State One Call.

4. Performed a geotechnical field study for the proposed bridge and wall improvements consisting of Standard Penetration Test (SPT) borings.

5. Performed a geotechnical field study at requested roadway improvement locations consisting of hand auger borings.

6. Measured groundwater depths at the boring locations. Estimated Seasonal High Groundwater (SHGWT) levels at the hand auger boring locations.

7. Performed rock coring at selected SPT boring locations. Recorded the core depth, time of coring, percent recovery (REC) and rock quality designation (RQD) for each core sample.

8. Visually examined and classified soil and rock samples recovered using the Unified Soil Classification System (USCS) for the SPT borings and American Association of State Highway and Transportation Officials (AASHTO) soil classification system or the hand auger borings.

9. Conducted laboratory testing on selected representative samples to confirm visual soil classifications, determine rock characteristics and evaluate the corrosive nature of the soil and water encountered.

10. Coordinated with the project surveyor to obtain survey data (locations and elevations) for the borings performed (excluding the bridge SPT borings performed within the Hillsborough River).

11. Prepared this engineering data report, which summarizes the course of study pursued, the field and laboratory data generated, and the subsurface conditions encountered in the vicinity of the proposed improvements.

3.0 REVIEW OF PUBLISHED DATA

3.1 Review of Potentiometric Surface Information

Based on a review of the “Potentiometric Surface of the Upper Floridan Aquifer, West-Central Florida” maps published by the USGS, the potentiometric surface elevation at the bridge sites is reported up to approximately +15 feet, NGVD 29.

Artesian flow conditions were encountered during field explorations at borings B-HR-1, B-HR-2 and B-HR-3 performed within the Hillsborough River for the SR 618 over Downtown Viaduct Bridge. The artesian flow conditions within these borings were encountered at elevations ranging from approximately -69 to -90 feet, NAVD 88. The borings encountered artesian head elevations ranging from approximately +4 to +6 feet, NAVD 88. The approximate elevations of the artesian flow conditions encountered during the field explorations and the water head measurements are presented on the **Report of Core Borings Sheets** in **Appendix M**.

3.2 Review of Existing Geotechnical Data

Tierra reviewed existing SPT boring data provided by THEA and determined the applicability of the existing data to the proposed bridge structures. The existing soil boring data provided by THEA is provided in **Appendices A** through **M** of this report.

4.0 SUBSURFACE EXPLORATION

4.1 Boring Location Plan and Utility Clearance

Prior to commencing our subsurface explorations, a boring location plan was generated based on a review of current project design files, general guidance provided in the FDOT "Soils and Foundation Handbook", and our engineering judgment. The borings were located by Tierra in the field using hand-held, non-survey grade Global Positioning System (GPS) equipment. Following completion of the borings, the borings were survey located by the project surveyor (excluding the bridge SPT borings performed within the Hillsborough River). The project surveyor provided State Plane coordinates and elevations of the boring locations. The boring locations are depicted on the **Report of Core Borings** sheets presented in **Appendices A** through **N** and **Boring Location Plan** and **Roadway Soil Profiles** sheets in **Appendix O**.

Utility clearances were coordinated by Tierra through Sunshine State One Call and updated as required prior to performing the soil borings in order to reduce the potential for damage to any underground utilities during the boring process.

4.2 Bridge, Wall and Roadway Borings

Tierra performed over seventy (70) SPT borings at the bridge locations to depths ranging from approximately 60 to 120 feet below existing grades/existing water surface, over sixty (60) SPT borings at the wall locations to depths ranging from approximately 20 to 45 feet and over twenty (20) hand auger borings to depths ranging from approximately 2 to 6 feet below existing grades along selected portions of the roadway alignment. The SPT borings were performed using a mechanical drill rig using Bentonite mud drilling procedures. The soil sampling was performed in general accordance with the American Society for Testing and Materials (ASTM) test designation D-1586. The initial 2 to 6 feet of most SPT borings were manually advanced with a hand auger to verify utility clearances. Bridge SPT boring resistance N-values were then taken continuously to a depth of 17½ feet and on intervals of 2½ feet thereafter to the boring termination depths. Wall SPT boring resistance N-values were then taken continuously to a depth of 10 feet and on intervals of 5 feet thereafter to the boring termination depths. As each soil type was revealed, representative samples were placed in air-tight containers and returned to our office for confirmation of the field classification by a geotechnical engineer.

The hand auger borings were performed by manually twisting and advancing a bucket auger into the ground, typically in 6-inch increments. As each soil type was revealed, representative samples were placed in air-tight containers and returned to our office for confirmation of the field classification by a geotechnical engineer. The results of the bridge and wall SPT borings performed for this geotechnical study are presented on the **Report of Core Borings** sheets in **Appendices A** through **N**. The results of the roadway hand auger borings performed are presented on the **Boring Location Plan** and **Roadway Soil Profiles** sheets in **Appendix O**.

4.3 Rock Coring

Rock coring was performed at selected bridge SPT boring locations to obtain core samples for quality evaluation of the limestone encountered in the vicinity of the bridge sites. The coring operations were performed in general accordance with ASTM test designation D-2113. Core depths and coring duration times were recorded for each rock core run. The recovered rock cores were transported to Tierra's laboratory and removed from the inner barrel for documentation, classification and testing. The rock core information is presented on the **Report of Core Borings** sheets in **Appendices A** through **N**. **Rock Core Photographs** are provided in **Appendix R.**

5.0 LABORATORY TESTING

5.1 General

Representative soil samples collected from the borings performed along the project alignment were classified and stratified in general accordance with the USCS or AASHTO soil classification system. Our classification was based on visual observations, using the results from the laboratory testing as confirmation.

5.2 Test Designation

The following list summarizes the laboratory tests performed by Tierra and the respective test methods utilized.

- Grain-Size Analyses/Fines Content - The grain-size analyses/fines content tests were conducted in general accordance with the AASHTO test designation T-088 (ASTM test designation D-422).

- Atterberg Limits - The liquid limit and the plastic limit tests ("Atterberg Limits") were conducted in general accordance with the AASHTO test designations T-089 and T-090, respectively (ASTM test designation D-4318).

- Natural Moisture Content - The moisture content tests were conducted in general accordance with the AASHTO test designation T-265 (ASTM test designation D-2216).

- Organic Content – The organic content tests were performed in general accordance with AASHTO T-267.

- Environmental Corrosion - Environmental corrosion tests were conducted in general accordance with the FDOT test designations FM 5-550, FM 5-551, FM 5-552 and FM 5-553.

- Splitting Tensile - The splitting tensile tests were conducted in general accordance with the ASTM test designation D-3967.

- Unconfined Compression - The unconfined compression tests were conducted in general accordance with the ASTM test designation D2938.

Summaries of the laboratory test results are provided on the **Report of Core Borings** sheets in **Appendices A** through **N** and in the **Summary of Laboratory Testing Results for Environmental Classification** and **Summary of Laboratory Rock Core Strength Testing** tables in **Appendix Q**.

6.0 RESULTS OF SUBSURFACE EXPLORATION

6.1 General Soil Conditions

The soil borings generally encountered sandy soils underlain by clayey soils underlain by calcareous clay to weathered limestone to the boring termination depths. The soil types encountered during the subsurface exploration have been assigned a soil description followed by a USCS or AASHTO classification as shown on the **Report of Core Borings** sheets in **Appendices A** through **N** and **Roadway Soil Profiles** sheets in **Appendix O**.

A geotechnical engineer bases soil stratification on a visual review of the recovered samples, laboratory testing and interpretation of the field boring logs. The boring stratification lines represent the approximate boundaries between soil types of significantly different engineering properties; however, the actual transition may be gradual. In some cases, small variations in properties not considered pertinent to our engineering evaluation may have been abbreviated or omitted for clarity. The boring profiles represent the conditions at the particular boring location and variations did occur and should be expected between the borings.

6.2 Groundwater Levels and Seasonal High Groundwater Estimates

The groundwater table, when encountered, was measured at the boring locations during our field exploration. The depths to the encountered groundwater table are presented on the **Report of Core Borings** sheets in **Appendices A** through **N** and **Roadway Soil Profiles** sheets in **Appendix O**. Within some SPT borings, the groundwater table was not apparent prior to the introduction of drilling fluid, which generally occurred at a depth of approximately 10 feet below existing grades. Therefore, Groundwater Not Apparent (GNA) is depicted adjacent to these soil profiles on the **Report of Core Borings** sheets. In addition, the groundwater table was not encountered prior to the boring termination depth within hand auger borings SH-144RT and SH-174LT. As a result, GNE (Groundwater Not Encountered) is shown adjacent to these soil profiles.

The Seasonal High Groundwater Table (SHGWT) level was estimated at the hand auger borings performed along requested areas of the project alignment. The SHGWT levels at the hand auger boring locations were estimated based on a review of the soil samples recovered, groundwater levels observed in the borings, USDA Soil Survey information and the surrounding topography. The results of the estimated SHGWT levels at these

boring locations are presented on the **Roadway Soil Profiles** sheets in **Appendix O** and summarized on the **Summary of Roadway Seasonal High Groundwater Table Estimates** in **Appendix P.**

When reviewing the provided groundwater information it should be noted that groundwater levels tend to fluctuate during periods of prolonged drought and extended rainfall and may be affected by man-made influences. The estimated USDA seasonal high groundwater levels are based upon conditions that existed at the project site when the information was published. The USDA estimates do not account for conditions following the altering of the area due to development/construction, if any. In addition, a seasonal effect will also occur in which higher groundwater levels are normally recorded during the rainy seasons.

7.0 ENVIRONMENTAL CLASSIFICATION

Laboratory tests were performed on soil samples obtained from the bridge SPT borings and water samples obtained from the Hillsborough River and Tampa Bay to determine the superstructure and substructure environmental classification. The recommended environmental classifications for each bridge are included on the **Report of Core Borings** sheets in **Appendices A** through **M** and in the **Summary of Laboratory Testing Results for Environmental Classification** table in **Appendix Q**.

It should be noted that the recommended environmental classifications were determined in accordance with the laboratory test results and guidelines provided the FDOT Structures Design Guidelines (SDG). Bridge structures that are proposed within 2,500 feet of Tampa Bay or the Hillsborough River were classified as Extremely Aggressive due to the chloride content of the water samples obtained from Tampa Bay and the Hillsborough River.

8.0 REPORT LIMITATIONS

Our services have been performed and our findings obtained in accordance with generally accepted geotechnical engineering principles and practices at the time of this report. This company is not responsible for the conclusions, opinions or recommendations made by others based on these data.

The scope of the exploration was intended to provide information related to the soil conditions in the vicinity of the proposed South Selmon Capacity project. This report presents the geotechnical conditions based on the data obtained from the soil borings performed at the locations indicated in this report and does not reflect any variations which may occur between these borings. If any variations become evident during the course of design and/or construction, a re-evaluation of the conditions contained in this report is the responsibility of the design-build team.

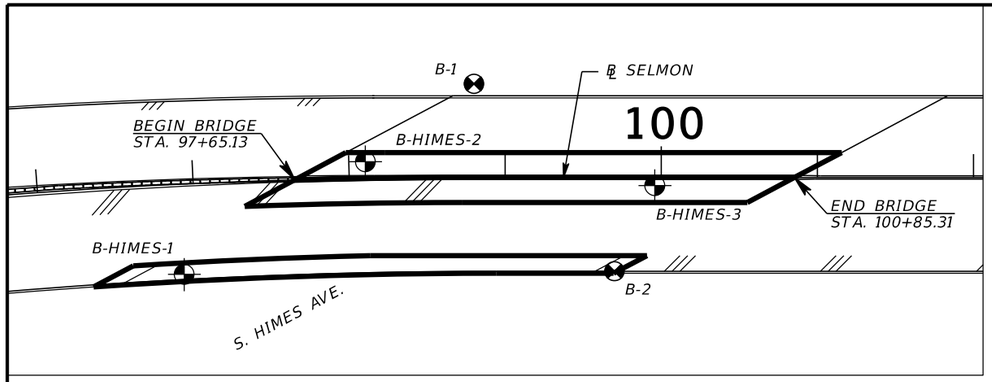
The data presented in this report is for informational purposes only. Once the design has been established, project-specific geotechnical evaluations and design analyses should be completed by the design-build team for the construction of the project. It should be noted that the design-build team will be responsible for the final design and their own interpretation of the data presented in this report.

The scope of services, included herein, did not include any environmental assessment for the presence or absence of hazardous or toxic materials in the soil, surface water, groundwater, air, on the site, below, and around the site. Any statements in this report or on the boring logs regarding odors, colors, unusual or suspicious items and conditions are strictly for the information of HNTB and THEA.

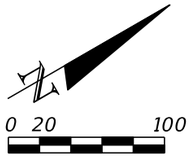
APPENDIX A

Report of Core Borings Sheets – SR 618 over Himes Ave.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

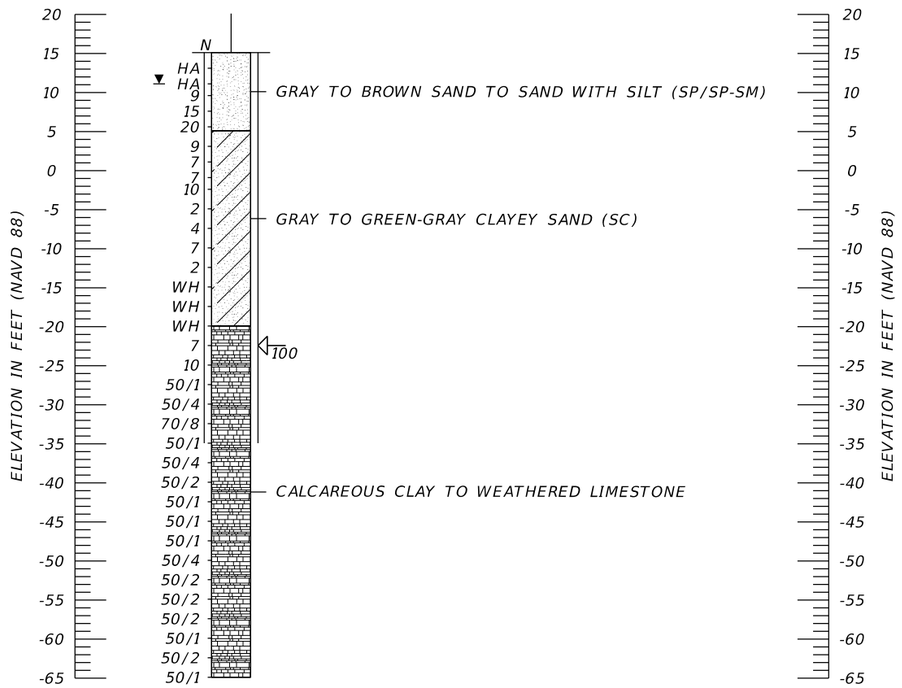
ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (RESISTIVITY = 5,000 OHM-CM)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	5,000 TO 8,800 OHM-CM
CHLORIDES	<5 PPM
SULFATES	<5 PPM
pH	7.6 TO 7.9

BOR #	B-HIMES-1
STA.	96+88
REF.	℄ SELMON
OFF.	62' RT.
ELEV.	15.1'
DATE	3/10/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -64.9 FT (NAVD 88)
LATITUDE: N 27.90466
LONGITUDE: W 82.50229

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100308 & 100309

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

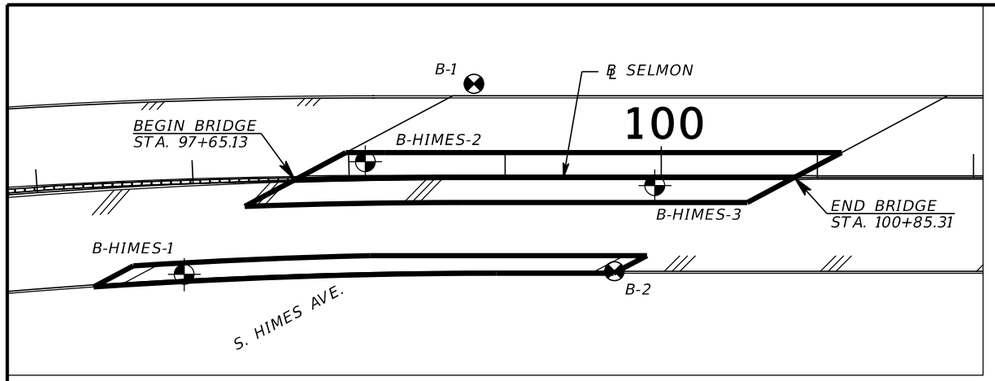
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1) HIMES AVENUE

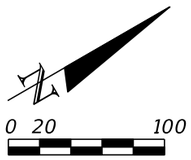
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



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CHLORIDES	<5 PPM
SULFATES	<5 PPM
pH	7.6 TO 7.9

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
- GRAY TO GREEN-GRAY CLAYEY SAND (SC)
- DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
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WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200 NMC LL PI	PERCENT PASSING #200 SIEVE NATURAL MOISTURE CONTENT (%) LIQUID LIMIT (%) PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⌖	APPROXIMATE SPT BORING LOCATION
⊗	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
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REC	PERCENT RECOVERY (%)
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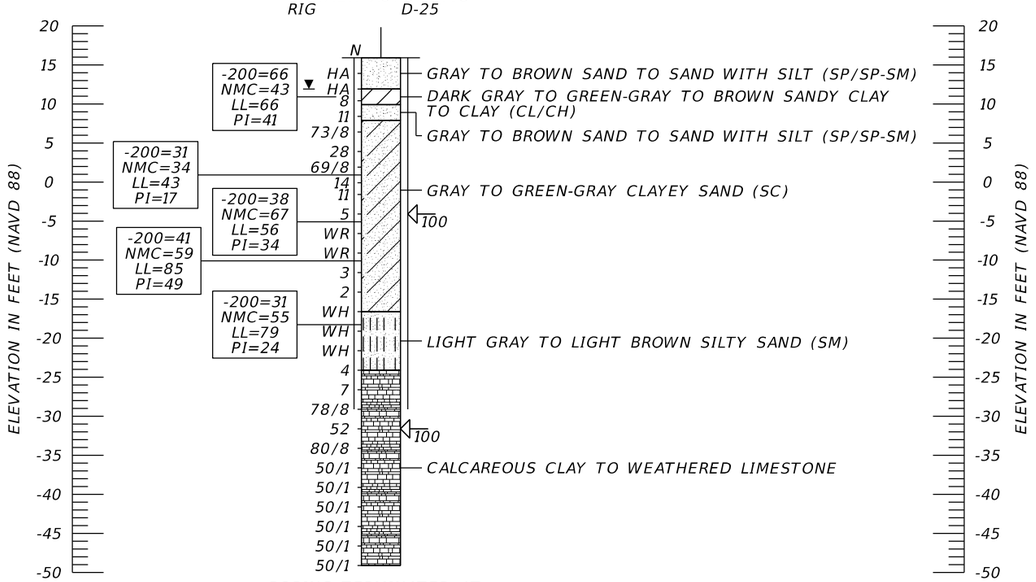
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

BOR #	B-HIMES-2
STA.	98+11
REF.	℄ SELMON
OFF.	11' LT.
ELEV.	15.9
DATE	3/8/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



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LONGITUDE: W 82.50231

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
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FIRM	4 to 8	3 to 6
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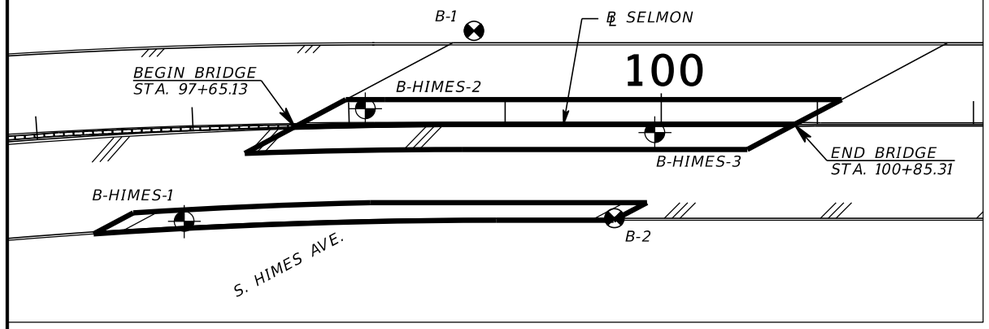
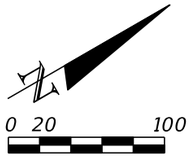


BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (RESISTIVITY = 5,000 OHM-CM)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	5,000 TO 8,800 OHM-CM
CHLORIDES	<5 PPM
SULFATES	<5 PPM
pH	7.6 TO 7.9

LEGEND

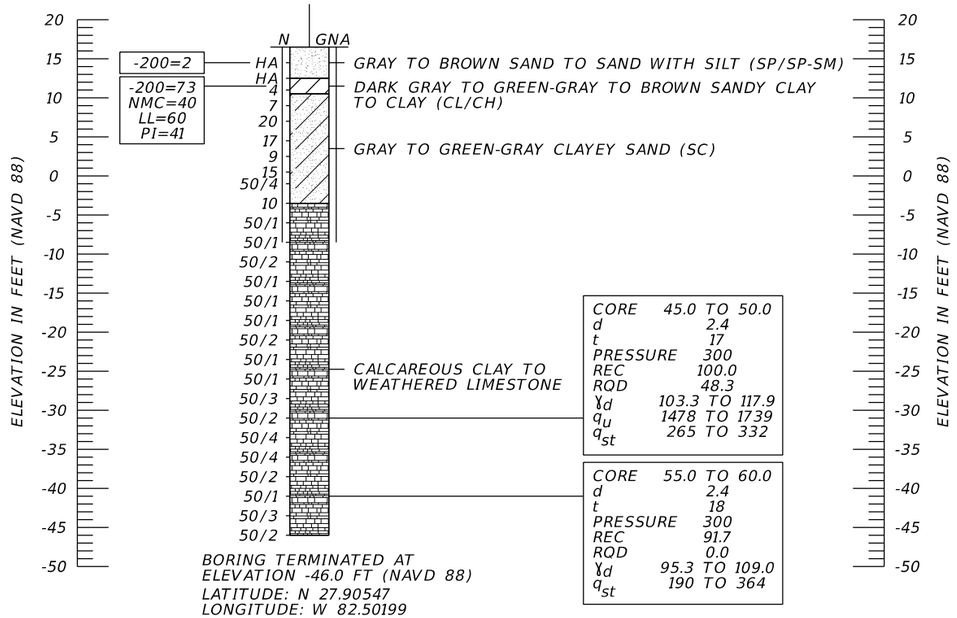
- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
- GRAY TO GREEN-GRAY CLAYEY SAND (SC)
- DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⌖	APPROXIMATE SPT BORING LOCATION
⊗	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
←100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

BOR #	B-HIMES-3
STA.	99+96
REF.	℄ SELMON
OFF.	5' RT.
ELEV.	16.5
DATE	3/9/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



CORE	45.0 TO 50.0
d	2.4
t	17
PRESSURE	300
REC	100.0
RQD	48.3
γ_d	103.3 TO 117.9
q_u	1478 TO 1739
q_{st}	265 TO 332

CORE	55.0 TO 60.0
d	2.4
t	18
PRESSURE	300
REC	91.7
RQD	0.0
γ_d	95.3 TO 109.0
q_{st}	190 TO 364

BORING TERMINATED AT ELEVATION -46.0 FT (NAVD 88)
LATITUDE: N 27.90547
LONGITUDE: W 82.50199

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100308 & 100309

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

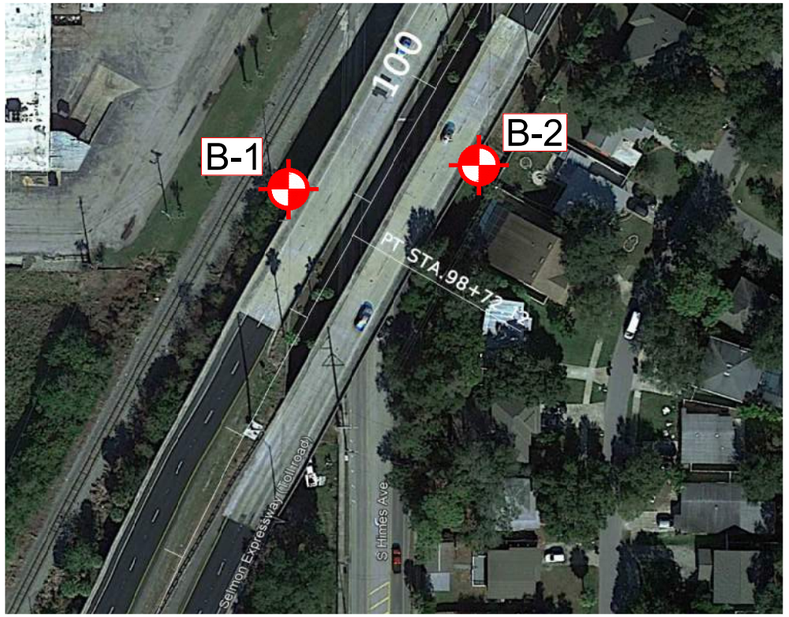
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (3) HIMES AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE:

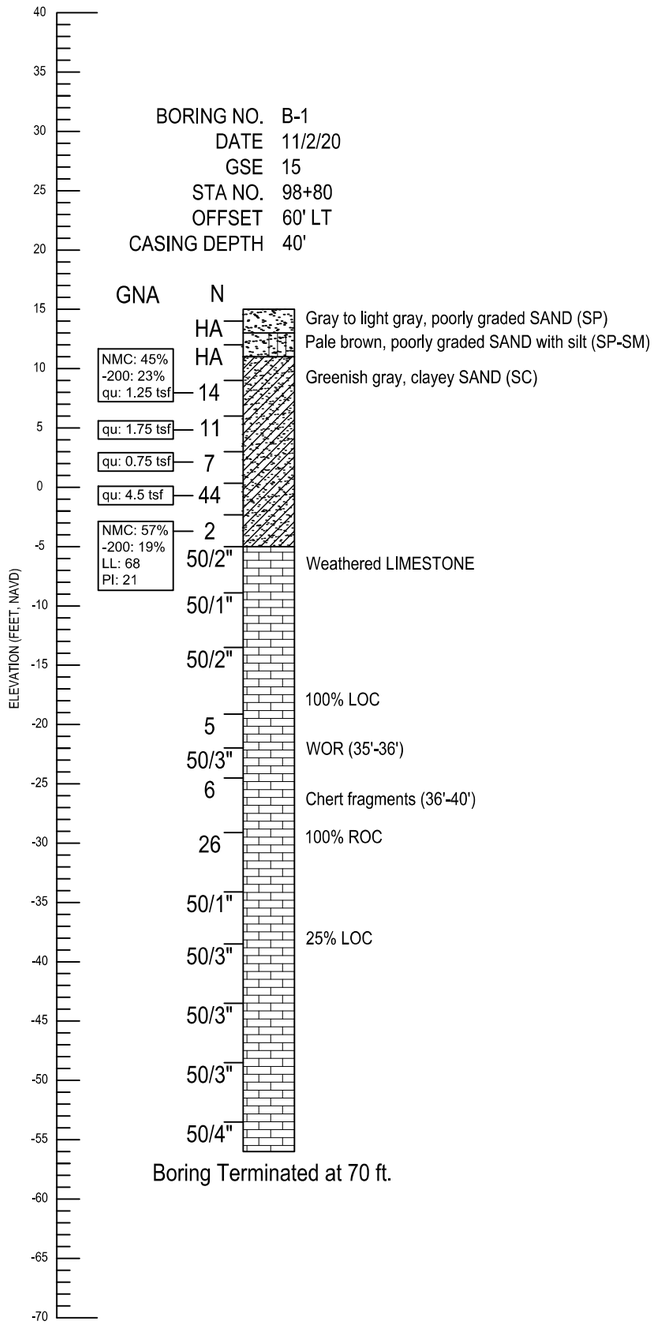
CONCRETE: MODERATELY AGGRESSIVE

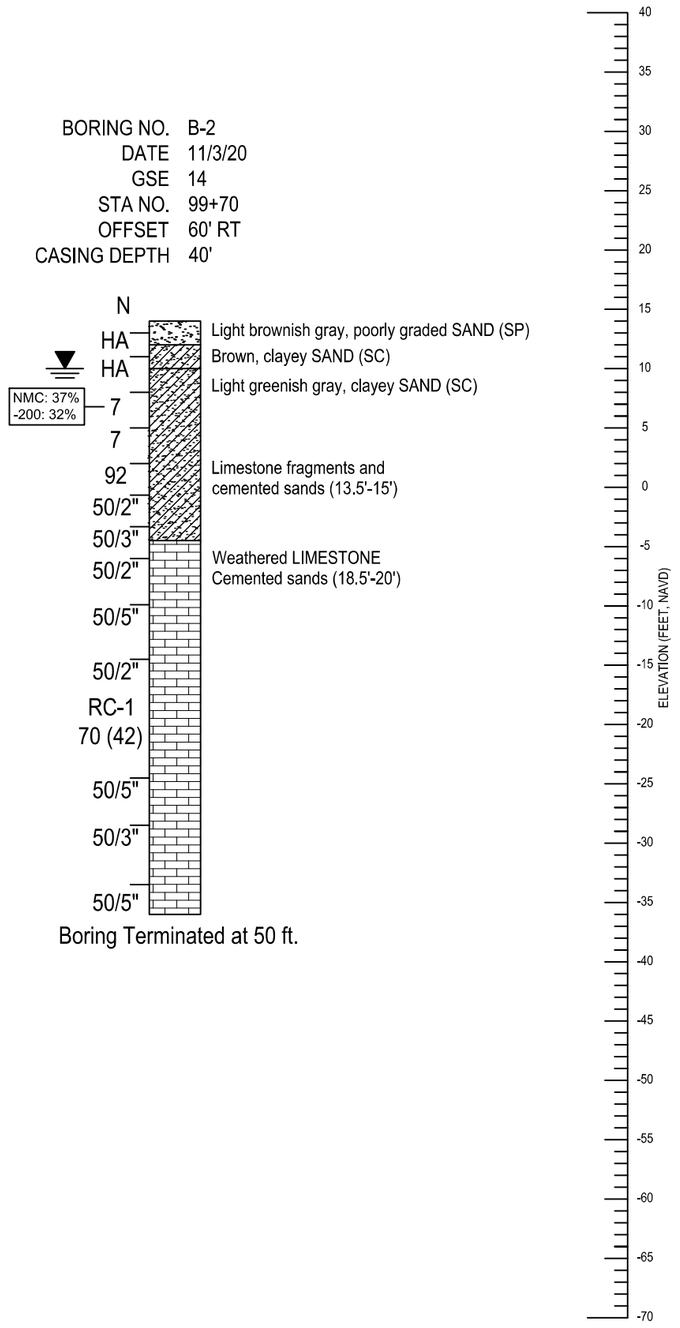
STEEL: EXTREMELY AGGRESSIVE (pH = 5.8)

SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

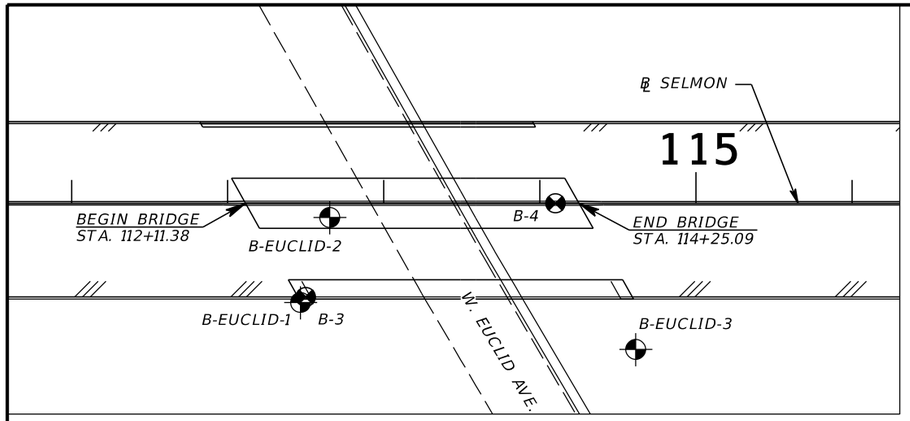
REPORT OF CORE BORINGS HIMES AVE

SHEET NO. 3

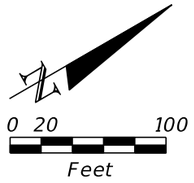
APPENDIX B

Report of Core Borings Sheets – SR 618 over Euclid Ave.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	12,000 TO 24,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.5 TO 7.7

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN TO BLUE-GRAY CLAYEY SAND (SC)
- BROWN TO BLUE-GRAY SANDY CLAY TO CLAY OCCASIONALLY WITH LIMESTONE FRAGMENTS (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

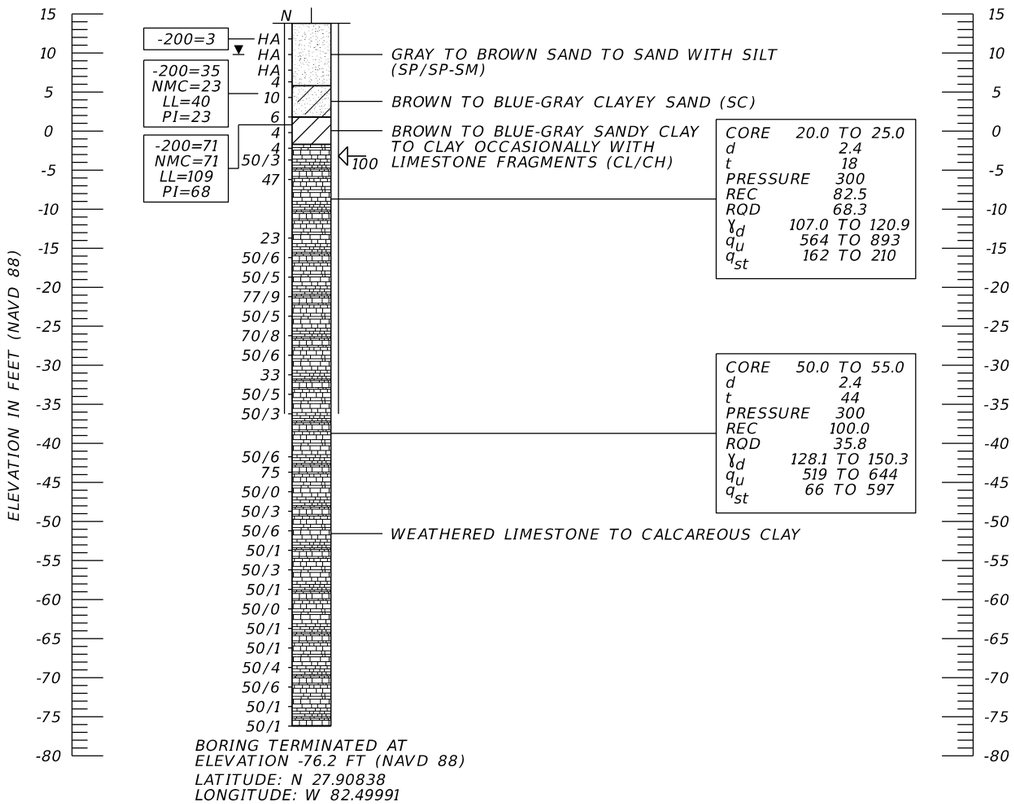
- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BOR #	B-EUCLID-1
STA.	112+47
REF.	℄ SELMON
OFF.	64' RT.
ELEV.	13.8'
DATE	10/25/2021
DRILLER	D. STAKELIN
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -76.2 FT (NAVD 88)
LATITUDE: N 27.90838
LONGITUDE: W 82.49991

BRIDGE NOS. 100310 & 100311

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

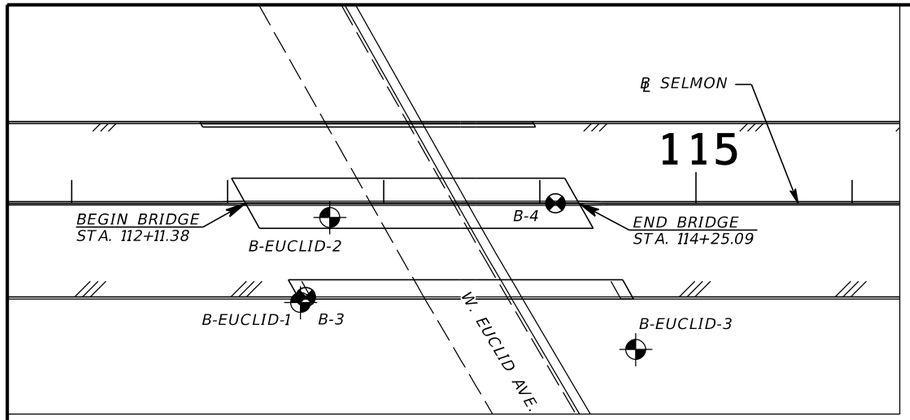
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1) W. EUCLID AVENUE

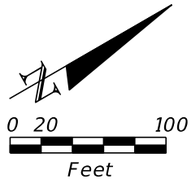
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



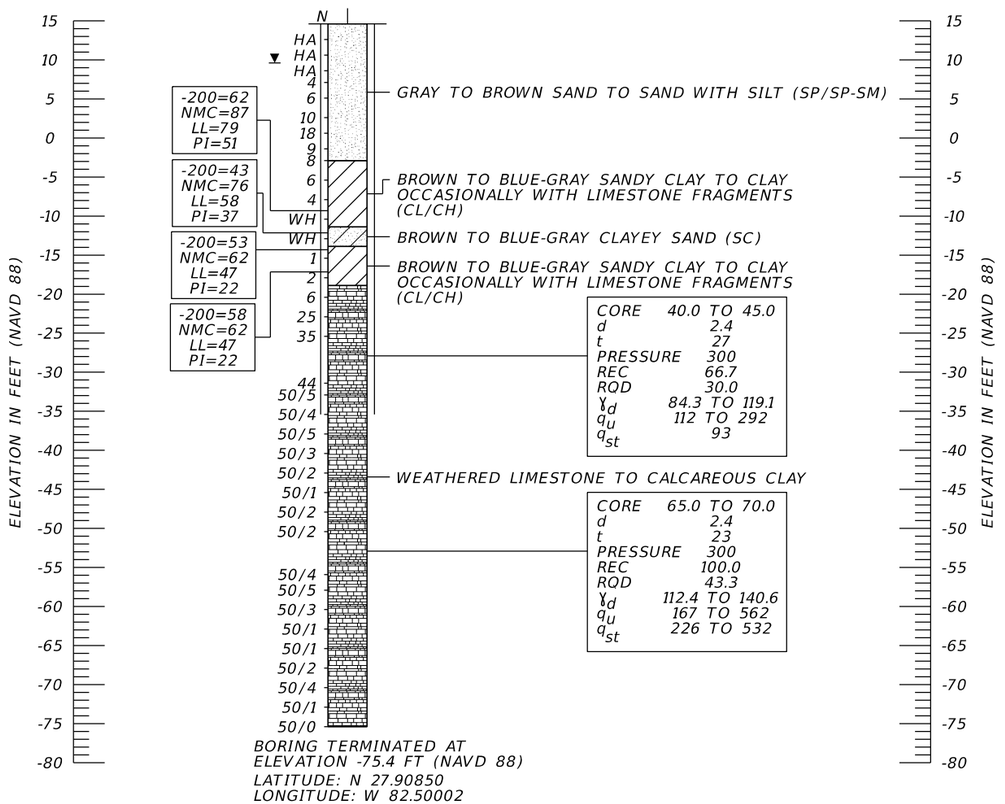
BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

BOR #	B-EUCLID-2
STA.	112+65
REF.	℄ SELMON
OFF.	9' RT.
ELEV.	14.6'
DATE	10/28/2021
DRILLER	D. STAKELIN
HAMMER	AUTOMATIC
RIG	D-25



ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	12,000 TO 24,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.5 TO 7.7

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN TO BLUE-GRAY CLAYEY SAND (SC)
- BROWN TO BLUE-GRAY SANDY CLAY TO CLAY OCCASIONALLY WITH LIMESTONE FRAGMENTS (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100310 & 100311

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

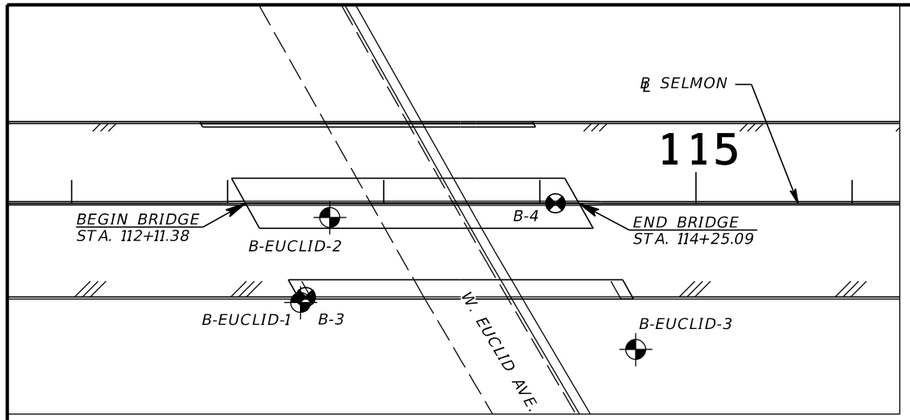
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) W. EUCLID AVENUE

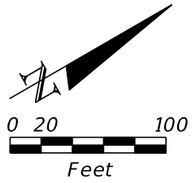
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



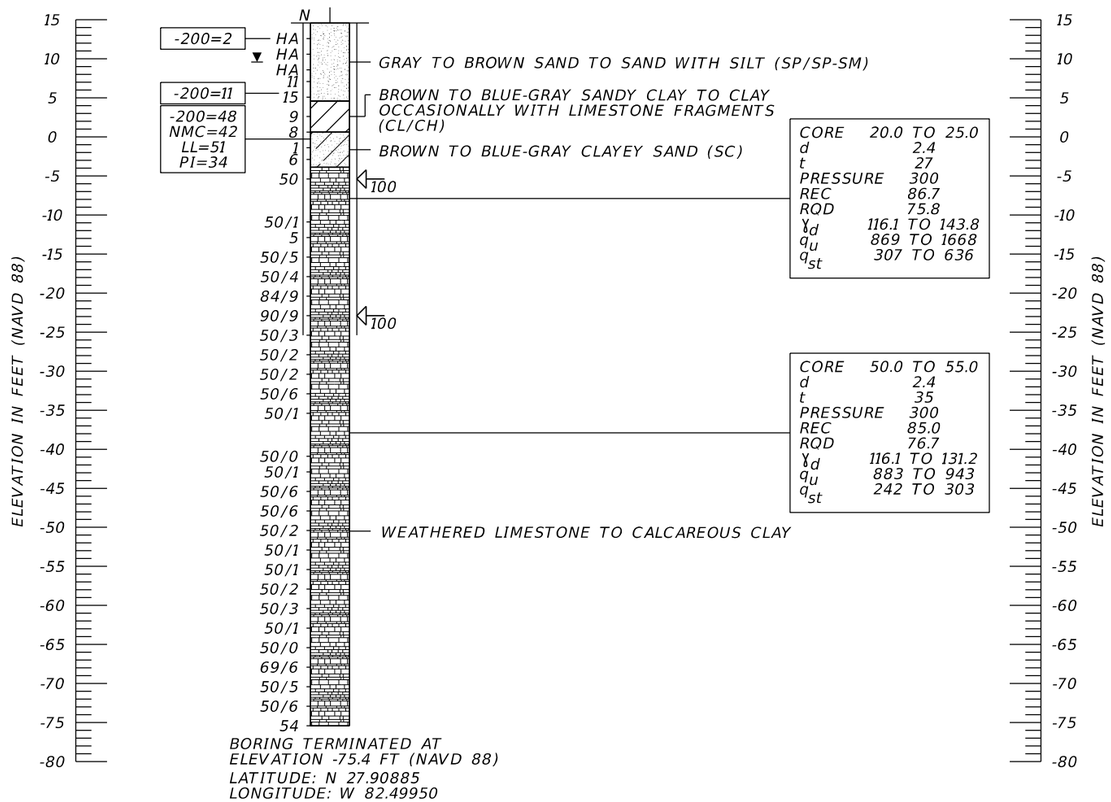
BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

BOR #	B-EUCLID-3
STA.	114+61
REF.	℄ SELMON
OFF.	94' RT.
ELEV.	14.6'
DATE	11/1/2021
DRILLER	D. STAKELIN
HAMMER	AUTOMATIC
RIG	D-25



ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	12,000 TO 24,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.5 TO 7.7

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN TO BLUE-GRAY CLAYEY SAND (SC)
- BROWN TO BLUE-GRAY SANDY CLAY TO CLAY OCCASIONALLY WITH LIMESTONE FRAGMENTS (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
⊗	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
⊲100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100310 & 100311

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

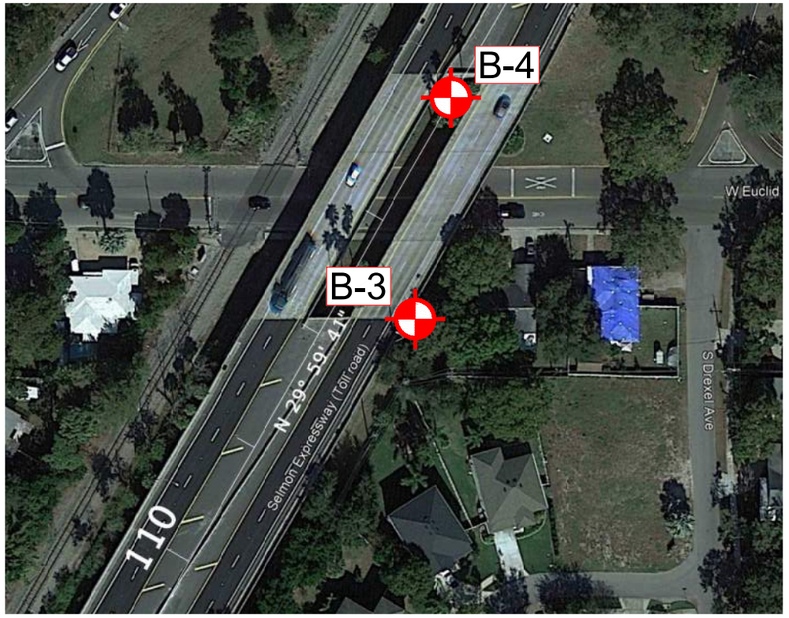
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (3) W. EUCLID AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE:

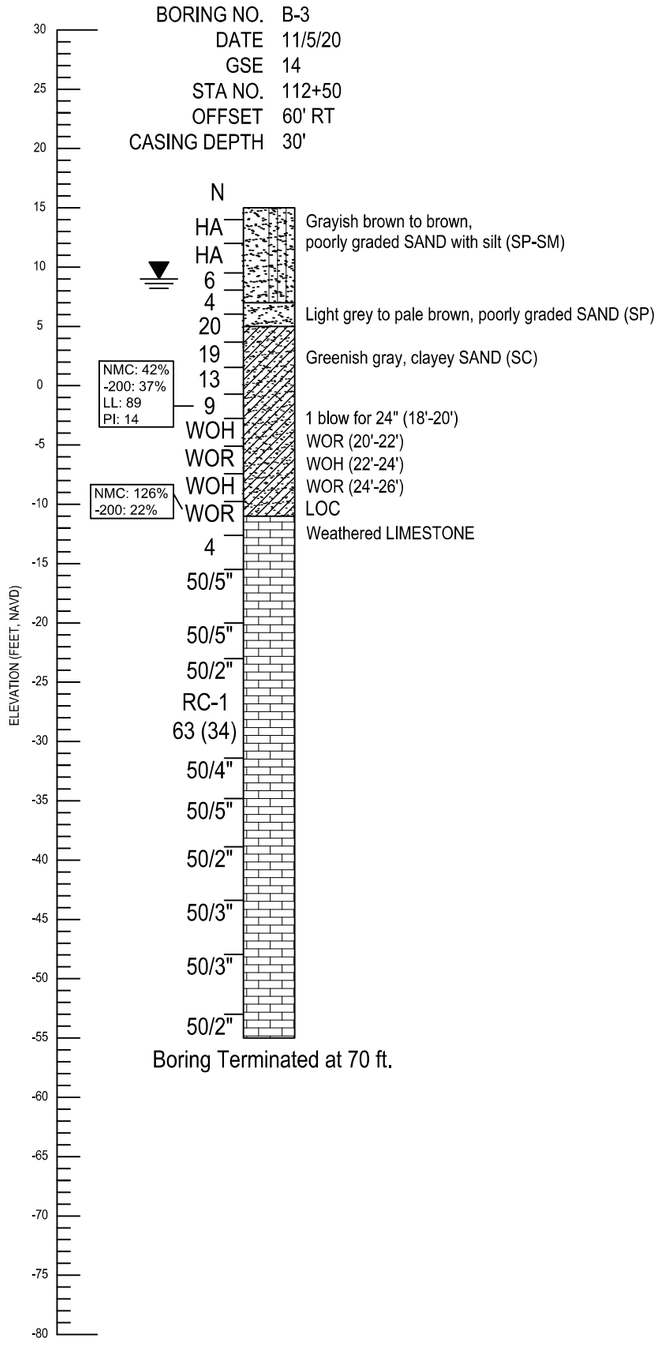
CONCRETE: SLIGHTLY AGGRESSIVE

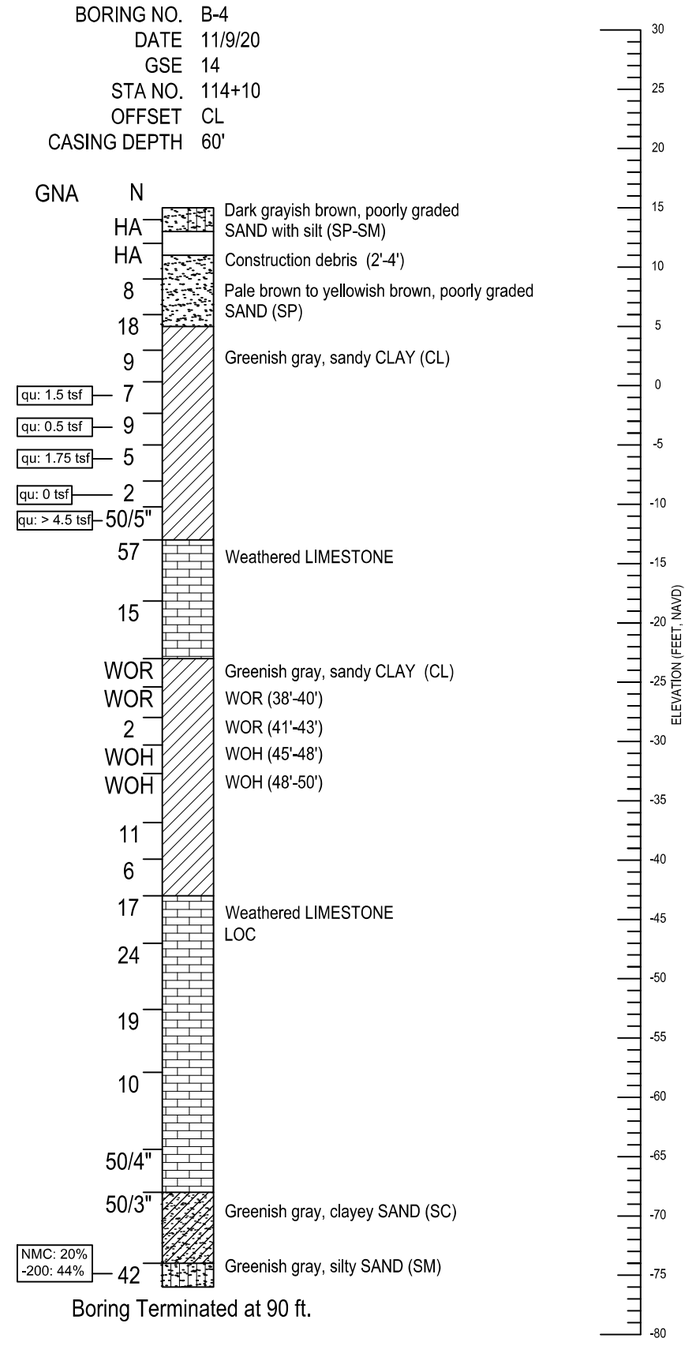
STEEL: SLIGHTLY AGGRESSIVE

SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

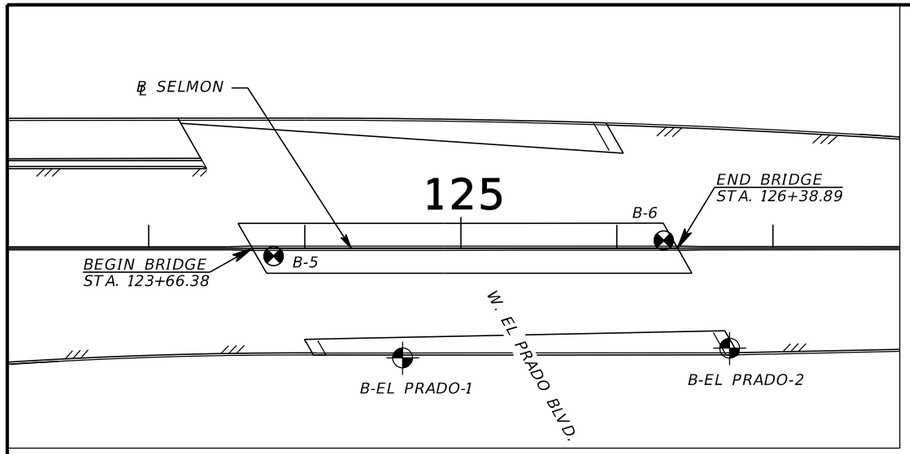
REPORT OF CORE BORINGS EUCLID AVE

SHEET NO. 4

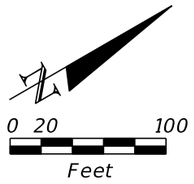
APPENDIX C

Report of Core Borings Sheets – SR 618 over El Prado Blvd.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,000 TO 4,300 OHM-CM
CHLORIDES	15 TO 45 PPM
SULFATES	<5 TO 63 PPM
pH	6.3 TO 7.6

WATER TEST RESULTS: (TAMPA BAY)

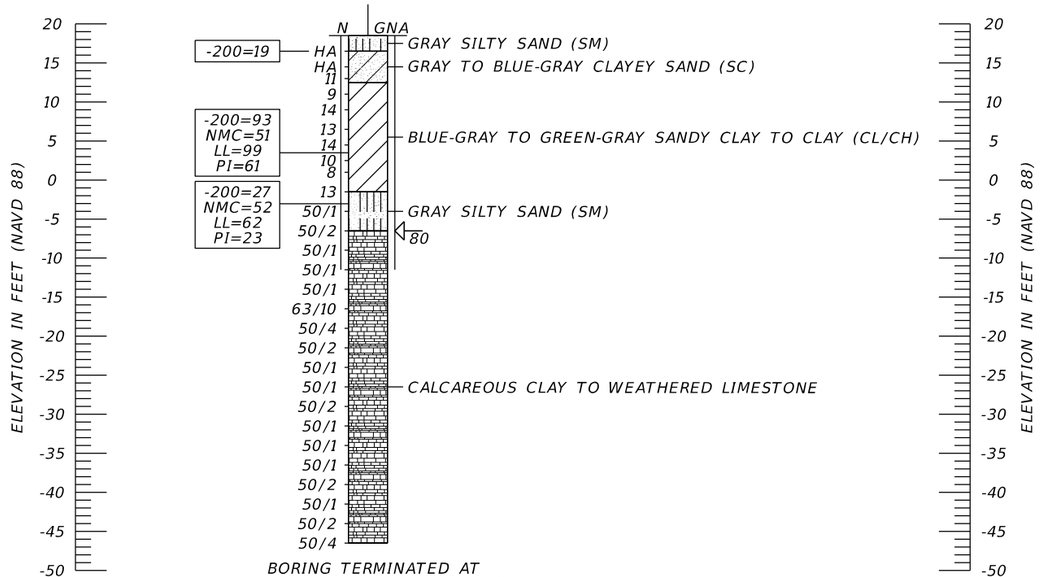
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- GRAY TO BLUE-GRAY CLAYEY SAND (SC)
- BLUE-GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- BLUE-GRAY INDURATED SILT (MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⌖	APPROXIMATE SPT BORING LOCATION
⊗	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

BOR # B-EL PRADO-1
STA. 124+63
REF. ℄ SELMON
OFF. 70' RT.
ELEV. 18.5
DATE 3/11/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -46.5 FT (NAVD 88)
LATITUDE: N 27.91127
LONGITUDE: W 82.49802

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100312 & 100313

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

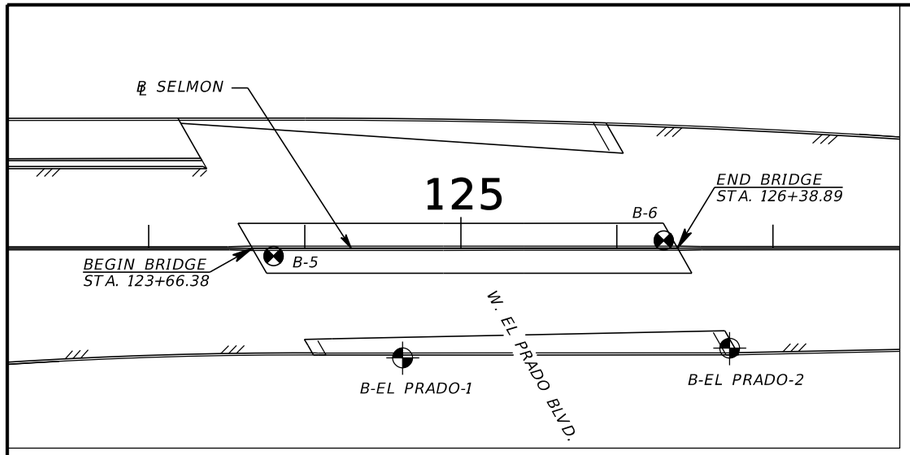
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

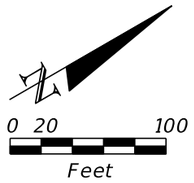
SHEET TITLE: REPORT OF CORE BORINGS (1) W. EL PRADO BLVD.

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

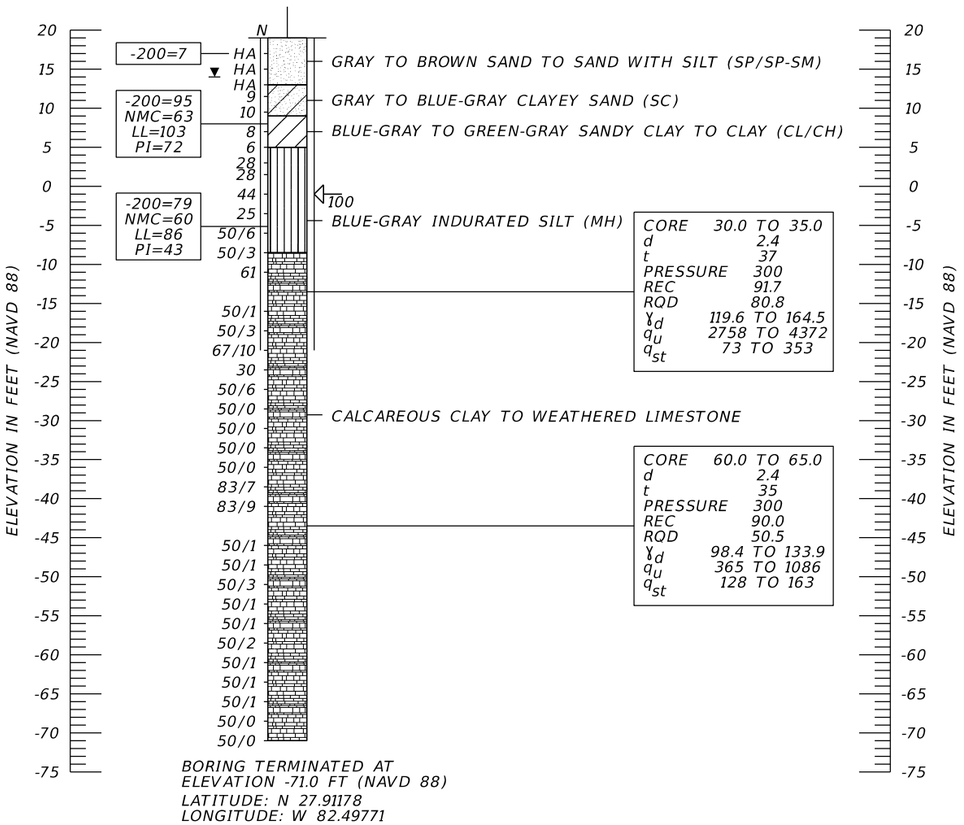
SHEET NO.





BORING LOCATION PLAN

BOR # B-EL PRADO-2
STA. 126+72
REF. ℄ SELMON
OFF. 64' RT.
ELEV. 19.0'
DATE 11/3/2021
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -71.0 FT (NAVD 88)
LATITUDE: N 27.91178
LONGITUDE: W 82.49771

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,000 TO 4,300 OHM-CM
CHLORIDES	15 TO 45 PPM
SULFATES	<5 TO 63 PPM
pH	6.3 TO 7.6

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- GRAY TO BLUE-GRAY CLAYEY SAND (SC)
- BLUE-GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- BLUE-GRAY INDURATED SILT (MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γd	DRY UNIT WEIGHT (PCF)
qu	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
qst	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100312 & 100313

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

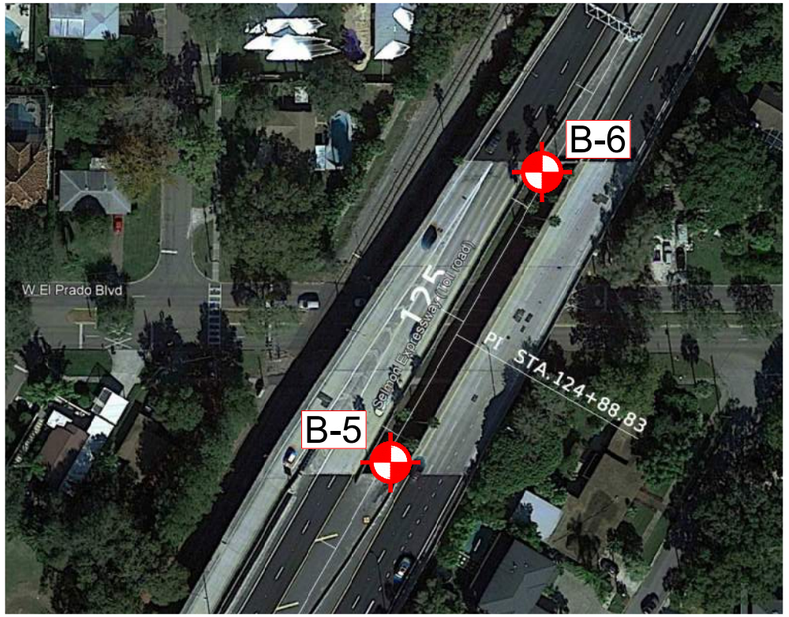
DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) W. EL PRADO BLVD.
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.

bsawaska 7/14/2022 8:14:46 PM J:\6511\2021 Files\6511-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geote



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

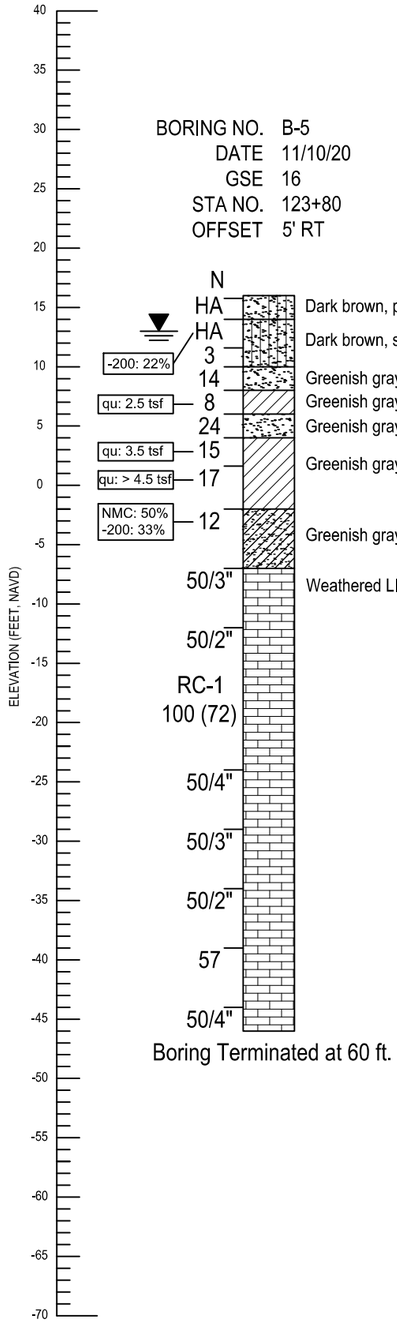
ENVIRONMENTAL CLASSIFICATION

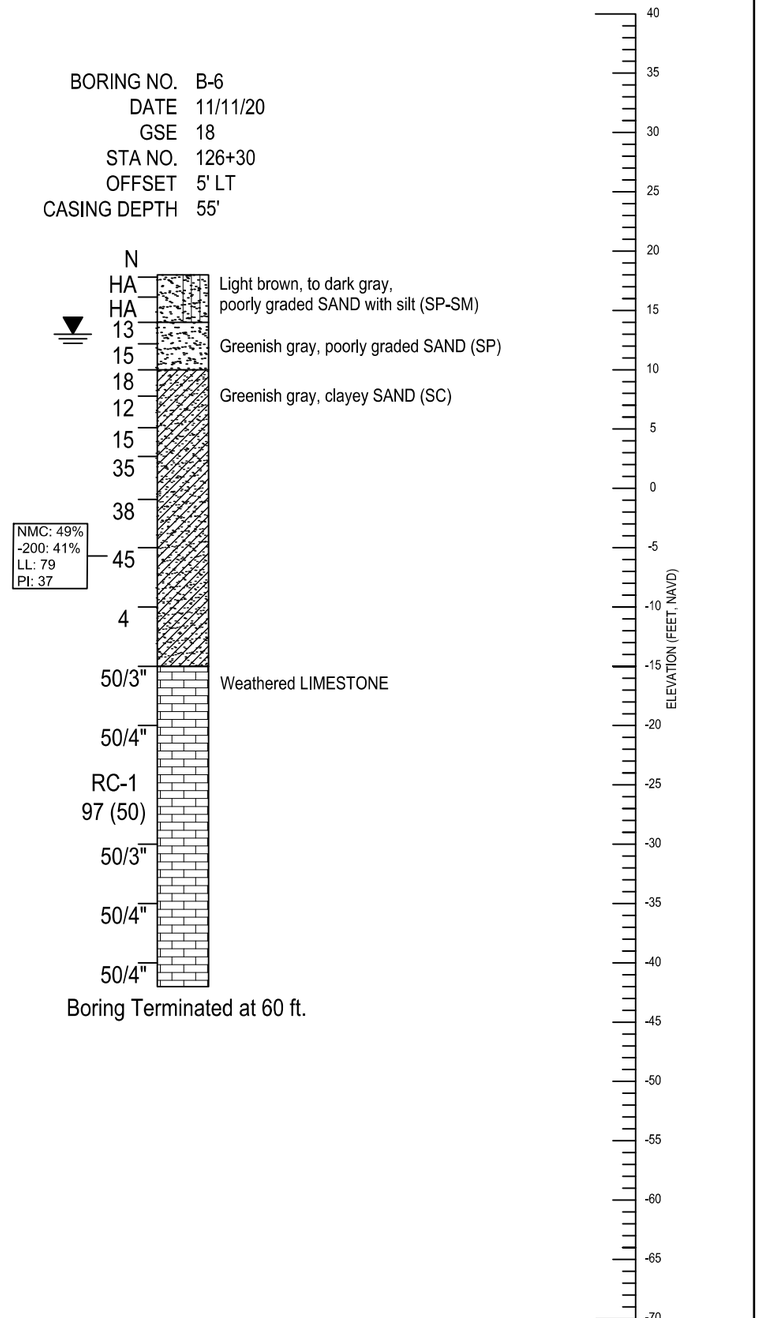
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

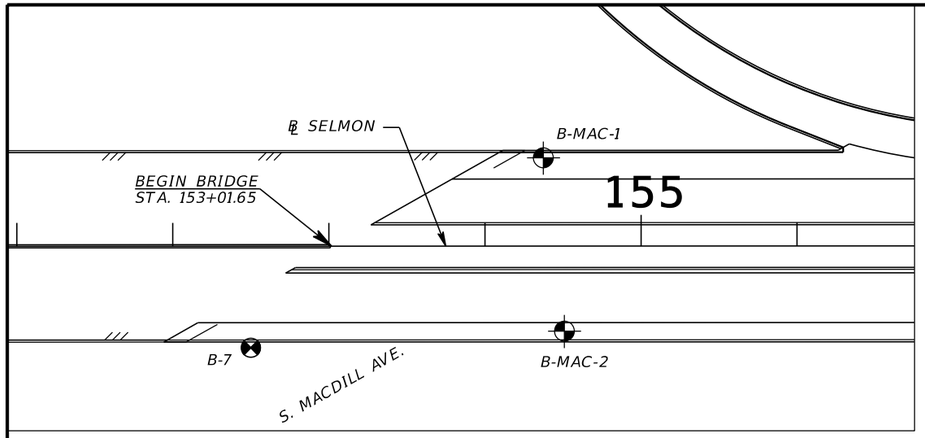
REPORT OF CORE BORINGS EL PRADO BLVD

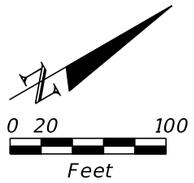
SHEET NO. 5

APPENDIX D

Report of Core Borings Sheets – SR 618 over MacDill Ave./Bay to Bay Blvd.

Existing Geotechnical Data – Borings Performed by Others





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	20,000 TO 23,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	8.2 TO 8.6

WATER TEST RESULTS: (TAMPA BAY)

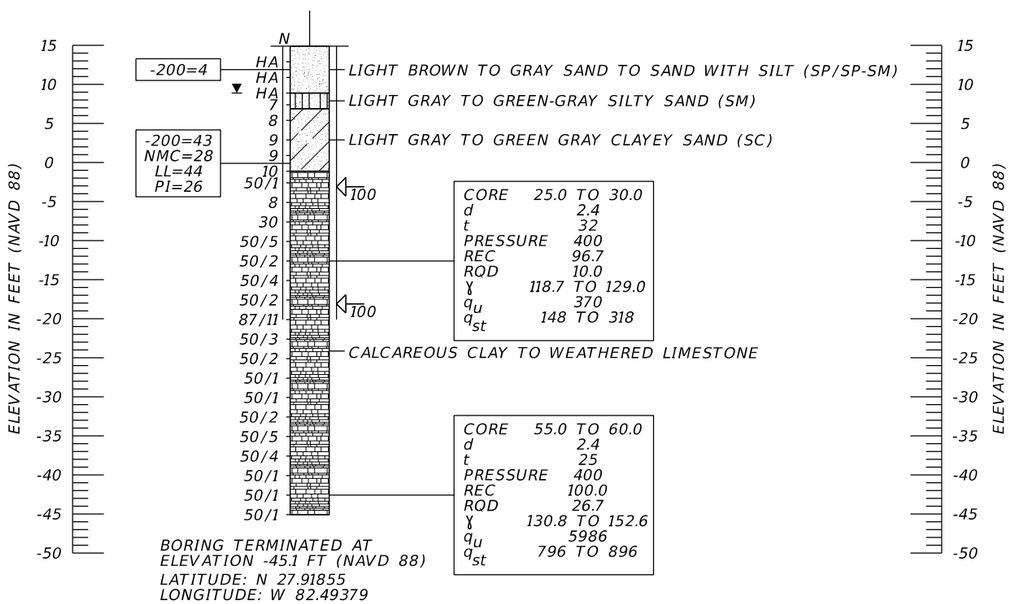
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	LIGHT BROWN TO GRAY SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
	LIGHT GRAY TO GREEN GRAY CLAYEY SAND (SC)
	GRAY TO GREEN-GRAY CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MAC-1
STA. 154+37
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 14.9'
DATE 3/18/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -45.1 FT (NAVD 88)
LATITUDE: N 27.91855
LONGITUDE: W 82.49379

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100314 & 100315

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

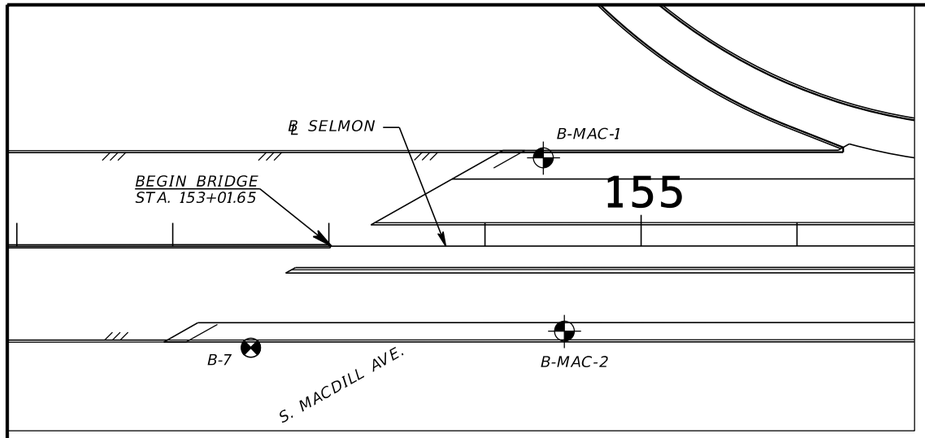
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

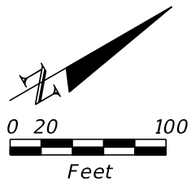
DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1) S. MACDILL AVE./BAY TO BAY BLVD.
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	20,000 TO 23,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	8.2 TO 8.6

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

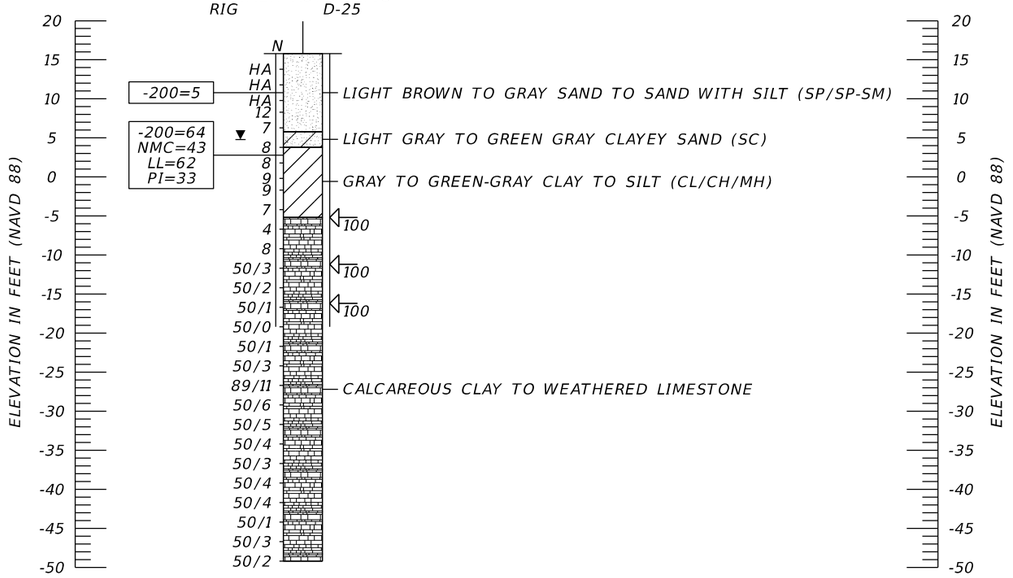
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	LIGHT BROWN TO GRAY SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
	LIGHT GRAY TO GREEN GRAY CLAYEY SAND (SC)
	GRAY TO GREEN-GRAY CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MAC-2
STA. 154+51
REF. ℄ SELMON
OFF. 54' RT.
ELEV. 15.8'
DATE 3/20/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -49.2 FT (NAVD 88)
LATITUDE: N 27.91843
LONGITUDE: W 82.49347

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100314 & 100315

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

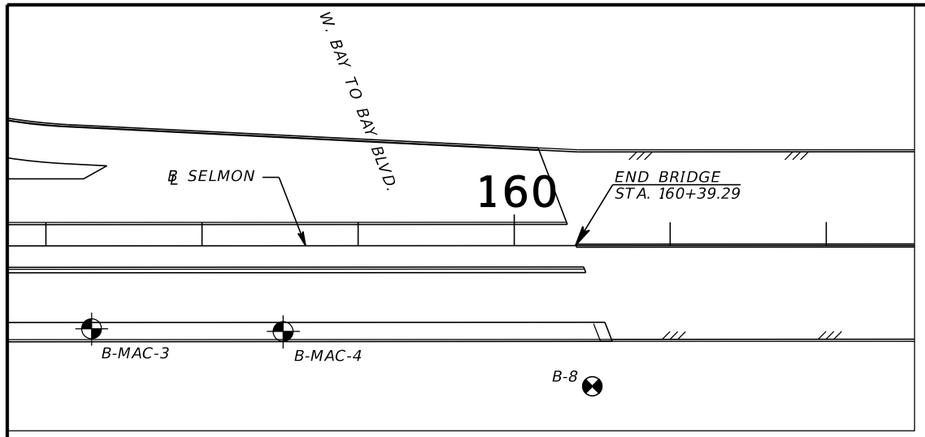
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

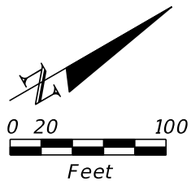
SHEET TITLE: REPORT OF CORE BORINGS (2) S. MACDILL AVE./BAY TO BAY BLVD.

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	20,000 TO 23,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	8.2 TO 8.6

WATER TEST RESULTS: (TAMPA BAY)

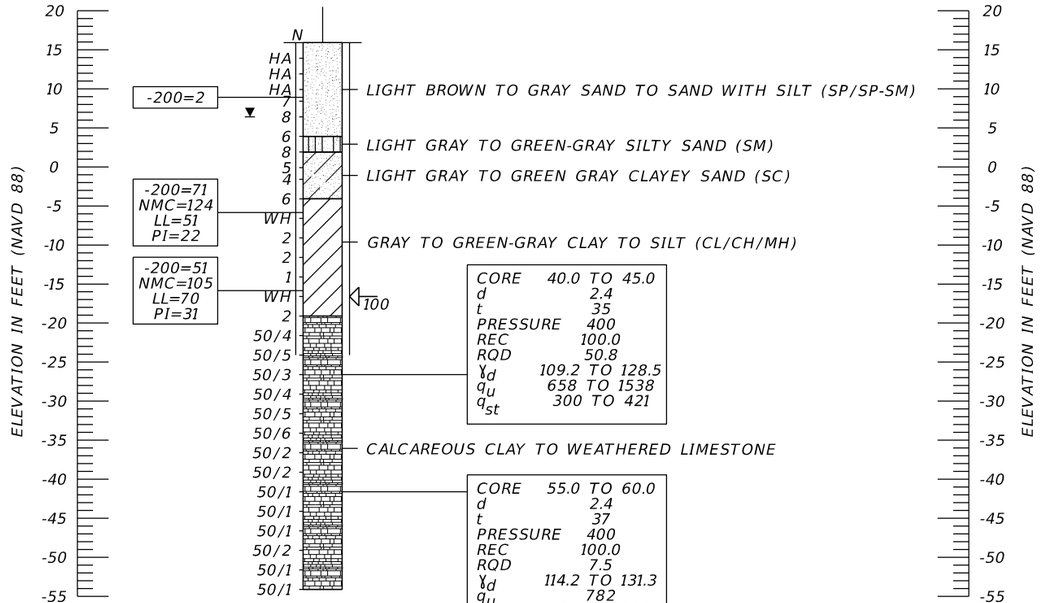
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	LIGHT BROWN TO GRAY SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
	LIGHT GRAY TO GREEN GRAY CLAYEY SAND (SC)
	GRAY TO GREEN-GRAY CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MAC-3
STA. 157+29
REF. ℄ SELMON
OFF. 53' RT.
ELEV. 15.6'
DATE 3/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -54.4 FT (NAVD 88)
LATITUDE: N 27.91910
LONGITUDE: W 82.49305

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100314 & 100315

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

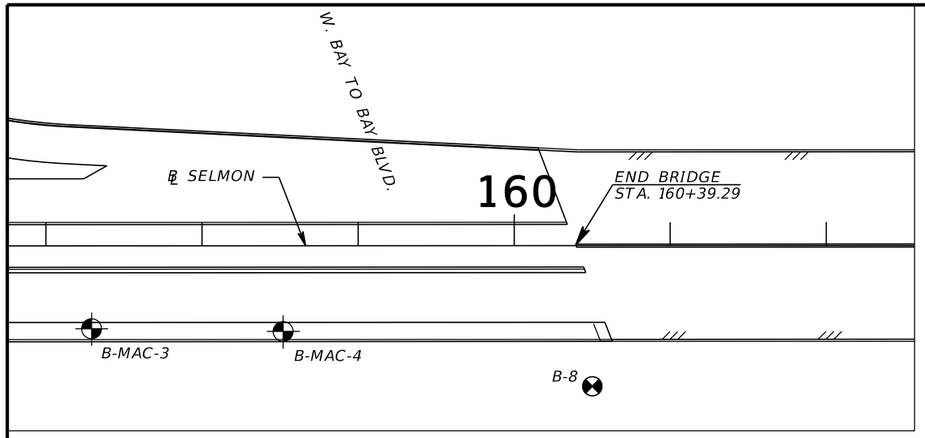
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

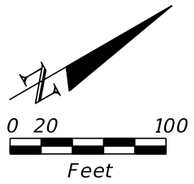
SHEET TITLE: REPORT OF CORE BORINGS (3) S. MACDILL AVE./BAY TO BAY BLVD.

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	20,000 TO 23,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	8.2 TO 8.6

WATER TEST RESULTS: (TAMPA BAY)

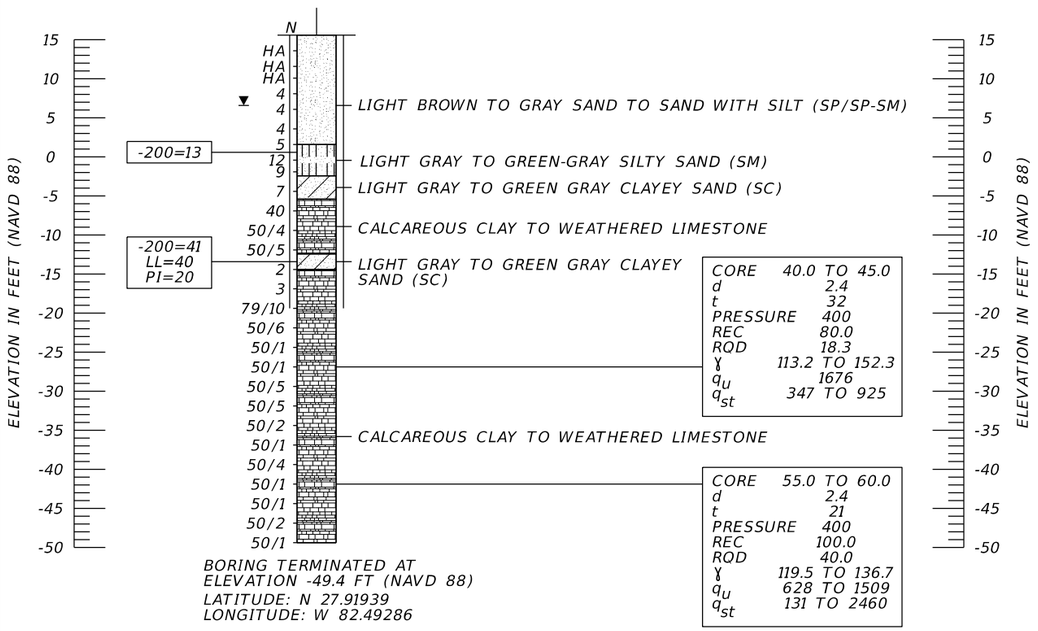
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	LIGHT BROWN TO GRAY SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
	LIGHT GRAY TO GREEN GRAY CLAYEY SAND (SC)
	GRAY TO GREEN-GRAY CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MAC-4
STA. 158+52
REF. ℄ SELMON
OFF. 55' RT.
ELEV. 15.6'
DATE 3/16/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -49.4 FT (NAVD 88)
LATITUDE: N 27.91939
LONGITUDE: W 82.49286

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100314 & 100315

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

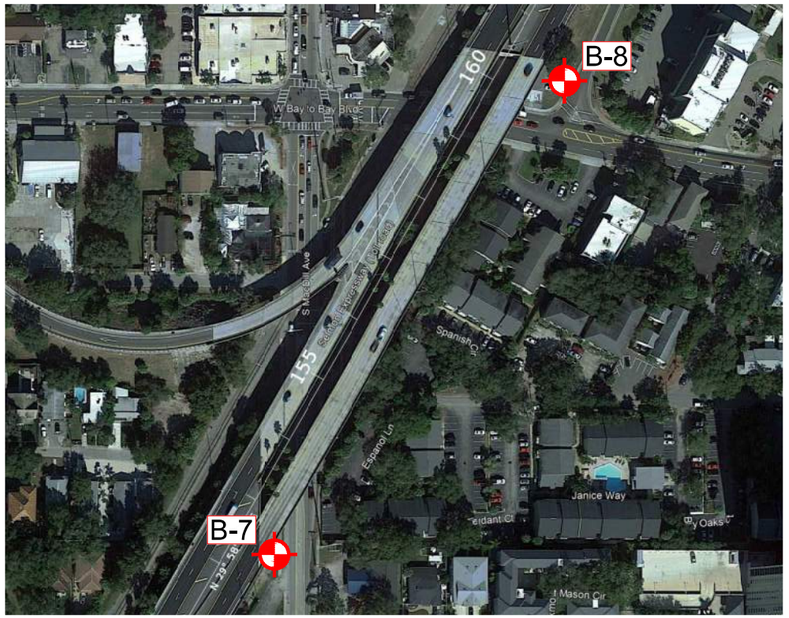
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (4) S. MACDILL AVE./BAY TO BAY BLVD.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 200' 400'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

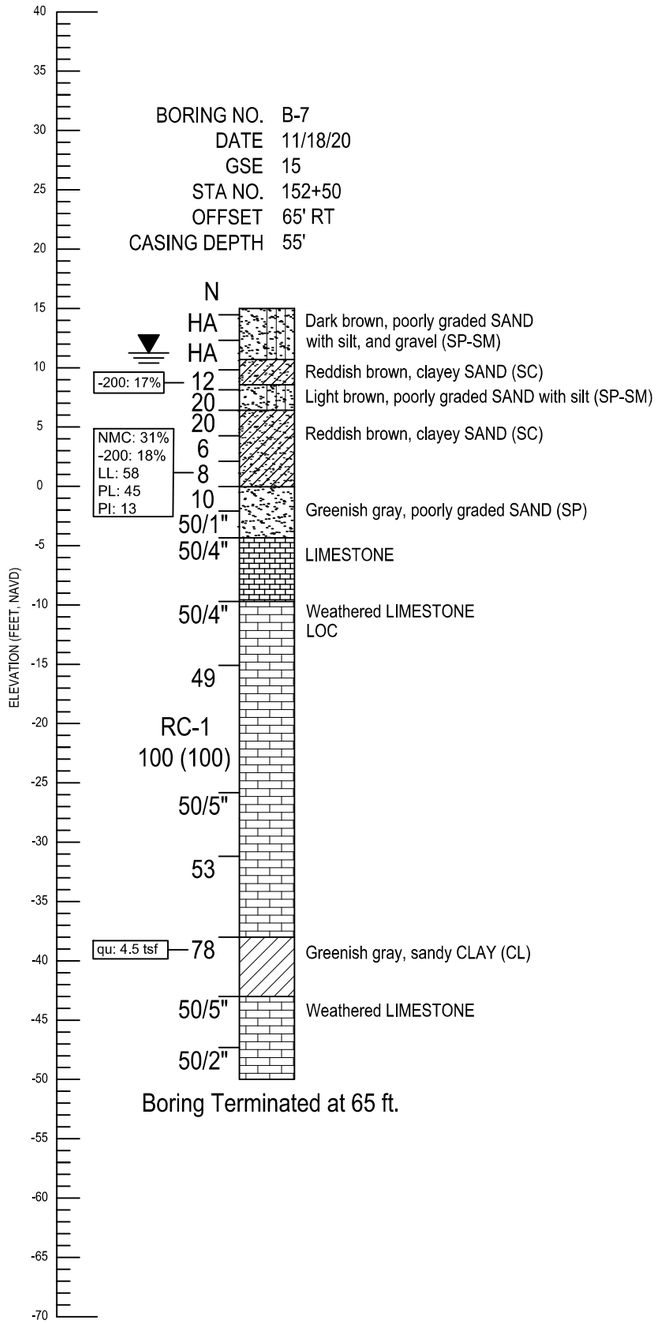
ENVIRONMENTAL CLASSIFICATION

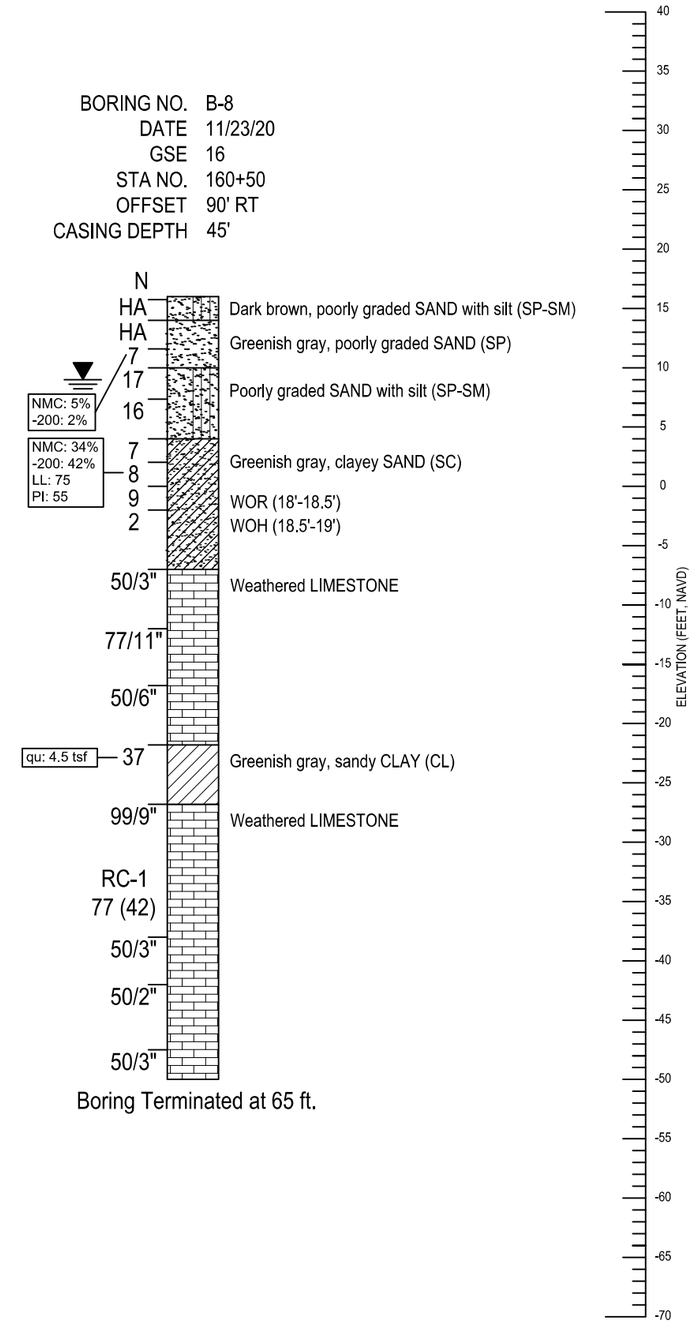
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

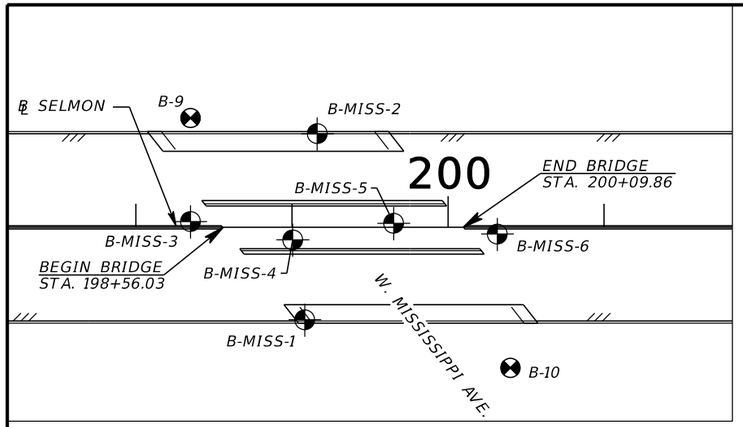
REPORT OF CORE BORINGS MACDILL AVE & BAY TO BAY BLVD

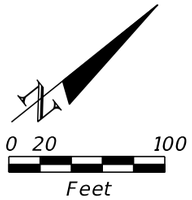
SHEET NO. 6

APPENDIX E

Report of Core Borings Sheets – SR 618 over Mississippi Ave.

Existing Geotechnical Data – Borings Performed by Others



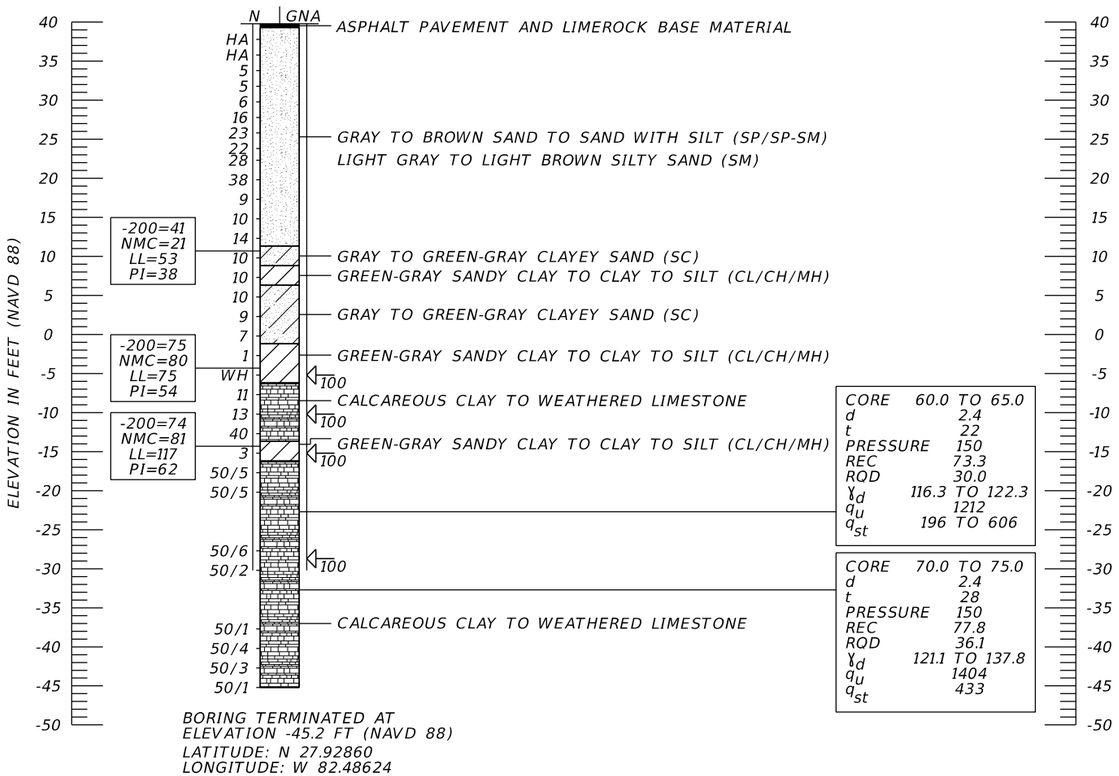


BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

BOR #	B-MISS-3
STA.	198+35
REF.	℄ SELMON
OFF.	3' LT.
ELEV.	39.8
DATE	6/6/2022
DRILLER	R. SCRUGGS
HAMMER	AUTOMATIC
RIG	D-25



CORE	60.0 TO 65.0
d	2.4
t	22
PRESSURE	150
REC	73.3
RQD	30.0
γ_d	116.3 TO 122.3
q_u	1212
q_{st}	196 TO 606

CORE	70.0 TO 75.0
d	2.4
t	28
PRESSURE	150
REC	77.8
RQD	36.1
γ_d	121.1 TO 137.8
q_u	1404
q_{st}	433

BORING TERMINATED AT
ELEVATION -45.2 FT (NAVD 88)
LATITUDE: N 27.92860
LONGITUDE: W 82.48624

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

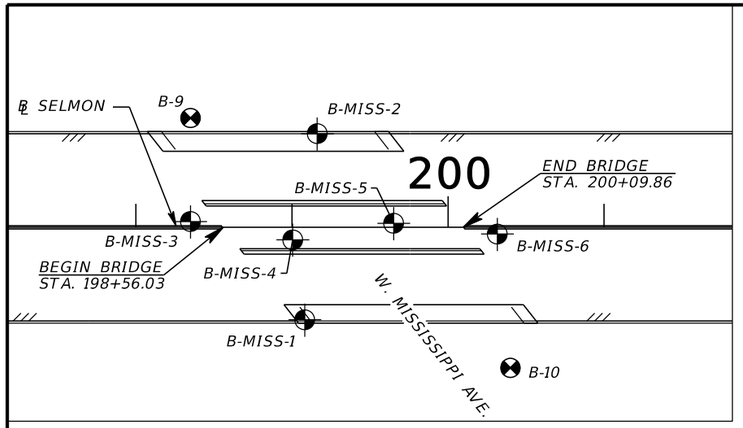
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

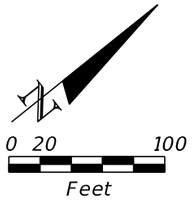
SHEET TITLE: REPORT OF CORE BORINGS (1) W. MISSISSIPPI AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

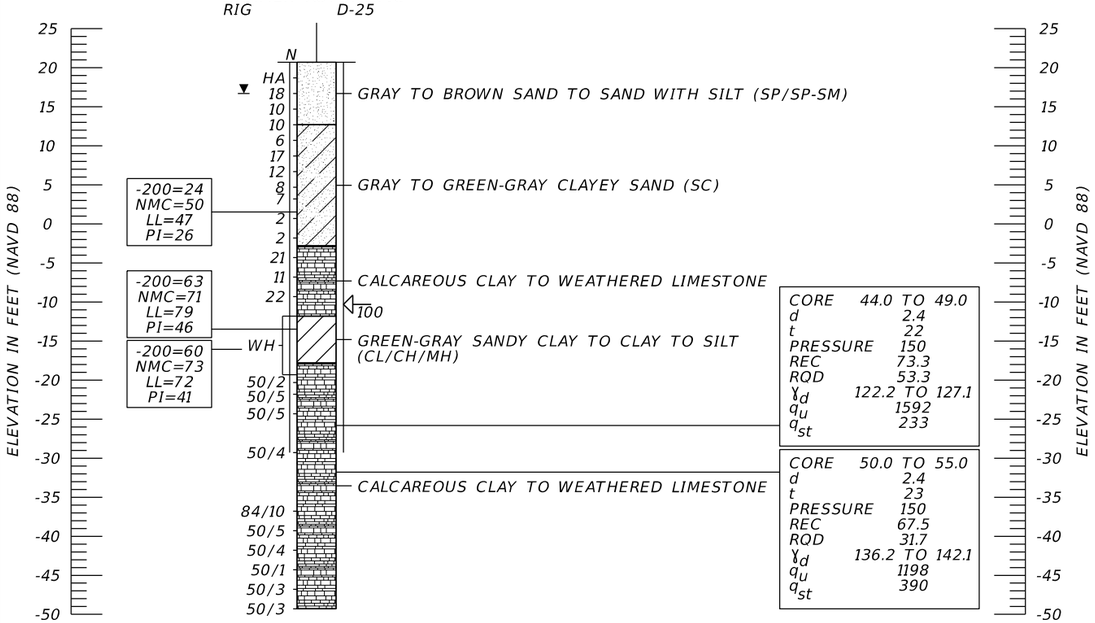
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MISS-4
STA. 199+00
REF. ℄ SELMON
OFF. 8' RT.
ELEV. 20.7
DATE 6/14/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -49.3 FT (NAVD 88)
LATITUDE: N 27.92872
LONGITUDE: W 82.48609

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

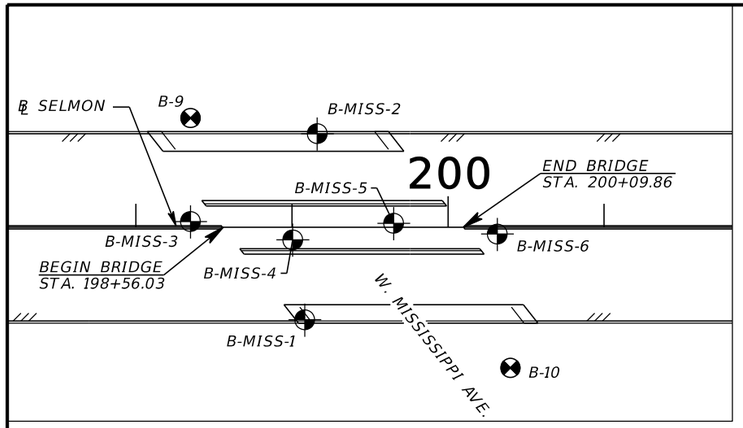
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

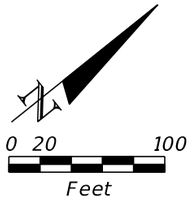
SHEET TITLE: REPORT OF CORE BORINGS (2) W. MISSISSIPPI AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

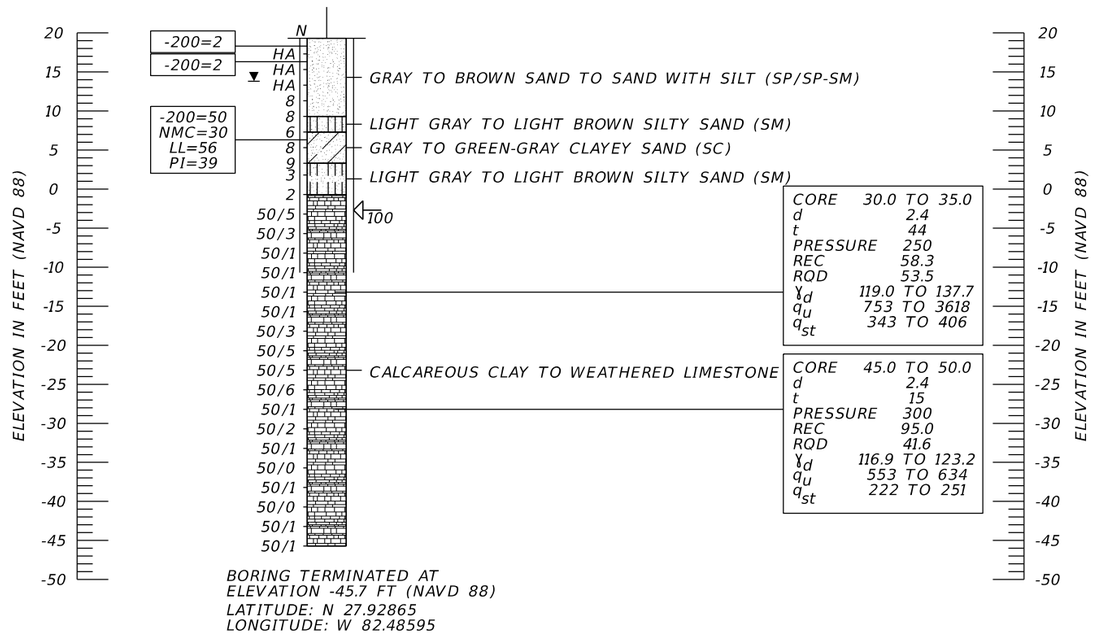
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MISS-1
STA. 199+08
REF. ℄ SELMON
OFF. 59' RT.
ELEV. 19.3'
DATE 3/23/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -45.7 FT (NAVD 88)
LATITUDE: N 27.92865
LONGITUDE: W 82.48595

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

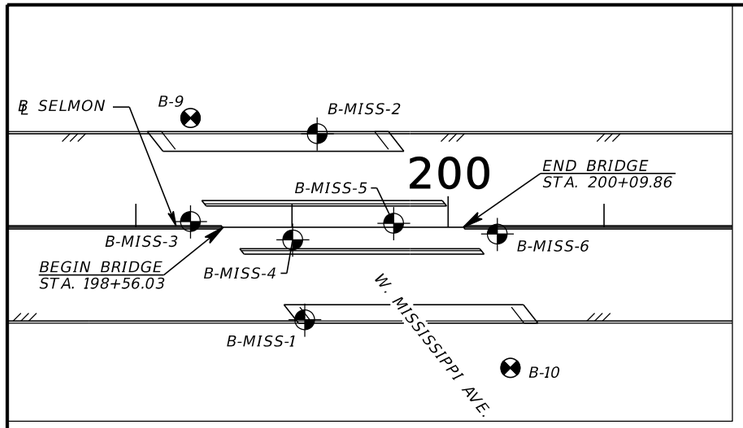
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

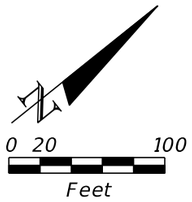
SHEET TITLE: REPORT OF CORE BORINGS (3) W. MISSISSIPPI AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

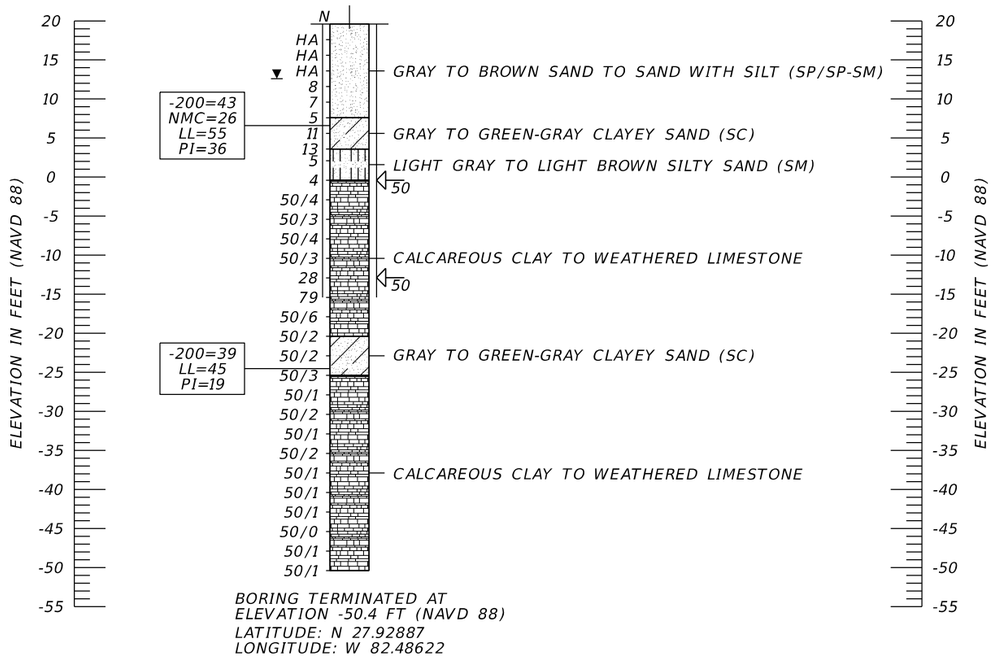
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR #	B-MISS-2
STA.	199+16
REF.	℄ SELMON
OFF.	60' LT.
ELEV.	19.6'
DATE	3/24/2022
DRILLER	I. POORAN
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -50.4 FT (NAVD 88)
LATITUDE: N 27.92887
LONGITUDE: W 82.48622

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

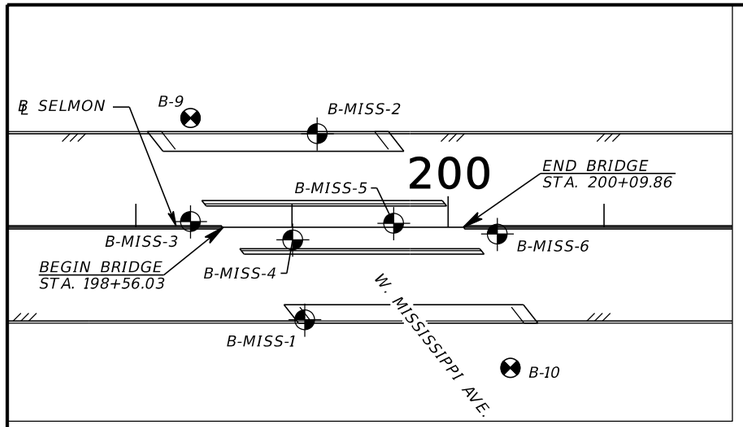
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

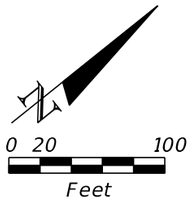
SHEET TITLE: REPORT OF CORE BORINGS (4) W. MISSISSIPPI AVENUE

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

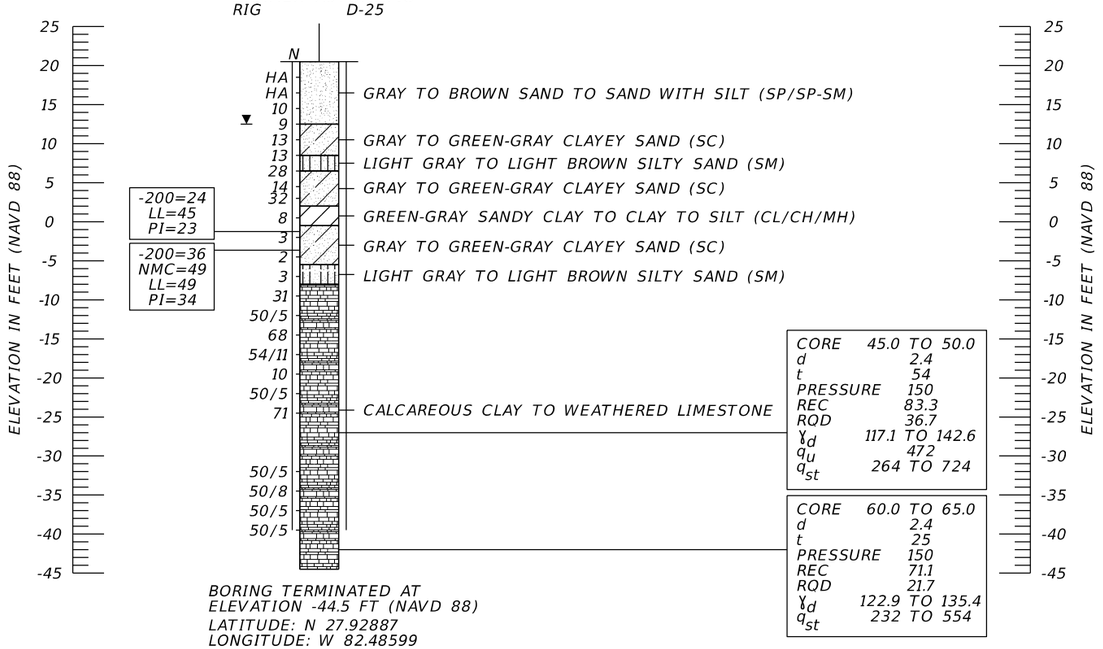
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MISS-5
STA. 199+65
REF. ℄ SELMON
OFF. 2' LT.
ELEV. 20.5
DATE 5/26/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



CORE	45.0 TO 50.0
d	2.4
t	54
PRESSURE	150
REC	83.3
RQD	36.7
γ_d	117.1 TO 142.6
q_u	472
q_{st}	264 TO 724

CORE	60.0 TO 65.0
d	2.4
t	25
PRESSURE	150
REC	71.1
RQD	21.7
γ_d	122.9 TO 135.4
q_{st}	232 TO 554

BORING TERMINATED AT
ELEVATION -44.5 FT (NAVD 88)
LATITUDE: N 27.92887
LONGITUDE: W 82.48599

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

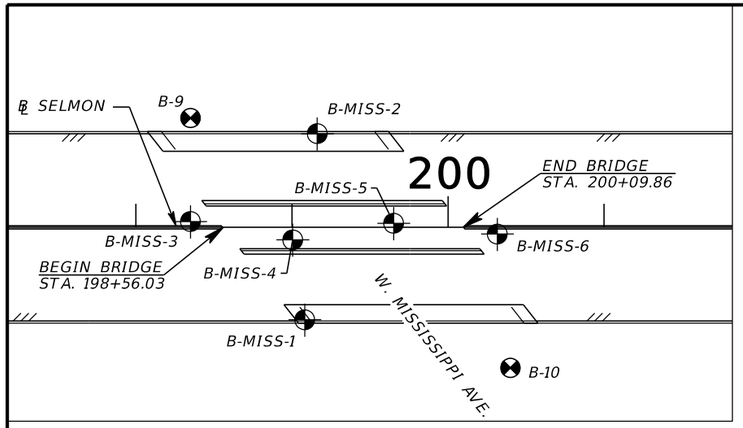
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

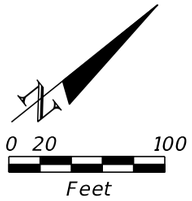
SHEET TITLE: REPORT OF CORE BORINGS (5) W. MISSISSIPPI AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	6,800 TO 28,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.2 TO 7.7

WATER TEST RESULTS: (TAMPA BAY)

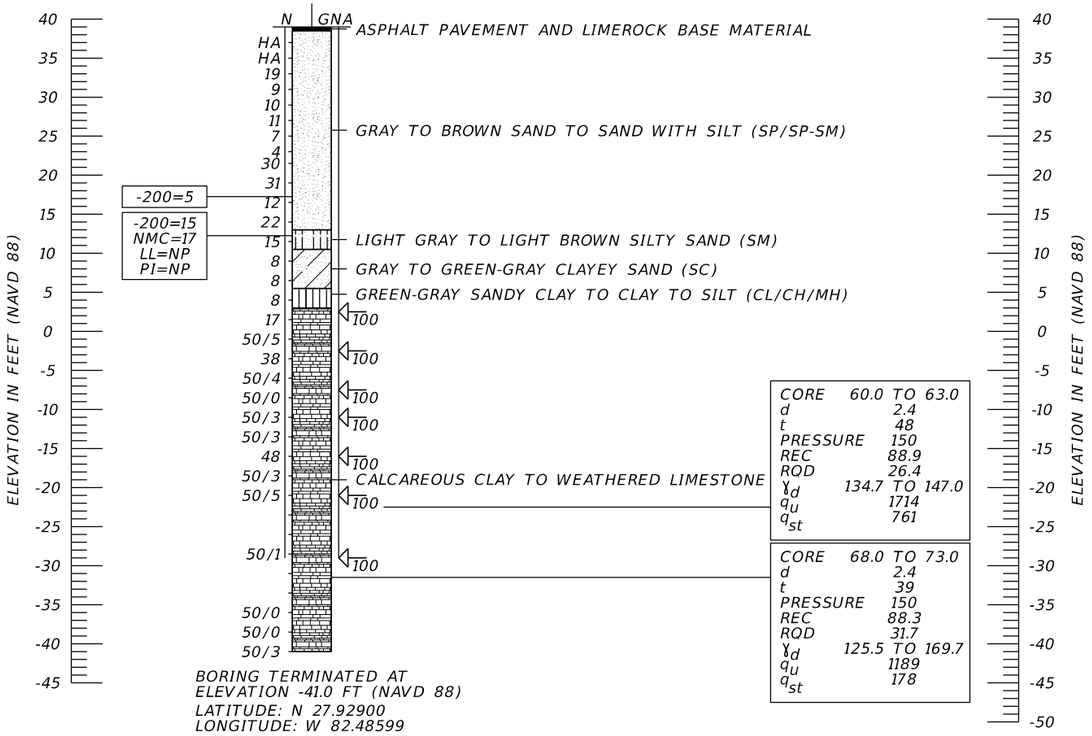
RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/CH/MH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR #	B-MISS-6
STA.	200+32
REF.	℄ SELMON
OFF.	5' RT.
ELEV.	39.0
DATE	6/8/2022
DRILLER	R. SCRUGGS
HAMMER	AUTOMATIC
RIG	D-25



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100316 & 100317

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

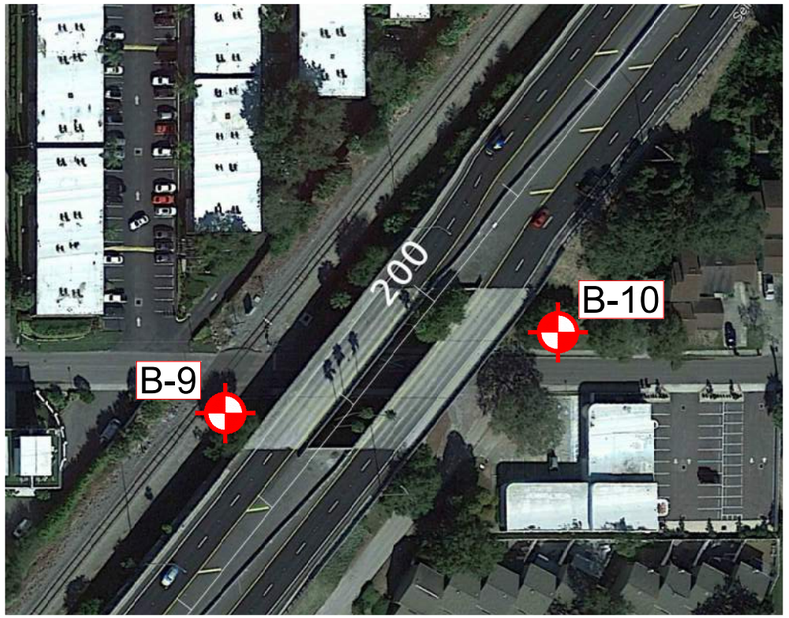
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (6) W. MISSISSIPPI AVENUE

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

ENVIRONMENTAL CLASSIFICATION

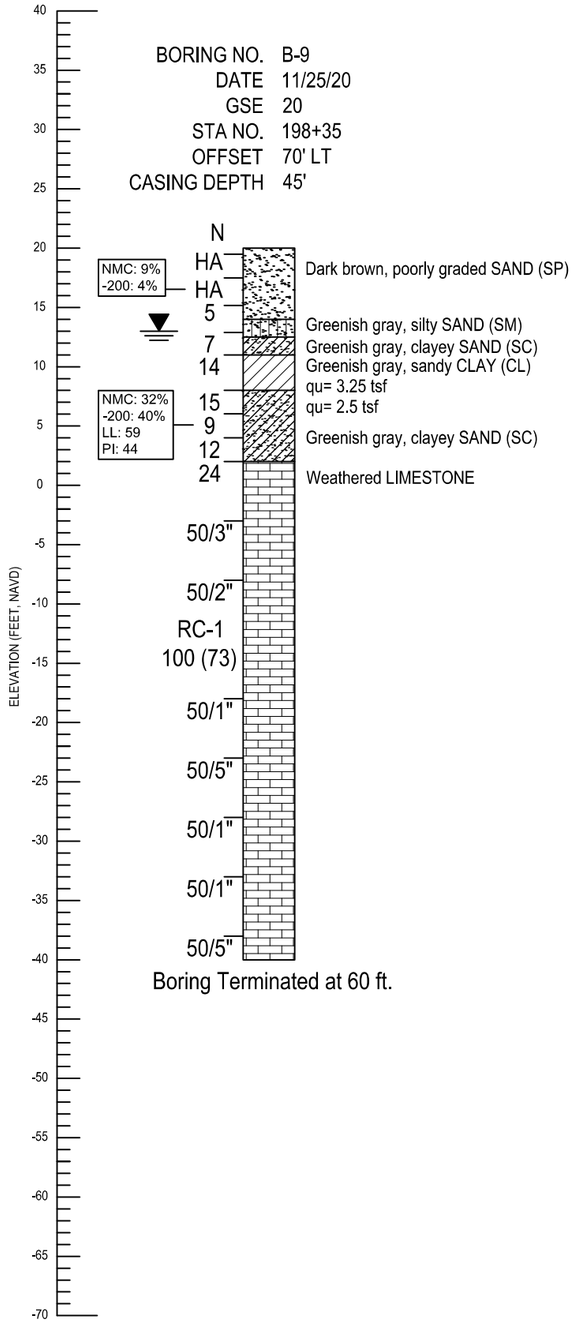
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

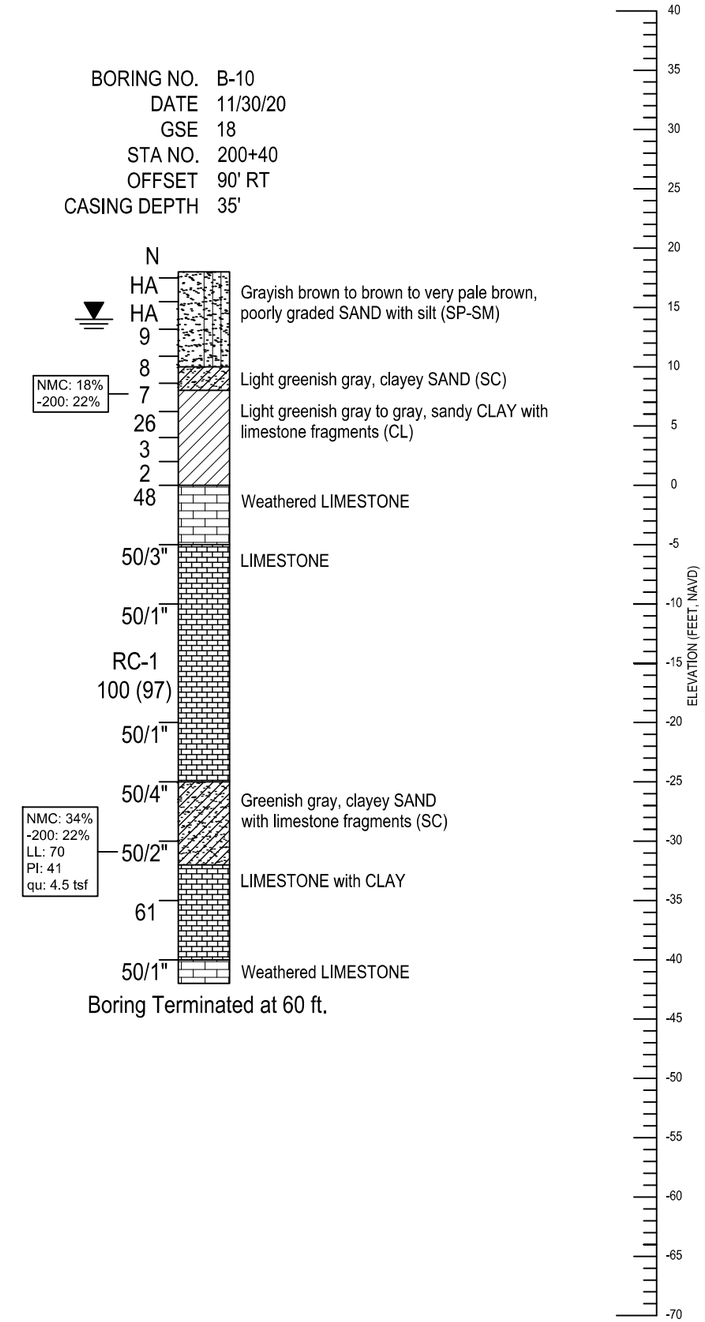
GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24

BORING NO. B-9
DATE 11/25/20
GSE 20
STA NO. 198+35
OFFSET 70' LT
CASING DEPTH 45'



Boring Terminated at 60 ft.

BORING NO. B-10
DATE 11/30/20
GSE 18
STA NO. 200+40
OFFSET 90' RT
CASING DEPTH 35'



Boring Terminated at 60 ft.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

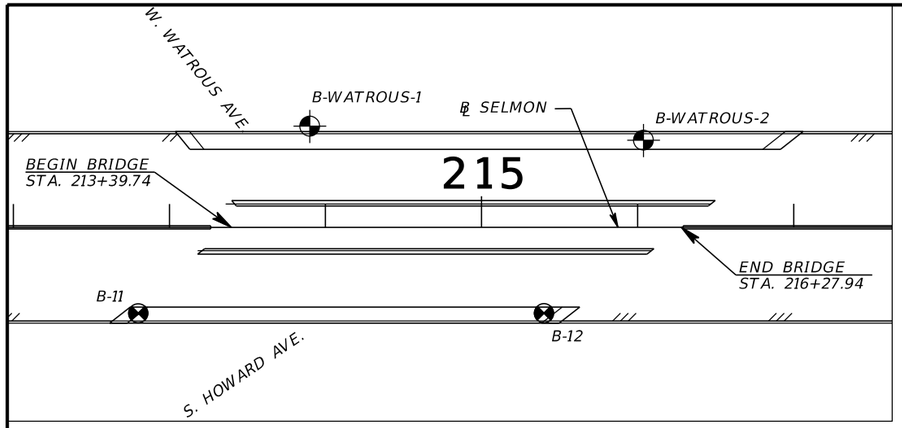
REPORT OF CORE BORINGS MISSISSIPPI AVE

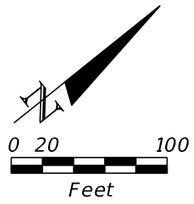
SHEET NO. 7

APPENDIX F

Report of Core Borings Sheets – SR 618 over Howard Ave./Watrous Ave.

Existing Geotechnical Data – Borings Performed by Others





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	14,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 TO 27 PPM
pH	7.2 TO 7.5

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

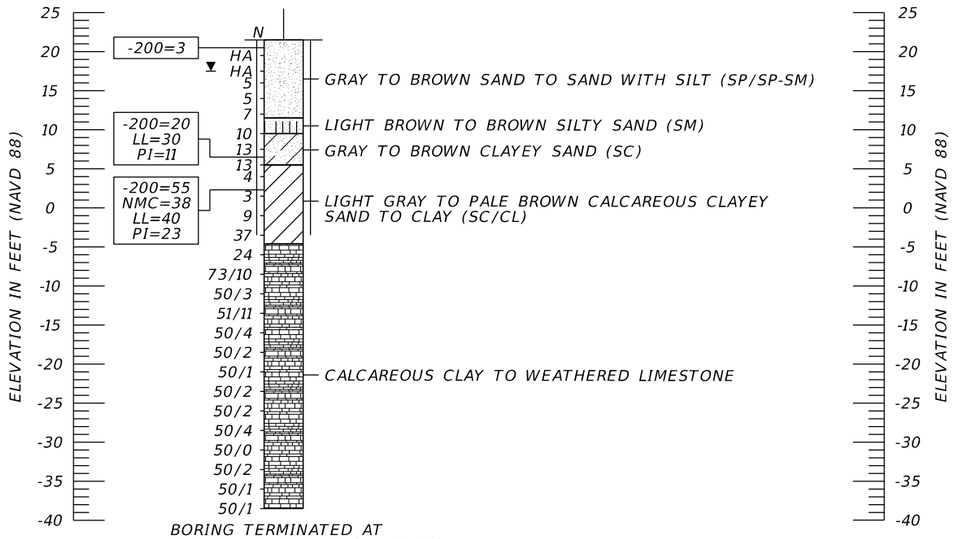
LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT BROWN TO BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- LIGHT GRAY TO PALE BROWN CALCAREOUS CLAYEY SAND TO CLAY (SC/CL)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-WATROUS-1
STA. 213+90
REF. ℄ SELMON
OFF. 65' LT.
ELEV. 21.5'
DATE 4/7/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -38.5 FT (NAVD 88)
LATITUDE: N 27.93205
LONGITUDE: W 82.48340

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100318 & 100319

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

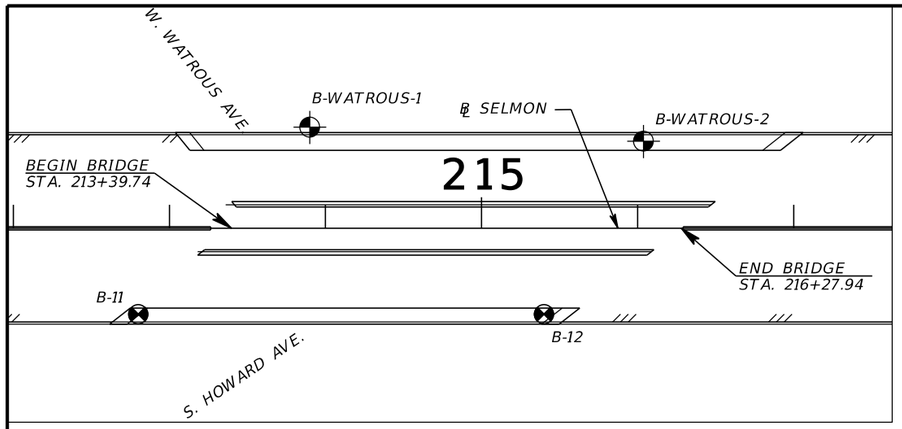
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

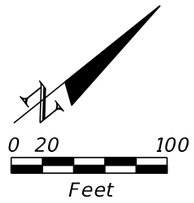
SHEET TITLE: REPORT OF CORE BORINGS (1) W. WATROUS AVENUE/S. HOWARD AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	14,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 TO 27 PPM
pH	7.2 TO 7.5

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

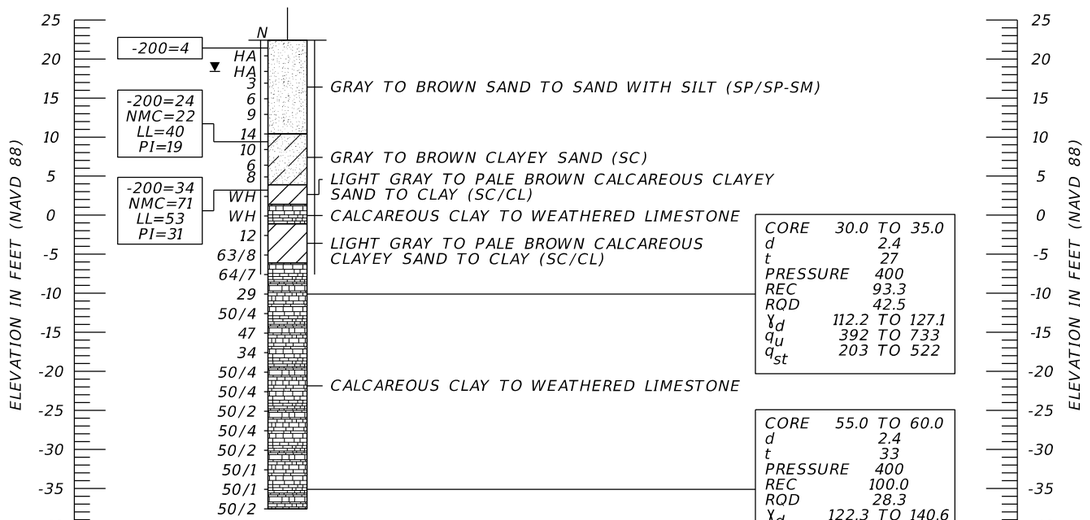
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT BROWN TO BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- LIGHT GRAY TO PALE BROWN CALCAREOUS CLAYEY SAND TO CLAY (SC/CL)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
| |	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-WATROUS-2
STA. 216+04
REF. ℄ SELMON
OFF. 56' LT.
ELEV. 22.4'
DATE 3/14/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -37.6 FT (NAVD 88)
LATITUDE: N 27.93249
LONGITUDE: W 82.48296

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100318 & 100319

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

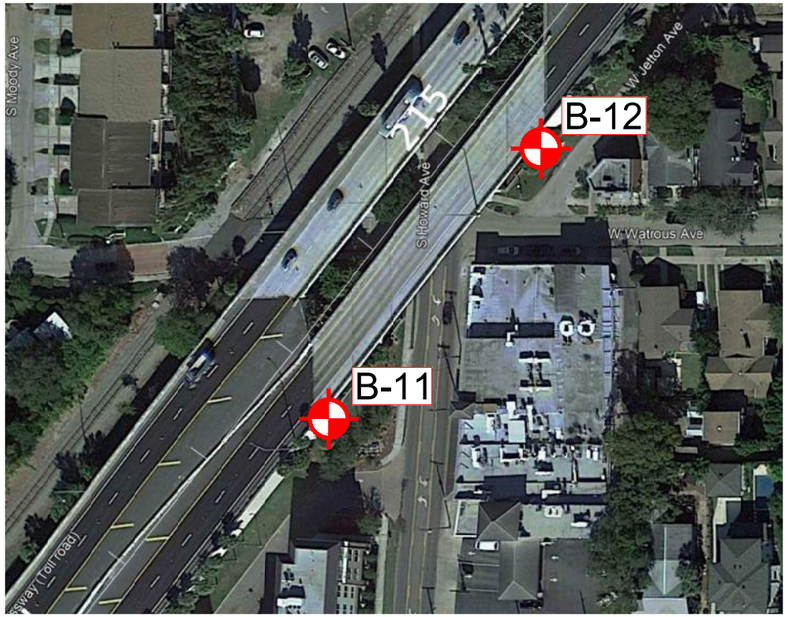
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) W. WATROUS AVENUE/S. HOWARD AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

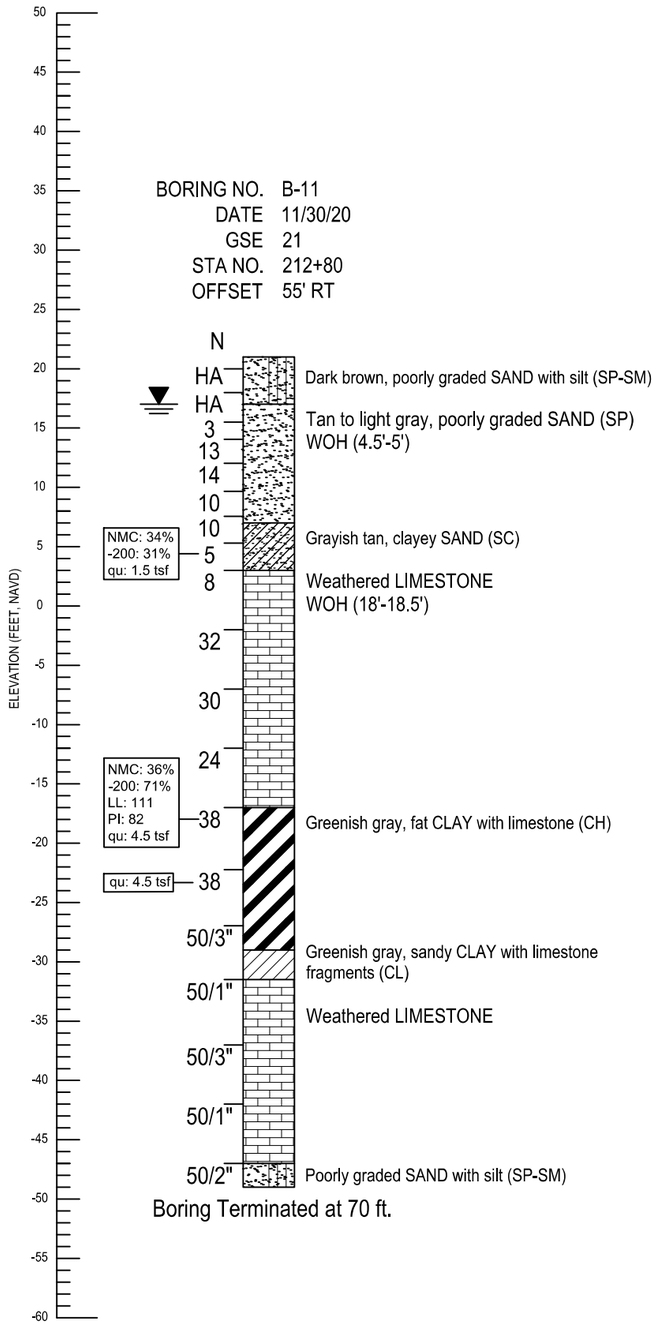
ENVIRONMENTAL CLASSIFICATION

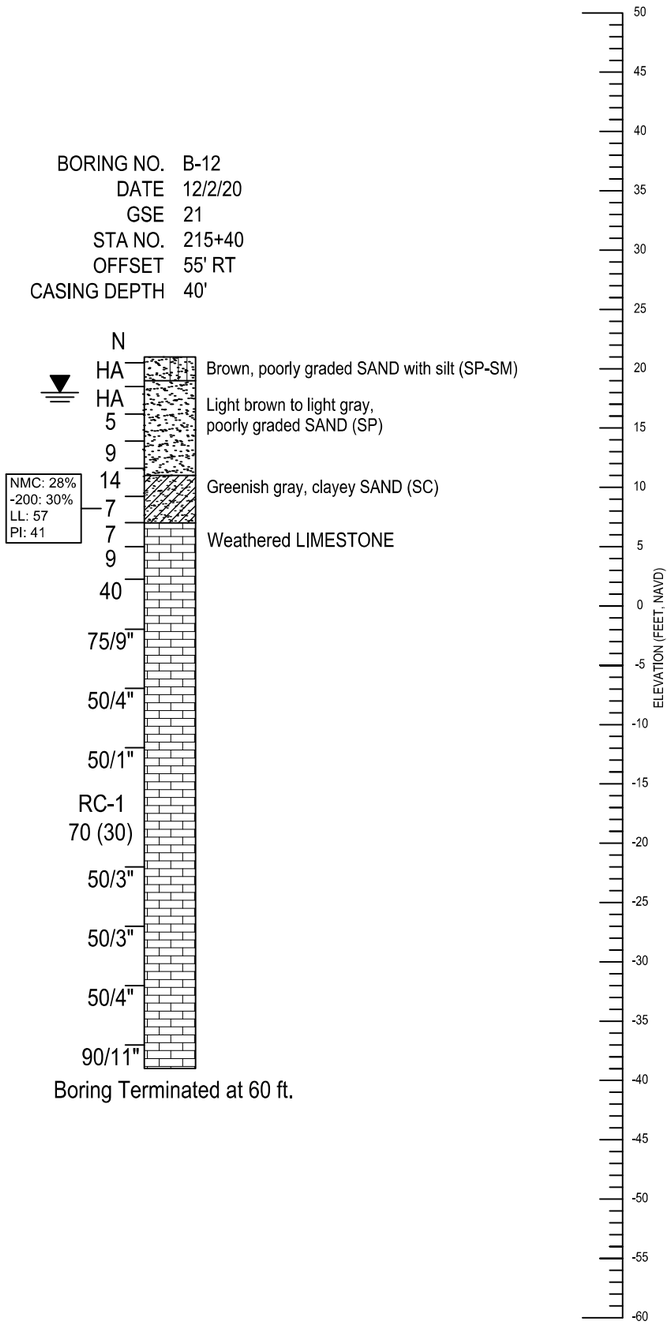
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

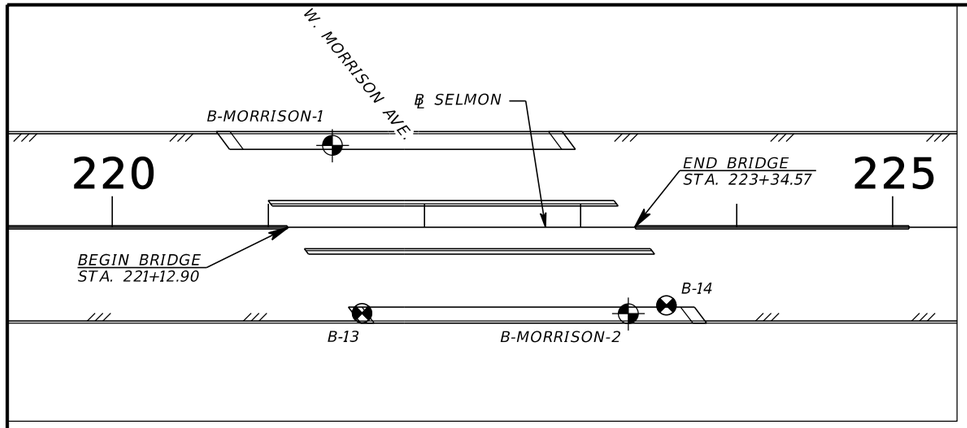
REPORT OF CORE BORINGS WATROUS AVE/HOWARD AVE

SHEET NO. 8

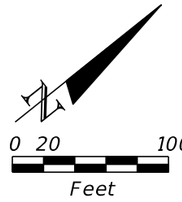
APPENDIX G

Report of Core Borings Sheets – SR 618 over Morrison Ave.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	10,000 TO 14,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 TO 12 PPM
pH	6.9 TO 8.2

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

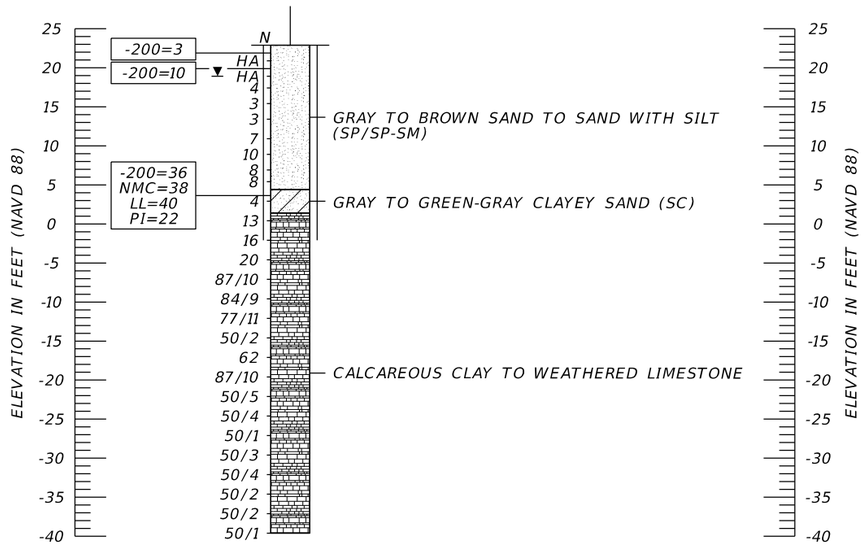
- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY TO GREEN-GRAY CLAYEY SAND (SC)
- DARK GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION BY OTHERS
- APPROXIMATE SPT BORING LOCATION
- ▼ GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

BOR #	B-MORRISON-1
STA.	221+41
REF.	℄ SELMON
OFF.	52' LT.
ELEV.	22.9'
DATE	3/23/2022
DRILLER	K. CAUDILL
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -39.6 FT (NAVD 88)
LATITUDE: N 27.93364
LONGITUDE: W 82.48192

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100320 & 100321

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

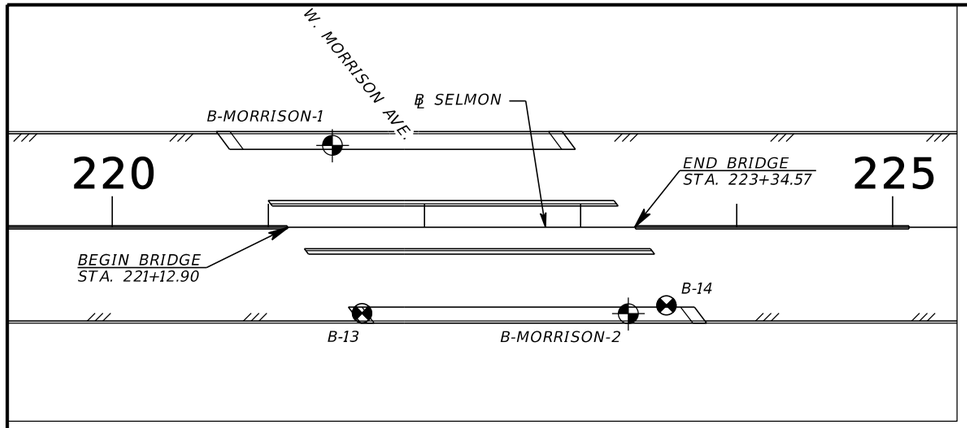
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1)
W. MORRISON AVENUE

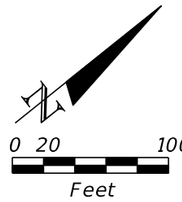
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS
FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	10,000 TO 14,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 TO 12 PPM
pH	6.9 TO 8.2

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

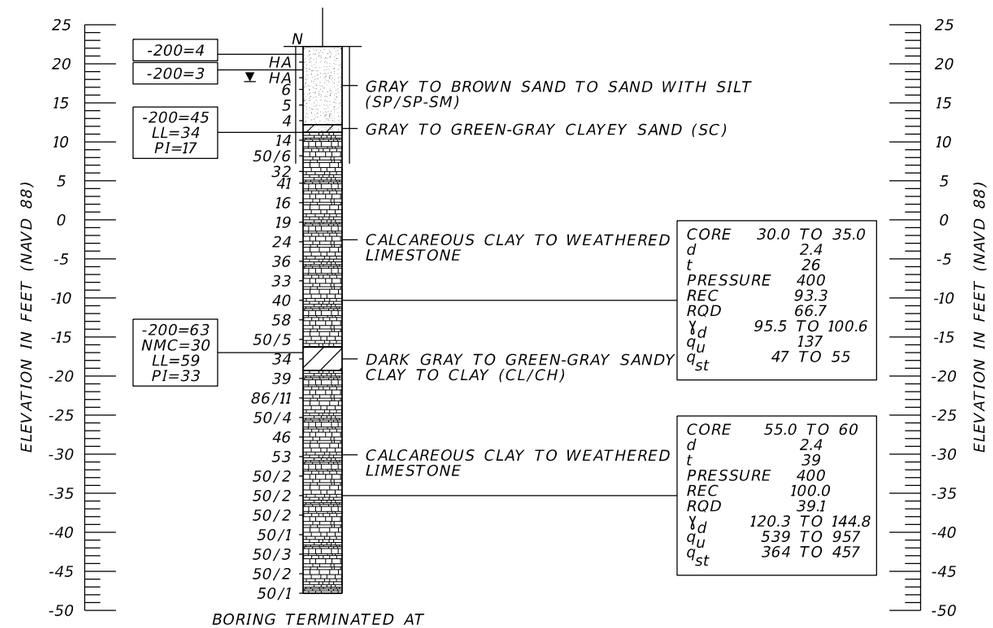
- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY TO GREEN-GRAY CLAYEY SAND (SC)
- DARK GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION BY OTHERS
- APPROXIMATE SPT BORING LOCATION
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-MORRISON-2
STA. 223+31
REF. ℄ SELMON
OFF. 55' RT.
ELEV. 22.2'
DATE 3/22/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -47.8 FT (NAVD 88)
LATITUDE: N 27.93387
LONGITUDE: W 82.48129

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100320 & 100321

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

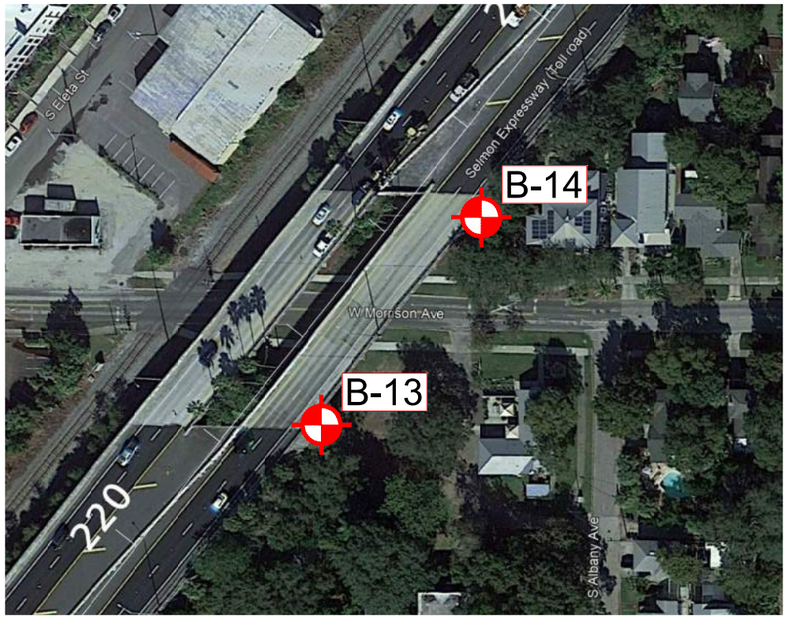
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) W. MORRISON AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

0' 100' 200'
Graphic Scale (feet)

LEGEND:
Approximate SPT Boring Location

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

WATER TABLE EXISTING AT TIME OF BORING
ESTIMATED SEASONAL HIGH GROUNDWATER TABLE

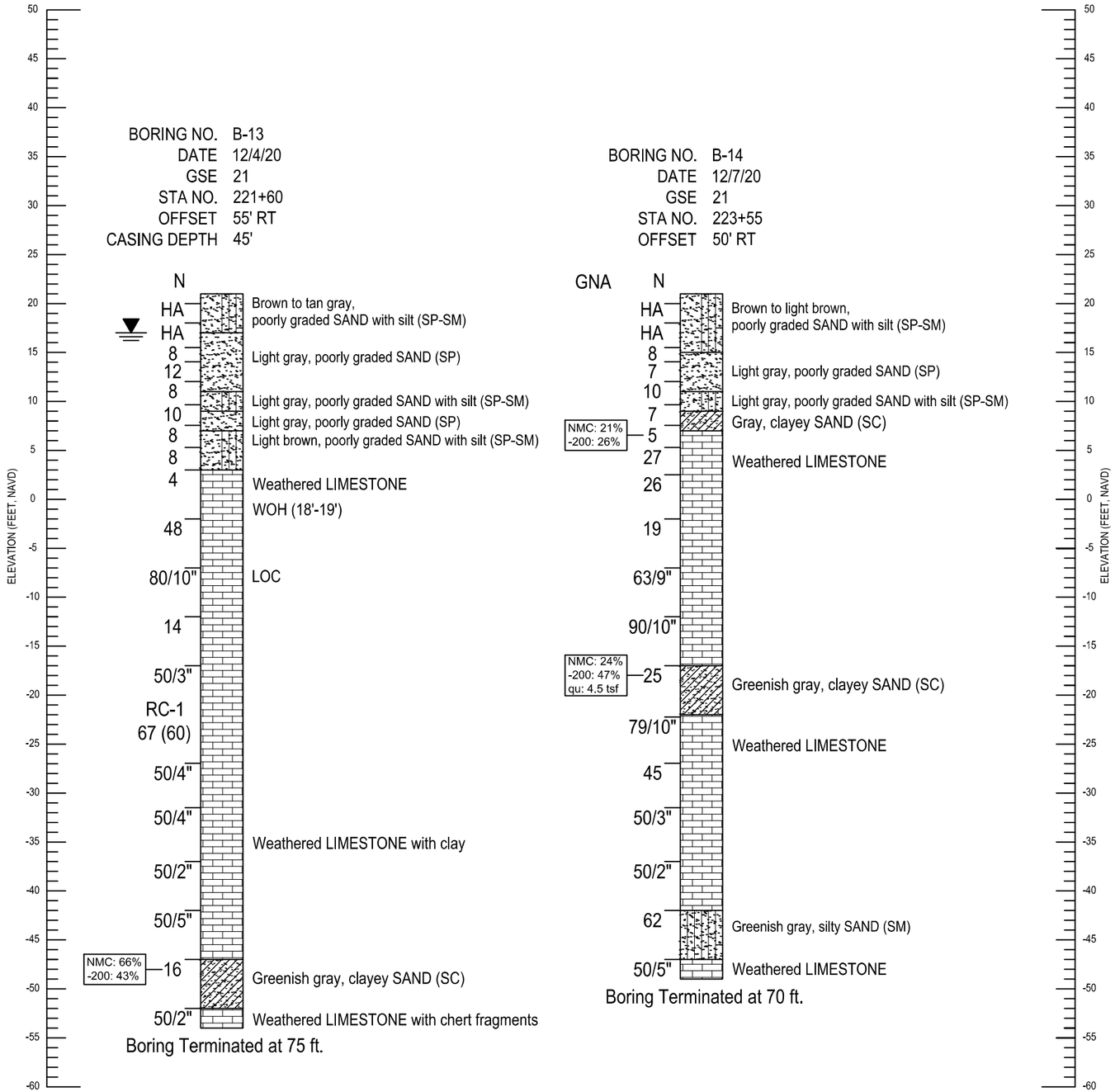
N	SPT N-VALUE
HA	HAND AUGER
NMC	NATURAL MOISTURE CONTENT (%)
-200	FINES PASSING A NO. 200 SIEVE (%)
GNA	GROUNDWATER NOT APPARENT
GSE	APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
OC	ORGANIC CONTENT
LL	LIQUID LIMIT
PI	PLASTICITY INDEX
LOC	LOSS OF CIRCULATION
ROC	REGAIN OF CIRCULATION
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
SP	UNIFIED SOIL CLASSIFICATION SYSTEM
qu	UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
50/3"	50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
RC-1 70 (42)	ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)
SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24



BORING NO. B-13
DATE 12/4/20
GSE 21
STA NO. 221+60
OFFSET 55' RT
CASING DEPTH 45'

N	
HA	Brown to tan gray, poorly graded SAND with silt (SP-SM)
HA	
8	Light gray, poorly graded SAND (SP)
12	
8	Light gray, poorly graded SAND with silt (SP-SM)
10	Light gray, poorly graded SAND (SP)
8	Light brown, poorly graded SAND with silt (SP-SM)
8	
4	Weathered LIMESTONE
	WOH (18'-19')
48	
80/10"	LOC
14	
50/3"	
	RC-1
	67 (60)
50/4"	
50/4"	
	Weathered LIMESTONE with clay
50/2"	
50/5"	
NMC: 66% -200: 43% — 16	Greenish gray, clayey SAND (SC)
50/2"	Weathered LIMESTONE with chert fragments

Boring Terminated at 75 ft.

BORING NO. B-14
DATE 12/7/20
GSE 21
STA NO. 223+55
OFFSET 50' RT

GNA	N	
	HA	Brown to light brown, poorly graded SAND with silt (SP-SM)
	HA	
	8	Light gray, poorly graded SAND (SP)
	7	
	10	Light gray, poorly graded SAND with silt (SP-SM)
NMC: 21% -200: 26%	7	Gray, clayey SAND (SC)
	5	
	27	Weathered LIMESTONE
	26	
	19	
	63/9"	
	90/10"	
NMC: 24% -200: 47% qu: 4.5 tsf	25	Greenish gray, clayey SAND (SC)
	79/10"	Weathered LIMESTONE
	45	
	50/3"	
	50/2"	
	62	Greenish gray, silty SAND (SM)
	50/5"	Weathered LIMESTONE

Boring Terminated at 70 ft.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

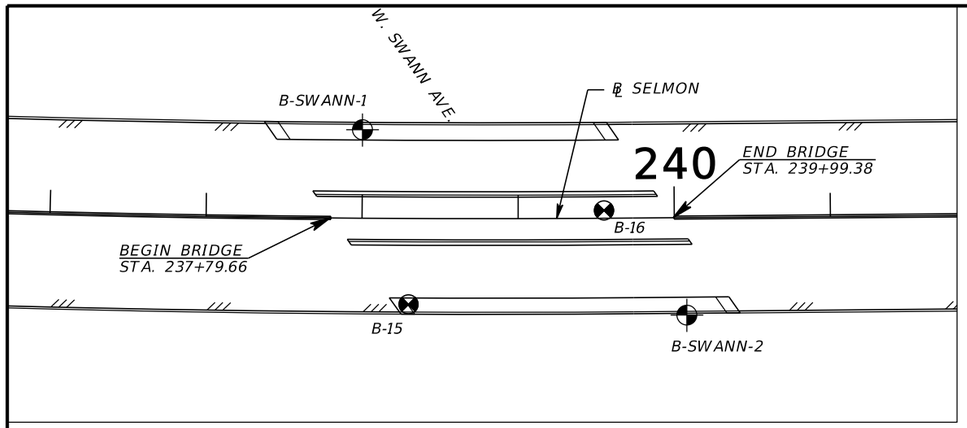
REPORT OF CORE BORINGS MORRISON AVE

SHEET NO. 9

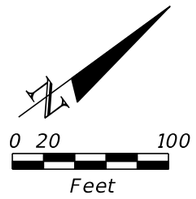
APPENDIX H

Report of Core Borings Sheets – SR 618 over Swann Ave.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (RESISTIVITY = 4,800 OHM-CM)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	4,800 TO 28,000 OHM-CM
CHLORIDES	45 TO 90 PPM
SULFATES	<5 TO 171 PPM
pH	6.8 TO 7.1

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- BROWN SILT (ML/MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR #	B-SWANN-1
STA.	238+00
REF.	℄ SELMON
OFF.	57' LT.
ELEV.	20.3'
DATE	3/21/2022
DRILLER	K. CAUDILL
HAMMER	AUTOMATIC
RIG	D-25

BORING TERMINATED AT ELEVATION -54.7 FT (NAVD 88)
LATITUDE: N 27.93723
LONGITUDE: W 82.47875

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100322 & 100323

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

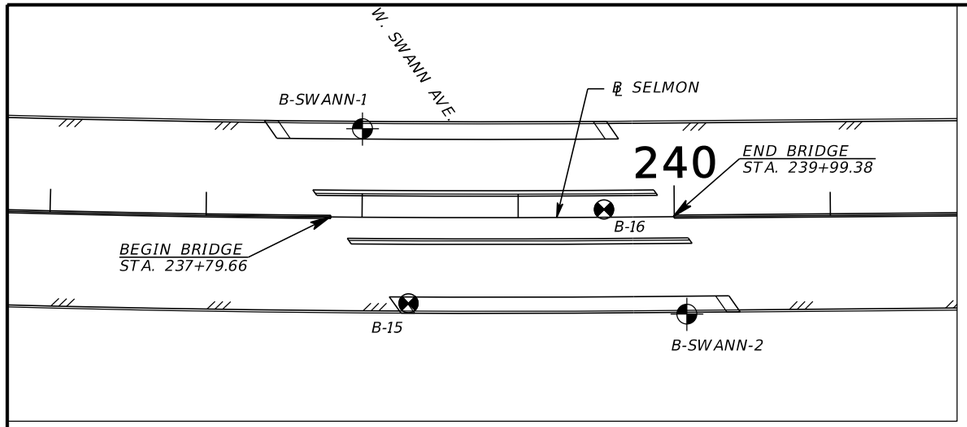
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

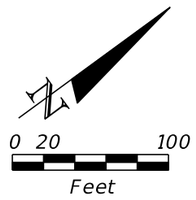
SHEET TITLE: REPORT OF CORE BORINGS (1) W. SWANN AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

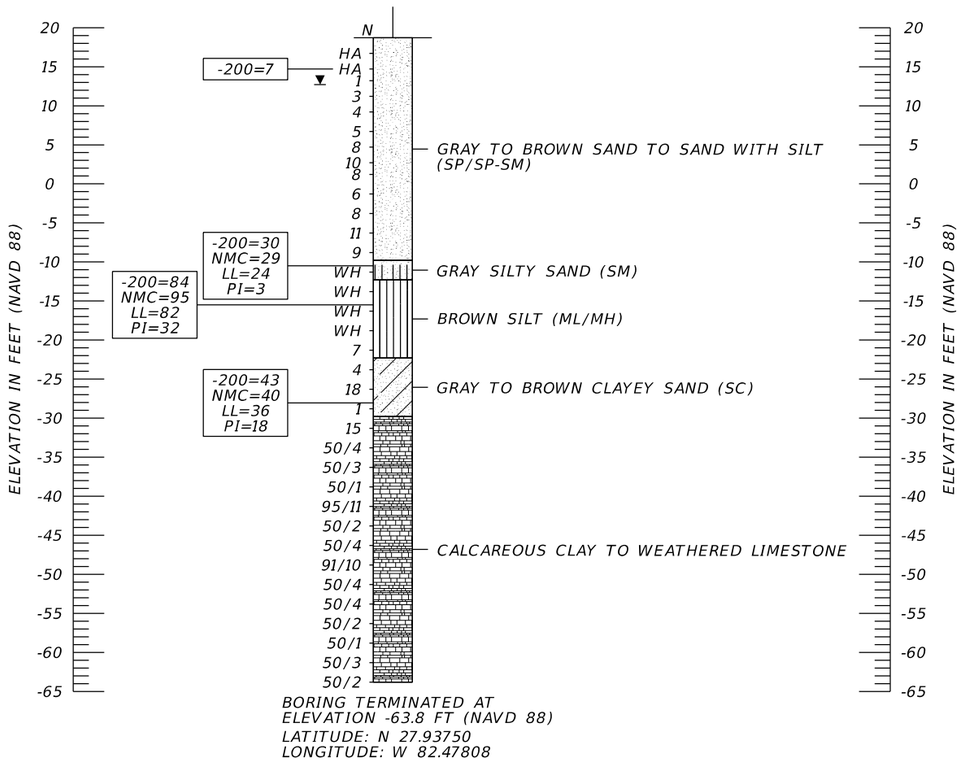
LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- BROWN SILT (ML/MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BORING LOCATION PLAN

BOR #	B-SWANN-2
STA.	240+08
REF.	℄ SELMON
OFF.	62' RT.
ELEV.	18.7'
DATE	4/14/2022
DRILLER	R. SCRUGGS
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -63.8 FT (NAVD 88)
LATITUDE: N 27.93750
LONGITUDE: W 82.47808

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (RESISTIVITY = 4,800 OHM-CM)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	4,800 TO 28,000 OHM-CM
CHLORIDES	45 TO 90 PPM
SULFATES	<5 TO 171 PPM
pH	6.8 TO 7.1

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100322 & 100323

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

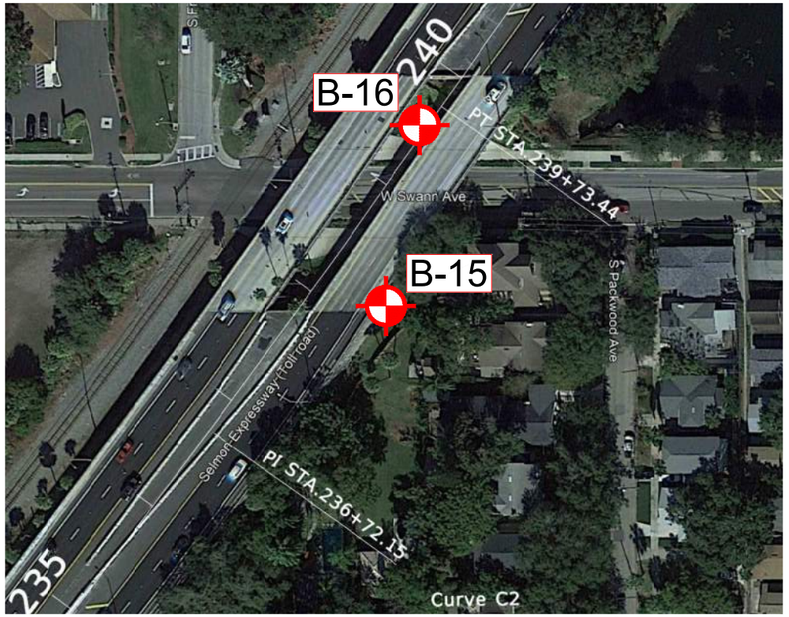
SHEET TITLE: REPORT OF CORE BORINGS (2) W. SWANN AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:

bsawaska 7/14/2022 8:15:03 PM J:\65II\2021 Files\65II-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



Source: Google Earth
Image Date: 12/17/2019

LEGEND:
Approximate SPT Boring Location

0' 100' 200'
Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

WATER TABLE EXISTING AT TIME OF BORING
ESTIMATED SEASONAL HIGH GROUNDWATER TABLE

N	SPT N-VALUE
HA	HAND AUGER
NMC	NATURAL MOISTURE CONTENT (%)
-200	FINES PASSING A NO. 200 SIEVE (%)
GNA	GROUNDWATER NOT APPARENT
GSE	APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
OC	ORGANIC CONTENT
LL	LIQUID LIMIT
PI	PLASTICITY INDEX
LOC	LOSS OF CIRCULATION
ROC	REGAIN OF CIRCULATION
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
SP	UNIFIED SOIL CLASSIFICATION SYSTEM
qu	UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
50/3"	50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
RC-1 70 (42)	ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

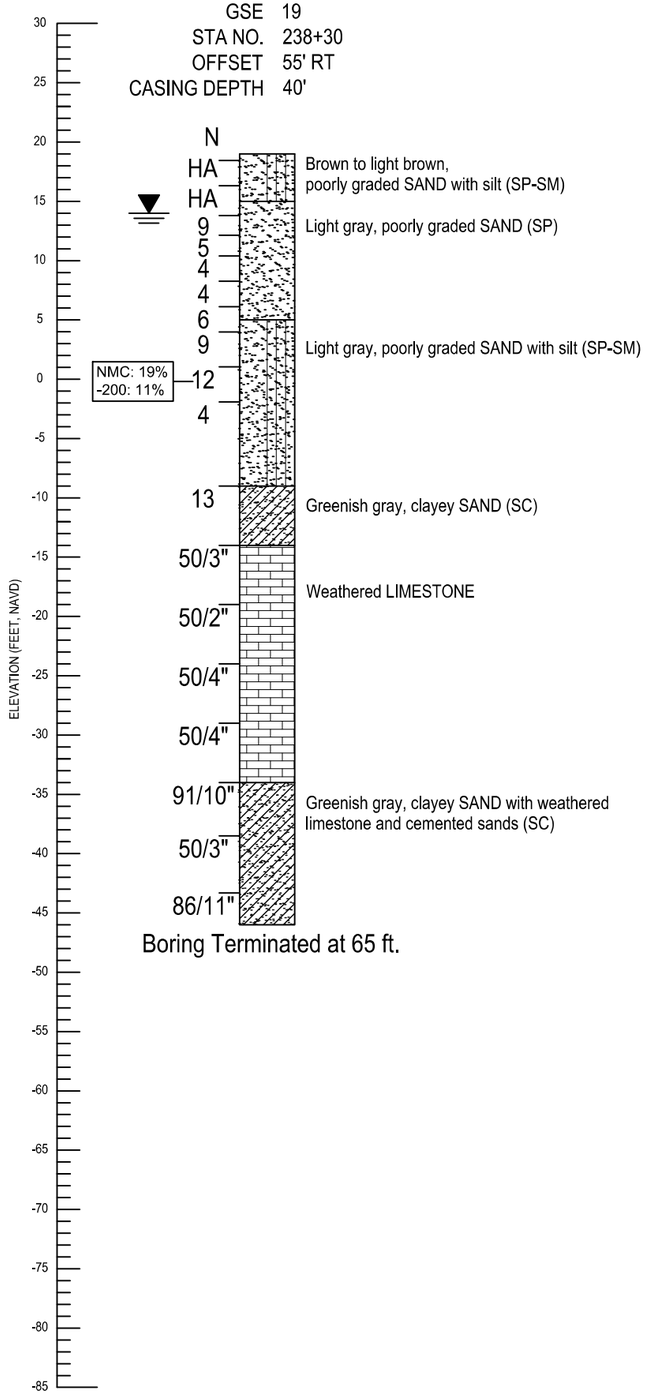
ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE:
CONCRETE: MODERATELY AGGRESSIVE
STEEL: MODERATELY AGGRESSIVE
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

ENGINEERING CLASSIFICATION

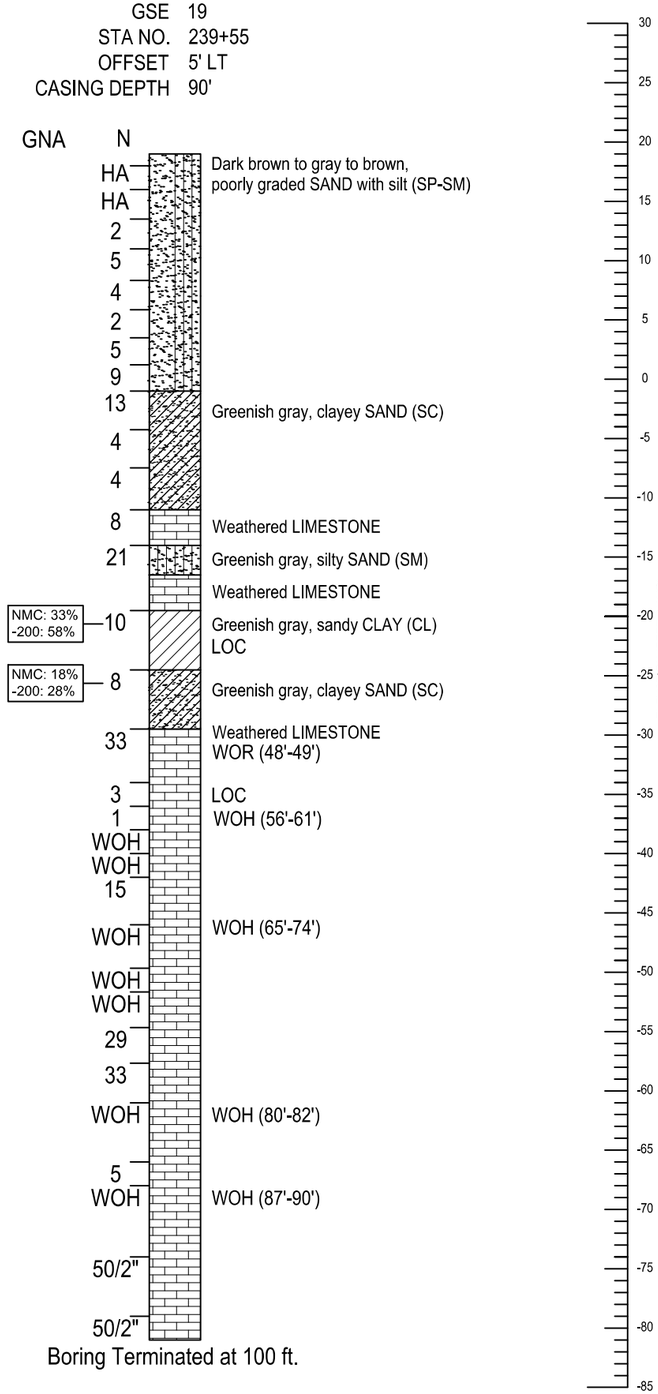
GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24

BORING NO. B-15
DATE 12/8/20
GSE 19
STA NO. 238+30
OFFSET 55' RT
CASING DEPTH 40'



Boring Terminated at 65 ft.

BORING NO. B-16
DATE 12/23/20
GSE 19
STA NO. 239+55
OFFSET 5' LT
CASING DEPTH 90'



Boring Terminated at 100 ft.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

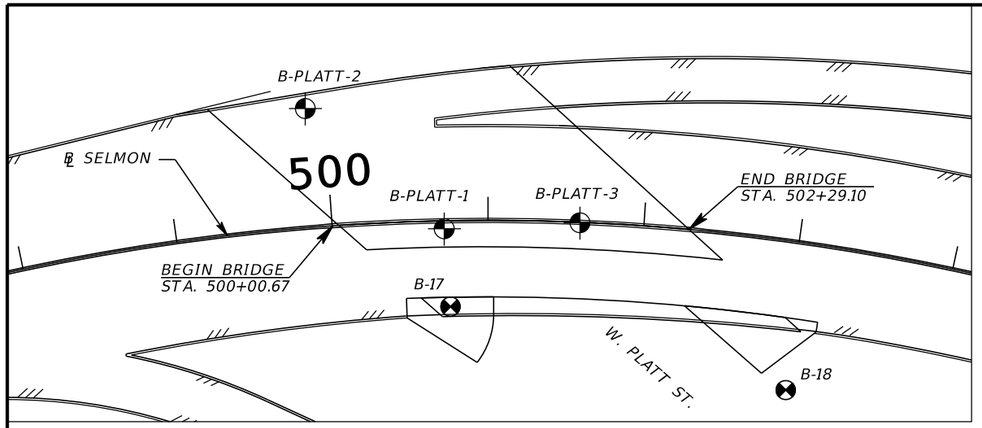
REPORT OF CORE BORINGS SWANN AVE

SHEET NO. 10

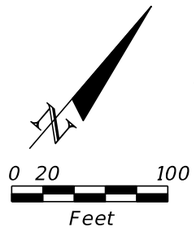
APPENDIX I

Report of Core Borings Sheets – SR 618 over Platt St.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	18,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	36 TO 45 PPM
pH	8.1 TO 8.8

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- BLUE-GRAY CALCAREOUS CLAYEY SAND (SC)
- BLUE-GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- BLUE-GRAY TO GREEN-GRAY SANDY SILT TO CALCAREOUS SILT (ML/MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

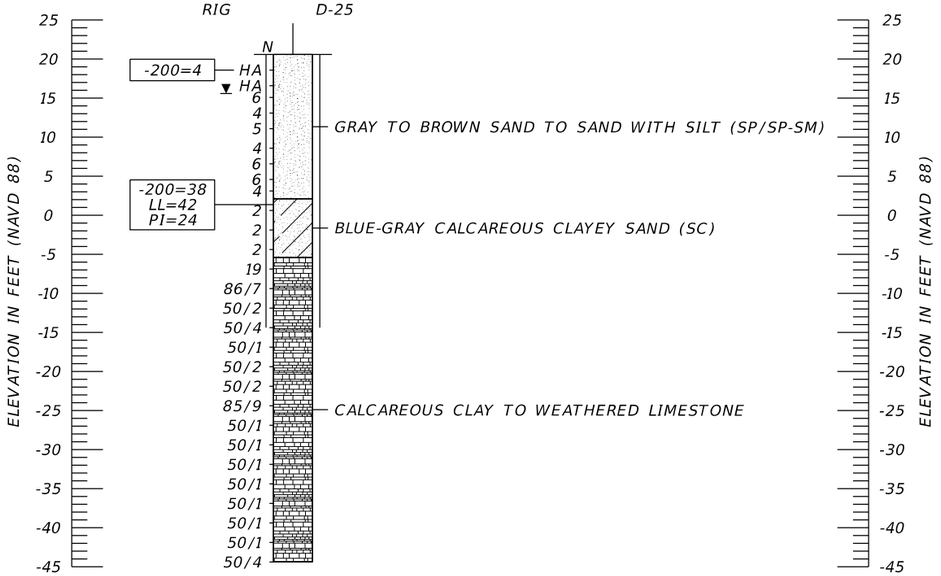
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- APPROXIMATE SPT BORING LOCATION
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BOR # B-PLATT-2
STA. 499+89
REF. ℄ SELMON
OFF. 78' LT.
ELEV. 20.6'
DATE 3/22/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -44.4 FT (NAVD 88)
LATITUDE: N 27.94172
LONGITUDE: W 82.47516

BRIDGE NOS. 100324 & 100325

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

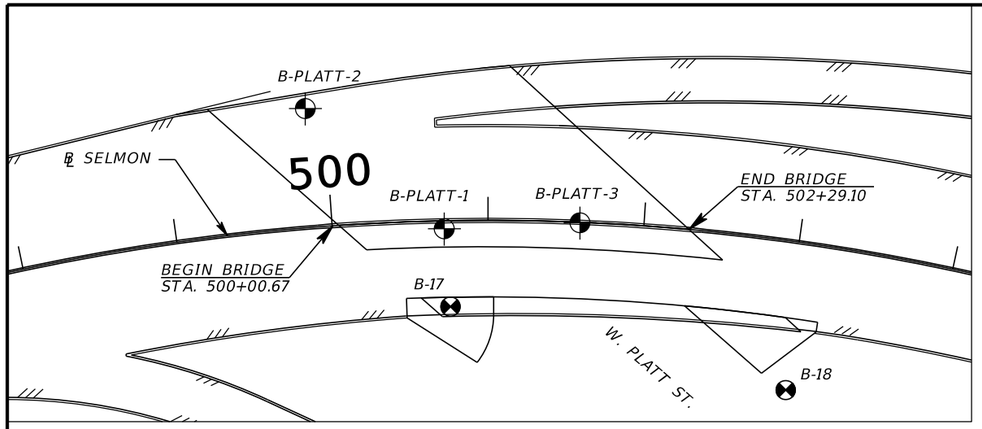
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

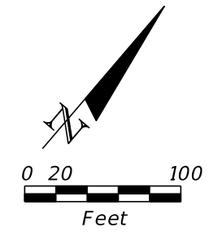
TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1) W. PLATT STREET
REF. DWG. NO.:
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.:



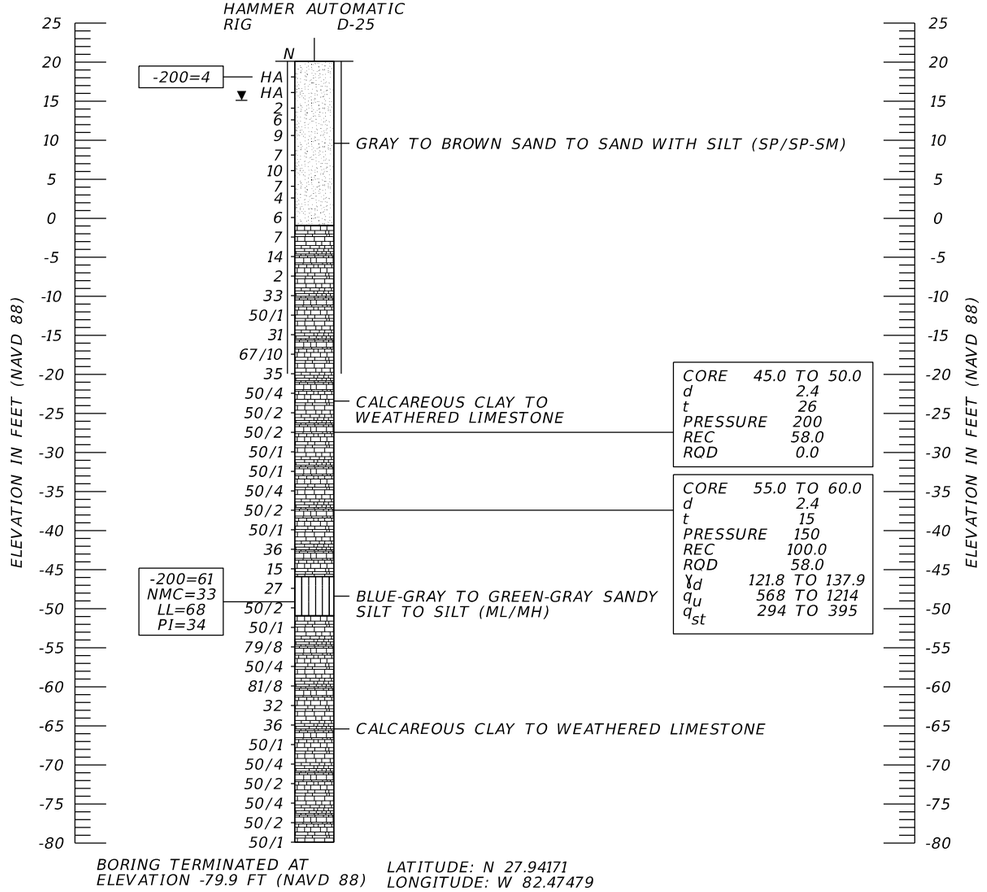
BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

BOR #	B-PLATT-1
STA.	500+72
REF.	℄ SELMON
OFF.	5' RT.
ELEV.	20.1'
DATE	3/23/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT ELEVATION -79.9 FT (NAVD 88)

LATITUDE: N 27.94171
LONGITUDE: W 82.47479

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	18,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	36 TO 45 PPM
pH	8.1 TO 8.8

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- BLUE-GRAY CALCAREOUS CLAYEY SAND (SC)
- BLUE-GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- BLUE-GRAY TO GREEN-GRAY SANDY SILT TO CALCAREOUS SILT (ML/MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION BY OTHERS
- APPROXIMATE SPT BORING LOCATION
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100324 & 100325

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

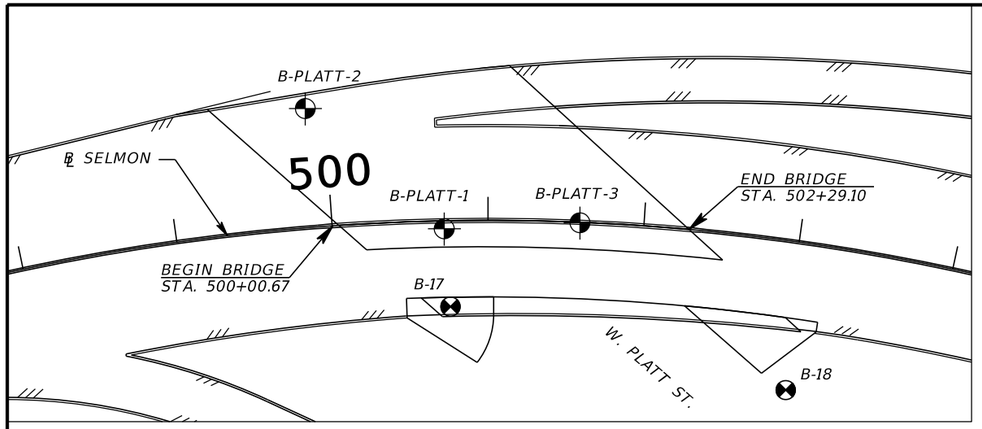
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) W. PLATT STREET

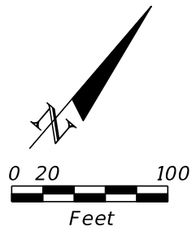
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: SLIGHTLY AGGRESSIVE
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

RESISTIVITY	18,000 OHM-CM
CHLORIDES	15 PPM
SULFATES	36 TO 45 PPM
pH	8.1 TO 8.8

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- GRAY SILTY SAND (SM)
- BLUE-GRAY CALCAREOUS CLAYEY SAND (SC)
- BLUE-GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- BLUE-GRAY TO GREEN-GRAY SANDY SILT TO CALCAREOUS SILT (ML/MH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

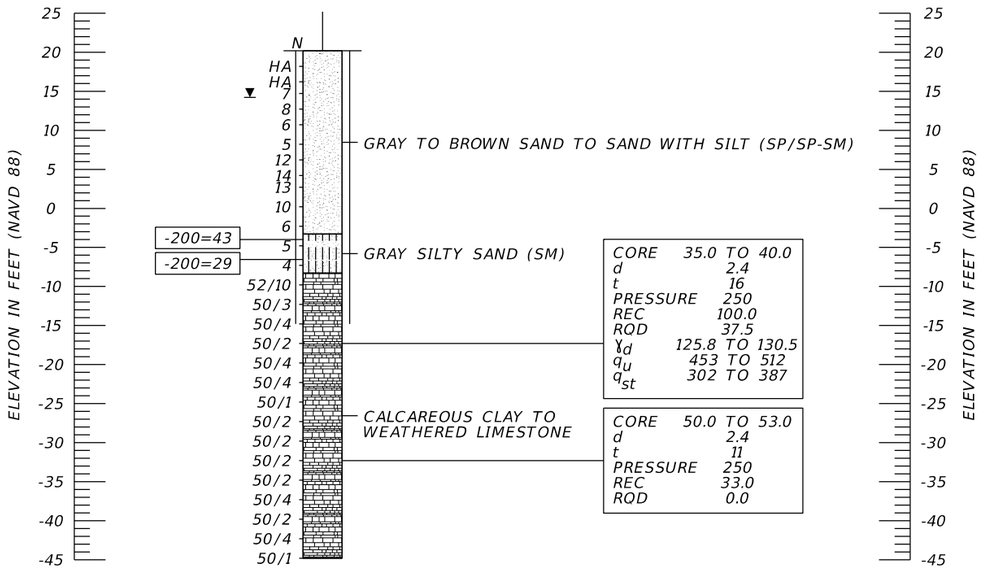
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- APPROXIMATE SPT BORING LOCATION
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BOR #	B-PLATT-3
STA.	501+59
REF.	℄ SELMON
OFF.	0' RT.
ELEV.	20.2'
DATE	3/21/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT ELEVATION -44.8 FT (NAVD 88)

LATITUDE: N 27.94188
LONGITUDE: W 82.47459

BRIDGE NOS. 100324 & 100325

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

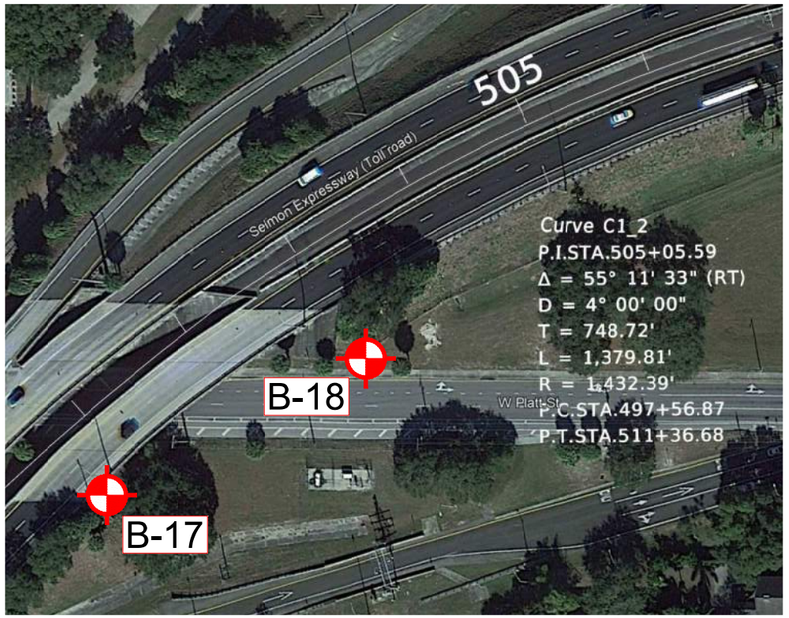
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (3) W. PLATT STREET

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

WATER TABLE EXISTING AT TIME OF BORING
ESTIMATED SEASONAL HIGH GROUNDWATER TABLE

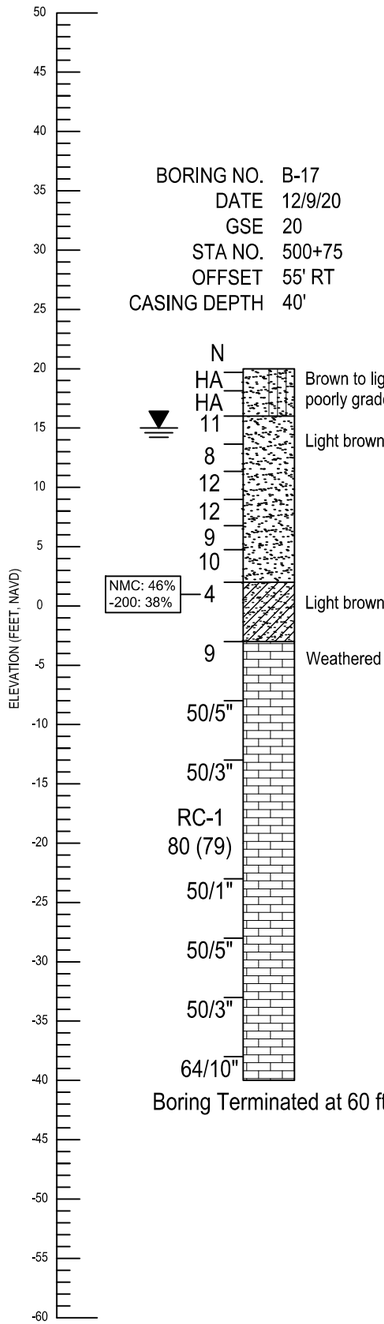
N	SPT N-VALUE
HA	HAND AUGER
NMC	NATURAL MOISTURE CONTENT (%)
-200	FINES PASSING A NO. 200 SIEVE (%)
GNA	GROUNDWATER NOT APPARENT
GSE	APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
OC	ORGANIC CONTENT
LL	LIQUID LIMIT
PI	PLASTICITY INDEX
LOC	LOSS OF CIRCULATION
ROC	REGAIN OF CIRCULATION
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
SP	UNIFIED SOIL CLASSIFICATION SYSTEM
qu	UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
50/3"	50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
RC-1 70 (42)	ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

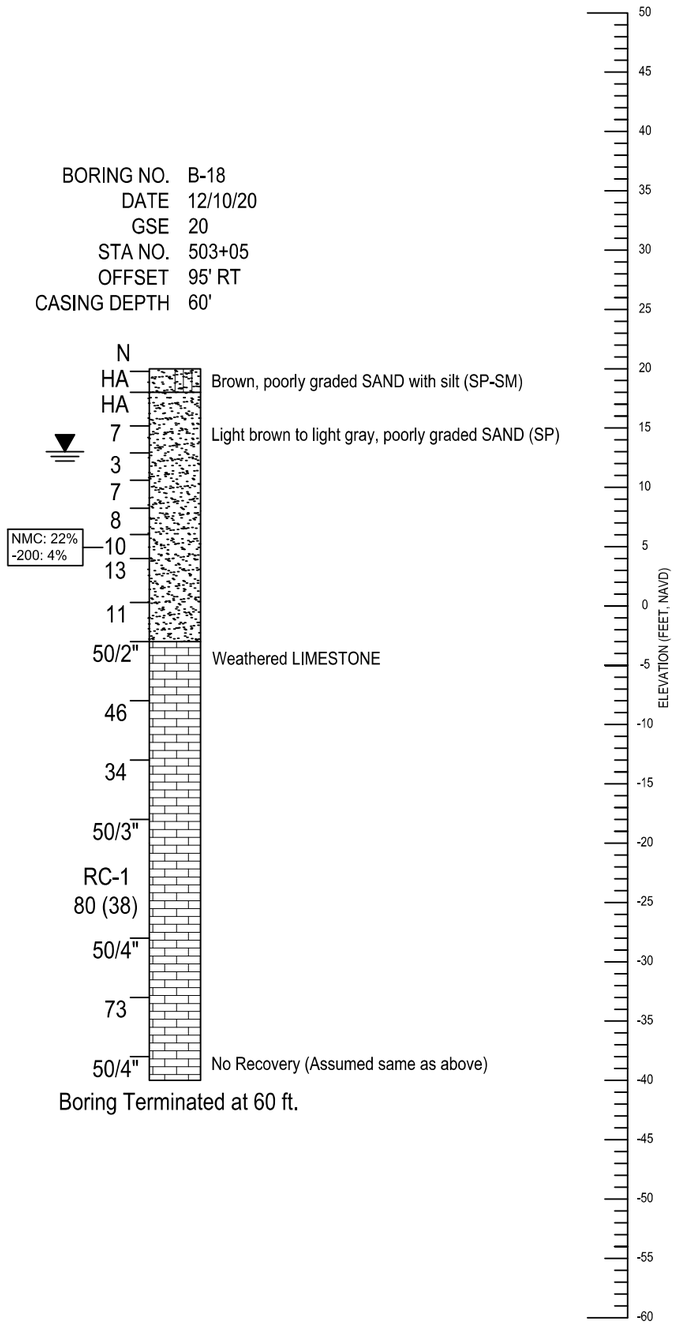
ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE:
CONCRETE: SLIGHTLY AGGRESSIVE
STEEL: MODERATELY AGGRESSIVE
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

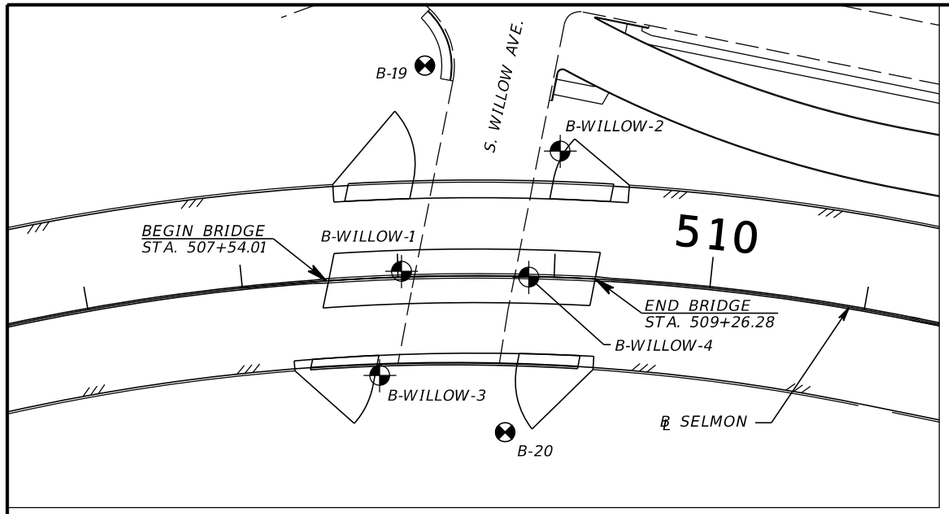
REPORT OF CORE BORINGS PLATT ST

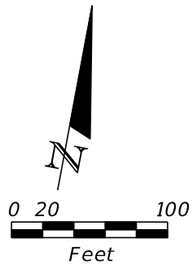
SHEET NO. 11

APPENDIX J

Report of Core Borings Sheets – SR 618 over Willow Ave.

Existing Geotechnical Data – Borings Performed by Others





NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (pH = 7.0)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

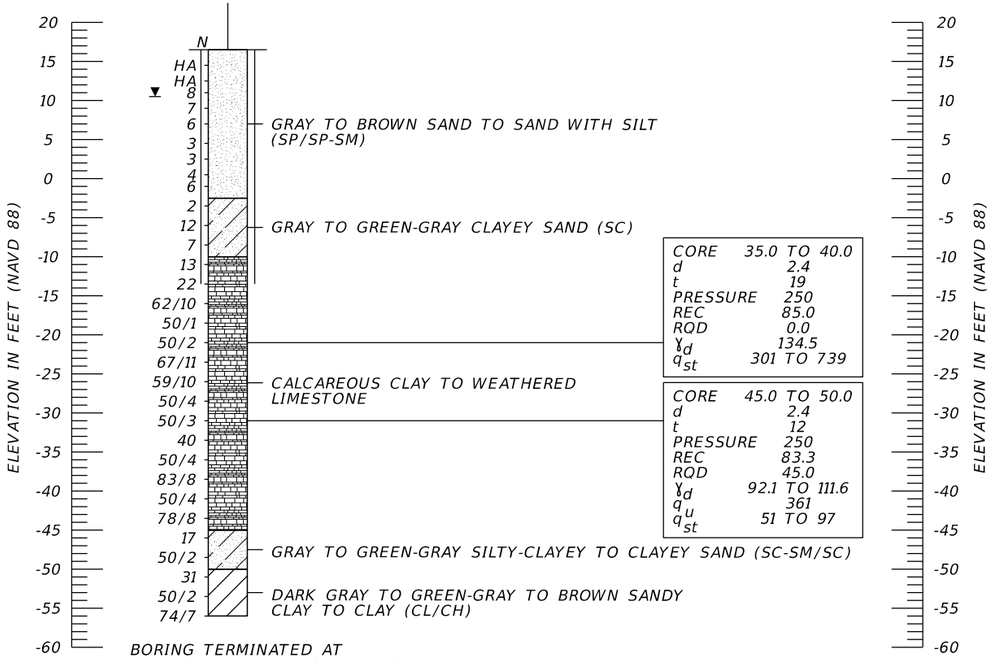
RESISTIVITY	7,100 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.0

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BORING LOCATION PLAN

BOR #	B-WILLOW-3
STA.	507+85
REF.	℄ SELMON
OFF.	62' RT.
ELEV.	16.5'
DATE	3/15/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -56.0 FT (NAVD 88)

LATITUDE: N 27.94246
LONGITUDE: W 82.47282

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100326 & 100327

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

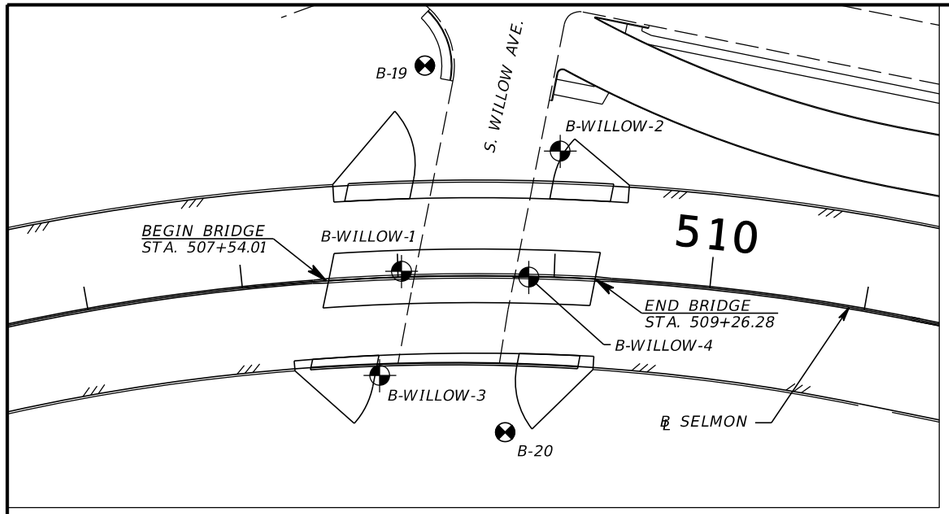
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

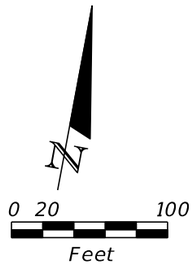
SHEET TITLE: REPORT OF CORE BORINGS (1) S. WILLOW AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (pH = 7.0)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

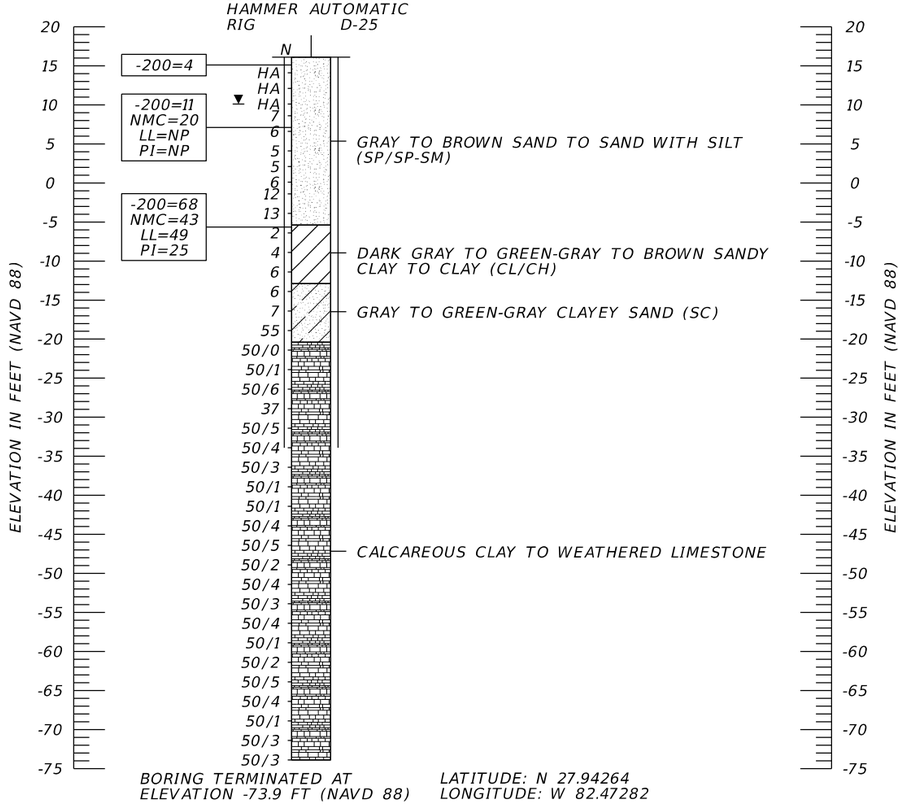
RESISTIVITY	7,100 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.0

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BORING LOCATION PLAN



BORING TERMINATED AT ELEVATION -73.9 FT (NAVD 88)

LATITUDE: N 27.94264
LONGITUDE: W 82.47282

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100326 & 100327

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

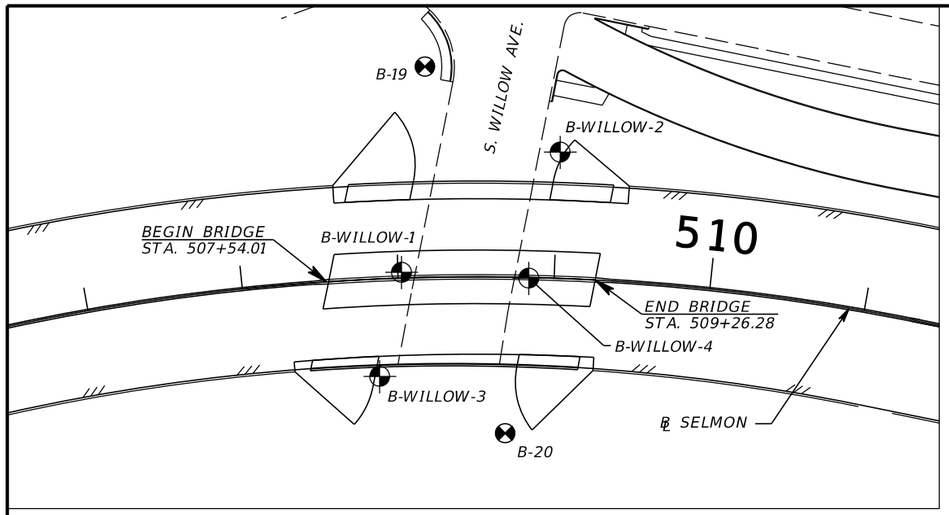
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

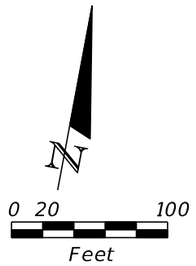
SHEET TITLE: REPORT OF CORE BORINGS (2) S. WILLOW AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (pH = 7.0)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

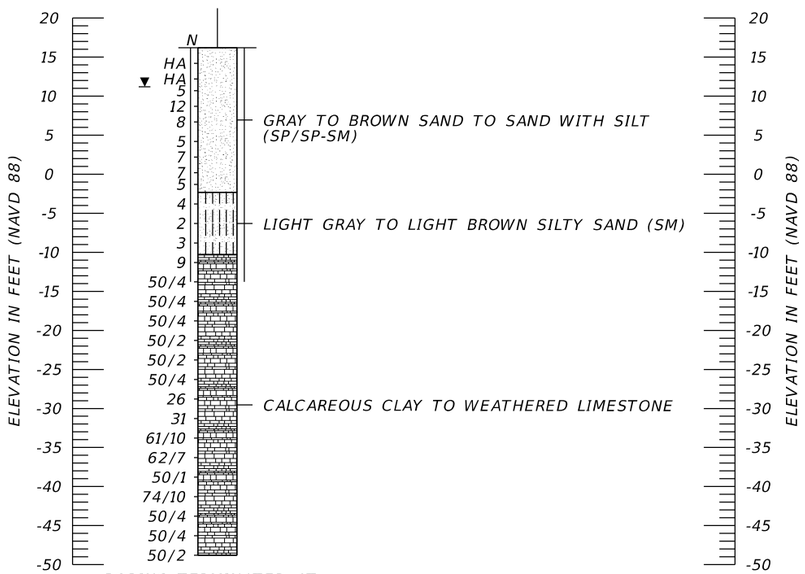
RESISTIVITY	7,100 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.0

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
ROD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BOR # B-WILLOW-4
STA. 508+84
REF. ℄ SELMON
OFF. 0' RT.
ELEV. 16.2'
DATE 3/16/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -48.8 FT (NAVD 88)

LATITUDE: N 27.94268
LONGITUDE: W 82.47257

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100326 & 100327

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

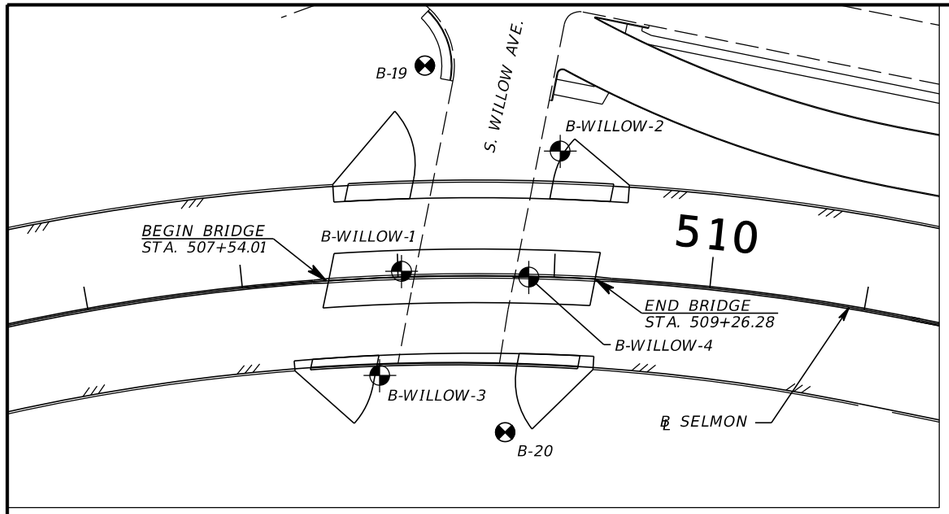
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

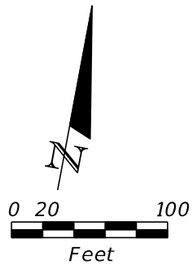
SHEET TITLE: REPORT OF CORE BORINGS (3) S. WILLOW AVENUE

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: SLIGHTLY AGGRESSIVE
SUBSTRUCTURE	STEEL: MODERATELY AGGRESSIVE (pH = 7.0)
SUPERSTRUCTURE	SLIGHTLY AGGRESSIVE

SOIL TEST RESULTS:

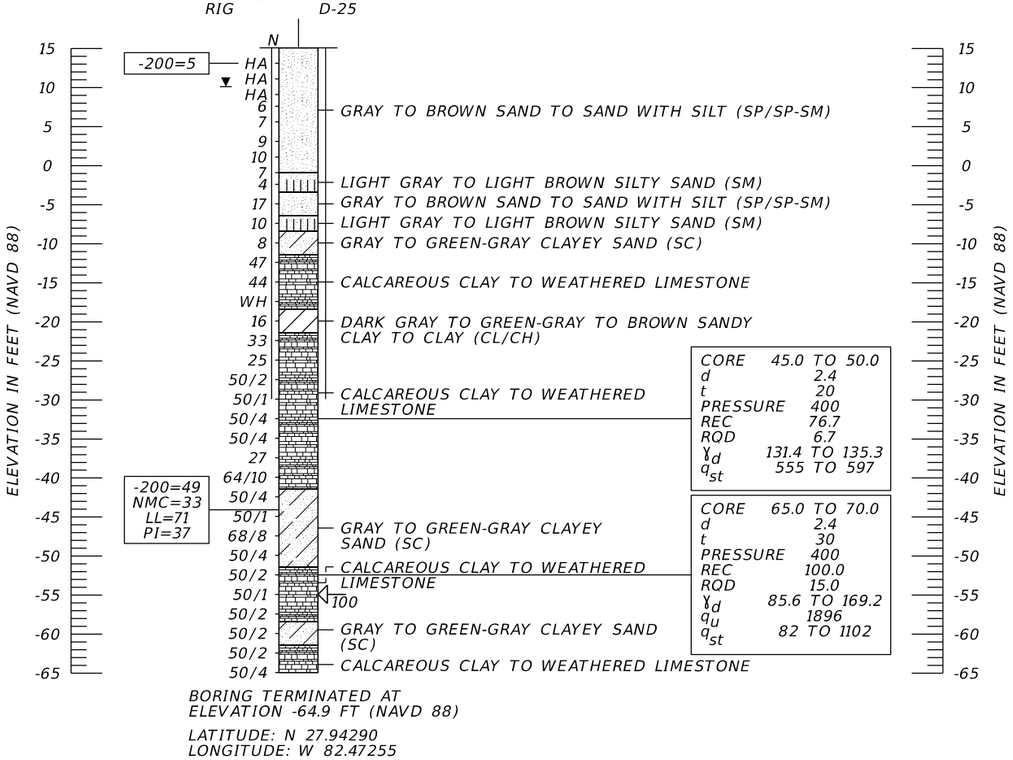
RESISTIVITY	7,100 OHM-CM
CHLORIDES	15 PPM
SULFATES	<5 PPM
pH	7.0

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT GRAY TO LIGHT BROWN SILTY SAND (SM)
	GRAY TO GREEN-GRAY CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY TO BROWN SANDY CLAY TO CLAY (CL/CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

BORING LOCATION PLAN

BOR #	B-WILLOW-2
STA.	509+01
REF.	℄ SELMON
OFF.	81' LT.
ELEV.	15.1'
DATE	3/17/2022
DRILLER	A. JACKSON
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -64.9 FT (NAVD 88)

LATITUDE: N 27.94290
LONGITUDE: W 82.47255

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100326 & 100327

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

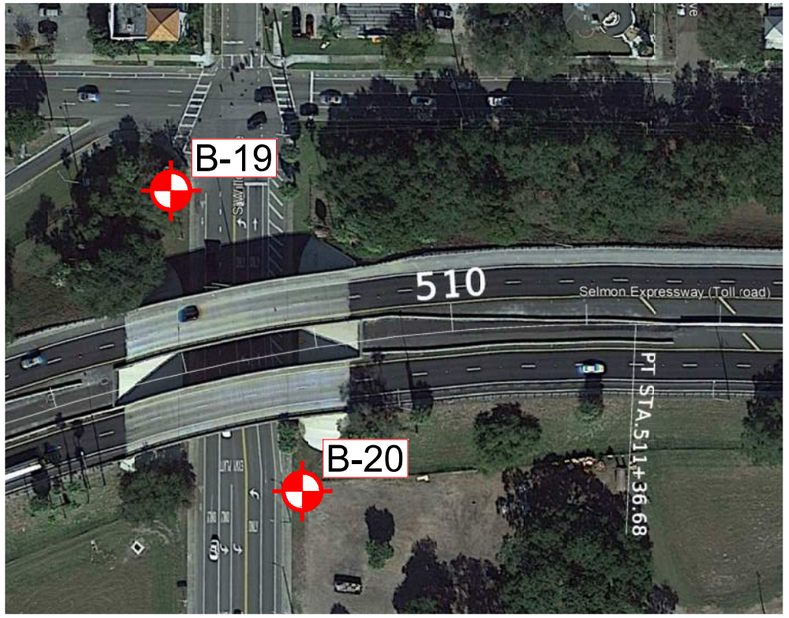
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (4)
S. WILLOW AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS
FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

0' 100' 200'
Graphic Scale (feet)

LEGEND:
Approximate SPT Boring Location

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

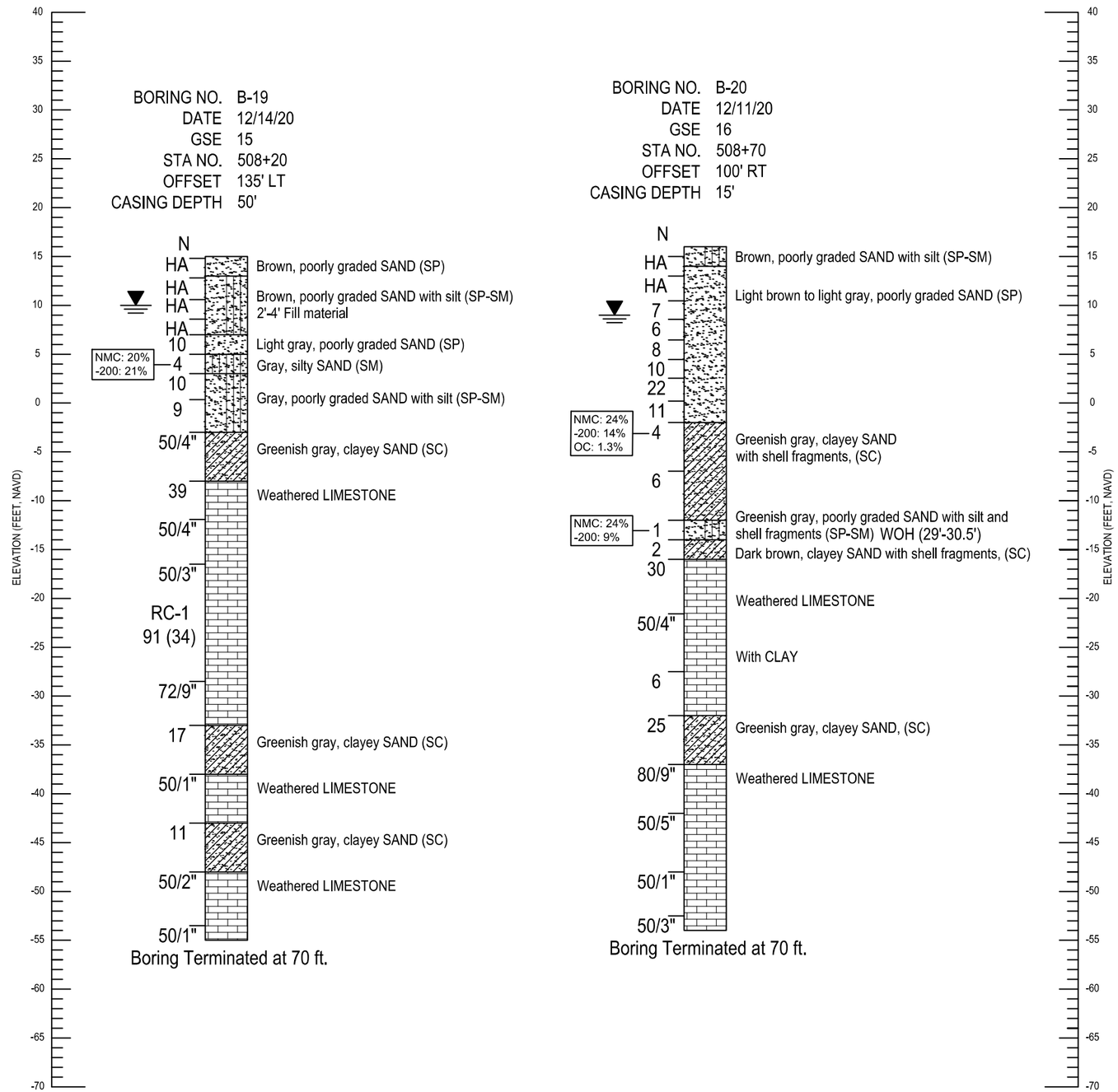
WATER TABLE EXISTING AT TIME OF BORING
ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
N SPT N-VALUE
HA HAND AUGER
NMC NATURAL MOISTURE CONTENT (%)
-200 FINES PASSING A NO. 200 SIEVE (%)
GNA GROUNDWATER NOT APPARENT
GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
OC ORGANIC CONTENT
LL LIQUID LIMIT
PI PLASTICITY INDEX
LOC LOSS OF CIRCULATION
ROC REGAIN OF CIRCULATION
WOH WEIGHT OF HAMMER
WOR WEIGHT OF ROD
SP UNIFIED SOIL CLASSIFICATION SYSTEM
qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE:
CONCRETE: MODERATELY AGGRESSIVE
STEEL: MODERATELY AGGRESSIVE
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24



BORING NO. B-19
DATE 12/14/20
GSE 15
STA NO. 508+20
OFFSET 135' LT
CASING DEPTH 50'

N		
HA		Brown, poorly graded SAND (SP)
HA		Brown, poorly graded SAND with silt (SP-SM)
HA		2'-4' Fill material
HA		
10		Light gray, poorly graded SAND (SP)
4	NMC: 20%, -200: 21%	Gray, silty SAND (SM)
10		Gray, poorly graded SAND with silt (SP-SM)
9		
50/4"		Greenish gray, clayey SAND (SC)
39		Weathered LIMESTONE
50/4"		
50/3"		
RC-1 91 (34)		
72/9"		
17		Greenish gray, clayey SAND (SC)
50/1"		Weathered LIMESTONE
11		Greenish gray, clayey SAND (SC)
50/2"		Weathered LIMESTONE
50/1"		

Boring Terminated at 70 ft.

BORING NO. B-20
DATE 12/11/20
GSE 16
STA NO. 508+70
OFFSET 100' RT
CASING DEPTH 15'

N		
HA		Brown, poorly graded SAND with silt (SP-SM)
HA		Light brown to light gray, poorly graded SAND (SP)
7		
6		
8		
10		
22		
11	NMC: 24%, -200: 14%, OC: 1.3%	Greenish gray, clayey SAND with shell fragments, (SC)
4		
6		
1	NMC: 24%, -200: 9%	Greenish gray, poorly graded SAND with silt and shell fragments (SP-SM) WOH (29'-30.5')
2		Dark brown, clayey SAND with shell fragments, (SC)
30		Weathered LIMESTONE
50/4"		With CLAY
6		
25		Greenish gray, clayey SAND, (SC)
80/9"		Weathered LIMESTONE
50/5"		
50/1"		
50/3"		

Boring Terminated at 70 ft.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

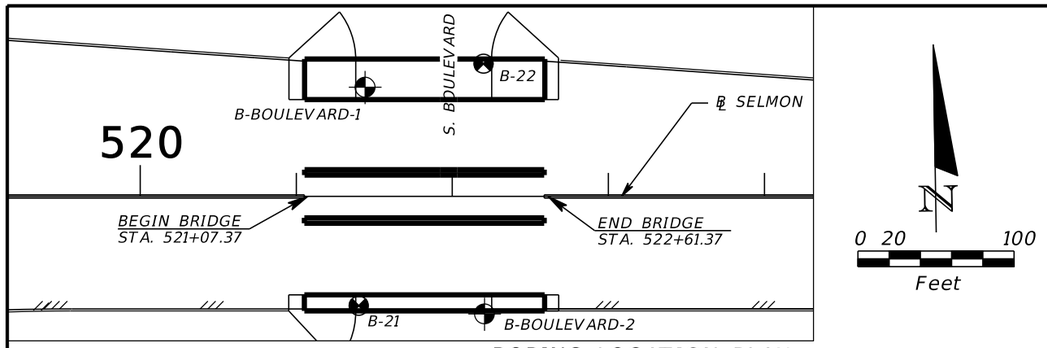
REPORT OF CORE BORINGS
WILLOW AVE

SHEET NO. 12

APPENDIX K

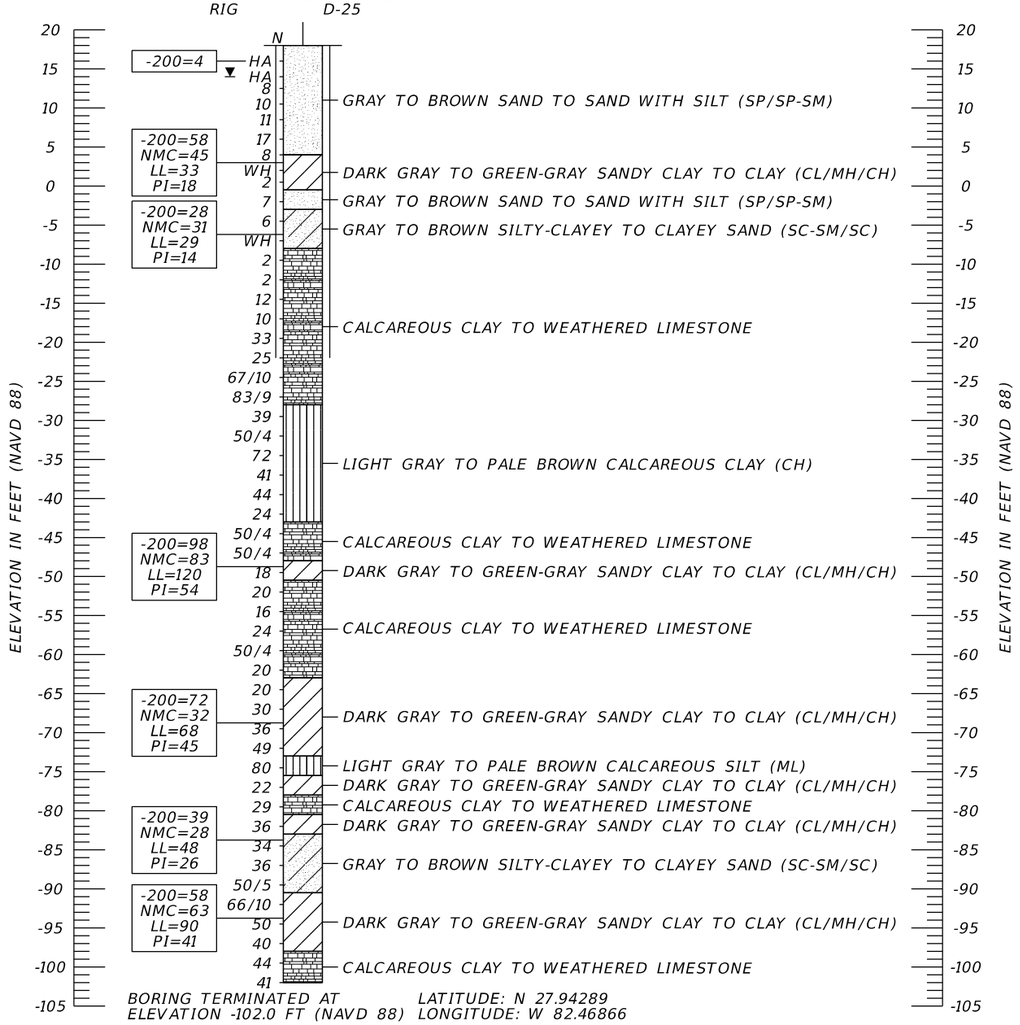
Report of Core Borings Sheets – SR 618 over South Boulevard

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN

BOR # B-BOULEVARD-1
STA. 521+44
REF. ℄ SELMON
OFF. 70' LT.
ELEV. 18.0'
DATE 4/4/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -102.0 FT (NAVD 88)
LATITUDE: N 27.94289
LONGITUDE: W 82.46866

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	4,700 TO 4,900 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.5 TO 8.0

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

- GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT BROWN TO BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- DARK GRAY TO GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/MH/CH)
- LIGHT GRAY TO PALE BROWN CALCAREOUS CLAY (CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100328 & 100329

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

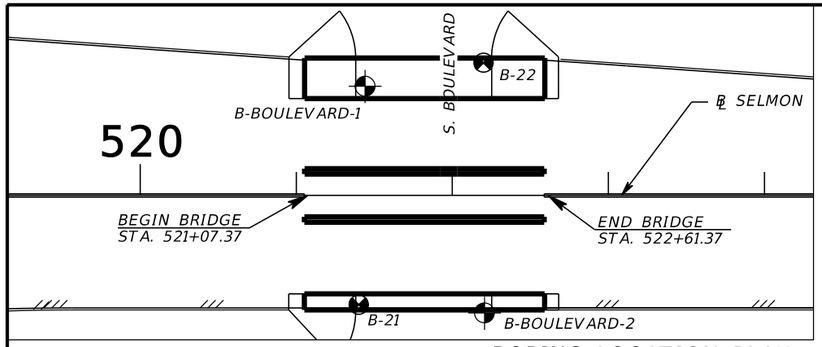
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

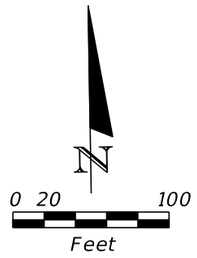
SHEET TITLE: REPORT OF CORE BORINGS (1) SOUTH BOULEVARD

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

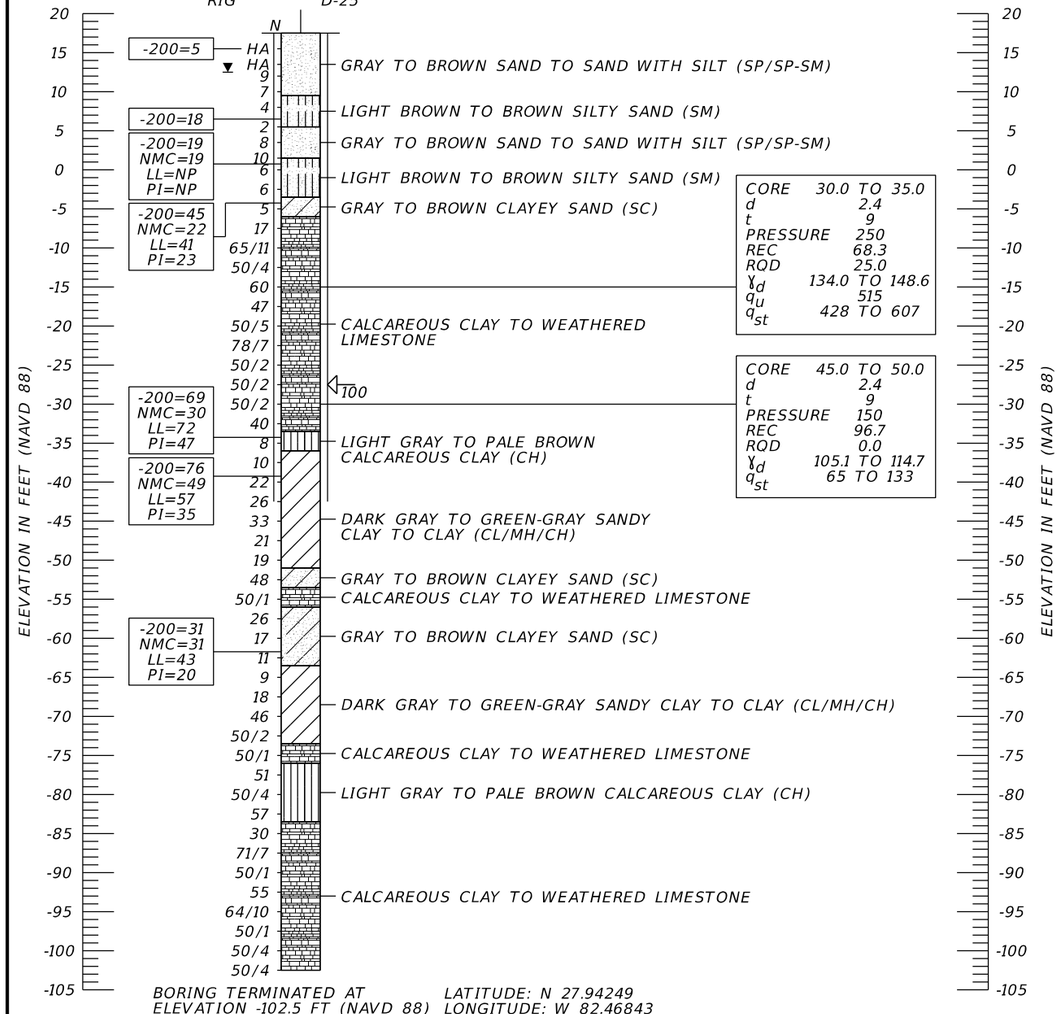
SHEET NO.





BORING LOCATION PLAN

BOR # B-BOULEVARD-2
STA. 522+21
REF. ℄ SELMON
OFF. 75' RT.
ELEV. 17.5'
DATE 3/24/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -102.5 FT (NAVD 88)
LATITUDE: N 27.94249
LONGITUDE: W 82.46843

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	4,700 TO 4,900 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	7.5 TO 8.0

WATER TEST RESULTS: (TAMPA BAY)

RESISTIVITY	260 OHM-CM
CHLORIDES	20,000 PPM
SULFATES	3,700 PPM
pH	7.5

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

LEGEND

	GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
	LIGHT BROWN TO BROWN SILTY SAND (SM)
	GRAY TO BROWN CLAYEY SAND (SC)
	DARK GRAY TO GREEN-GRAY SANDY CLAY TO CLAY TO SILT (CL/MH/CH)
	LIGHT GRAY TO PALE BROWN CALCAREOUS CLAY (CH)
	CALCAREOUS CLAY TO WEATHERED LIMESTONE
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100328 & 100329

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

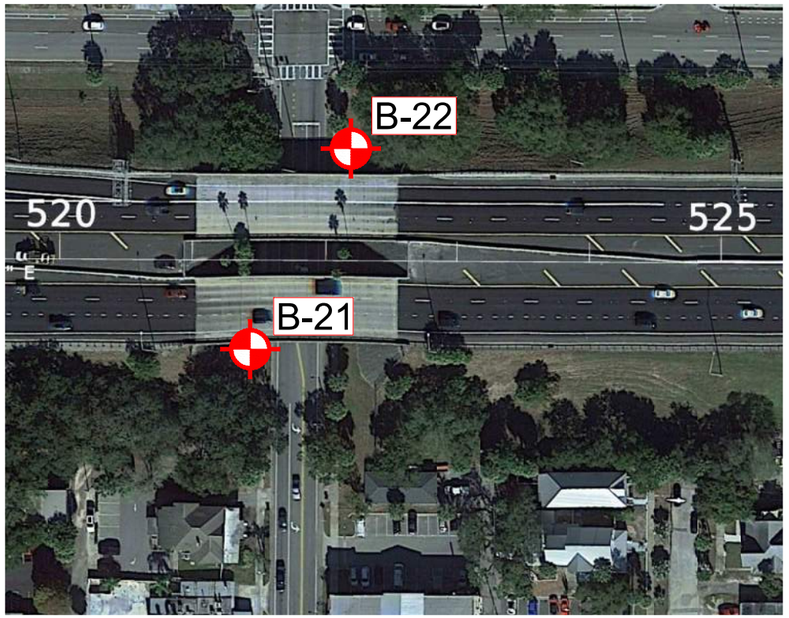
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) SOUTH BOULEVARD

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

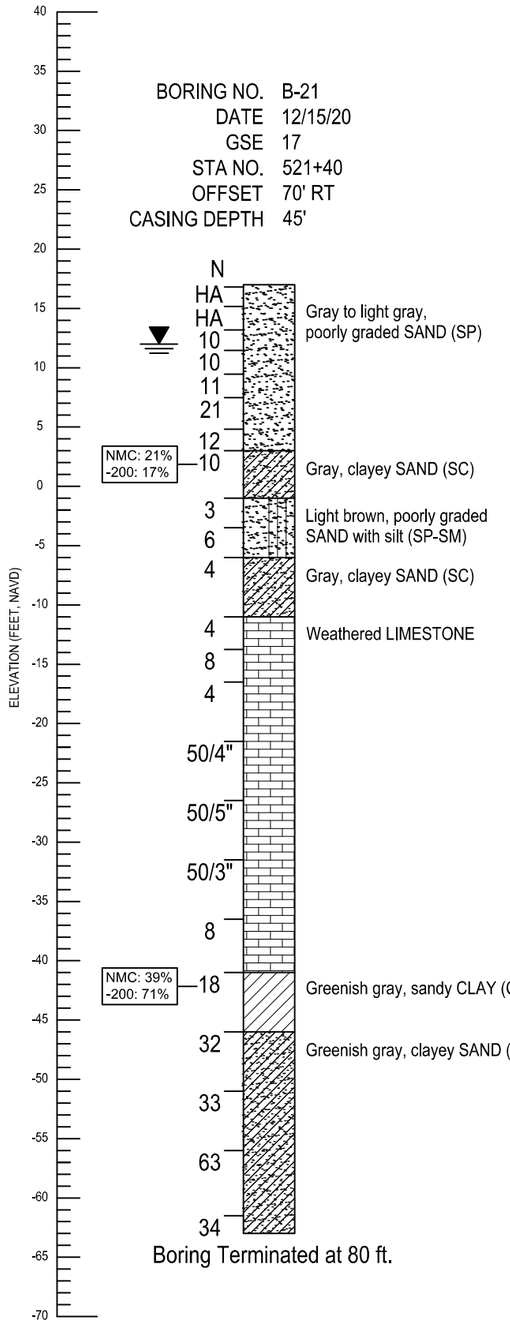
ENVIRONMENTAL CLASSIFICATION

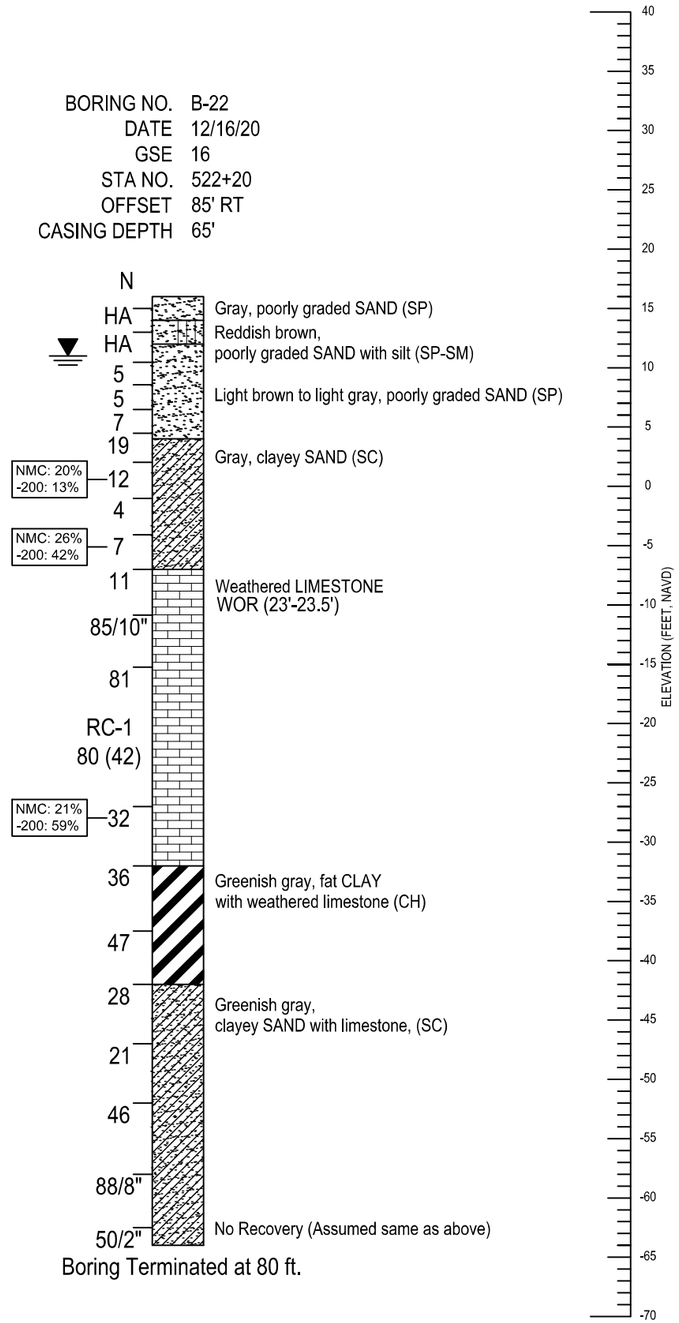
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

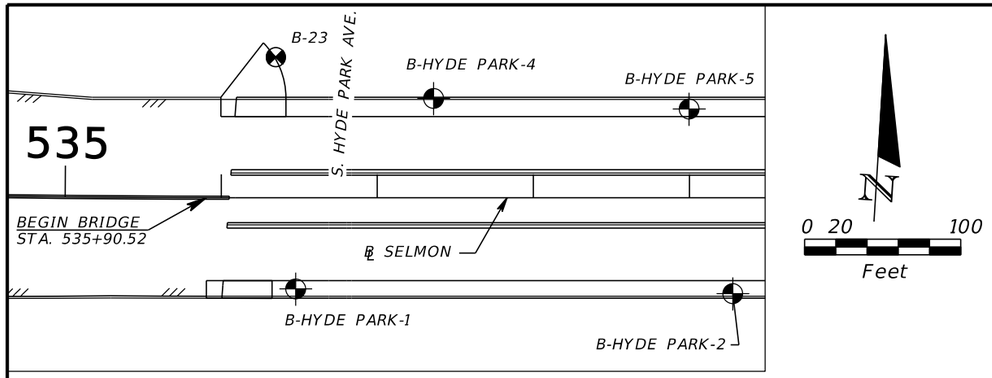
REPORT OF CORE BORINGS SOUTH BLVD

SHEET NO. 13

APPENDIX L

Report of Core Borings Sheets – SR 618 over Hyde Park Ave./Plant Ave.

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

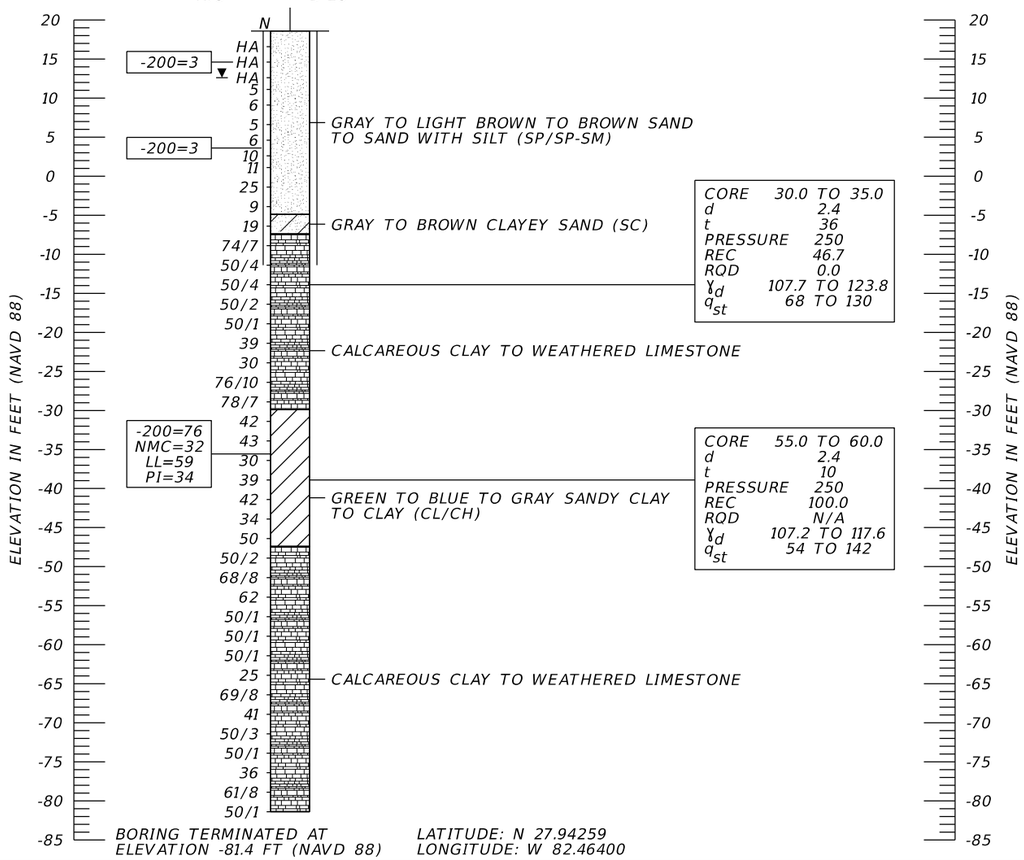
- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BOR # B-HYDE PARK-1
STA. 536+48
REF. ℄ SELMON
OFF. 58' RT.
ELEV. 18.6
DATE 3/18/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



ELEVATION IN FEET (NAVD 88)
20 15 10 5 0 -5 -10 -15 -20 -25 -30 -35 -40 -45 -50 -55 -60 -65 -70 -75 -80 -85

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

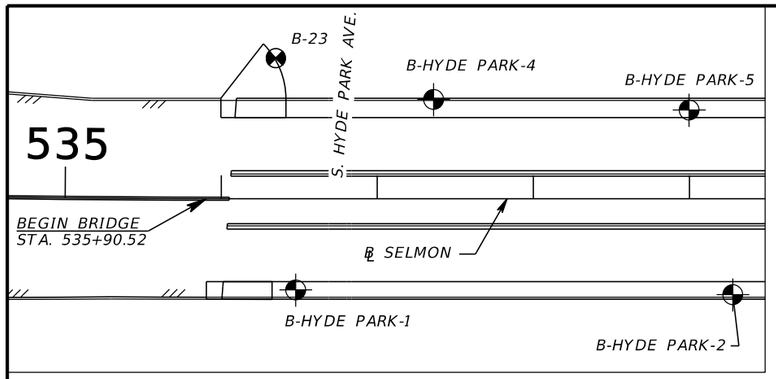
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

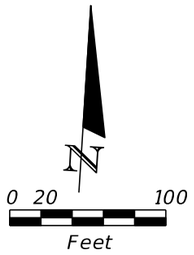
SHEET TITLE: REPORT OF CORE BORINGS (1)
S. HYDE PARKE AVENUE/S. PLANT AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

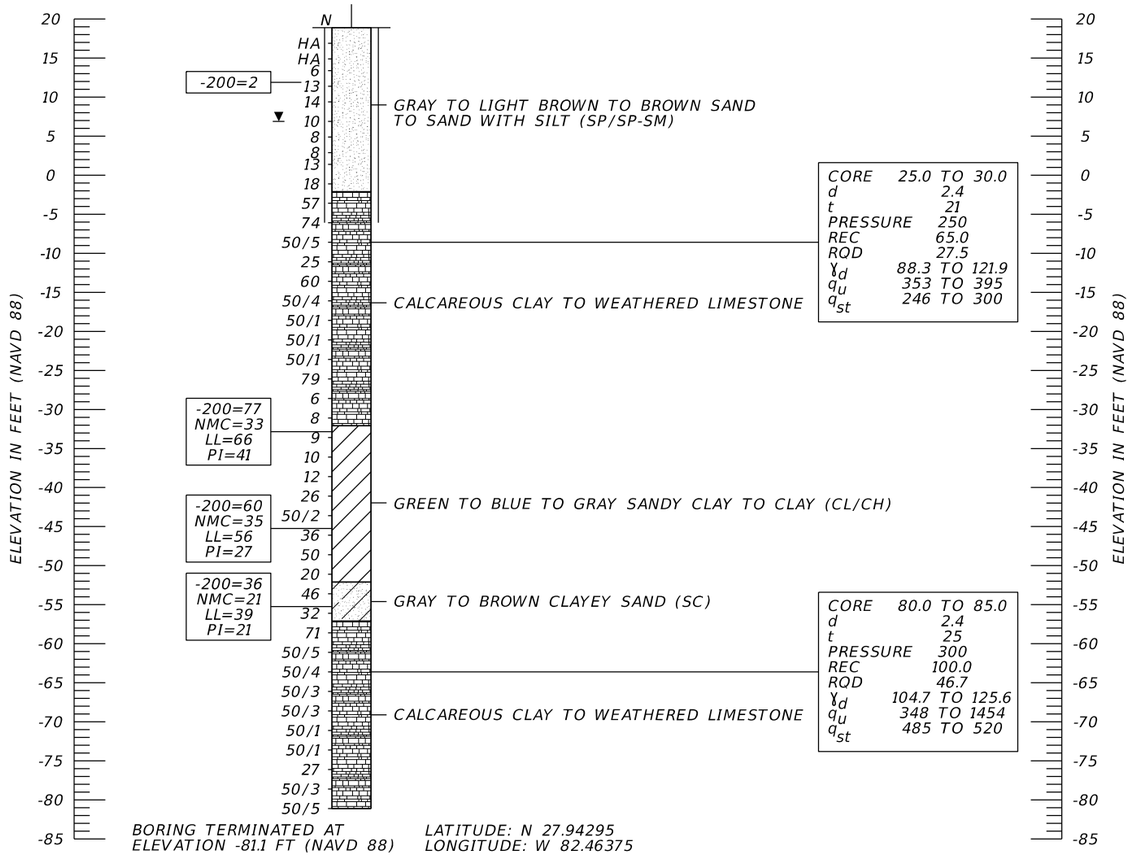
SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

BOR # B-HYDE PARK-4
STA. 537+36
REF. ℄ SELMON
OFF. 64' LT.
ELEV. 18.9
DATE 3/18/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -81.1 FT (NAVD 88)
LATITUDE: N 27.94295
LONGITUDE: W 82.46375

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
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50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- ▼ GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

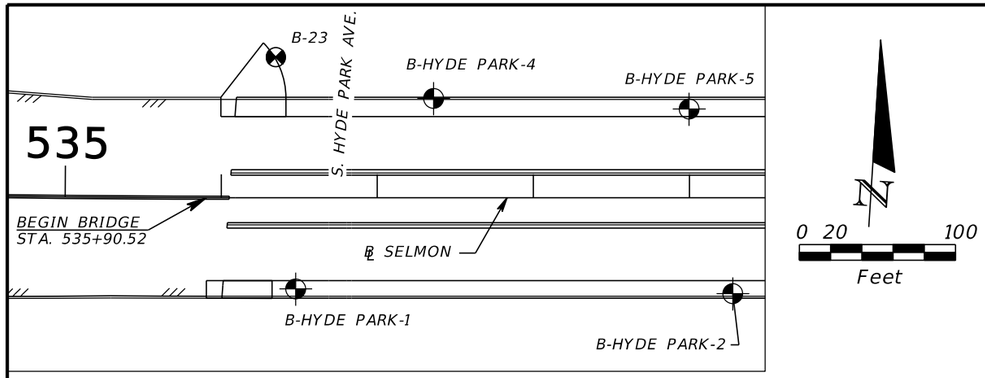
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

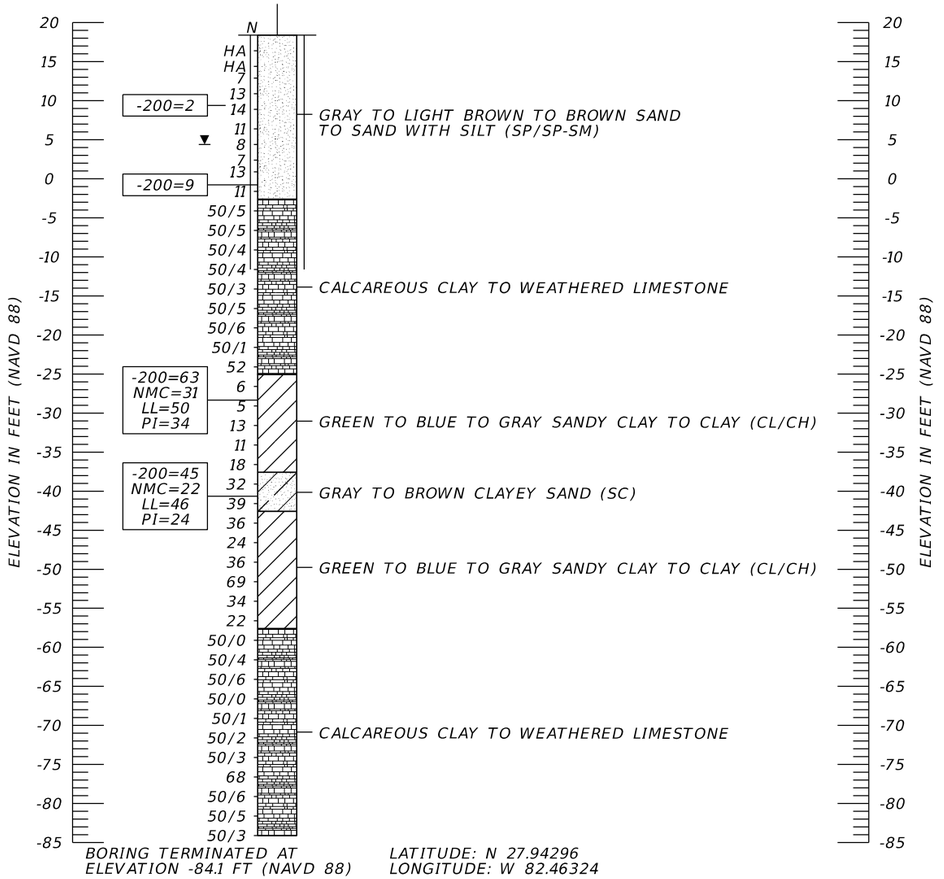
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (2) S. HYDE PARKE AVENUE/S. PLANT AVENUE
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-HYDE PARK-5
STA. 539+00
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 18.4
DATE 3/20/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -84.1 FT (NAVD 88)

LATITUDE: N 27.94296
LONGITUDE: W 82.46324

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

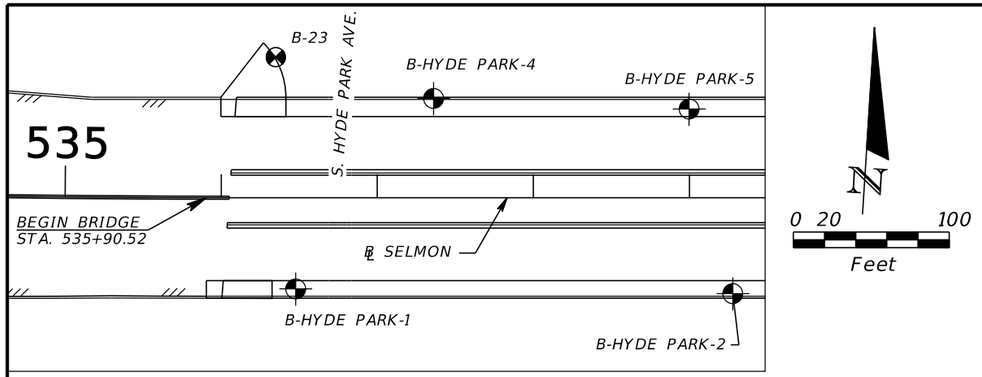
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (3)
S. HYDE PARKE AVENUE/S. PLANT AVENUE

REF. DWG. NO.

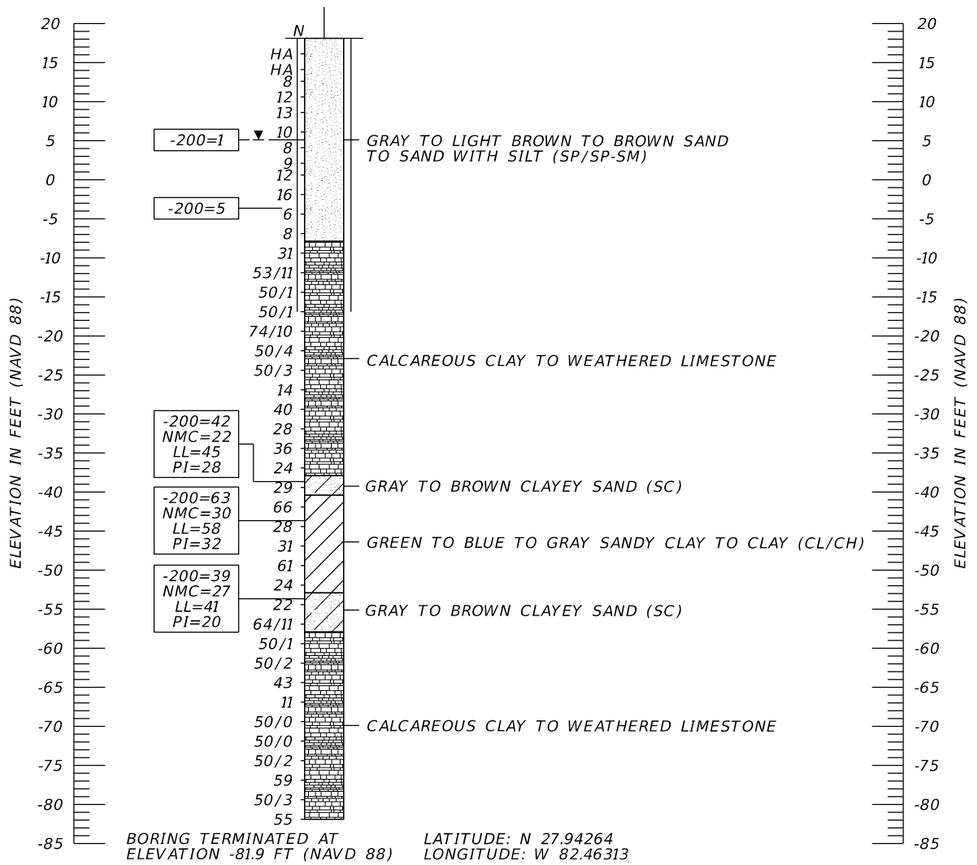
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

BOR # B-HYDE PARK-2
STA. 539+28
REF. ℄ SELMON
OFF. 61' RT.
ELEV. 18.1
DATE 3/22/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

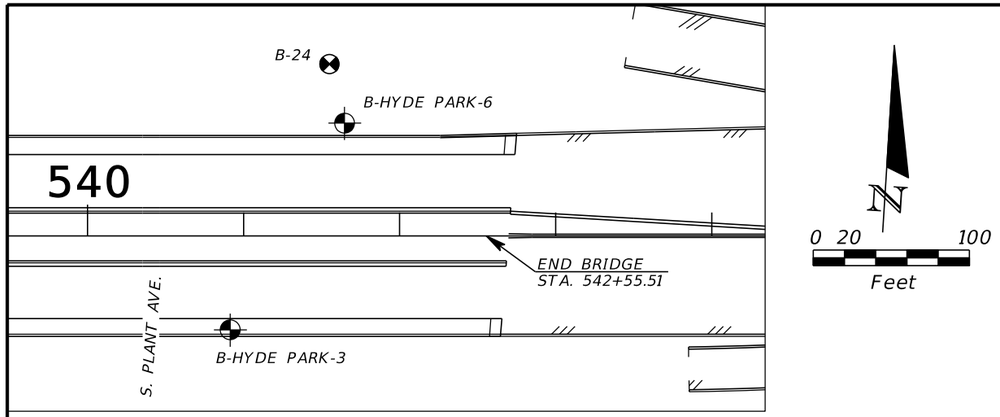
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (4)
S. HYDE PARKE AVENUE/S. PLANT AVENUE

REF. DWG. NO.:

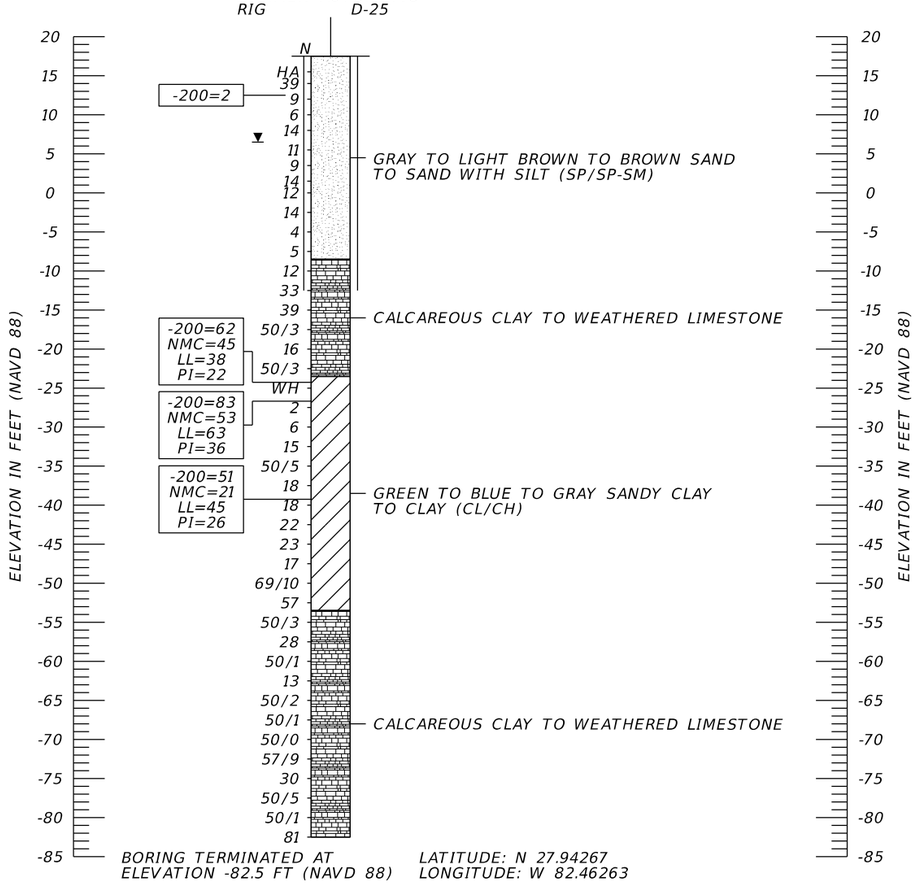
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR # B-HYDE PARK-3
STA. 540+91
REF. ℄ SELMON
OFF. 60' RT.
ELEV. 17.5
DATE 3/24/2022
DRILLER R. SCRUGS
HAMMER AUTOMATIC
RIG D-25



HA	39
9	6
14	11
9	14
12	14
4	5
12	33
39	50/3
16	50/3
WH	2
6	15
50/5	18
18	22
23	17
69/10	57
50/3	28
50/1	13
50/2	50/1
50/0	57/9
30	50/5
50/1	81

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY, BJS
CHECKED BY, DN
DESIGNED BY, BJS
CHECKED BY, KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

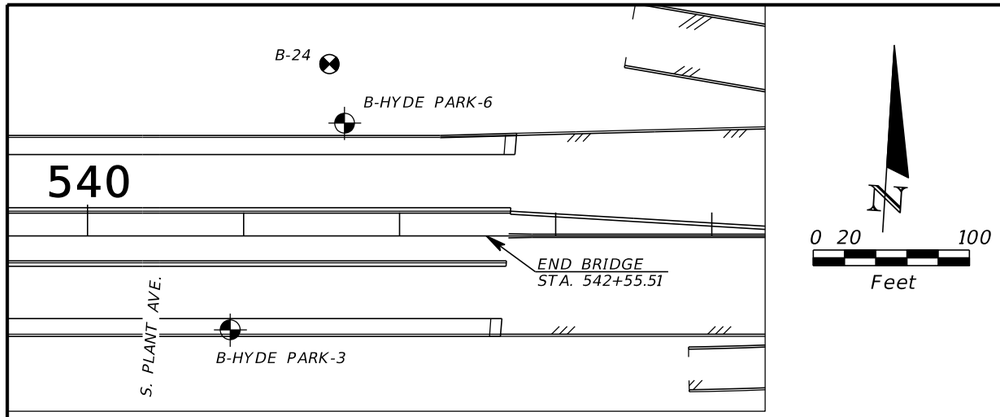
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE,
REPORT OF CORE BORINGS (5)
S. HYDE PARKE AVENUE/S. PLANT AVENUE

REF. DWG. NO.

PROJECT NAME,
SOUTH SELMON EXPRESSWAY IMPROVEMENTS
FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

NOTES:

1. BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29.

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	3,900 TO 21,000 OHM-CM
CHLORIDES	15 TO 90 PPM
SULFATES	<5 TO 15 PPM
pH	6.8 TO 6.9

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

LEGEND

- GRAY TO LIGHT BROWN TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- BROWN SILTY SAND (SM)
- GRAY TO BROWN CLAYEY SAND (SC)
- GREEN TO BLUE TO GRAY SANDY CLAY TO CLAY (CL/CH)
- CALCAREOUS CLAY TO WEATHERED LIMESTONE

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N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988

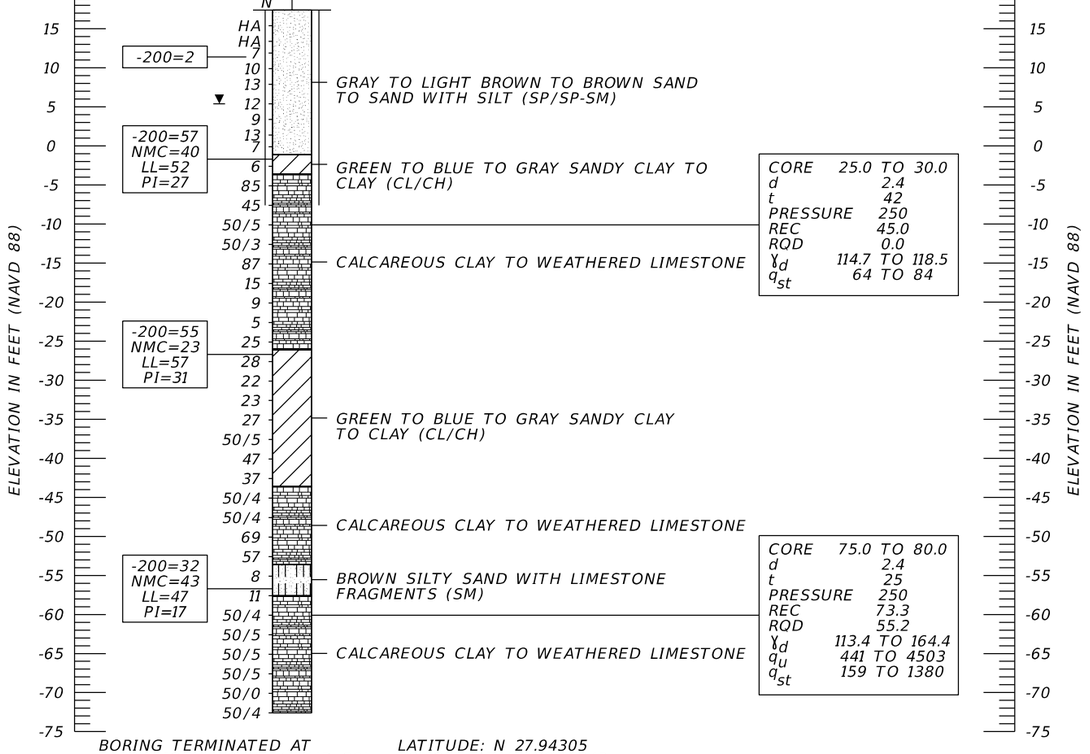
- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BOR # B-HYDE PARK-6
STA. 541+65
REF. ℄ SELMON
OFF. 72' LT.
ELEV. 17.4
DATE 3/17/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -72.6 FT (NAVD 88)
LATITUDE: N 27.94305
LONGITUDE: W 82.46243

BRIDGE NOS. 100330 & 100331

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (6) S. HYDE PARKE AVENUE/S. PLANT AVENUE

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 100' 200'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

- WATER TABLE EXISTING AT TIME OF BORING
- ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
- N SPT N-VALUE
- HA HAND AUGER
- NMC NATURAL MOISTURE CONTENT (%)
- -200 FINES PASSING A NO. 200 SIEVE (%)
- GNA GROUNDWATER NOT APPARENT
- GSE APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
- OC ORGANIC CONTENT
- LL LIQUID LIMIT
- PI PLASTICITY INDEX
- LOC LOSS OF CIRCULATION
- ROC REGAIN OF CIRCULATION
- WOH WEIGHT OF HAMMER
- WOR WEIGHT OF ROD
- SP UNIFIED SOIL CLASSIFICATION SYSTEM
- qu UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
- 50/3" 50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
- RC-1 70 (42) ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

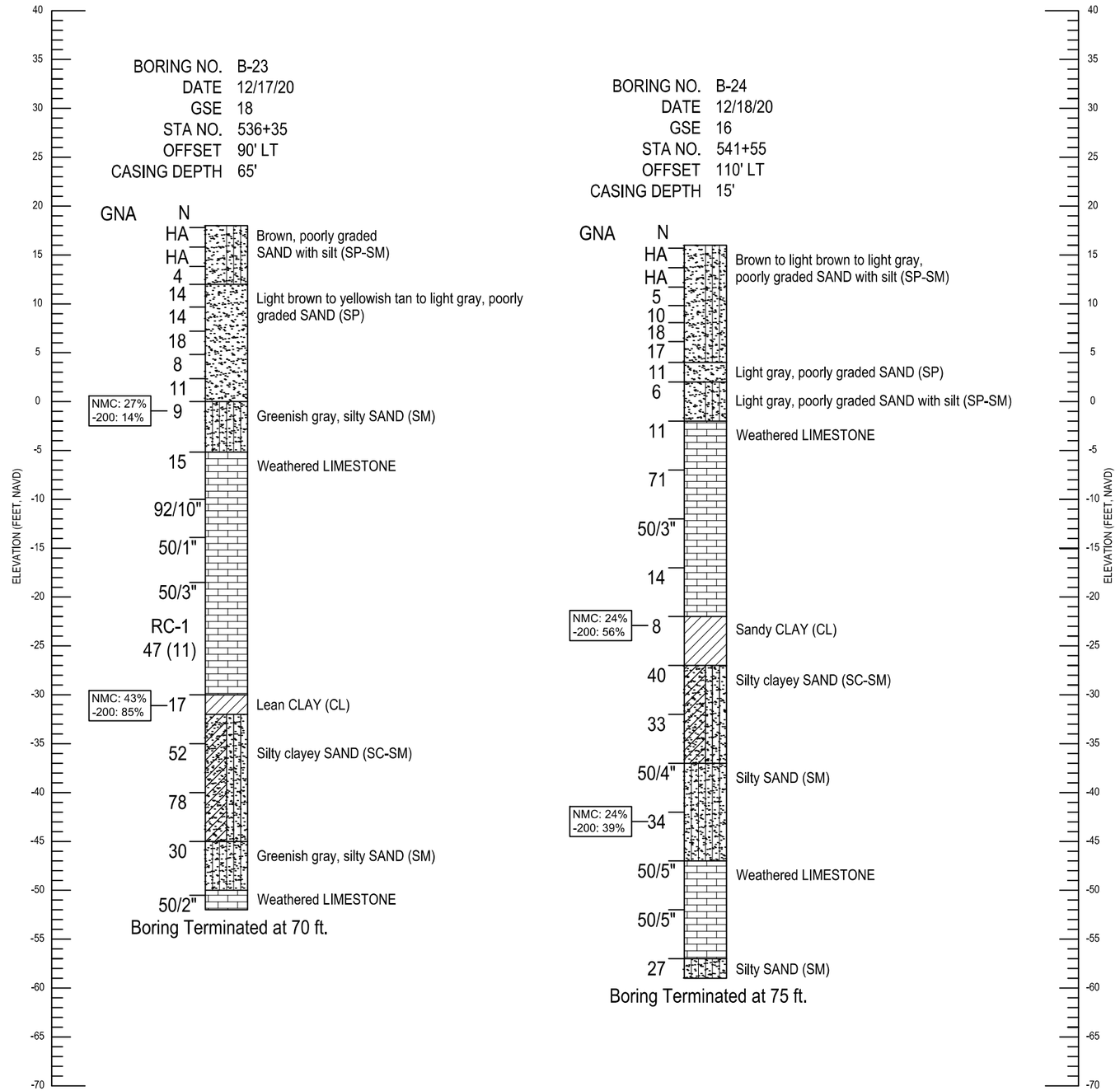
ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24



BORING NO. B-23
DATE 12/17/20
GSE 18
STA NO. 536+35
OFFSET 90' LT
CASING DEPTH 65'

GNA	N	
	HA	Brown, poorly graded SAND with silt (SP-SM)
	HA	
	4	
	14	Light brown to yellowish tan to light gray, poorly graded SAND (SP)
	14	
	18	
	8	
	11	
NMC: 27% -200: 14%	9	Greenish gray, silty SAND (SM)
	15	Weathered LIMESTONE
	92/10"	
	50/1"	
	50/3"	
	RC-1 47 (11)	
NMC: 43% -200: 85%	17	Lean CLAY (CL)
	52	Silty clayey SAND (SC-SM)
	78	
	30	Greenish gray, silty SAND (SM)
	50/2"	Weathered LIMESTONE

Boring Terminated at 70 ft.

BORING NO. B-24
DATE 12/18/20
GSE 16
STA NO. 541+55
OFFSET 110' LT
CASING DEPTH 15'

GNA	N	
	HA	Brown to light brown to light gray, poorly graded SAND with silt (SP-SM)
	HA	
	5	
	10	
	18	
	17	
	11	Light gray, poorly graded SAND (SP)
	6	Light gray, poorly graded SAND with silt (SP-SM)
	11	Weathered LIMESTONE
	71	
	50/3"	
	14	
NMC: 24% -200: 56%	8	Sandy CLAY (CL)
	40	Silty clayey SAND (SC-SM)
	33	
	50/4"	Silty SAND (SM)
NMC: 24% -200: 39%	34	
	50/5"	Weathered LIMESTONE
	50/5"	
	27	Silty SAND (SM)

Boring Terminated at 75 ft.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

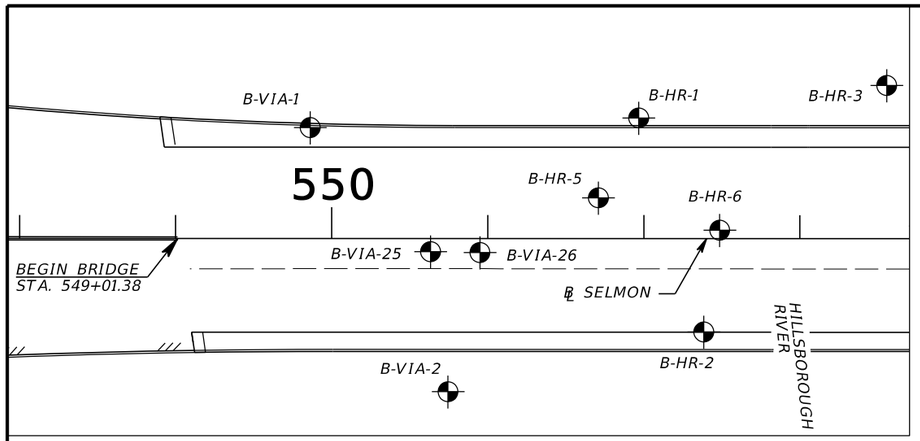
REPORT OF CORE BORINGS HYDE PARK AVE & PLANT AVE

SHEET NO. 14

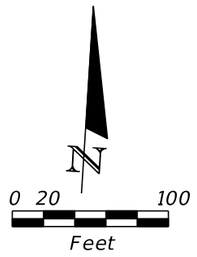
APPENDIX M

Report of Core Borings Sheets – SR 618 over Downtown Viaduct

Existing Geotechnical Data – Borings Performed by Others



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

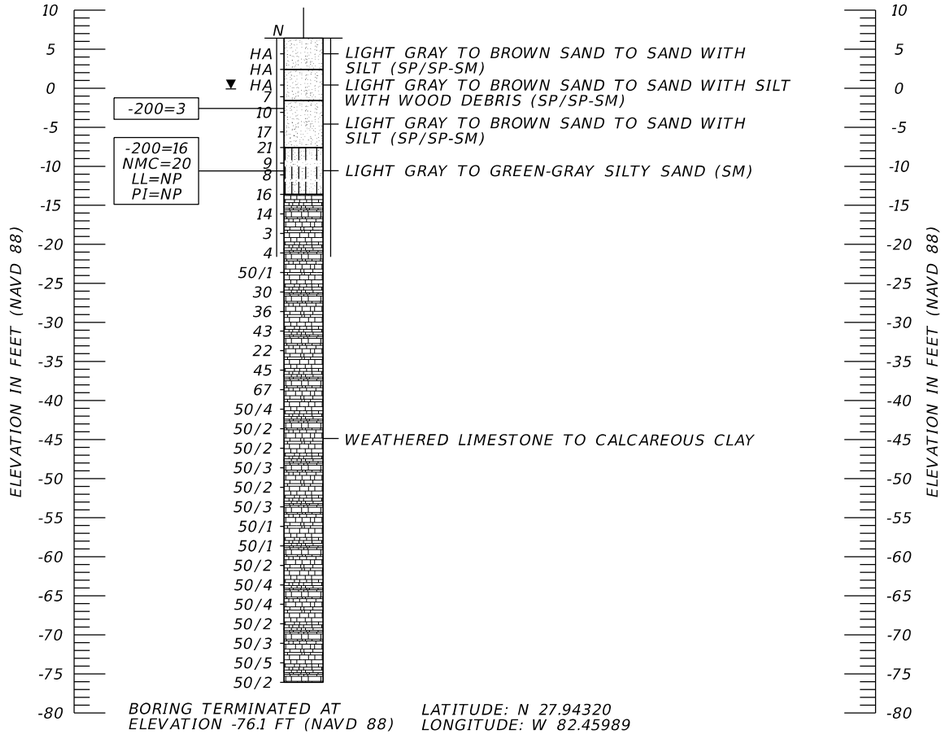
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-1
STA. 549+86
REF. ℄ SELMON
OFF. 71' LT.
ELEV. 6.4'
DATE 3/25/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -76.1 FT (NAVD 88)

LATITUDE: N 27.94320
LONGITUDE: W 82.45989

SAFETY HAMMER		AUTOMATIC HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4		LESS THAN 3
LOOSE	4 to 10		3 to 8
MEDIUM DENSE	10 to 30		8 to 24
DENSE	30 to 50		24 to 40
VERY DENSE	GREATER THAN 50		GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2		LESS THAN 1
SOFT	2 to 4		1 to 3
FIRM	4 to 8		3 to 6
STIFF	8 to 15		6 to 12
VERY STIFF	15 to 30		12 to 24
HARD	GREATER THAN 30		GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

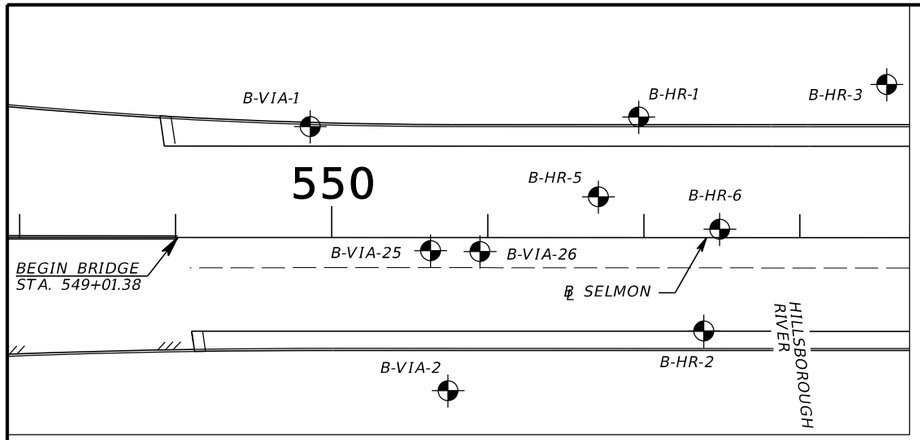
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (1) VIADUCT

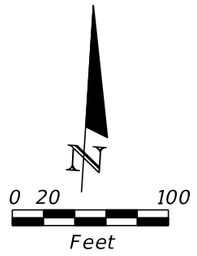
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

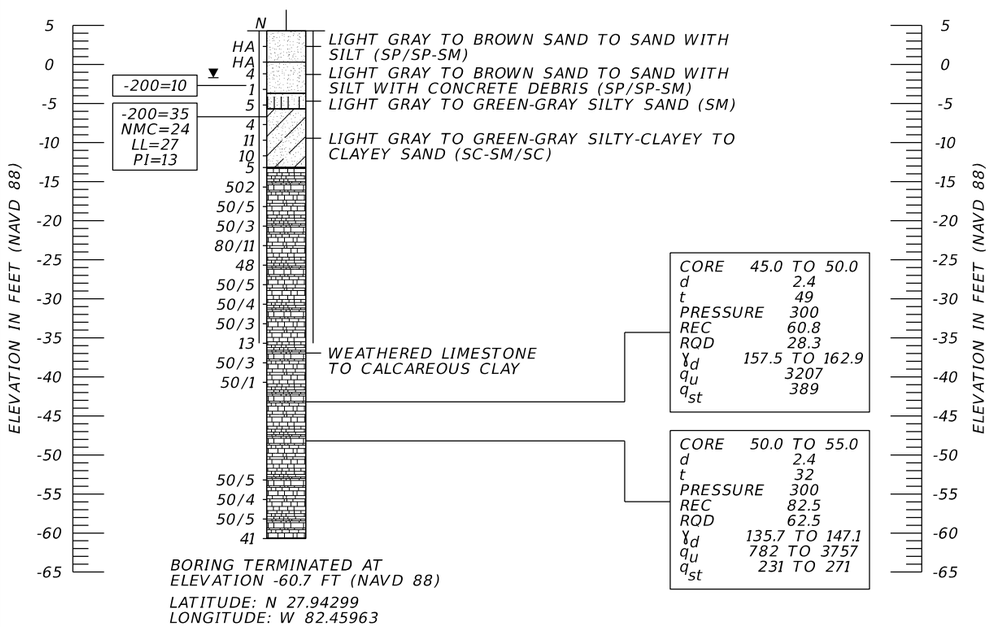
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-25
STA. 550+63
REF. ℄ SELMON
OFF. 8' RT.
ELEV. 4.3
DATE 6/2/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



CORE 45.0 TO 50.0
d 2.4
t 49
PRESSURE 300
REC 60.8
RQD 28.3
γ_d 157.5 TO 162.9
q_u 3207
q_{st} 389

CORE 50.0 TO 55.0
d 2.4
t 32
PRESSURE 300
REC 82.5
RQD 62.5
γ_d 135.7 TO 147.1
q_u 782 TO 3757
q_{st} 231 TO 271

BORING TERMINATED AT ELEVATION -60.7 FT (NAVD 88)

LATITUDE: N 27.94299
LONGITUDE: W 82.45963

SAFETY HAMMER		AUTOMATIC HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4		LESS THAN 3
LOOSE	4 to 10		3 to 8
MEDIUM DENSE	10 to 30		8 to 24
DENSE	30 to 50		24 to 40
VERY DENSE	GREATER THAN 50		GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2		LESS THAN 1
SOFT	2 to 4		1 to 3
FIRM	4 to 8		3 to 6
STIFF	8 to 15		6 to 12
VERY STIFF	15 to 30		12 to 24
HARD	GREATER THAN 30		GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

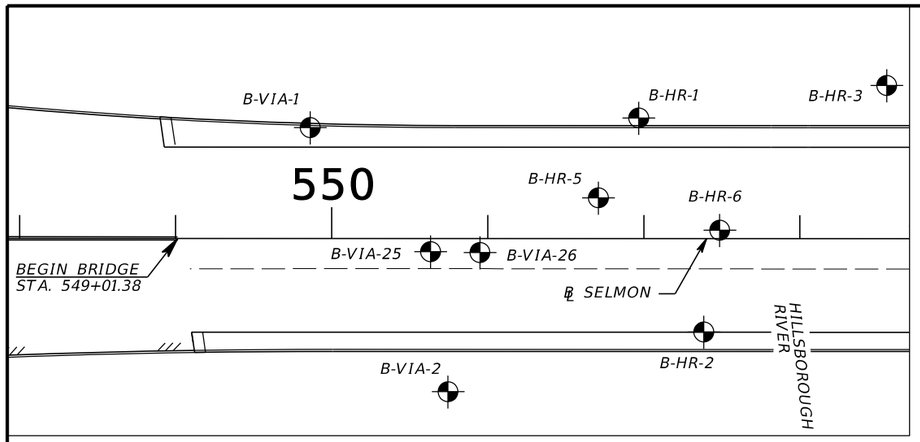
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

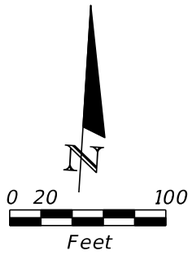
SHEET TITLE: REPORT OF CORE BORINGS (2) VIADUCT

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

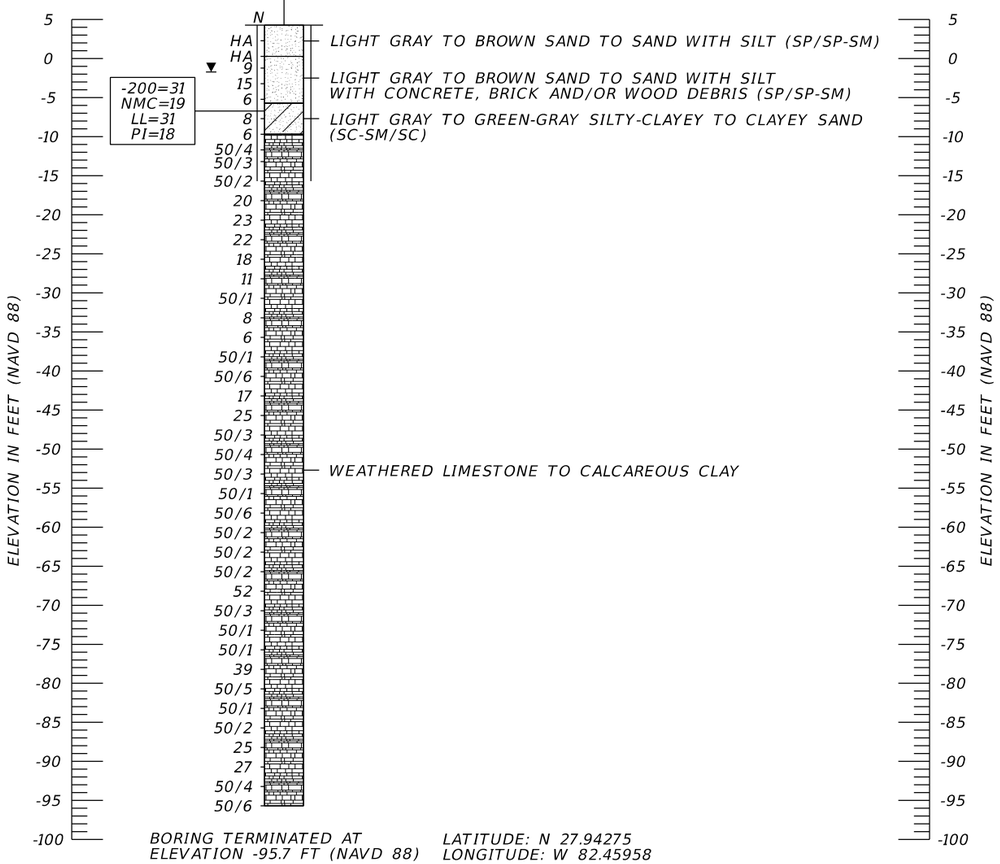
SHEET NO.





BORING LOCATION PLAN

BOR # B-VIA-2
STA. 550+75
REF. ℄ SELMON
OFF. 98' RT.
ELEV. 4.3'
DATE 3/23/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -95.7 FT (NAVD 88)

LATITUDE: N 27.94275
LONGITUDE: W 82.45958

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

APPROXIMATE SPT BORING LOCATION BY OTHERS

GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS

100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)

CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

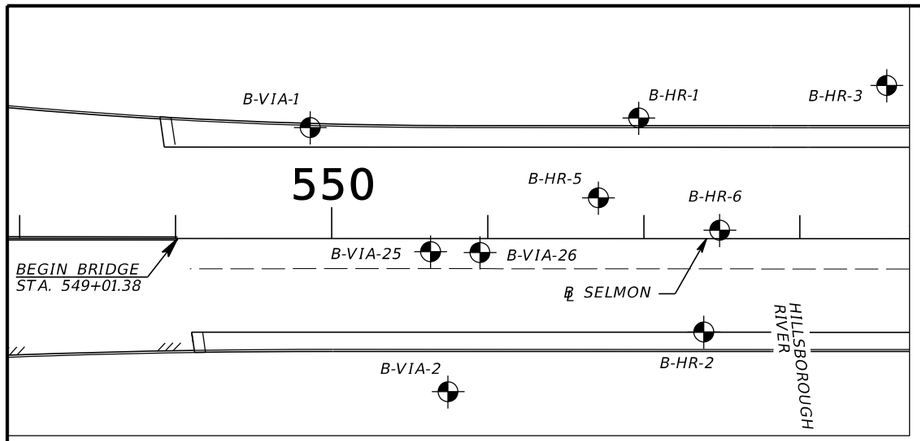
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (3) VIADUCT

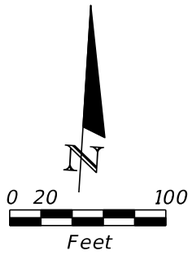
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

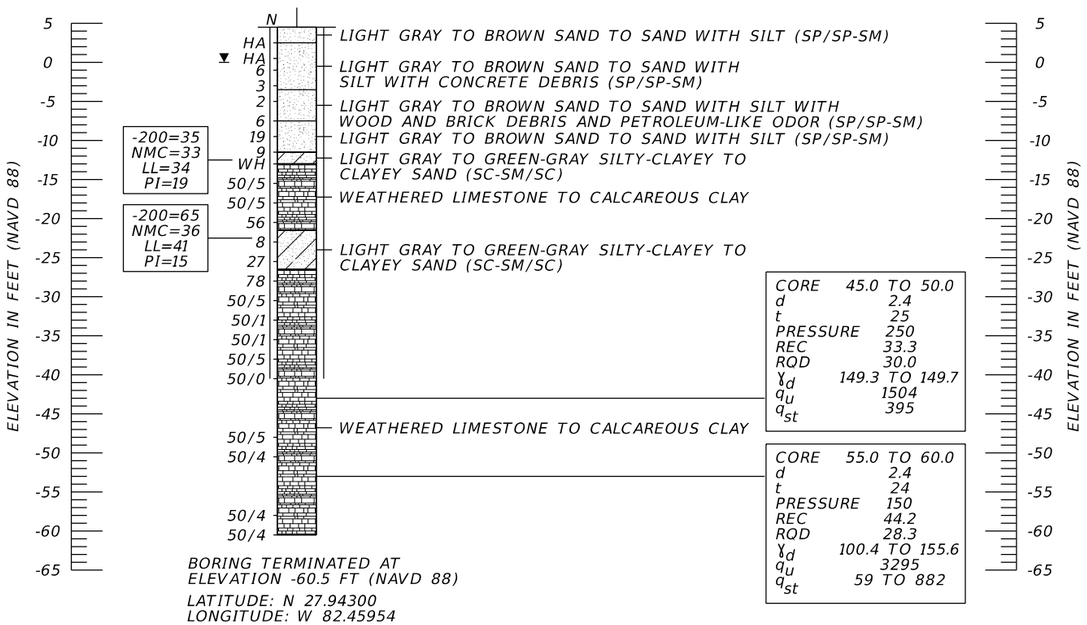
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-26
STA. 550+95
REF. ℄ SELMON
OFF. 9' RT.
ELEV. 4.5
DATE 5/28/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -60.5 FT (NAVD 88)

LATITUDE: N 27.94300
LONGITUDE: W 82.45954

BRIDGE NOS. 100332 & 100333

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

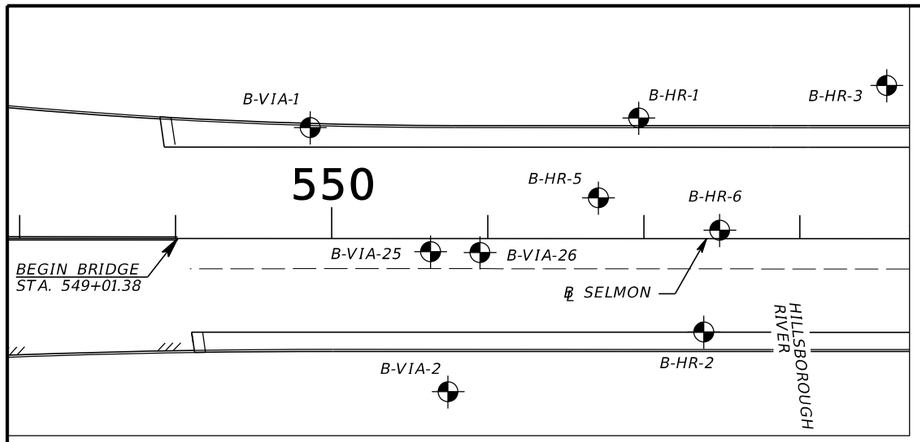
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (4) VIADUCT

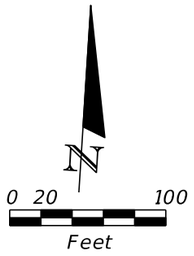
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

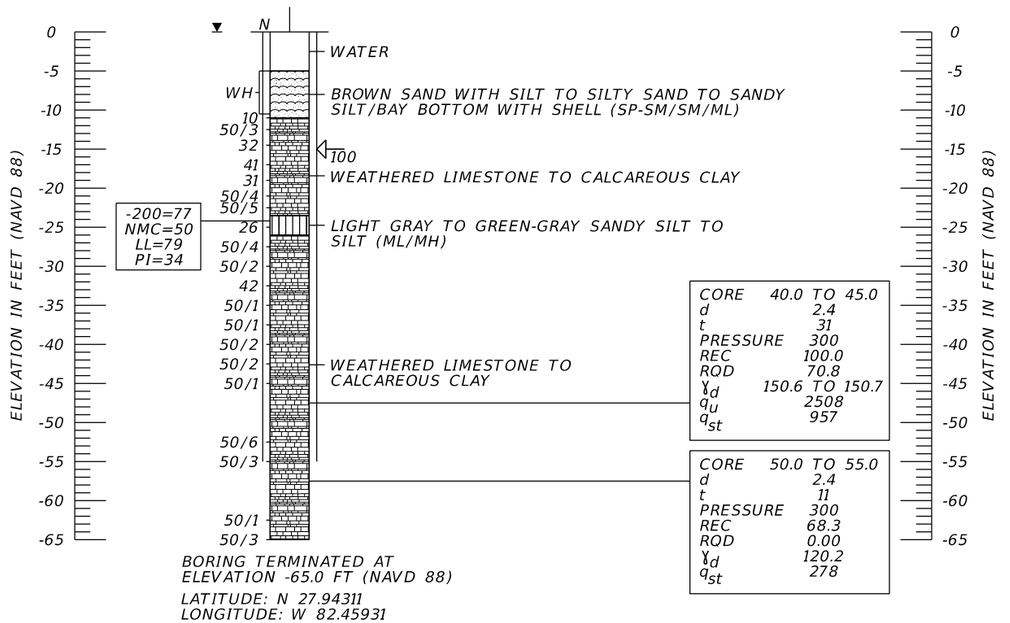
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-HR-5*
STA. 551+71
REF. ℄ SELMON
OFF. 26' LT.
ELEV. -5.0' (MUDLINE)
DATE 6/11/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



BORING TERMINATED AT ELEVATION -65.0 FT (NAVD 88)

LATITUDE: N 27.94311
LONGITUDE: W 82.45931

BRIDGE NOS. 100332 & 100333

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

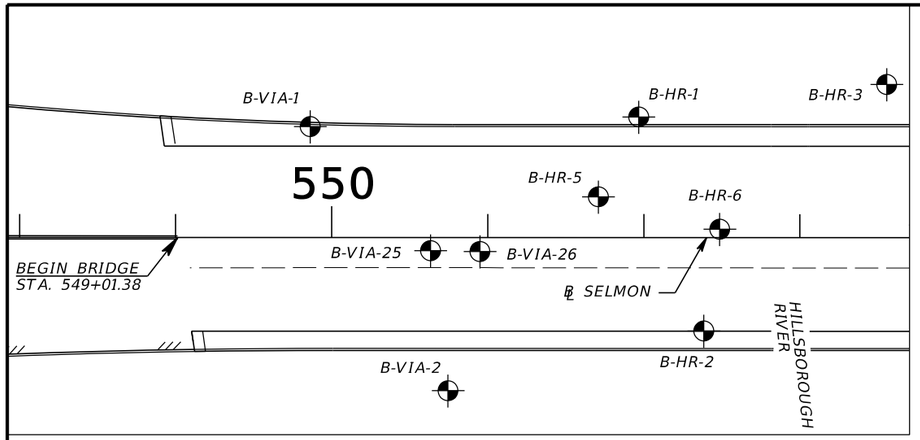
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

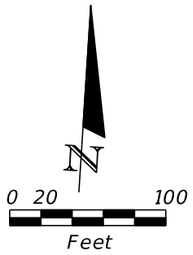
SHEET TITLE: REPORT OF CORE BORINGS (5) VIADUCT

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

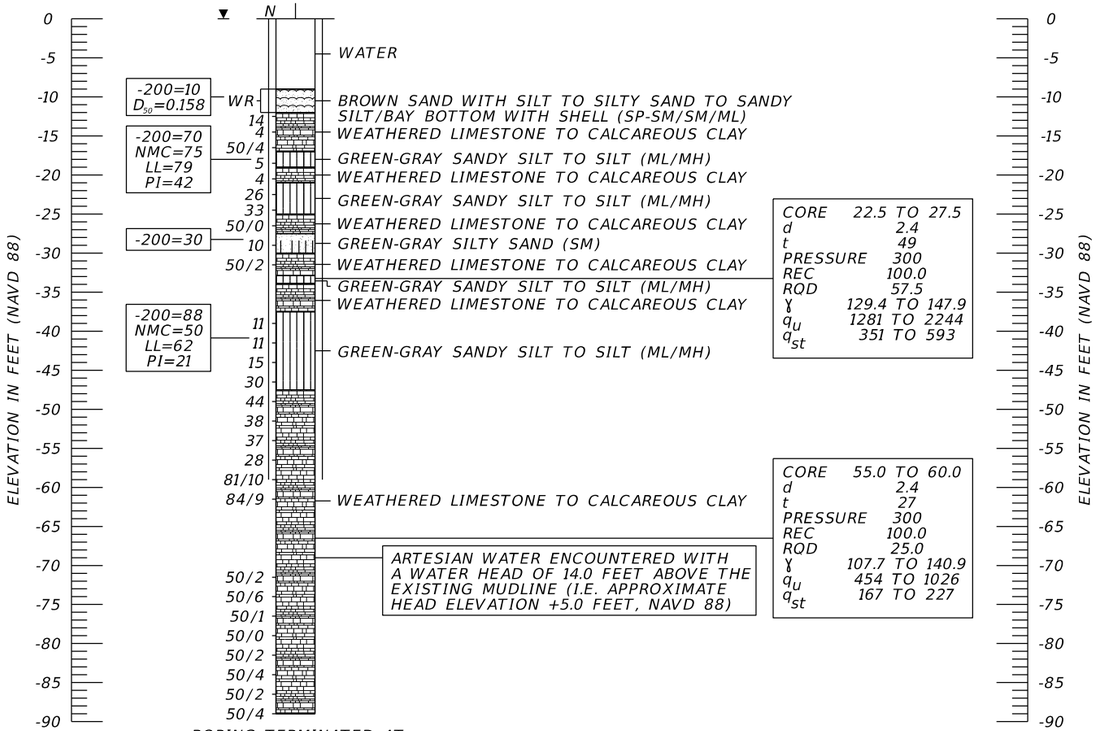
SHEET NO.:





BORING LOCATION PLAN

BOR # B-HR-1*
STA. 551+97
REF. ℄ SELMON
OFF. 77' LT.
ELEV. -9.0' (MUDLINE)
DATE 2/4/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



BORING TERMINATED AT ELEVATION -89.0 FT (NAVD 88)

LATITUDE: N 27.94325
LONGITUDE: W 82.45924

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

APPROXIMATE SPT BORING LOCATION BY OTHERS

GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS

100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)

CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γd — DRY UNIT WEIGHT (PCF)
qu — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
qst — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

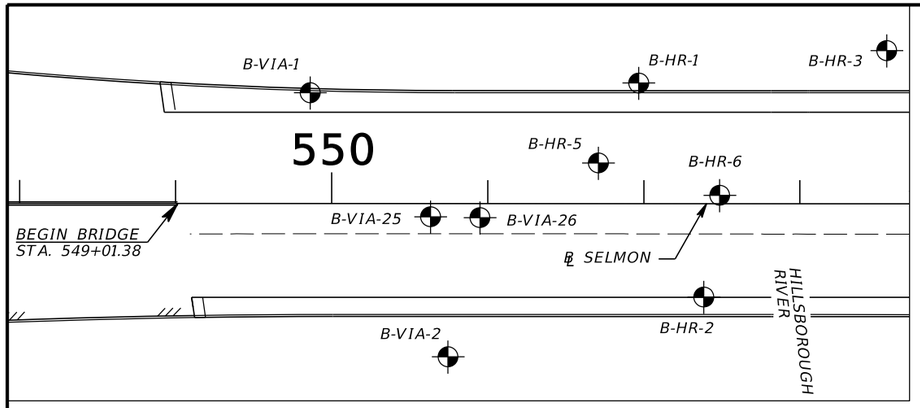
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

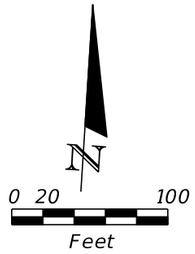
SHEET TITLE: REPORT OF CORE BORINGS (6) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

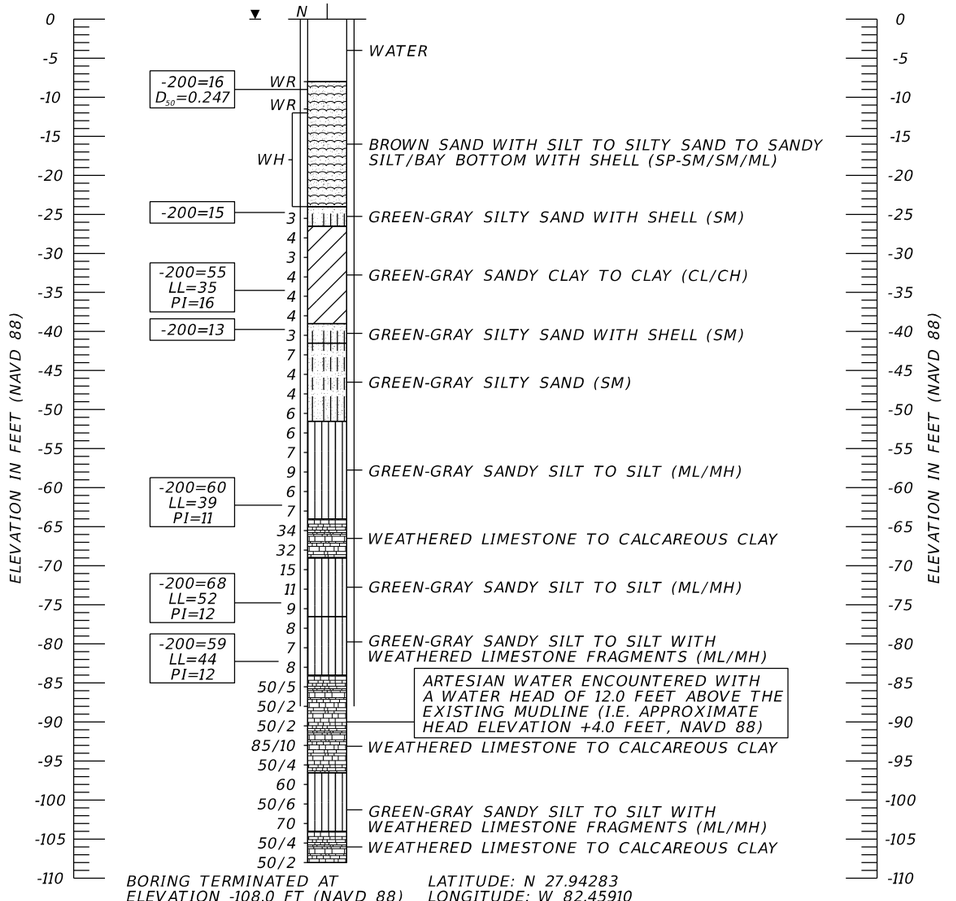
SHEET NO.





BORING LOCATION PLAN

BOR # B-HR-2 *
STA. 552+31
REF. ℄ SELMON
OFF. 79' RT.
ELEV. -8.0' (MUDLINE)
DATE 2/3/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

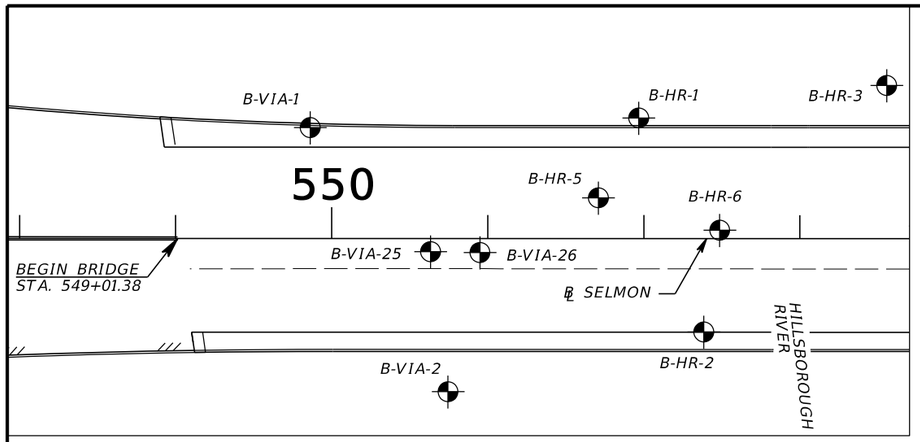
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (7) VIADUCT

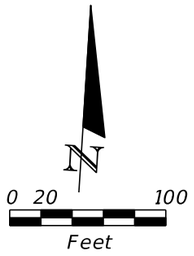
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

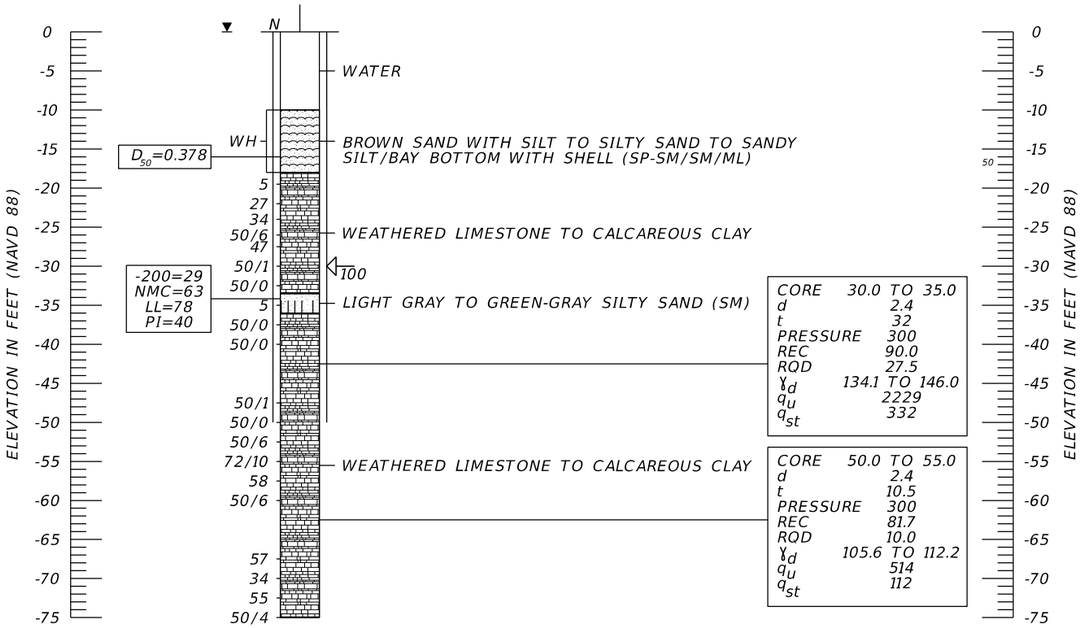
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-HR-6*
STA. 552+49
REF. ℄ SELMON
OFF. 5' LT.
ELEV. -10.0' (MUDLINE)
DATE 6/10/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



BORING TERMINATED AT ELEVATION -75.0 FT (NAVD 88)

LATITUDE: N 27.94307
LONGITUDE: W 82.45906

SAFETY HAMMER		AUTOMATIC HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4		LESS THAN 3
LOOSE	4 to 10		3 to 8
MEDIUM DENSE	10 to 30		8 to 24
DENSE	30 to 50		24 to 40
VERY DENSE	GREATER THAN 50		GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2		LESS THAN 1
SOFT	2 to 4		1 to 3
FIRM	4 to 8		3 to 6
STIFF	8 to 15		6 to 12
VERY STIFF	15 to 30		12 to 24
HARD	GREATER THAN 30		GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

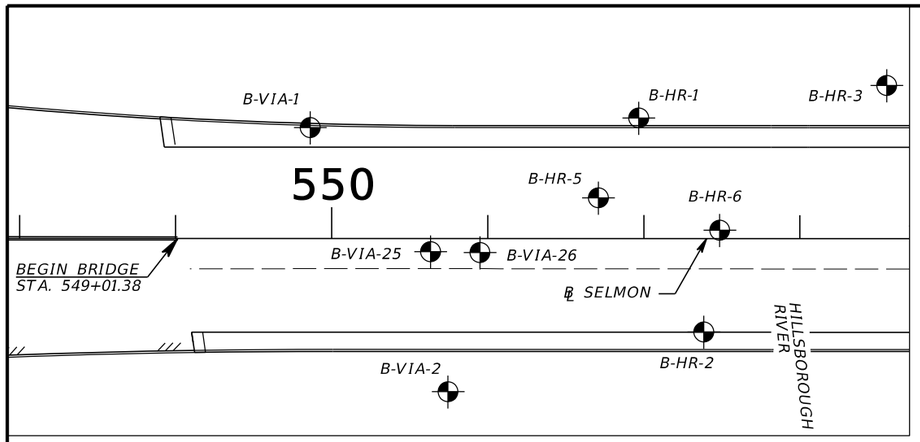
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (8) VIADUCT

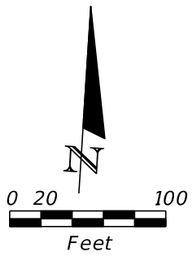
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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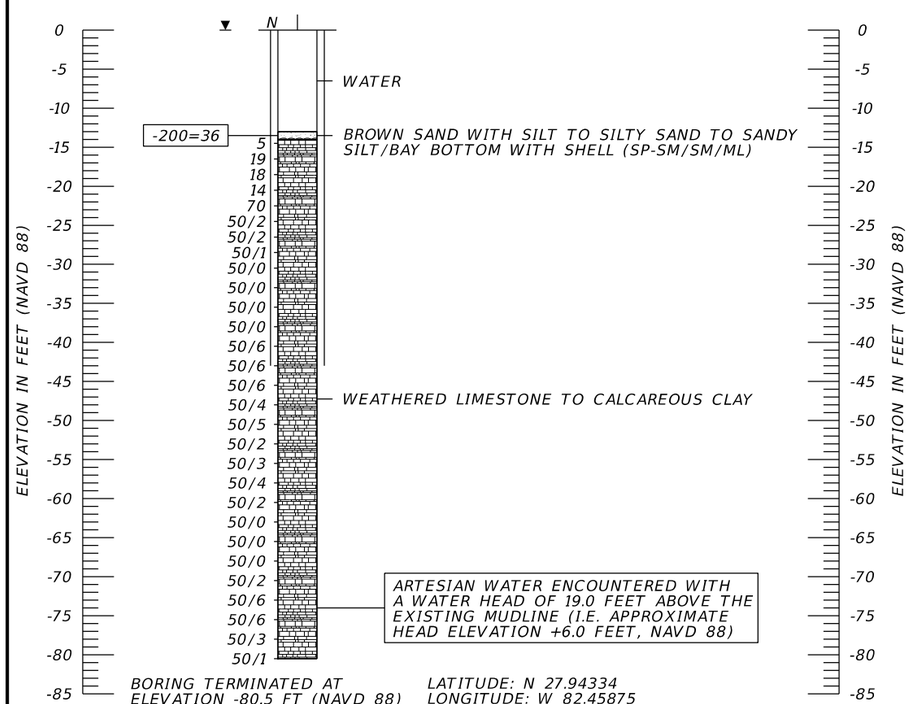
BOR # B-HR-3*
STA. 553+56
REF. ℄ SELMON
OFF. 98' LT.
ELEV. -13.0' (MUDLINE)
DATE 1/31/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



BORING TERMINATED AT ELEVATION -80.5 FT (NAVD 88)

LATITUDE: N 27.94334
LONGITUDE: W 82.45875

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

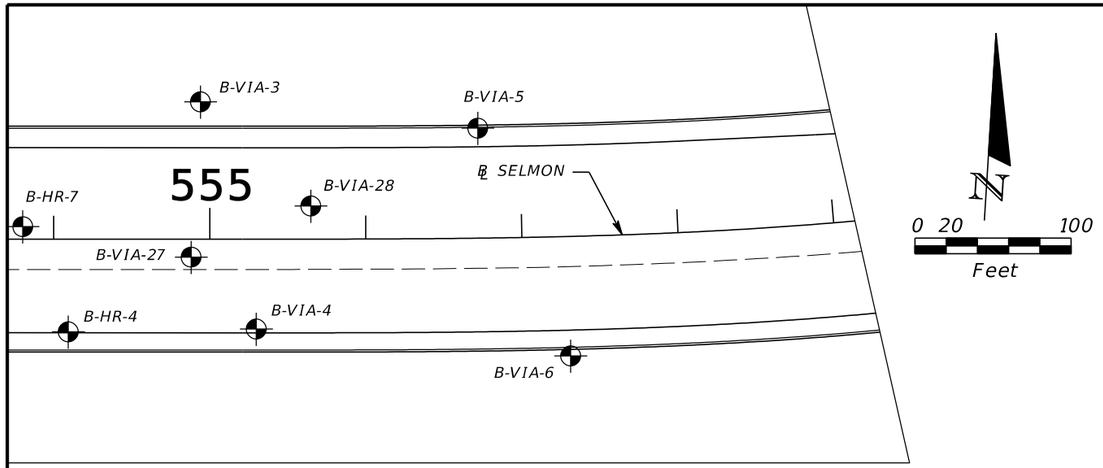
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (9) VIADUCT

REF. DWG. NO.:

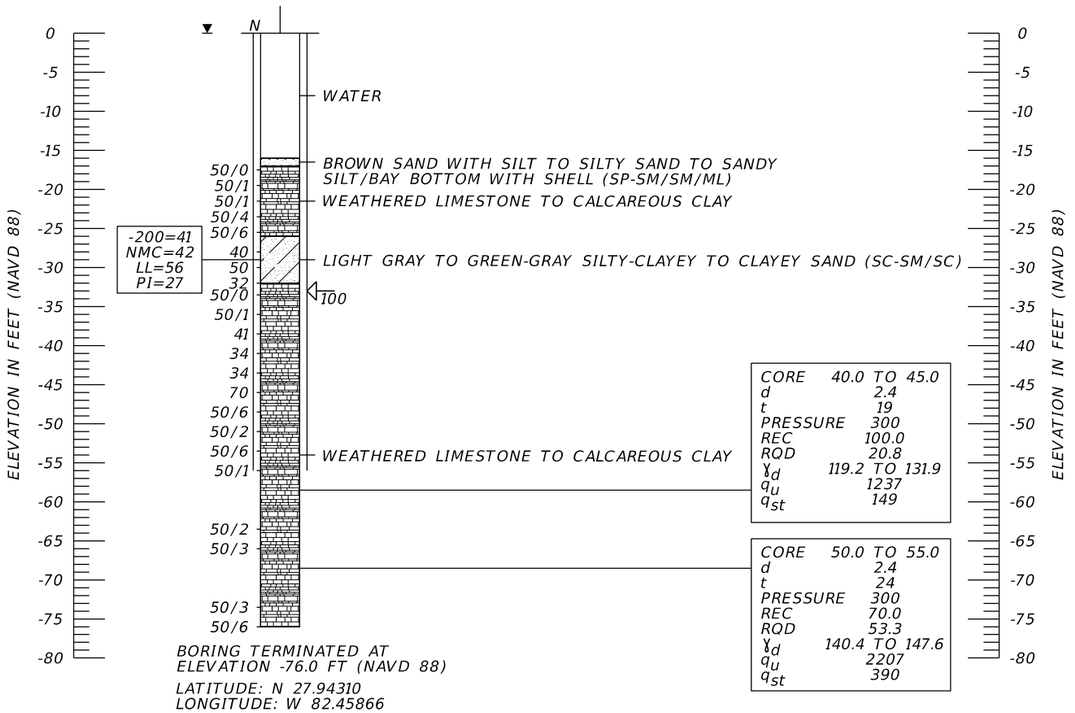
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR # B-HR-7*
STA. 553+80
REF. ℄ SELMON
OFF. 8' LT.
ELEV. -16.0' (MUDLINE)
DATE 6/12/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



CORE	40.0 TO 45.0
d	2.4
t	19
PRESSURE	300
REC	100.0
RQD	20.8
γ_d	119.2 TO 131.9
q_u	1237
q_{st}	149

CORE	50.0 TO 55.0
d	2.4
t	24
PRESSURE	300
REC	70.0
RQD	53.3
γ_d	140.4 TO 147.6
q_u	2207
q_{st}	390

BORING TERMINATED AT ELEVATION -76.0 FT (NAVD 88)
LATITUDE: N 27.94310
LONGITUDE: W 82.45866

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
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50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

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WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING
- GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

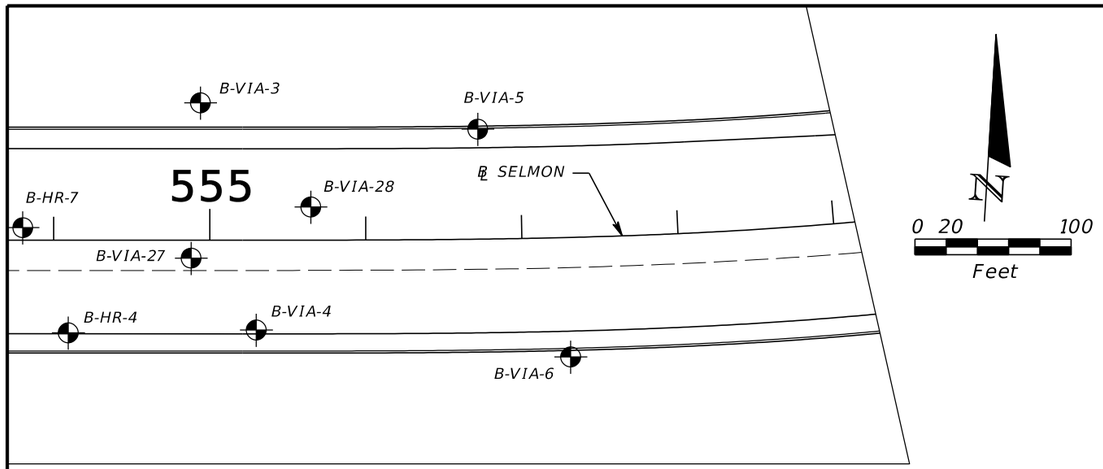
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

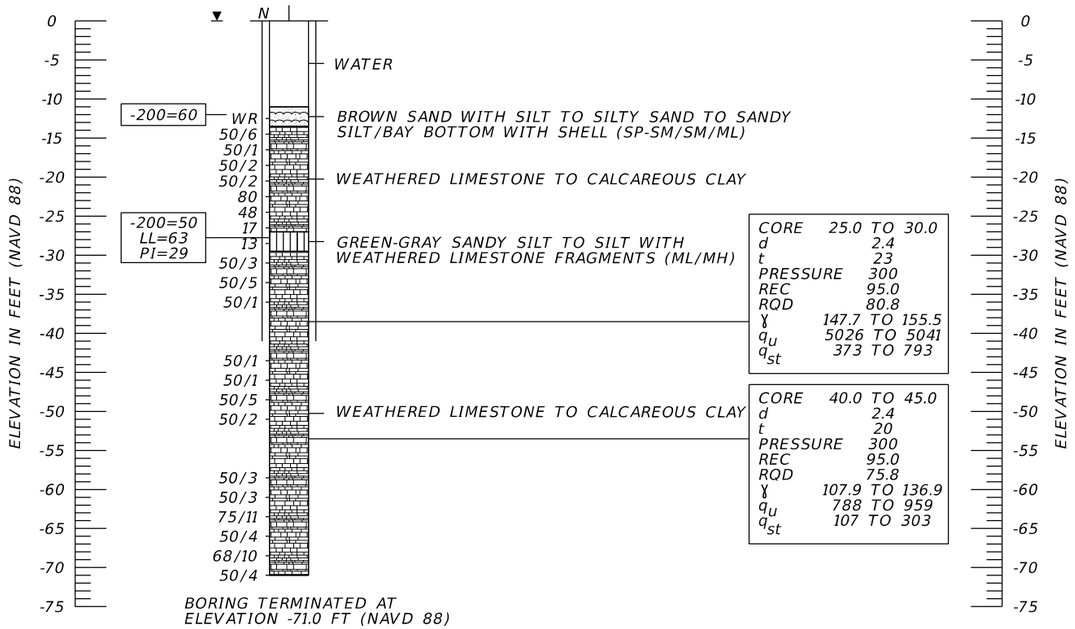
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (10) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-HR-4*
STA. 554+09
REF. ℄ SELMON
OFF. 59' RT.
ELEV. -11.0' (MUDLINE)
DATE 2/2/2022
DRILLER D. STAKELIN
HAMMER SAFETY
RIG D-25



CORE	25.0 TO 30.0
d	2.4
t	23
PRESSURE	300
REC	95.0
RQD	80.8
γ_d	147.7 TO 155.5
q_u	5026 TO 5041
q_{st}	373 TO 793

CORE	40.0 TO 45.0
d	2.4
t	20
PRESSURE	300
REC	95.0
RQD	75.8
γ_d	107.9 TO 136.9
q_u	788 TO 959
q_{st}	107 TO 303

BORING TERMINATED AT ELEVATION -71.0 FT (NAVD 88)

LATITUDE: N 27.94292
LONGITUDE: W 82.45855

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

APPROXIMATE SPT BORING LOCATION BY OTHERS

GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS

100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)

CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

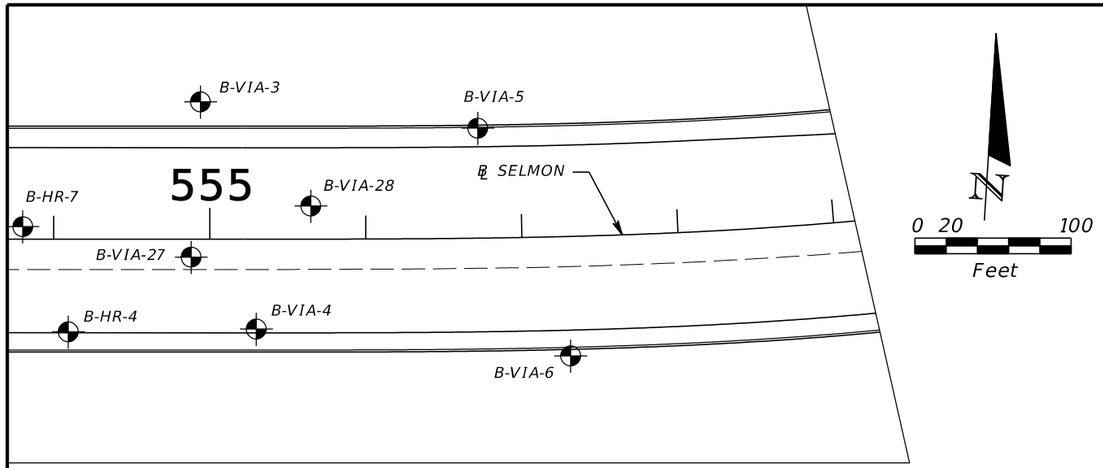
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (II) VIADUCT

REF. DWG. NO.

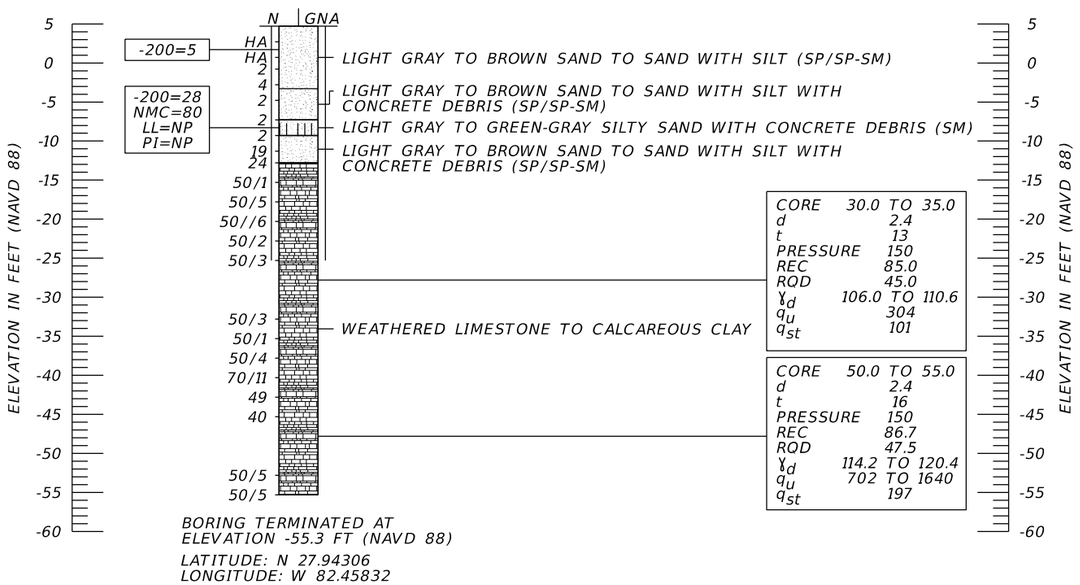
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-27
STA. 554+88
REF. ℄ SELMON
OFF. 12' RT.
ELEV. 4.7
DATE 5/13/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -55.3 FT (NAVD 88)

LATITUDE: N 27.94306
LONGITUDE: W 82.45832

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

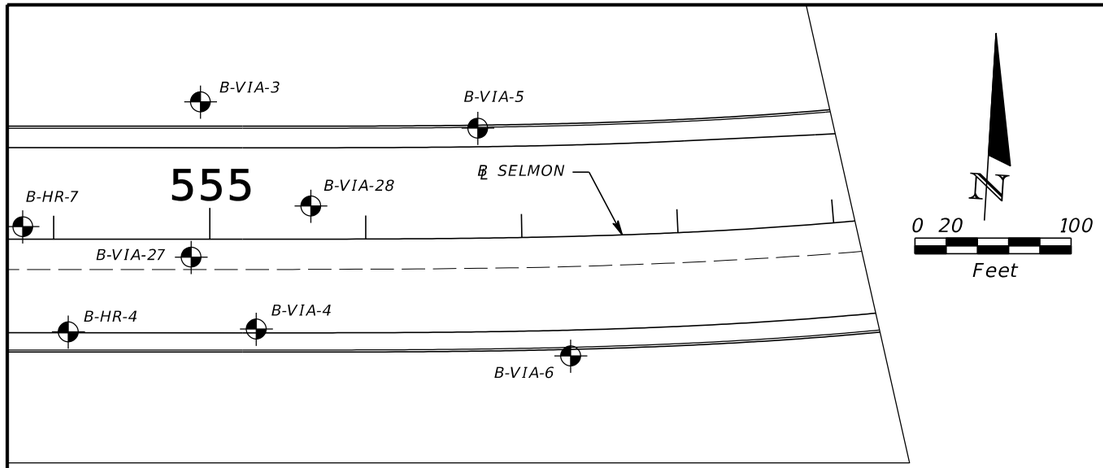
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (12) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

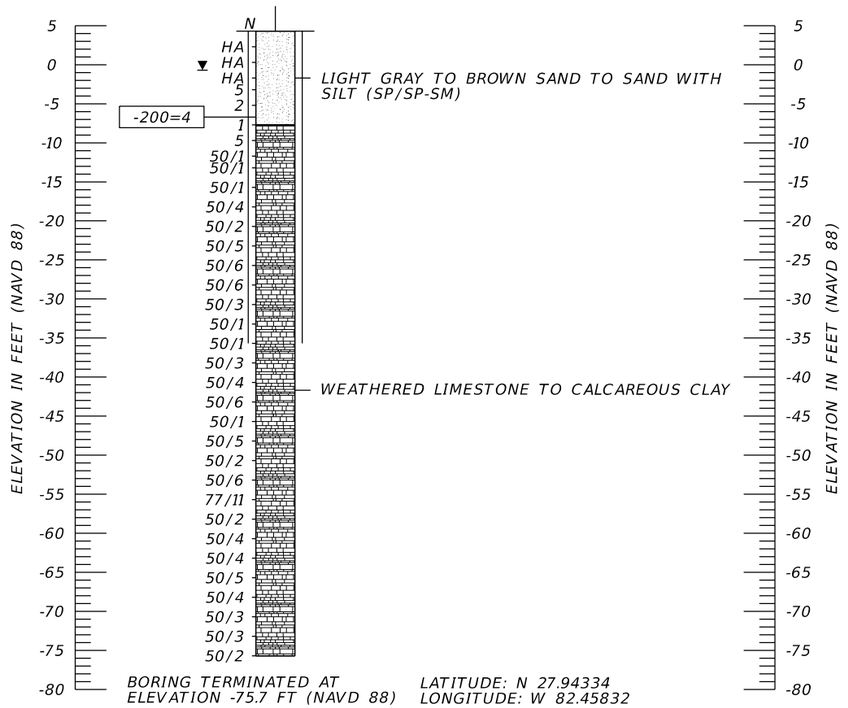
REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN

BOR #	B-VIA-3
STA.	554+94
REF.	℄ SELMON
OFF.	88' LT.
ELEV.	4.3'
DATE	3/30/2022
DRILLER	I. POORAN
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT ELEVATION -75.7 FT (NAVD 88)

LATITUDE: N 27.94334
LONGITUDE: W 82.45832

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
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γ_d	DRY UNIT WEIGHT (PCF)
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D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT.)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SPT N-VALUE (BLOWS/FT.)**	**SPT N-VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

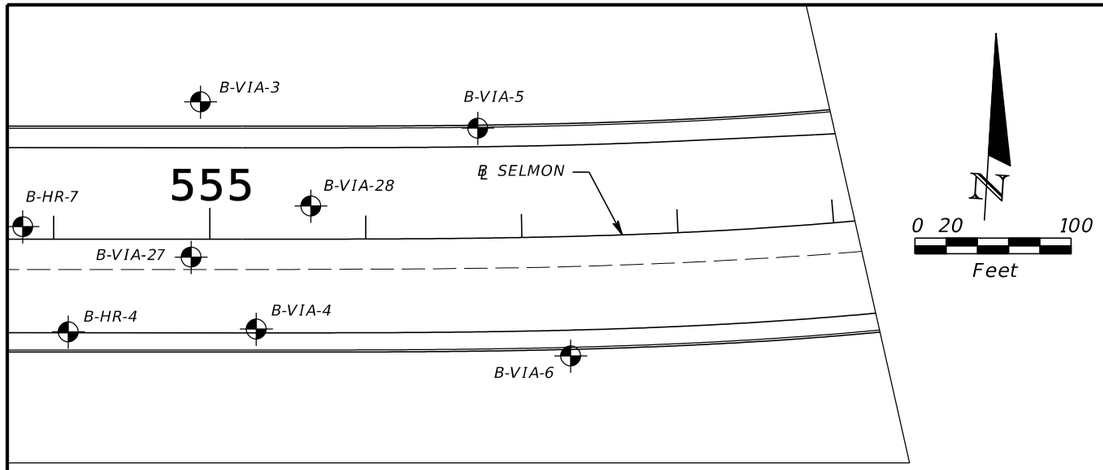
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (13) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

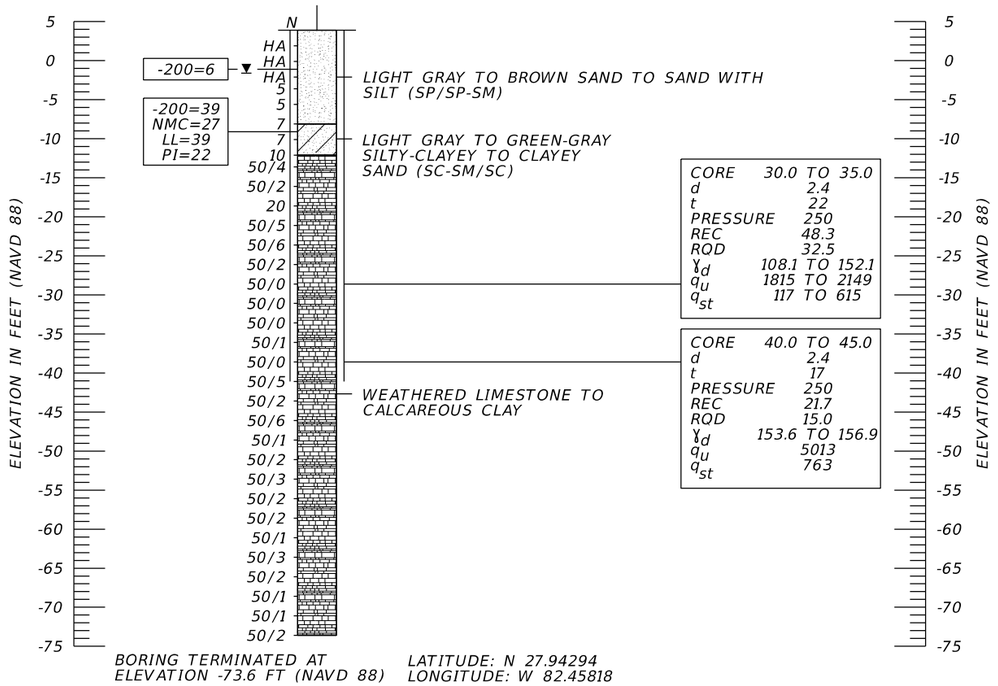
REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-4
STA. 555+30
REF. ℄ SELMON
OFF. 58' RT.
ELEV. 3.9'
DATE 3/29/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -73.6 FT (NAVD 88)
LATITUDE: N 27.94294
LONGITUDE: W 82.45818

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING
- GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

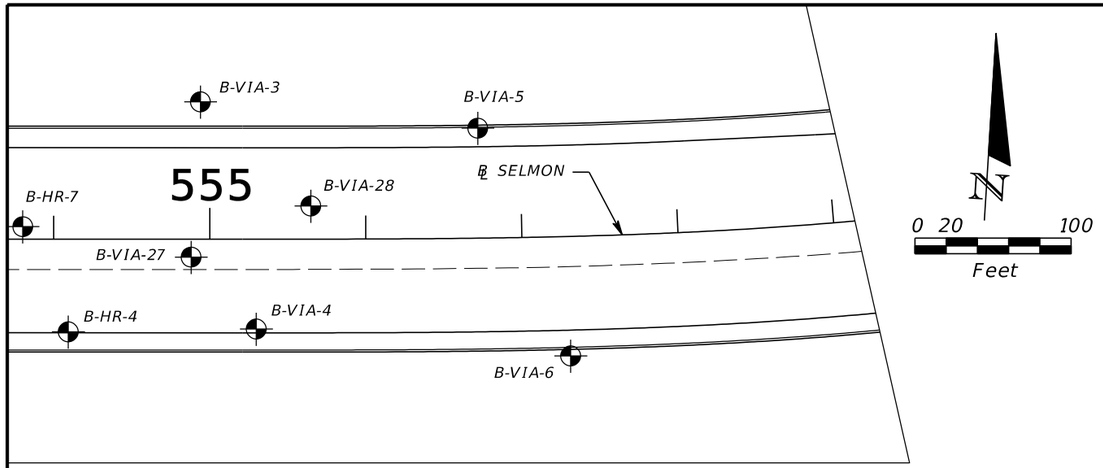
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

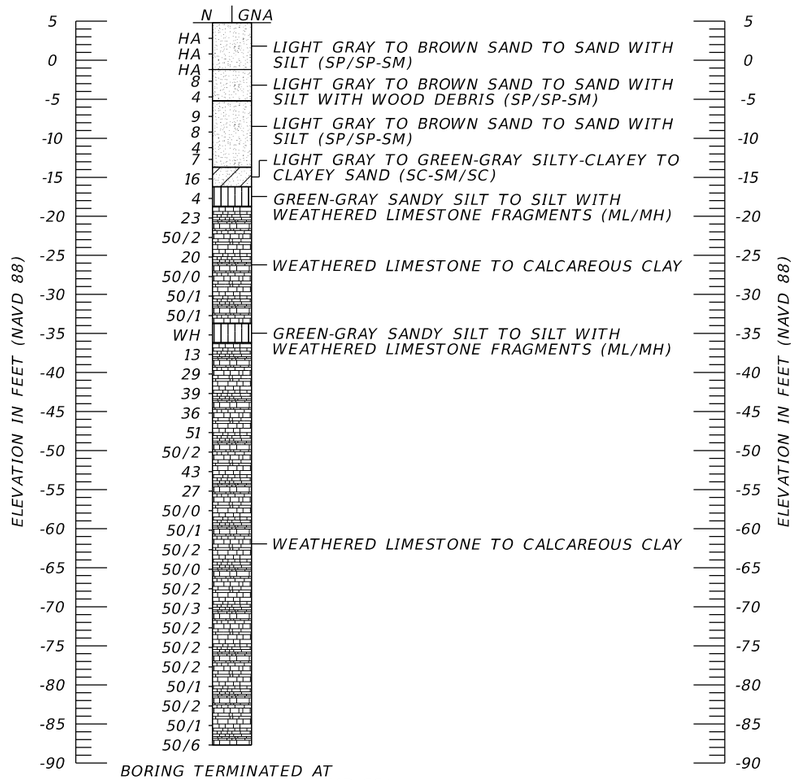
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (14) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR #	B-VIA-28
STA.	555+65
REF.	B/L SELMON
OFF.	21' LT.
ELEV.	4.8
DATE	7/12/2022
DRILLER	J. SHAW
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT
ELEVATION -87.7 FT (NAVD 88)

LATITUDE: N 27.94286
LONGITUDE: W 82.45827

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
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50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
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PI	PLASTICITY INDEX (%)
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NP	NON-PLASTIC
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	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
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SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
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NOTES:

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GRANULAR MATERIALS-RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT.)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
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DENSE	30 to 50	24 to 40
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SILTS AND CLAYS CONSISTENCY	**SPT N-VALUE (BLOWS/FT.)**	**SPT N-VALUE (BLOWS/FT.)**
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STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

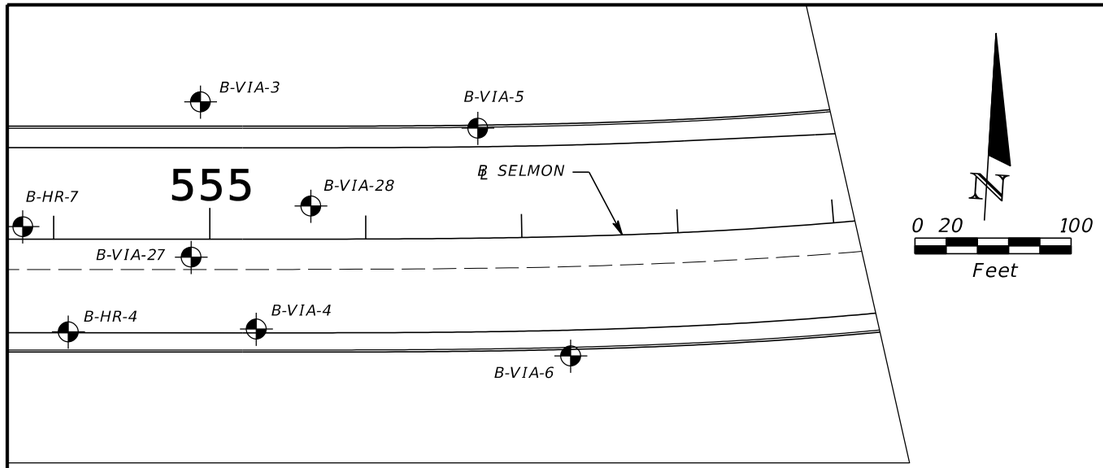
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (15) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

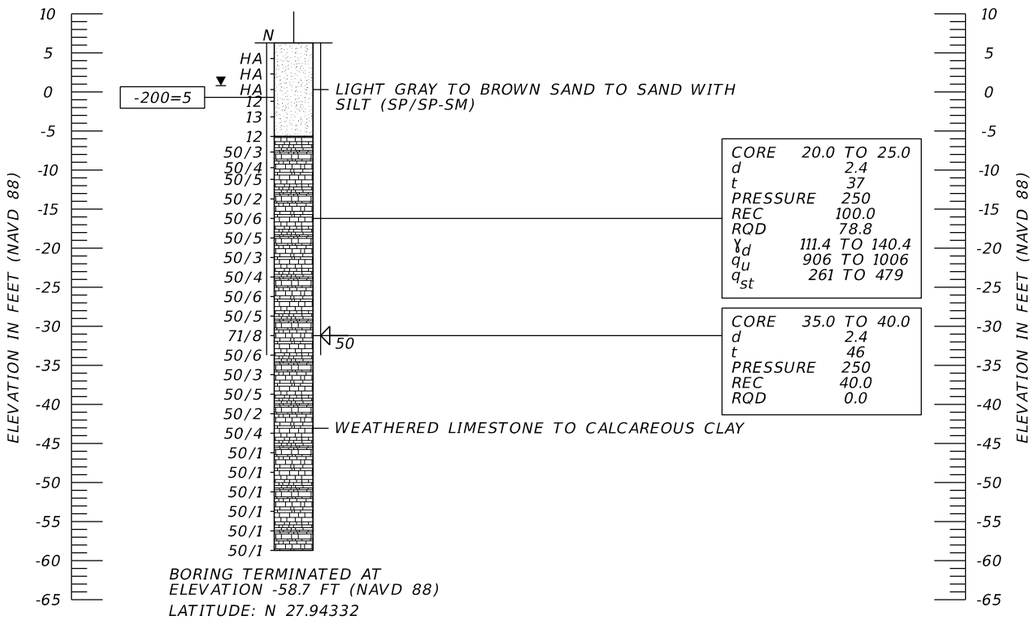
REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-5
STA. 556+73
REF. ℄ SELMON
OFF. 70' LT.
ELEV. 6.3'
DATE 3/26/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
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WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
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NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
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- CASING
- GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

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t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
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qst — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

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RESISTIVITY	8,700 TO 27,000 OHM-CM
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1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
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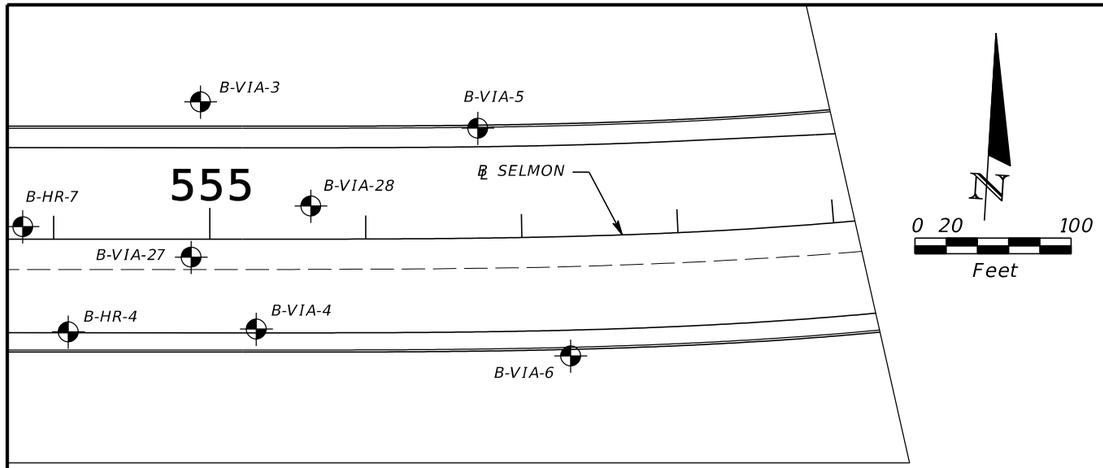
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (16) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

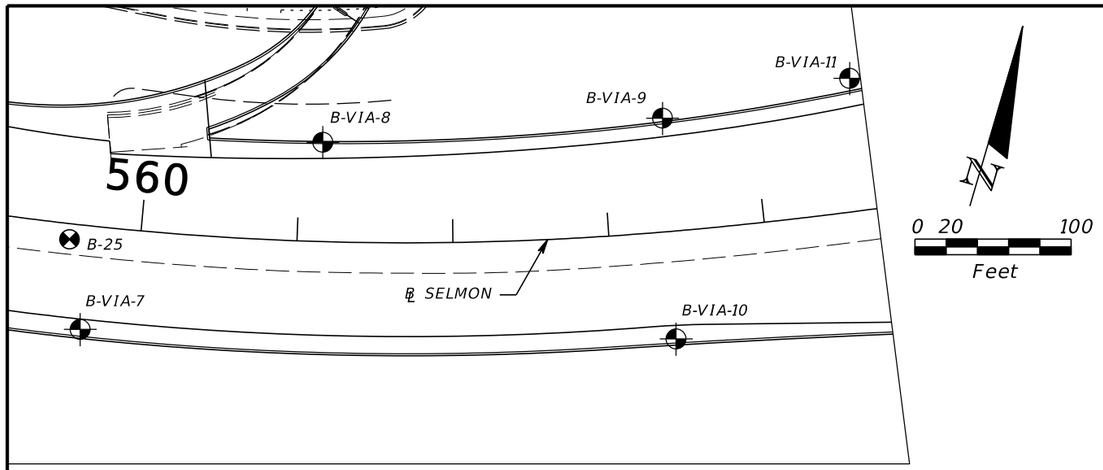
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (17) VIADUCT

REF. DWG. NO.:

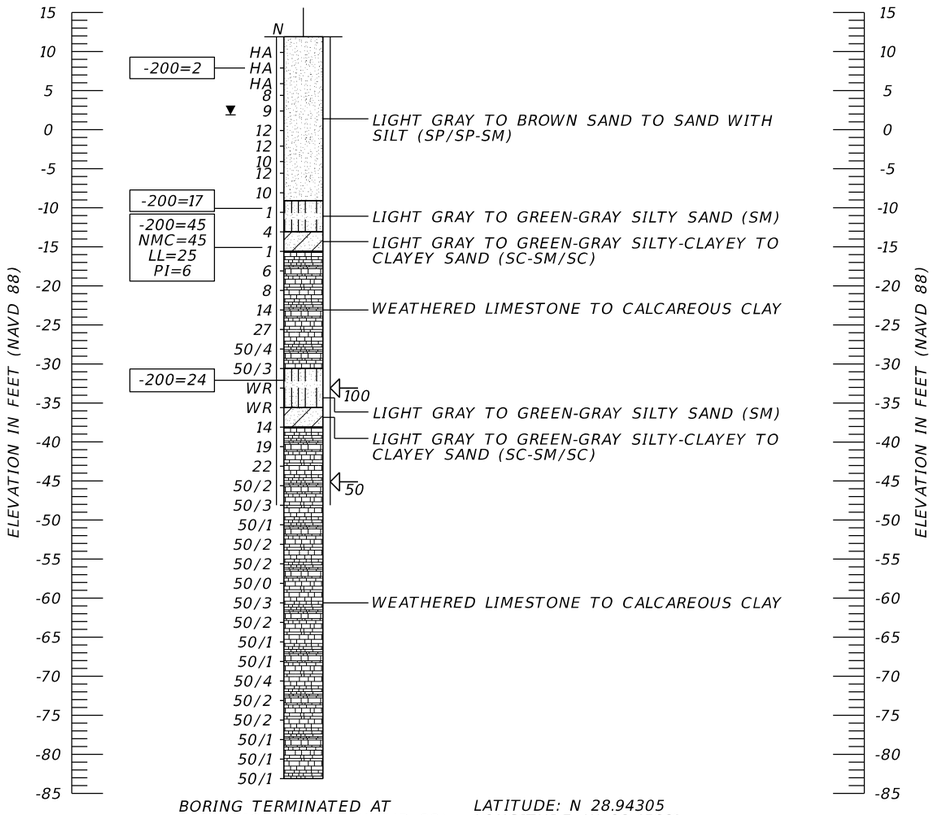
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR # B-VIA-7
STA. 559+68
REF. ℄ SELMON
OFF. 67' RT.
ELEV. 11.9'
DATE 3/31/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -83.1 FT (NAVD 88)
LATITUDE: N 28.94305
LONGITUDE: W 82.45681

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

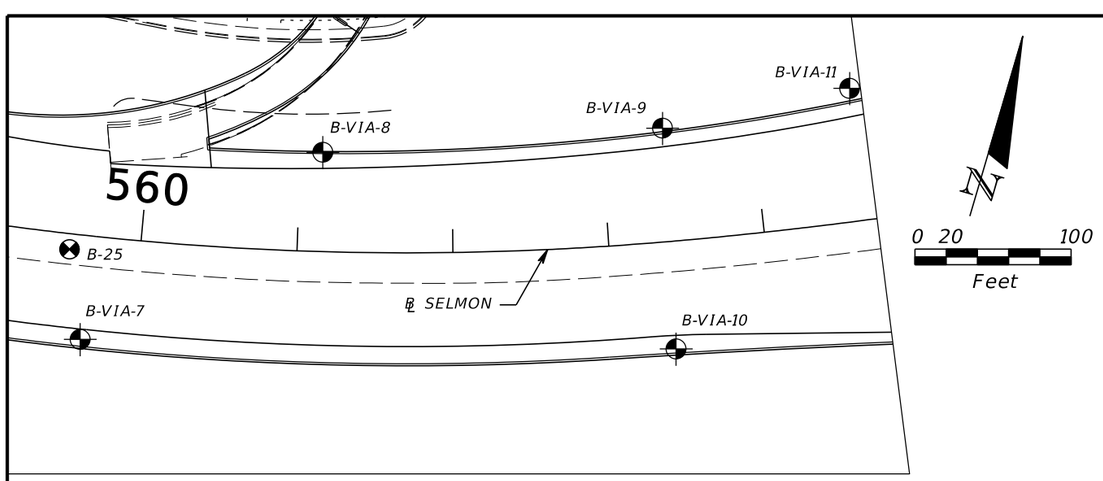
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

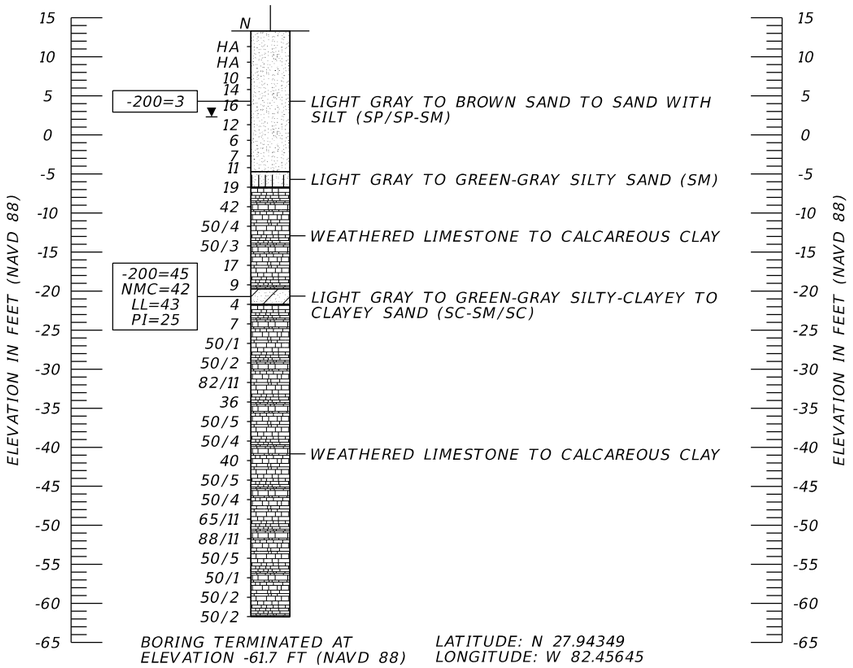
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (18) VIADUCT
REF. DWG. NO.:
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.:



BORING LOCATION PLAN

BOR # B-VIA-8
STA. 561+15
REF. B/L CROSSTOWN2
OFF. 64' LT.
ELEV. 13.3'
DATE 4/14/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -61.7 FT (NAVD 88)
LATITUDE: N 27.94349
LONGITUDE: W 82.45645

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING
- GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

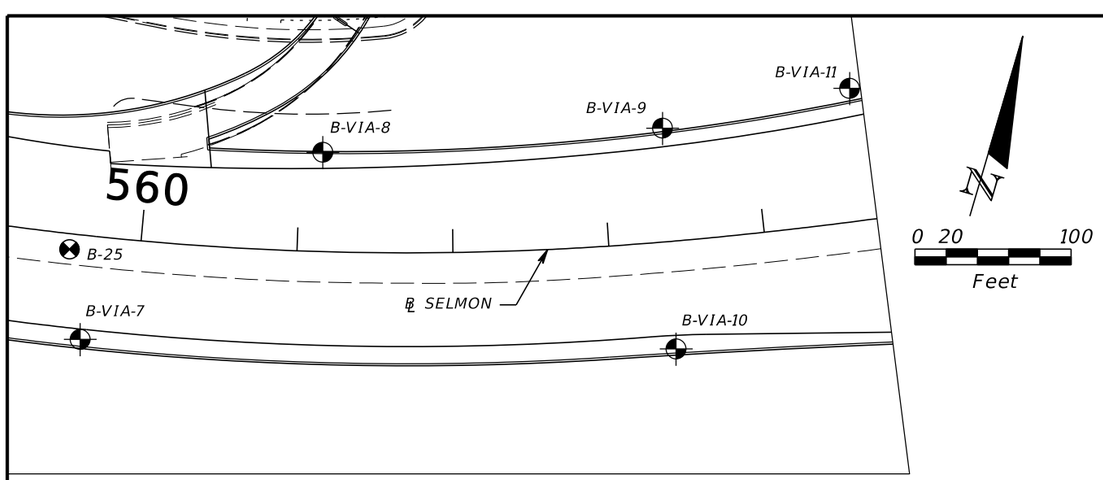
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

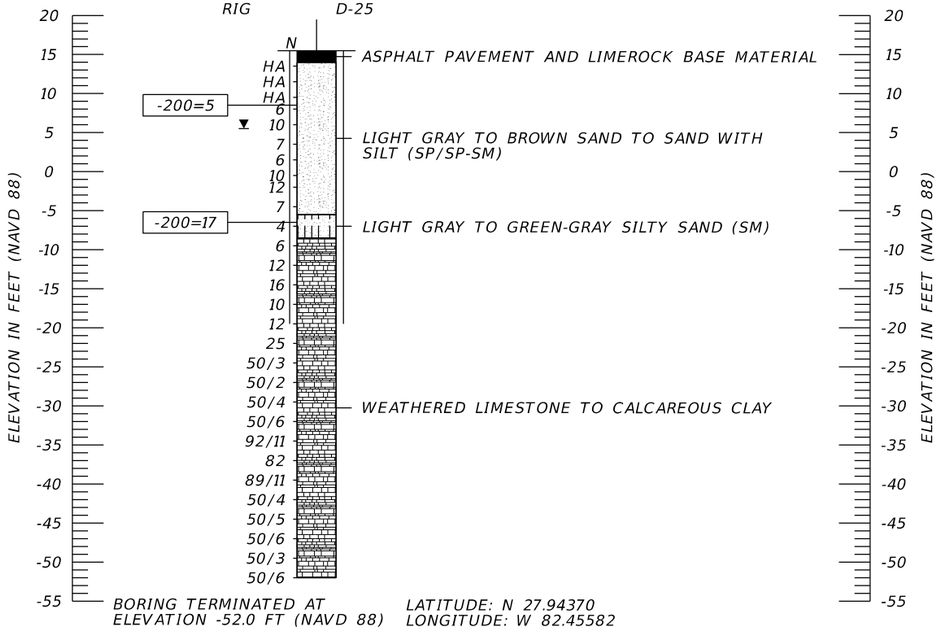
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (19) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-9
STA. 563+41
REF. ℄ SELMON
OFF. 73' LT.
ELEV. 15.5'
DATE 3/28/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -52.0 FT (NAVD 88)
LATITUDE: N 27.94370
LONGITUDE: W 82.45582

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
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- ORGANIC SILTY SAND TO SANDY SILT (Pt)
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50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
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RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
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SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

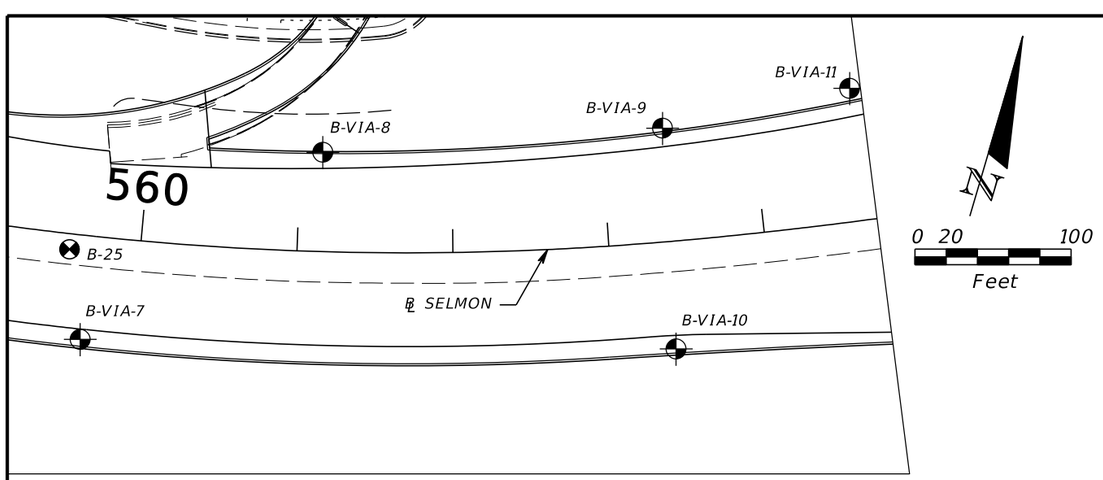
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

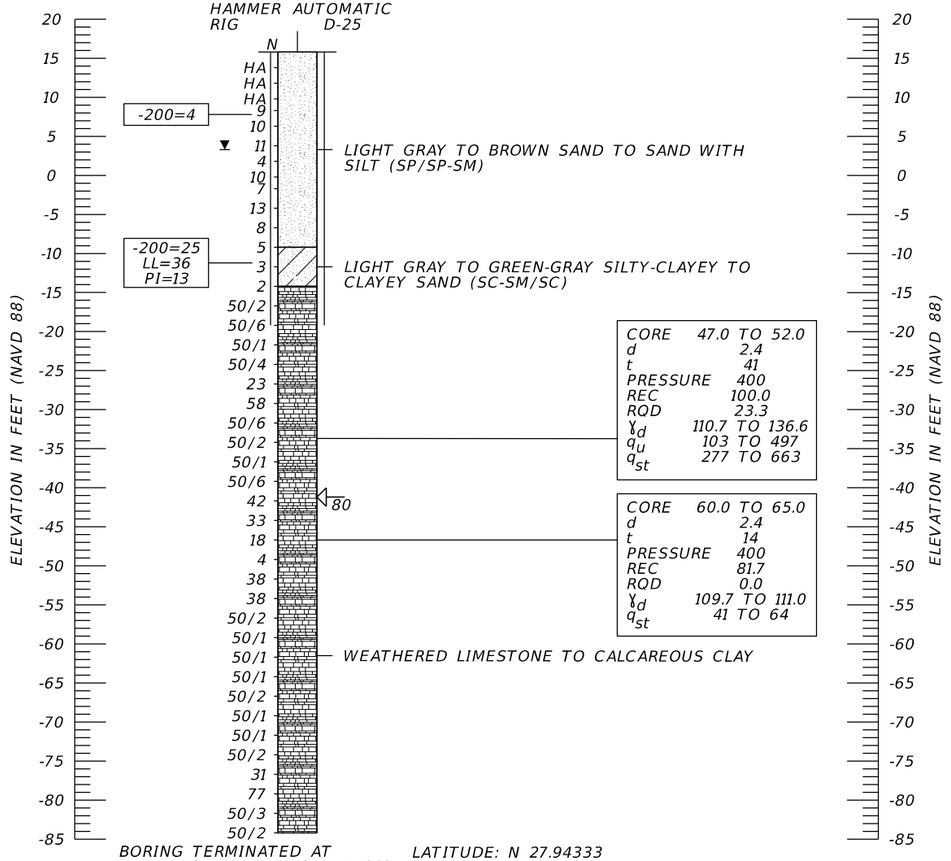
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (20) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-10
STA. 563+37
REF. ℄ SELMON
OFF. 69' RT.
ELEV. 15.8'
DATE 3/24/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -84.2 FT (NAVD 88)
LATITUDE: N 27.94333
LONGITUDE: W 82.45567

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

APPROXIMATE SPT BORING LOCATION BY OTHERS

GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS

100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)

CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT.)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SPT N-VALUE (BLOWS/FT.)**	**SPT N-VALUE (BLOWS/FT.)**
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

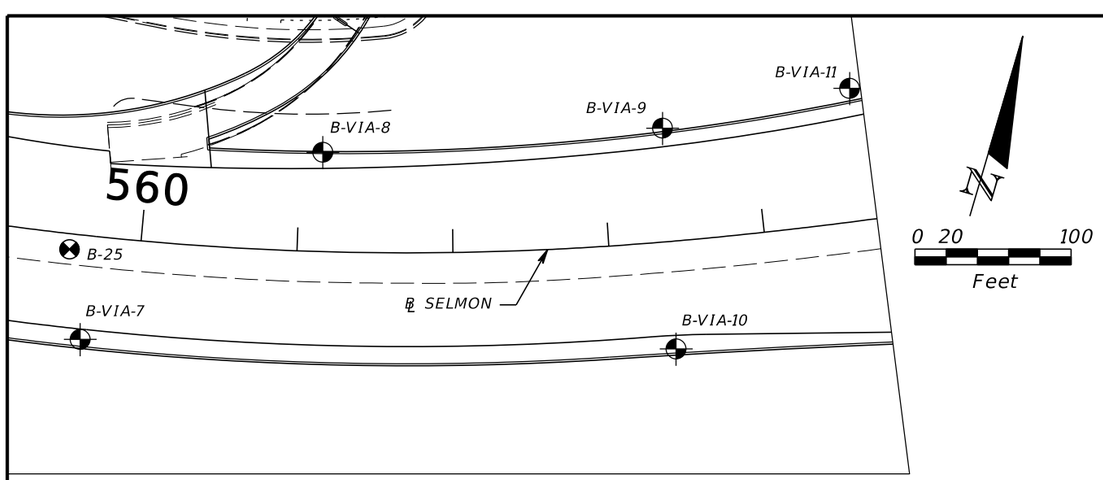
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (21) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

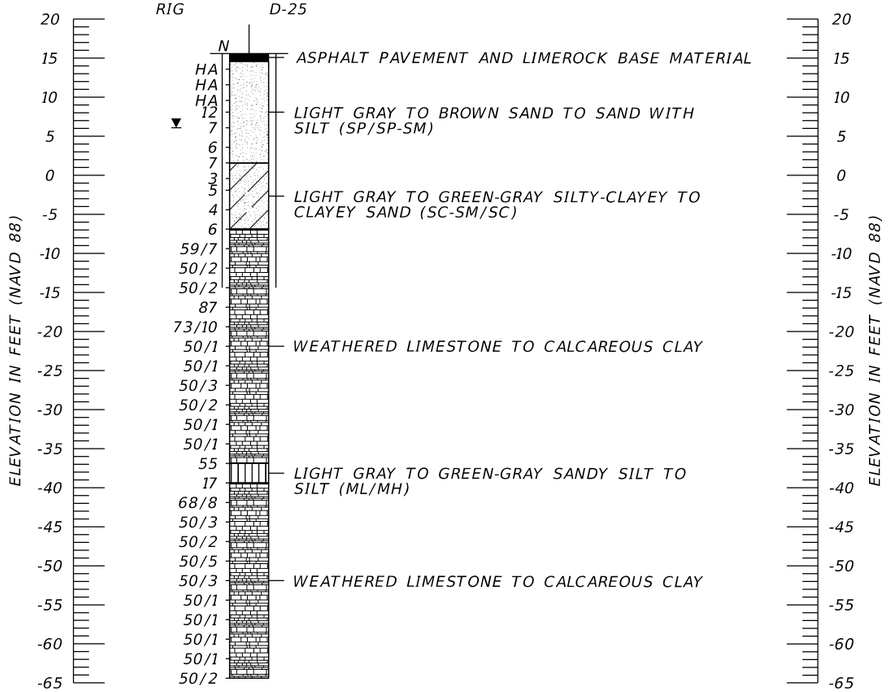
REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-11
STA. 564+72
REF. ℄ SELMON
OFF. 84' LT.
ELEV. 15.6'
DATE 4/1/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -64.4 FT (NAVD 88)
LATITUDE: N 27.94387
LONGITUDE: W 82.45547

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

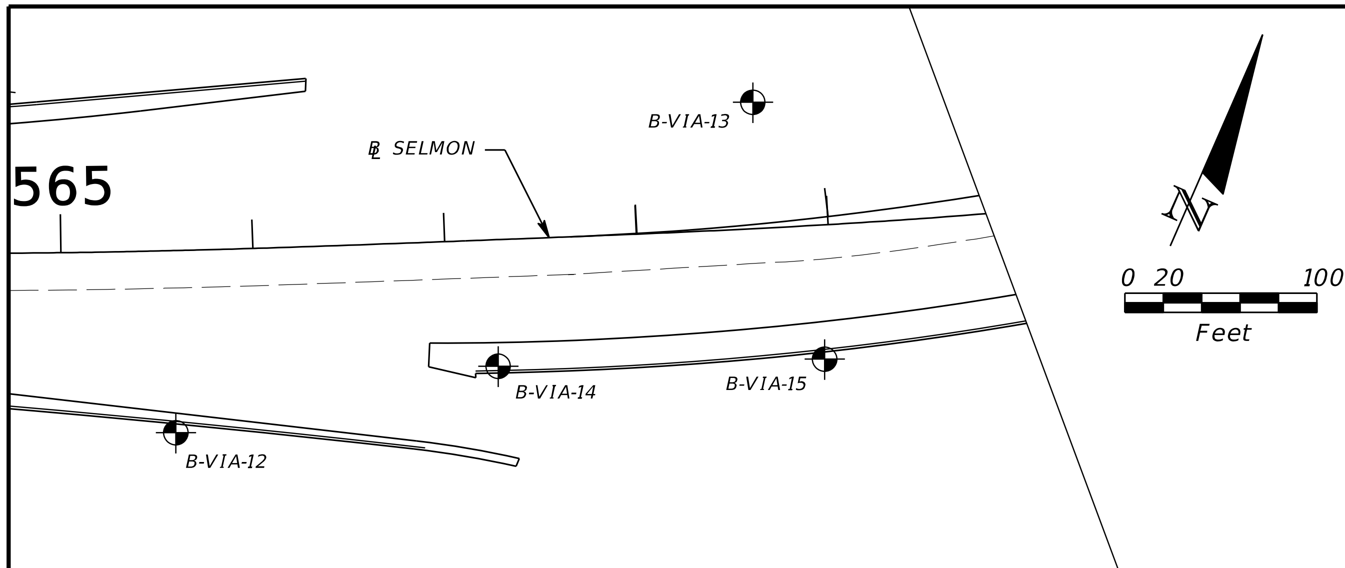
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

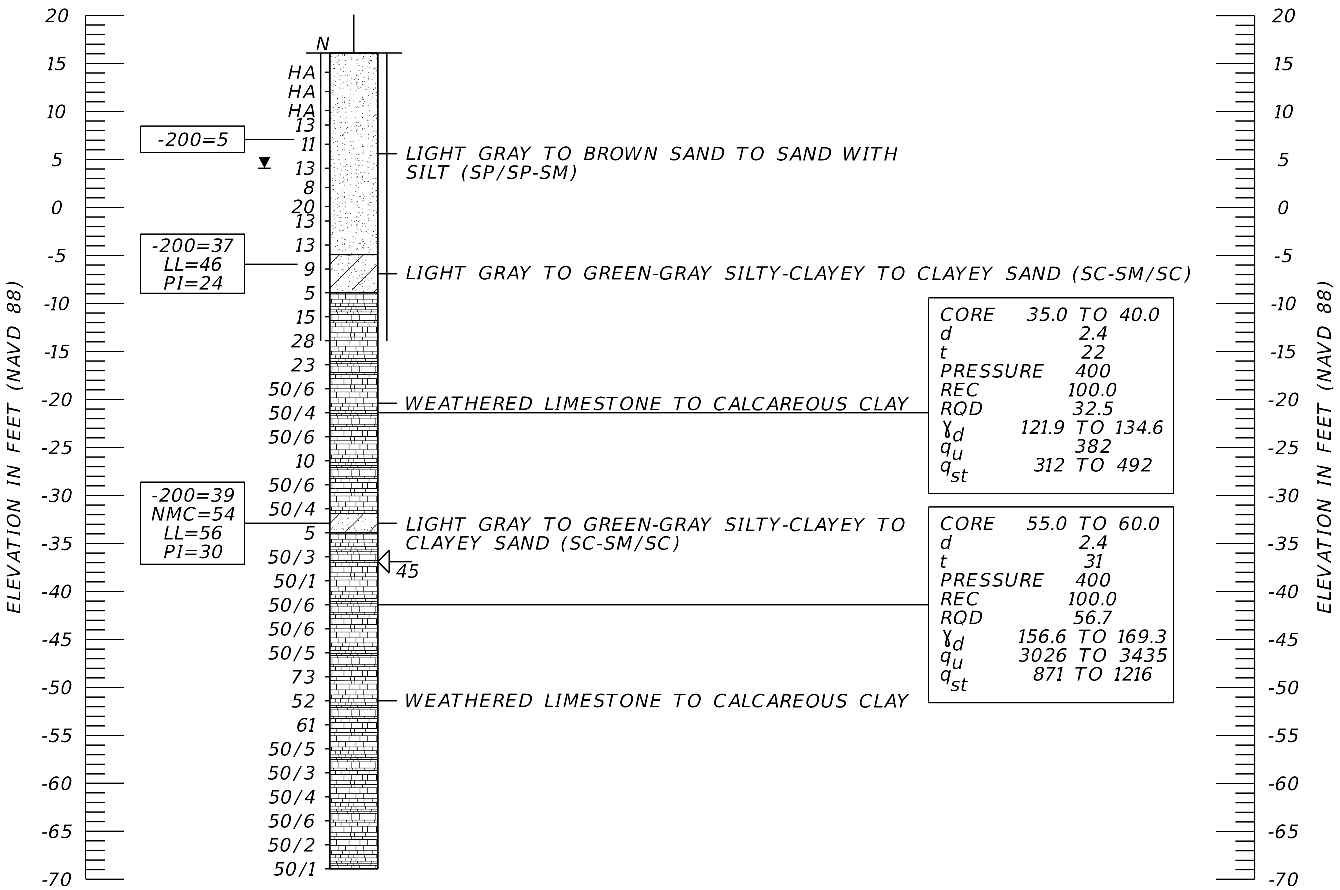
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (22) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-12
STA. 565+58
REF. ℄ SELMON
OFF. 95' RT.
ELEV. 16.1'
DATE 3/29/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -68.9 FT (NAVD 88)

LATITUDE: N 27.94352
LONGITUDE: W 82.45500

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:	
RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS:	(TAMPA BAY & HILLSBOROUGH RIVER)
RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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LEGEND

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- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
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NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
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PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
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q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS-RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
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FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

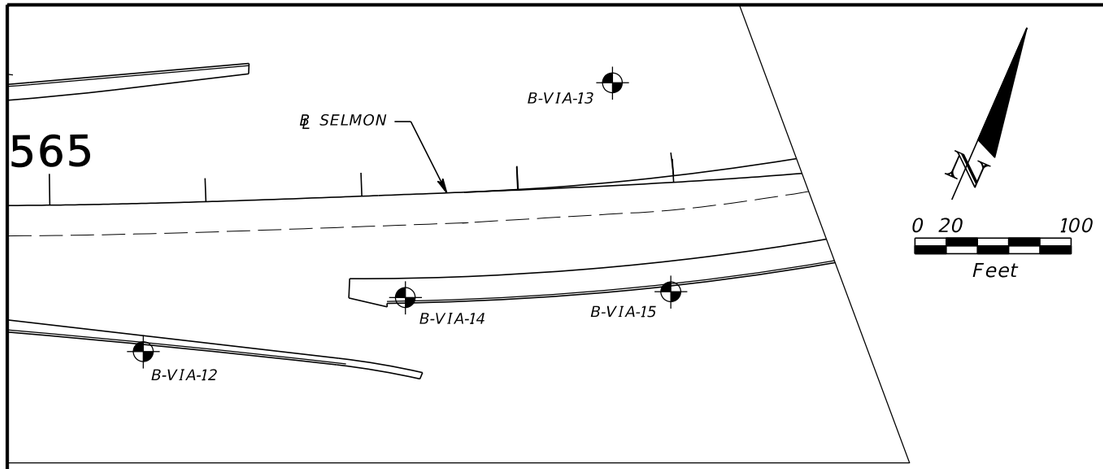
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (23) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



BORING LOCATION PLAN

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

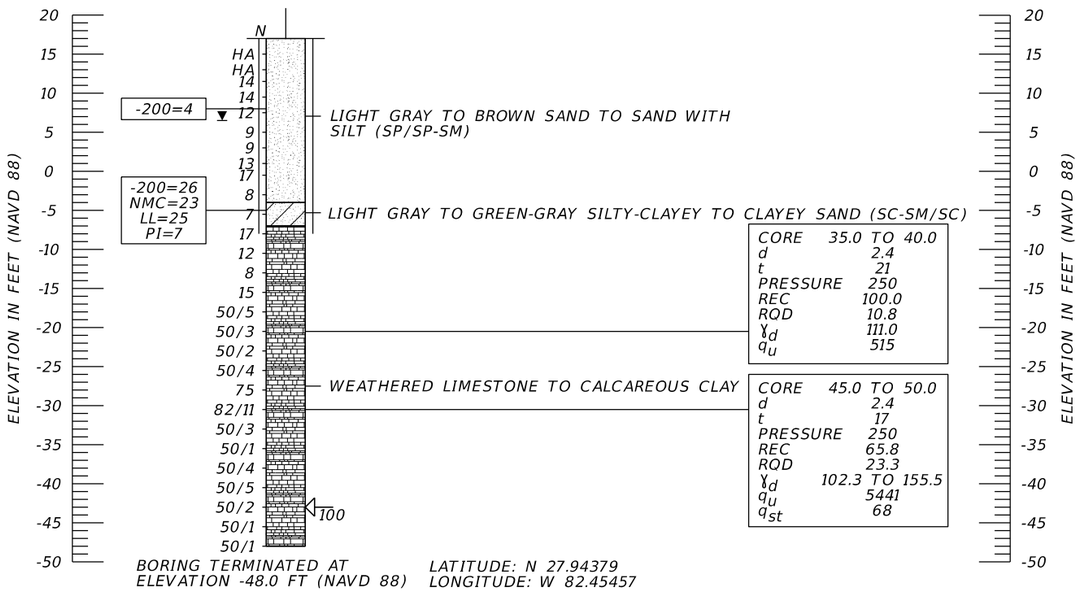
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-14
STA. 567+65
REF. ℄ SELMON
OFF. 66' RT.
ELEV. 17.0'
DATE 3/28/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -48.0 FT (NAVD 88)
LATITUDE: N 27.94379
LONGITUDE: W 82.45457

SAFETY HAMMER		AUTOMATIC HAMMER	
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4		LESS THAN 3
LOOSE	4 to 10		3 to 8
MEDIUM DENSE	10 to 30		8 to 24
DENSE	30 to 50		24 to 40
VERY DENSE	GREATER THAN 50		GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)		SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2		LESS THAN 1
SOFT	2 to 4		1 to 3
FIRM	4 to 8		3 to 6
STIFF	8 to 15		6 to 12
VERY STIFF	15 to 30		12 to 24
HARD	GREATER THAN 30		GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

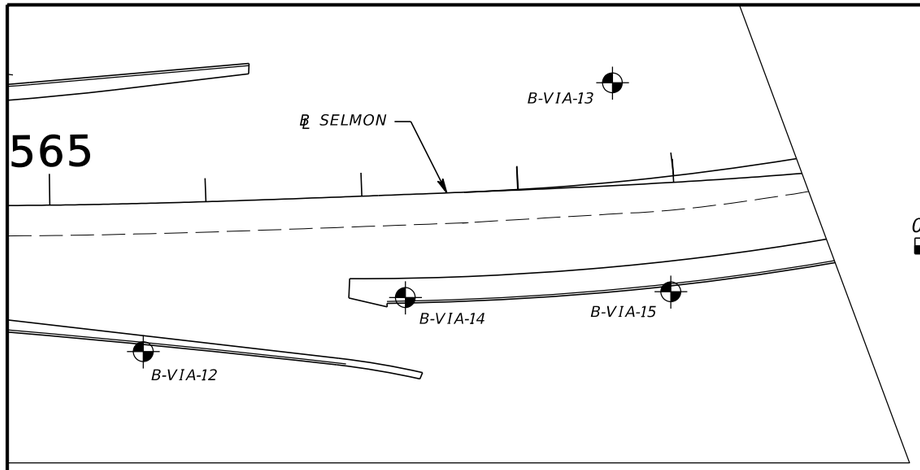
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

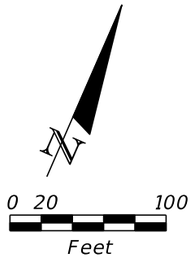
DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (24) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.





BORING LOCATION PLAN

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

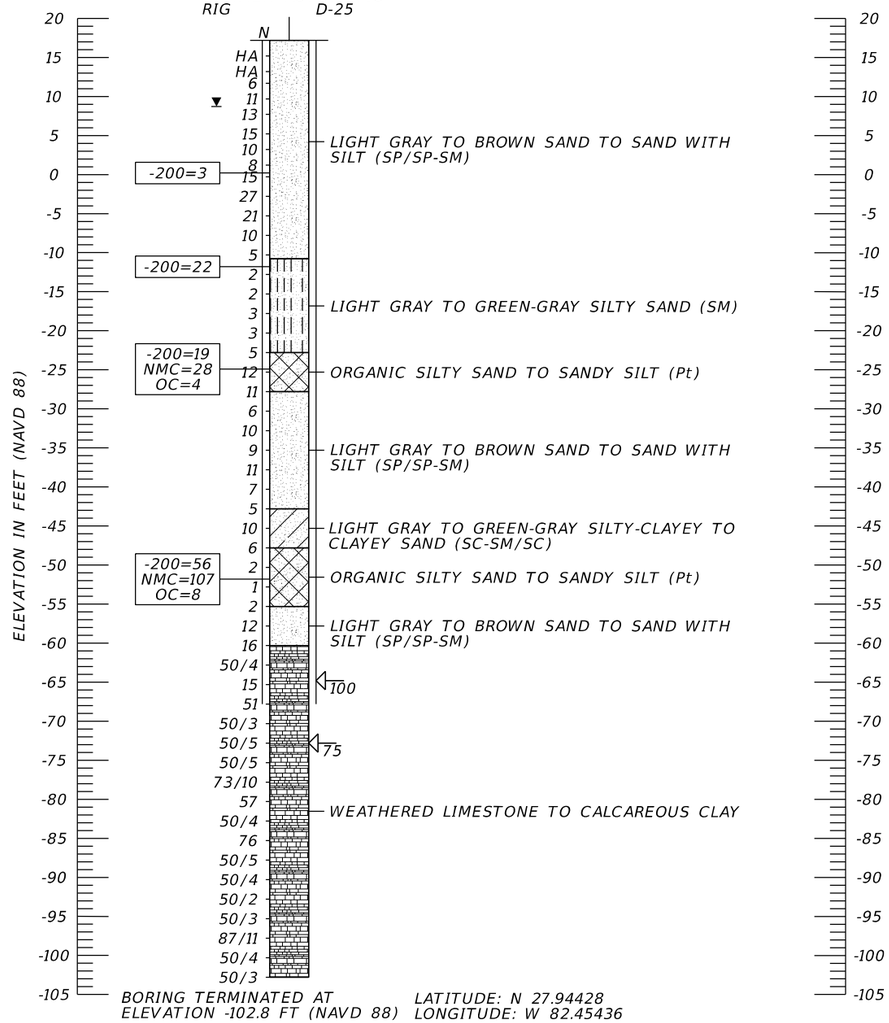
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-13
STA. 568+67
REF. B/L CROSSTOWN2
OFF. 63' LT.
ELEV. 17.2'
DATE 4/1/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -102.8 FT (NAVD 88)
LATITUDE: N 27.94428
LONGITUDE: W 82.45436

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

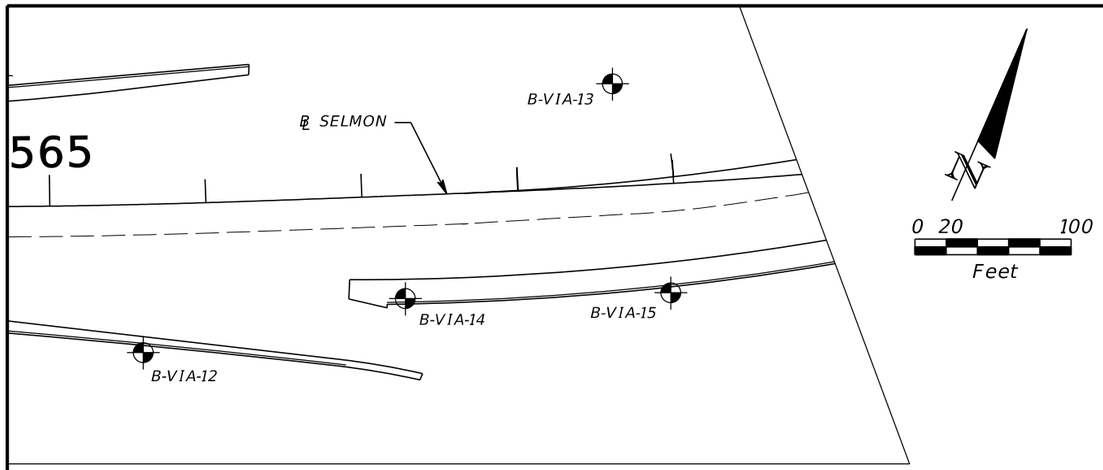
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

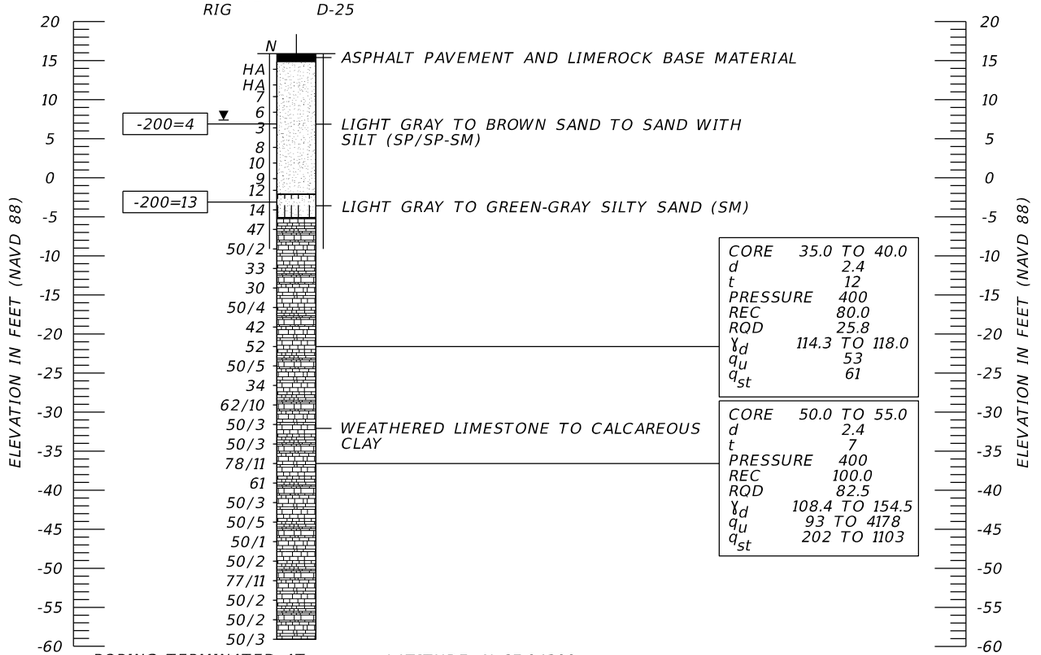
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (25) VIADUCT
REF. DWG. NO.:
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.:



BORING LOCATION PLAN

BOR # B-VIA-15
STA. 568+90
REF. ℄ SELMON
OFF. 74' RT.
ELEV. 15.4'
DATE 3/29/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -59.1 FT (NAVD 88)
LATITUDE: N 27.94399
LONGITUDE: W 82.45409

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

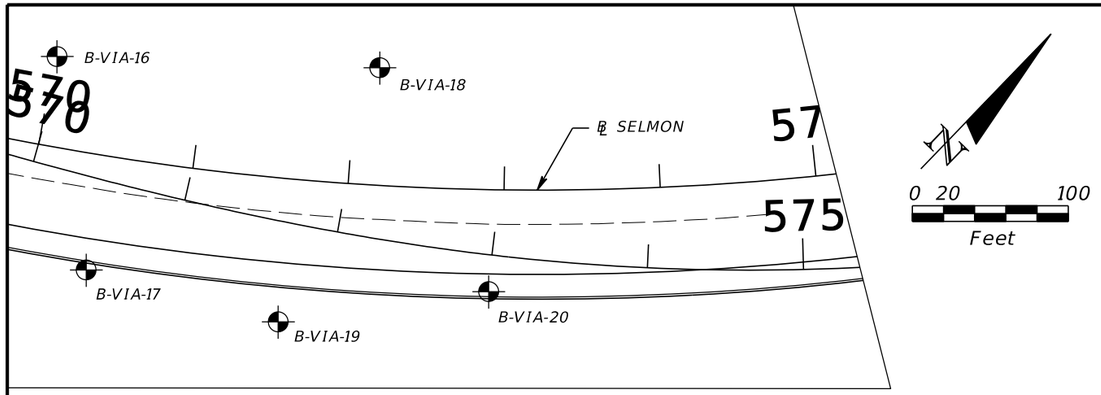
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

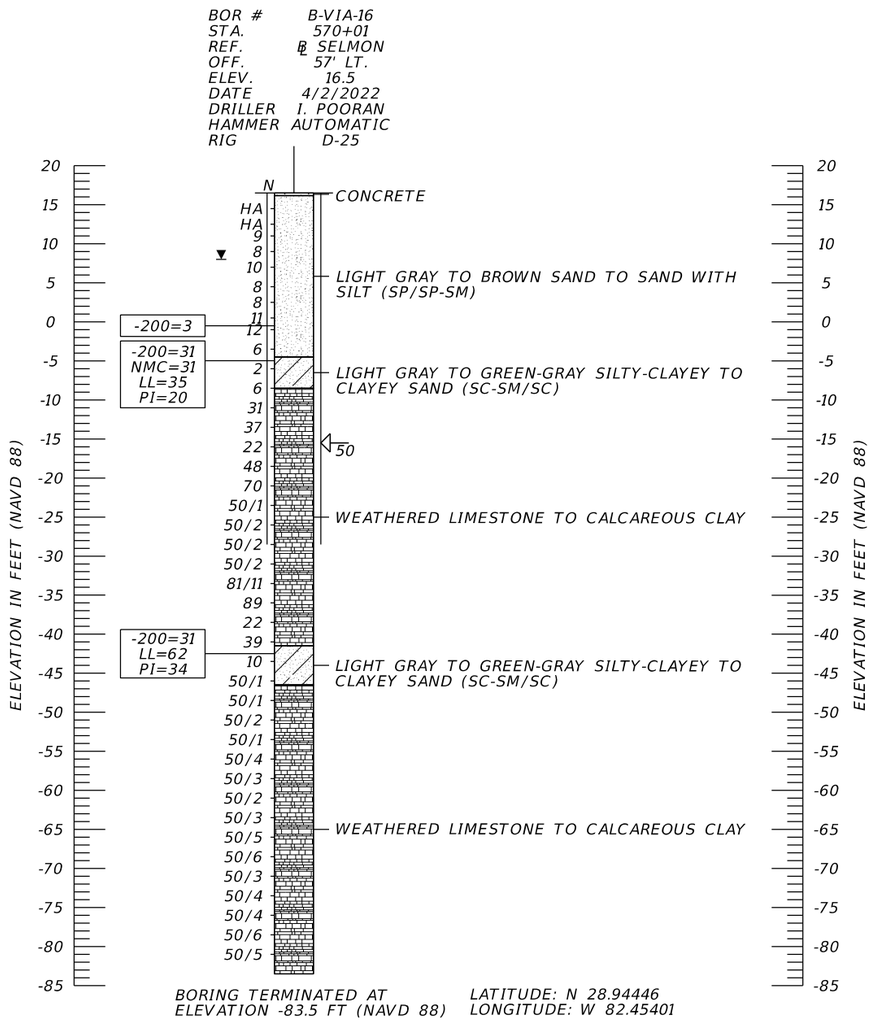
TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (26) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN



BORING TERMINATED AT ELEVATION -83.5 FT (NAVD 88)

LATITUDE: N 28.94446
LONGITUDE: W 82.45401

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

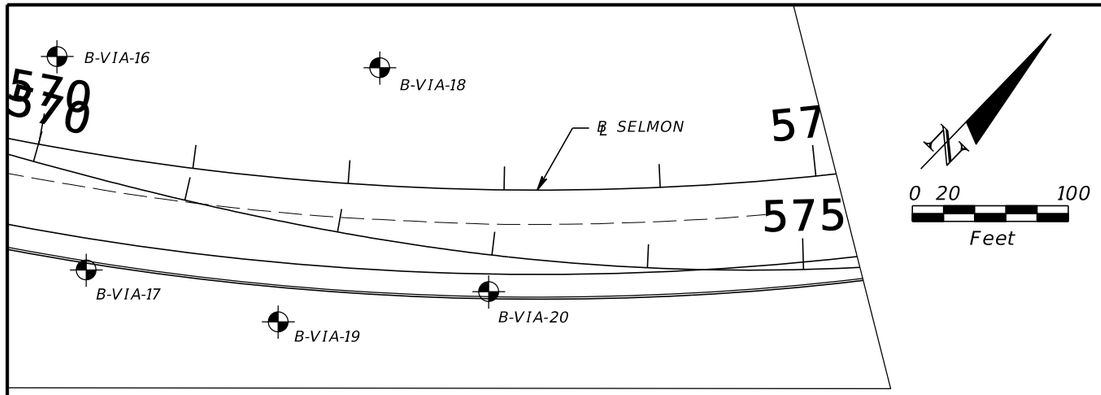
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (27) VIADUCT

REF. DWG. NO.:

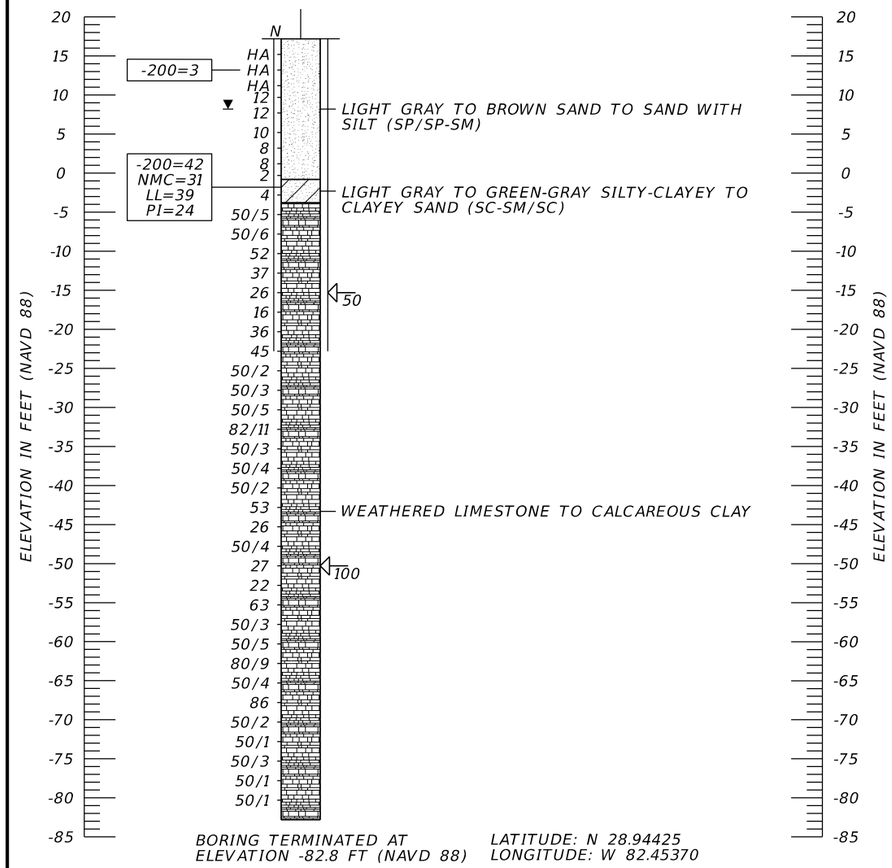
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR #	B-VIA-17
STA.	570+41
REF.	℄ SELMON
OFF.	63' RT.
ELEV.	17.2
DATE	3/30/2022
DRILLER	K. CAUDILL
HAMMER	AUTOMATIC
RIG	D-25



N	
HA	
HA	
HA	
12	
12	
10	
8	
8	
2	
4	
50/5	
50/6	
52	
37	
26	
16	
36	
45	
50/2	
50/3	
50/5	
82/11	
50/3	
50/4	
50/2	
53	
26	
50/4	
27	
22	
63	
50/3	
50/5	
80/9	
50/4	
86	
50/2	
50/1	
50/3	
50/1	
50/1	

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
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50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
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d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
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HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

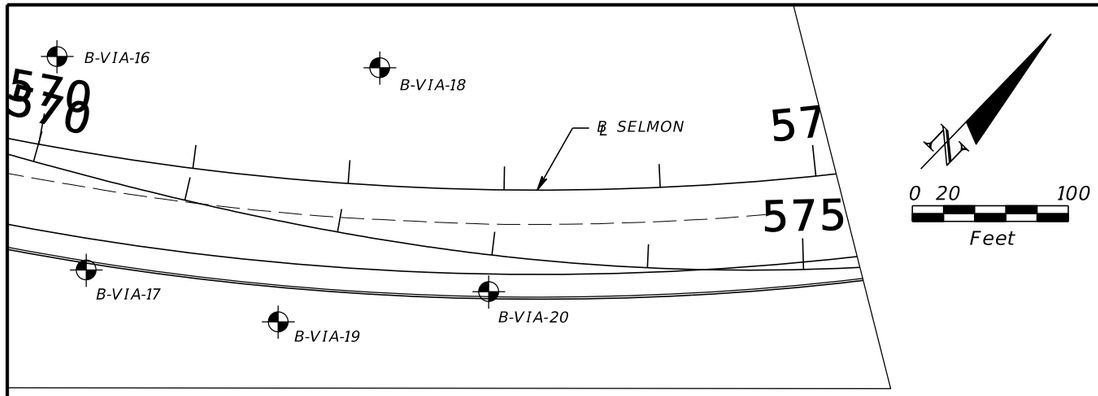
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (28) VIADUCT

REF. DWG. NO.:

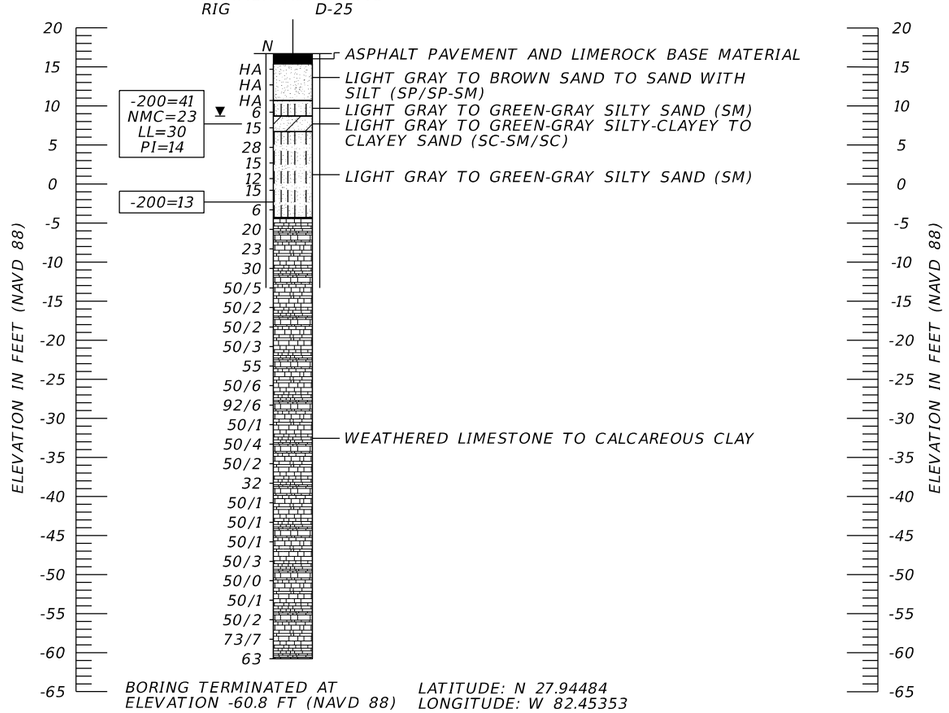
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR #	B-VIA-18
STA.	572+16
REF.	℄ SELMON
OFF.	75' LT.
ELEV.	16.7'
DATE	3/30/2022
DRILLER	J. SHAW
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT ELEVATION -60.8 FT (NAVD 88)

LATITUDE: N 27.94484
LONGITUDE: W 82.45353

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
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WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
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LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
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d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
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q_{st}	SPLITTING TENSILE STRENGTH (PSI)
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SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
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SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
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TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

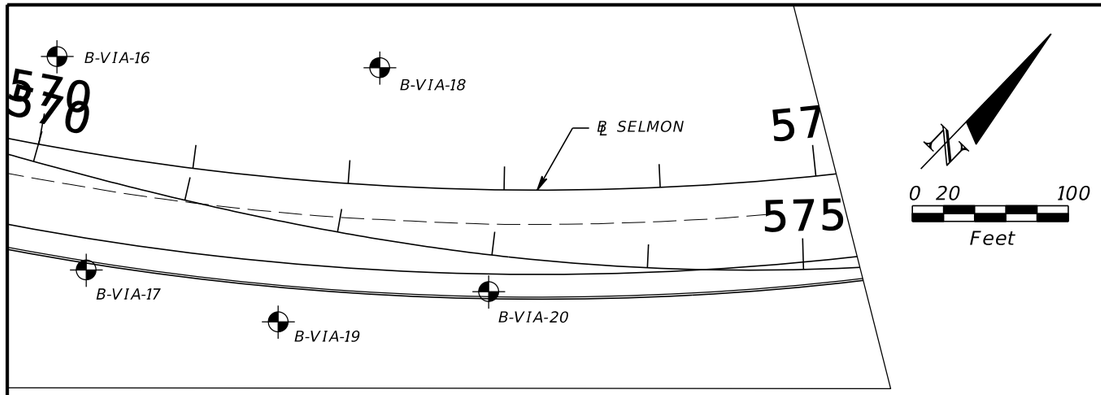
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (29) VIADUCT

REF. DWG. NO.:

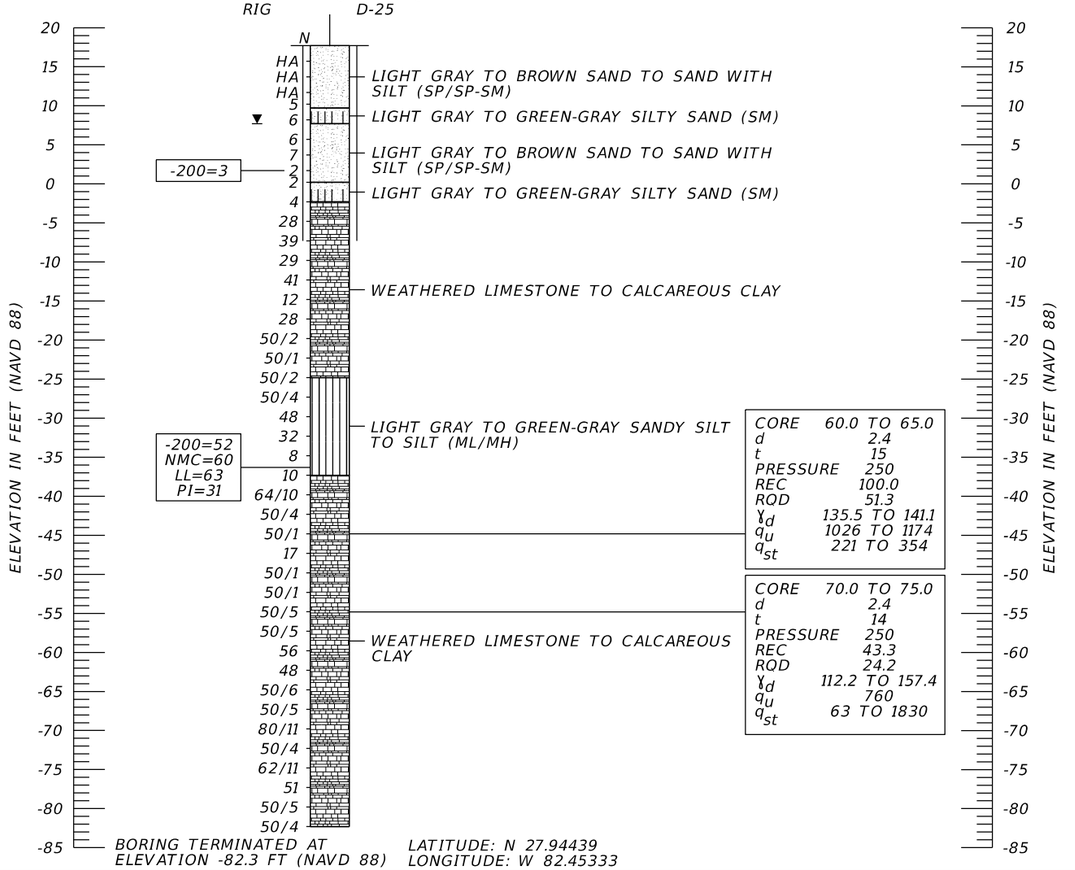
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

BOR # B-VIA-19
STA. 571+63
REF. ℄ SELMON
OFF. 92' RT.
ELEV. 17.7'
DATE 3/28/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



CORE	60.0 TO 65.0
d	2.4
t	15
PRESSURE	250
REC	100.0
RQD	51.3
γ_d	135.5 TO 141.1
q_u	1026 TO 1174
q_{st}	221 TO 354

CORE	70.0 TO 75.0
d	2.4
t	14
PRESSURE	250
REC	43.3
RQD	24.2
γ_d	112.2 TO 157.4
q_u	760
q_{st}	63 TO 1830

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
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50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
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WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
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pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

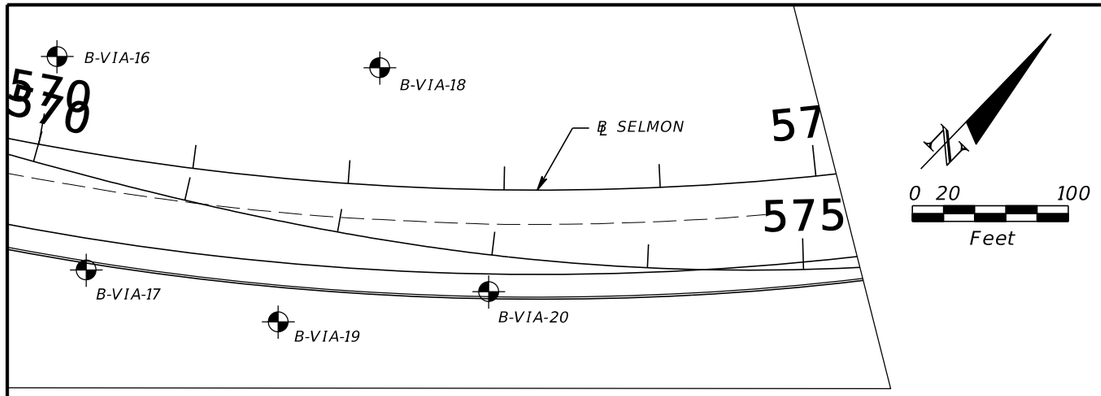
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

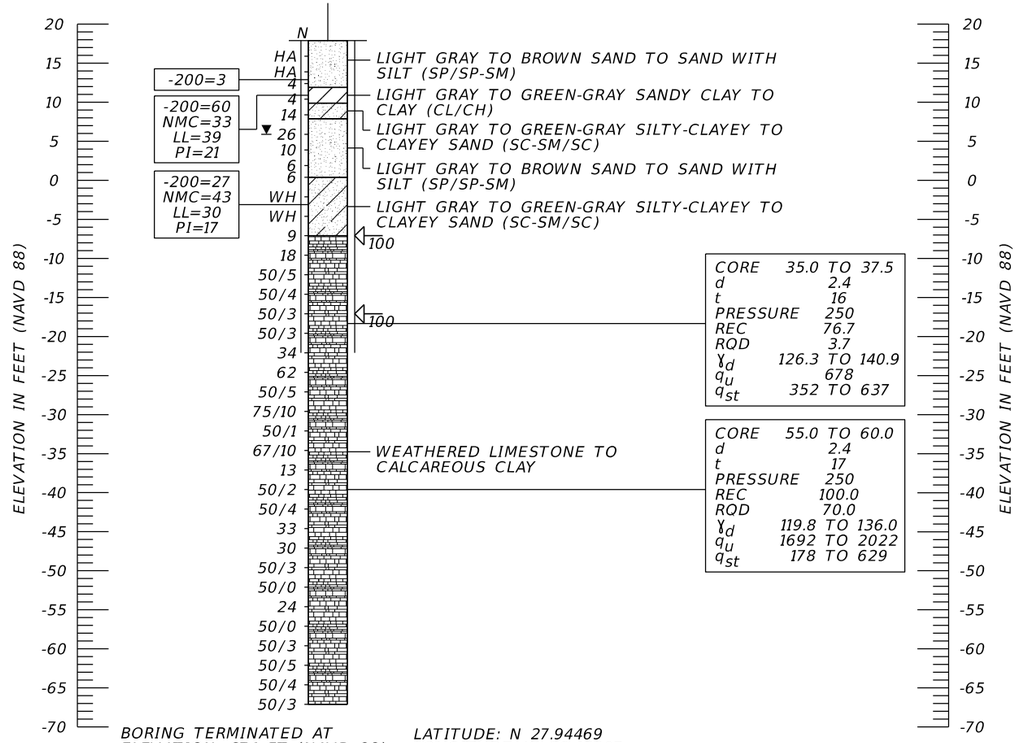
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (30) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN

BOR # B-VIA-20
STA. 572+91
REF. ℄ SELMON
OFF. 65' RT.
ELEV. 17.9'
DATE 3/28/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -67.1 FT (NAVD 88)
LATITUDE: N 27.94469
LONGITUDE: W 82.45307

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP — UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.

N — NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).

50/4 — NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION

HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

-200 — PERCENT PASSING #200 SIEVE
NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

- APPROXIMATE SPT BORING LOCATION
- APPROXIMATE SPT BORING LOCATION BY OTHERS
- GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
- 100 LOSS OF CIRCULATION OF DRILLING FLUID (%)
- CASING
- GNA GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d — CORE BARREL DIAMETER (INCHES)
t — ROCK CORE TIME (MINUTES)
PRESSURE — DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC — PERCENT RECOVERY (%)
RQD — ROCK QUALITY DESIGNATION (%)
γ_d — DRY UNIT WEIGHT (PCF)
q_u — MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st} — SPLITTING TENSILE STRENGTH (PSI)

D_{50} — PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
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	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

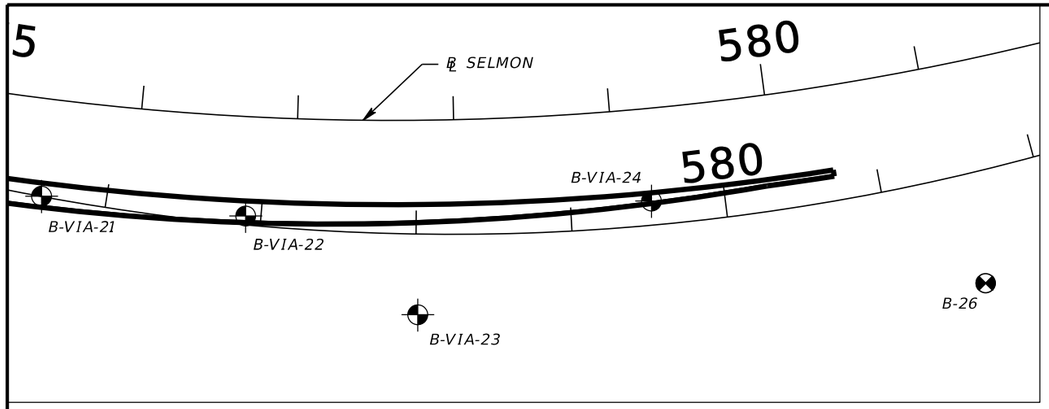
SHEET TITLE: REPORT OF CORE BORINGS (31) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

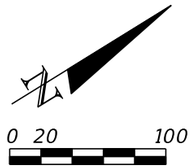
REF. DWG. NO.

SHEET NO.

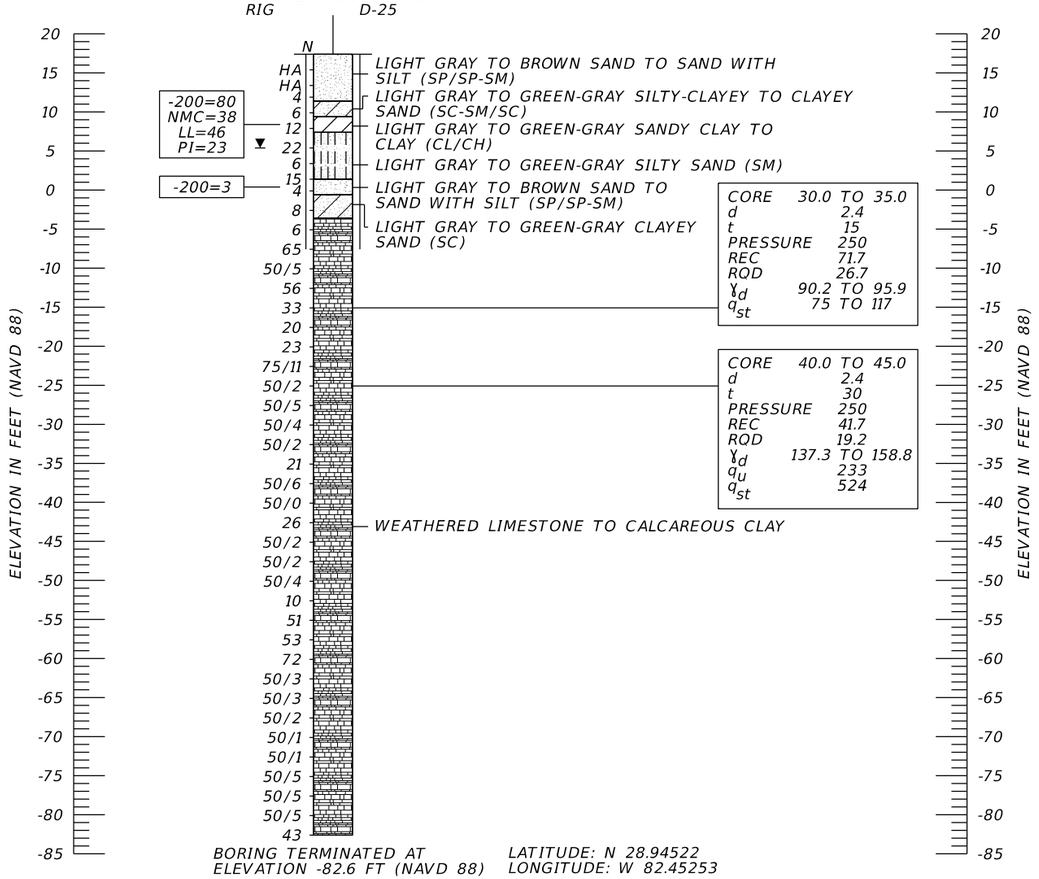
bgarcia 7/18/2022 2:19:07 PM J:\6511\2021 Files\6511-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geote



BORING LOCATION PLAN



BOR # B-VIA-21
STA. 575+43
REF. ℄ SELMON
OFF. 62' RT.
ELEV. 17.4
DATE 3/30/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -82.6 FT (NAVD 88)
LATITUDE: N 28.94522
LONGITUDE: W 82.45253

LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
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- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
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HA — HAND AUGERED TO VERIFY UTILITY CLEARANCE

WH — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER

WR — SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD

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NMC — NATURAL MOISTURE CONTENT (%)
LL — LIQUID LIMIT (%)
PI — PLASTICITY INDEX (%)
OC — ORGANIC CONTENT (%)
NP — NON-PLASTIC

NAVD 88 — NORTH AMERICAN VERTICAL DATUM OF 1988

APPROXIMATE SPT BORING LOCATION

APPROXIMATE SPT BORING LOCATION BY OTHERS

GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS

100 — LOSS OF CIRCULATION OF DRILLING FLUID (%)

CASING

GNA — GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.

℄ SELMON — BASELINE SURVEY OF SELMON EXPRESSWAY

CORE — CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
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t — ROCK CORE TIME (MINUTES)
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γ_d — DRY UNIT WEIGHT (PCF)
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q_{st} — SPLITTING TENSILE STRENGTH (PSI)

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SOIL TEST RESULTS:

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CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
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WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

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SULFATES	3,700 TO 3,900 PPM
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NOTES:

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	SAFETY HAMMER	AUTOMATIC HAMMER
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SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
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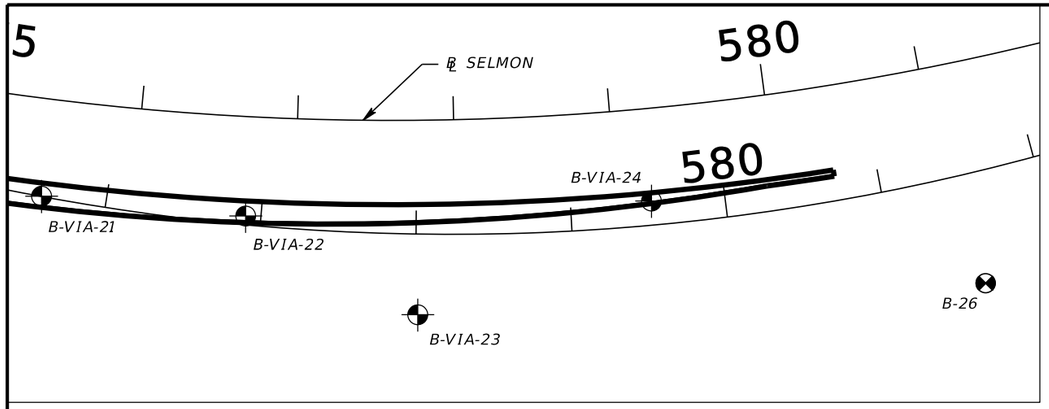
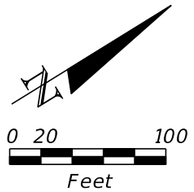
TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (32) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.





LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
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- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
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N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
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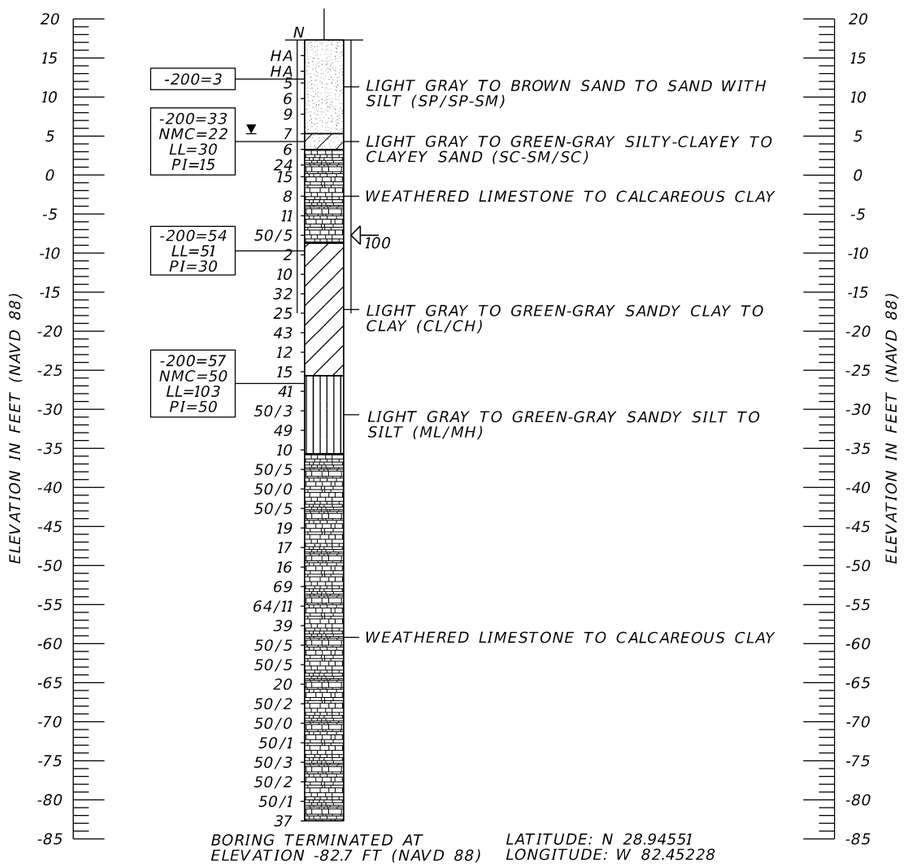
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

BORING LOCATION PLAN

BOR # B-VIA-22
STA. 576+70
REF. ℄ SELMON
OFF. 64' RT.
ELEV. 17.3
DATE 4/1/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -82.7 FT (NAVD 88)

LATITUDE: N 28.94551
LONGITUDE: W 82.45228

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
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SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

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	SAFETY HAMMER	AUTOMATIC HAMMER
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VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

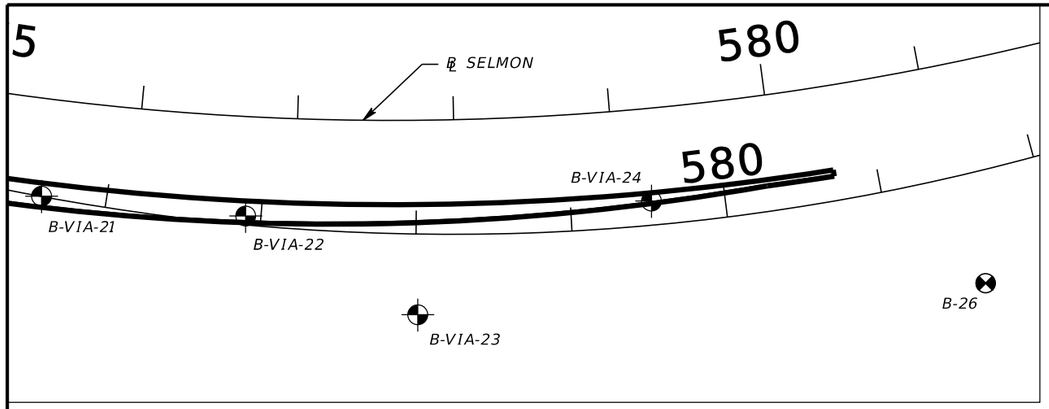
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (33) VIADUCT

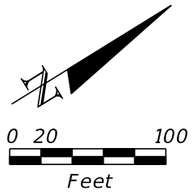
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

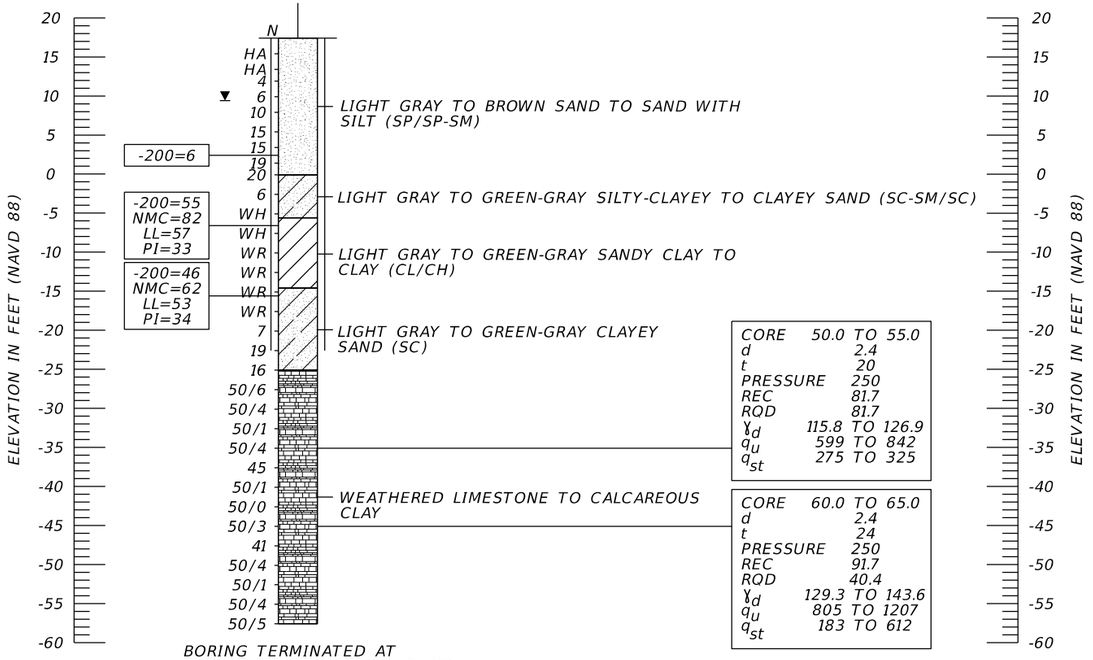
WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

BOR # B-VIA-23
STA. 577+76
REF. ℄ SELMON
OFF. 125' RT.
ELEV. 17.4'
DATE 3/26/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



CORE	50.0 TO 55.0
d	2.4
t	20
PRESSURE	250
REC	81.7
RQD	81.7
γ_d	115.8 TO 126.9
q_u	599 TO 842
q_{st}	275 TO 325

CORE	60.0 TO 65.0
d	2.4
t	24
PRESSURE	250
REC	91.7
RQD	40.4
γ_d	129.3 TO 143.6
q_u	805 TO 1207
q_{st}	183 TO 612

LATITUDE: N 27.94568
LONGITUDE: W 82.45194

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

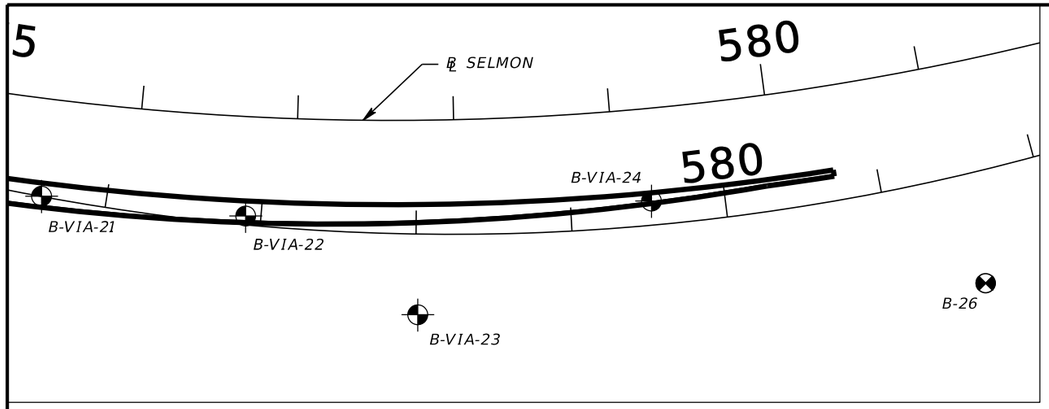
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

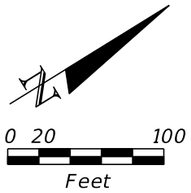
TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (34) VIADUCT
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.



BORING LOCATION PLAN



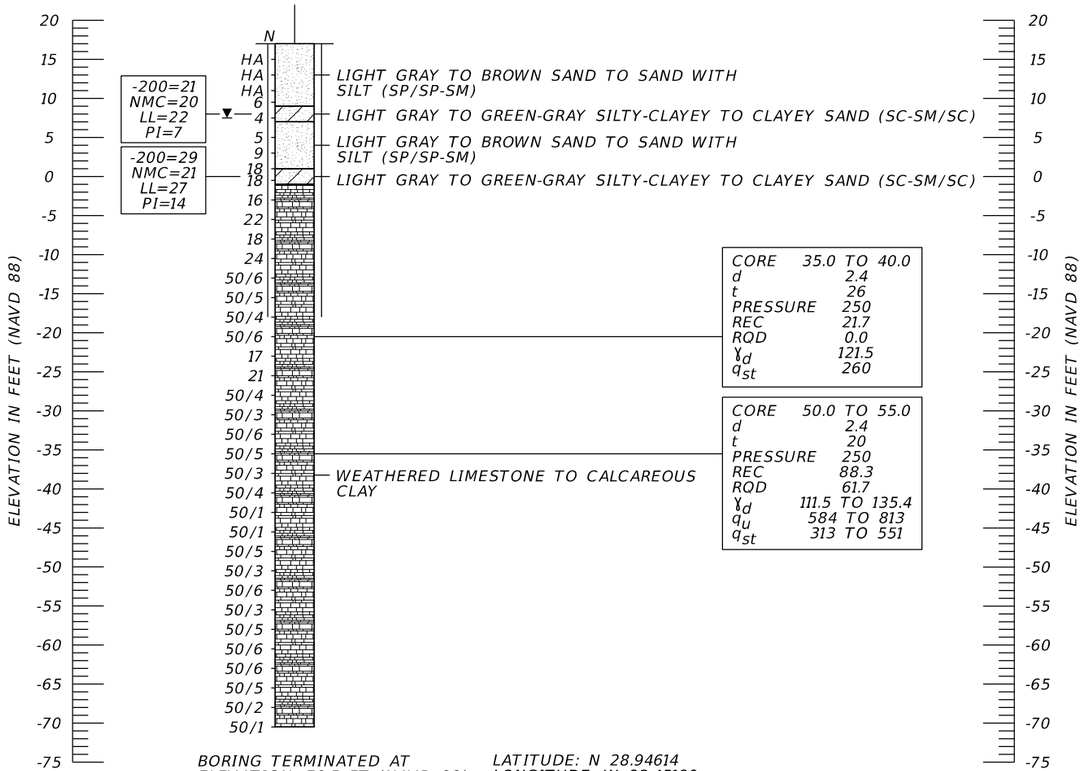
LEGEND

- BROWN SAND WITH SILT TO SILTY SAND TO SANDY SILT/BAY BOTTOM WITH SHELL (SP-SM/SM/ML)
- LIGHT GRAY TO BROWN SAND TO SAND WITH SILT (SP/SP-SM)
- LIGHT GRAY TO GREEN-GRAY SILTY SAND (SM)
- LIGHT GRAY TO GREEN-GRAY SILTY-CLAYEY TO CLAYEY SAND (SC-SM/SC)
- LIGHT GRAY TO GREEN-GRAY SANDY CLAY TO CLAY (CL/CH)
- LIGHT GRAY TO GREEN-GRAY SANDY SILT TO SILT (ML/MH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	APPROXIMATE SPT BORING LOCATION BY OTHERS
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY

CORE	CORE DEPTH IS REFERENCED TO FEET BELOW THE GROUND SURFACE (MUDLINE) AT THE TIME OF BORING COMPLETION
d	CORE BARREL DIAMETER (INCHES)
t	ROCK CORE TIME (MINUTES)
PRESSURE	DOWN PRESSURE APPLIED DURING CORE RUN (PSI)
REC	PERCENT RECOVERY (%)
RQD	ROCK QUALITY DESIGNATION (%)
γ_d	DRY UNIT WEIGHT (PCF)
q_u	MAXIMUM UNCONFINED COMPRESSION STRENGTH (PSI)
q_{st}	SPLITTING TENSILE STRENGTH (PSI)
D_{50}	PARTICLE DIAMETER SUCH THAT 50% OF THE SOIL BY WEIGHT IS OF SMALLER SIZE (mm)

BOR #	B-VIA-24
STA.	579+22
REF.	℄ SELMON
OFF.	59' RT.
ELEV.	17.0
DATE	4/1/2022
DRILLER	I. POORAN
HAMMER	AUTOMATIC
RIG	D-25



BORING TERMINATED AT ELEVATION -70.5 FT (NAVD 88)

LATITUDE: N 28.94614
LONGITUDE: W 82.45189

ENVIRONMENTAL CLASSIFICATION:

SUBSTRUCTURE	CONCRETE: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUBSTRUCTURE	STEEL: EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)
SUPERSTRUCTURE	EXTREMELY AGGRESSIVE (WATER - CHLORIDES = 20,000 PPM)

SOIL TEST RESULTS:

RESISTIVITY	8,700 TO 27,000 OHM-CM
CHLORIDES	15 TO 30 PPM
SULFATES	<5 PPM
pH	6.7 TO 8.2

WATER TEST RESULTS: (TAMPA BAY & HILLSBOROUGH RIVER)

RESISTIVITY	260 TO 300 OHM-CM
CHLORIDES	15,000 TO 20,000 PPM
SULFATES	3,700 TO 3,900 PPM
pH	7.2 TO 7.7

NOTES:

1. BORINGS DENOTED WITH AN ASTERISK (*) WERE PERFORMED IN THE HILLSBOROUGH RIVER AND WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +/- 10 FEET. THE STATIONS AND OFFSETS OF THESE BORING LOCATIONS WERE DETERMINED USING THE GPS COORDINATES OBTAINED IN THE FIELD IN CONJUNCTION WITH THE PROJECT DESIGN FILES AND SHOULD BE CONSIDERED APPROXIMATE. THE WATER SURFACE ELEVATION AT THESE BORING LOCATIONS WAS ASSUMED TO BE +0 FEET, NAVD 88. THE REMAINING BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.
2. BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER, WEST-CENTRAL FLORIDA" MAPS PUBLISHED BY THE USGS, THE POTENTIOMETRIC SURFACE ELEVATION AT THE BRIDGE SITE IS REPORTED UP TO APPROXIMATELY +15 FEET, NGVD 29. SPT BORINGS B-HR-1, B-HR-2 AND B-HR-3 ENCOUNTERED ARTESIAN HEAD ELEVATIONS RANGING FROM APPROXIMATELY +4 TO +6 FEET, NAVD 88.

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

BRIDGE NOS. 100332 & 100333

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

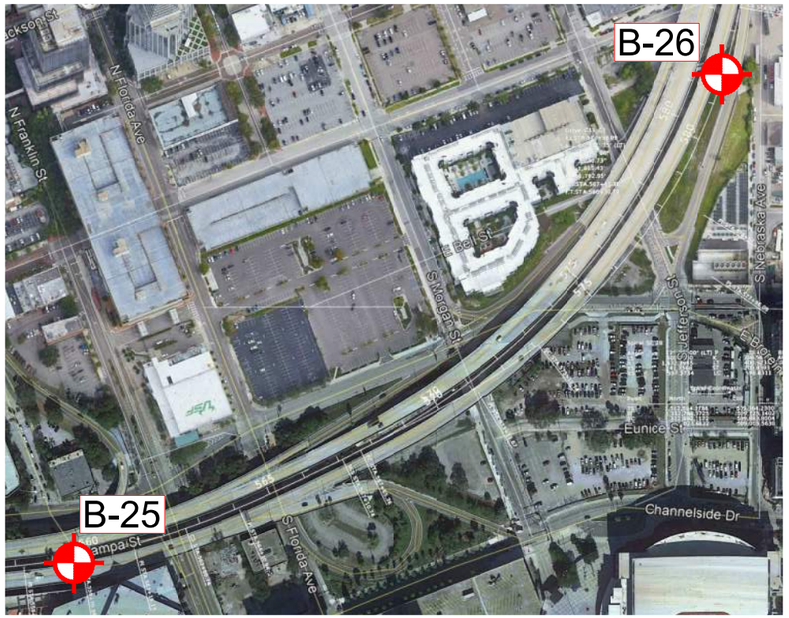
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: REPORT OF CORE BORINGS (35) VIADUCT

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

REF. DWG. NO.

SHEET NO.



Source: Google Earth
Image Date: 12/17/2019

LEGEND:

Approximate SPT Boring Location

0' 400' 800'

Graphic Scale (feet)

LEGEND

- (SP-SM) Poorly-graded SAND with silt
- (SC) Clayey SAND
- (CL) Lean CLAY
- (CH) Fat CLAY
- Limestone
- Weathered LIMESTONE
- (SM) Silty SAND
- (SP-SC) Poorly graded SAND with clay
- (SC-SM) Silty clayey SAND
- (SP) Poorly-graded SAND

WATER TABLE EXISTING AT TIME OF BORING
ESTIMATED SEASONAL HIGH GROUNDWATER TABLE

N	SPT N-VALUE
HA	HAND AUGER
NMC	NATURAL MOISTURE CONTENT (%)
-200	FINES PASSING A NO. 200 SIEVE (%)
GNA	GROUNDWATER NOT APPARENT
GSE	APPROXIMATE GROUND SURFACE ELEVATION (FEET, NAVD)
OC	ORGANIC CONTENT
LL	LIQUID LIMIT
PI	PLASTICITY INDEX
LOC	LOSS OF CIRCULATION
ROC	REGAIN OF CIRCULATION
WOH	WEIGHT OF HAMMER
WOR	WEIGHT OF ROD
SP	UNIFIED SOIL CLASSIFICATION SYSTEM
qu	UNCONFINED COMPRESSIVE STRENGTH FROM POCKET PENETROMETER
50/3"	50 BLOWS FOR 3-INCHES PENETRATION INTO SOIL
RC-1 70 (42)	ROCK CORE WITH 70% RECOVERY AND RQD OF 42%

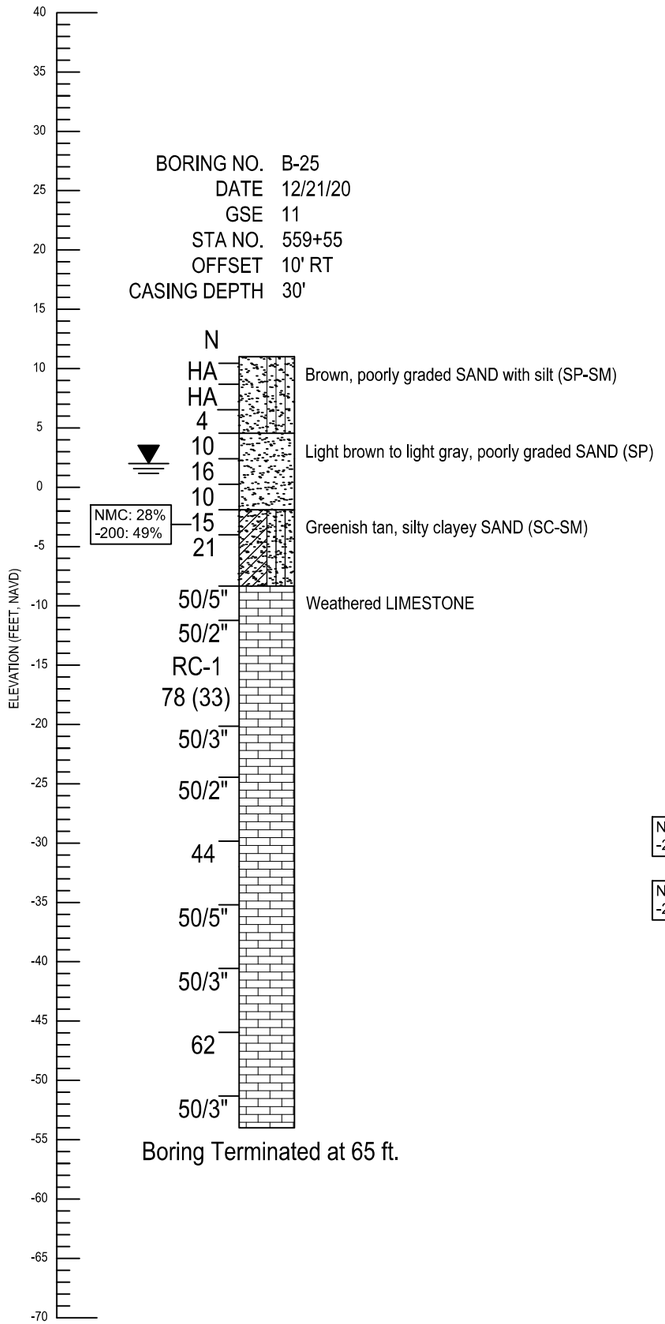
ENVIRONMENTAL CLASSIFICATION

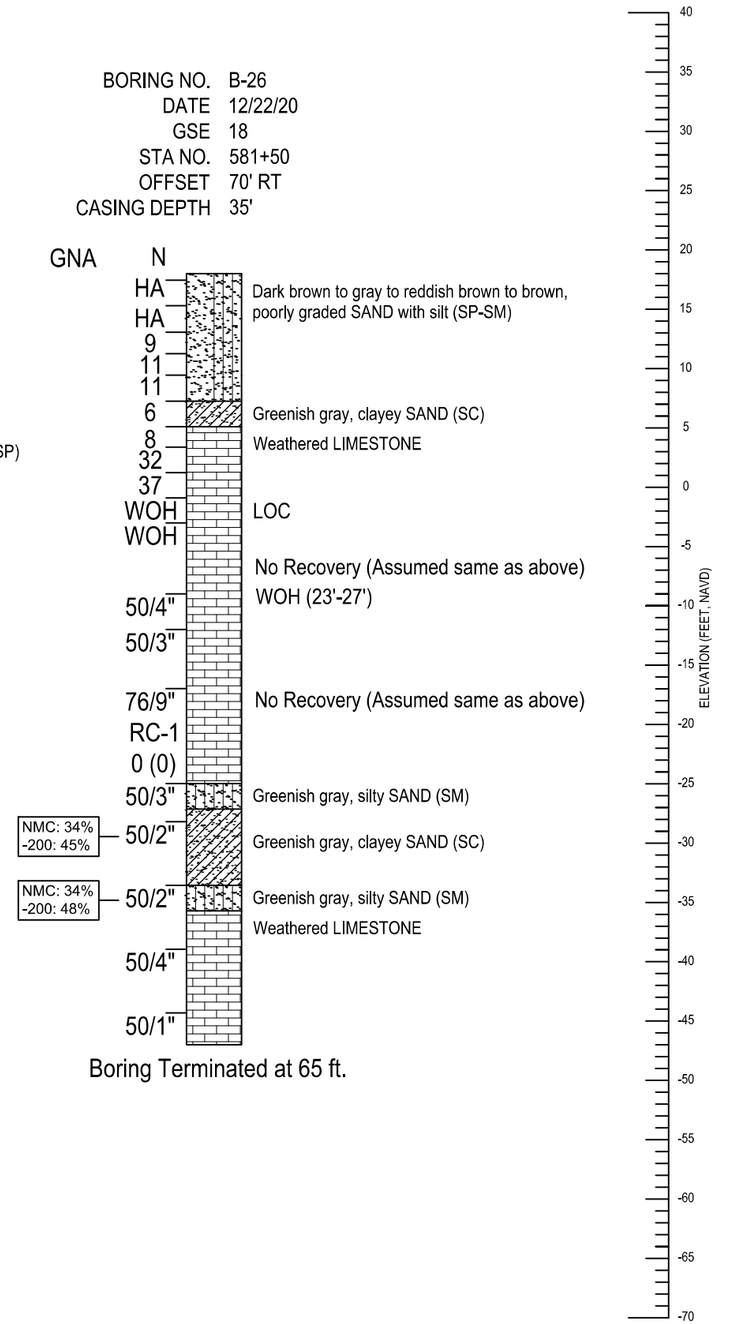
SUBSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

SUPERSTRUCTURE: EXTREMELY AGGRESSIVE (Chlorides = 9,500 ppm in Hillsborough Bay)

ENGINEERING CLASSIFICATION

GRANULAR MATERIALS- RELATIVE DENSITY	SAFETY HAMMER SPT N-VALUE (BLOWS/FT)	AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)
VERY LOOSE	≤ 4	≤ 3
LOOSE	4-10	3-8
MEDIUM DENSE	10-30	8-24
DENSE	30-50	24-40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	**SAFETY HAMMER SPT N-VALUE (BLOWS/FT)**	**AUTOMATIC HAMMER SPT N-VALUE (BLOWS/FT)**
VERY SOFT	≤ 2	≤ 1
SOFT	2-4	1-3
FIRM	4-8	3-6
STIFF	8-15	6-12
VERY STIFF	15-30	12-24
HARD	GREATER THAN 30	GREATER THAN 24





REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ETHAN H. DREW, P.E.
P.E. NO. 88622
MC SQUARED, INC.
5808-A BRECKENRIDGE PARKWAY,
TAMPA, FL 33610

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

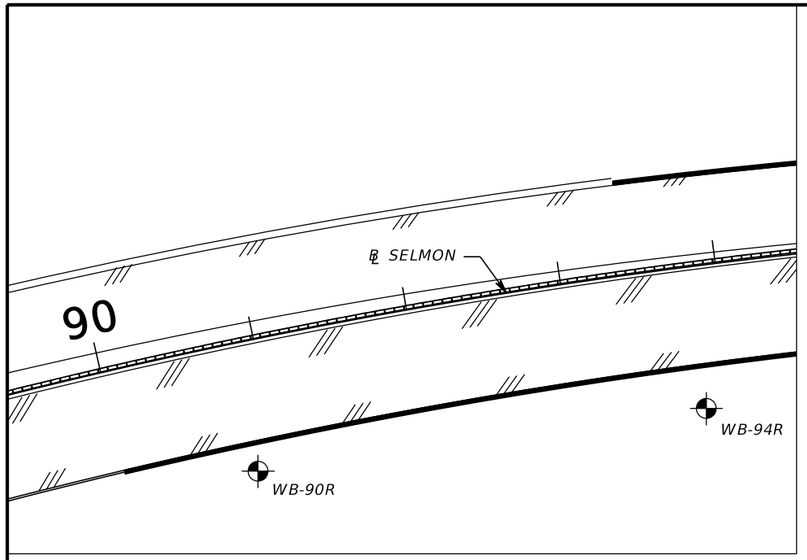
ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 618	HILLSBOROUGH	

REPORT OF CORE BORINGS VIADUCT DOWNTOWN

SHEET NO. 15

APPENDIX N

Report of Core Borings Sheets – Retaining Walls



0 20 100
Feet

BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

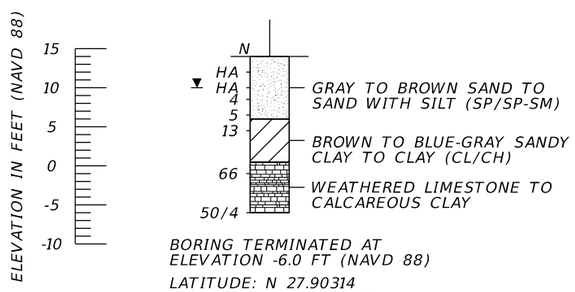
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

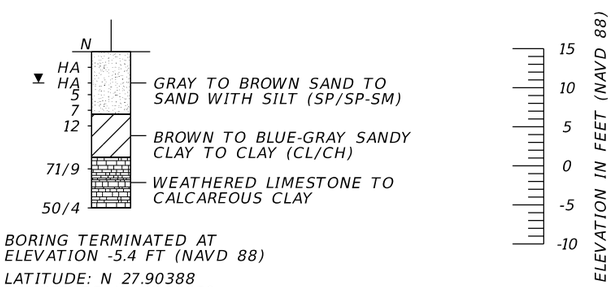
BOR # WB-90R
STA. 90+86
REF. ℄ SELMON
OFF. 83' RT.
ELEV. 14.0'
DATE 3/10/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -6.0 FT (NAVD 88)

LATITUDE: N 27.90314
LONGITUDE: W 82.50293

BOR # WB-94R
STA. 93+82
REF. ℄ SELMON
OFF. 91' RT.
ELEV. 14.6'
DATE 3/10/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -5.4 FT (NAVD 88)

LATITUDE: N 27.90388
LONGITUDE: W 82.50259

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

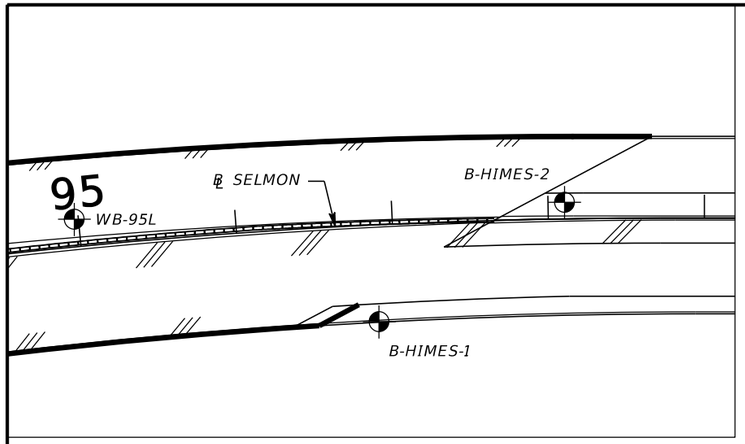
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (1)

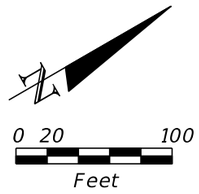
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

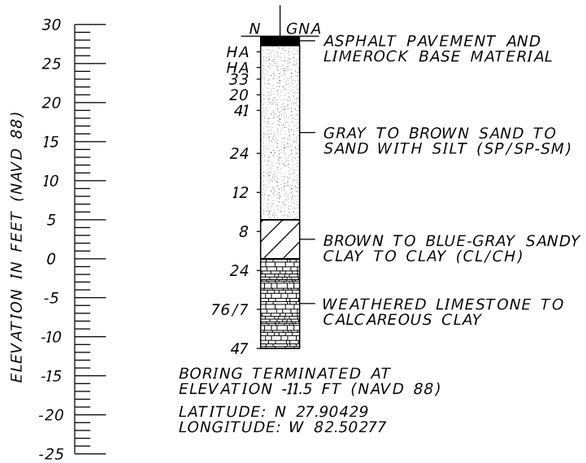
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

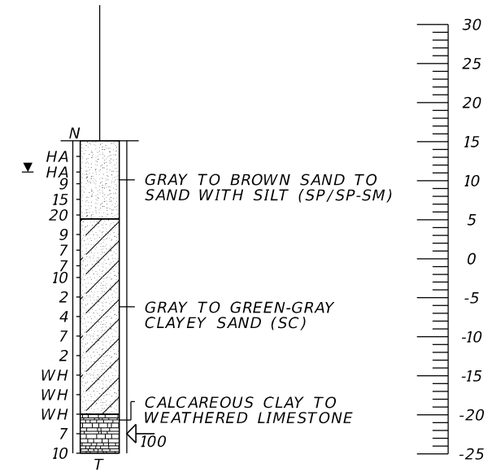
BOR # WB-95L
STA. 94+97
REF. ℄ SELMON
OFF. 18' LT.
ELEV. 28.5'
DATE 1/24/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -11.5 FT (NAVD 88)

LATITUDE: N 27.90429
LONGITUDE: W 82.50277

BOR # B-HIMES-1
STA. 96+88
REF. ℄ SELMON
OFF. 62' RT.
ELEV. 15.1'
DATE 3/10/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT ELEVATION -24.9 FT (NAVD 88)

LATITUDE: N 27.90466
LONGITUDE: W 82.50229

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

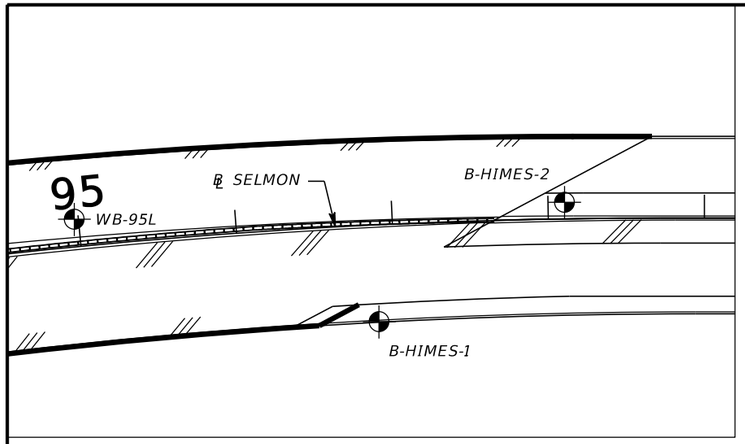
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (2)

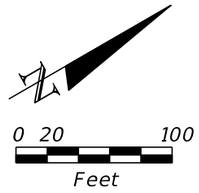
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

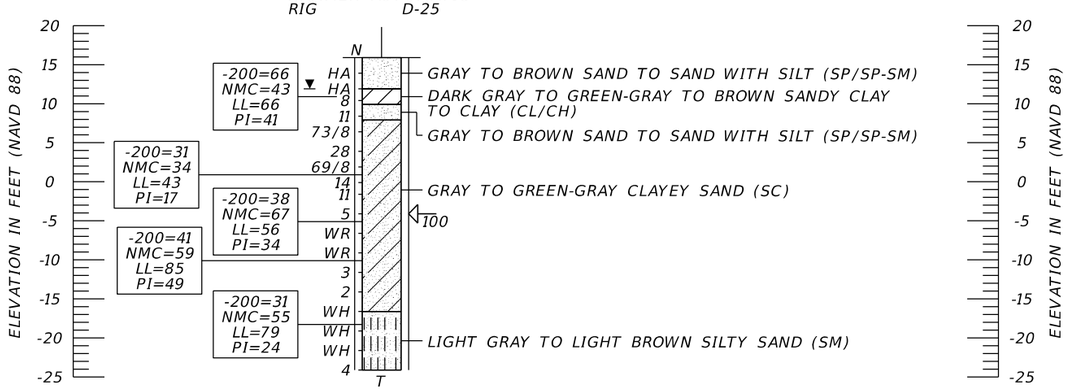
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
T100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-HIMES-2
STA. 98+11
REF. ℄ SELMON
OFF. 11' LT.
ELEV. 15.9
DATE 3/8/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT ELEVATION -24.1 FT (NAVD 88)
LATITUDE: N 27.90505
LONGITUDE: W 82.50231

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

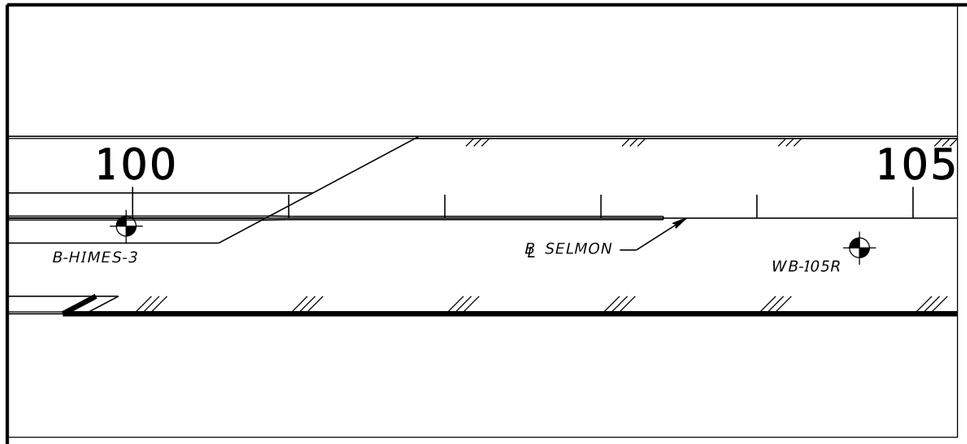
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (3)

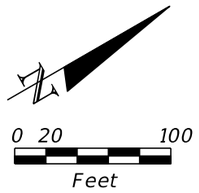
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

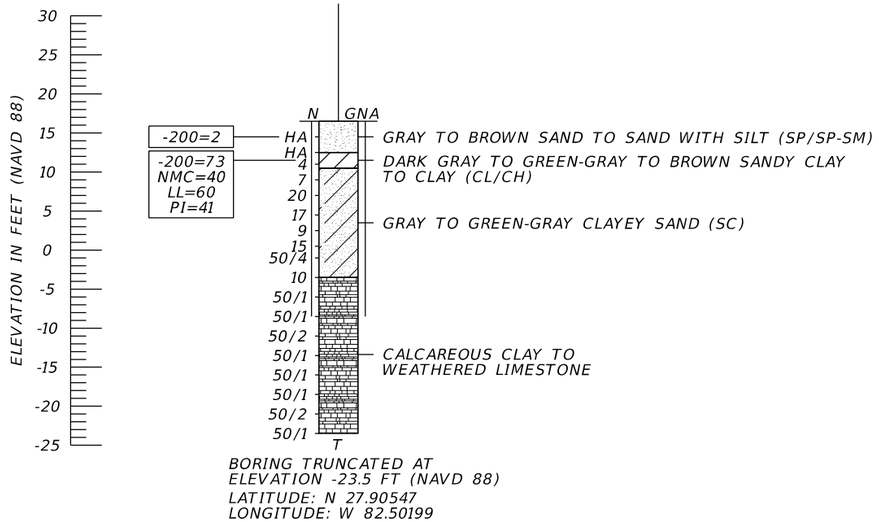
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

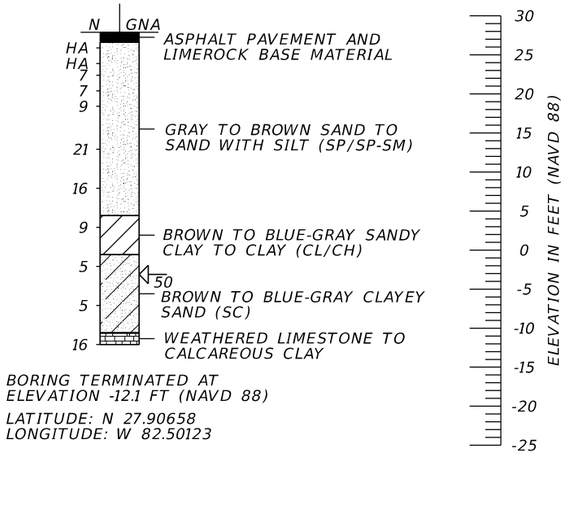
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-HIMES-3
STA. 99+96
REF. ℄ SELMON
OFF. 5' RT.
ELEV. 16.5
DATE 3/9/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -23.5 FT (NAVD 88)
LATITUDE: N 27.90547
LONGITUDE: W 82.50199

BOR # WB-105R
STA. 104+66
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 27.9'
DATE 1/31/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -12.1 FT (NAVD 88)
LATITUDE: N 27.90658
LONGITUDE: W 82.50123

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

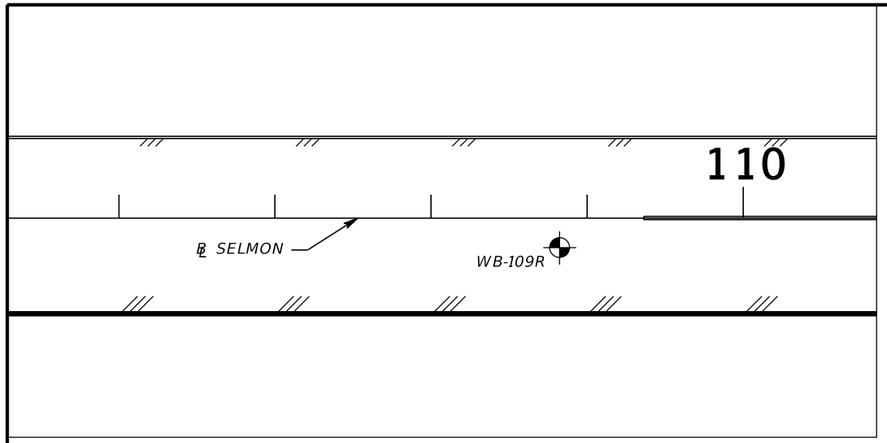
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (4)

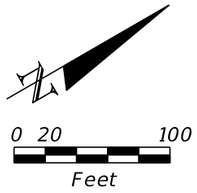
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

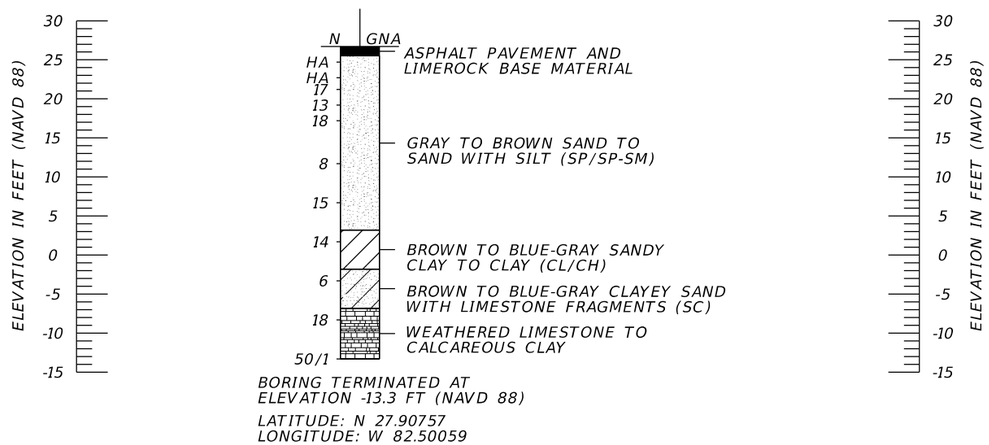
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-109R
STA. 108+82
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 26.7'
DATE 1/31/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -13.3 FT (NAVD 88)

LATITUDE: N 27.90757
LONGITUDE: W 82.50059

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

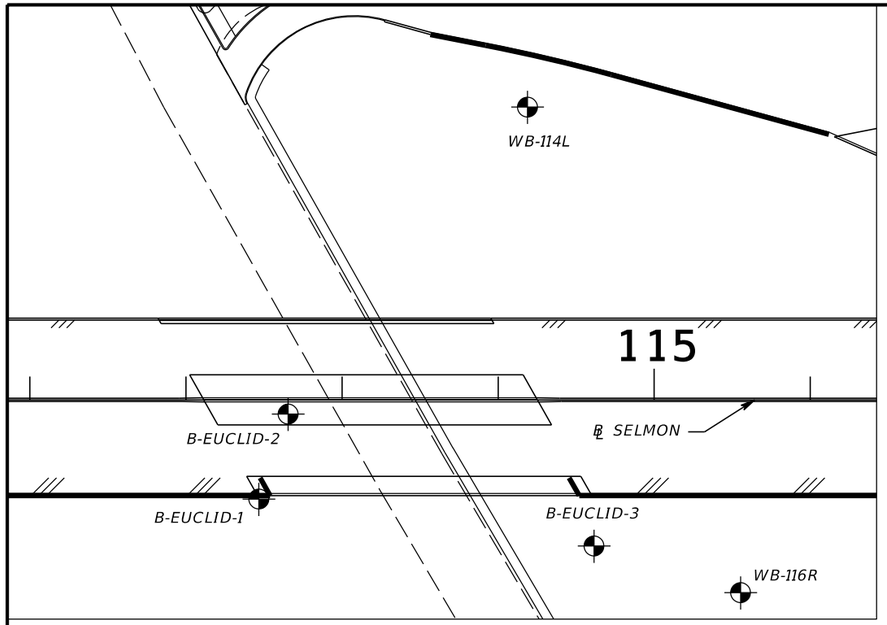
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

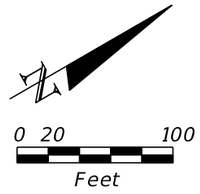
SHEET TITLE: RETAINING WALLS (5)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

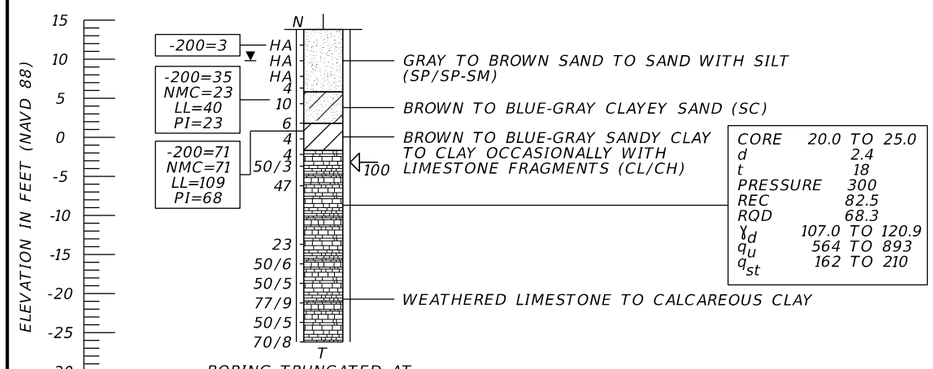
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

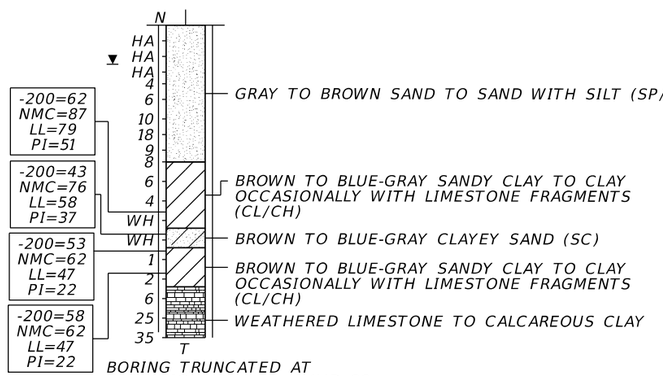
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-EUCLID-1
STA. 112+47
REF. ℄ SELMON
OFF. 64' RT.
ELEV. 13.8'
DATE 10/25/2021
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -26.2 FT (NAVD 88)
LATITUDE: N 27.90838
LONGITUDE: W 82.49991

BOR # B-EUCLID-2
STA. 112+65
REF. ℄ SELMON
OFF. 9' RT.
ELEV. 14.6'
DATE 10/28/2021
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -25.4 FT (NAVD 88)
LATITUDE: N 27.90850
LONGITUDE: W 82.50002

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

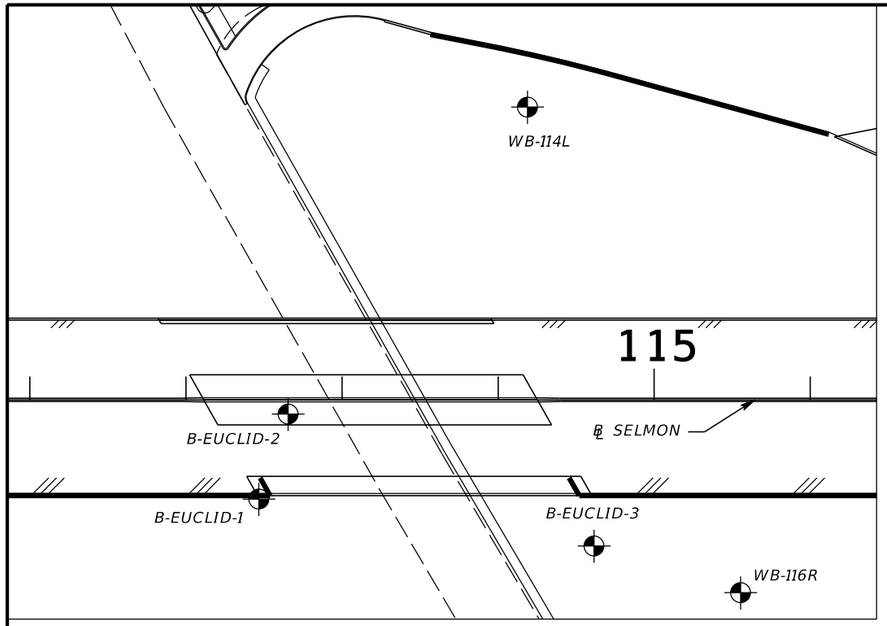
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (6)

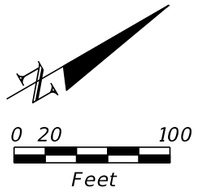
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

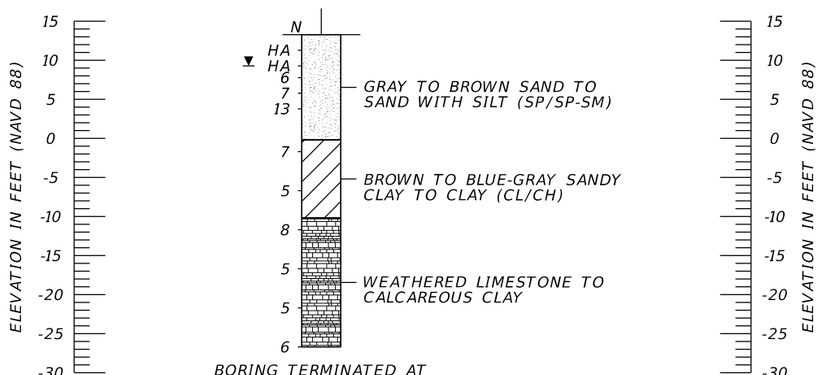
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-114L
STA. 114+19
REF. ℄ SELMON
OFF. 187' LT.
ELEV. 13.3
DATE 3/10/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -26.7 FT (NAVD 88)

LATITUDE: N 27.90917
LONGITUDE: W 82.50035

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

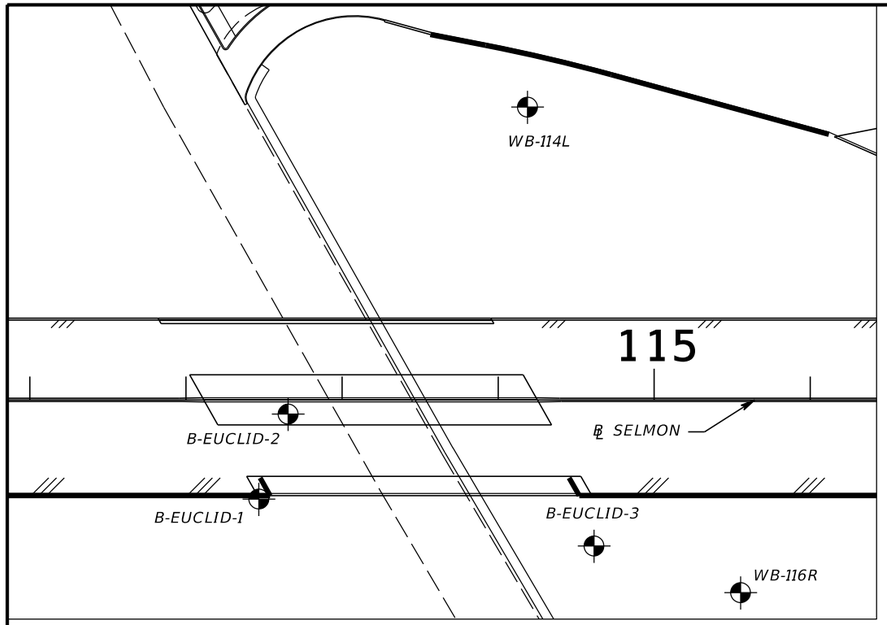
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

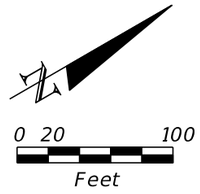
SHEET TITLE: RETAINING WALLS (7)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

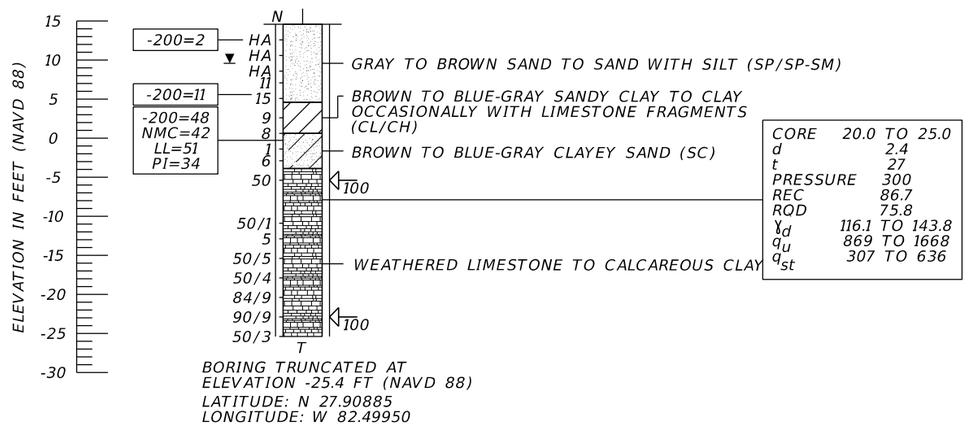
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

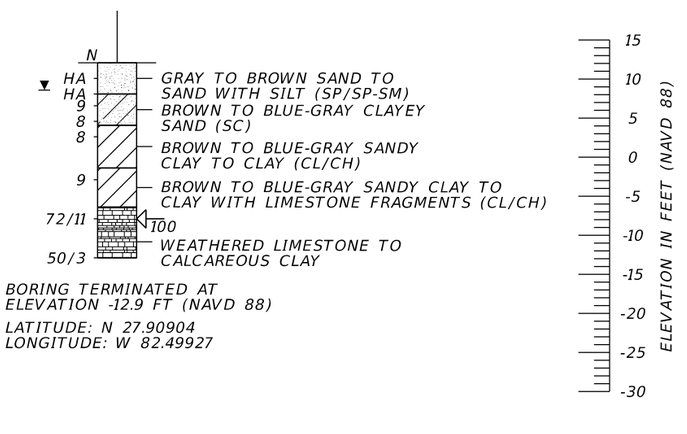
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-EUCLID-3
STA. 114+61
REF. ℄ SELMON
OFF. 94' RT.
ELEV. 14.6'
DATE 11/1/2021
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -25.4 FT (NAVD 88)
LATITUDE: N 27.90885
LONGITUDE: W 82.49950

BOR # WB-116R
STA. 115+55
REF. ℄ SELMON
OFF. 123' RT.
ELEV. 12.1'
DATE 3/10/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -12.9 FT (NAVD 88)
LATITUDE: N 27.90904
LONGITUDE: W 82.49927

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

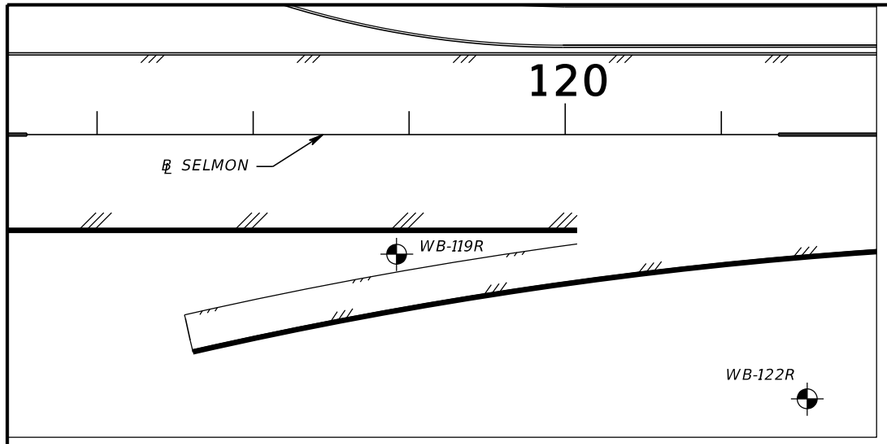
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

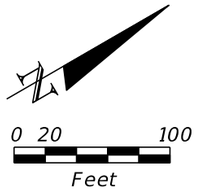
SHEET TITLE: RETAINING WALLS (8)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

LEGEND

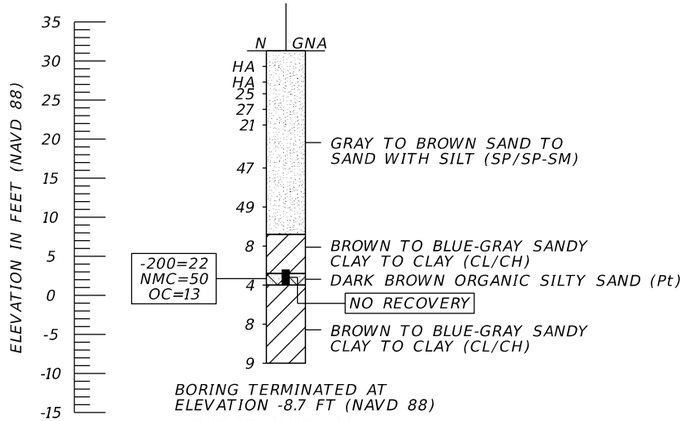
	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

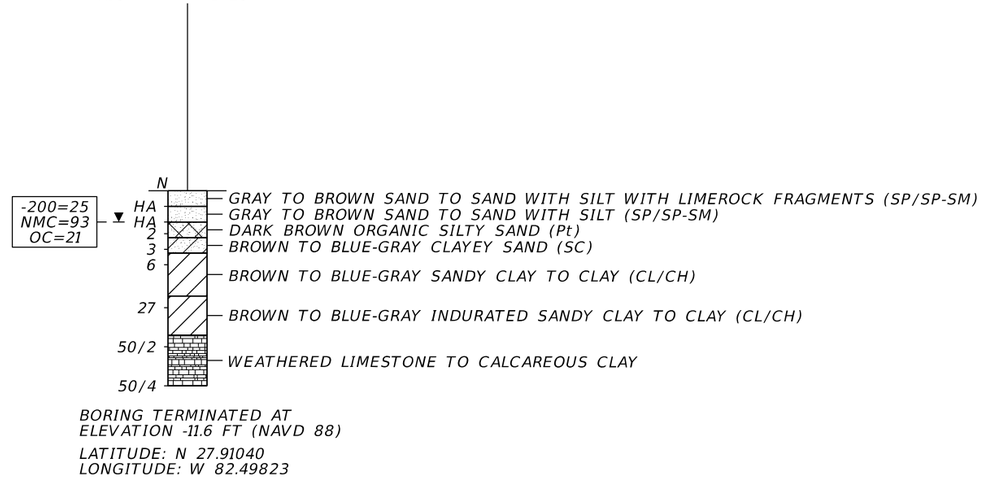
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.





	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

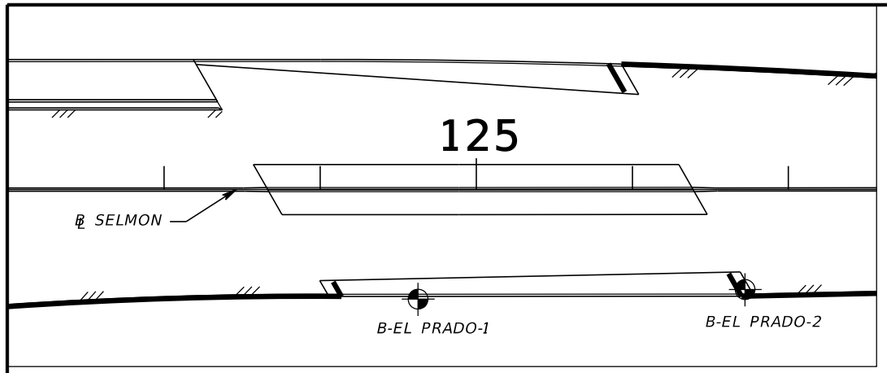
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

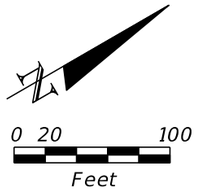
SHEET TITLE: RETAINING WALLS (9)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

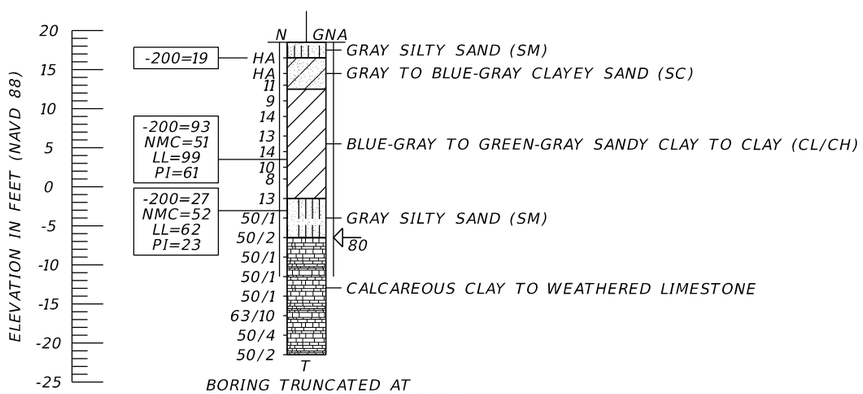
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

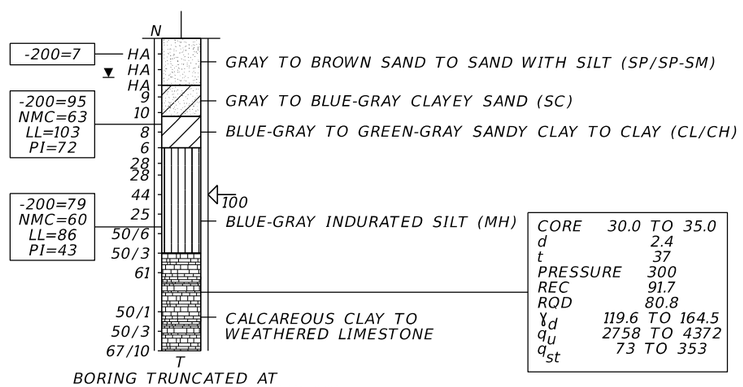
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-EL PRADO-1
STA. 124+63
REF. ℄ SELMON
OFF. 70' RT.
ELEV. 18.5
DATE 3/11/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -21.5 FT (NAVD 88)
LATITUDE: N 27.91127
LONGITUDE: W 82.49802

BOR # B-EL PRADO-2
STA. 126+72
REF. ℄ SELMON
OFF. 64' RT.
ELEV. 19.0'
DATE 11/3/2021
DRILLER D. STAKELIN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -21.0 FT (NAVD 88)
LATITUDE: N 27.91178
LONGITUDE: W 82.49771

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

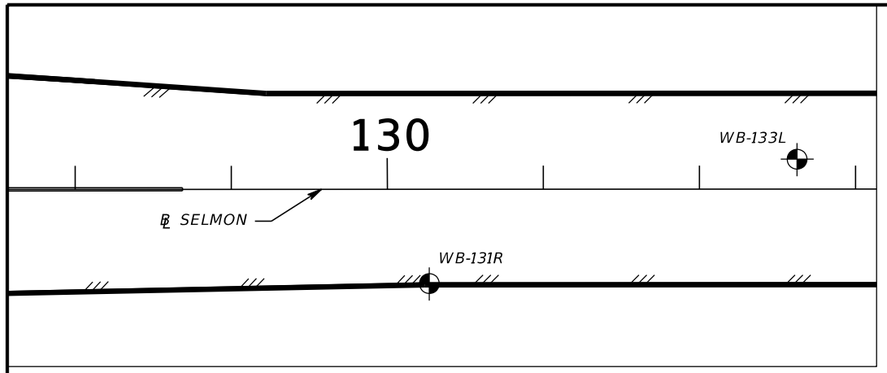
SHEET TITLE: RETAINING WALLS (10)

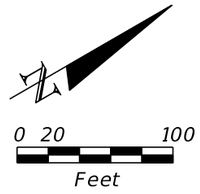
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:46:58 PM J:\6511\2021 Files\6511-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

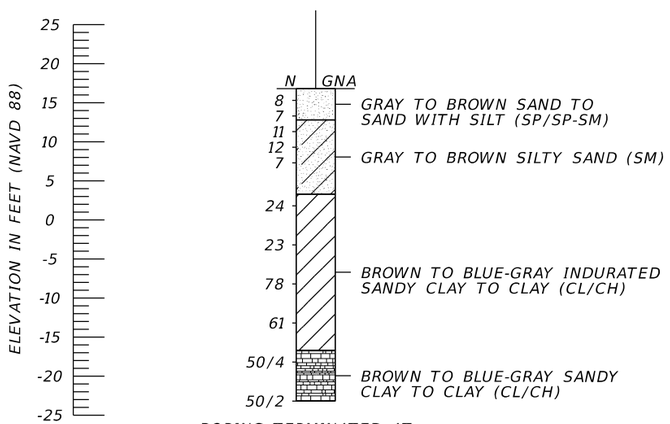
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

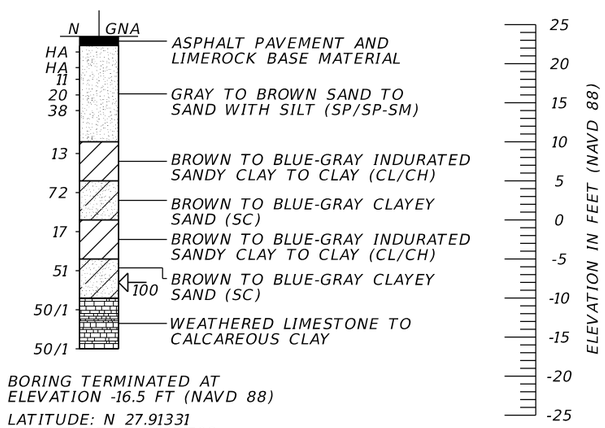
BOR # WB-131R
STA. 130+27
REF. ℄ SELMON
OFF. 60' RT.
ELEV. 16.8'
DATE 3/30/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -23.2 FT (NAVD 88)

LATITUDE: N 27.91264
LONGITUDE: W 82.49718

BOR # WB-133L
STA. 132+63
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 23.5'
DATE 1/24/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -16.5 FT (NAVD 88)

LATITUDE: N 27.91331
LONGITUDE: W 82.49703

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

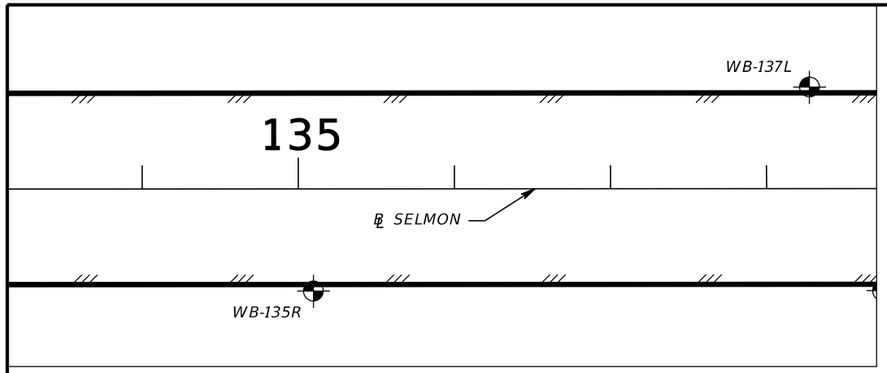
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

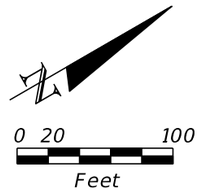
SHEET TITLE: RETAINING WALLS (II)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

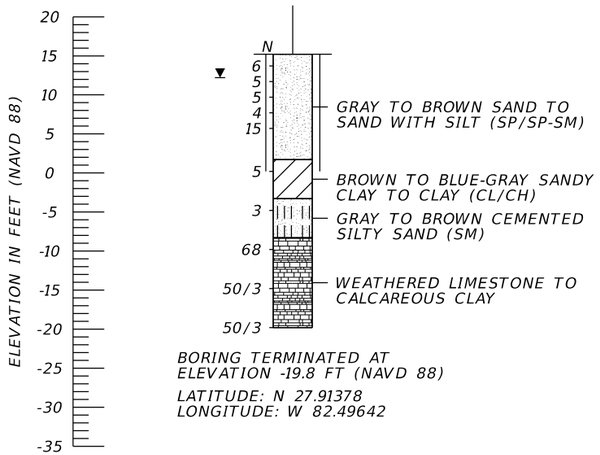
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

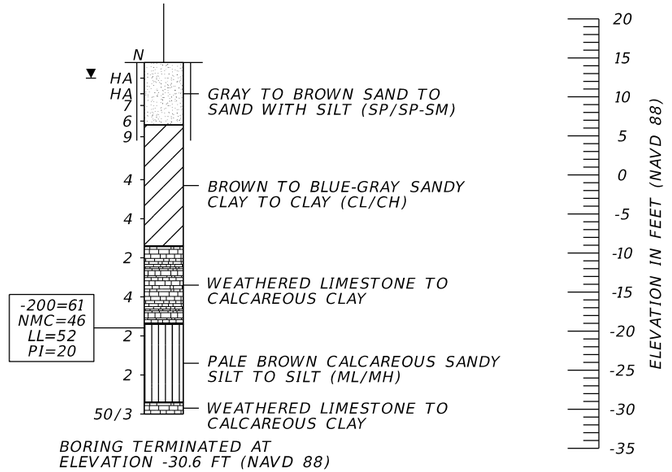
BOR # WB-135R
STA. 135+10
REF. ℄ SELMON
OFF. 65' RT.
ELEV. 15.2'
DATE 3/30/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -19.8 FT (NAVD 88)

LATITUDE: N 27.91378
LONGITUDE: W 82.49642

BOR # WB-137L
STA. 138+28
REF. ℄ SELMON
OFF. 65' LT.
ELEV. 14.4'
DATE 3/30/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -30.6 FT (NAVD 88)

LATITUDE: N 27.91472
LONGITUDE: W 82.49629

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

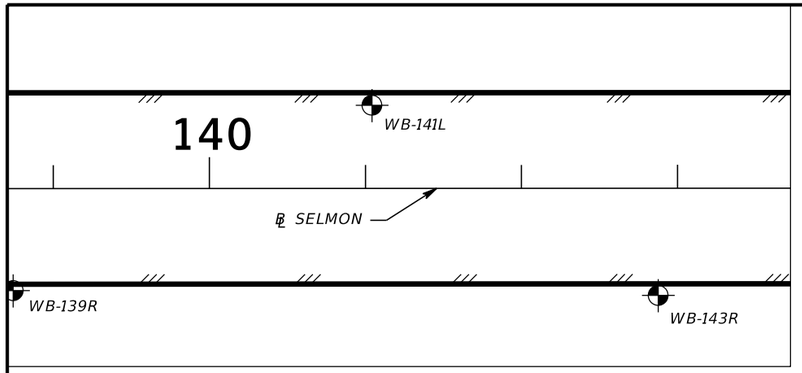
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (12)

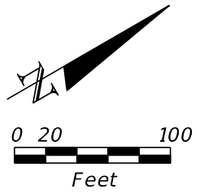
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

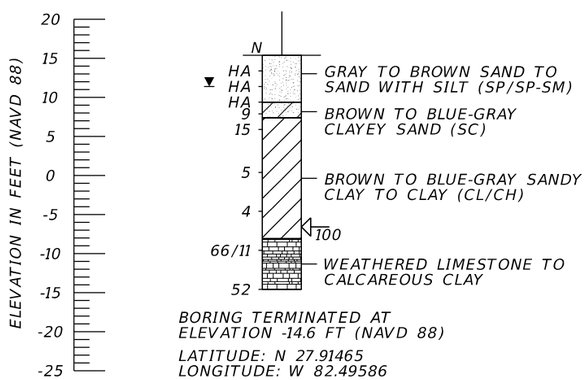
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

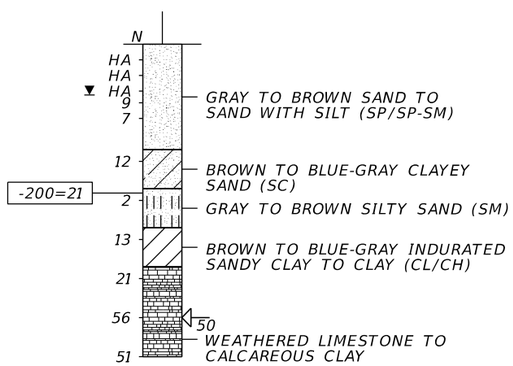
BOR # WB-139R
STA. 138+74
REF. ℄ SELMON
OFF. 65' RT.
ELEV. 15.4'
DATE 1/13/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -14.6 FT (NAVD 88)

LATITUDE: N 27.91465
LONGITUDE: W 82.49586

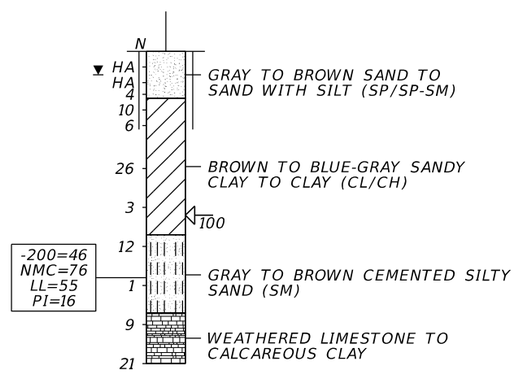
BOR # WB-141L
STA. 141+04
REF. ℄ SELMON
OFF. 53' LT.
ELEV. 16.8'
DATE 1/13/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -23.2 FT (NAVD 88)

LATITUDE: N 27.91536
LONGITUDE: W 82.49583

BOR # WB-143R
STA. 142+88
REF. ℄ SELMON
OFF. 69' RT.
ELEV. 15.9'
DATE 3/30/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -24.1 FT (NAVD 88)

LATITUDE: N 27.91564
LONGITUDE: W 82.49522

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

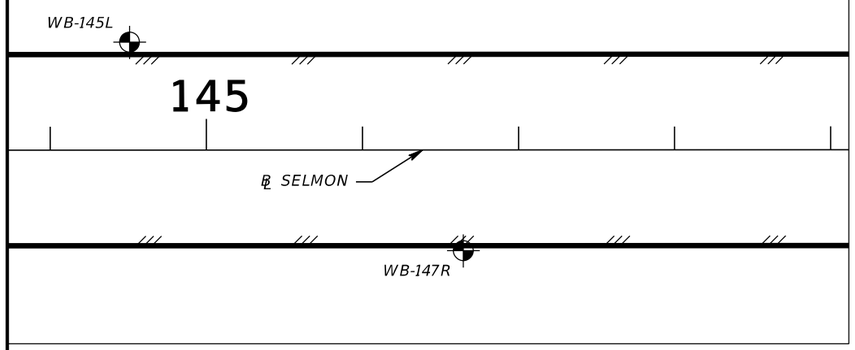
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (13)

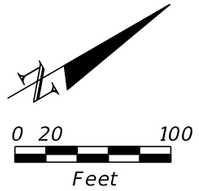
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

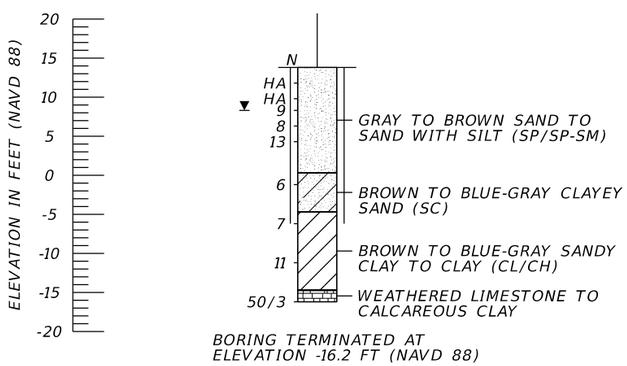
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

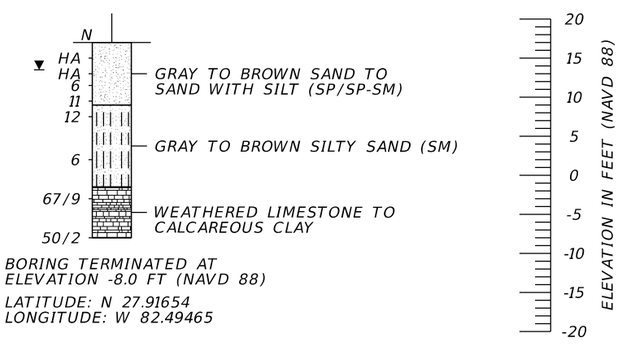
BOR # WB-145L
STA. 144+51
REF. ℄ SELMON
OFF. 69' LT.
ELEV. 13.8'
DATE 1/13/2022
DRILLER M. ATKINSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -16.2 FT (NAVD 88)

LATITUDE: N 27.91621
LONGITUDE: W 82.49534

BOR # WB-147R
STA. 146+65
REF. ℄ SELMON
OFF. 64' RT.
ELEV. 17.0'
DATE 3/15/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -8.0 FT (NAVD 88)

LATITUDE: N 27.91654
LONGITUDE: W 82.49465

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

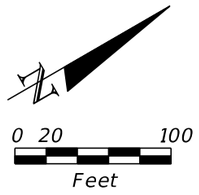
SHEET TITLE: RETAINING WALLS (14)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

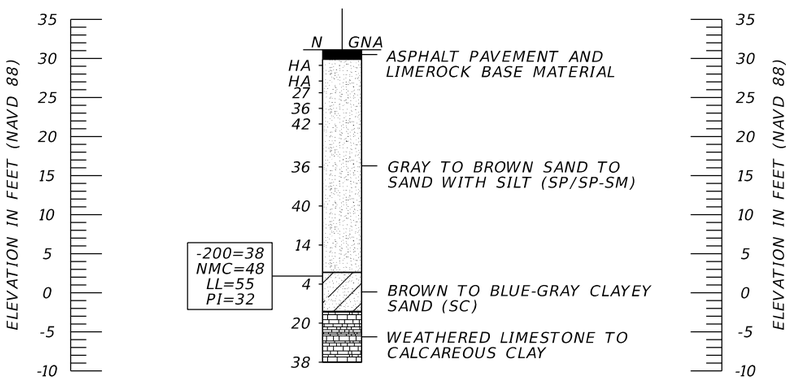
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-149L
STA. 149+27
REF. ℄ SELMON
OFF. 21' LT.
ELEV. 31.1'
DATE 1/24/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -8.9 FT (NAVD 88)

LATITUDE: N 27.91729
LONGITUDE: W 82.49448

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

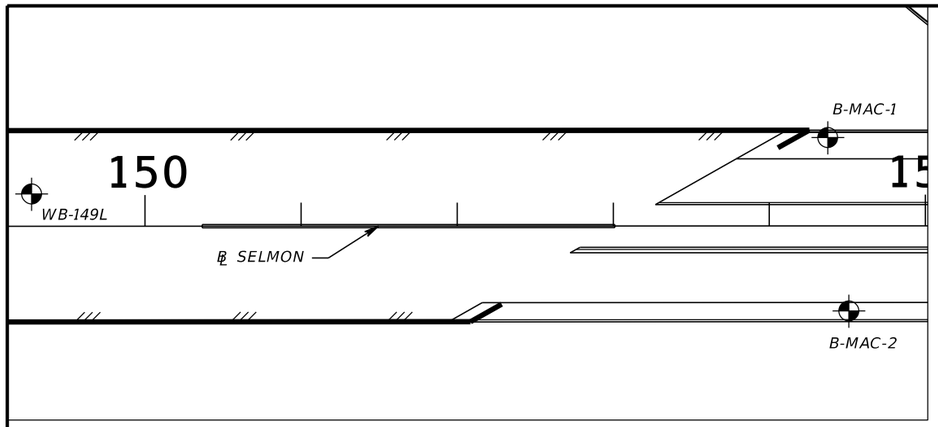
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

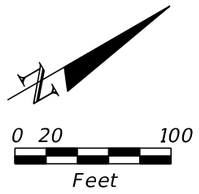
SHEET TITLE: RETAINING WALLS (15)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

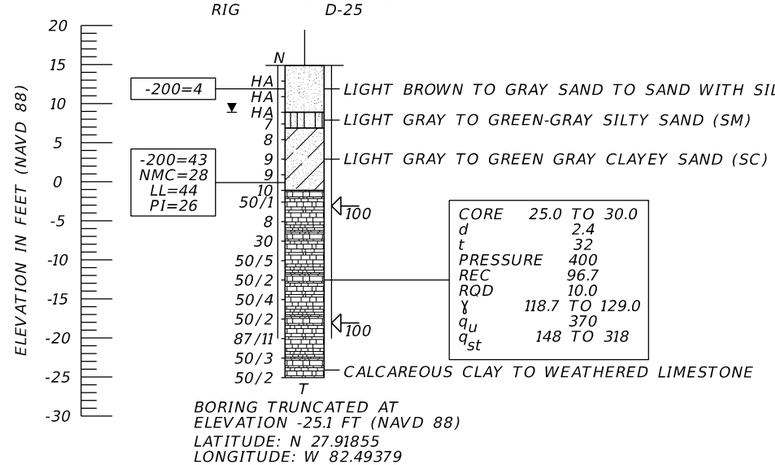
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

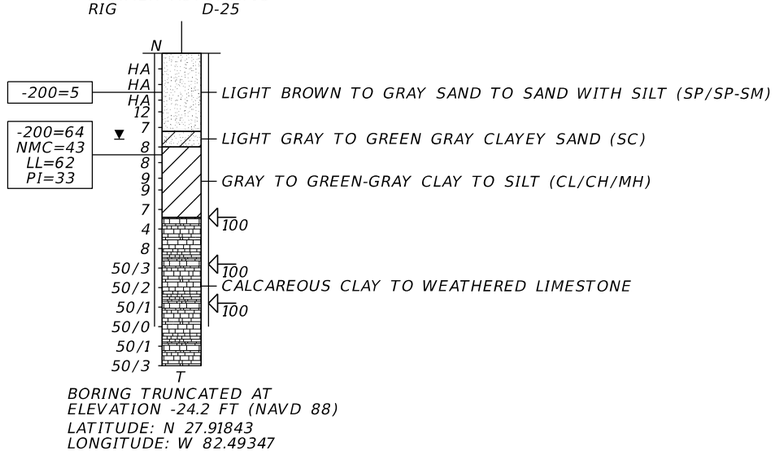
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-MAC-1
STA. 154+37
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 14.9'
DATE 3/18/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25

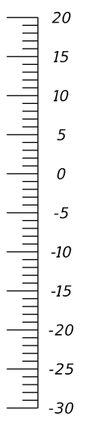


BORING TRUNCATED AT
ELEVATION -25.1 FT (NAVD 88)
LATITUDE: N 27.91855
LONGITUDE: W 82.49379

BOR # B-MAC-2
STA. 154+51
REF. ℄ SELMON
OFF. 54' RT.
ELEV. 15.8'
DATE 3/20/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -24.2 FT (NAVD 88)
LATITUDE: N 27.91843
LONGITUDE: W 82.49347



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

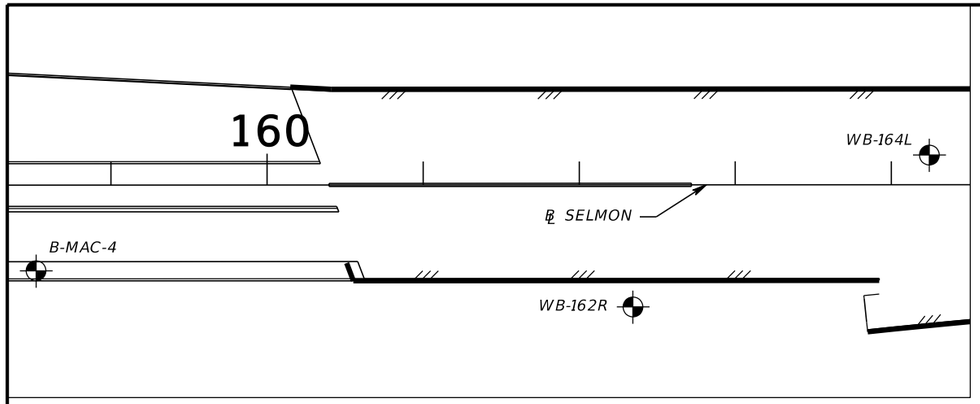
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (16)

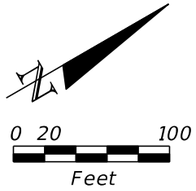
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

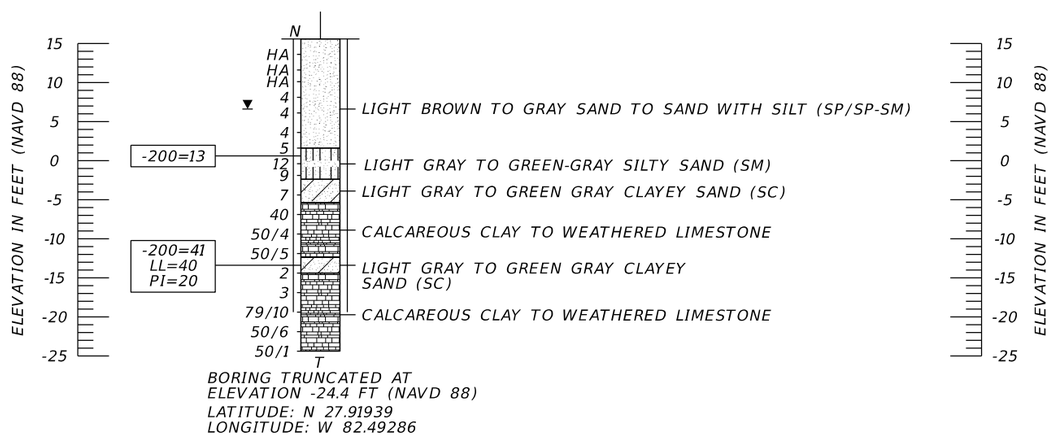
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-MAC-4
STA. 158+52
REF. ℄ SELMON
OFF. 55' RT.
ELEV. 15.6'
DATE 3/16/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT ELEVATION -24.4 FT (NAVD 88)
LATITUDE: N 27.91939
LONGITUDE: W 82.49286

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

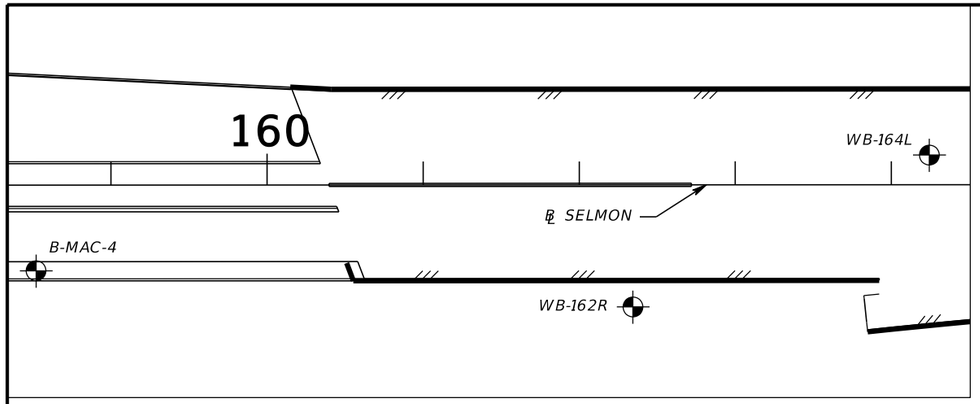
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (17)

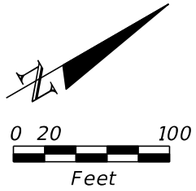
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

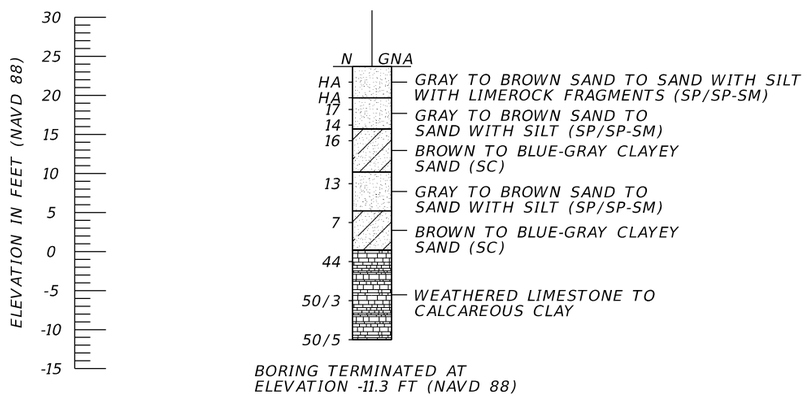
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

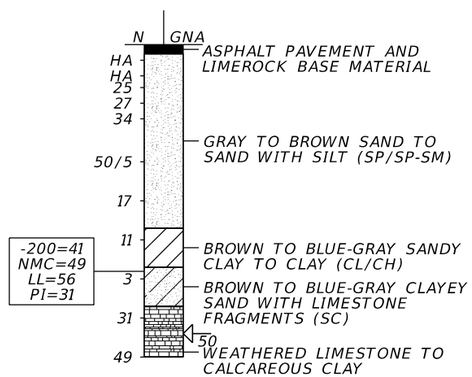
BOR # WB-162R
STA. 162+34
REF. ℄ SELMON
OFF. 78' RT.
ELEV. 23.7'
DATE 3/11/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -11.3 FT (NAVD 88)

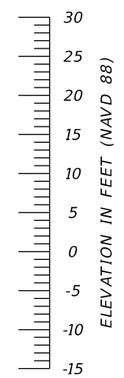
LATITUDE: N 27.92027
LONGITUDE: W 82.49221

BOR # WB-164L
STA. 164+24
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 26.5'
DATE 1/24/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -13.5 FT (NAVD 88)

LATITUDE: N 27.92086
LONGITUDE: W 82.49218



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

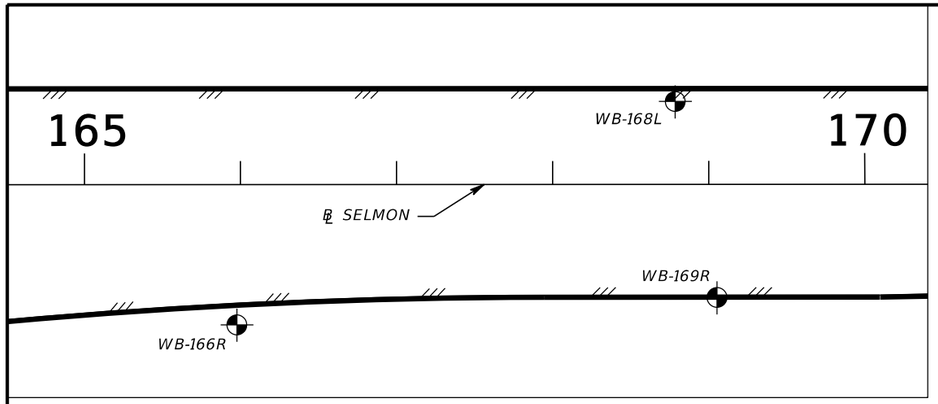
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (18)

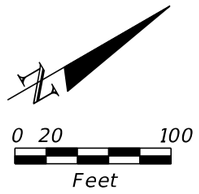
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

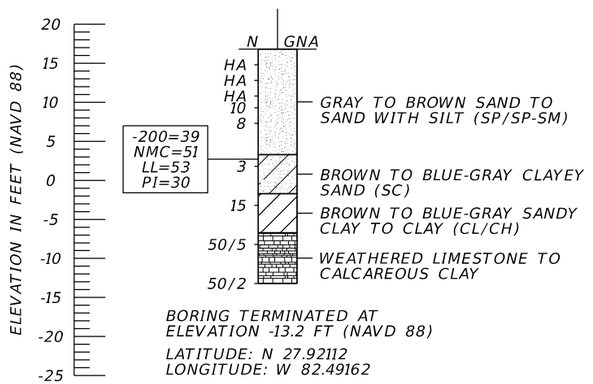
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

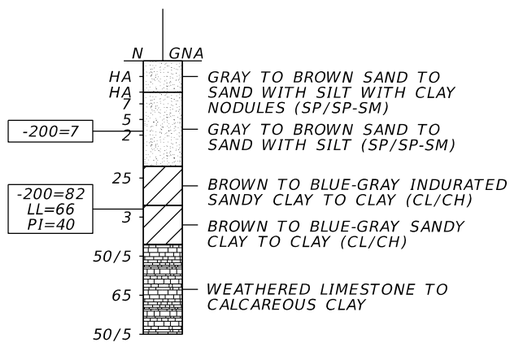
BOR # WB-166R
STA. 165+98
REF. ℄ SELMON
OFF. 90' RT.
ELEV. 16.8'
DATE 3/18/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -13.2 FT (NAVD 88)

LATITUDE: N 27.92112
LONGITUDE: W 82.49162

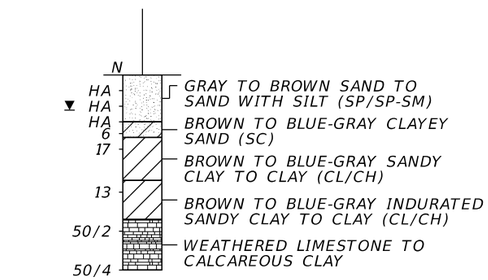
BOR # WB-168L
STA. 168+79
REF. ℄ SELMON
OFF. 53' LT.
ELEV. 15.3'
DATE 1/12/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -19.7 FT (NAVD 88)

LATITUDE: N 27.92199
LONGITUDE: W 82.49157

BOR # WB-169R
STA. 169+05
REF. ℄ SELMON
OFF. 72' RT.
ELEV. 13.5'
DATE 1/13/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -11.5 FT (NAVD 88)

LATITUDE: N 27.92188
LONGITUDE: W 82.49119

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

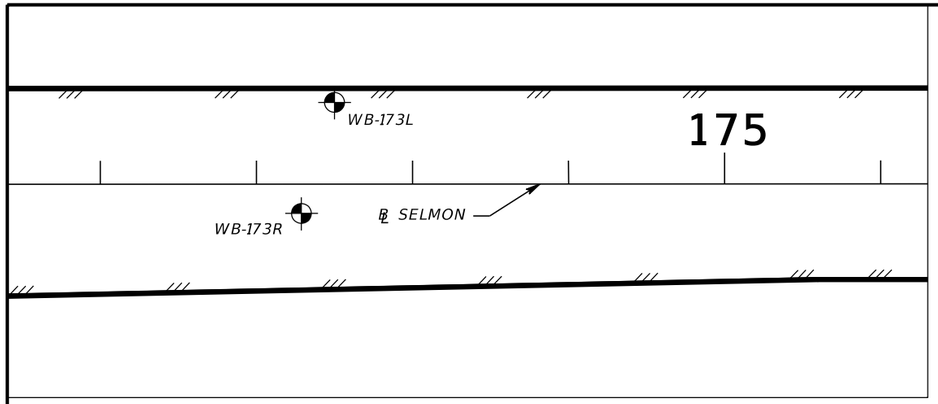
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (19)

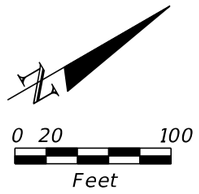
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

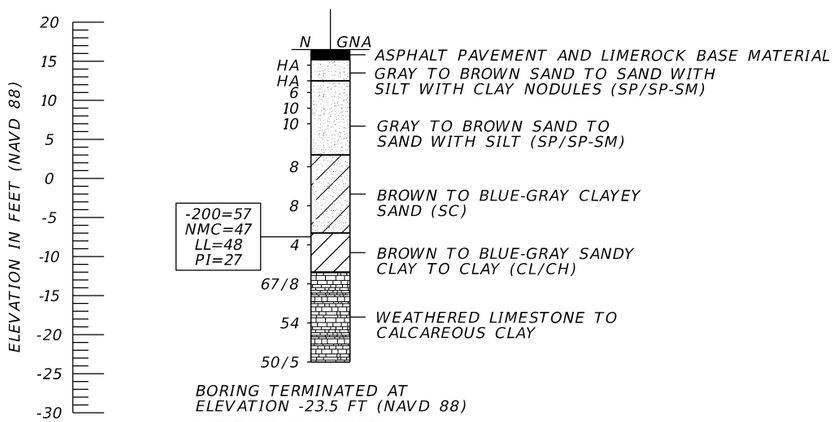
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

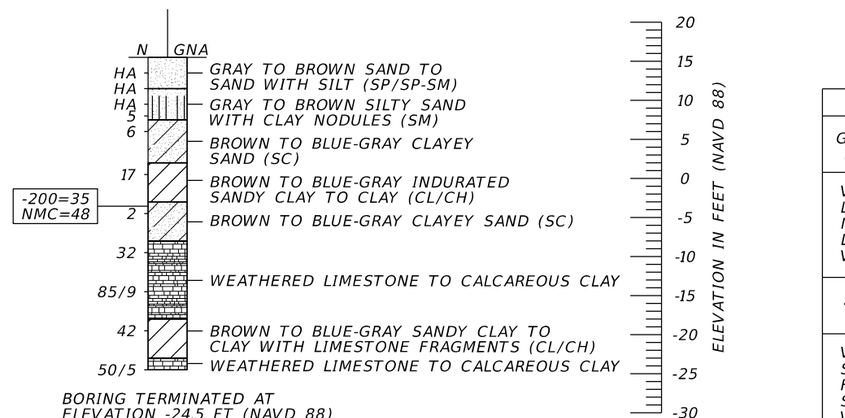
BOR # WB-173R
STA. 172+29
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 16.5'
DATE 1/31/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -23.5 FT (NAVD 88)

LATITUDE: N 27.92273
LONGITUDE: W 82.49084

BOR # WB-173L
STA. 172+50
REF. ℄ SELMON
OFF. 52' LT.
ELEV. 15.5'
DATE 1/12/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -24.5 FT (NAVD 88)

LATITUDE: N 27.92288
LONGITUDE: W 82.49100

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

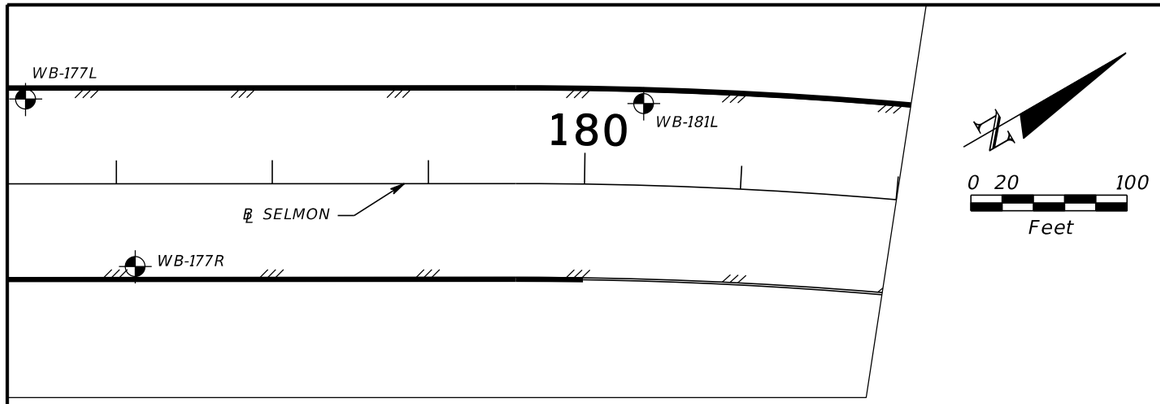
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (20)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

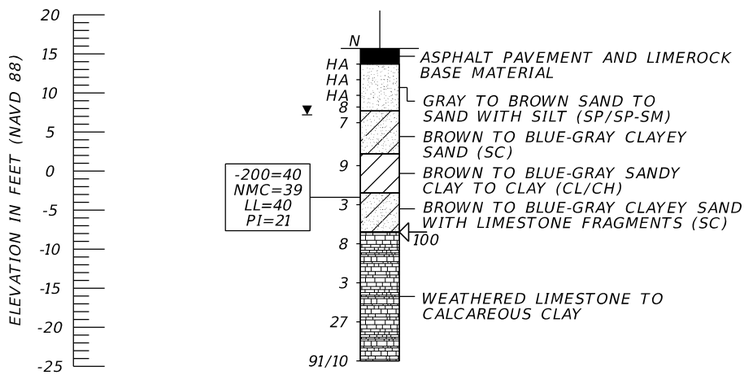
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

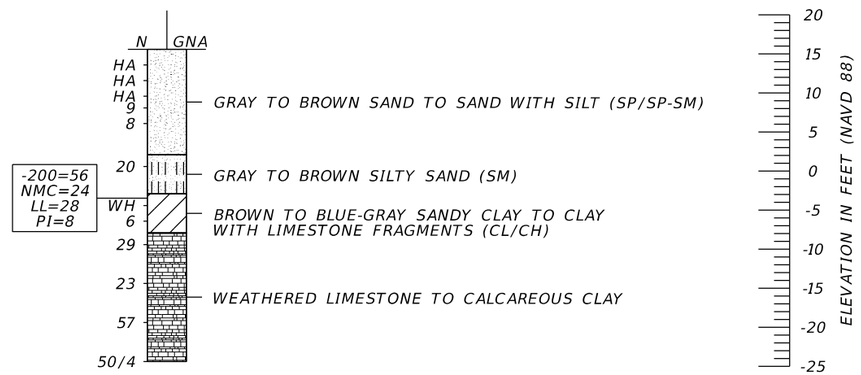
BOR # WB-177L
STA. 176+42
REF. ℄ SELMON
OFF. 54' LT.
ELEV. 15.7
DATE 1/12/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -24.3 FT (NAVD 88)

LATITUDE: N 27.92381
LONGITUDE: W 82.49040

BOR # WB-177R
STA. 177+12
REF. ℄ SELMON
OFF. 53' RT.
ELEV. 15.6'
DATE 1/14/2022
DRILLER C. VIRGEN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -24.4 FT (NAVD 88)

LATITUDE: N 27.92384
LONGITUDE: W 82.49000

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

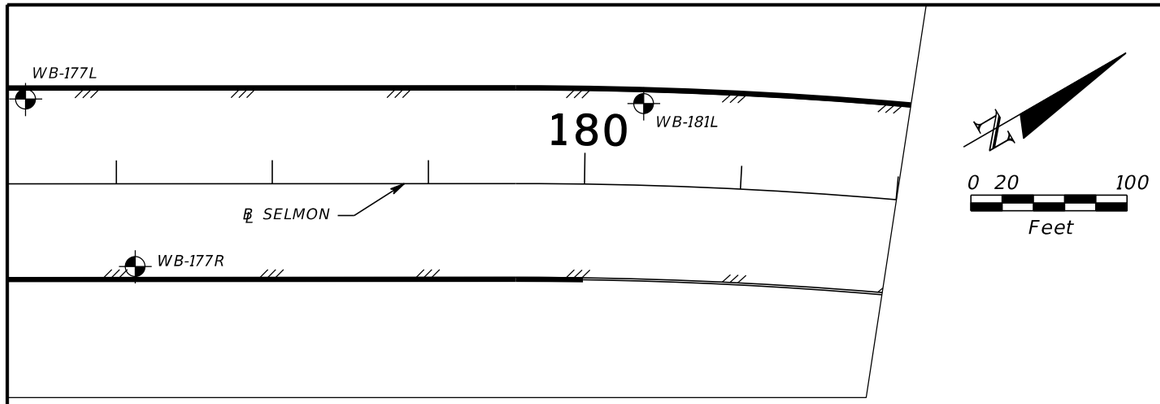
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (21)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

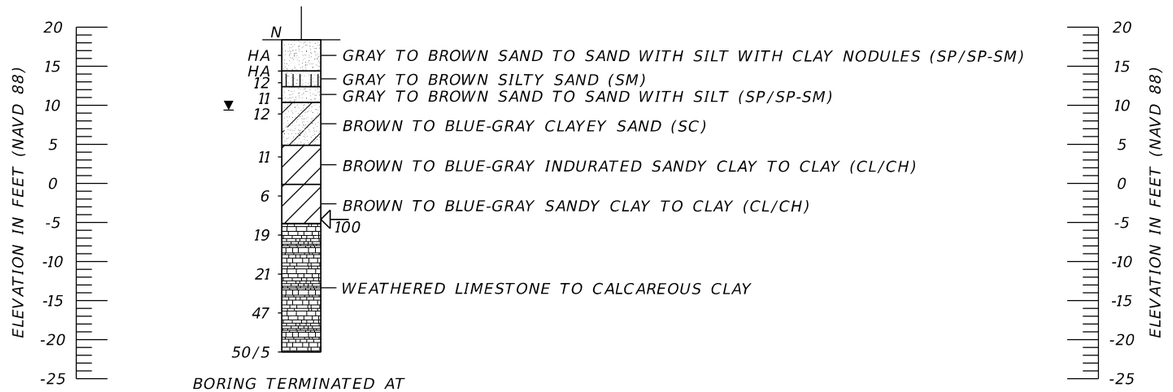
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-181L
STA. 180+36
REF. ℄ SELMON
OFF. 52' LT.
ELEV. 18.4'
DATE 1/13/2022
DRILLER M. ATKINSON
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -21.6 FT (NAVD 88)

LATITUDE: N 27.92476
LONGITUDE: W 82.48978

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

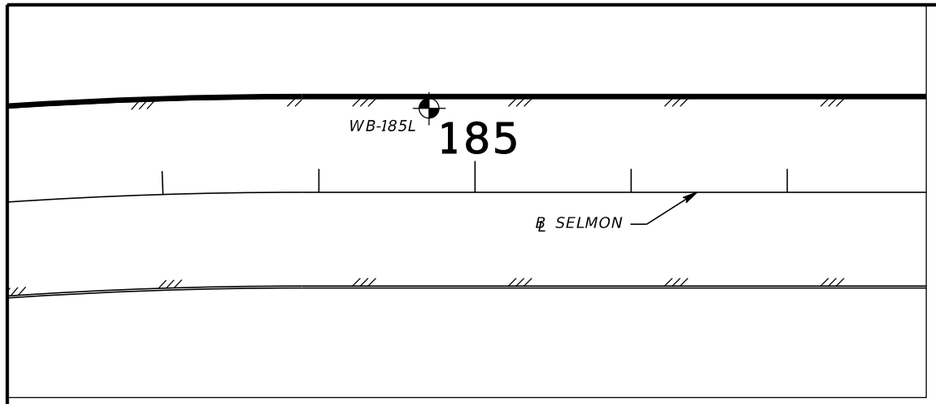
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (22)

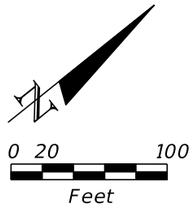
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

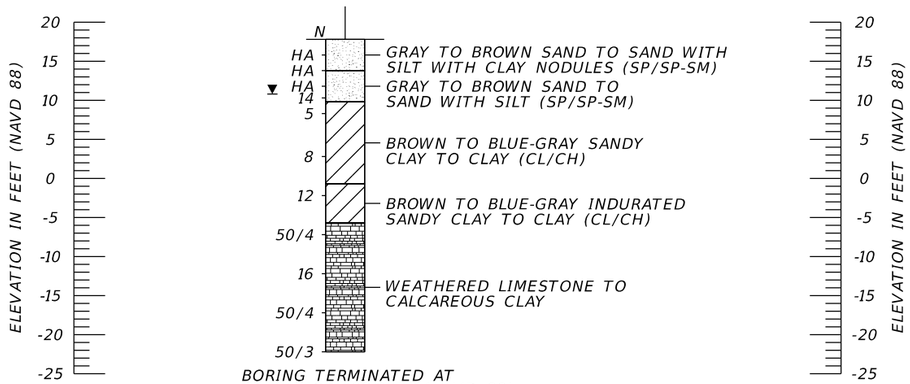
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-185L
STA. 184+71
REF. ℄ SELMON
OFF. 54' LT.
ELEV. 17.8'
DATE 1/12/2022
DRILLER R. SCRUGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -23.2 FT (NAVD 88)

LATITUDE: N 27.92574
LONGITUDE: W 82.48899

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

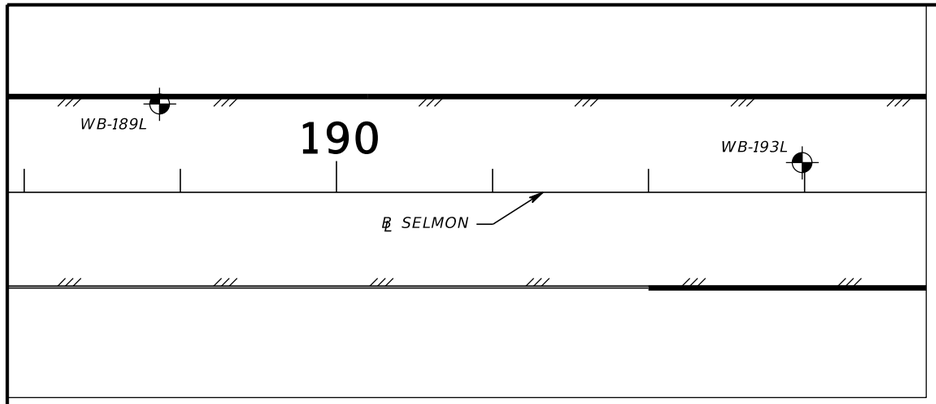
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (23)

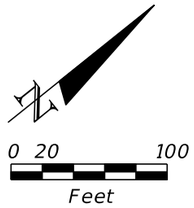
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

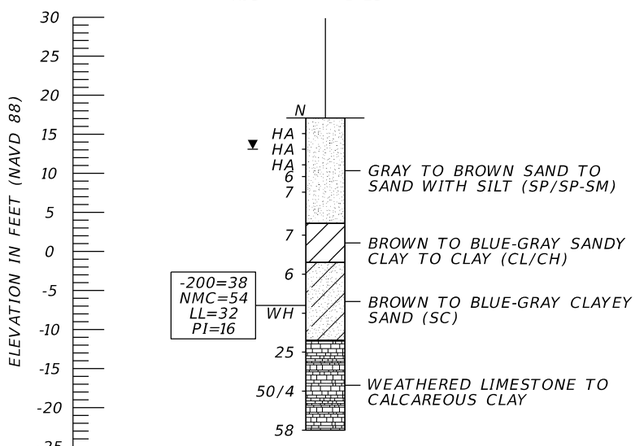
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
||	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

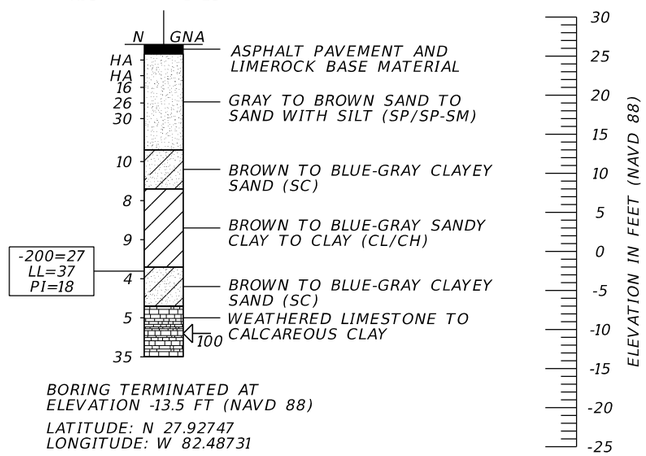
BOR # WB-189L
STA. 188+87
REF. ℄ SELMON
OFF. 56' LT.
ELEV. 17.1'
DATE 1/12/2022
DRILLER R. SCRUGS
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -22.9 FT (NAVD 88)

LATITUDE: N 27.92664
LONGITUDE: W 82.48820

BOR # WB-193L
STA. 192+98
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 26.5'
DATE 1/18/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -13.5 FT (NAVD 88)

LATITUDE: N 27.92747
LONGITUDE: W 82.48731

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

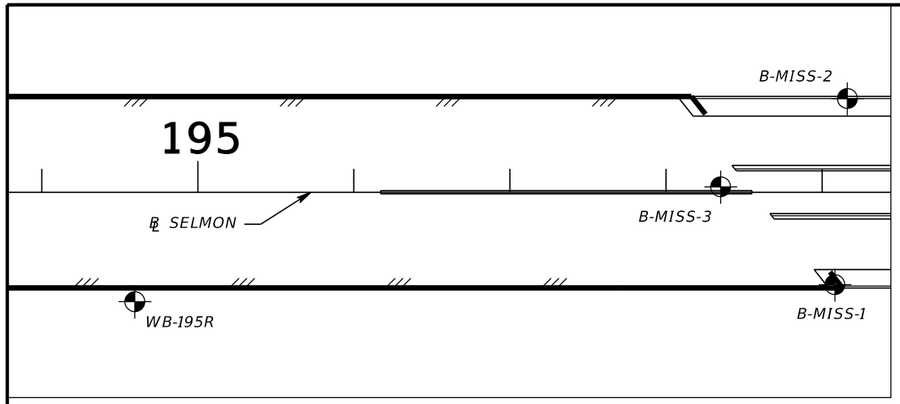
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (24)

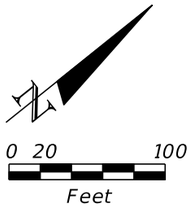
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

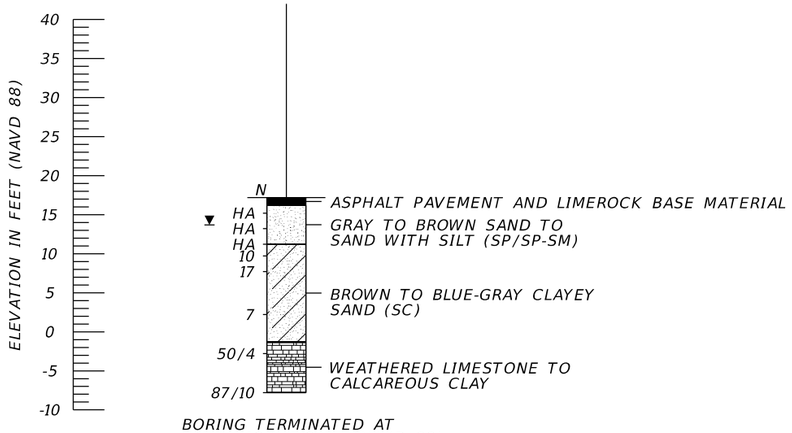
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

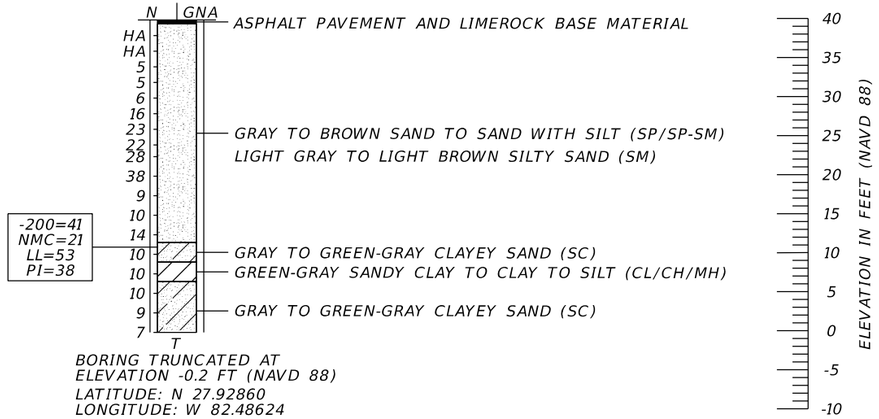
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-195R
STA. 194+60
REF. ℄ SELMON
OFF. 70' RT.
ELEV. 17.2'
DATE 3/16/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -7.8 FT (NAVD 88)
LATITUDE: N 27.92766
LONGITUDE: W 82.48679

BOR # B-MISS-3
STA. 198+35
REF. ℄ SELMON
OFF. 3' LT.
ELEV. 39.8
DATE 6/6/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -0.2 FT (NAVD 88)
LATITUDE: N 27.92860
LONGITUDE: W 82.48624

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

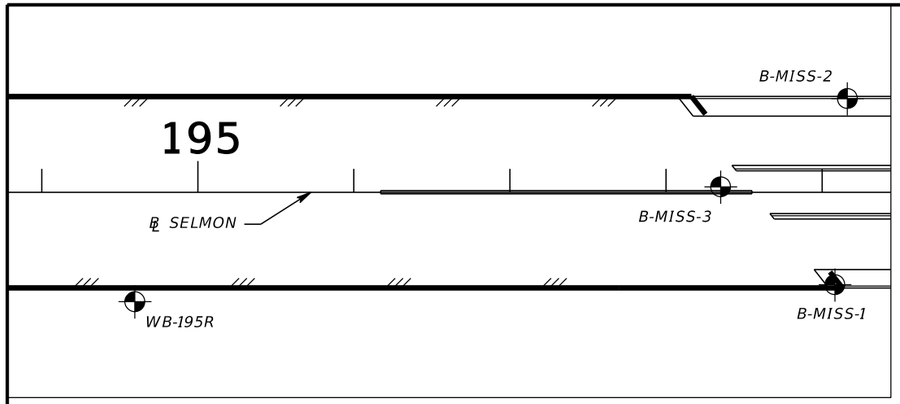
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (25)

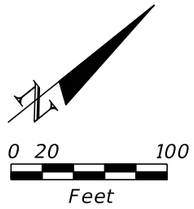
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

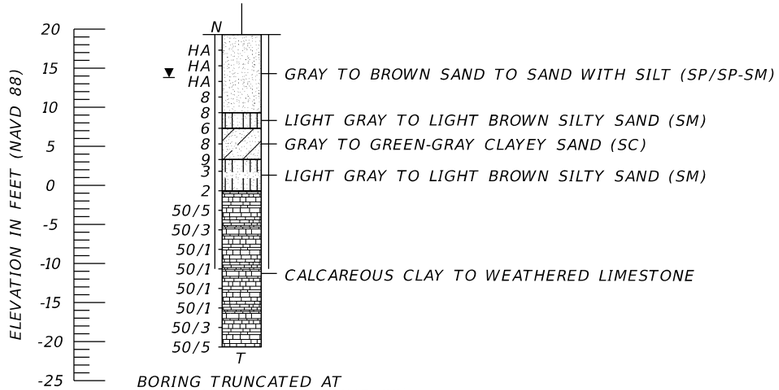
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

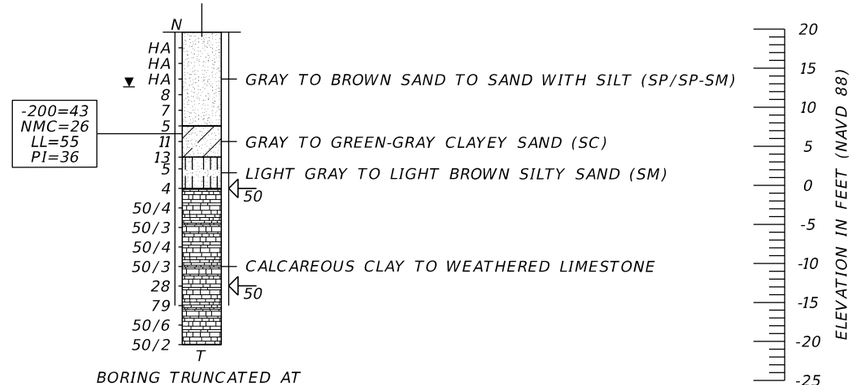
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-MISS-1
STA. 199+08
REF. ℄ SELMON
OFF. 59' RT.
ELEV. 19.3'
DATE 3/23/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -20.7 FT (NAVD 88)
LATITUDE: N 27.92865
LONGITUDE: W 82.48595

BOR # B-MISS-2
STA. 199+16
REF. ℄ SELMON
OFF. 60' LT.
ELEV. 19.6'
DATE 3/24/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -20.4 FT (NAVD 88)
LATITUDE: N 27.92887
LONGITUDE: W 82.48622

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

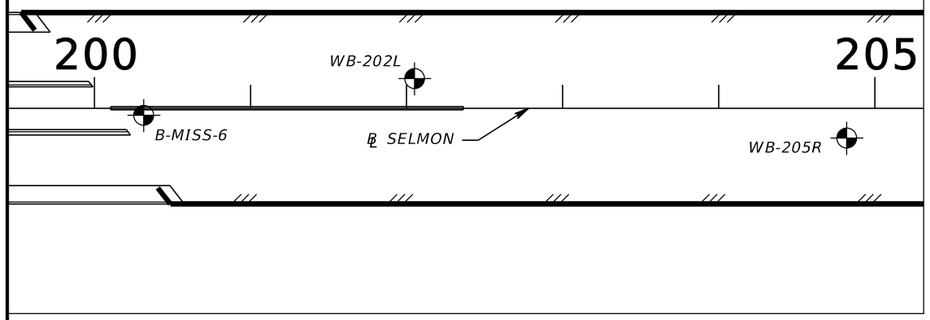
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (26)

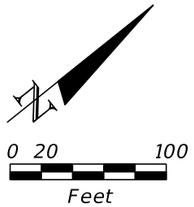
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

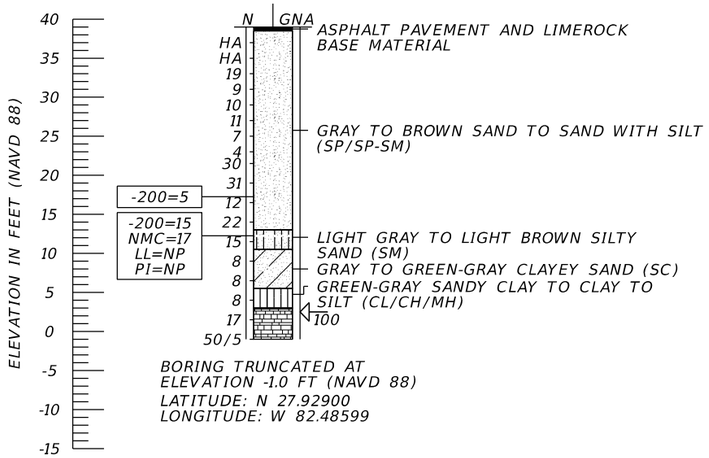
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

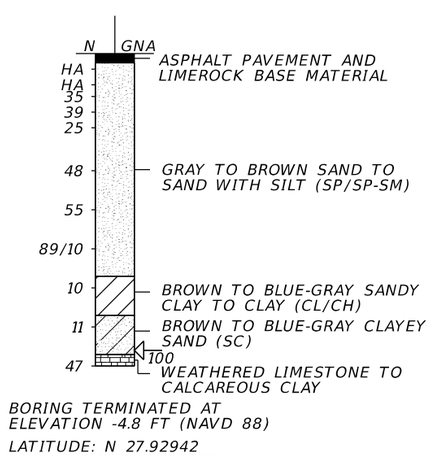
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-MISS-6
STA. 200+32
REF. ℄ SELMON
OFF. 5' RT.
ELEV. 39.0
DATE 6/8/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



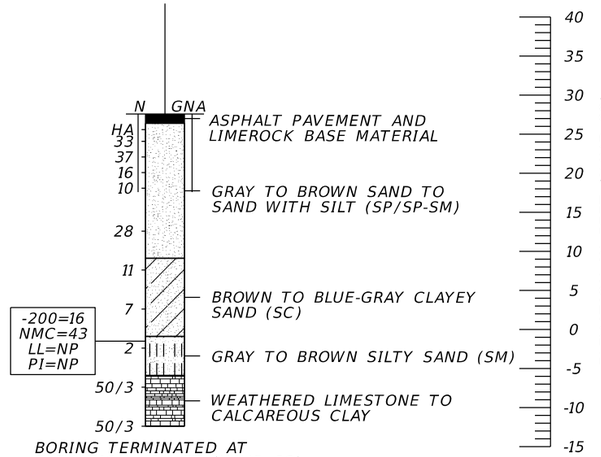
BORING TRUNCATED AT
ELEVATION -1.0 FT (NAVD 88)
LATITUDE: N 27.92900
LONGITUDE: W 82.48599

BOR # WB-202L
STA. 202+05
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 35.2'
DATE 1/18/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -4.8 FT (NAVD 88)
LATITUDE: N 27.92942
LONGITUDE: W 82.48557

BOR # WB-205R
STA. 204+82
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 27.6'
DATE 1/31/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -12.4 FT (NAVD 88)
LATITUDE: N 27.92995
LONGITUDE: W 82.48494

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

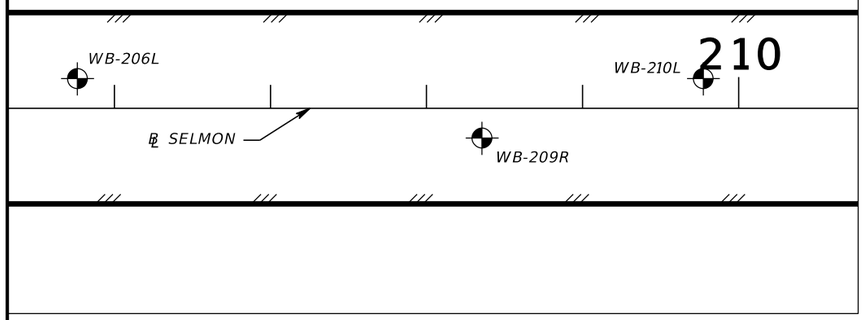
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (27)

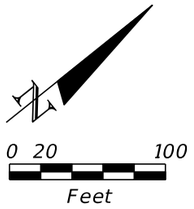
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

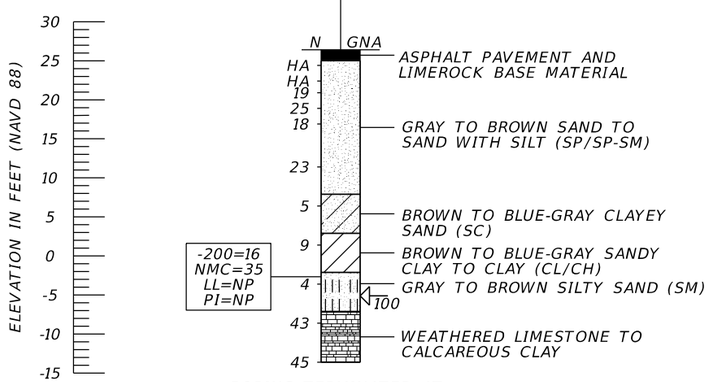
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

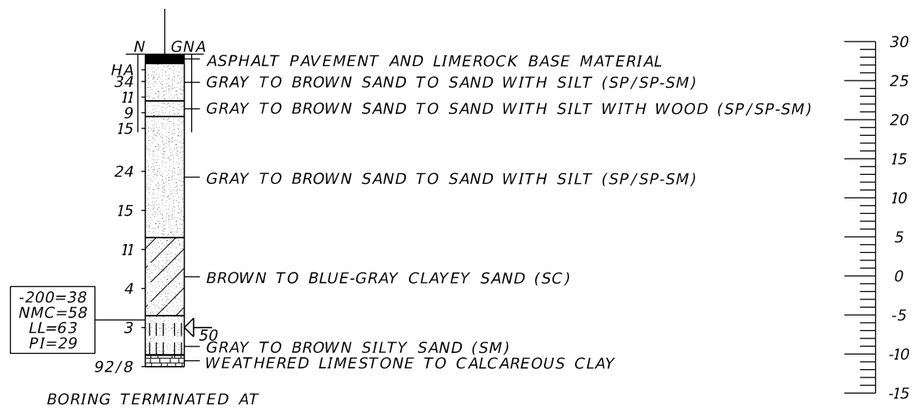
BOR # WB-206L
STA. 205+76
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 26.4'
DATE 1/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -13.6 FT (NAVD 88)

LATITUDE: N 27.93022
LONGITUDE: W 82.48485

BOR # WB-209R
STA. 208+36
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 28.4'
DATE 1/31/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -11.6 FT (NAVD 88)

LATITUDE: N 27.93071
LONGITUDE: W 82.48426

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

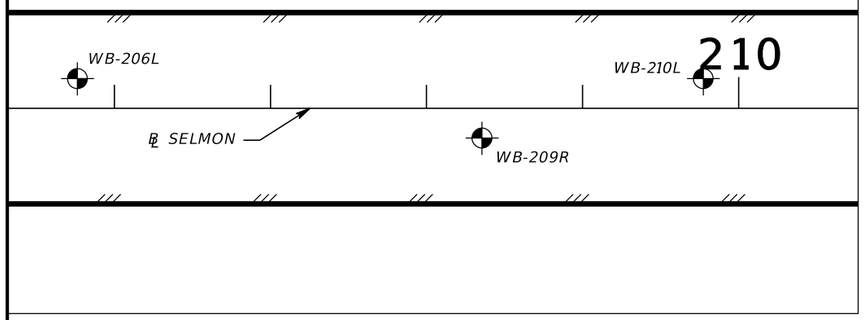
SHEET TITLE: RETAINING WALLS (28)

REF. DWG. NO.

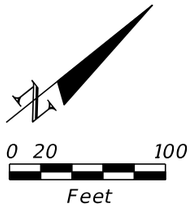
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:22 PM J:\651\2021 Files\651-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

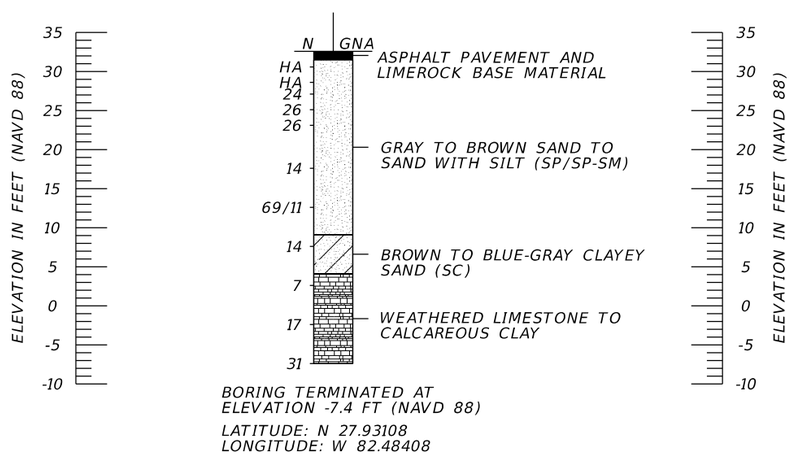
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-210L
STA. 209+77
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 32.6'
DATE 1/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -7.4 FT (NAVD 88)

LATITUDE: N 27.93108
LONGITUDE: W 82.48408

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

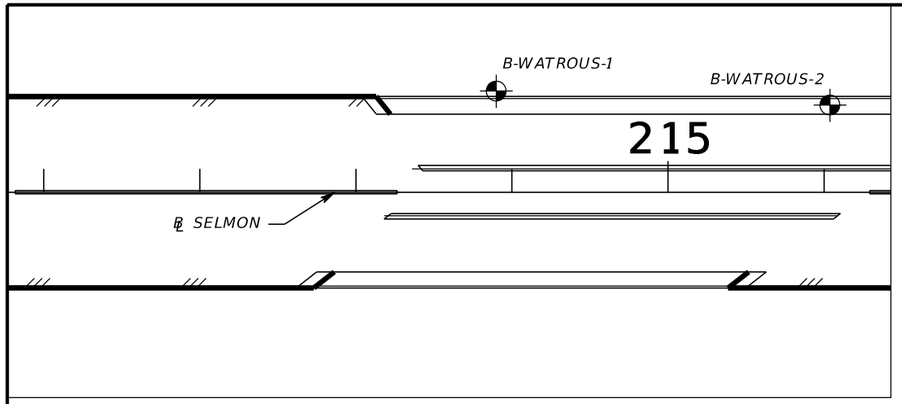
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

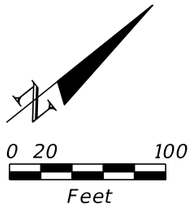
SHEET TITLE: RETAINING WALLS (29)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

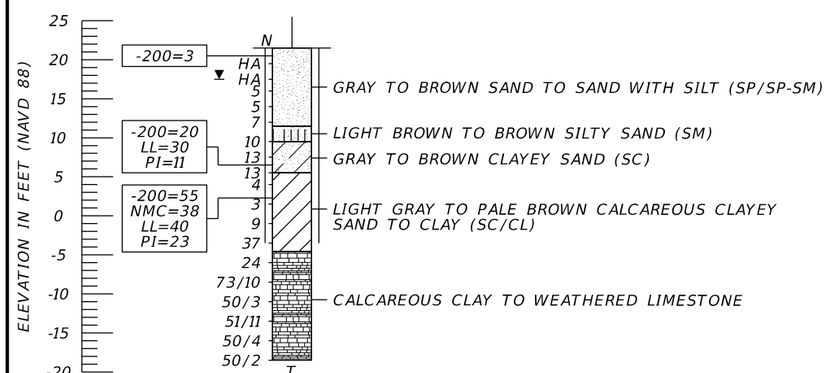
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

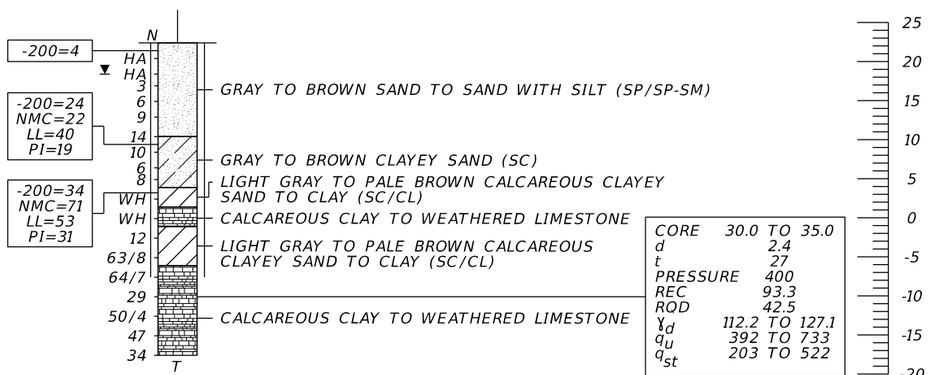
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-WATROUS-1
STA. 213+90
REF. ℄ SELMON
OFF. 65' LT.
ELEV. 21.5'
DATE 4/7/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -18.5 FT (NAVD 88)
LATITUDE: N 27.93205
LONGITUDE: W 82.48340

BOR # B-WATROUS-2
STA. 216+04
REF. ℄ SELMON
OFF. 56' LT.
ELEV. 22.4'
DATE 3/14/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



CORE	30.0 TO 35.0
d	2.4
t	27
PRESSURE	400
REC	93.3
RQD	42.5
γ_d	112.2 TO 127.1
q_u	392 TO 733
q_{st}	203 TO 522

BORING TRUNCATED AT
ELEVATION -17.6 FT (NAVD 88)
LATITUDE: N 27.93249
LONGITUDE: W 82.48296

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

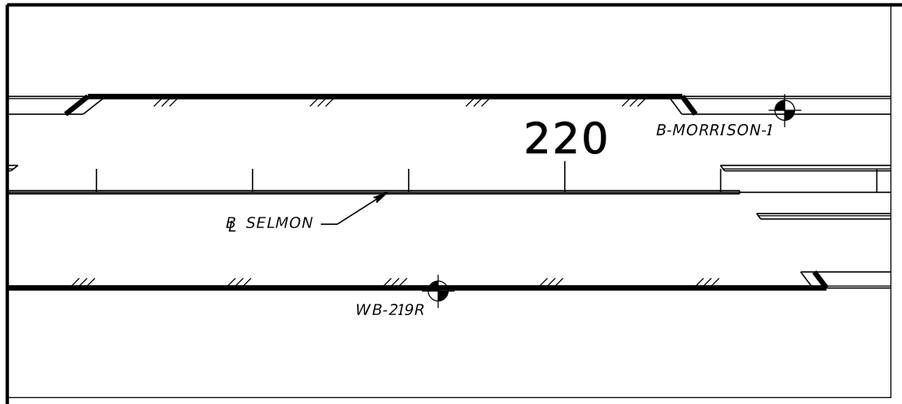
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

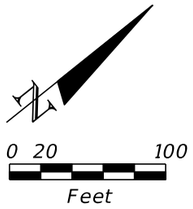
SHEET TITLE: RETAINING WALLS (30)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

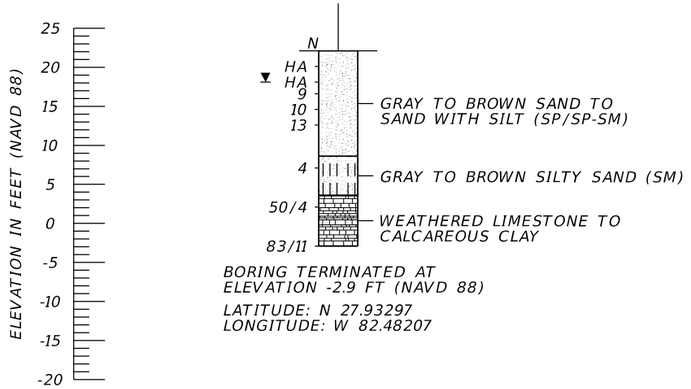
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

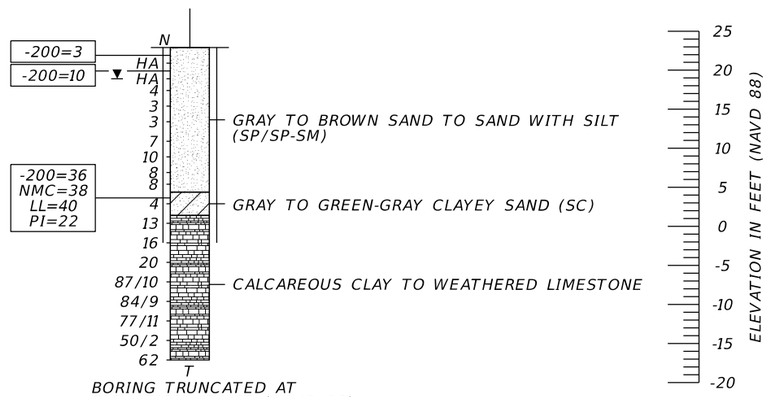
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-219R
STA. 219+19
REF. ℄ SELMON
OFF. 63' RT.
ELEV. 22.1'
DATE 3/16/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -2.9 FT (NAVD 88)
LATITUDE: N 27.93297
LONGITUDE: W 82.48207

BOR # B-MORRISON-1
STA. 221+41
REF. ℄ SELMON
OFF. 52' LT.
ELEV. 22.9'
DATE 3/23/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -17.1 FT (NAVD 88)
LATITUDE: N 27.93364
LONGITUDE: W 82.48192

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE LOOSE MEDIUM DENSE DENSE VERY DENSE	LESS THAN 4 4 to 10 10 to 30 30 to 50 GREATER THAN 50	LESS THAN 3 3 to 8 8 to 24 24 to 40 GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT SOFT FIRM STIFF VERY STIFF HARD	LESS THAN 2 2 to 4 4 to 8 8 to 15 15 to 30 GREATER THAN 30	LESS THAN 1 1 to 3 3 to 6 6 to 12 12 to 24 GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

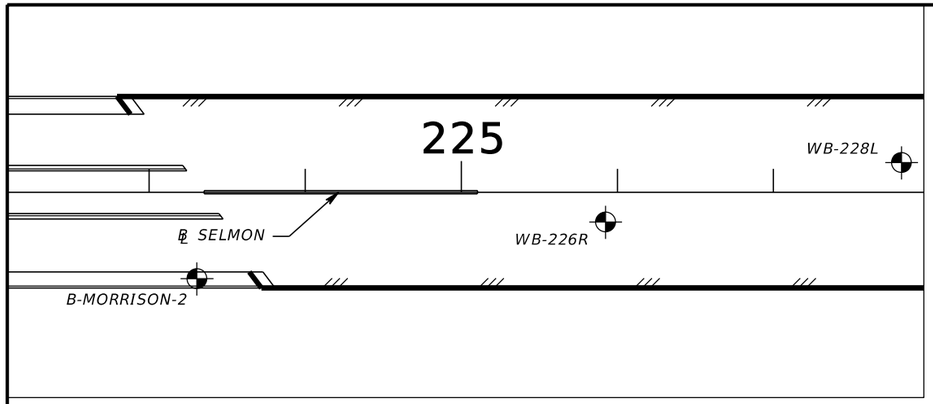
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (31)

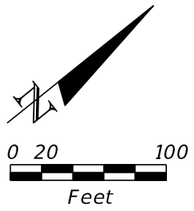
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO. 25



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

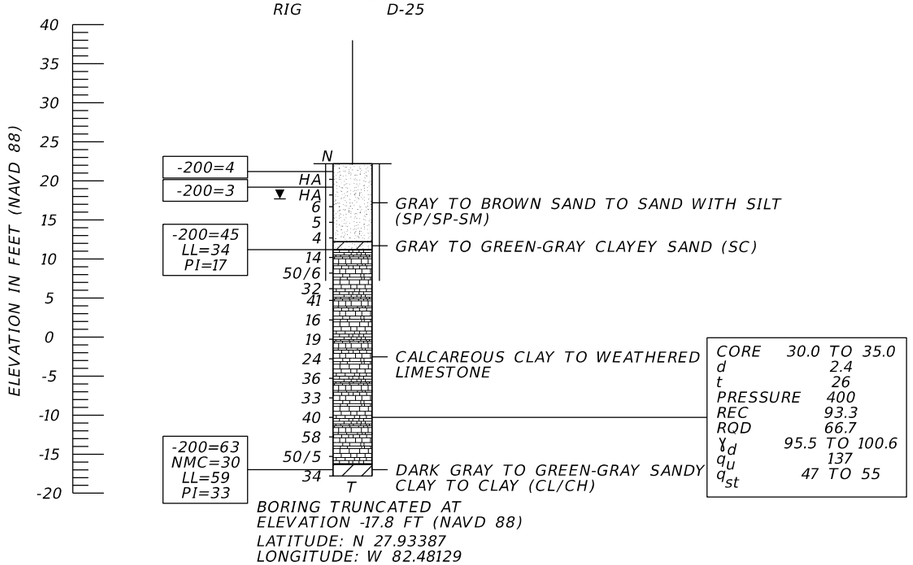
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

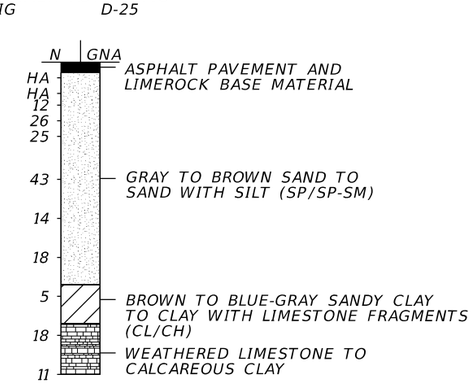
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-MORRISON-2
STA. 223+31
REF. ℄ SELMON
OFF. 55' RT.
ELEV. 22.2'
DATE 3/22/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -17.8 FT (NAVD 88)
LATITUDE: N 27.93387
LONGITUDE: W 82.48129

BOR # WB-226R
STA. 225+92
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 35.2'
DATE 2/1/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -4.8 FT (NAVD 88)
LATITUDE: N 27.93449
LONGITUDE: W 82.48087

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

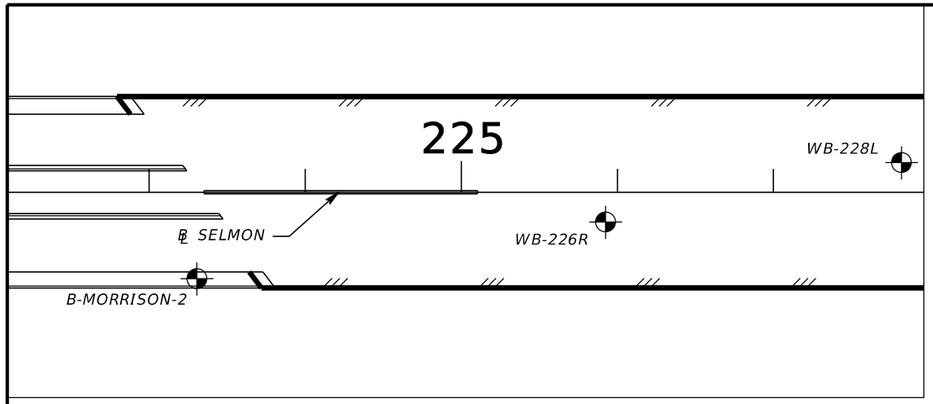
DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

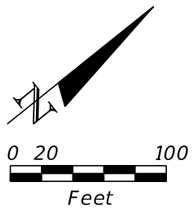
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (32)
REF. DWG. NO.
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET
SHEET NO.

bgarcia 7/18/2022 2:47:24 PM J:\65II\2021 Files\65II-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geote



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

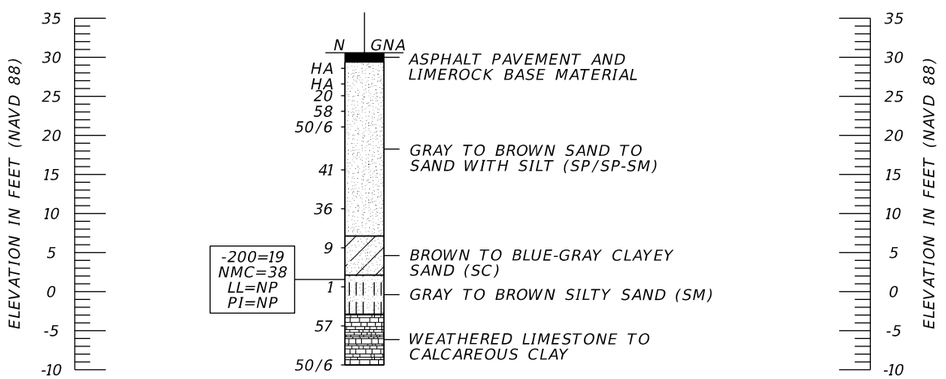
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-228L
STA. 227+82
REF. ℄ SELMON
OFF. 19' LT.
ELEV. 30.6'
DATE 1/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -9.4 FT (NAVD 88)

LATITUDE: N 27.93497
LONGITUDE: W 82.48060

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

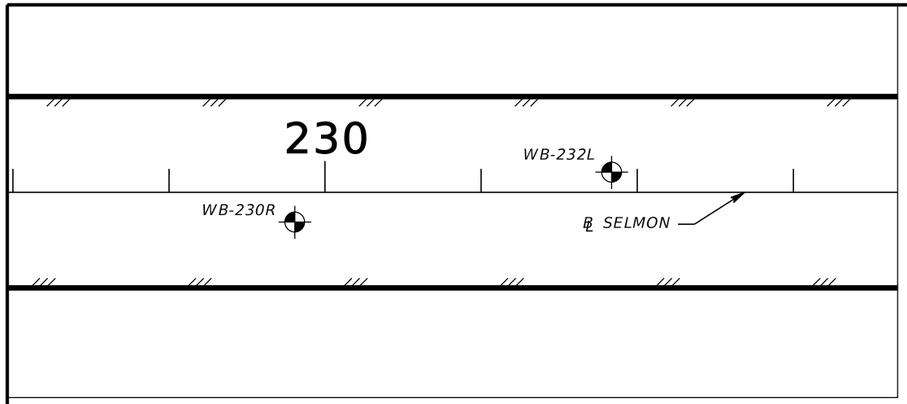
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (33)

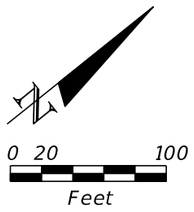
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

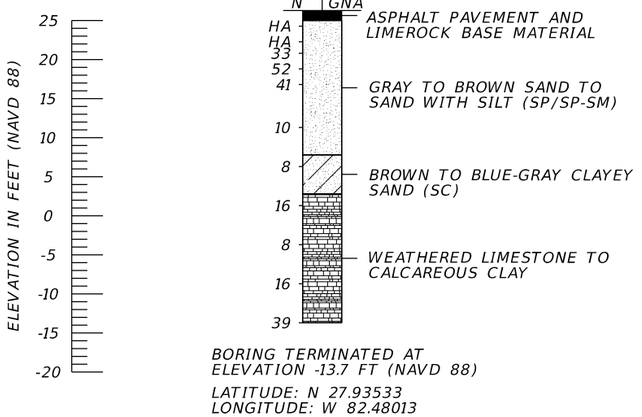
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

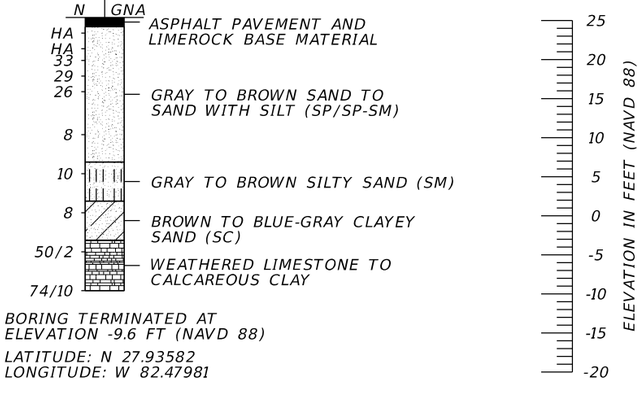
BOR # WB-230R
STA. 229+81
REF. ℄ SELMON
OFF. 19' RT.
ELEV. 26.3'
DATE 2/1/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -13.7 FT (NAVD 88)

LATITUDE: N 27.93533
LONGITUDE: W 82.48013

BOR # WB-232L
STA. 231+84
REF. ℄ SELMON
OFF. 13' LT.
ELEV. 25.4'
DATE 1/17/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -9.6 FT (NAVD 88)

LATITUDE: N 27.93582
LONGITUDE: W 82.47981

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

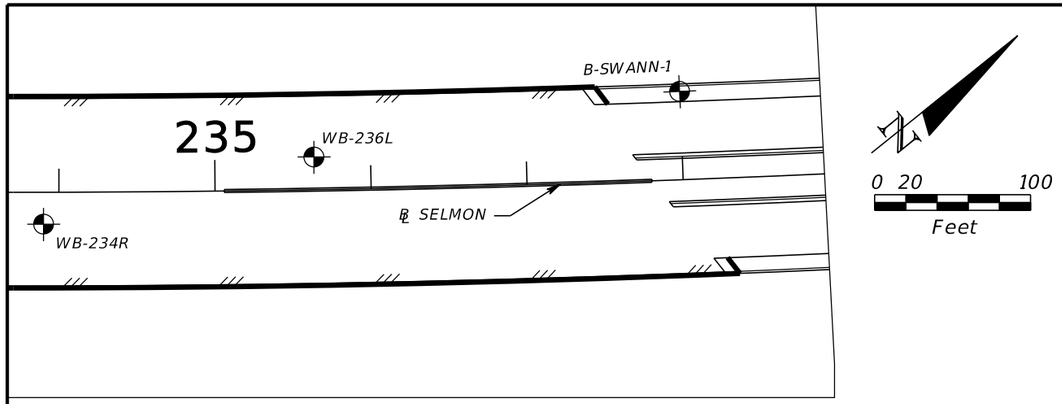
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (34)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

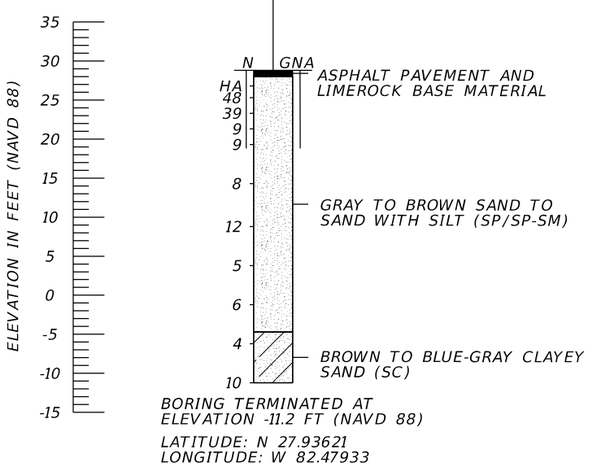
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

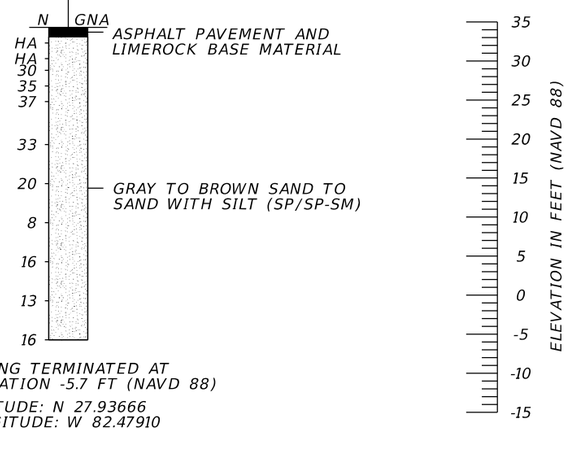
BOR # WB-234R
STA. 233+90
REF. ℄ SELMON
OFF. 20' RT.
ELEV. 28.8'
DATE 2/1/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -11.2 FT (NAVD 88)

LATITUDE: N 27.93621
LONGITUDE: W 82.47933

BOR # WB-236L
STA. 235+64
REF. ℄ SELMON
OFF. 21' LT.
ELEV. 34.3'
DATE 1/17/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -5.7 FT (NAVD 88)

LATITUDE: N 27.93666
LONGITUDE: W 82.47910

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

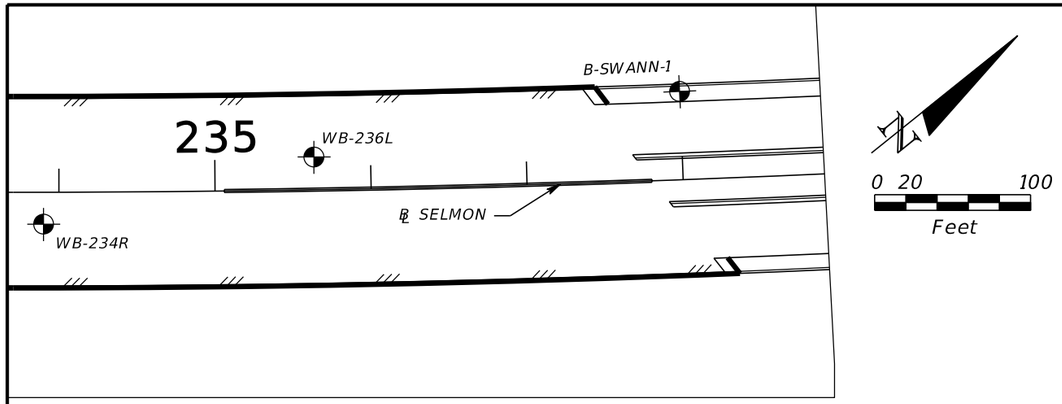
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (35)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

0 20 100
Feet

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

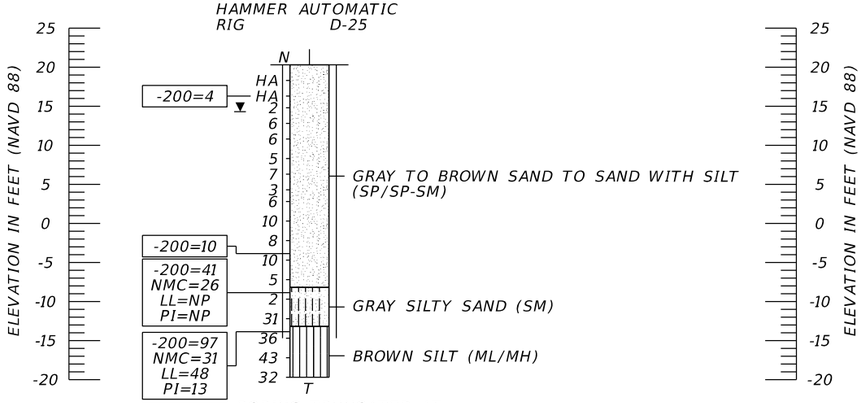
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-SWANN-1
STA. 238+00
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 20.3'
DATE 3/21/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -19.7 FT (NAVD 88)
LATITUDE: N 27.93723
LONGITUDE: W 82.47875

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

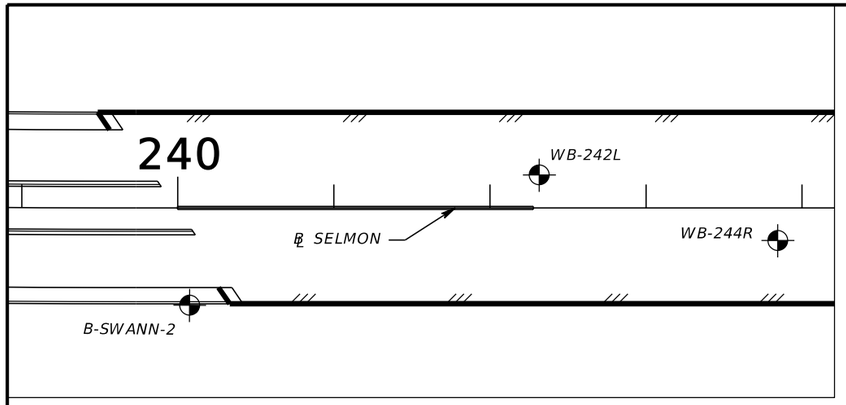
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (36)

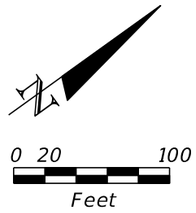
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

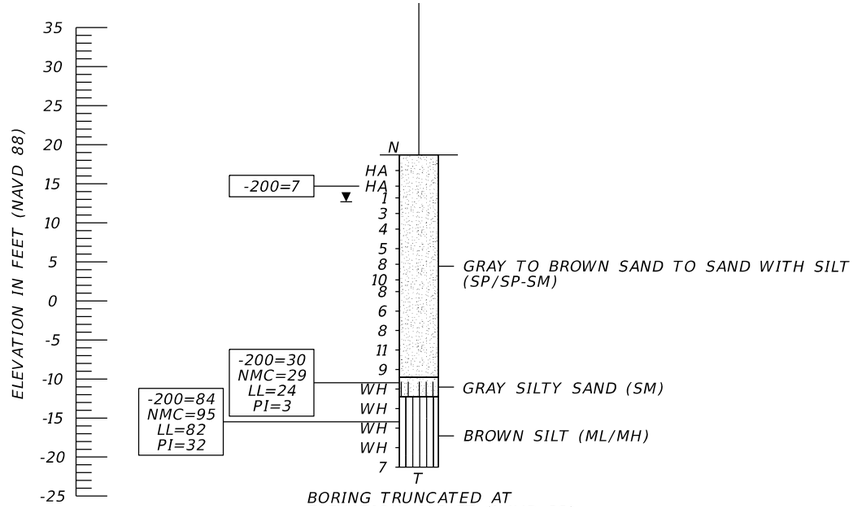
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

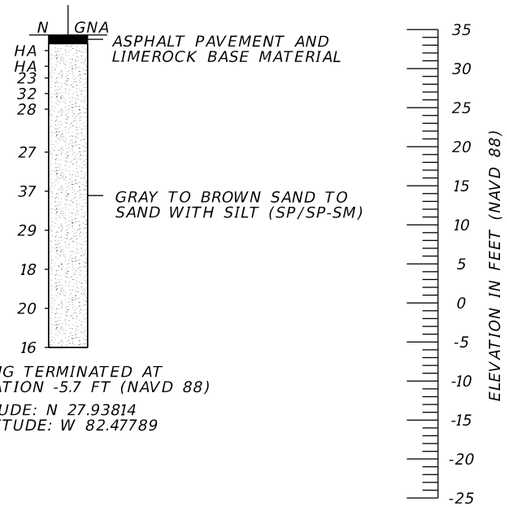
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-SWANN-2
STA. 240+08
REF. ℄ SELMON
OFF. 62' RT.
ELEV. 18.7'
DATE 4/14/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -21.3 FT (NAVD 88)
LATITUDE: N 27.93750
LONGITUDE: W 82.47808

BOR # WB-242L
STA. 242+32
REF. ℄ SELMON
OFF. 21' LT.
ELEV. 34.3'
DATE 1/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -5.7 FT (NAVD 88)
LATITUDE: N 27.93814
LONGITUDE: W 82.47789

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY, BJS
CHECKED BY, DN
DESIGNED BY, BJS
CHECKED BY, KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

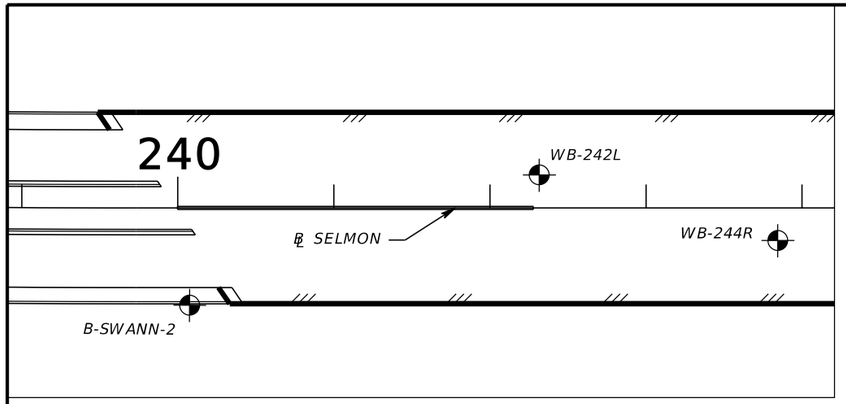
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

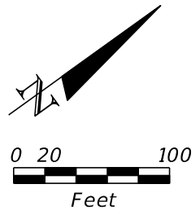
SHEET TITLE: RETAINING WALLS (37)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

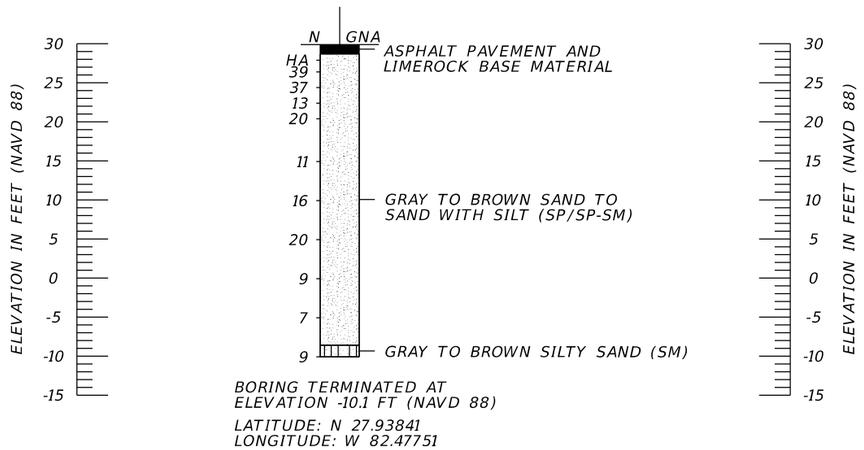
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-244R
STA. 243+84
REF. ℄ SELMON
OFF. 21' RT.
ELEV. 29.9'
DATE 2/1/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -10.1 FT (NAVD 88)

LATITUDE: N 27.93841
LONGITUDE: W 82.47751

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

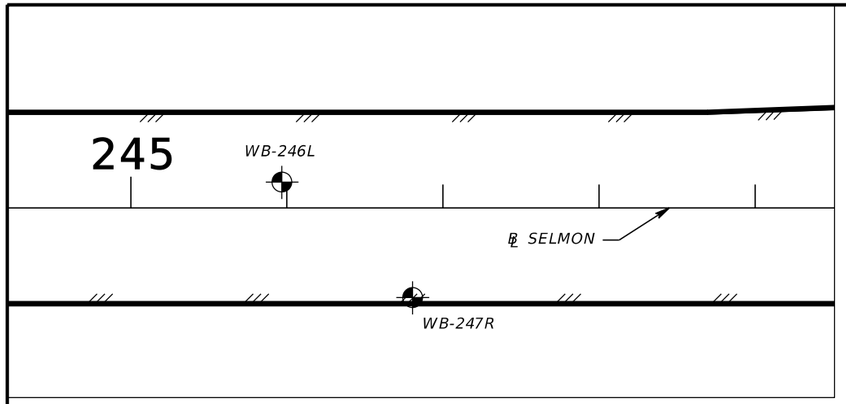
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

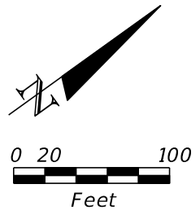
SHEET TITLE: RETAINING WALLS (38)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

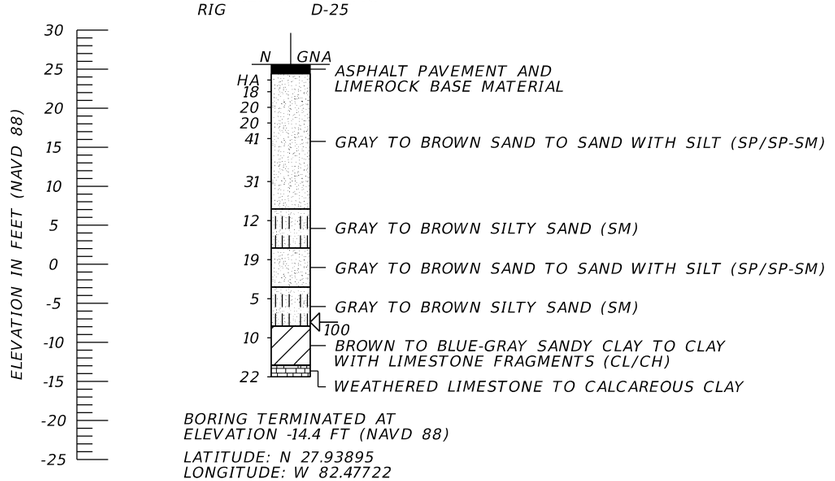
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

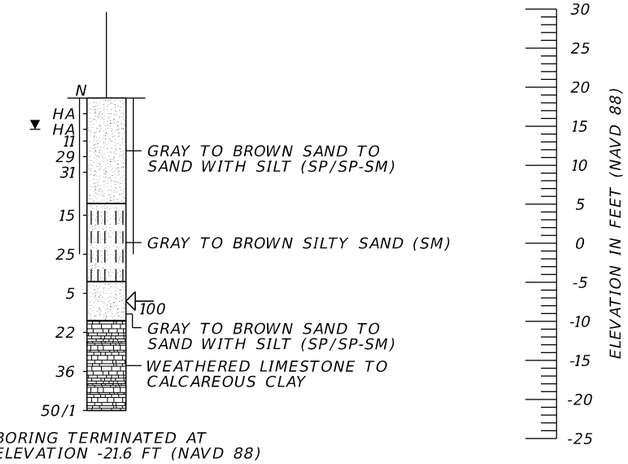
BOR # WB-246L
STA. 245+97
REF. ℄ SELMON
OFF. 17' LT.
ELEV. 25.6'
DATE 1/17/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -14.4 FT (NAVD 88)

LATITUDE: N 27.93895
LONGITUDE: W 82.47722

BOR # WB-247R
STA. 246+81
REF. ℄ SELMON
OFF. 57' RT.
ELEV. 18.4'
DATE 3/31/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -21.6 FT (NAVD 88)

LATITUDE: N 27.93902
LONGITUDE: W 82.47688

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

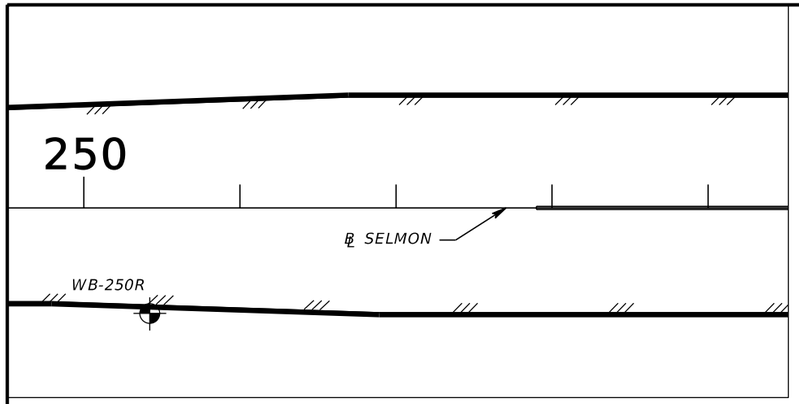
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (39)

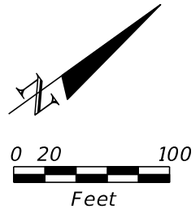
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

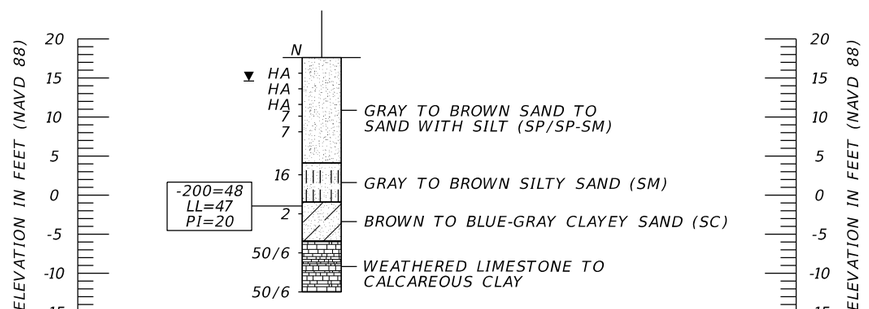
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⌖	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-250R
STA. 250+42
REF. ℄ SELMON
OFF. 68' RT.
ELEV. 17.6'
DATE 3/18/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -12.4 FT (NAVD 88)

LATITUDE: N 27.93981
LONGITUDE: W 82.47621

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

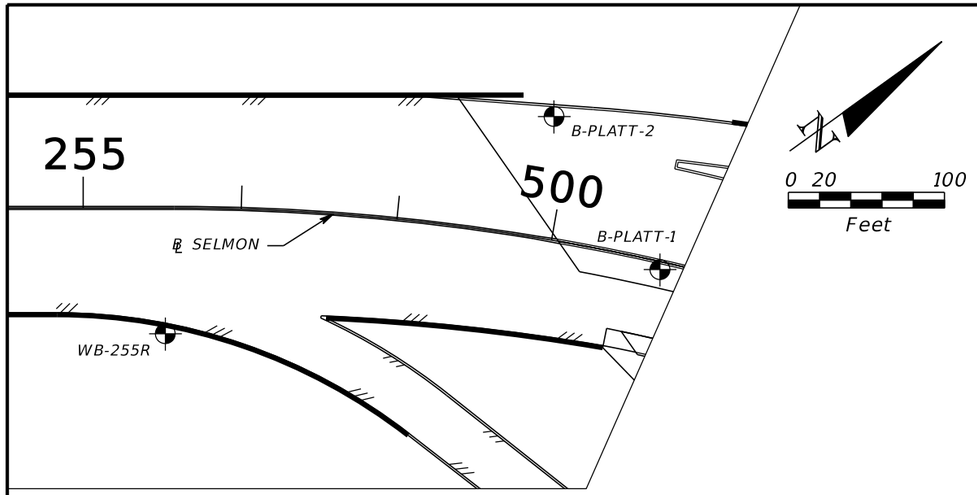
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (40)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

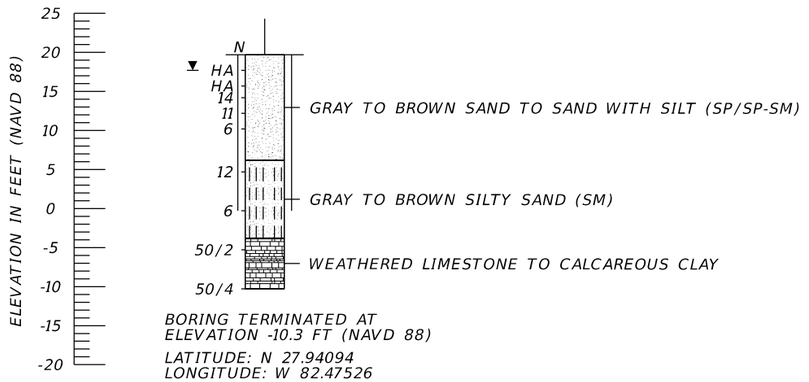
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

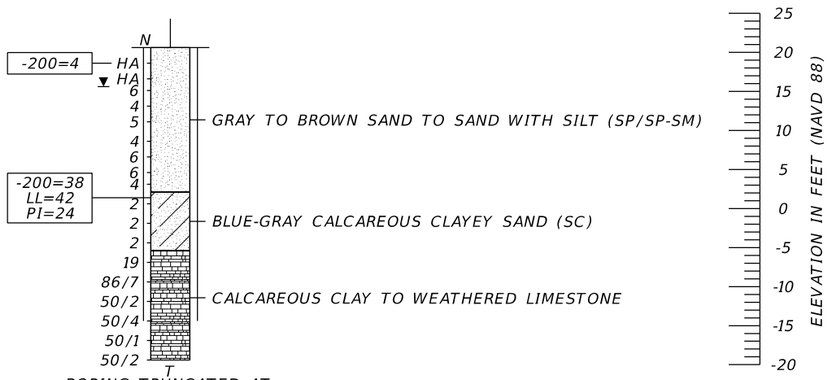
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-255R
STA. 255+53
REF. ℄ SELMON
OFF. 81' RT.
ELEV. 19.7
DATE 3/31/2022
DRILLER B. CRAIG
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -10.3 FT (NAVD 88)
LATITUDE: N 27.94094
LONGITUDE: W 82.47526

BOR # B-PLATT-2
STA. 499+89
REF. ℄ SELMON
OFF. 78' LT.
ELEV. 20.6'
DATE 3/22/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -19.4 FT (NAVD 88)
LATITUDE: N 27.94172
LONGITUDE: W 82.47516

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

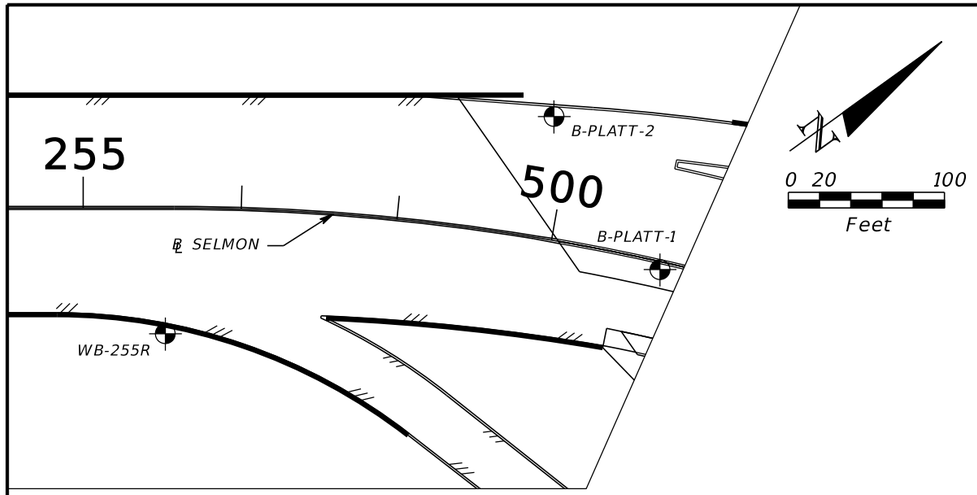
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (41)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

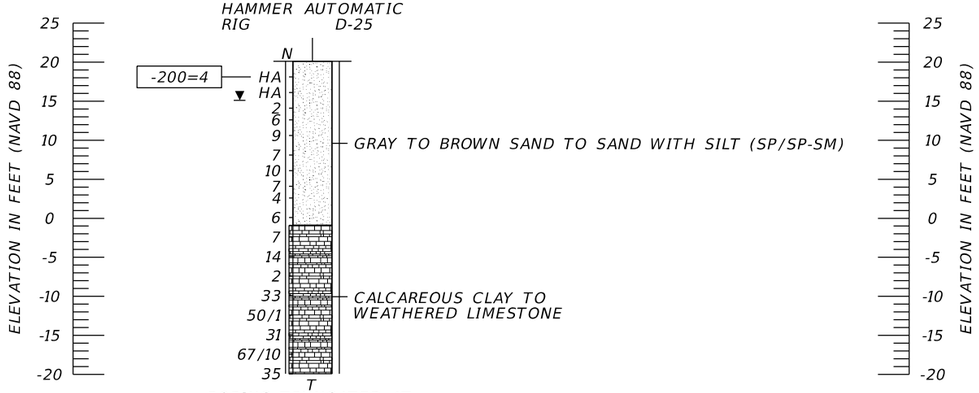
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-PLATT-1
STA. 500+72
REF. ℄ SELMON
OFF. 5' RT.
ELEV. 20.1'
DATE 3/23/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -19.9 FT (NAVD 88)

LATITUDE: N 27.94171
LONGITUDE: W 82.47479

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

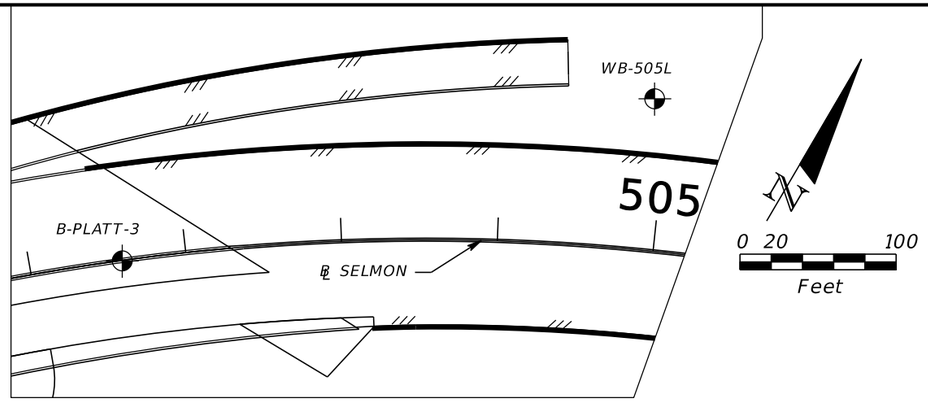
SHEET TITLE: RETAINING WALLS (42)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:31 PM J:\651\2021 Files\651-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

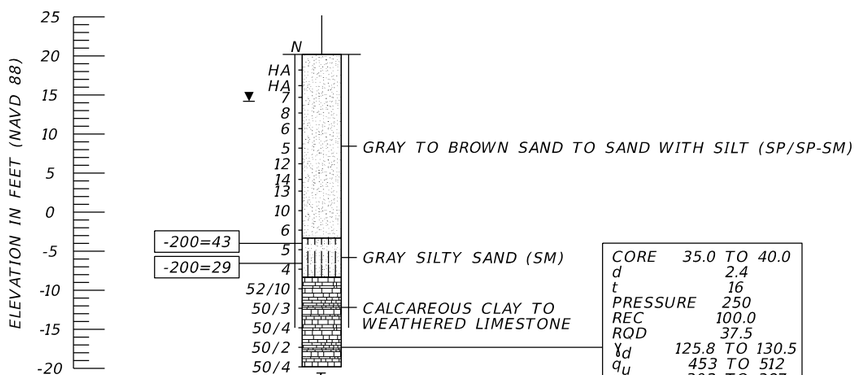
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-PLATT-3
STA. 501+59
REF. ℄ SELMON
OFF. 0' RT.
ELEV. 20.2'
DATE 3/21/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25

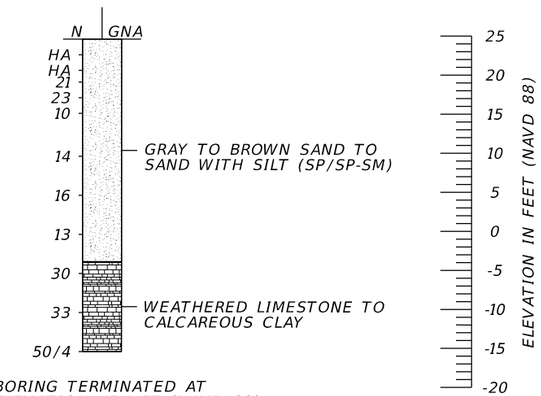


CORE	35.0 TO 40.0
d	2.4
t	16
PRESSURE	250
REC	100.0
RQD	37.5
γ_d	125.8 TO 130.5
q_u	453 TO 512
q_{st}	302 TO 387

BORING TRUNCATED AT
ELEVATION -19.8 FT (NAVD 88)

LATITUDE: N 27.94188
LONGITUDE: W 82.47459

BOR # WB-505L
STA. 504+92
REF. ℄ SELMON
OFF. 97' LT.
ELEV. 24.6'
DATE 3/15/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -15.4 FT (NAVD 88)

LATITUDE: N 27.94260
LONGITUDE: W 82.47385

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

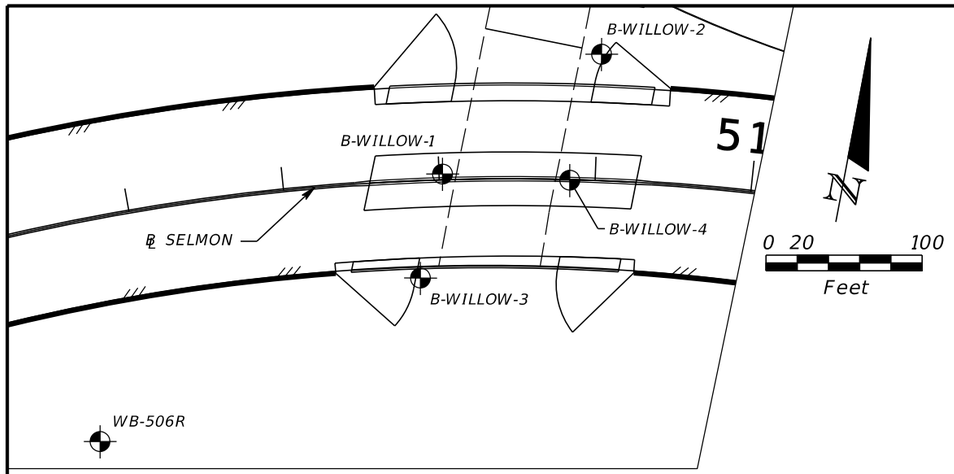
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (43)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

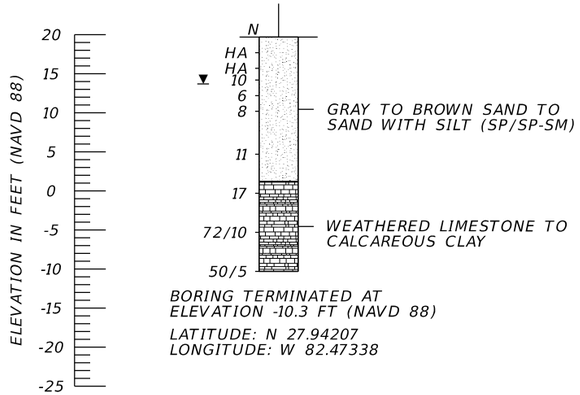
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

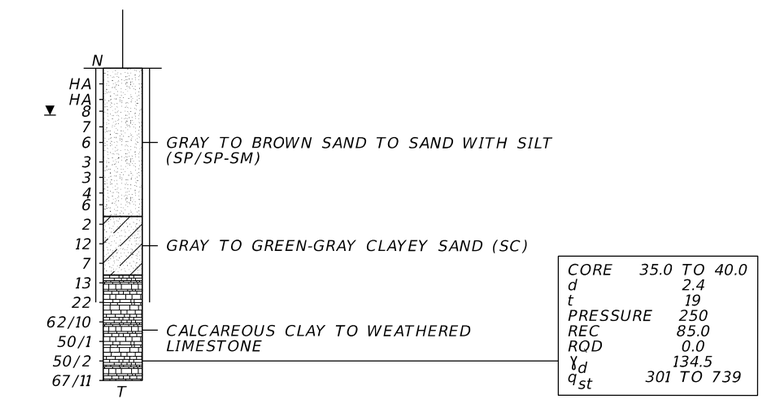
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-506R
STA. 505+52
REF. ℄ SELMON
OFF. 141' RT.
ELEV. 19.7'
DATE 3/14/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25

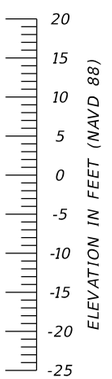


BORING TERMINATED AT
ELEVATION -10.3 FT (NAVD 88)
LATITUDE: N 27.94207
LONGITUDE: W 82.47338

BOR # B-WILLOW-3
STA. 507+85
REF. ℄ SELMON
OFF. 62' RT.
ELEV. 16.5'
DATE 3/15/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -23.5 FT (NAVD 88)
LATITUDE: N 27.94246
LONGITUDE: W 82.47282



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

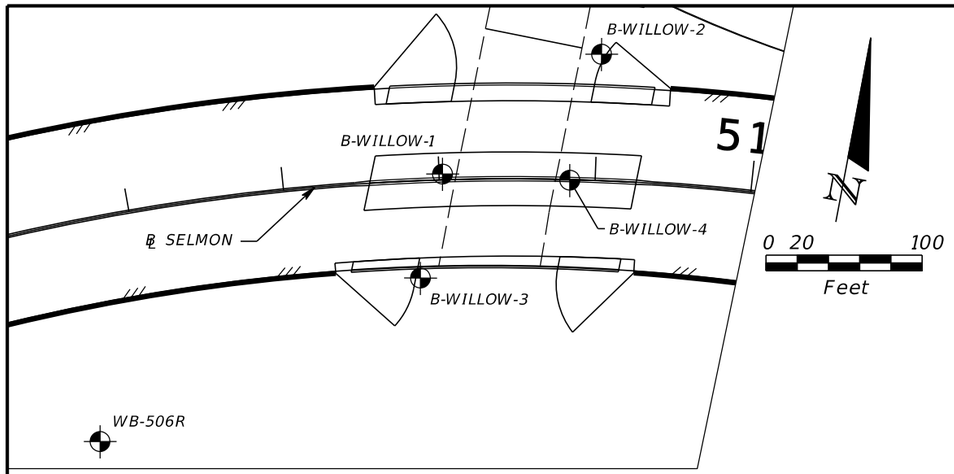
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (44)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

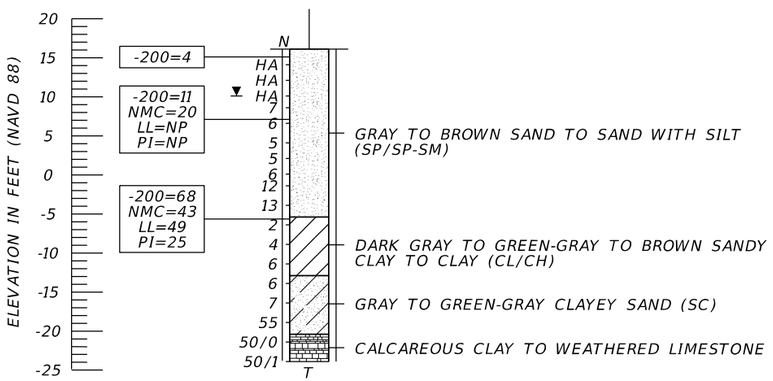
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

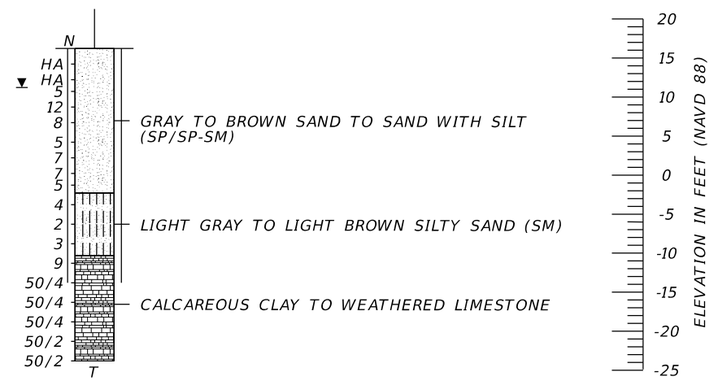
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-WILLOW-1
STA. 508+02
REF. ℄ SELMON
OFF. 4' LT.
ELEV. 16.1'
DATE 4/4/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -23.9 FT (NAVD 88)
LATITUDE: N 27.94264
LONGITUDE: W 82.47282

BOR # B-WILLOW-4
STA. 508+84
REF. ℄ SELMON
OFF. 0' RT.
ELEV. 16.2'
DATE 3/16/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -23.8 FT (NAVD 88)
LATITUDE: N 27.94268
LONGITUDE: W 82.47257

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

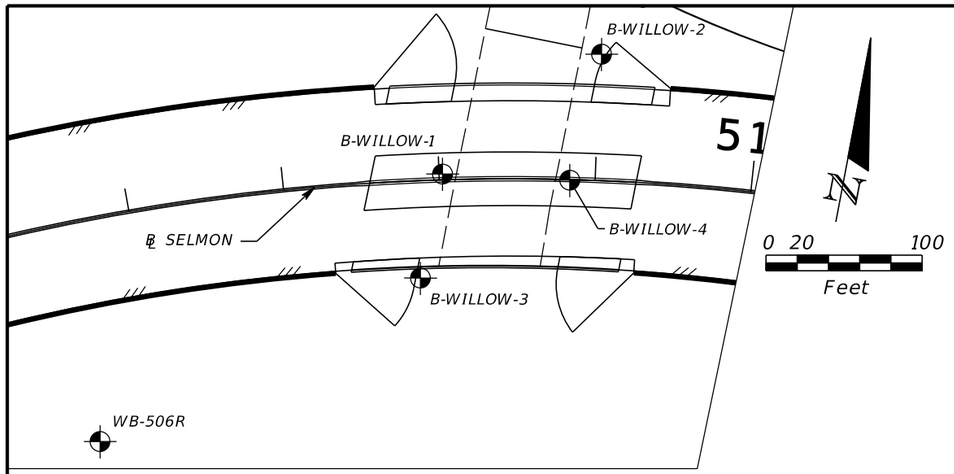
SHEET TITLE: RETAINING WALLS (45)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:33 PM J:\651\2021 Files\651-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

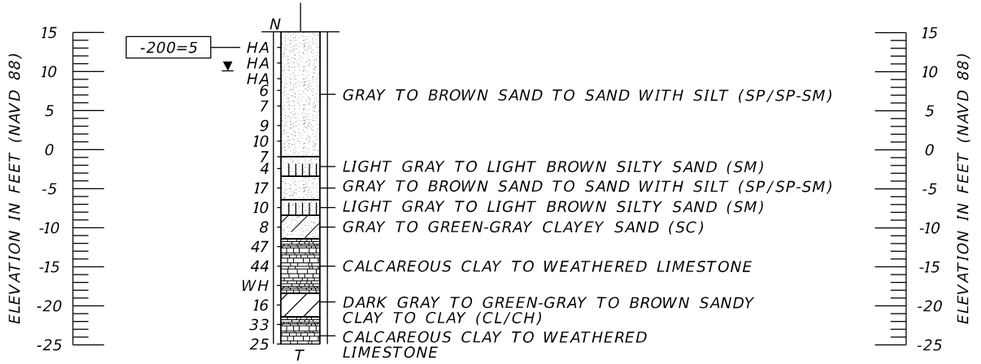
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-WILLOW-2
STA. 509+01
REF. ℄ SELMON
OFF. 81' LT.
ELEV. 15.1'
DATE 3/17/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -24.9 FT (NAVD 88)

LATITUDE: N 27.94290
LONGITUDE: W 82.47255

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

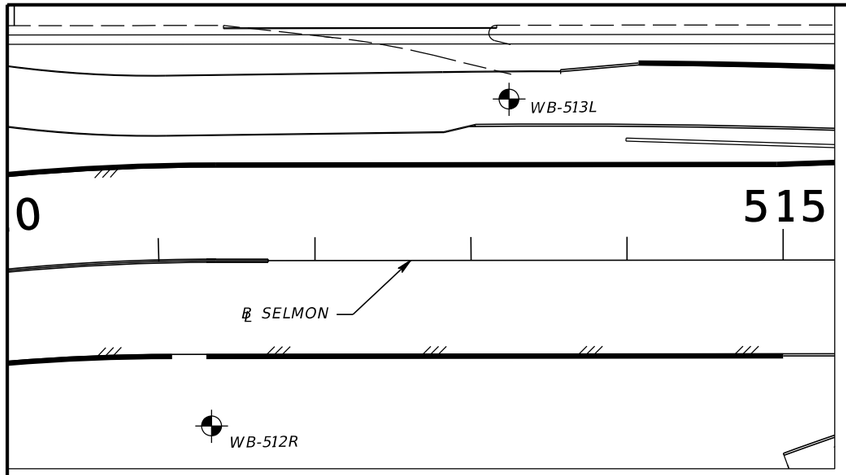
SHEET TITLE: RETAINING WALLS (46)

REF. DWG. NO.

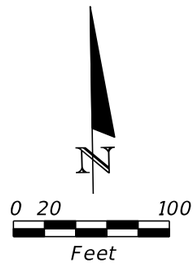
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:33 PM J:\6511\2021 Files\6511-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

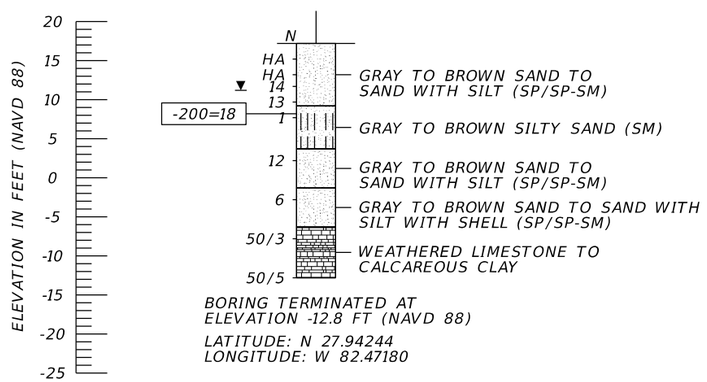
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

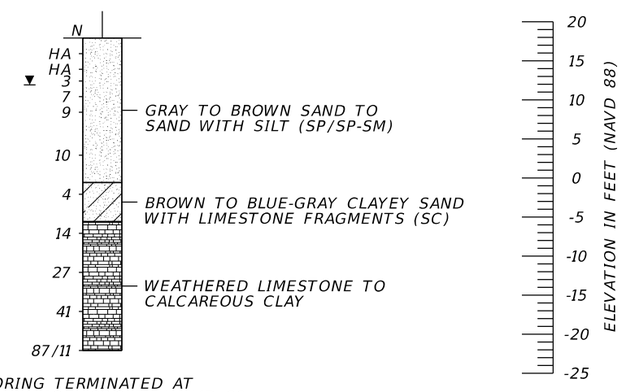
BOR # WB-512R
STA. 511+33
REF. ℄ SELMON
OFF. 106' RT.
ELEV. 17.2'
DATE 3/14/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -12.8 FT (NAVD 88)

LATITUDE: N 27.94244
LONGITUDE: W 82.47180

BOR # WB-513L
STA. 513+24
REF. ℄ SELMON
OFF. 103' LT.
ELEV. 17.9'
DATE 3/13/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -22.8 FT (NAVD 88)

LATITUDE: N 27.94301
LONGITUDE: W 82.47120

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

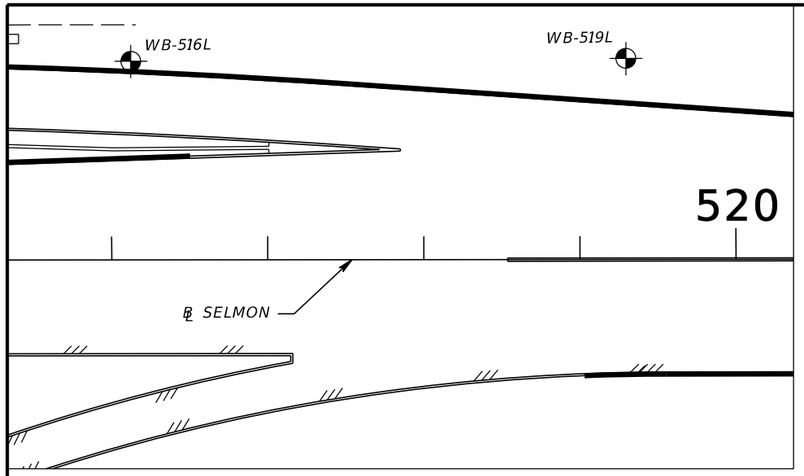
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (47)

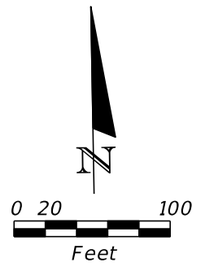
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

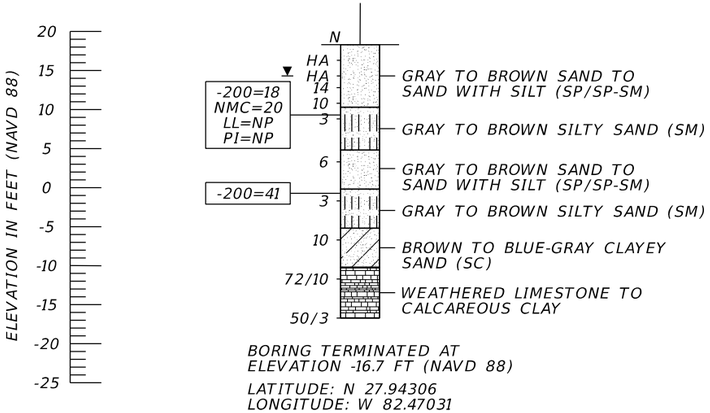
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⇦100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

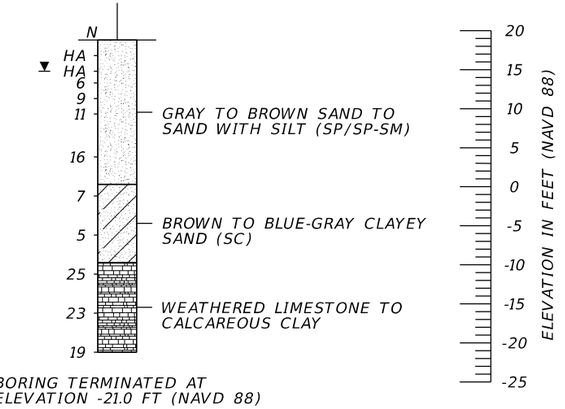
BOR # WB-516L
STA. 516+12
REF. ℄ SELMON
OFF. 127' LT.
ELEV. 18.3'
DATE 3/11/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -16.7 FT (NAVD 88)

LATITUDE: N 27.94306
LONGITUDE: W 82.47031

BOR # WB-519L
STA. 519+30
REF. ℄ SELMON
OFF. 129' LT.
ELEV. 18.8'
DATE 3/11/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -21.0 FT (NAVD 88)

LATITUDE: N 27.94306
LONGITUDE: W 82.46932

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

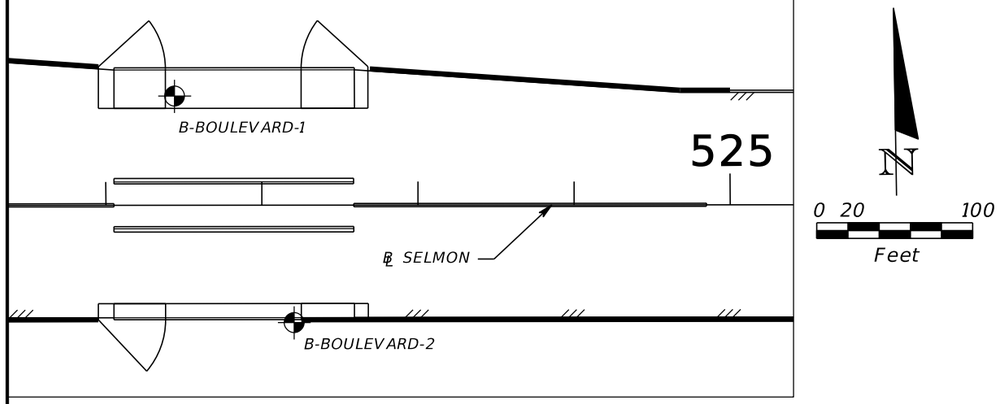
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (48)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

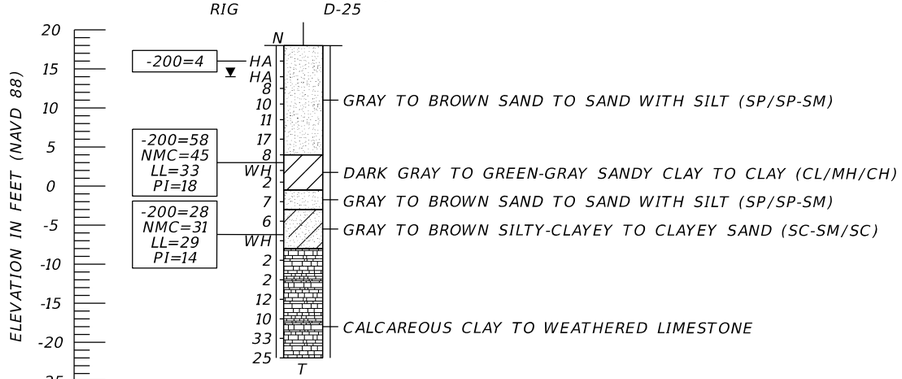
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

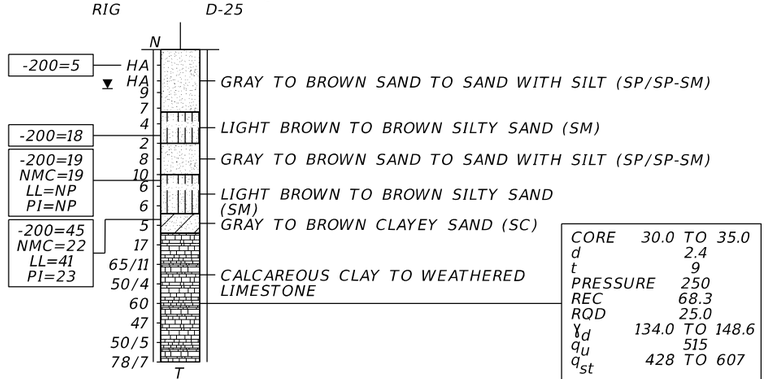
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-BOULEVARD-1
STA. 521+44
REF. ℄ SELMON
OFF. 70' LT.
ELEV. 18.0'
DATE 4/4/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -22.0 FT (NAVD 88)
LATITUDE: N 27.94289
LONGITUDE: W 82.46866

BOR # B-BOULEVARD-2
STA. 522+21
REF. ℄ SELMON
OFF. 75' RT.
ELEV. 17.5'
DATE 3/24/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25



CORE	30.0 TO 35.0
d	2.4
t	9
PRESSURE	250
REC	68.3
ROD	25.0
γ_d	134.0 TO 148.6
q_u	515
q_{st}	428 TO 607

BORING TRUNCATED AT
ELEVATION -22.5 FT (NAVD 88)
LATITUDE: N 27.94249
LONGITUDE: W 82.46843

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

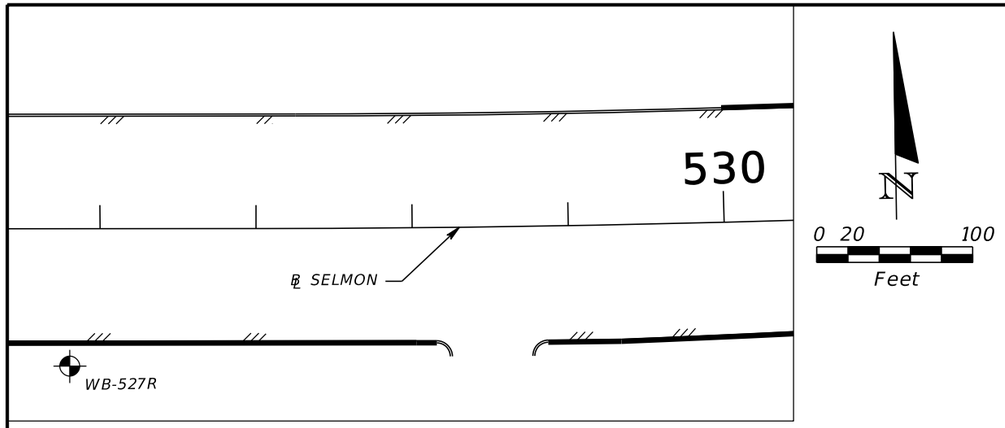
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (49)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

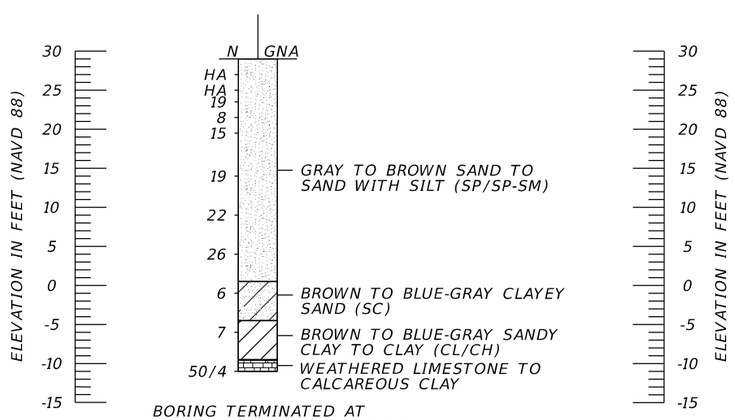
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⇦100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
||	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # WB-527R
STA. 525+81
REF. ℄ SELMON
OFF. 88' RT.
ELEV. 29.0'
DATE 3/17/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -11.0 FT (NAVD 88)

LATITUDE: N 27.94244
LONGITUDE: W 82.46732

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

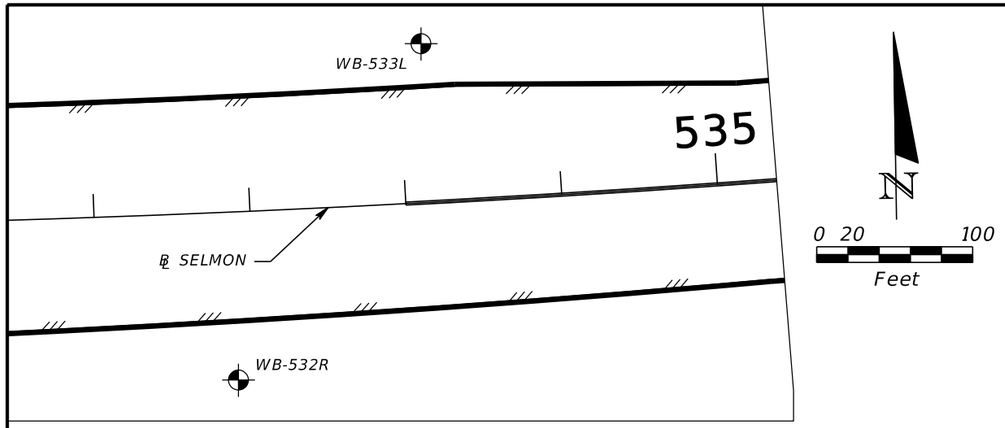
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (50)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

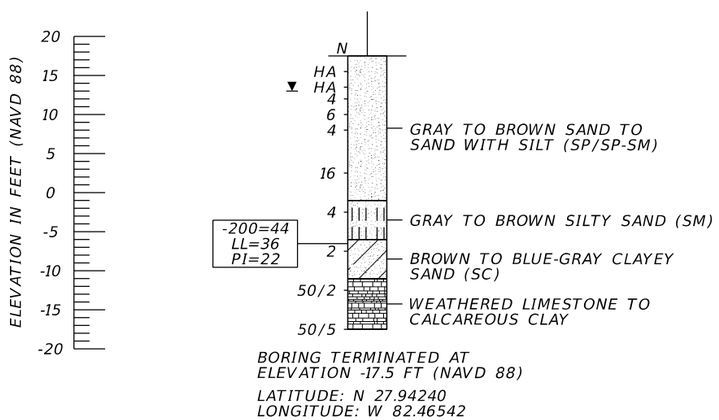
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⇦100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
| |	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

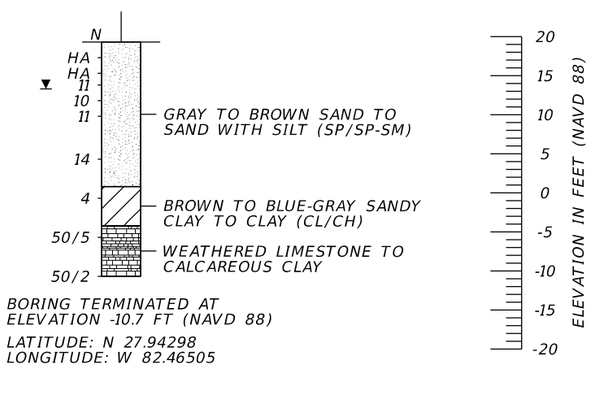
BOR # WB-532R
STA. 531+88
REF. ℄ SELMON
OFF. 108' RT.
ELEV. 17.5'
DATE 3/17/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -17.5 FT (NAVD 88)

LATITUDE: N 27.94240
LONGITUDE: W 82.46542

BOR # WB-533L
STA. 533+15
REF. ℄ SELMON
OFF. 102' LT.
ELEV. 19.3
DATE 3/17/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -10.7 FT (NAVD 88)

LATITUDE: N 27.94298
LONGITUDE: W 82.46505

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

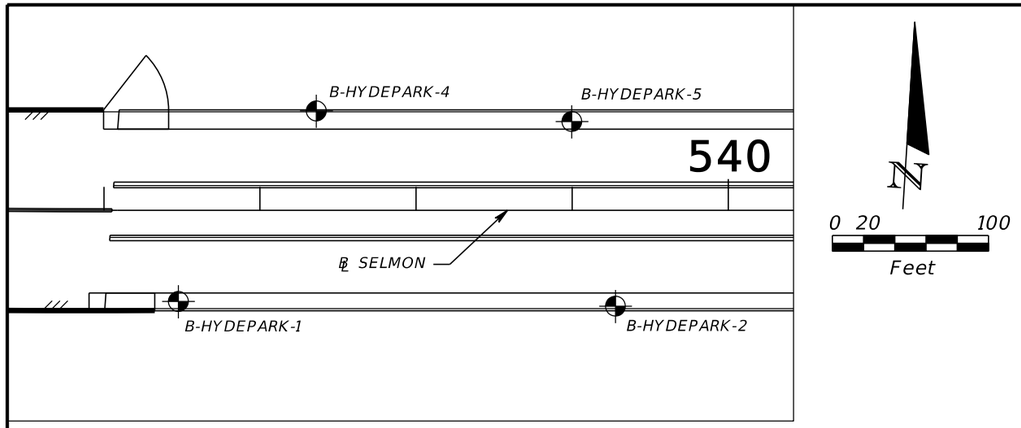
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (51)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

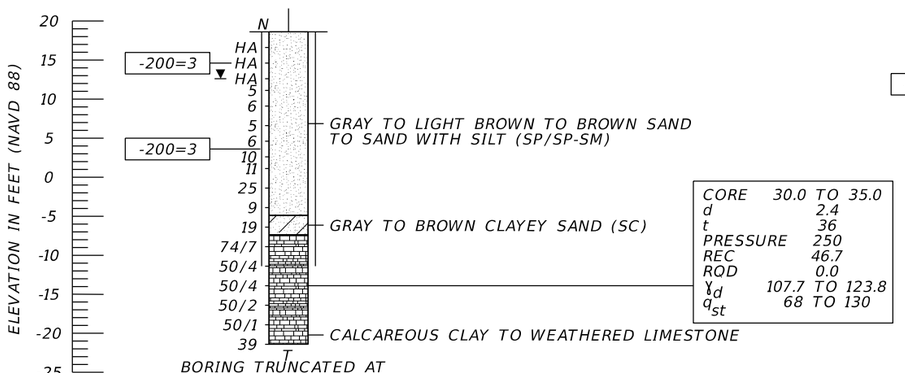
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
	APPROXIMATE SPT BORING LOCATION
	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
	SHELBY TUBE SAMPLE
100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-HYDE PARK-1
STA. 536+48
REF. ℄ SELMON
OFF. 58' RT.
ELEV. 18.6
DATE 3/18/2022
DRILLER A. JACKSON
HAMMER AUTOMATIC
RIG D-25

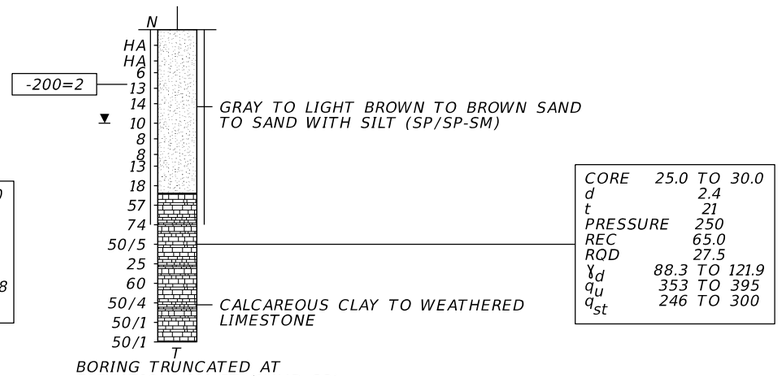


CORE	30.0 TO 35.0
d	2.4
t	36
PRESSURE	250
REC	46.7
RQD	0.0
γ_d	107.7 TO 123.8
q_{st}	68 TO 130

BORING TRUNCATED AT
ELEVATION -21.4 FT (NAVD 88)

LATITUDE: N 27.94259
LONGITUDE: W 82.46400

BOR # B-HYDE PARK-4
STA. 537+36
REF. ℄ SELMON
OFF. 64' LT.
ELEV. 18.9
DATE 3/18/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



CORE	25.0 TO 30.0
d	2.4
t	21
PRESSURE	250
REC	65.0
RQD	27.5
γ_d	88.3 TO 121.9
q_u	353 TO 395
q_{st}	246 TO 300

BORING TRUNCATED AT
ELEVATION -21.1 FT (NAVD 88)

LATITUDE: N 27.94295
LONGITUDE: W 82.46375

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

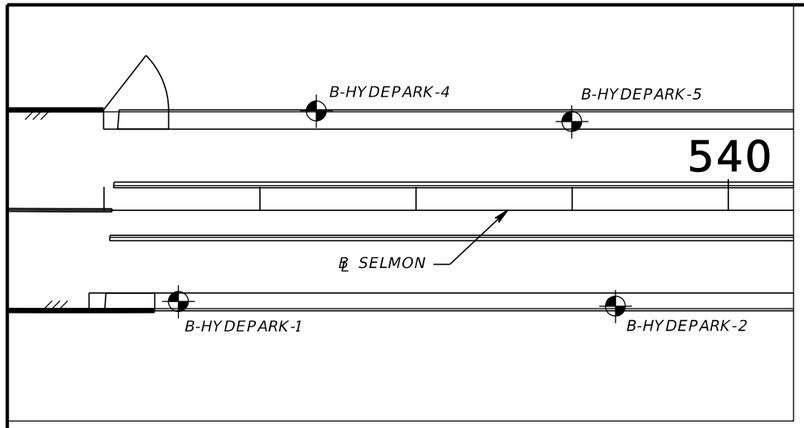
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

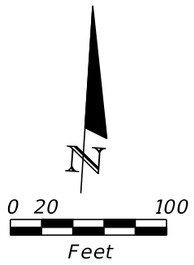
SHEET TITLE: RETAINING WALLS (52)

REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

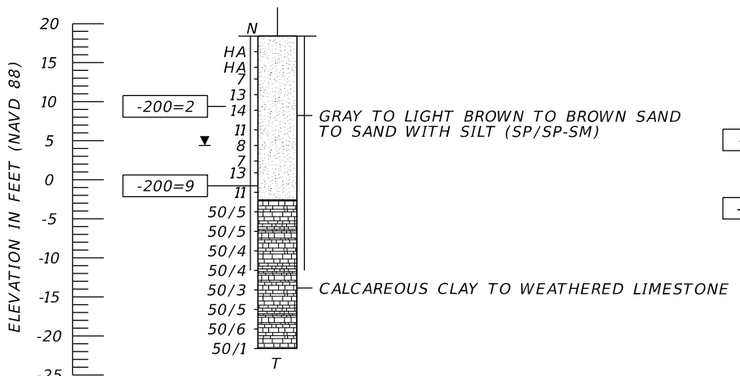
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⇦100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

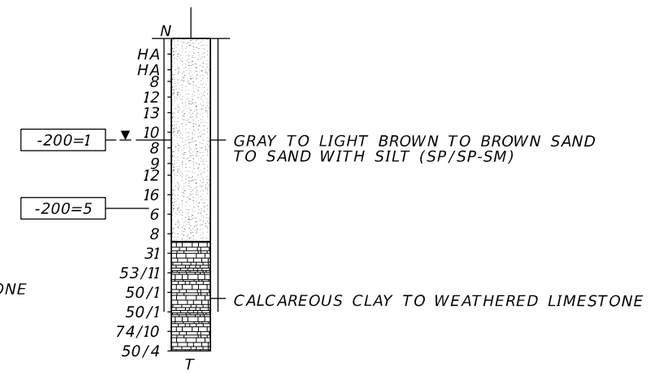
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-HYDE PARK-5
STA. 539+00
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 18.4
DATE 3/20/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -21.6 FT (NAVD 88)
LATITUDE: N 27.94296
LONGITUDE: W 82.46324

BOR # B-HYDE PARK-2
STA. 539+28
REF. ℄ SELMON
OFF. 61' RT.
ELEV. 18.1
DATE 3/22/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -21.9 FT (NAVD 88)
LATITUDE: N 27.94264
LONGITUDE: W 82.46313

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

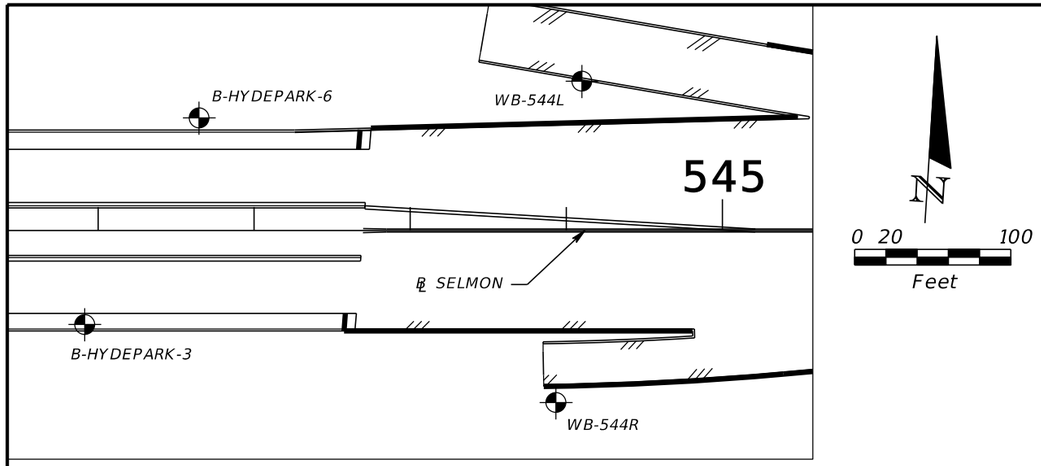
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (53)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

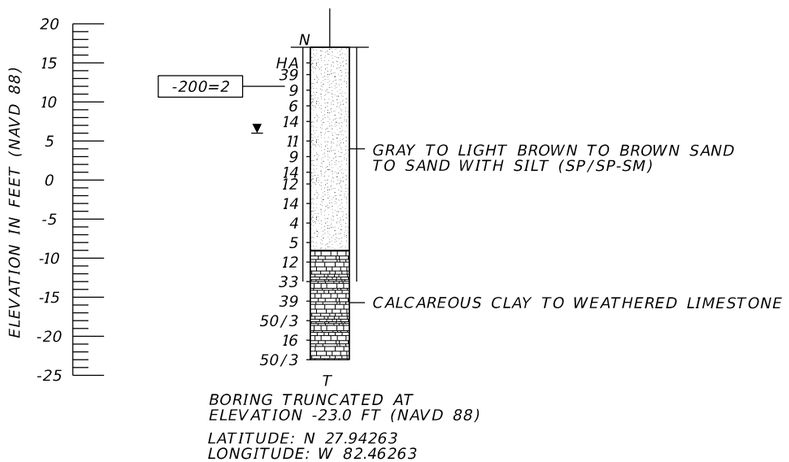
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⟵100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

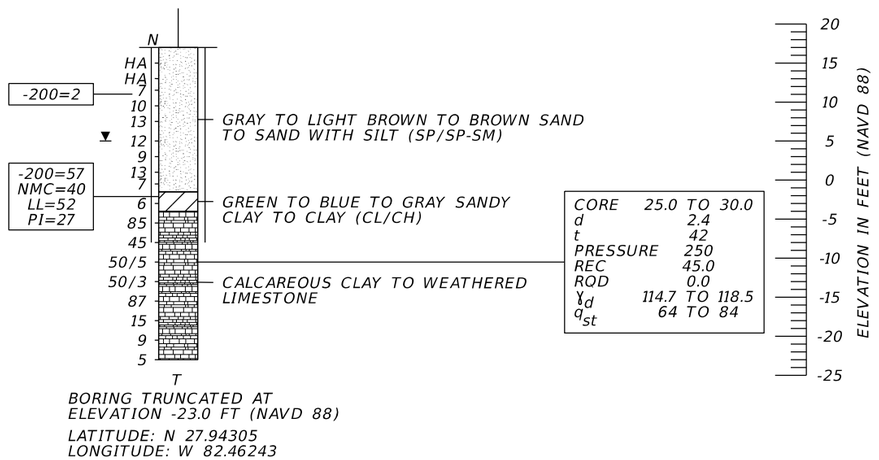
BOR # B-HYDE PARK-3
STA. 540+91
REF. ℄ SELMON
OFF. 60' RT.
ELEV. 17.0'
DATE 3/24/2022
DRILLER R. SCRUGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT ELEVATION -23.0 FT (NAVD 88)

LATITUDE: N 27.94263
LONGITUDE: W 82.46263

BOR # B-HYDE PARK-6
STA. 541+65
REF. ℄ SELMON
OFF. 72' LT.
ELEV. 17.0'
DATE 3/17/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT ELEVATION -23.0 FT (NAVD 88)

LATITUDE: N 27.94305
LONGITUDE: W 82.46243

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

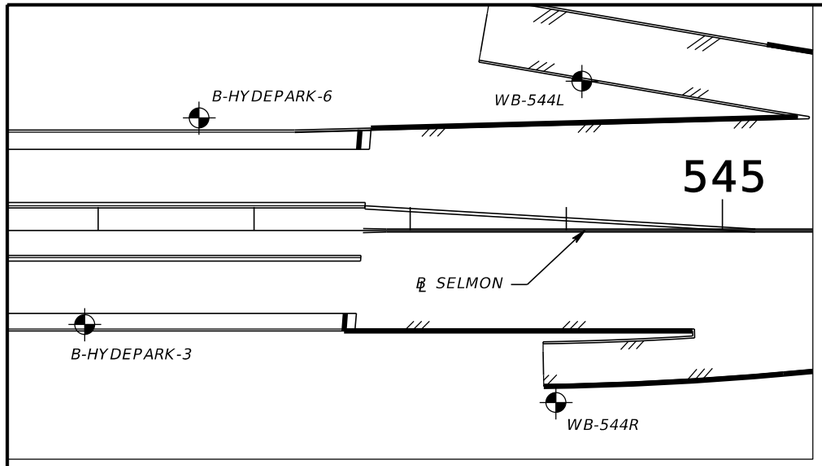
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

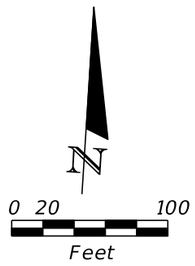
SHEET TITLE: RETAINING WALLS (54)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

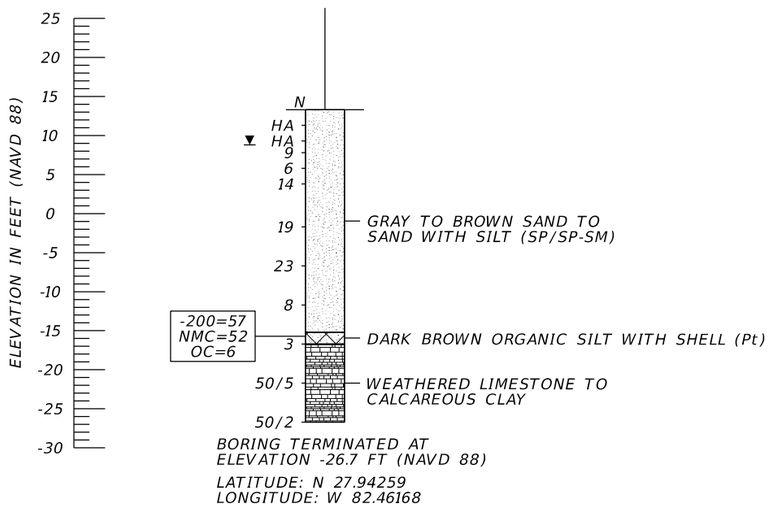
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
||	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

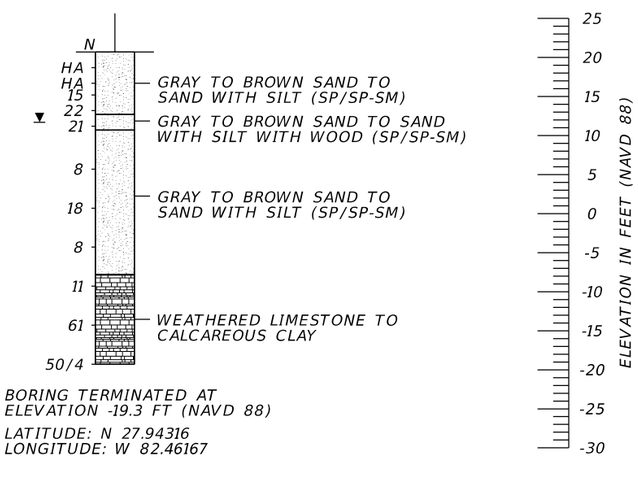
BOR # WB-544R
STA. 543+93
REF. ℄ SELMON
OFF. 110' RT.
ELEV. 13.3'
DATE 3/16/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -26.7 FT (NAVD 88)

LATITUDE: N 27.94259
LONGITUDE: W 82.46168

BOR # WB-544L
STA. 544+10
REF. ℄ SELMON
OFF. 96' LT.
ELEV. 20.7'
DATE 3/14/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT ELEVATION -19.3 FT (NAVD 88)

LATITUDE: N 27.94316
LONGITUDE: W 82.46167

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

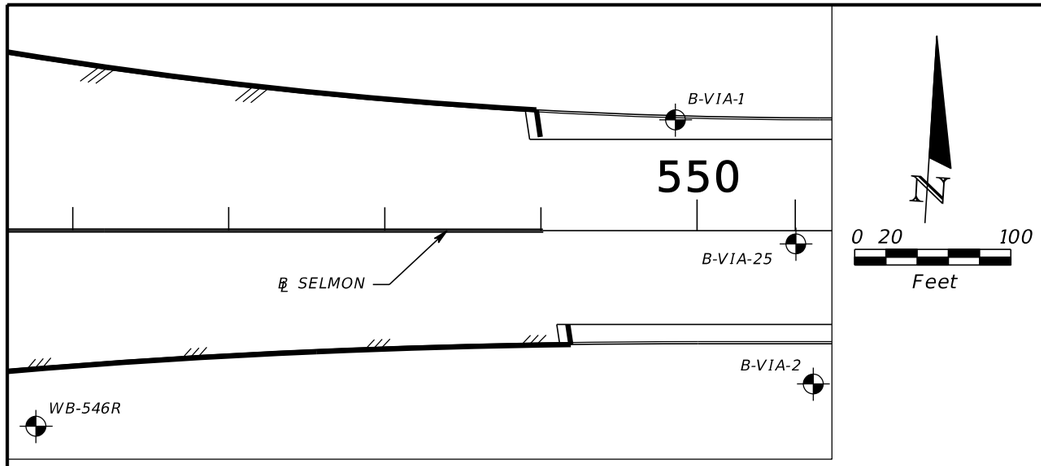
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (55)

REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.



BORING LOCATION PLAN

LEGEND

	SAND TO SAND WITH SILT (SP/SP-SM)
	SILTY SAND (SM)
	CLAYEY SAND (SC)
	SANDY CLAY TO CLAY (CL/CH)
	WEATHERED LIMESTONE TO CALCAREOUS CLAY
	ORGANIC SILTY SAND TO SANDY SILT (Pt)
	SANDY SILT TO SILT (ML/MH)
	ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

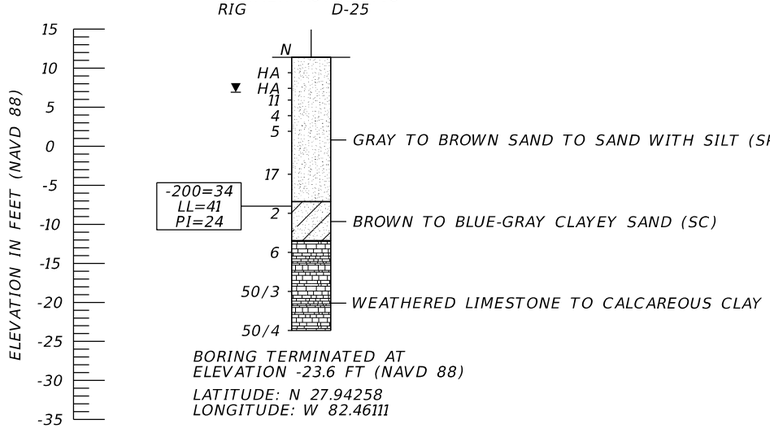
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

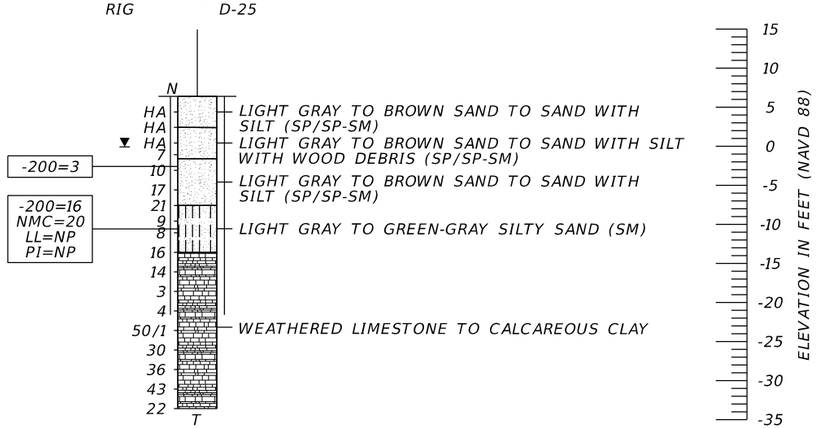
BOR # WB-546R
STA. 545+76
REF. ℄ SELMON
OFF. 125' RT.
ELEV. 11.4'
DATE 3/16/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TERMINATED AT
ELEVATION -23.6 FT (NAVD 88)

LATITUDE: N 27.94258
LONGITUDE: W 82.46111

BOR # B-VIA-1
STA. 549+86
REF. ℄ SELMON
OFF. 71' LT.
ELEV. 6.4'
DATE 3/25/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -33.6 FT (NAVD 88)

LATITUDE: N 27.94320
LONGITUDE: W 82.45989

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

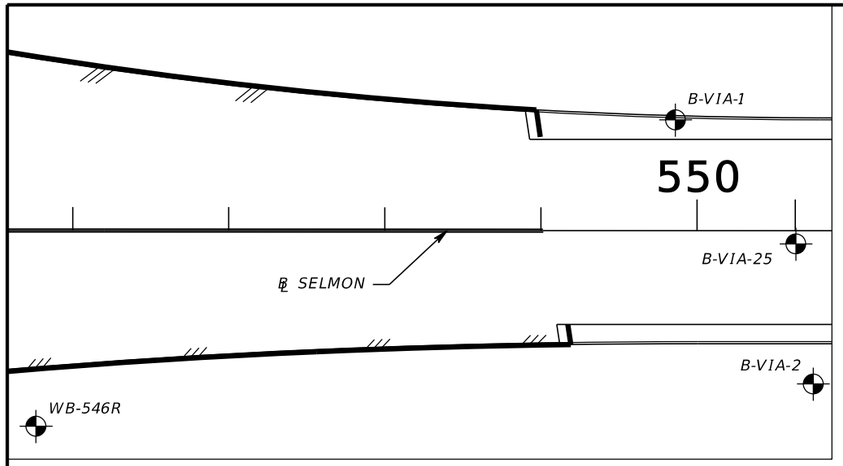
SHEET TITLE: RETAINING WALLS (56)

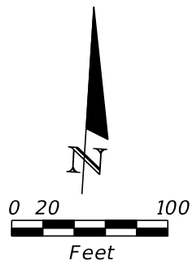
REF. DWG. NO.

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:40 PM J:\651\2021 Files\651-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec





BORING LOCATION PLAN

LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

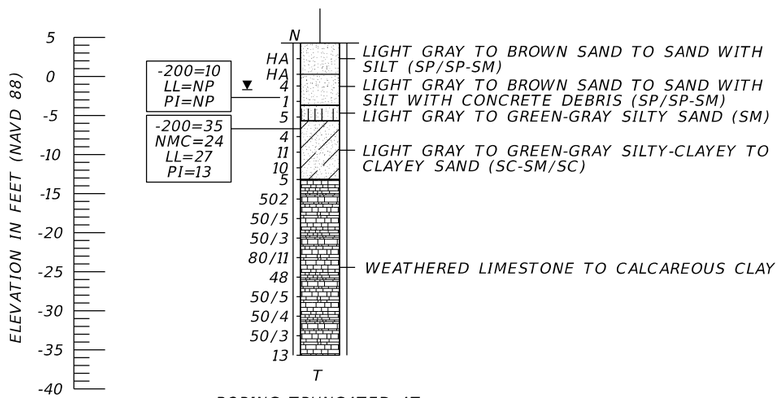
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

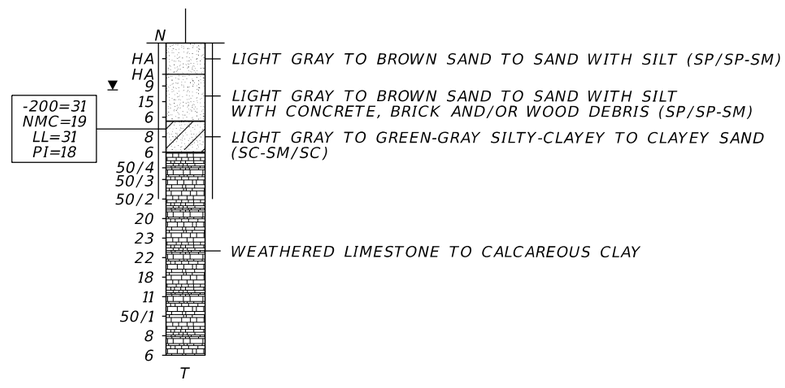
BOR # B-VIA-25
STA. 550+63
REF. ℄ SELMON
OFF. 8' RT.
ELEV. 4.3
DATE 6/2/2022
DRILLER R. SCRUGGS
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -60.7 FT (NAVD 88)

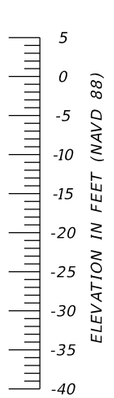
LATITUDE: N 27.94299
LONGITUDE: W 82.45963

BOR # B-VIA-2
STA. 550+75
REF. ℄ SELMON
OFF. 98' RT.
ELEV. 4.3'
DATE 3/23/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -35.7 FT (NAVD 88)

LATITUDE: N 27.94275
LONGITUDE: W 82.45958



	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY:	BJS
CHECKED BY:	DN
DESIGNED BY:	BJS
CHECKED BY:	KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

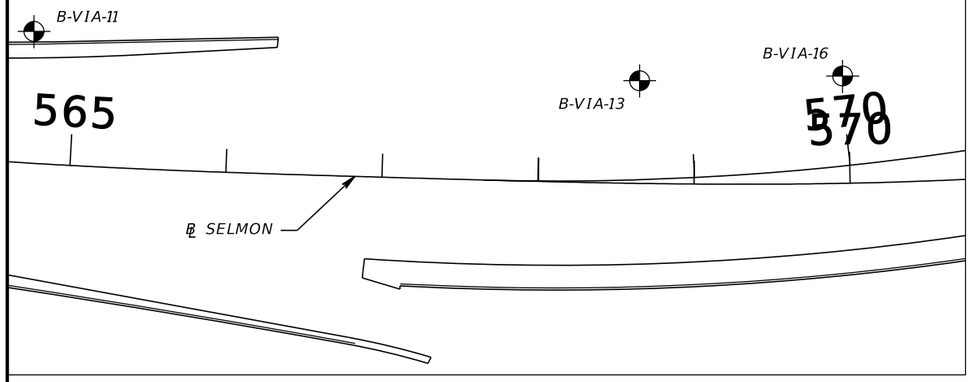
ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (57)

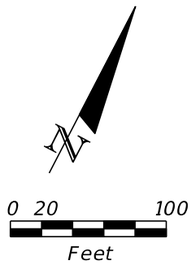
REF. DWG. NO.:

PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.:



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

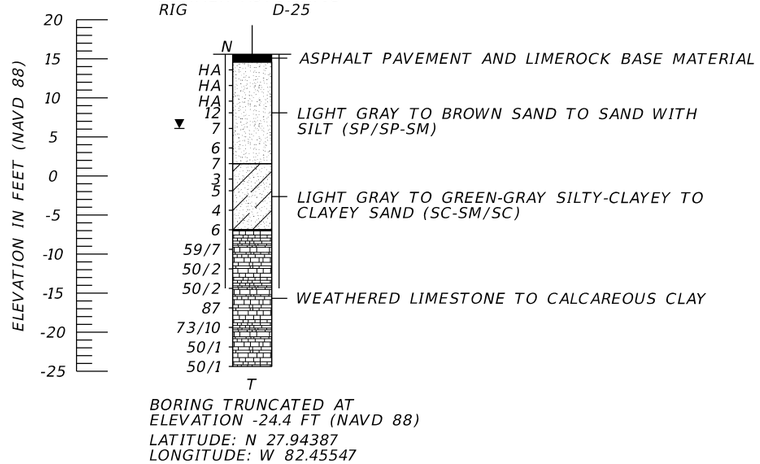
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
⇦100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
||	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

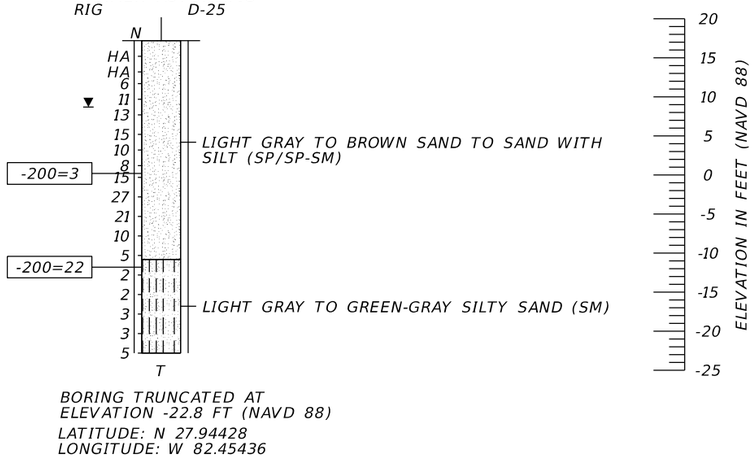
BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-VIA-11
STA. 564+72
REF. ℄ SELMON
OFF. 84' LT.
ELEV. 15.6'
DATE 4/1/2022
DRILLER J. SHAW
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -24.4 FT (NAVD 88)
LATITUDE: N 27.94387
LONGITUDE: W 82.45547

BOR # B-VIA-13
STA. 568+67
REF. B/L CROSSTOWN2
OFF. 63' LT.
ELEV. 17.2'
DATE 4/1/2022
DRILLER K. CAUDILL
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -22.8 FT (NAVD 88)
LATITUDE: N 27.94428
LONGITUDE: W 82.45436

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

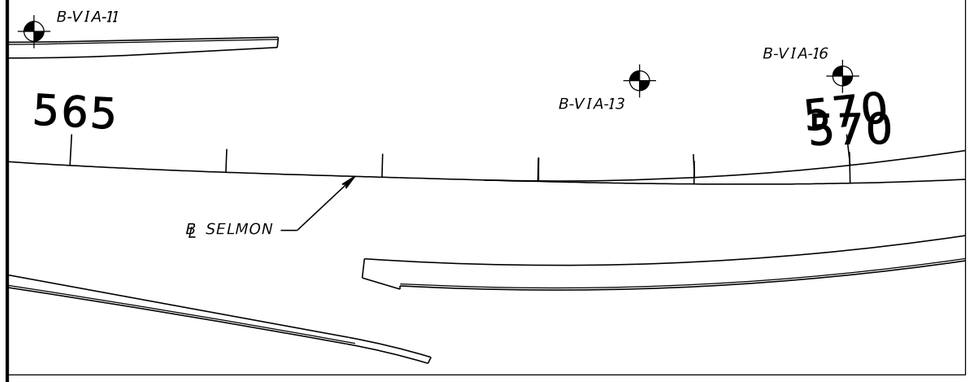
SHEET TITLE: RETAINING WALLS (58)

REF. DWG. NO.

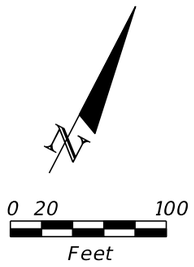
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

SHEET NO.

bgarcia 7/18/2022 2:47:41 PM J:\6511\2021 Files\6511-21-169 THEA Master HNTB\TWO 7_South Selmon Drilling\Microstation\Geotec



BORING LOCATION PLAN



LEGEND

- SAND TO SAND WITH SILT (SP/SP-SM)
- SILTY SAND (SM)
- CLAYEY SAND (SC)
- SANDY CLAY TO CLAY (CL/CH)
- WEATHERED LIMESTONE TO CALCAREOUS CLAY
- ORGANIC SILTY SAND TO SANDY SILT (Pt)
- SANDY SILT TO SILT (ML/MH)
- ASPHALT PAVEMENT AND LIMEROCK BASE MATERIAL

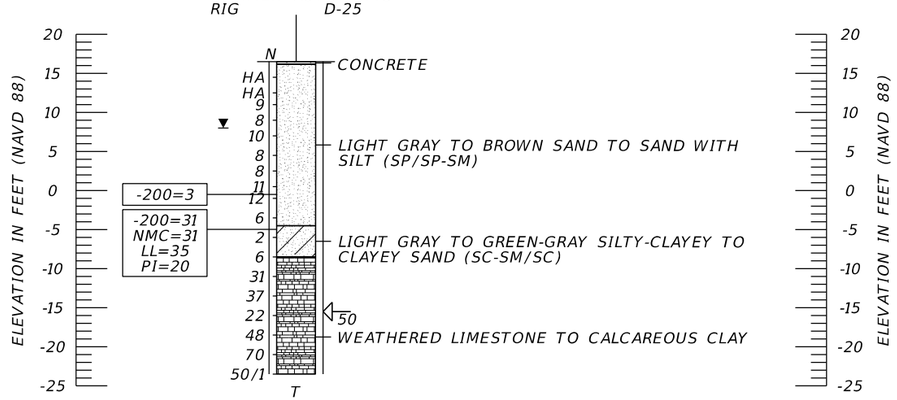
SP	UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2487) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
N	NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED).
50/4	NUMBER OF BLOWS FOR 4 INCHES OF PENETRATION
HA	HAND AUGERED TO VERIFY UTILITY CLEARANCE
WH	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD AND HAMMER
WR	SPLIT-SPOON SAMPLER ADVANCED UNDER WEIGHT OF ROD
-200	PERCENT PASSING #200 SIEVE
NMC	NATURAL MOISTURE CONTENT (%)
LL	LIQUID LIMIT (%)
PI	PLASTICITY INDEX (%)
OC	ORGANIC CONTENT (%)
NP	NON-PLASTIC
NAVD 88	NORTH AMERICAN VERTICAL DATUM OF 1988
⊕	APPROXIMATE SPT BORING LOCATION
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
GNA	GROUNDWATER NOT APPARENT DUE TO THE INTRODUCTION OF DRILLING FLUID.
T	BORING TRUNCATED. REFER TO BRIDGE REPORT OF CORE BORINGS FOR FULL DEPTH
▮	SHELBY TUBE SAMPLE
◁100	LOSS OF CIRCULATION OF DRILLING FLUID (%)
‖ ‖	CASING

℄ SELMON BASELINE SURVEY OF SELMON EXPRESSWAY

NOTE:

BORING LOCATIONS AND ELEVATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

BOR # B-VIA-16
STA. 570+01
REF. ℄ SELMON
OFF. 57' LT.
ELEV. 16.5
DATE 4/2/2022
DRILLER I. POORAN
HAMMER AUTOMATIC
RIG D-25



BORING TRUNCATED AT
ELEVATION -23.5 FT (NAVD 88)

LATITUDE: N 28.94446
LONGITUDE: W 82.45401

	SAFETY HAMMER	AUTOMATIC HAMMER
GRANULAR MATERIALS- RELATIVE DENSITY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY LOOSE	LESS THAN 4	LESS THAN 3
LOOSE	4 to 10	3 to 8
MEDIUM DENSE	10 to 30	8 to 24
DENSE	30 to 50	24 to 40
VERY DENSE	GREATER THAN 50	GREATER THAN 40
SILTS AND CLAYS CONSISTENCY	SPT N-VALUE (BLOWS/FT.)	SPT N-VALUE (BLOWS/FT.)
VERY SOFT	LESS THAN 2	LESS THAN 1
SOFT	2 to 4	1 to 3
FIRM	4 to 8	3 to 6
STIFF	8 to 15	6 to 12
VERY STIFF	15 to 30	12 to 24
HARD	GREATER THAN 30	GREATER THAN 24

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

DRAWN BY: BJS
CHECKED BY: DN
DESIGNED BY: BJS
CHECKED BY: KHS

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

SHEET TITLE: RETAINING WALLS (59)

REF. DWG. NO.:

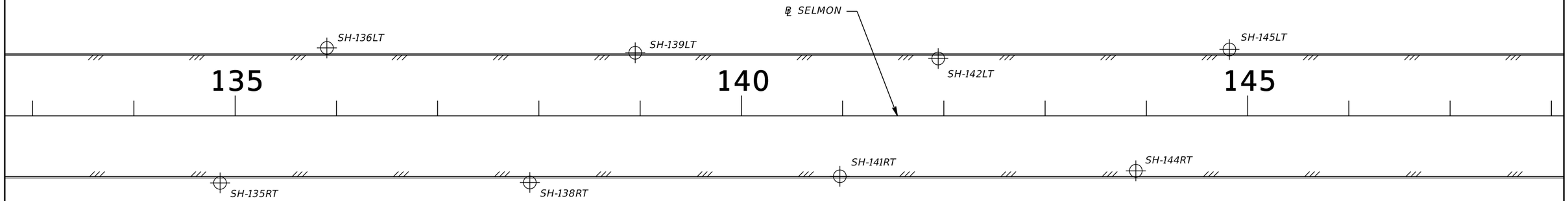
PROJECT NAME: SOUTH SELMON EXPRESSWAY IMPROVEMENTS FROM HIMES AVENUE TO WHITING STREET

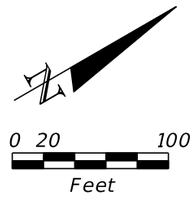
SHEET NO.:

APPENDIX O

Roadway Boring Location Plan

Roadway Soil Profiles





LEGEND

⊕ APPROXIMATE AUGER BORING LOCATION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

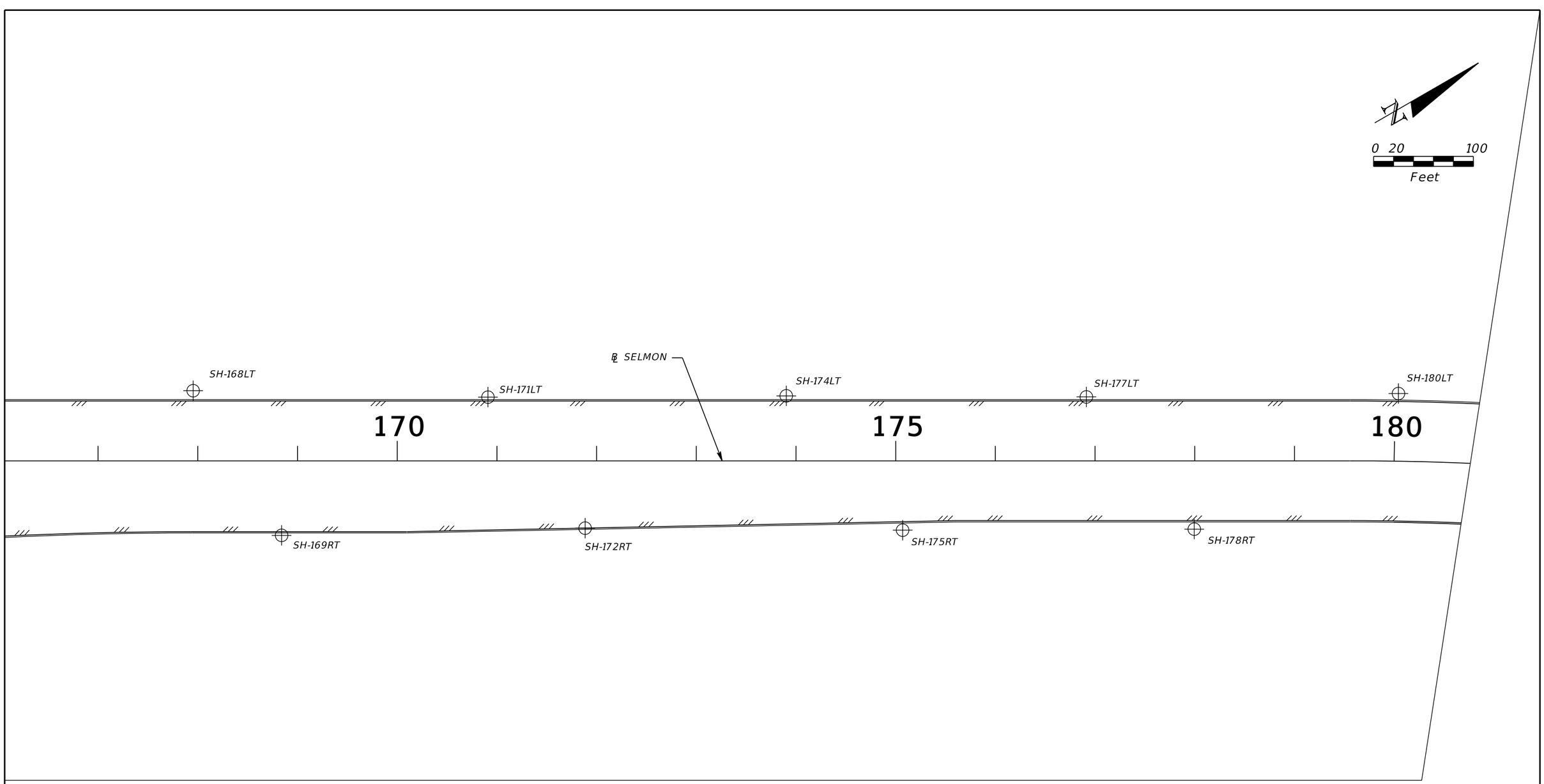
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

BORING LOCATION PLAN (1)

SHEET NO.



LEGEND

APPROXIMATE AUGER BORING LOCATION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

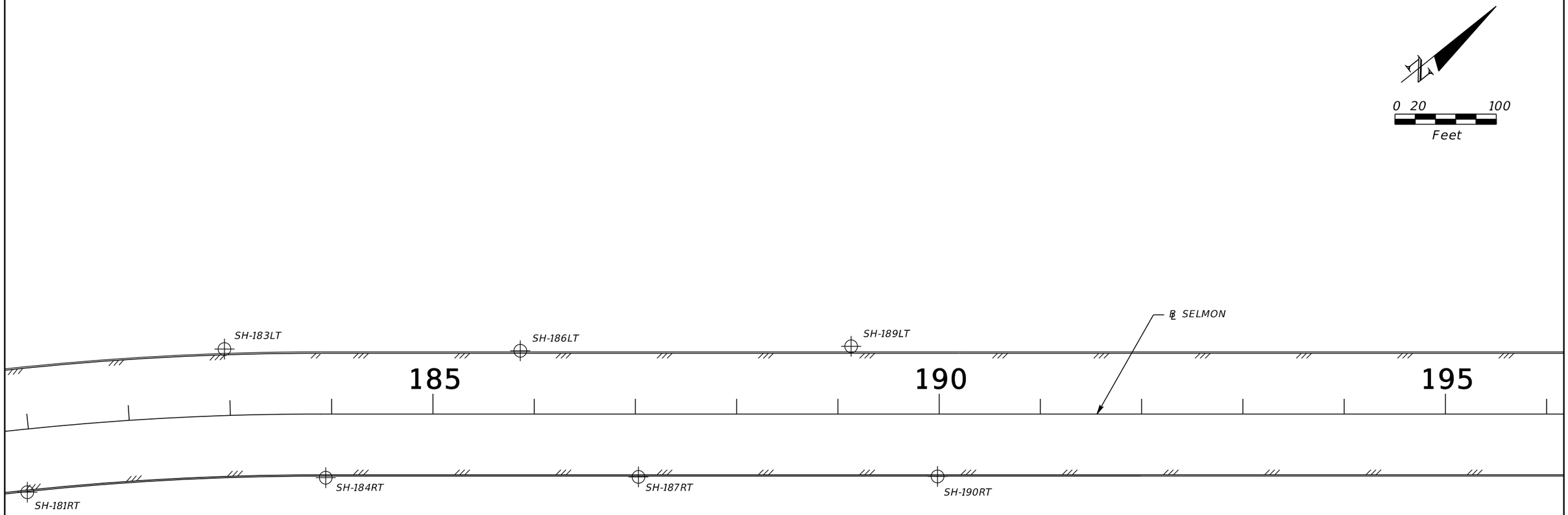
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

BORING LOCATION PLAN (2)

SHEET NO.



LEGEND

⊕ APPROXIMATE AUGER BORING LOCATION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

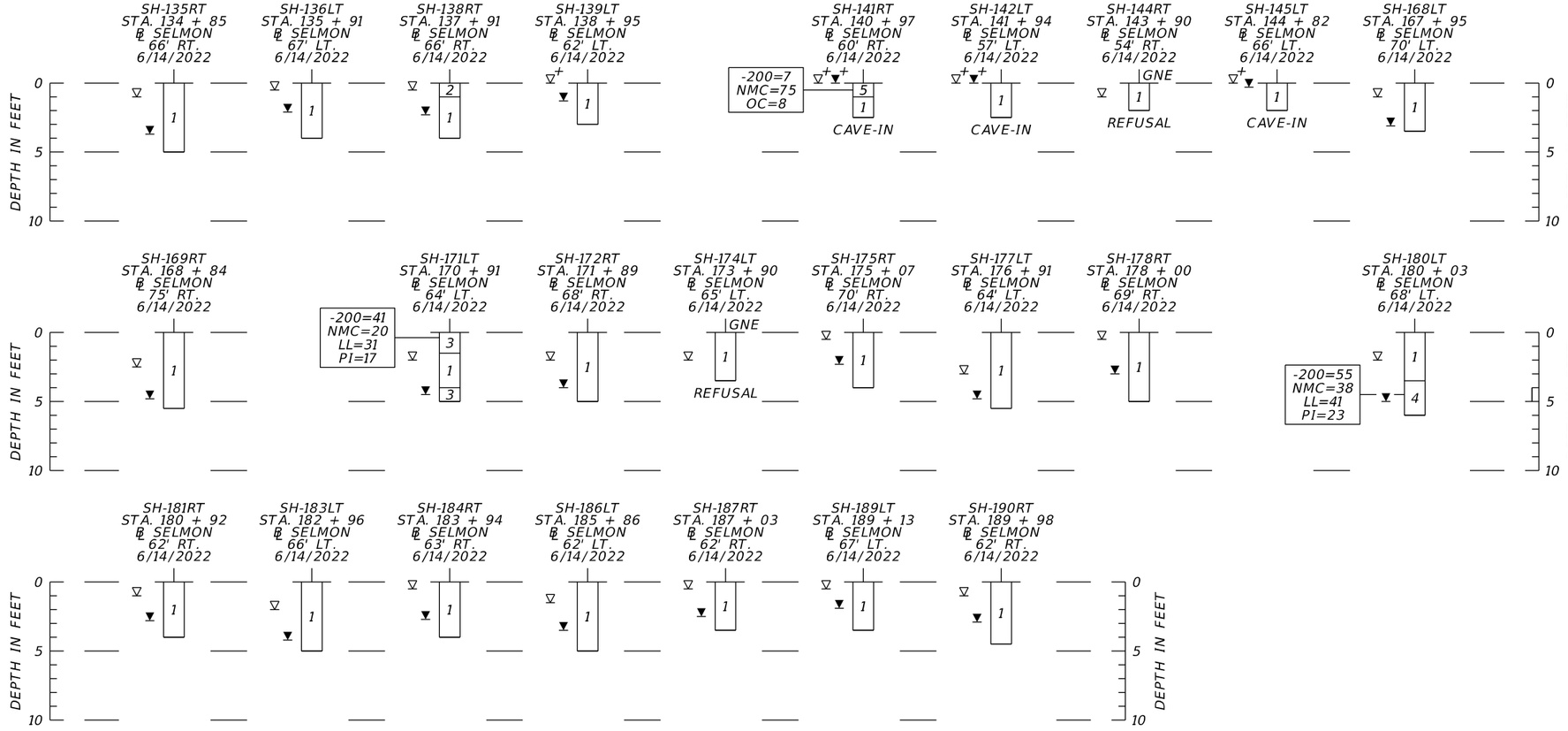
KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

BORING LOCATION PLAN (3)

SHEET NO.



LEGEND

1.	GRAY TO BROWN SAND TO SAND WITH SILT (A-3)
2.	BROWN SILTY SAND (A-2-4)
3.	GRAY TO ORANGE-GRAY CLAYEY SAND TO SANDY CLAY (A-2-6/A-6)
4.	ORANGE-GRAY SANDY CLAY TO CLAY (A-7-6)
5.	DARK BROWN ORGANIC SAND (A-8)
A-3	AASHTO GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW.
▽	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE
▽+	ESTIMATED SEASONAL HIGH GROUNDWATER TABLE IS ABOVE EXISTING GRADE
▼	GROUNDWATER LEVEL ENCOUNTERED DURING FIELD EXPLORATIONS
▼+	GROUNDWATER TABLE ENCOUNTERED ABOVE EXISTING GRADE
GNE	GROUNDWATER NOT ENCOUNTERED
CAVE-IN	CAVE-IN DUE TO SHALLOW GROUNDWATER INTRUSION
REFUSAL	REFUSAL DUE TO CONCRETE
℄ SELMON	BASELINE SURVEY OF SELMON EXPRESSWAY
NOTE:	BORING LOCATIONS WERE PROVIDED BY THE PROJECT SURVEYOR.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

KEVIN H. SCOTT, P.E.
P.E. LICENSE NUMBER 65514
TIERRA, INC.
7351 TEMPLE TERRACE HIGHWAY
TAMPA, FLORIDA 33637

TAMPA HILLSBOROUGH EXPRESSWAY AUTHORITY

ROAD NO.	COUNTY	THEA PROJECT NO.
SR 618	HILLSBOROUGH	HI-0012

ROADWAY SOIL PROFILES

SHEET NO.

APPENDIX P

Summary of Roadway Seasonal High Groundwater Table Estimates

Summary of Roadway Seasonal High Groundwater Table Estimates
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007

Boring Name	Boring Location[1]				Surveyed Ground Elevation[1] (feet, NAVD 88)	Boring Depth[2] (feet)	Measured Groundwater Table			USDA Soil Survey		Estimated SHGWT[4]	
	FL State Plane West		B/L Selmon				Date Recorded	Depth[2] (feet)	Elevation (feet, NAVD 88)	Map Symbol	Estimated SHGWT[3] Depth (feet)	Depth (feet)	Elevation (feet, NAVD 88)
	Northing	Easting	Station (feet)	Offset (feet)									
B/L SELMON 136+00 TO 145+00 (LEFT)													
SH-136LT	1301820	495773	135 + 91	67' LT	14.5	4.0	6/14/2022	2.1	12.4	34	0.5-1.5	0.5	14.0
SH-139LT	1302082	495929	138 + 95	62' LT	14.8	3.0	6/14/2022	1.3	13.5	34	0.5-1.5	ABG[6]	>14.8
SH-142LT	1302338	496083	141 + 94	57' LT	16.4	2.5	6/14/2022	ABG[6]	>16.4	34	0.5-1.5	ABG[6]	>16.4
SH-145LT	1302592	496219	144 + 82	66' LT	14.8	2.0	6/14/2022	0.3	14.6	32/34	0.5-1.5	ABG[6]	>14.8
B/L SELMON 136+00 TO 145+00 (RIGHT)													
SH-135RT	1301662	495835	134 + 85	66' RT	15.3	5.0	6/14/2022	3.7	11.6	34	0.5-1.5	1.0	14.3
SH-138RT	1301928	495988	137 + 91	66' RT	15.6	4.0	6/14/2022	2.3	13.3	34	0.5-1.5	0.5	15.1
SH-141RT	1302196	496135	140 + 97	60' RT	16.1	2.5	6/14/2022	ABG[6]	>16.1	34	0.5-1.5	ABG[6]	16.1
SH-144RT	1302452	496277	143 + 90	54' RT	17.0	2.0	6/14/2022	GNE[5]	<15.0	34	0.5-1.5	1.0	16.0
B/L SELMON 168+00 TO 190+00 (LEFT)													
SH-168LT	1304598	497371	167 + 95	70' LT	13.0	3.5	6/14/2022	3.1	9.9	32	0.5-1.5	1.0	12.0
SH-171LT	1304851	497524	170 + 91	64' LT	13.0	5.0	6/14/2022	4.5	8.5	32	0.5-1.5	2.0	11.0
SH-174LT	1305111	497672	173 + 90	65' LT	12.9	3.5	6/14/2022	GNE[5]	<9.4	32	0.5-1.5	2.0	10.9
SH-177LT	1305371	497824	176 + 91	64' LT	13.8	5.5	6/14/2022	4.8	9.0	32	0.5-1.5	3.0	10.8
SH-180LT	1305644	497977	180 + 03	68' LT	14.7	6.0	6/14/2022	5.0	9.7	32	0.5-1.5	2.0	12.7
SH-183LT	1305892	498146	182 + 96	66' LT	15.7	5.0	6/14/2022	4.2	11.5	32	0.5-1.5	2.0	13.7
SH-186LT	1306119	498330	185 + 86	62' LT	15.3	5.0	6/14/2022	3.5	11.8	32	0.5-1.5	1.5	13.8
SH-189LT	1306376	498531	189 + 13	67' LT	15.4	3.5	6/14/2022	1.9	13.5	32	0.5-1.5	0.5	14.9
B/L SELMON 168+00 TO 190+00 (RIGHT)													
SH-169RT	1304603	497541	168 + 84	75' RT	13.8	5.5	6/14/2022	4.8	9.0	32	0.5-1.5	2.5	11.3
SH-172RT	1304870	497686	171 + 89	68' RT	13.3	5.0	6/14/2022	4.0	9.3	32	0.5-1.5	2.0	11.3
SH-175RT	1305145	497847	175 + 07	70' RT	9.5	4.0	6/14/2022	2.3	7.2	32	0.5-1.5	0.5	9.0
SH-178RT	1305399	497992	178 + 00	69' RT	12.1	5.0	6/14/2022	3.0	9.1	32	0.5-1.5	0.5	11.6
SH-181RT	1305651	498134	180 + 92	62' RT	13.8	4.0	6/14/2022	2.8	11.0	32	0.5-1.5	1.0	12.8
SH-184RT	1305890	498308	183 + 94	63' RT	14.7	4.0	6/14/2022	2.7	12.0	32	0.5-1.5	0.5	14.2
SH-187RT	1306132	498500	187 + 03	62' RT	15.8	3.5	6/14/2022	2.5	13.3	32	0.5-1.5	0.5	15.3
SH-190RT	1306363	498684	189 + 98	62' RT	17.4	4.5	6/14/2022	2.9	14.5	32	0.5-1.5	1.0	16.4

[1] Boring locations and elevation were provided by the Project Surveyor.

[2] Depth below existing grades at time of augering.

[3] Seasonal high groundwater table depth estimated based on the Hillsborough County, Florida USDA Soil Survey information.

[4] Seasonal high groundwater table depth estimated based on soil stratigraphy, measured groundwater levels from the borings, the Hillsborough County, Florida USDA Soil Survey information and past experience with similar soil conditions.

[5] GNE: Groundwater Not Encountered

[6] ABG: Measured groundwater table or estimated seasonal high groundwater table is above existing grade.

APPENDIX Q

Summary of Laboratory Testing Results for Environmental Classification

Summary of Laboratory Rock Core Strength Testing

Summary of Laboratory Corrosion Test Results
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No: 6511-21-169-007

Boring Number	Depth (feet)	pH (FM 5-550)	Resistivity (ohm-cm) (FM 5-551)	Chlorides (ppm) (FM 5-552)	Sulfates (ppm) (FM 5-553)	Environmental Classification[1]	
						Steel	Concrete
SR 618 EB/WB over Himes Ave - Bridge Nos 100308 & 100309							
B-HIMES-2	0.0 - 4.0	7.6	5,000	<5	<5	Moderately Aggressive	Slightly Aggressive
B-HIMES-3	0.0 - 4.0	7.9	8,800	<5	<5	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Euclid Ave - Bridge Nos 100310 & 100311							
B-EUCLID-1	0.0 - 4.0	7.5	12,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-EUCLID-3	0.0 - 4.0	7.7	24,000	15	<5	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over El Prado Blvd - Bridge Nos 100312 & 100313							
B-EL PRADO-1	0.0 - 4.0	6.3	3,000	45	<5	Moderately Aggressive	Moderately Aggressive
B-EL PRADO-2	0.0 - 4.0	7.6	4,300	15	63	Moderately Aggressive	Slightly Aggressive
SR 618 EB/WB over MacDill Ave/Bay to Bay Blvd - Bridge Nos 100314 & 100315							
B-MAC-1	0.0 - 4.0	8.2	20,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-MAC-4	0.0 - 4.0	8.6	23,000	15	<5	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Mississippi Ave - Bridge Nos 100316 & 100317							
B-MISS-1	0.0 - 2.0	7.7	28,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-MISS-1	2.0 - 4.0	7.7	23,000	30	<5	Slightly Aggressive	Slightly Aggressive
B-MISS-2	0.0 - 2.0	7.2	6,800	30	<5	Slightly Aggressive	Slightly Aggressive
B-MISS-2	2.0 - 4.0	7.6	9,200	15	<5	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Howard Ave/Watrous Ave - Bridge Nos 100318 & 100319							
B-WATROUS-1	0.0 - 2.0	7.2	14,000	15	27	Slightly Aggressive	Slightly Aggressive
B-WATROUS-2	0.0 - 2.0	7.5	14,000	30	<5	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Morrison Ave - Bridge Nos 100320 & 100321							
B-MORRISON-1	0.0 - 2.0	6.9	14,000	30	<5	Moderately Aggressive	Slightly Aggressive
B-MORRISON-1	2.0 - 4.0	8.1	10,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-MORRISON-2	0.0 - 2.0	8.2	11,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-MORRISON-2	2.0 - 4.0	8.1	14,000	15	12	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Swann Ave - Bridge Nos 100322 & 100323							
B-SWANN-1	2.0 - 6.0	7.1	28,000	45	<5	Slightly Aggressive	Slightly Aggressive
B-SWANN-2	2.0 - 6.0	6.8	4,800	90	171	Moderately Aggressive	Slightly Aggressive
SR 618 EB/WB over Platt Street - Bridge Nos 100324 & 100325							
PLATT-1	0.0 - 4.0	8.1	18,000	15	36	Slightly Aggressive	Slightly Aggressive
PLATT-2	0.0 - 4.0	8.8	18,000	15	45	Slightly Aggressive	Slightly Aggressive
SR 618 EB/WB over Willow Ave - Bridge Nos 100326 & 100327							
B-WILLOW-2	0.0 - 4.0	7.0	7,100	15	<5	Moderately Aggressive	Slightly Aggressive
SR 618 EB/WB over South Boulevard - Bridge Nos 100328 & 100329							
B-BLVD-1	0.0 - 4.0	7.5	4,900	30	<5	Moderately Aggressive	Slightly Aggressive
B-BLVD-2	0.0 - 4.0	8.0	4,700	15	<5	Moderately Aggressive	Slightly Aggressive
SR 618 EB/WB over Hyde Park Ave/Plant Ave - Bridge Nos 100330 & 100331							
B-HYDE PARK-1	2.0 - 6.0	6.9	20,000	30	<5	Moderately Aggressive	Slightly Aggressive
B-HYDE PARK-4	6.0 - 8.0	6.8	21,000	15	<5	Moderately Aggressive	Slightly Aggressive
B-HYDE PARK-6	4.0 - 8.0	6.8	3,900	90	15	Moderately Aggressive	Slightly Aggressive
SR 618 EB/WB over Hillsborough River/Downtown Viaduct - Bridge Nos 100332 & 100333							
B-VIA-7	2.0 - 6.0	8.2	27,000	15	<5	Slightly Aggressive	Slightly Aggressive
B-VIA-17	2.0 - 6.0	6.7	8,700	30	<5	Moderately Aggressive	Slightly Aggressive
Hillsborough River - Water							
---	Water	7.2	300	15000	3900	Extremely Aggressive	Extremely Aggressive
---	Water	7.7	300	20000	3700	Extremely Aggressive	Extremely Aggressive
Tampa Bay - Water							
---	Water	7.5	260	20000	3700	Extremely Aggressive	Extremely Aggressive

[1] As per FDOT Structures Design Guidelines

Summary of Laboratory Rock Core Strength Testing
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No: 6511-21-169-007

Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-HIMES-3	45 - 50	100.0	48.3	C	117.9	1478	
				E	105.4	1739	
				E	108.2		265
				I	103.3		332
	55 - 60	91.7	0.0	A	95.3		190
				C	109.0		364
B-EUCLID-1	20 - 25	82.5	68.3	B	115.4	893	
				B	109.6		210
				D	120.9	564	
				E	107.0		162
	50 - 55	100.0	35.8	A	150.3		597
				B	128.1	644	
				E	132.7		66
				G	128.9	519	
B-EUCLID-2	40 - 45	66.7	30.0	A	84.3	122	
				H	119.1	292	
				H	109.4		93
	65 - 70	100.0	43.3	B	127.7		226
				D	114.0	562	
				H	112.4	167	
				I	140.6		532
B-EUCLID-3	20 - 25	86.7	75.8	A	136.3	1688	
				C	125.5		307
				F	116.1	869	
				G	143.8		636
	50 - 55	85.0	76.7	A	116.1	943	
				A	117.4		242
				D	126.3	883	
				D	131.2		303
B-EL PRADO-2	30 - 35	91.7	80.8	A	149.4		353
				D	164.5	4372	
				G	119.6		73
				I	155.6	2758	
	60 - 65	90.0	50.5	E	133.9	365	
				G	98.4		128
				H	121.0	1086	
				K	111.9		163

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Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-MAC-1	25 - 30	96.7	10.0	B	128.2		318
				I	118.7		148
				L	129.0	370	
	55 - 60	100.0	26.7	D	146.7		796
				H	130.8	5986	
				K	152.6		896
B-MAC-3	40 - 45	100.0	50.8	D	128.5		421
				F	122.1	1538	
				G	117.4		300
				G	109.2	658	
	55 - 60	100.0	7.5	C	116.2		286
				D	114.2		154
				E	131.3	782	
B-MAC-4	40 - 45	80.0	18.3	D	113.2		347
				F	152.3	1676	
				G	149.0		925
	55 - 60	100.0	40.0	B	136.7		2460
				C	136.1	628	
				D	119.5		131
				I	123.3	1509	
B-MISS-1	30 - 35	58.3	53.3	B	119.0		406
				B	137.7	3618	
				C	122.8		343
				E	119.3	753	
	45 - 50	95.0	41.6	B	119.6		222
				D	116.9	634	
				H	119.3		251
				H	123.2	553	
B-MISS-3	60 - 65	73.3	30.0	D	116.3		196
				G	122.3	1212	606
	70 - 75	77.8	36.1	A	121.1	1404	
				B	137.8		433
B-MISS-4	44 - 49	73.3	53.3	B	127.1		233
				F	122.2	1592	
	50 - 55	67.5	31.7	D	136.2		390
				H	142.1	1198	
B-MISS-5	45 - 50	83.3	36.7	A	117.1	472	
				D	128.5		264
				I	142.6		724
	60 - 65	71.7	21.7	C	122.9		232
				F	135.4		554
B-MISS-6	60 - 63	88.9	26.4	D	147.0	1714	
				G	134.7		761
	68 - 73	88.3	31.7	F	169.7		178
				H	125.5	1189	

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South Selmon Expressway Improvements from Himes Avenue to Whiting Street
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Tierra Project No: 6511-21-169-007

Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-WATROUS-2	30 - 35	93.3	42.5	A	127.1	733	
				B	126.1		522
				D	120.5		203
				E	112.2	392	
	55 - 60	100.0	28.3	A	122.3		409
				B	140.6	1397	
				C	138.3	1362	
B-MORRISON-2	30 - 35	93.3	66.7	D	99.1		55
				I	100.6		47
				K	95.5	137	
	55 - 60	100.0	39.1	B	134.8		457
				C	120.3	957	
				E	141.9	539	
				E	144.8		364
B-SWANN-1	45 - 50	28.3	9.2	B	137.5		482
				C	124.7	869	
				H	138.1	1127	
	60 - 65	49.2	21.7	A	102.7	232	
				D	132.1		924
				E	137.3		197
B-PLATT-1	45-50	58.0	0.0	---	---	---	---
	55 - 60	100.0	58.0	A	124.9	568	
				F	137.8		395
				G	137.9	1214	
				I	121.8		294
B-PLATT-3	35 - 40	100.0	37.5	A	128.1		387
				B	130.5	453	
				E	125.8		302
				H	128.3	512	
	50 - 53	33.0	0.0	---	---	---	---
B-WILLOW-2	45 - 50	76.7	6.7	D	131.4		597
				F	135.3		555
	65 - 70	100.0	15.0	E	169.2	1896	
				F	139.9		1102
				G	85.6		82
B-WILLOW-3	35 - 40	85.0	0.0	A	134.5		739
				B	134.5		301
	45 - 50	83.3	45.0	A	111.6	361	
				C	92.1		97
				H	100.2		51
B-BLVD-2	30 - 35	68.3	25.0	C	136.7		428
				D	148.6		607
				E	134.0	515	
	45 - 50	96.7	0.0	A	105.1		133
				B	114.7		65

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Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-HYDE PARK-1	30 - 35	46.7	0.0	B	123.8		130
				D	107.7		68
	55 - 60	100.0	N/A	D	117.6		129
				I	107.9		142
				J	107.2		54
B-HYDE PARK-4	25 - 30	65.0	27.5	A	121.9	395	
				D	114.6		246
				F	111.5		300
				H	88.3	353	
	80 - 85	100.0	46.7	C	107.4		520
				D	104.7	1454	
				F	114.7		485
				G	125.6	348	
B-HYDE PARK-6	25 - 30	45.0	0.0	A	118.5		84
				D	114.7		64
	75 - 80	73.3	55.2	A	142.5	1799	
				A	141.4		820
				B	157.6		1380
				D	164.4	4503	
				D	149.5		1146
				E	113.4	441	
				E	119.8		159
				F	122.1	573	
B-HR-1	22.5 - 27.5	100.0	57.5	C	142.5		593
				G	147.9	2244	
				H	136.9		351
				M	129.4	1281	
	55 - 60	100.0	25.0	B	140.9		227
				C	140.2	1026	
				G	121.4		167
				H	107.7	454	
B-HR-4	25 - 30	95.0	80.8	B	147.7		793
				B	153.9	5026	
				H	155.5	5041	
				I	150.6		373
	40 - 45	95.0	75.8	B	108.0		107
				D	111.9	959	
				I	136.9		303
				J	107.9	788	
B-HR-5	40 - 45	100.0	70.8	B	150.6		957
				D	150.7	2508	
	50 - 55	68.3	0.0	C	120.2		278

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Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-HR-6	30 - 35	90.0	27.5	C	146.0	2229	
				D	134.1		332
	50 - 55	81.7	10.0	A	105.6	514	
				B	112.2		112
B-HR-7	40 - 45	100.0	20.8	C	119.2		149
				D	131.9	1237	
	50 - 55	70.0	53.3	B	147.6	2207	
				E	140.4		390
B-VIA-4	30 - 35	48.3	32.5	A	108.1		117
				C	152.1	1815	
				D	143.3		615
				D	150.9	2149	
	40 - 45	21.7	15.0	C	153.6		763
				C	156.9	5013	
B-VIA-5	20 - 25	100.0	78.8	C	140.4	1006	
				C	128.6		479
				G	111.4		261
				J	123.5	906	
	35 - 40	40.0	0.0	---	---	---	---
B-VIA-10	47 - 52	100.0	23.3	E	124.6	497	
				F	136.6		663
				I	110.7		277
				K	111.4	103	
	60 - 65	81.7	0.0	F	111.0		64
				I	109.7		41
B-VIA-12	35 - 40	100.0	32.5	B	134.6	382	
				B	128.8		492
				F	121.9		312
	55 - 60	100.0	56.7	A	160.4		1216
				G	168.6	3026	
				H	169.3	3435	
				H	156.6		871
B-VIA-14	35 - 40	100.0	10.8	B	111.0	515	
	45 - 50	65.8	23.3	B	102.3		68
				G	155.5	5441	

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Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-VIA-15	35 - 40	80.0	25.8	C	118.0		61
				E	114.3	53	
				F	116.8		61
	50 - 55	100	82.5	E	108.4	93	
				F	122.5		202
				I	153.5	4178	
				I	154.5		1103
B-VIA-19	60 - 65	100.0	51.3	A	135.5		354
				D	137.5		221
				F	141.1	1174	
				J	138.5	1026	
	70 - 75	43.3	24.2	B	134.3	760	
				B	157.4		1830
				C	112.2		63
B-VIA-20	35-37.5	76.7	36.7	A	140.9		637
				B	126.3	678	
				C	136.9		352
	55 - 60	100.0	70.0	C	133.9	1692	
				F	136.0	2022	
				F	135.8		629
				G	119.8		178
B-VIA-21	30 - 35	71.7	26.7	E	90.2		75
				H	95.9		117
	40 - 45	41.7	19.2	A	158.8		524
				C	137.3	233	
B-VIA-23	50 - 55	81.7	81.7	B	116.4	842	
				B	119.7		325
				C	126.9	599	
				C	115.8		275
	60 - 65	91.7	40.4	B	143.6		612
				C	129.3	805	
				H	140.4	1207	
				I	129.8		183
B-VIA-24	35 - 40	21.7	0.0	A	121.5		260
	50 - 55	88.3	61.7	B	133.5		313
				E	111.5	584	
				G	133.3	813	
				G	135.4		551
B-VIA-25	45 - 50	60.8	28.3	C	157.5		389
				D	162.9	3207	
	50 - 55	82.5	62.5	A	145.8		271
				A	147.1	3757	
				F	140.6		231
				G	135.7	782	

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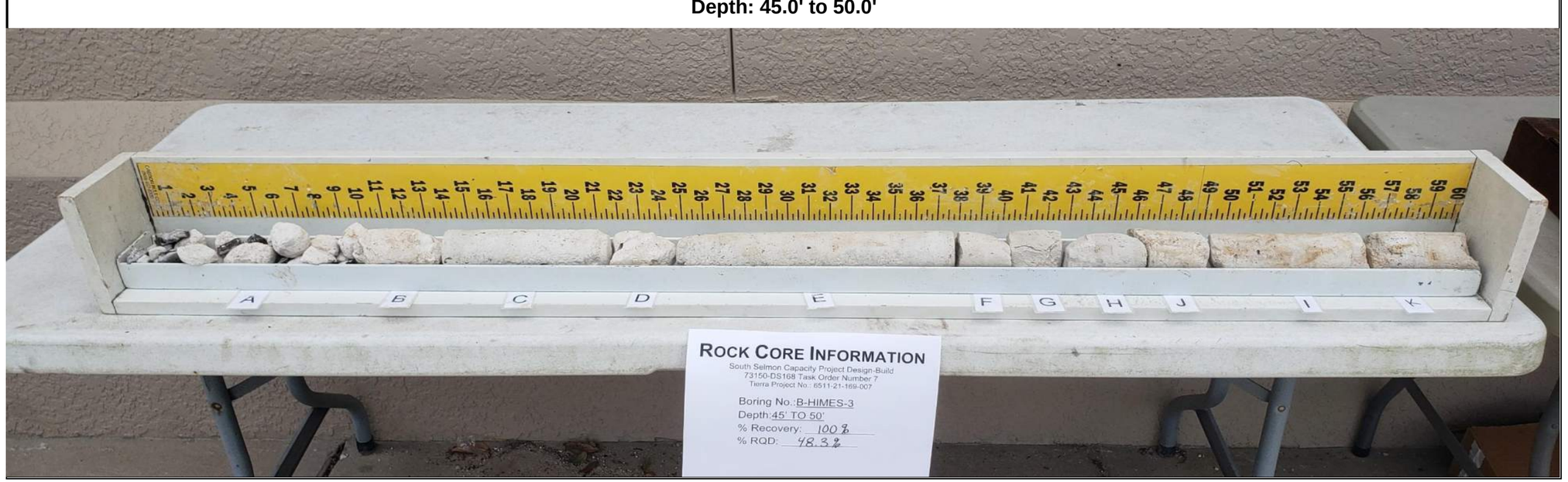
Boring Name	Depth (ft)	REC (%)	RQD (%)	Tested Sample Letter	Dry Unit Weight, γ_d (pcf)	Unconfined Compressive Strength, q_u (psi)	Splitting Tensile Strength, q_{st} (psi)
B-VIA-26	45 - 50	33.3	30.0	A	149.7		395
				A	149.3	1504	
	55 - 60	44.2	28.3	B	155.6		882
				C	155.0	3295	
				E	100.4		59
B-VIA-27	30 - 35	85.0	45.0	C	106.0	304	
				H	110.6		101
	50 - 55	86.7	47.5	J	114.2	702	
				H	120.4	1640	197

APPENDIX R

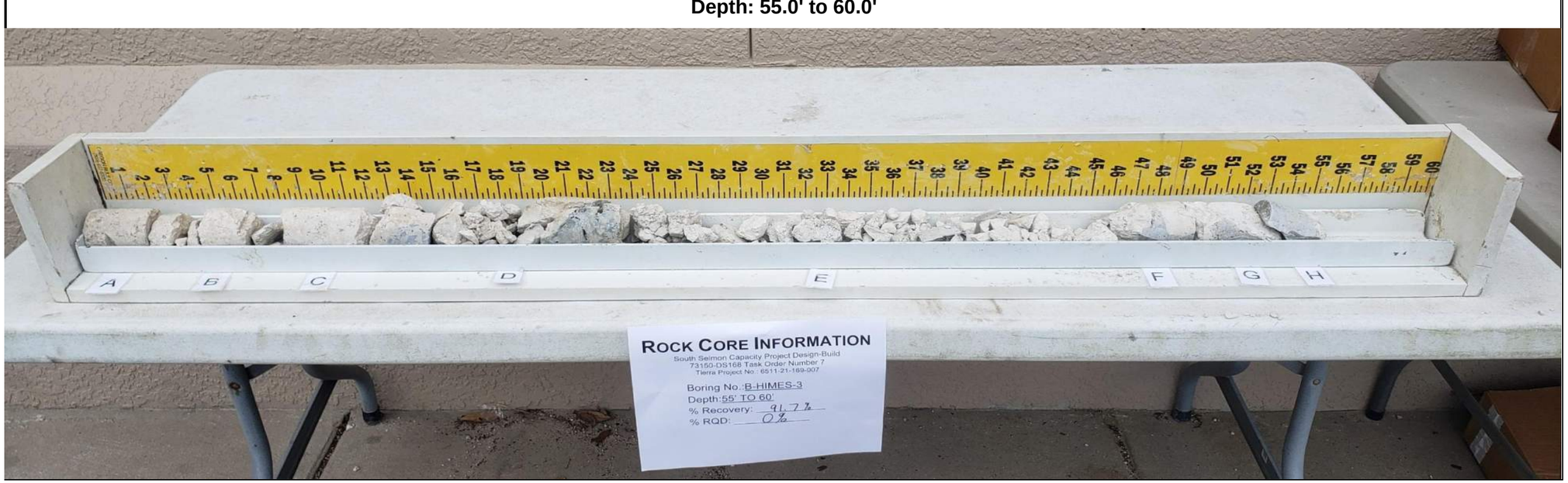
Rock Core Photographs

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HIMES-3
Depth: 45.0' to 50.0'



TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HIMES-3
Depth: 55.0' to 60.0'

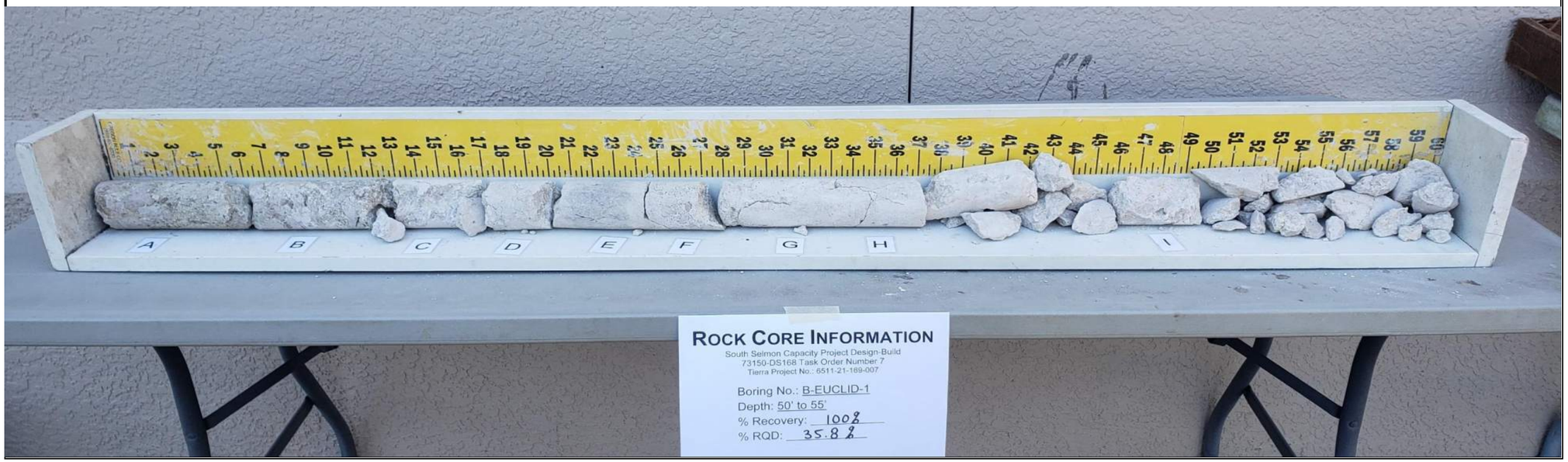


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

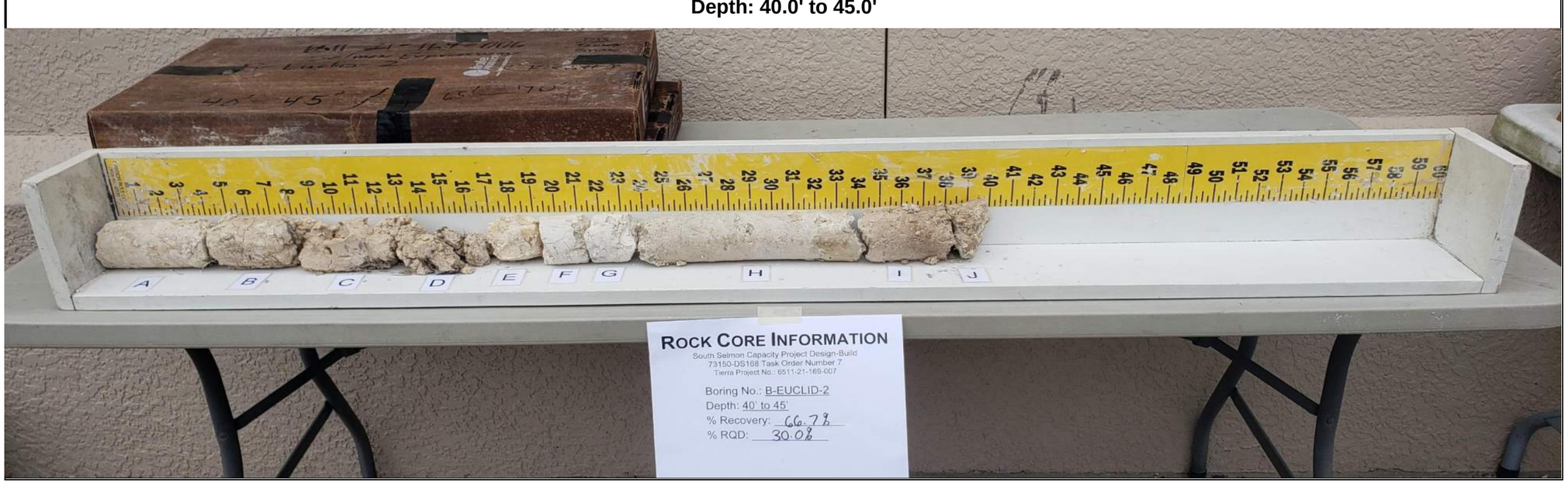
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-1
Depth: 20.0' to 25.0'

TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

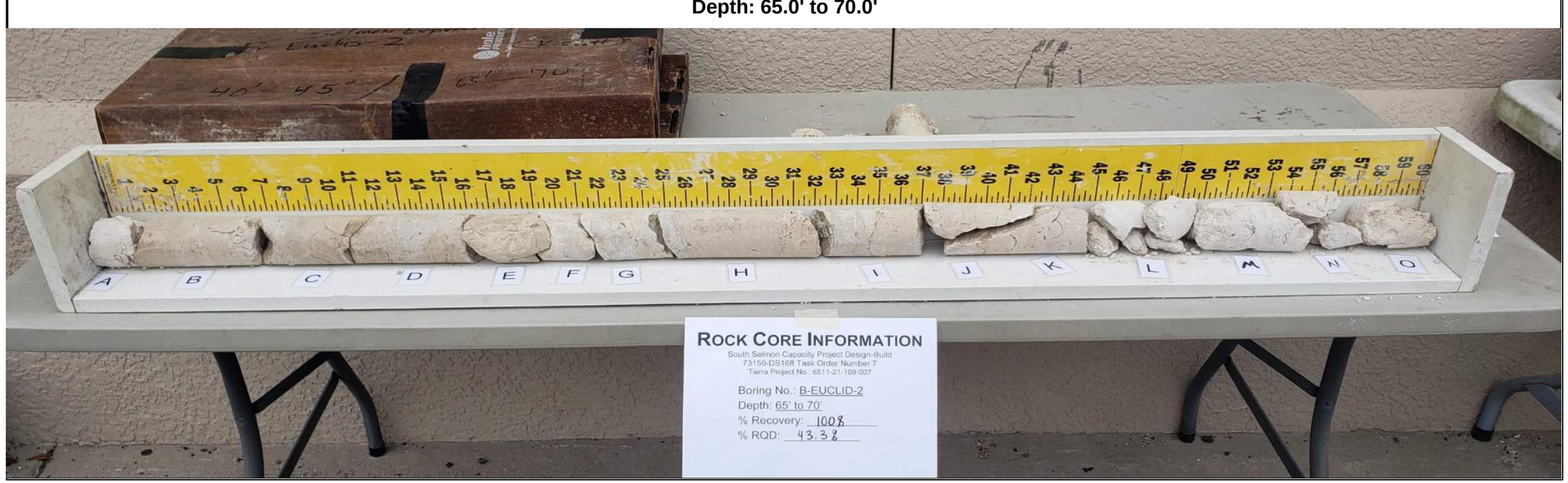
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-1
Depth: 50.0' to 55.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-2
Depth: 40.0' to 45.0'

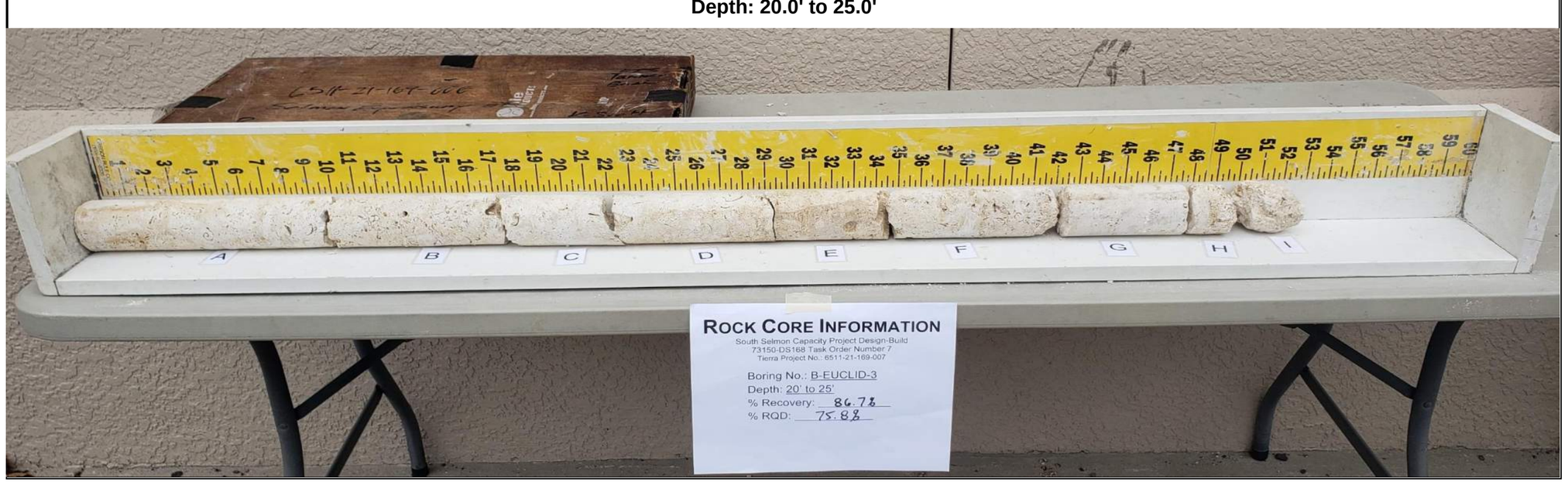


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-2
Depth: 65.0' to 70.0'

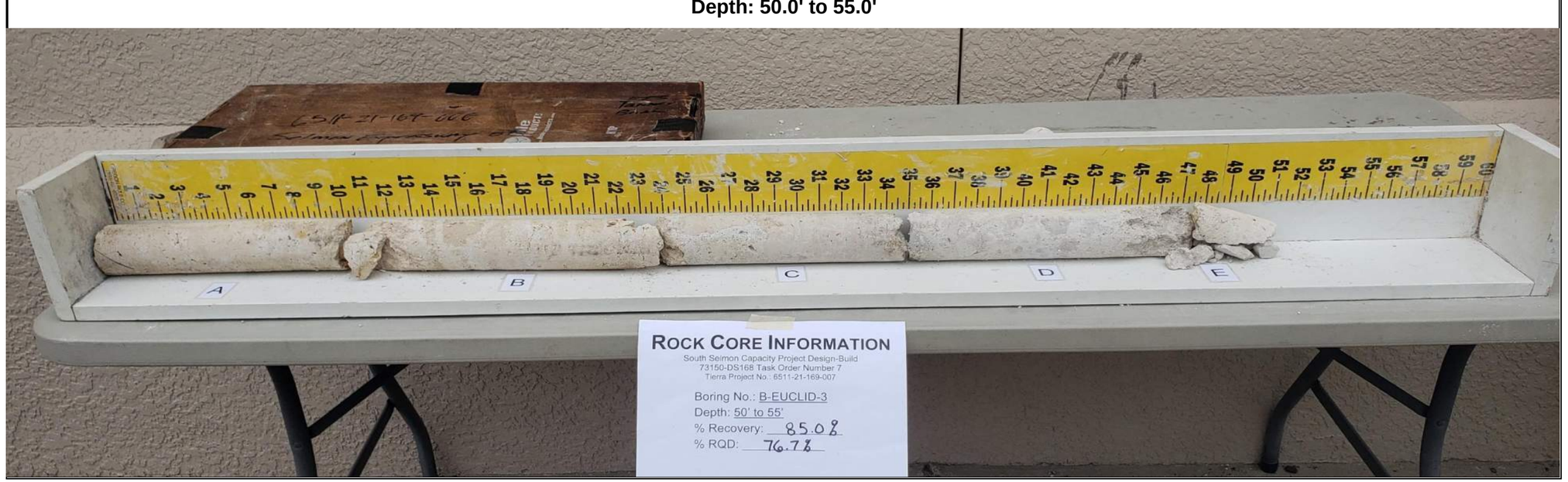


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-3
Depth: 20.0' to 25.0'

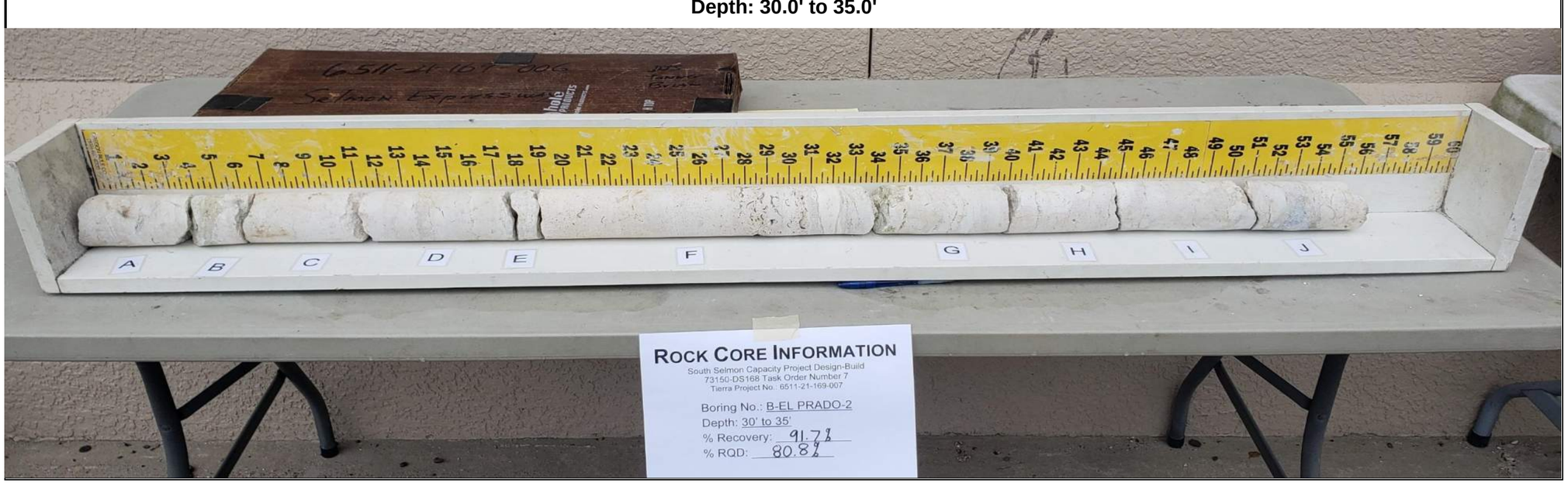


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EUCLID-3
Depth: 50.0' to 55.0'

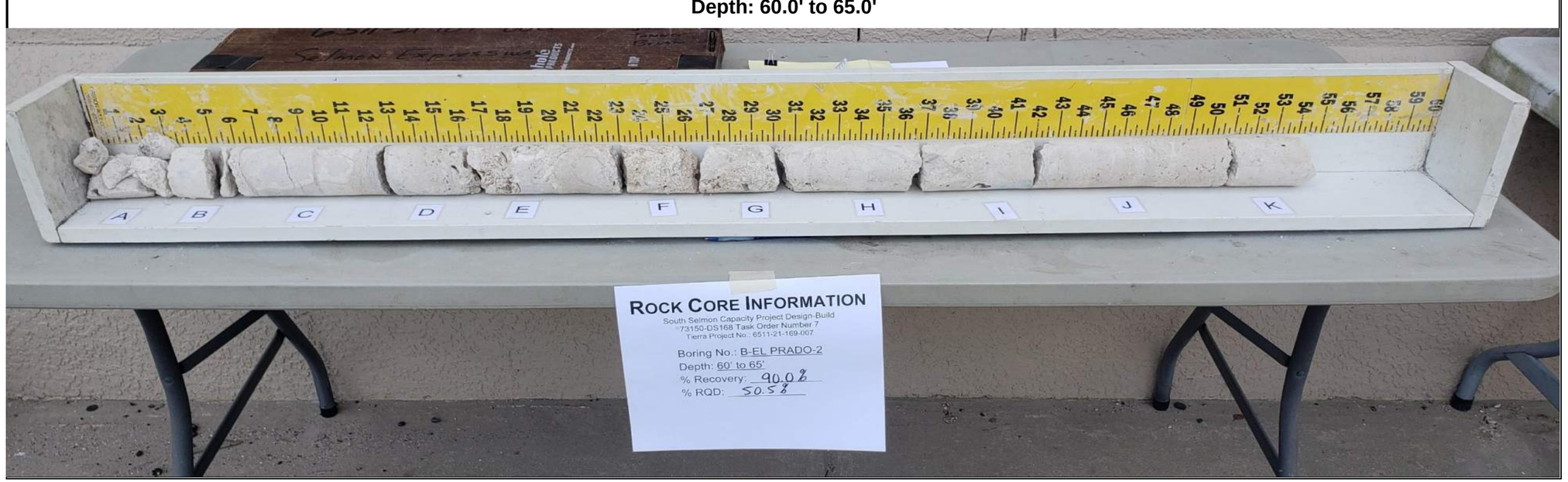


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EL PRADO-1
Depth: 30.0' to 35.0'

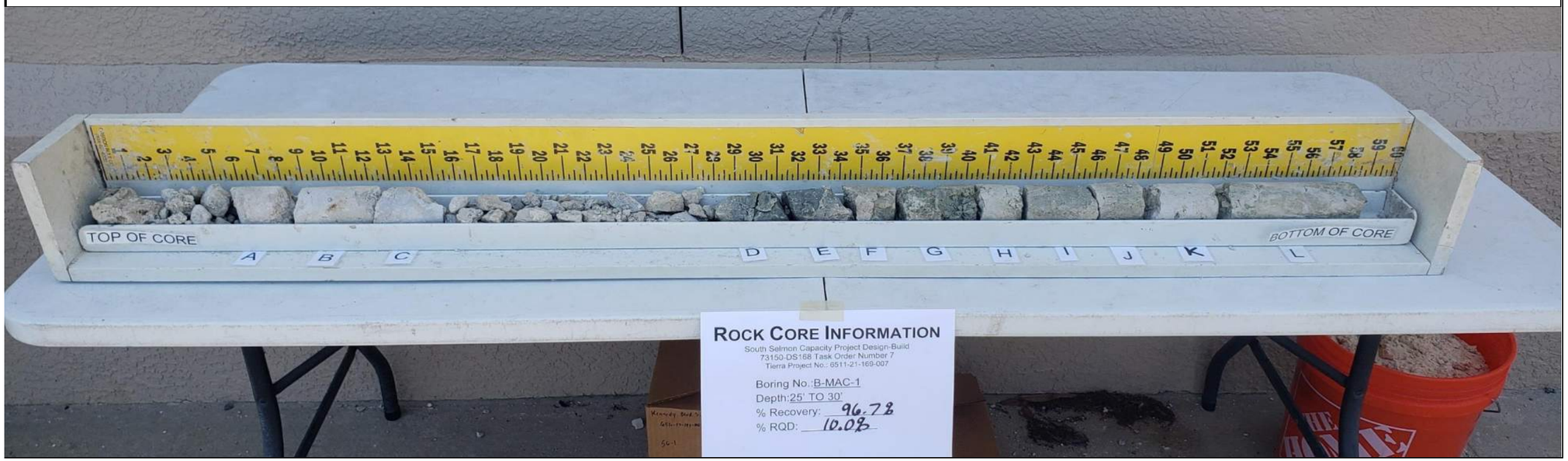


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-EL PRADO-1
Depth: 60.0' to 65.0'



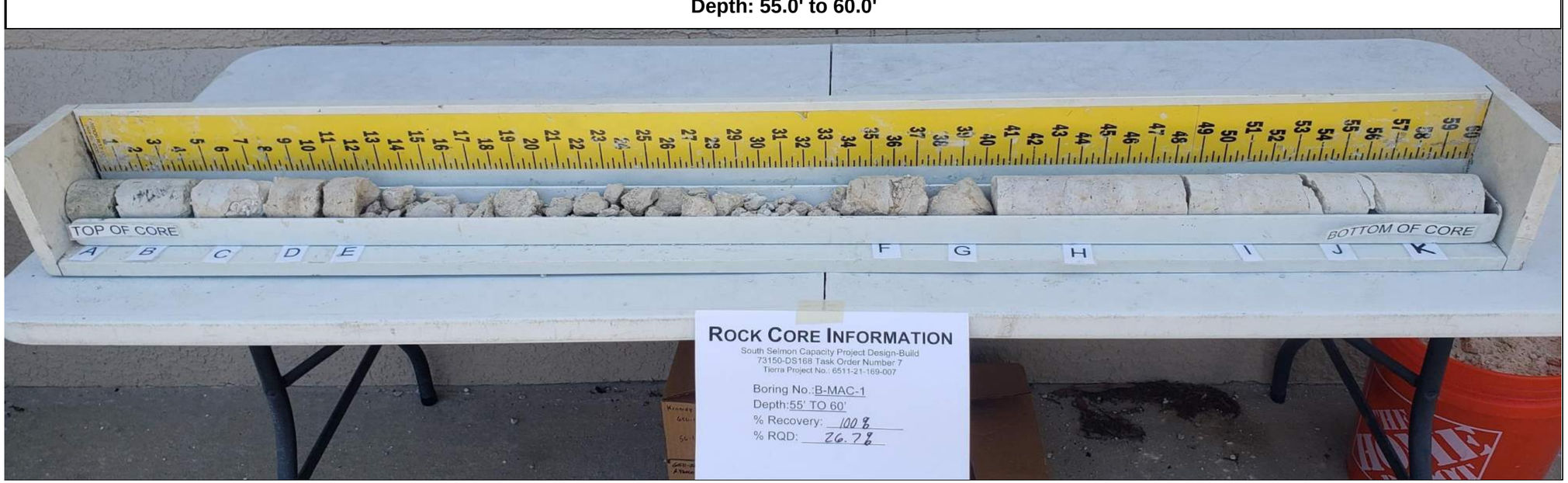
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-1
Depth: 25.0' to 30.0'



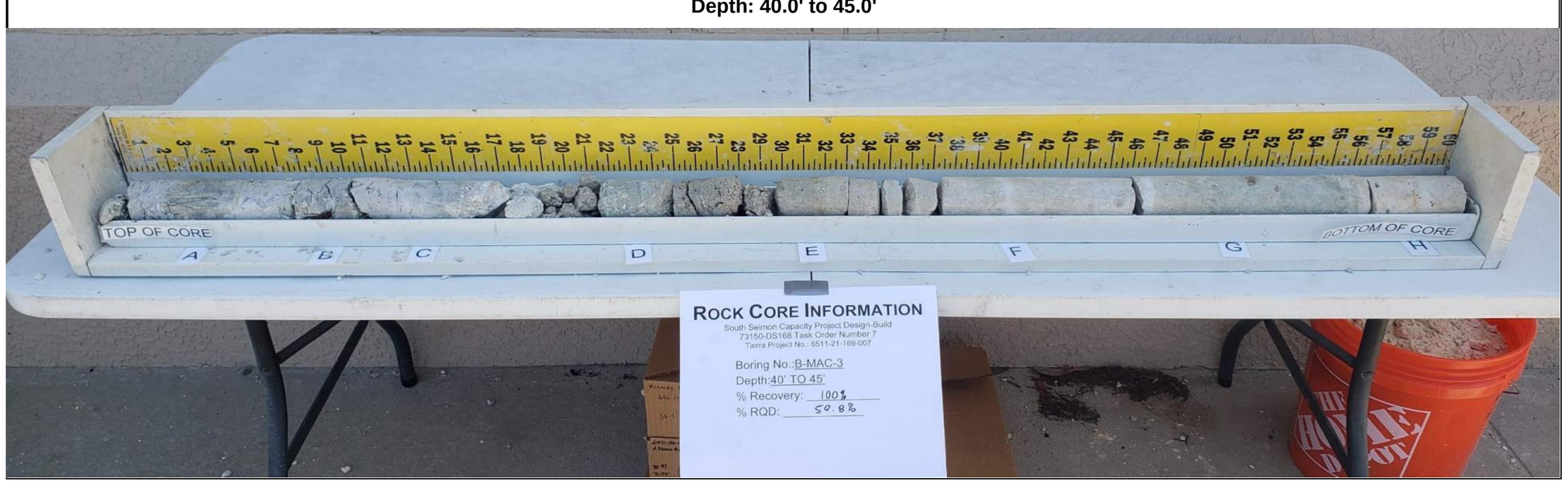
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-1
Depth: 55.0' to 60.0'

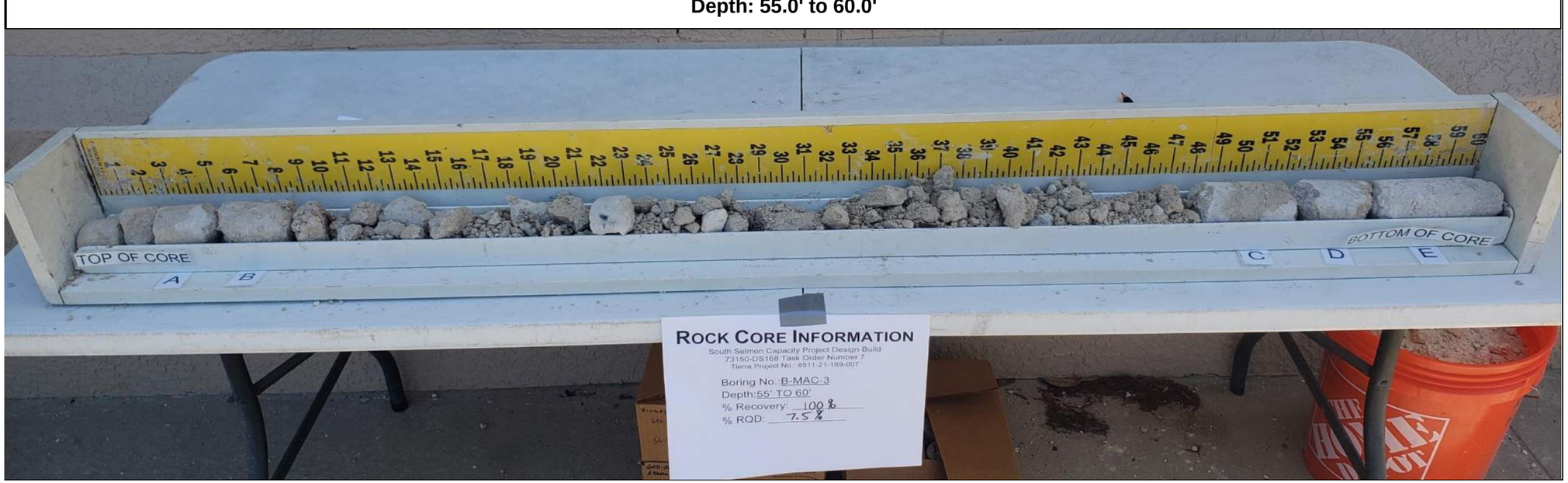


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

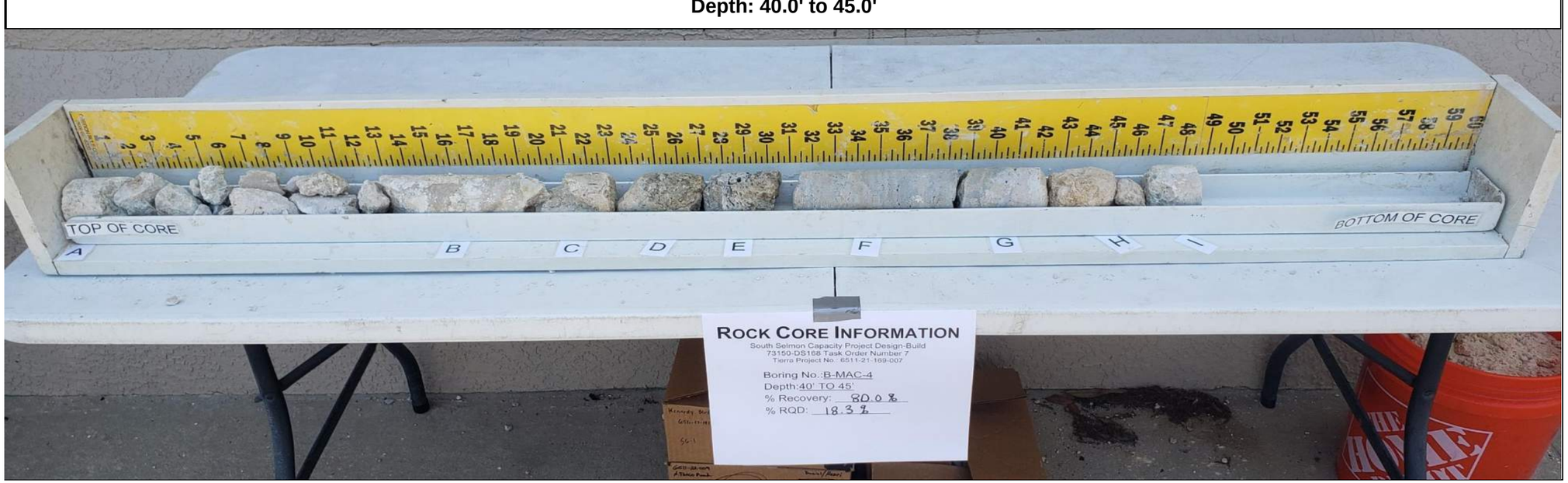
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-3
Depth: 40.0' to 45.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-3
Depth: 55.0' to 60.0'

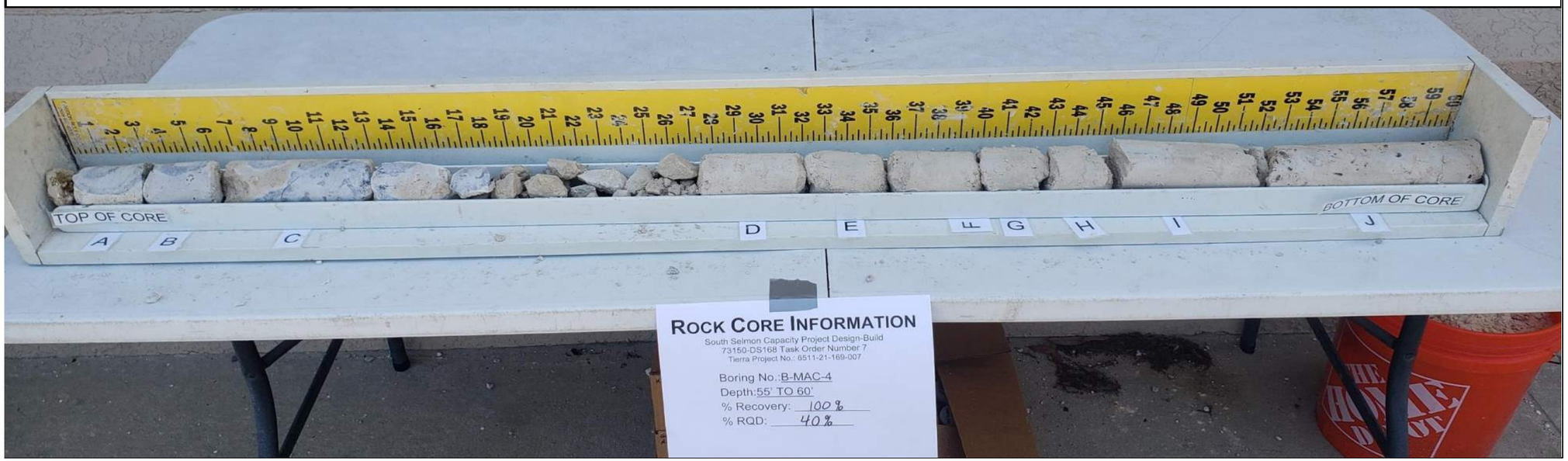


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-4
Depth: 40.0' to 45.0'



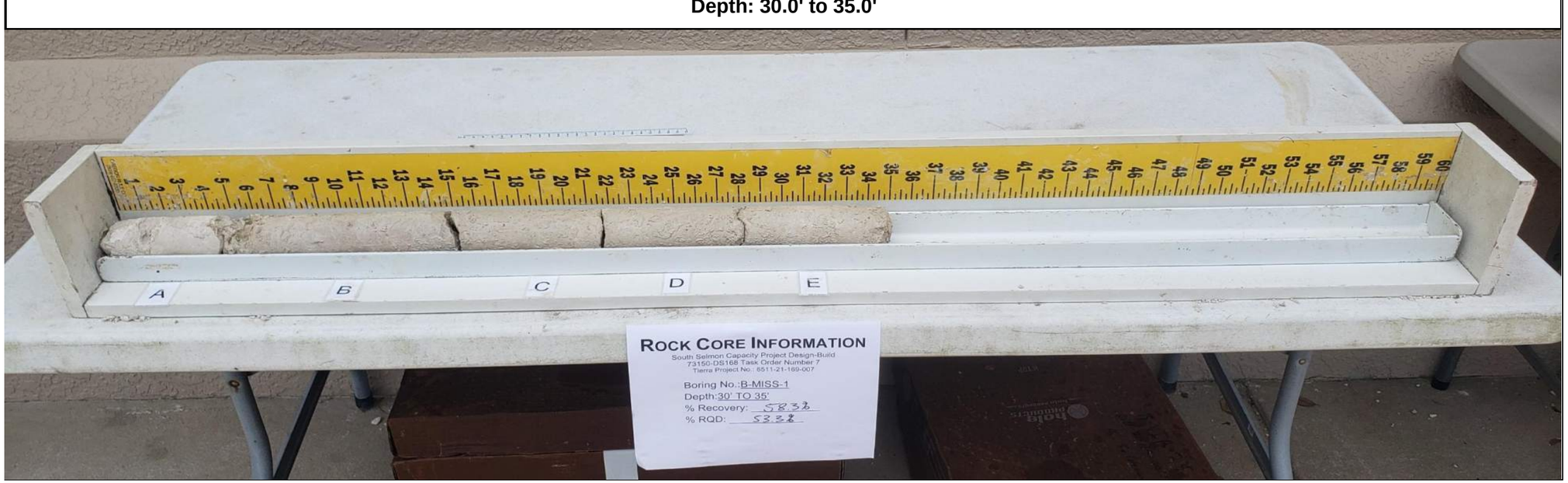
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MAC-4
Depth: 55.0' to 60.0'

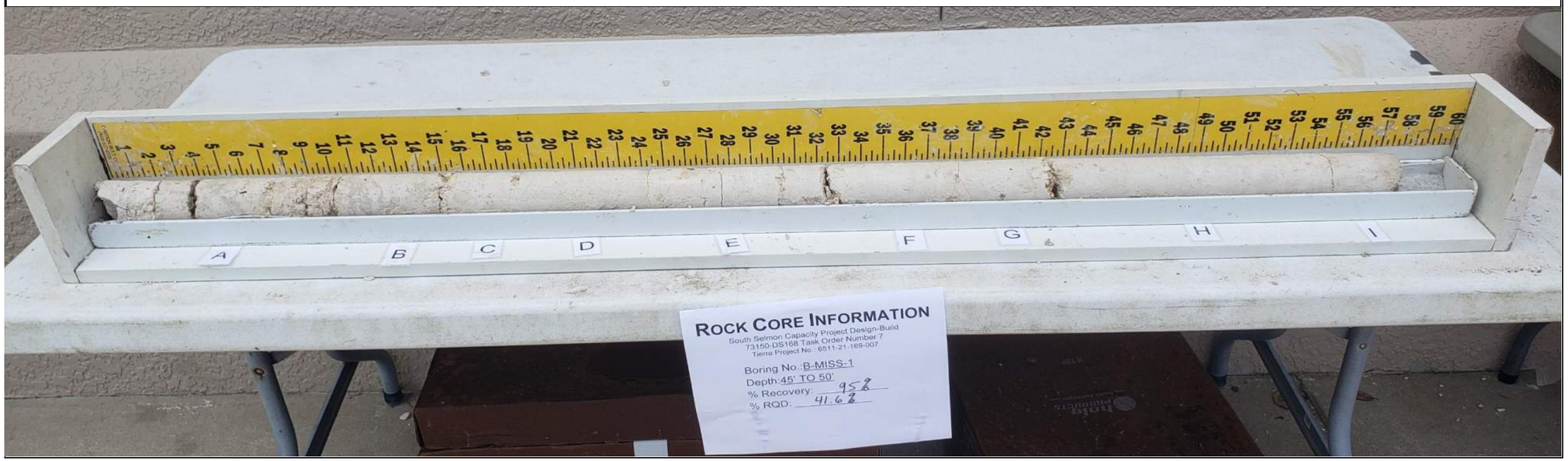


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

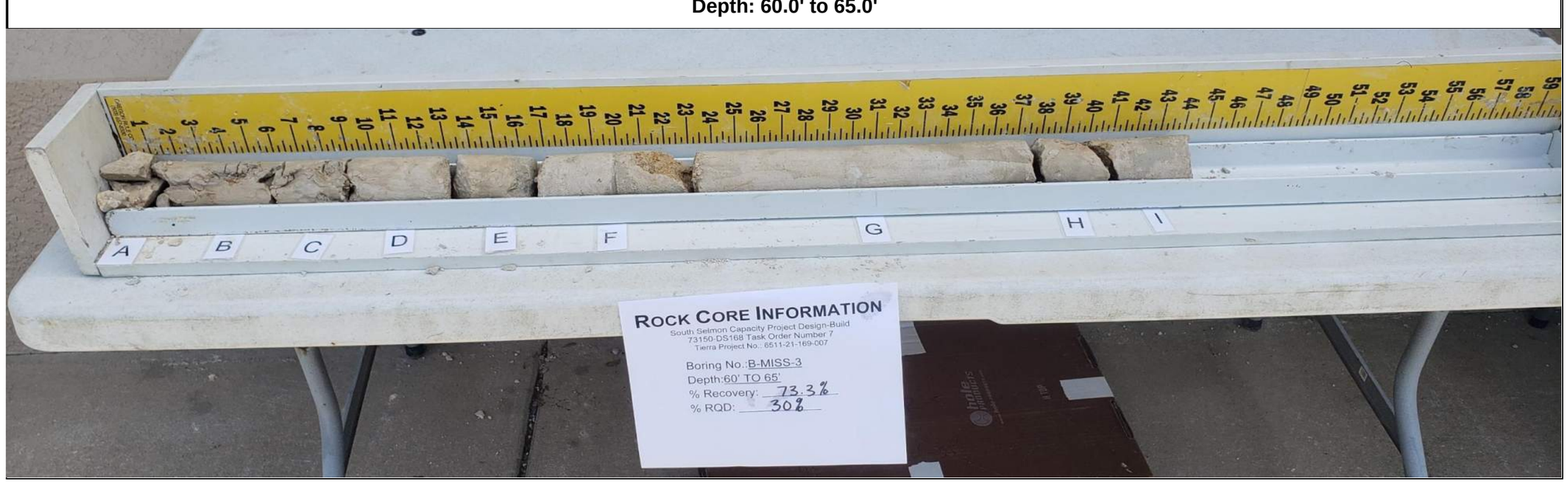
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-1
Depth: 30.0' to 35.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-1
Depth: 45.0' to 50.0'

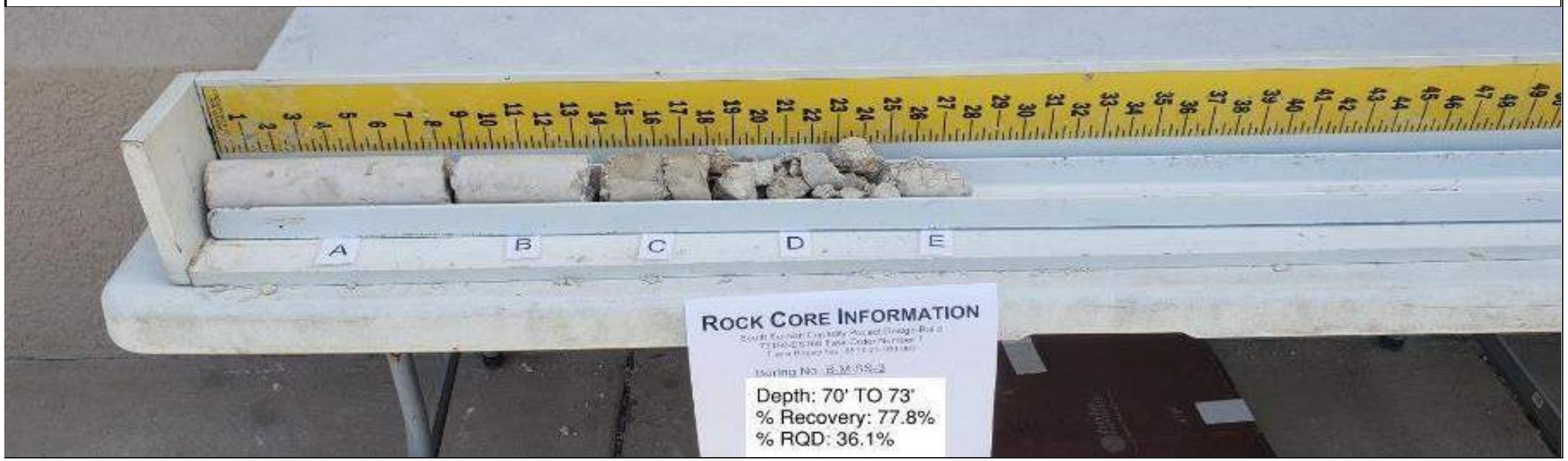


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-3
Depth: 60.0' to 65.0'

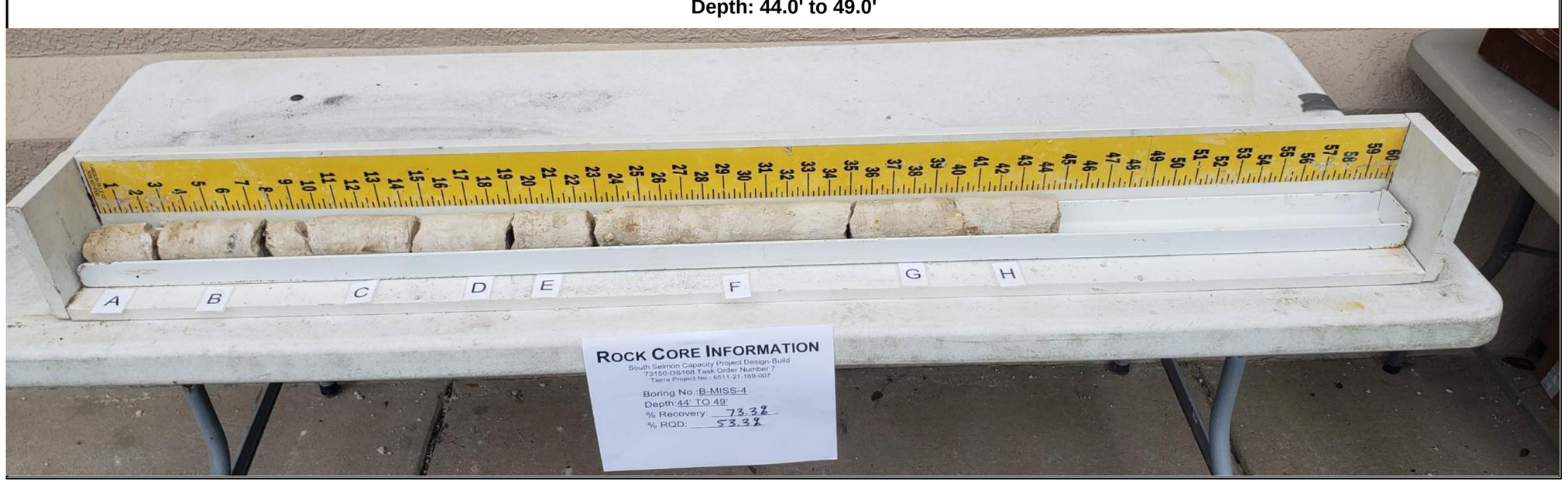


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-3
Depth: 70.0' to 73.0'

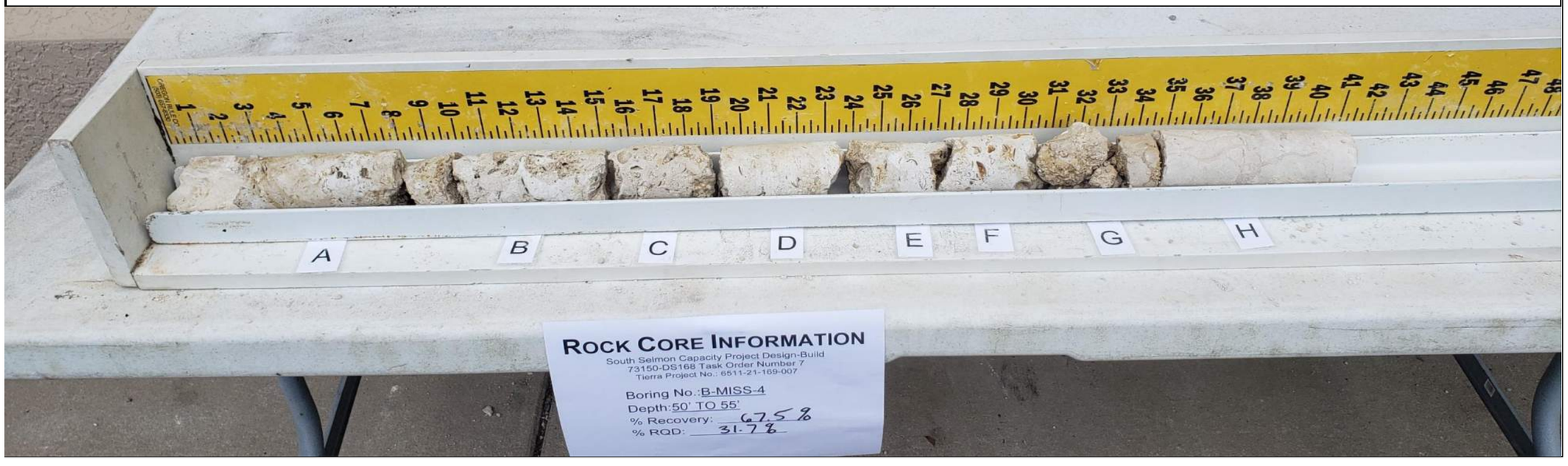


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-4
Depth: 44.0' to 49.0'

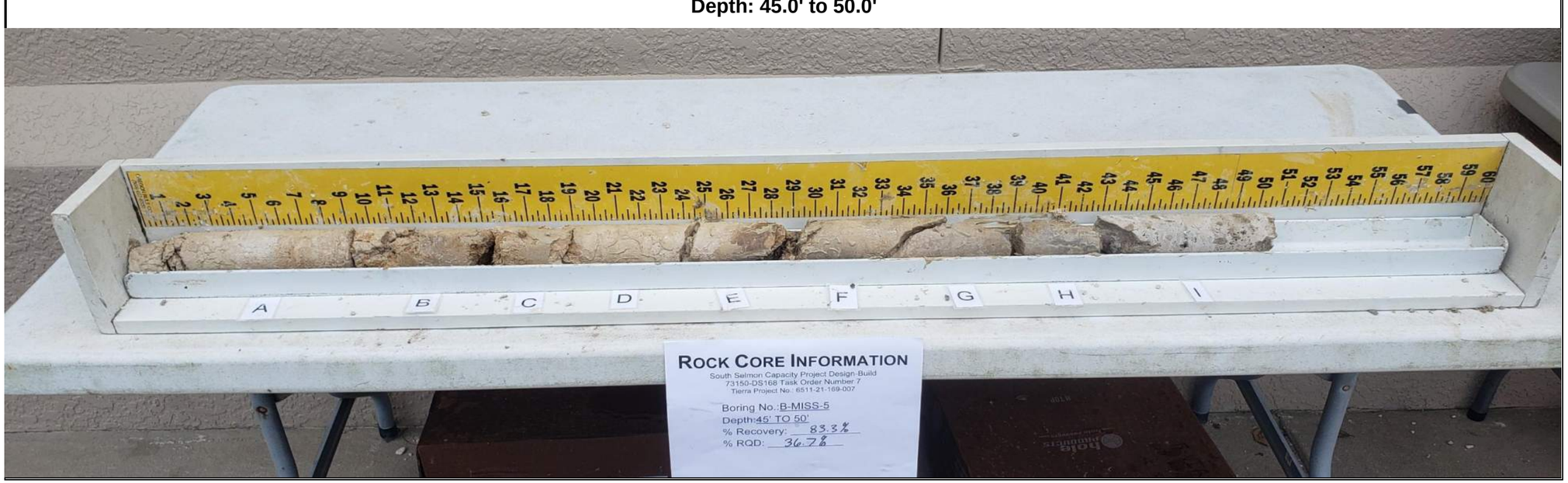


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-4
Depth: 50.0' to 55.0'

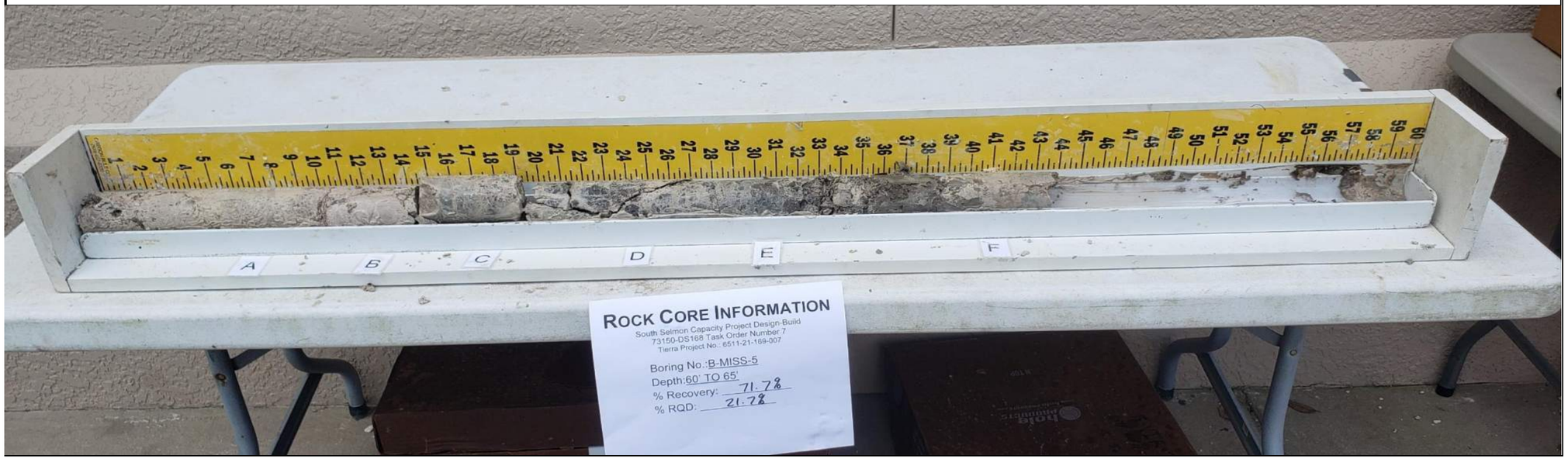


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-5
Depth: 45.0' to 50.0'

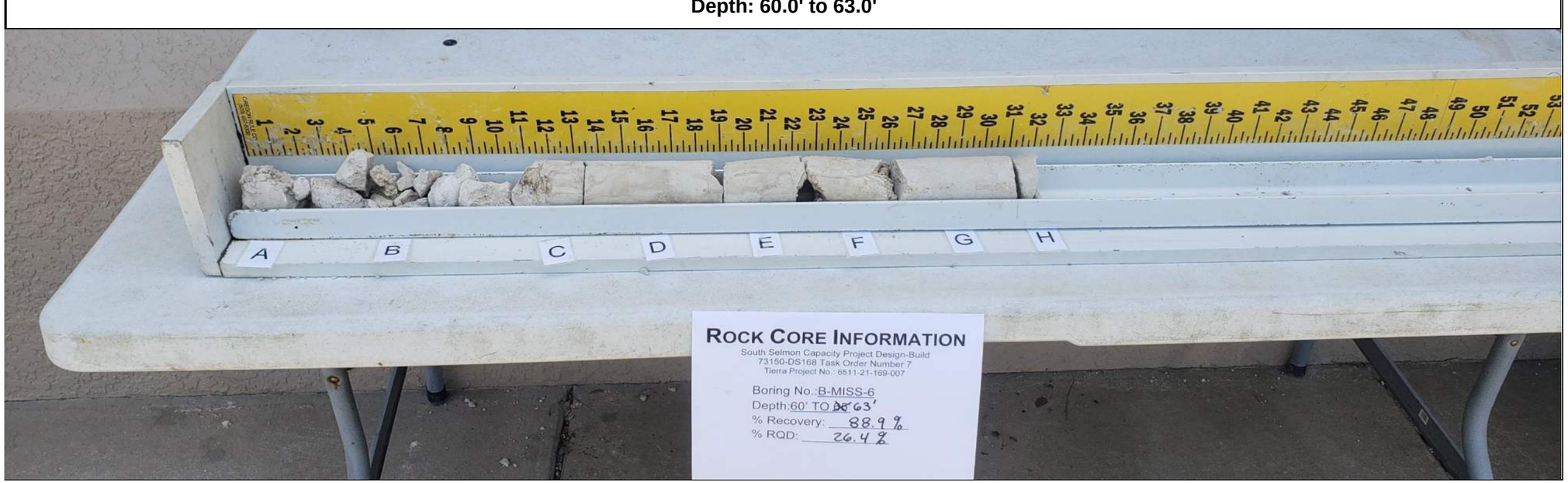


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-5
Depth: 60.0' to 65.0'

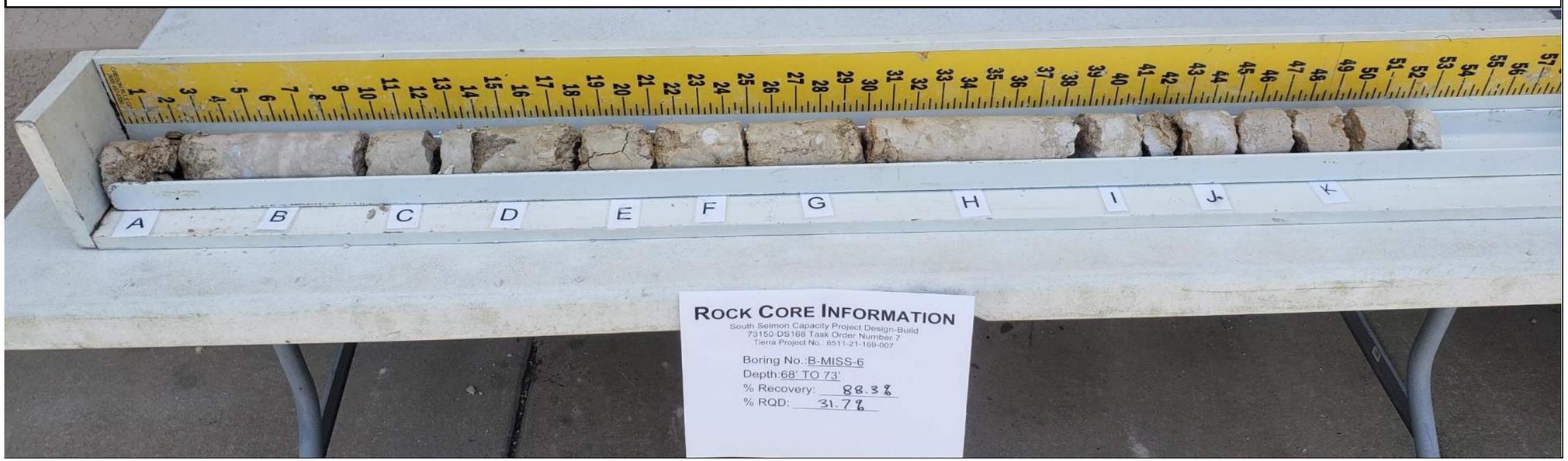


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-6
Depth: 60.0' to 63.0'



TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

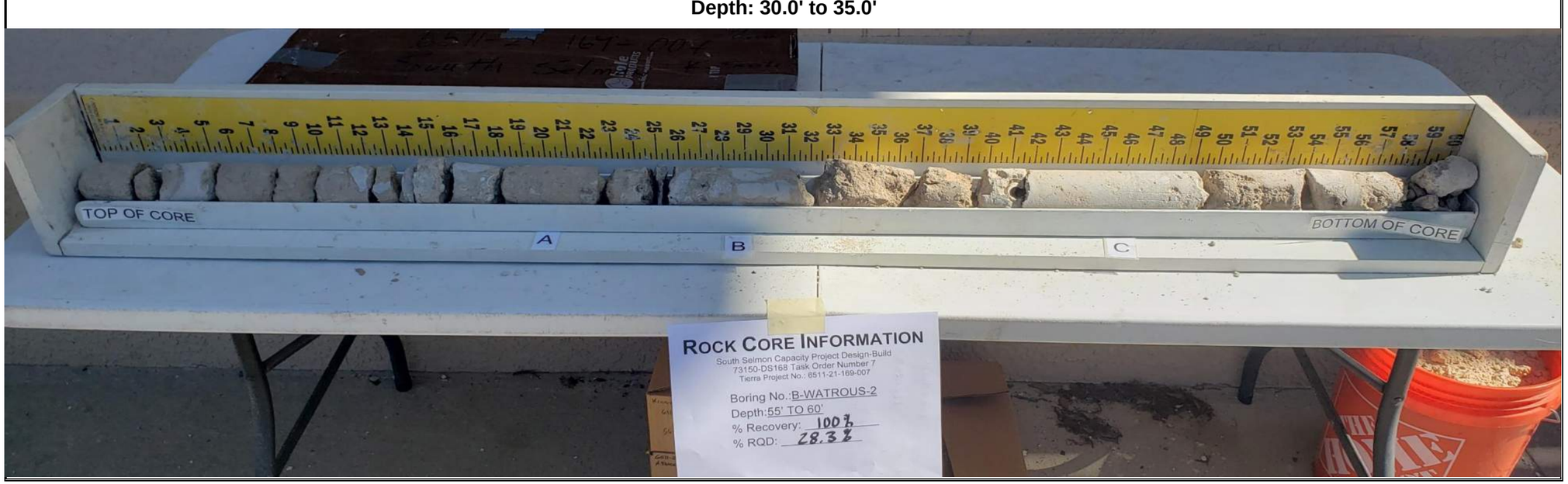
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MISS-6
Depth: 68.0' to 73.0'



TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WATROUS-2
Depth: 30.0' to 35.0'

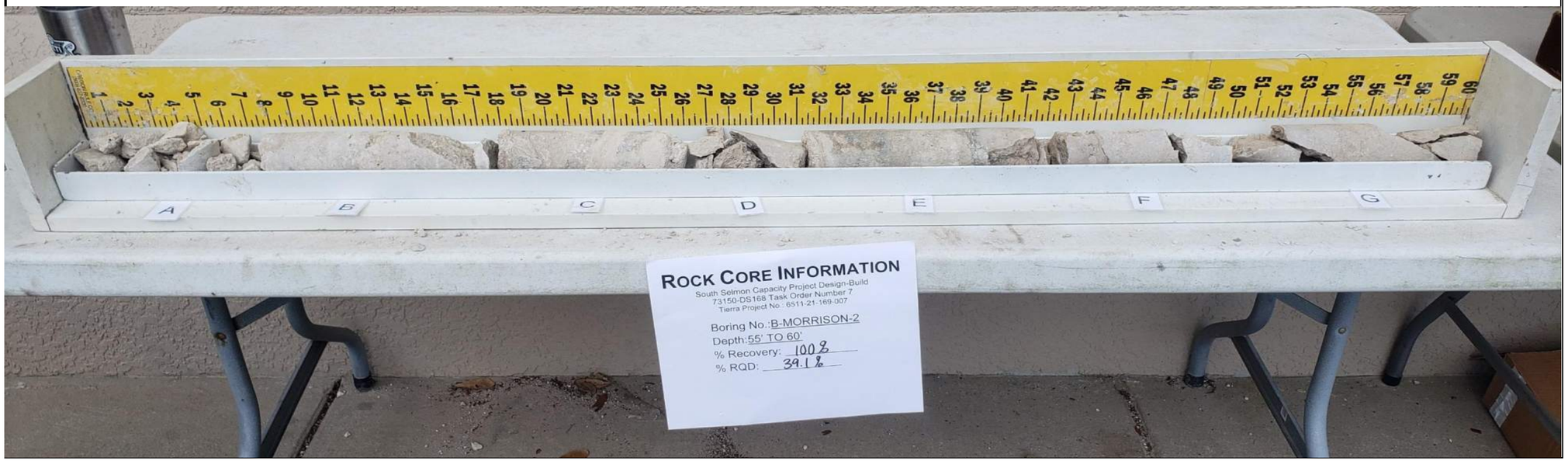
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WATROUS-2
Depth: 30.0' to 35.0'



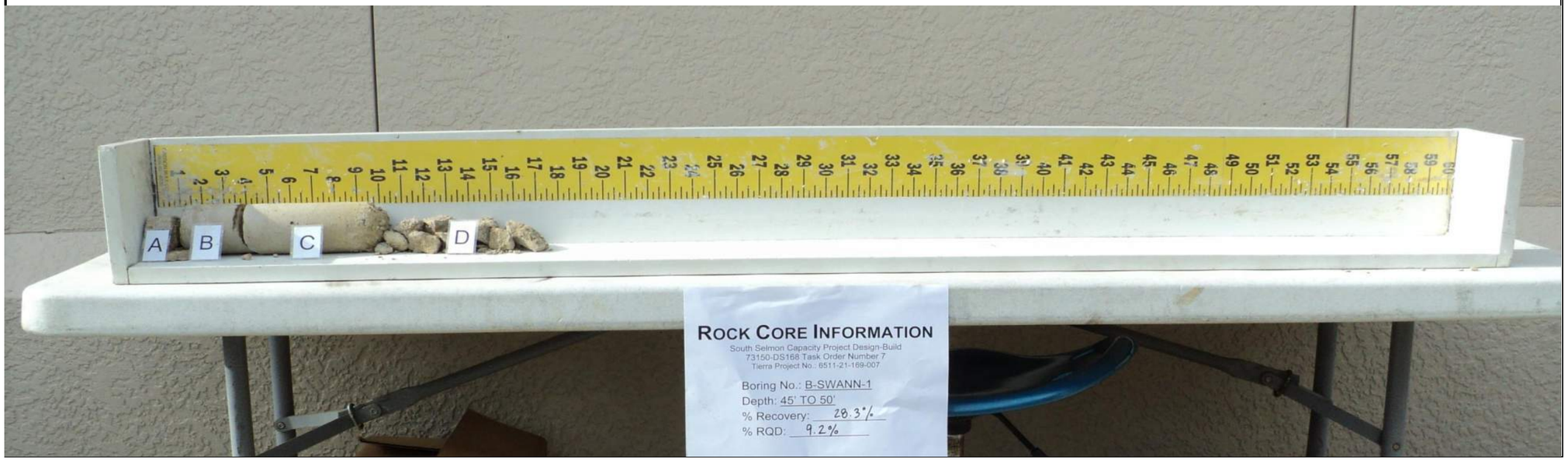
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MORRISON-2
Depth: 30.0' TO 35.0'

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-MORRISON-2
Depth: 55.0' TO 60.0'

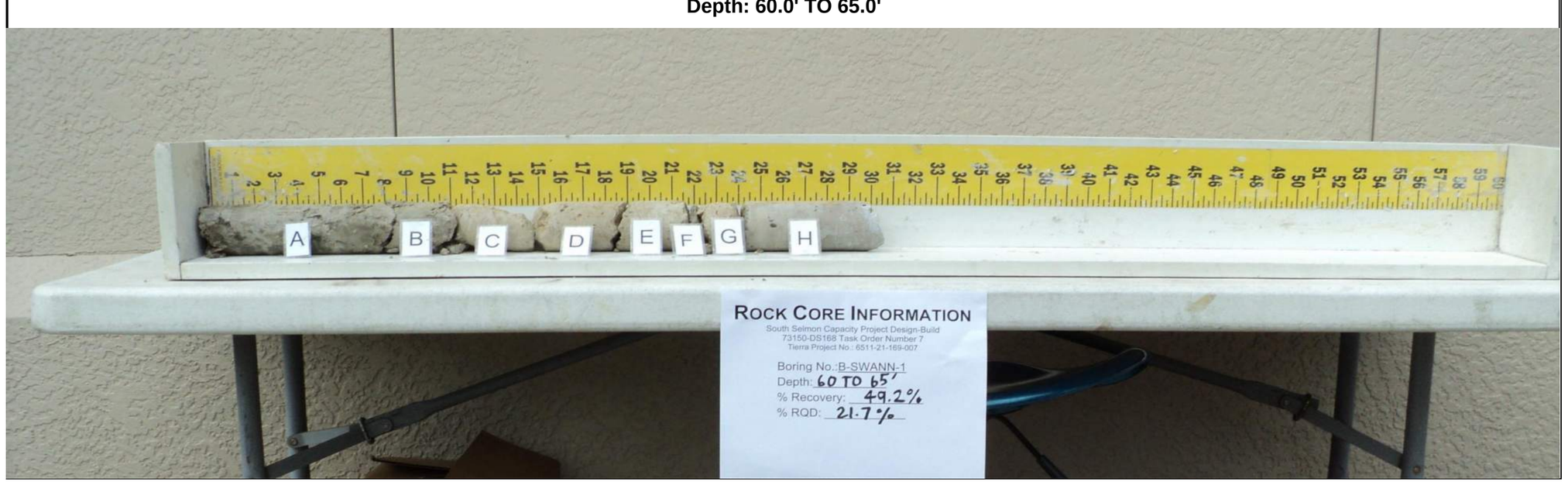


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-SWANN-1
Depth: 45.0' TO 50.0'

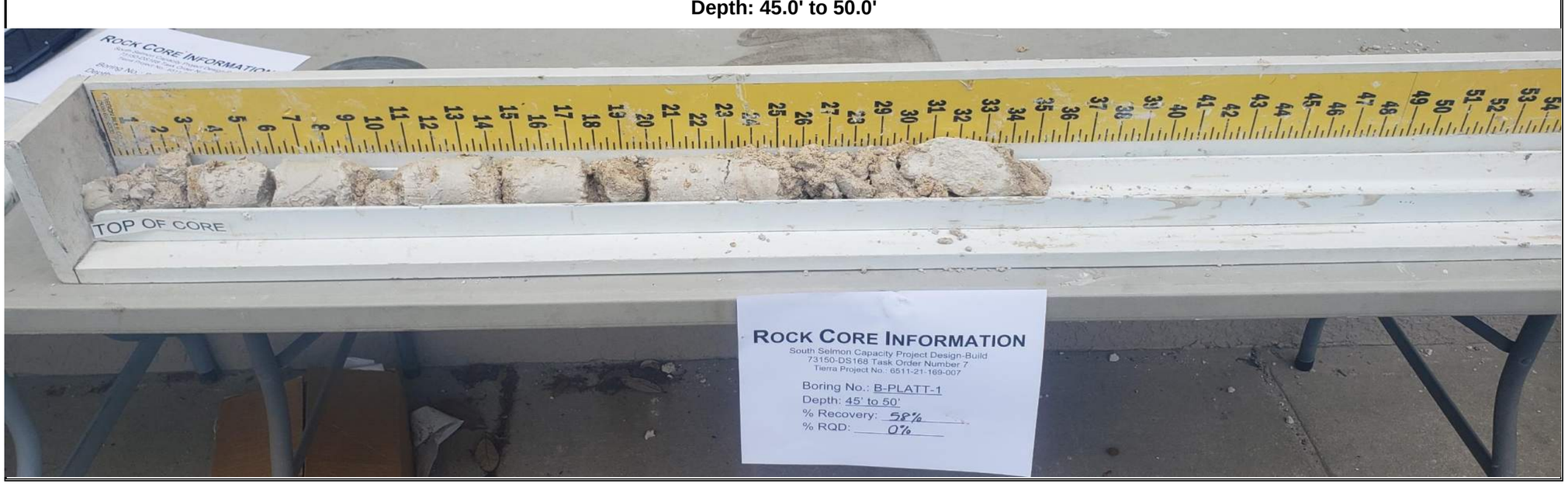


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-SWANN-1
Depth: 60.0' TO 65.0'



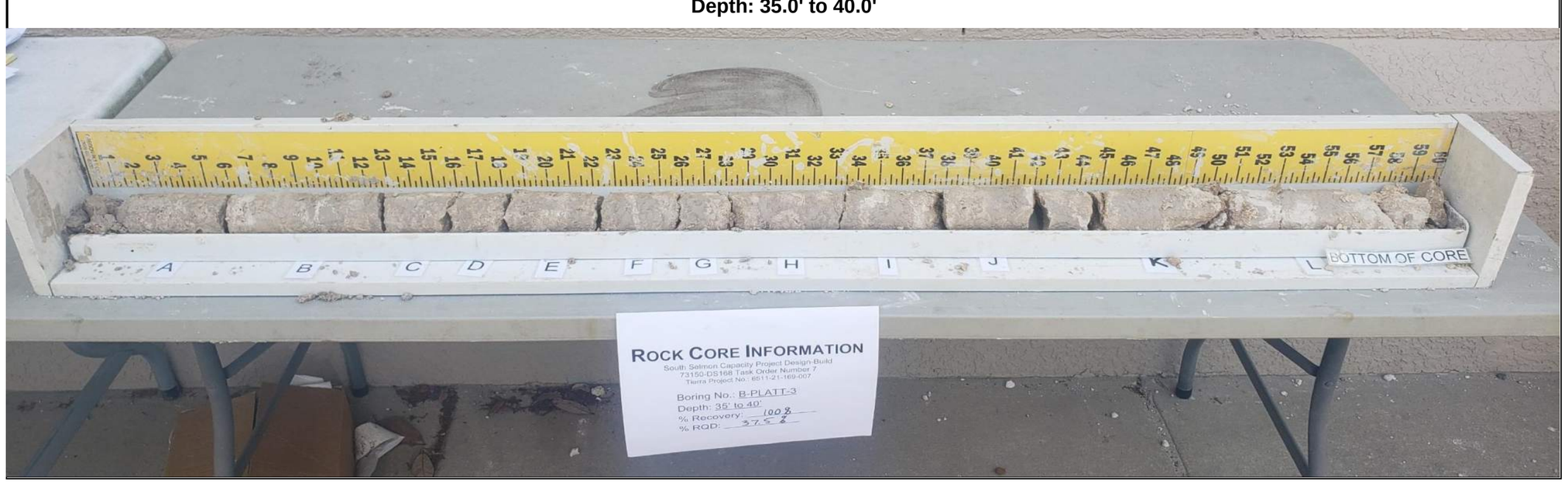
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-PLATT-1
Depth: 45.0' to 50.0'



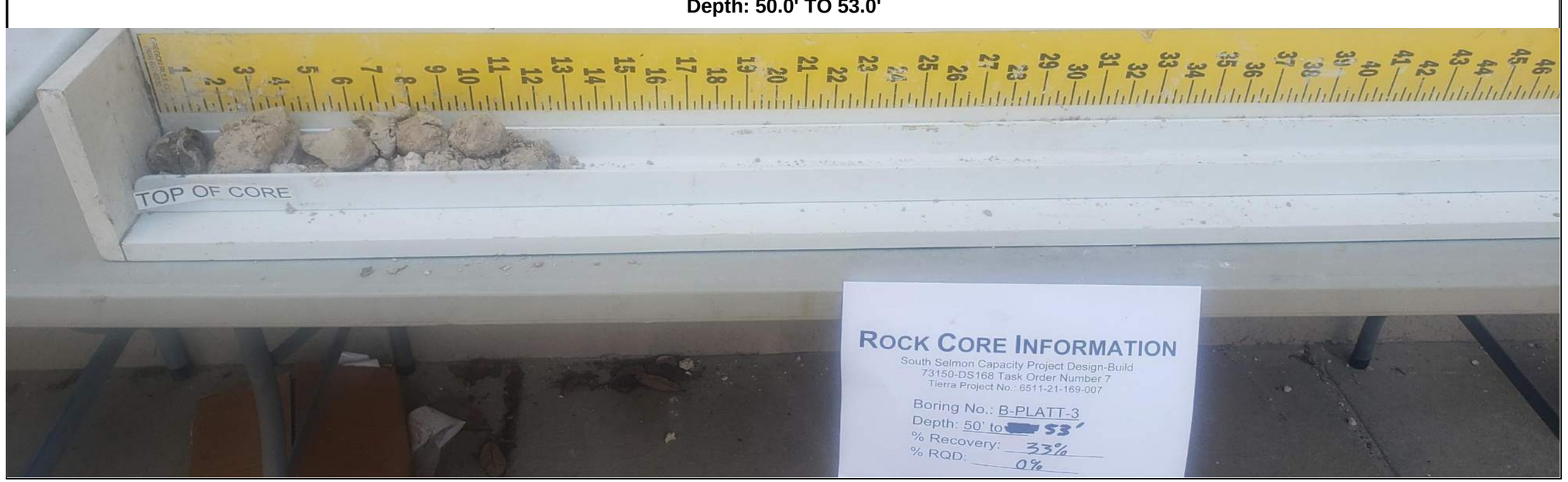
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-PLATT-1
Depth: 55.0' to 60.0'

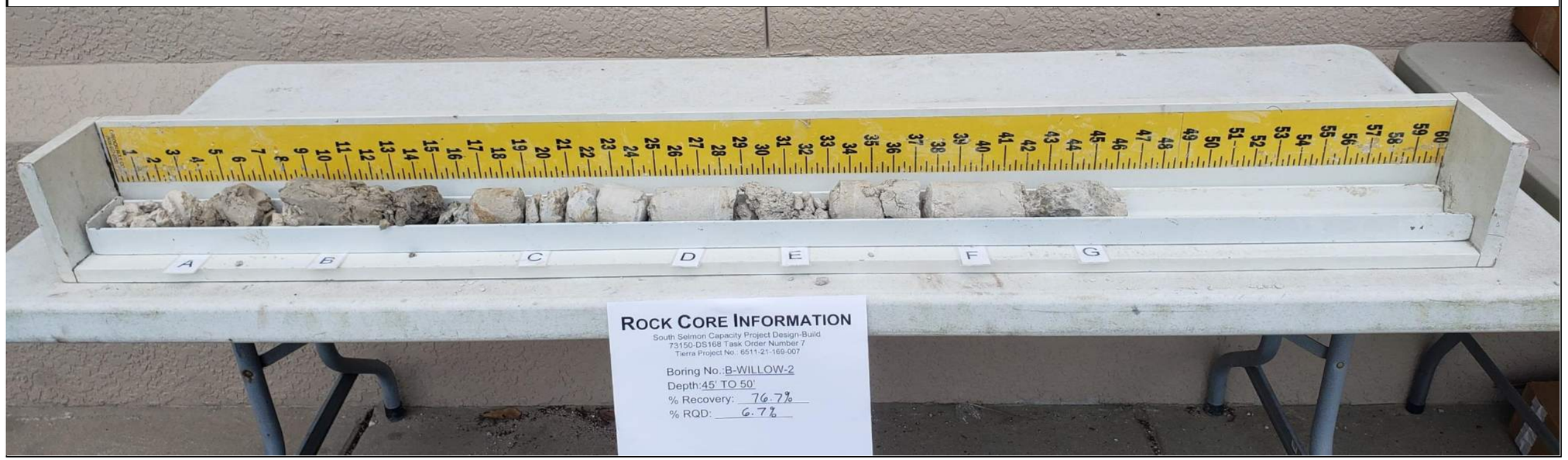
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-PLATT-3
Depth: 35.0' to 40.0'



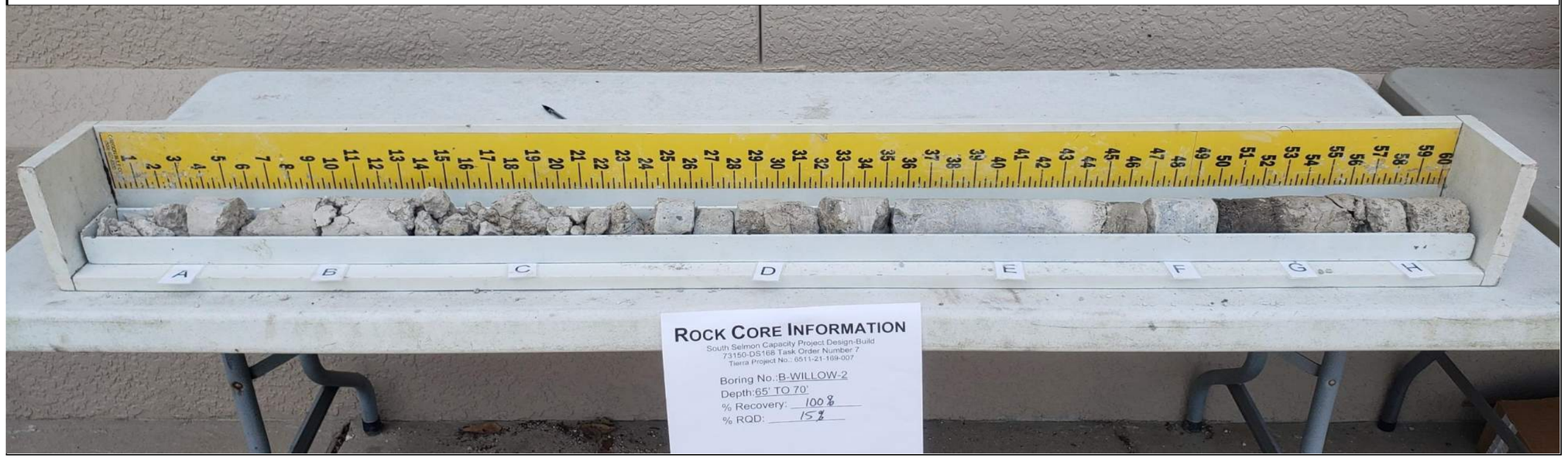
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-PLATT-3
Depth: 50.0' TO 53.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WILLOW-2
Depth: 45.0' to 50.0'

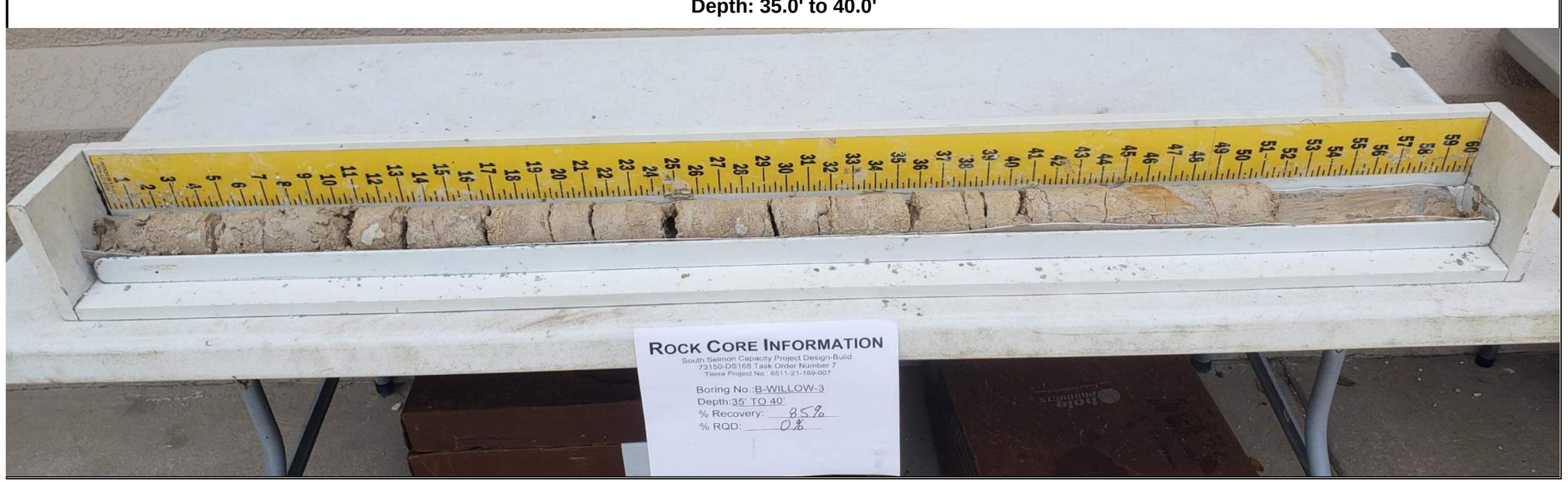


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WILLOW-2
Depth: 65.0' to 70.0'

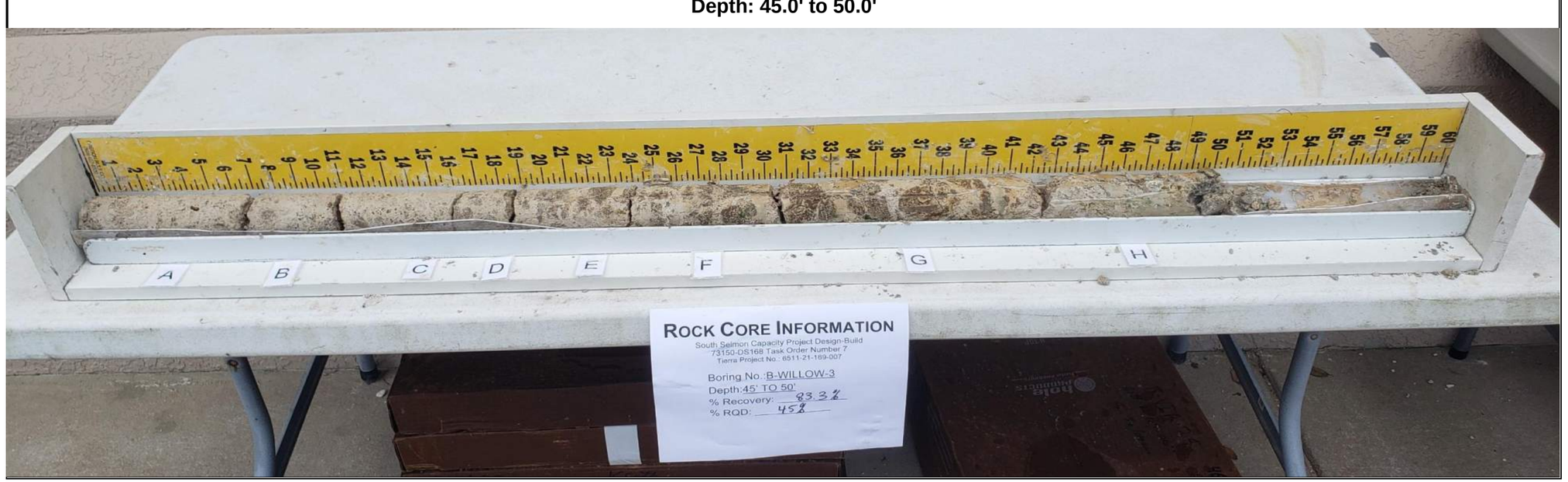


TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WILLOW-3
Depth: 35.0' to 40.0'

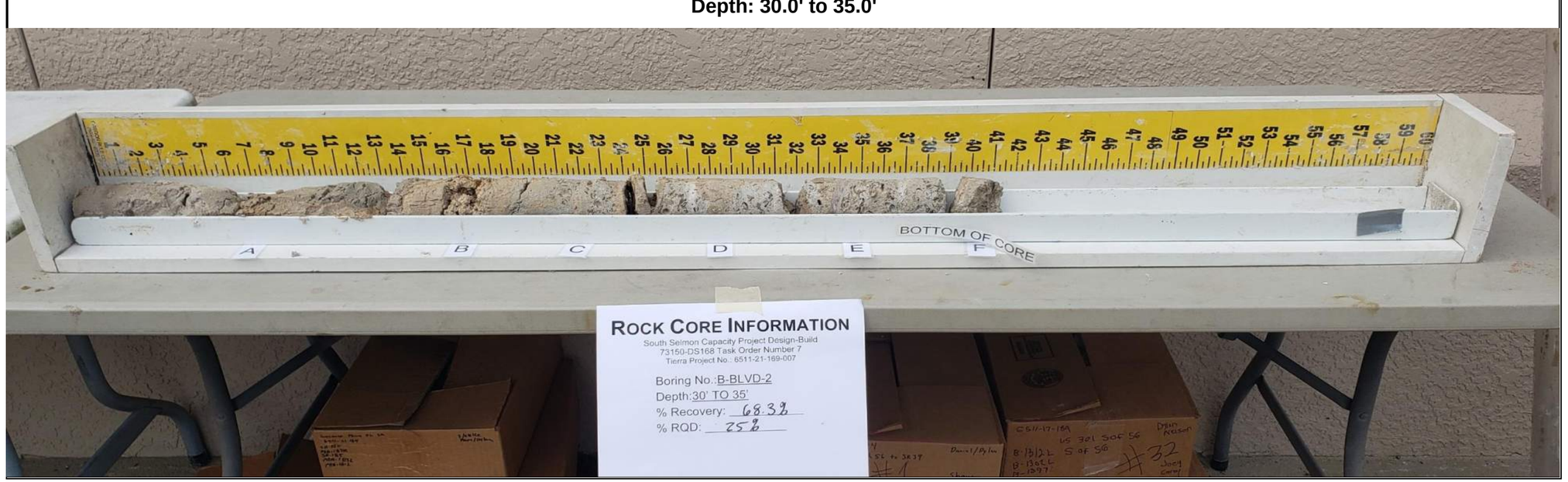


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-WILLOW-3
Depth: 45.0' to 50.0'



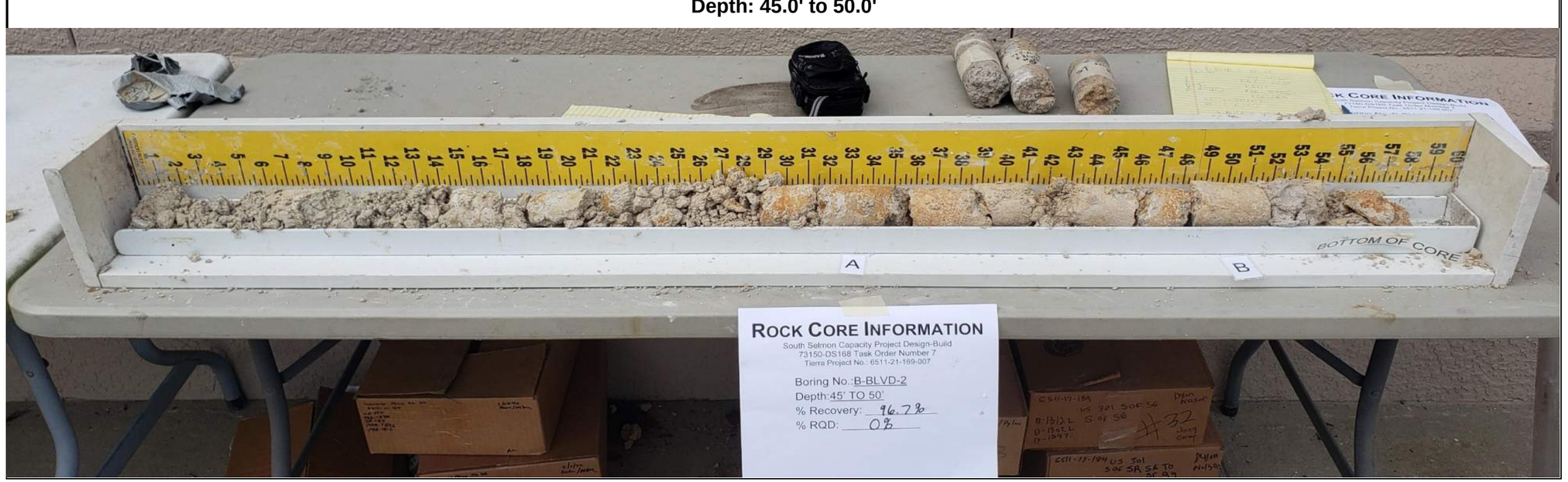
TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-BLVD-2
Depth: 30.0' to 35.0'



TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-BLVD-2
Depth: 45.0' to 50.0'



TIERRA
GEOTECHNICAL • MATERIALS
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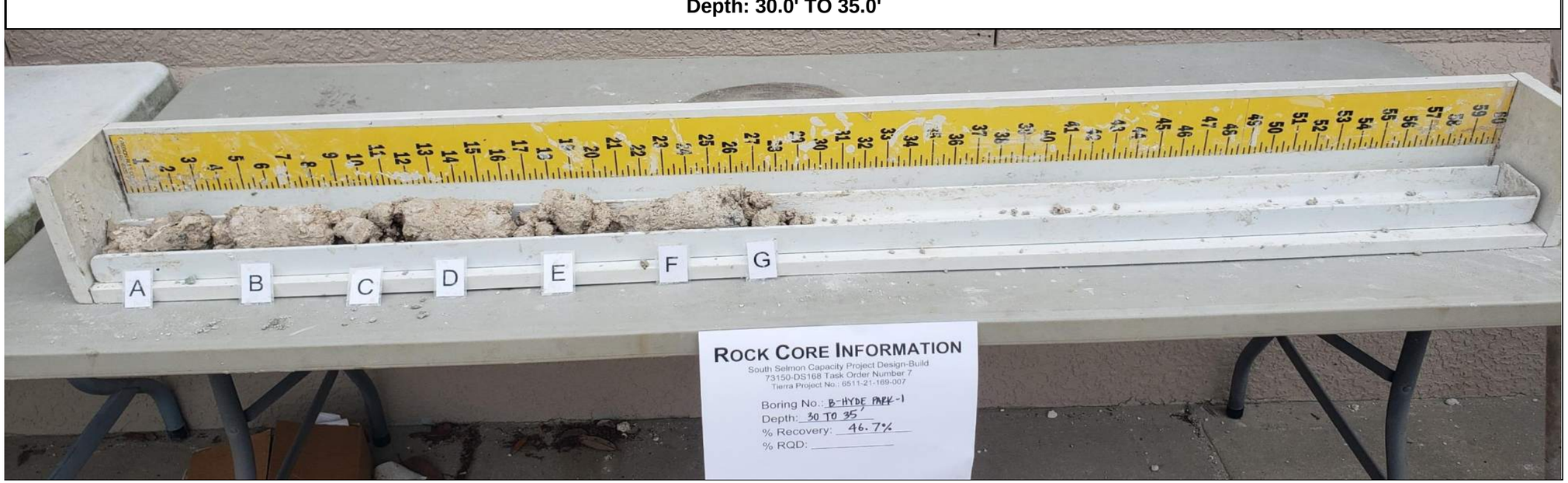
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-1
Depth: 30.0' TO 35.0'



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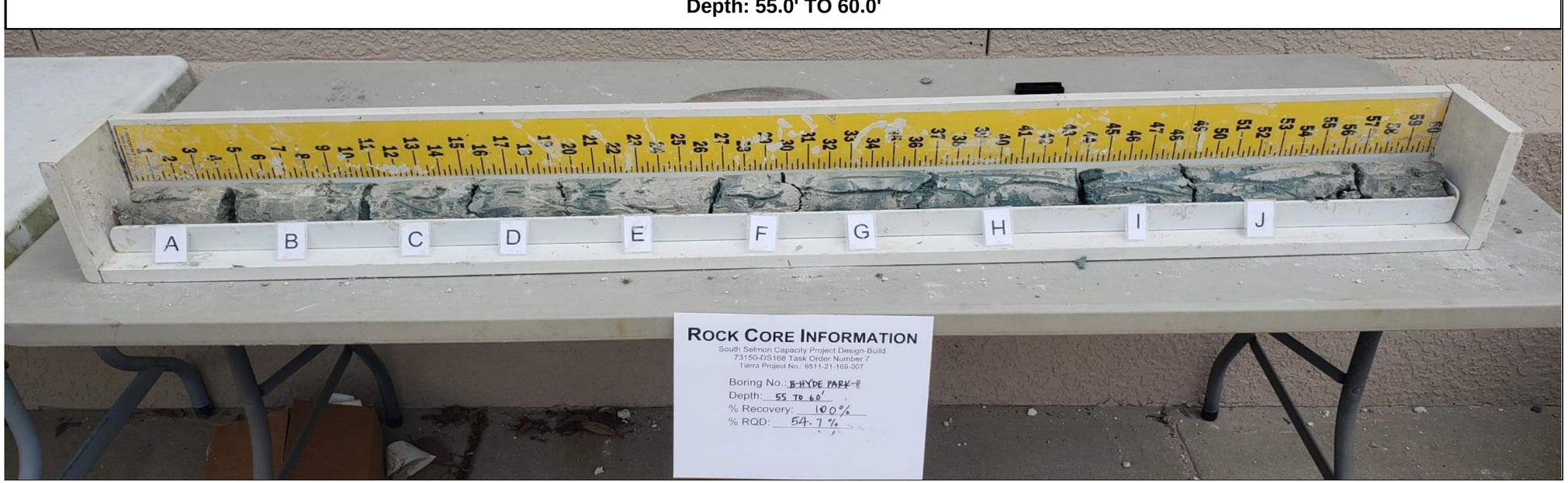
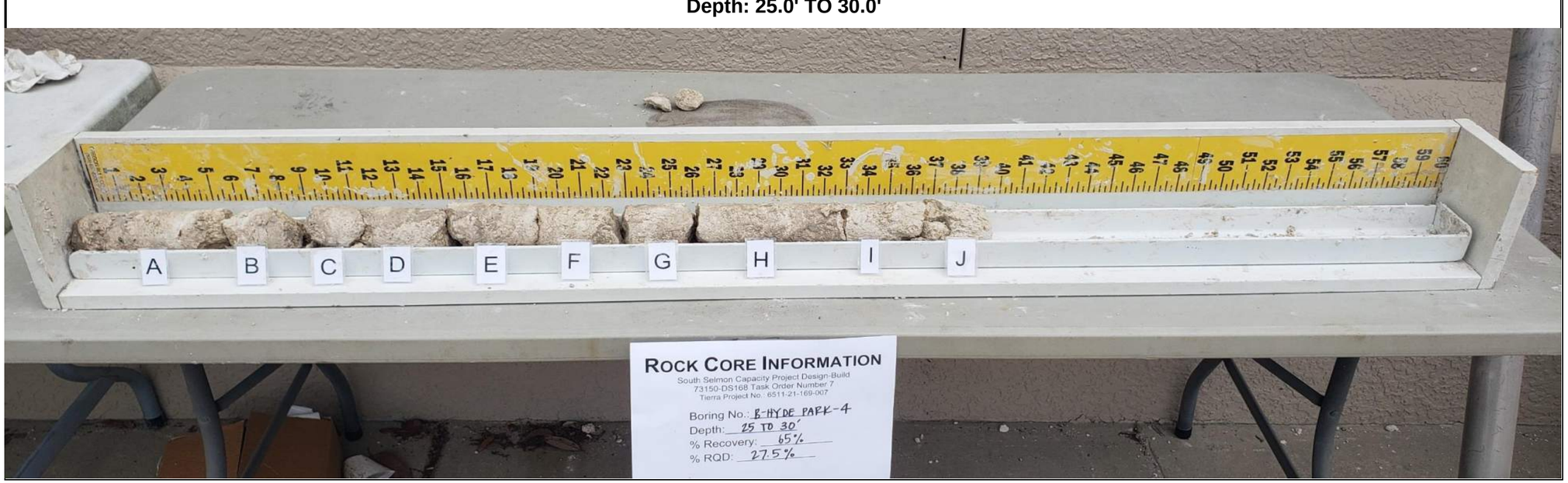
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-1
Depth: 55.0' TO 60.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-4
Depth: 25.0' TO 30.0'



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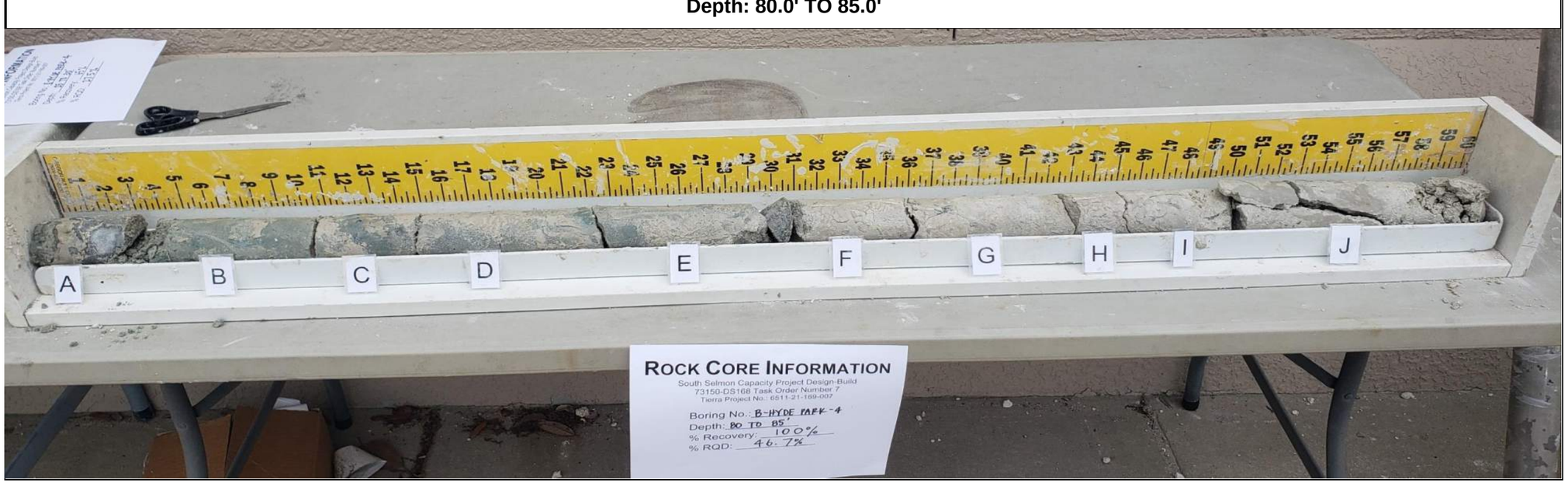
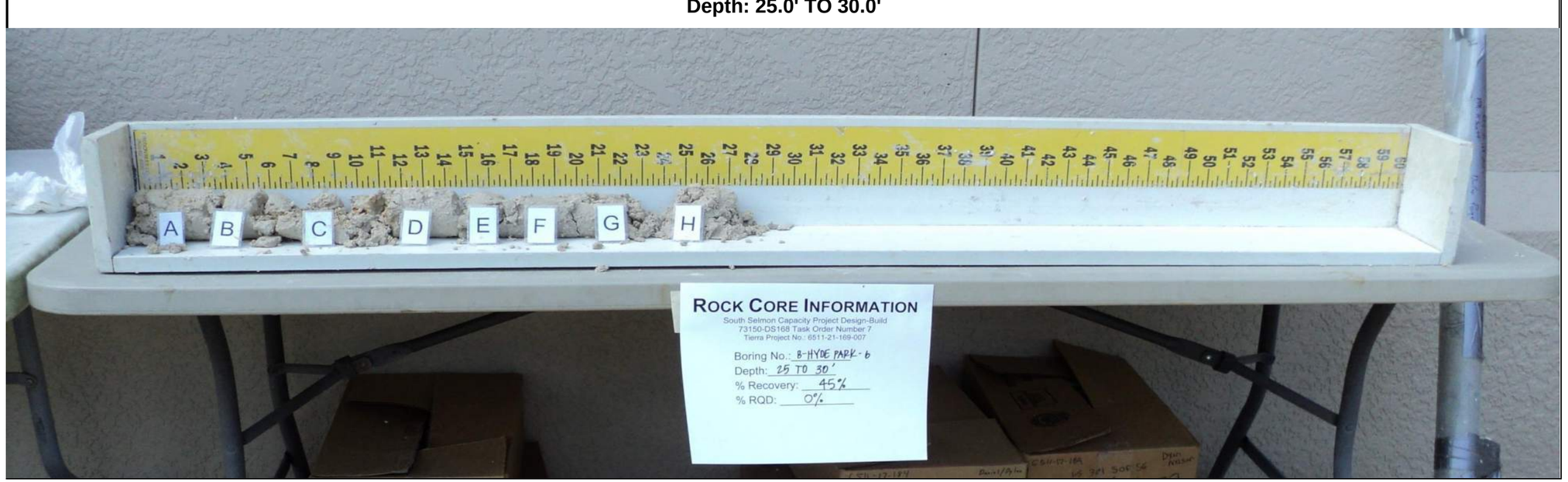
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-4
Depth: 80.0' TO 85.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-6
Depth: 25.0' TO 30.0'



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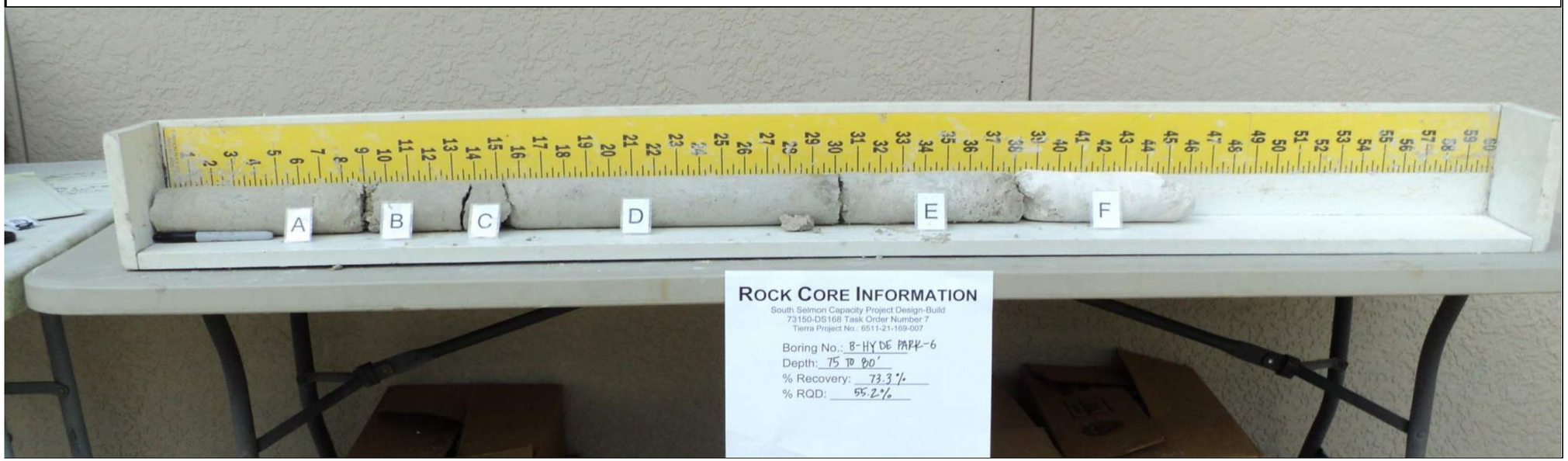
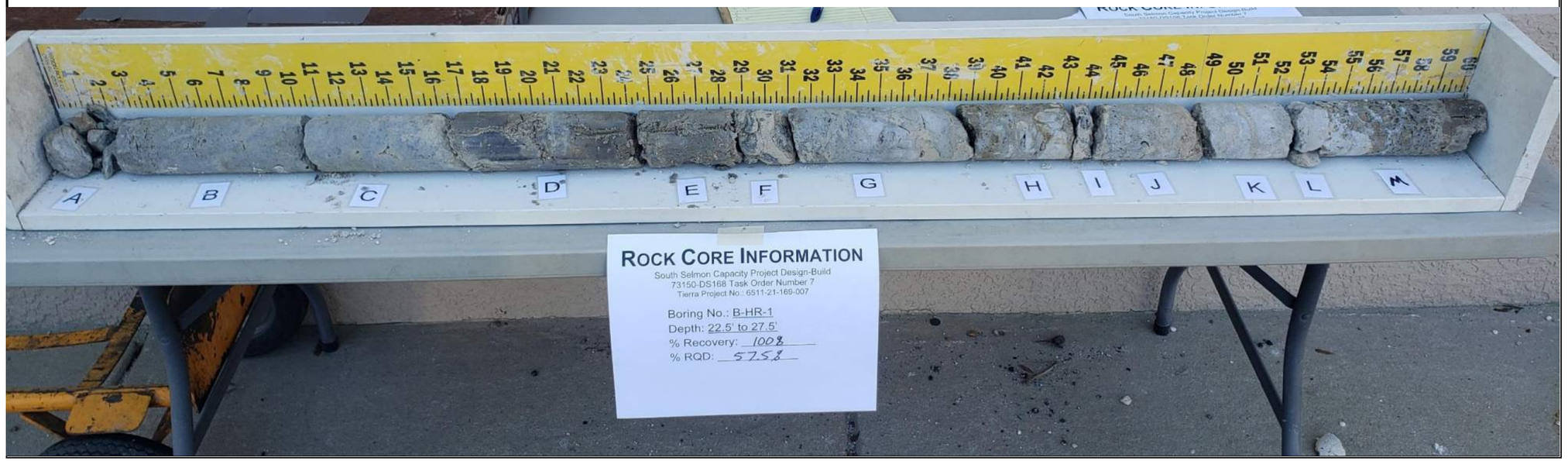
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HYDE PARK-6
Depth: 75.0' TO 80.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-1
Depth: 22.5' to 27.5'



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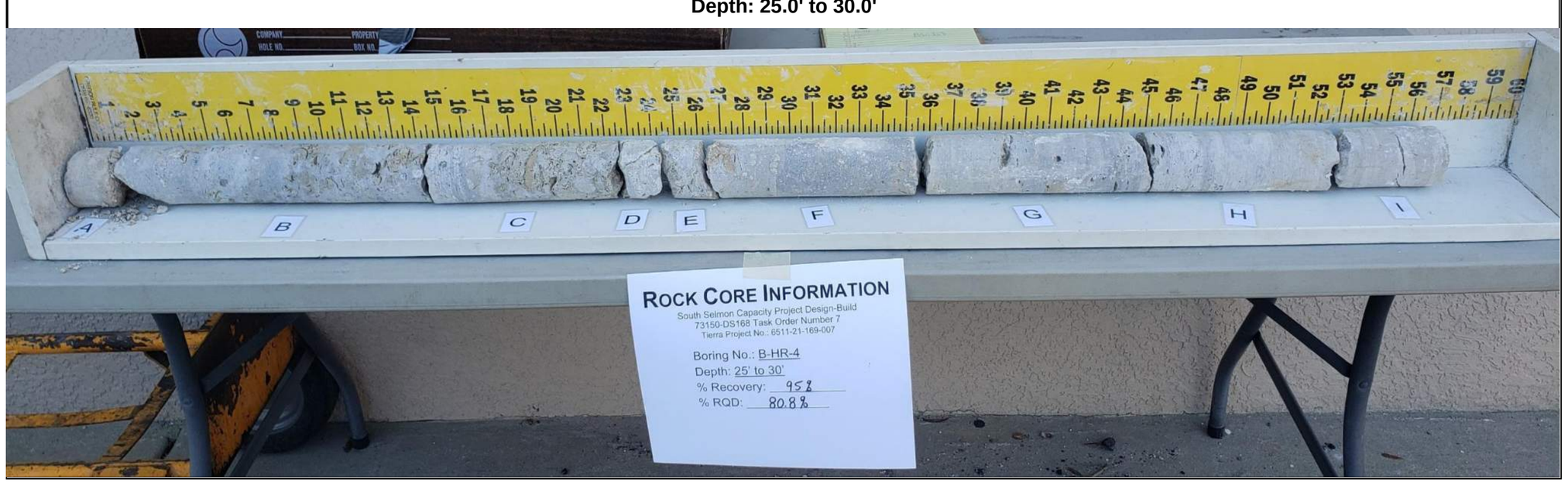
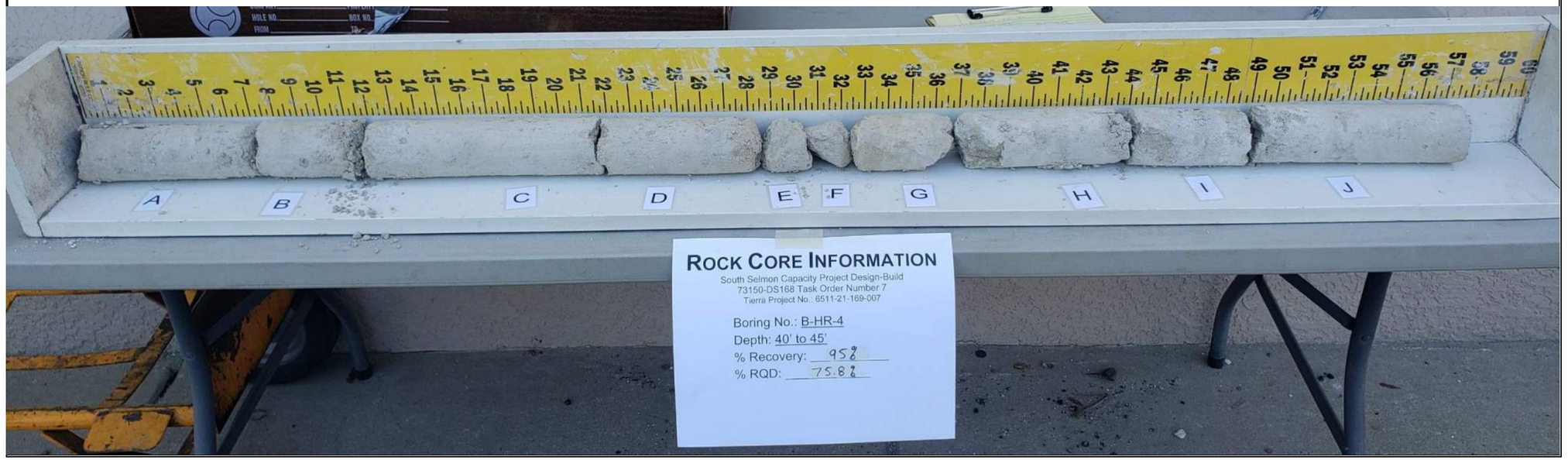
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-1
Depth: 55.0' to 60.0'

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-4
Depth: 25.0' to 30.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-4
Depth: 40.0' to 45.0'



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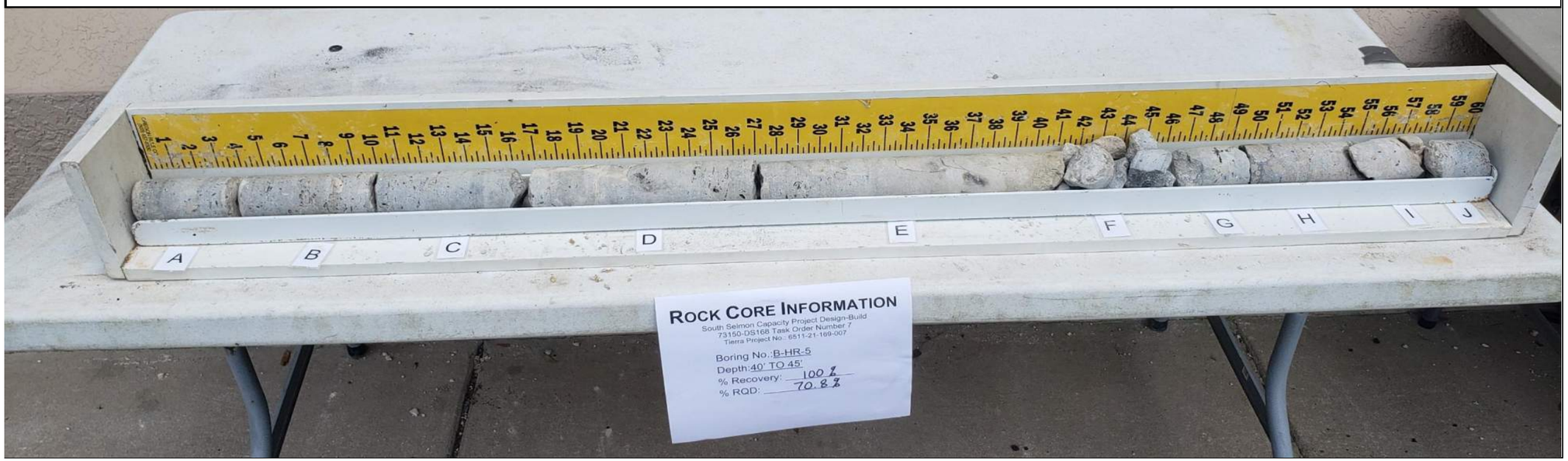
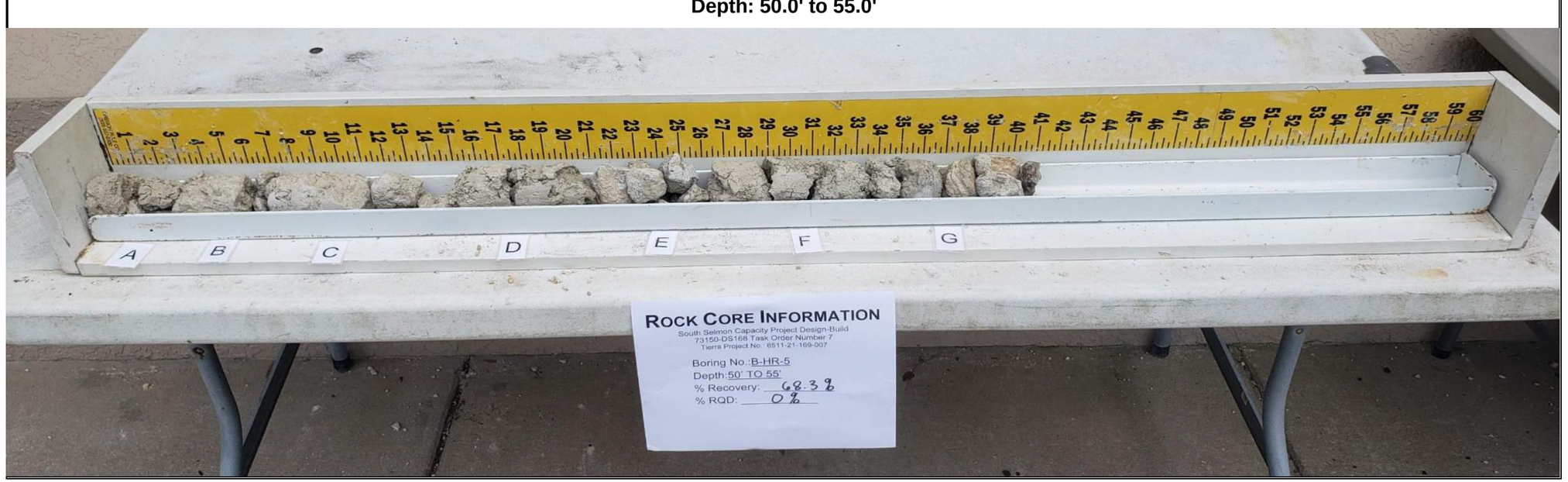
ENVIRONMENTAL • ENGINEERING

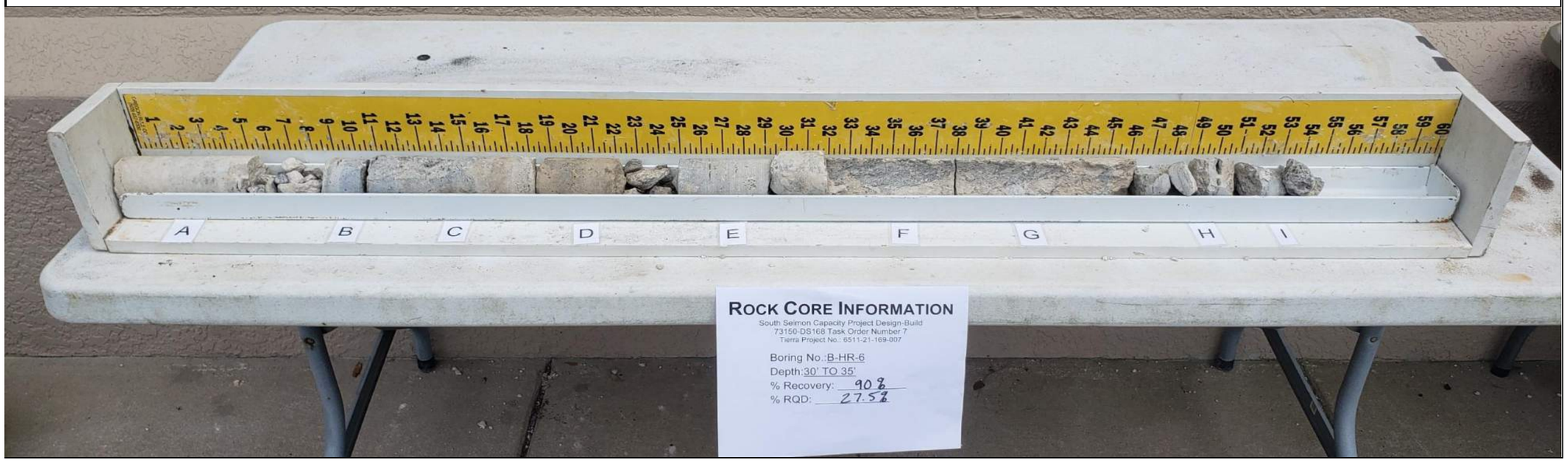
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-5
Depth: 40.0' to 45.0'



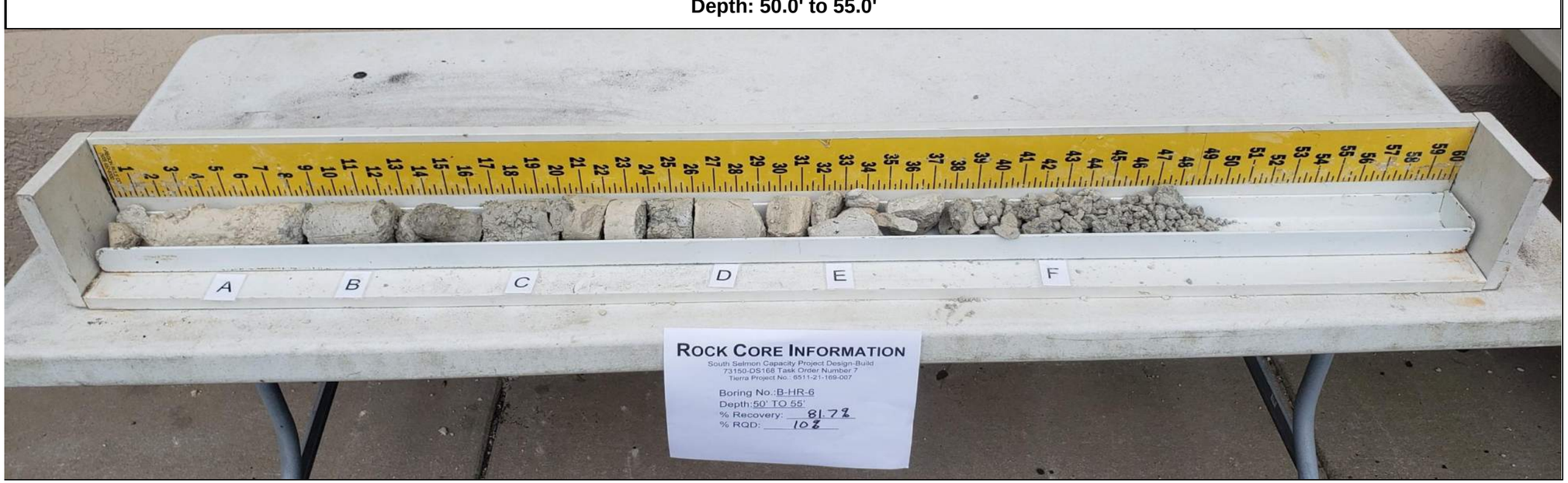
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-5
Depth: 50.0' to 55.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-6
Depth: 30.0' to 35.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-6
Depth: 50.0' to 55.0'



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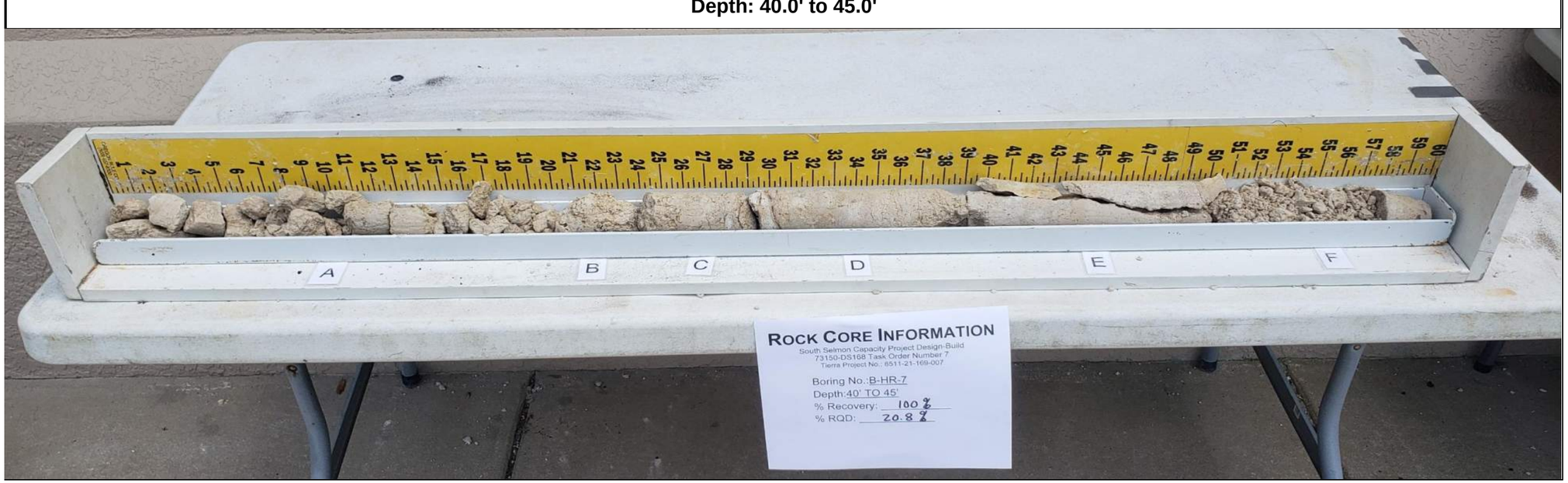
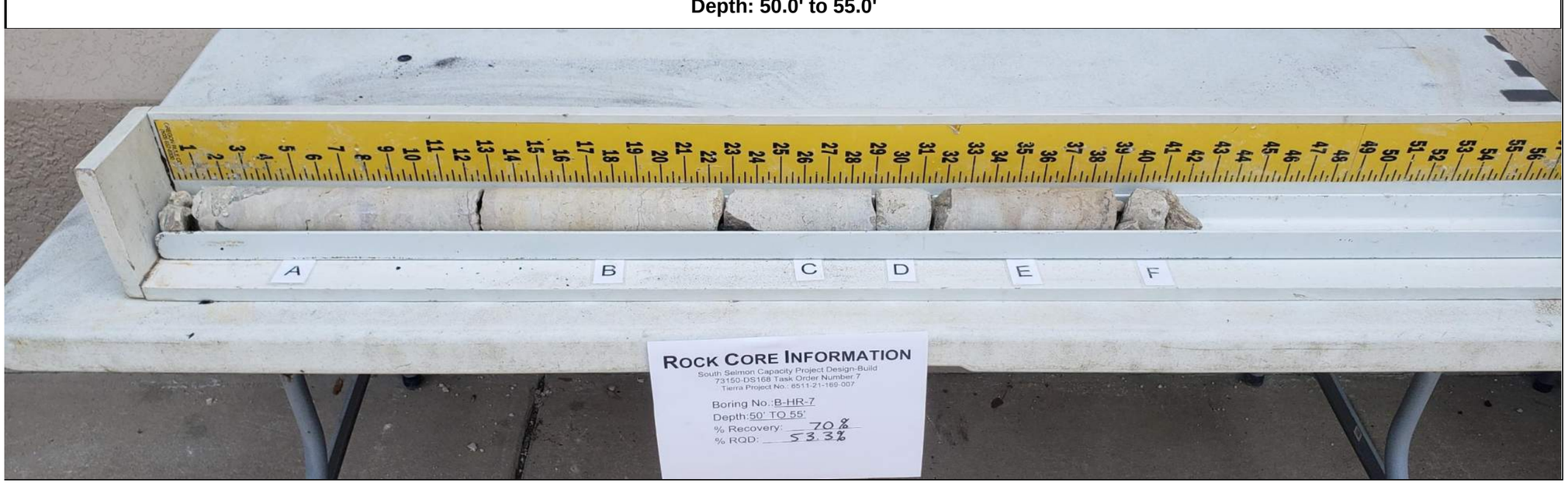
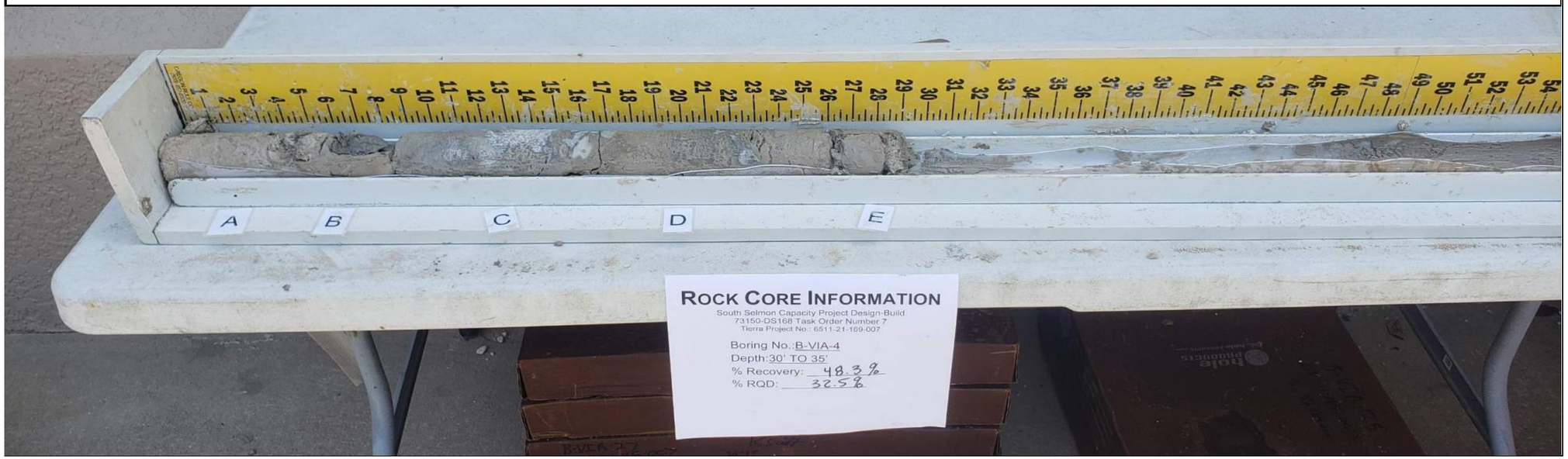
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-7
Depth: 40.0' to 45.0'



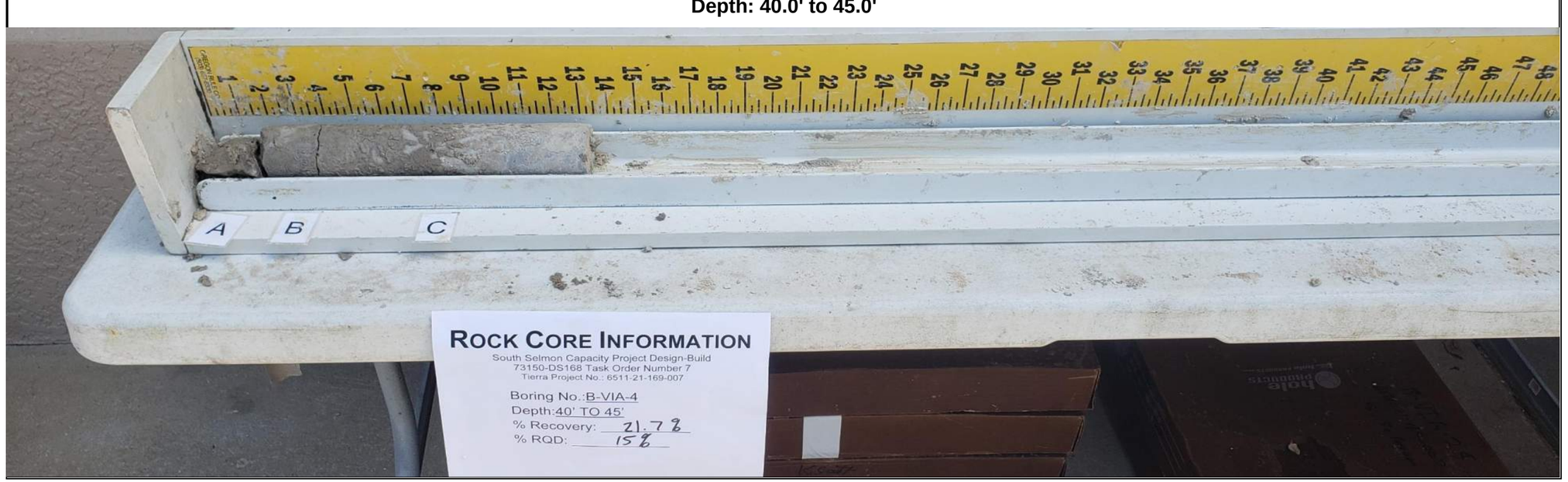
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-HR-7
Depth: 50.0' to 55.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-4
Depth: 30.0' to 35.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-4
Depth: 40.0' to 45.0'



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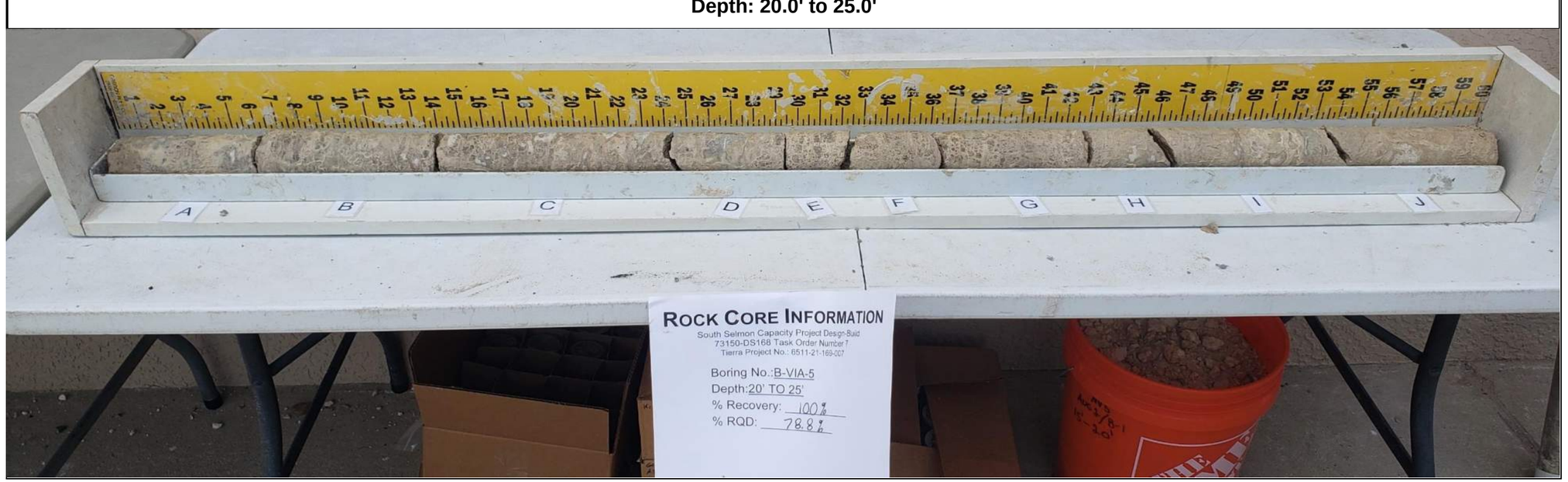
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-5
Depth: 20.0' to 25.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-5
Depth: 35.0' to 40.0'

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-10
Depth: 47.0' to 52.0'

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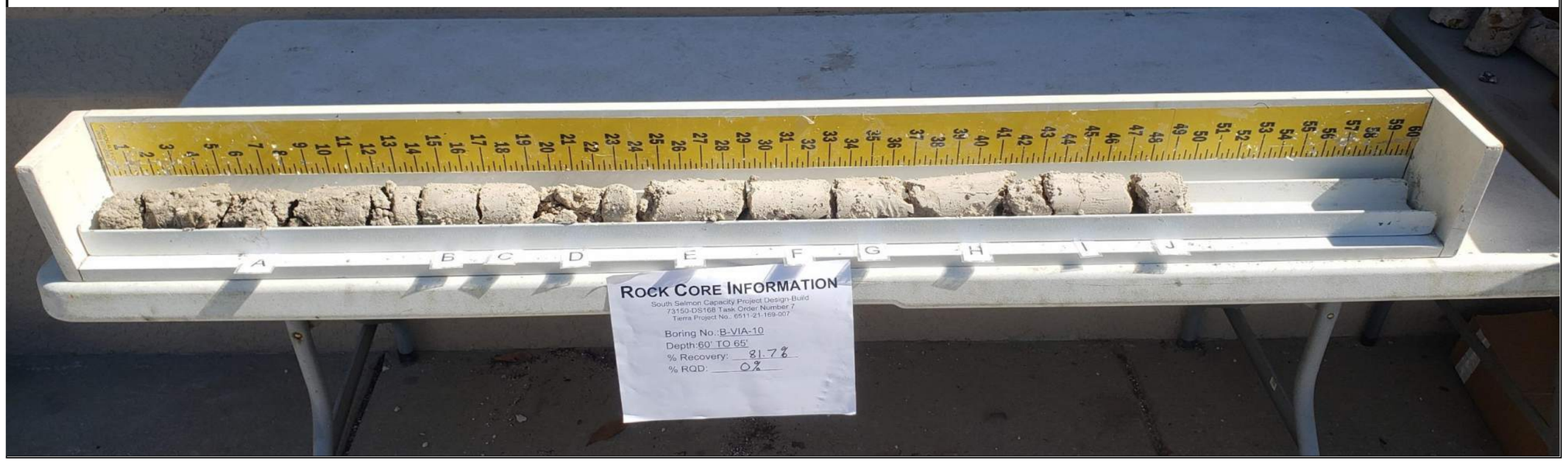
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-10
Depth: 60.0' to 65.0'



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GEOTECHNICAL • MATERIALS
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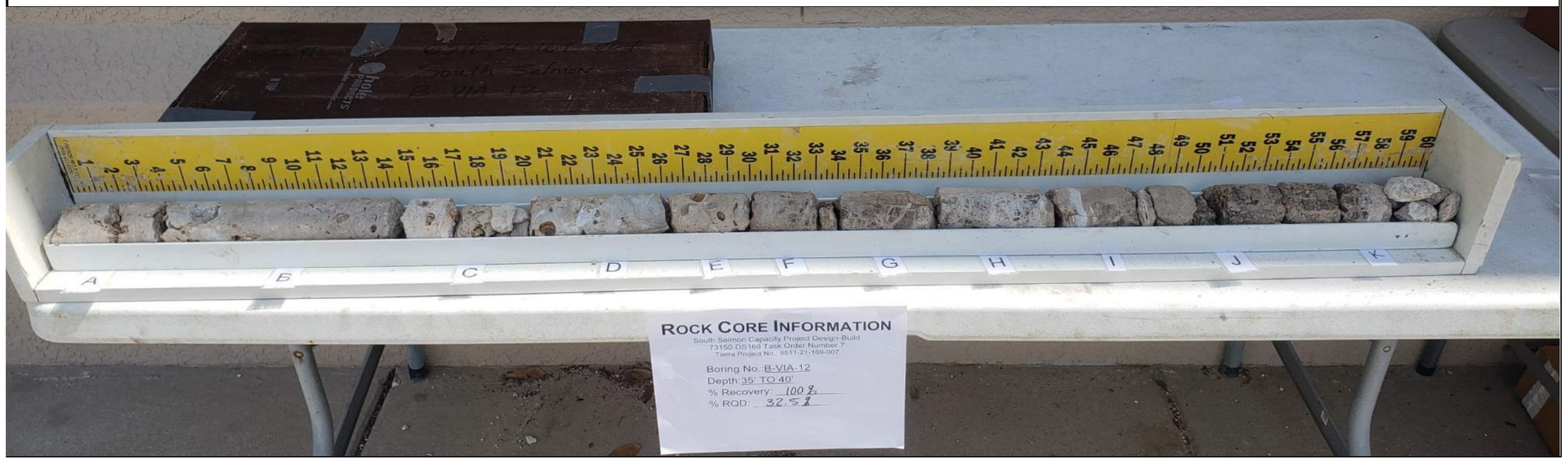
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-12
Depth: 35.0' to 40.0'



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GEOTECHNICAL • MATERIALS
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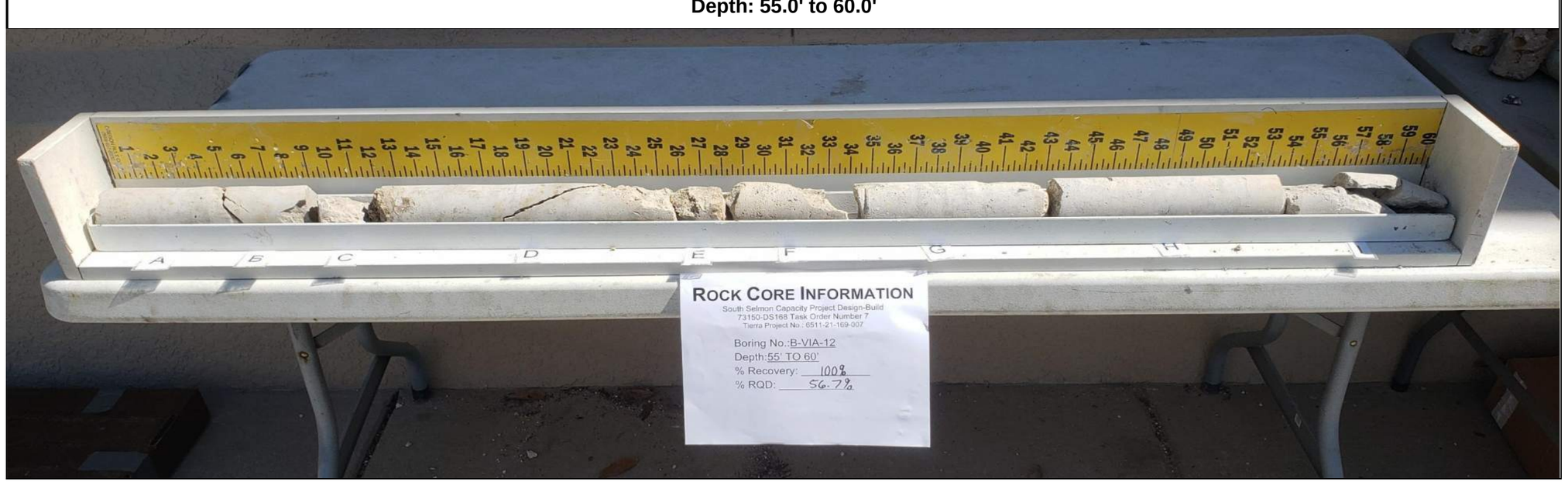
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-12
Depth: 55.0' to 60.0'



TIERRA
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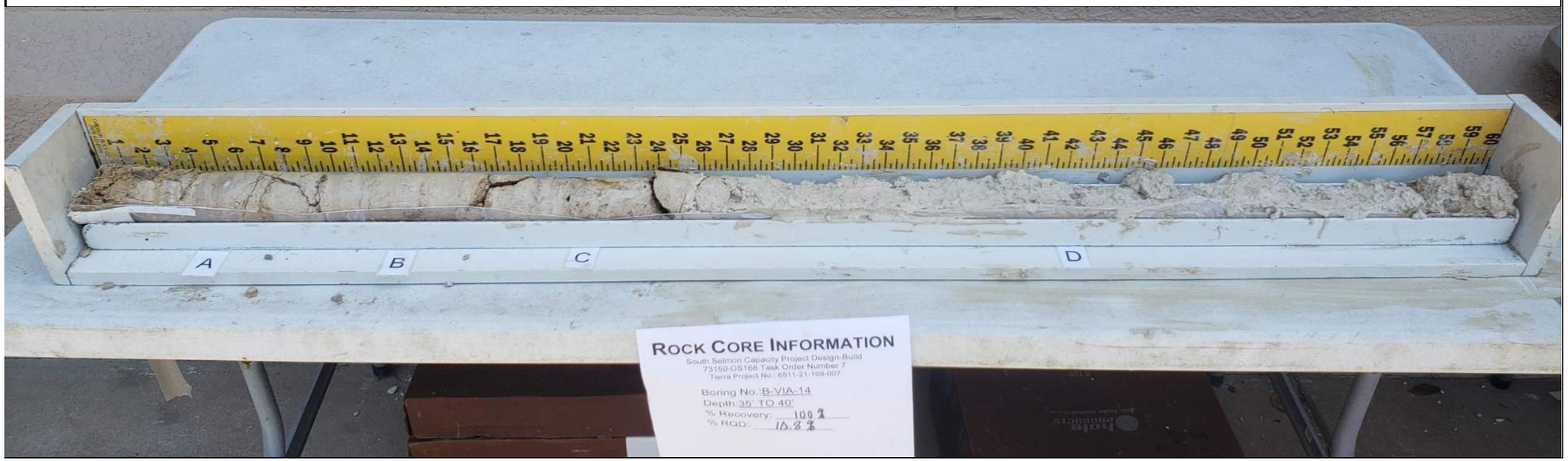
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-14
Depth: 35.0' to 40.0'



TIERRA
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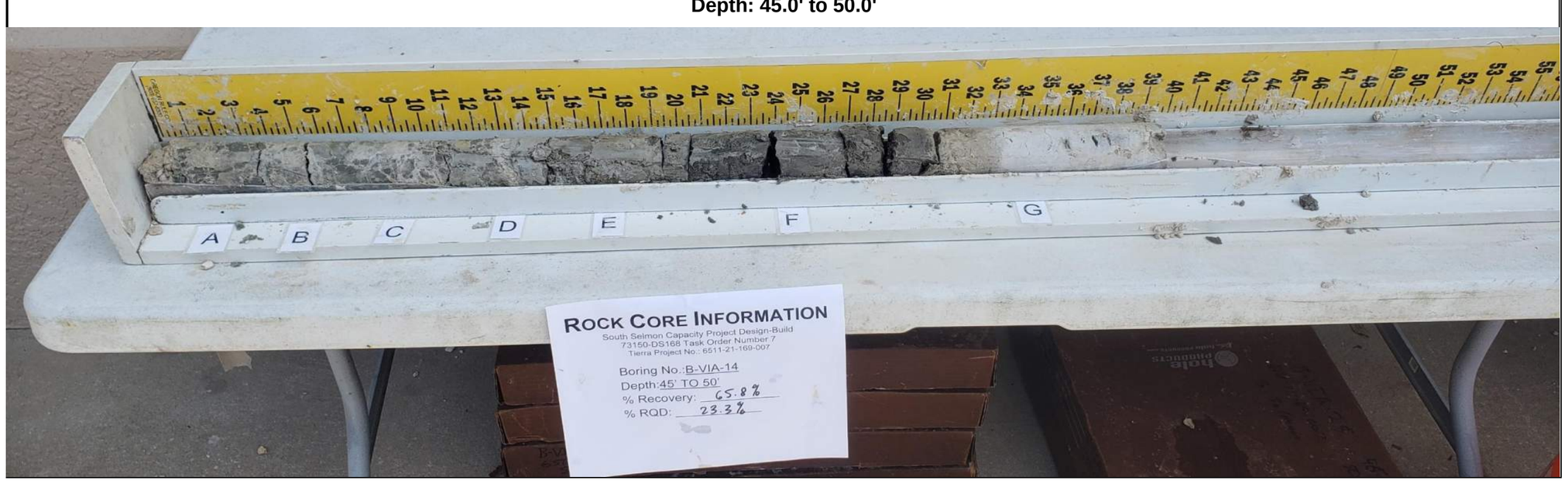
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-14
Depth: 45.0' to 50.0'



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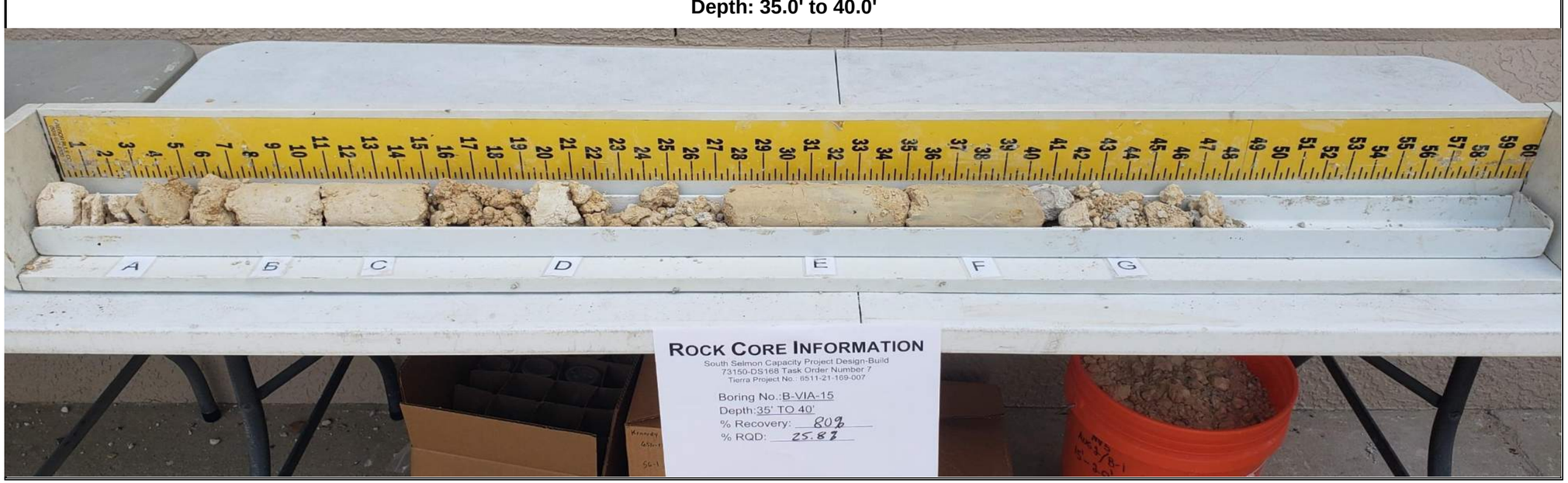
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-15
Depth: 35.0' to 40.0'



TIERRA
GEOTECHNICAL • MATERIALS
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South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-15
Depth: 50.0' to 55.0'

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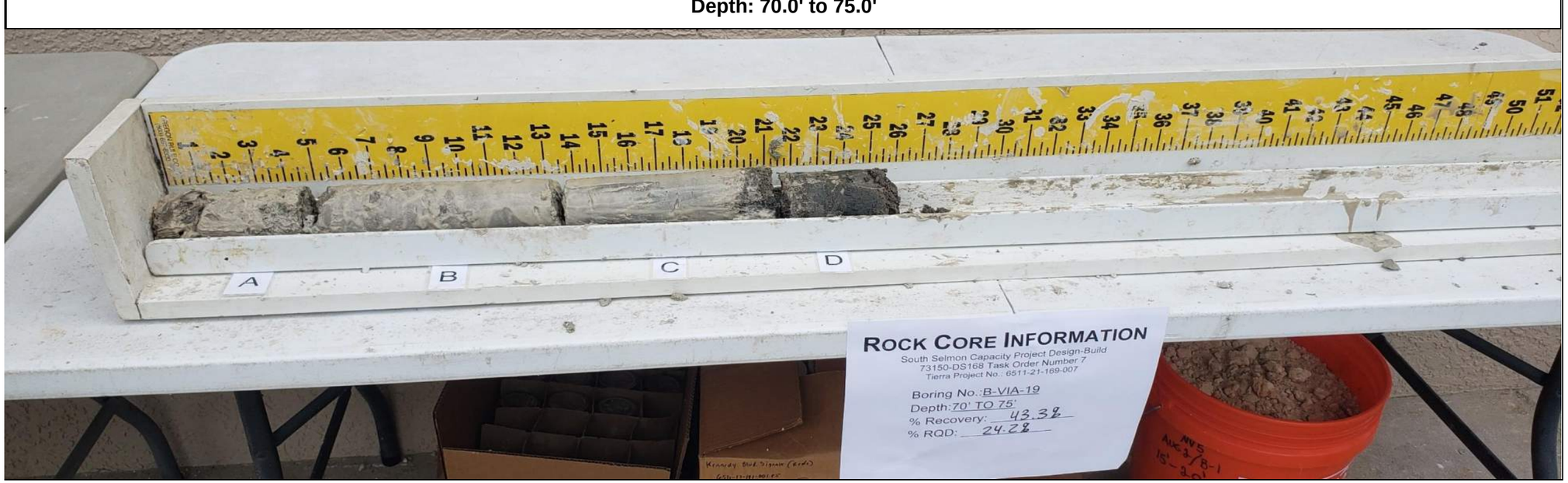
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-19
Depth: 60.0' to 65.0'

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-19
Depth: 70.0' to 75.0'



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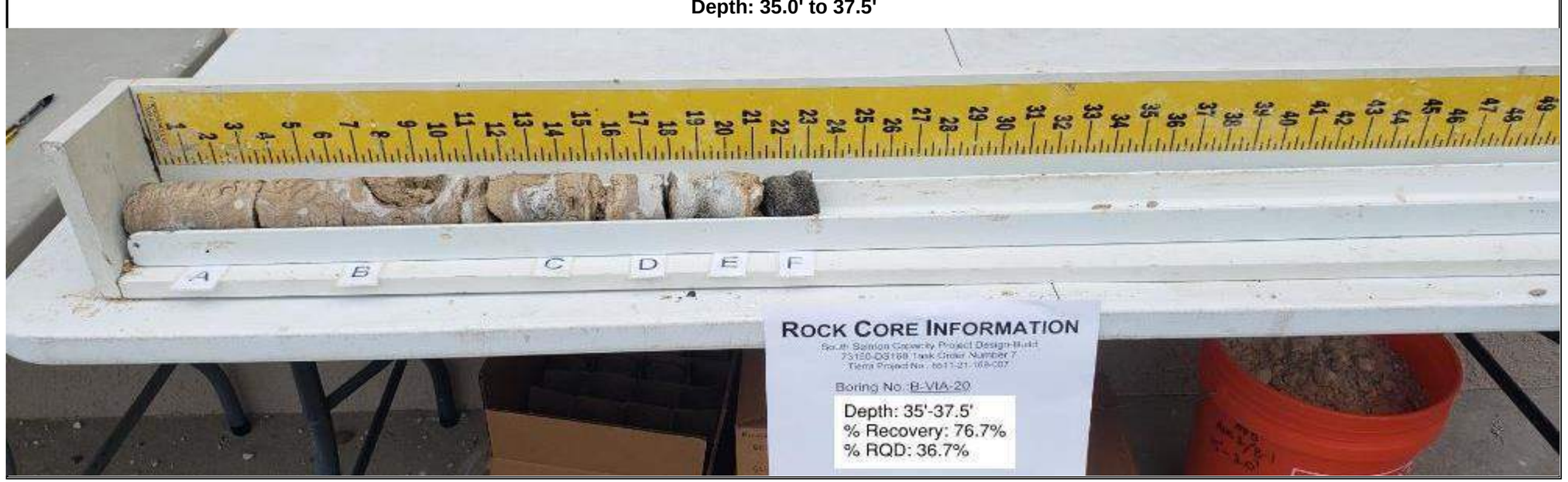
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-20
Depth: 35.0' to 37.5'



TIERRA
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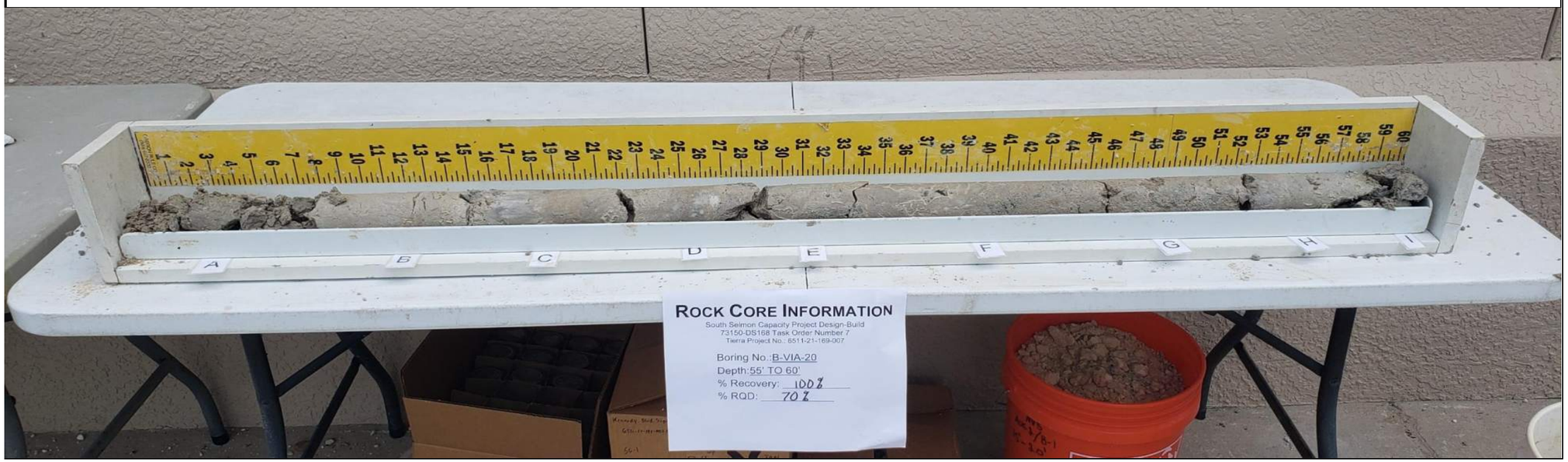
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-20
Depth: 55.0' to 60.0'



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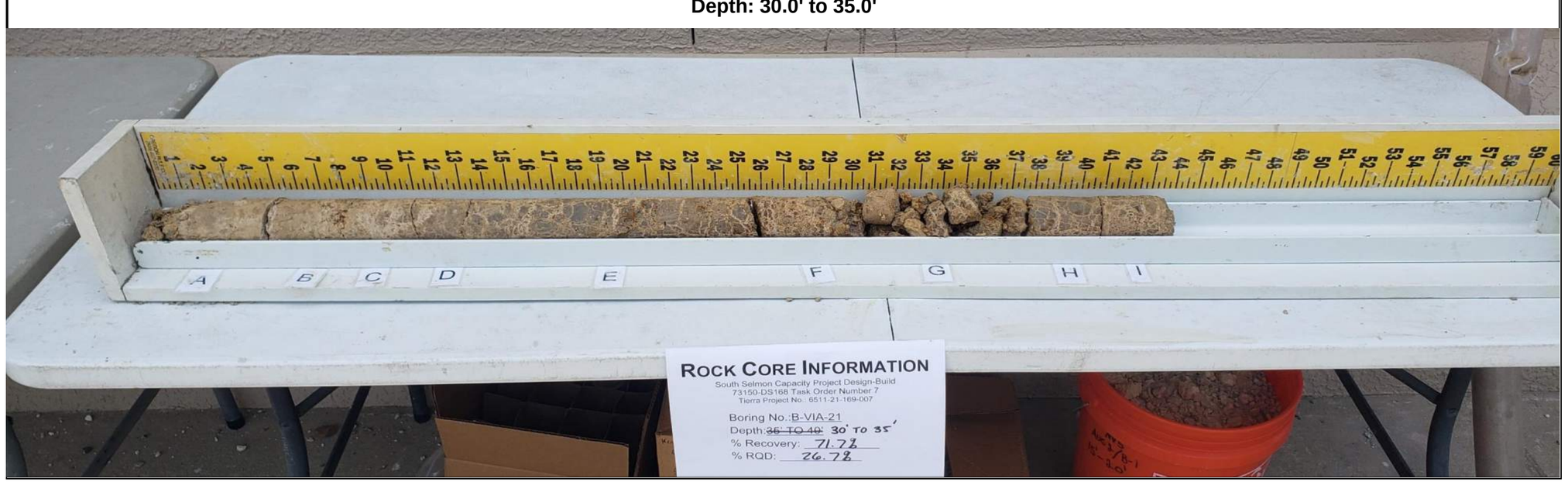
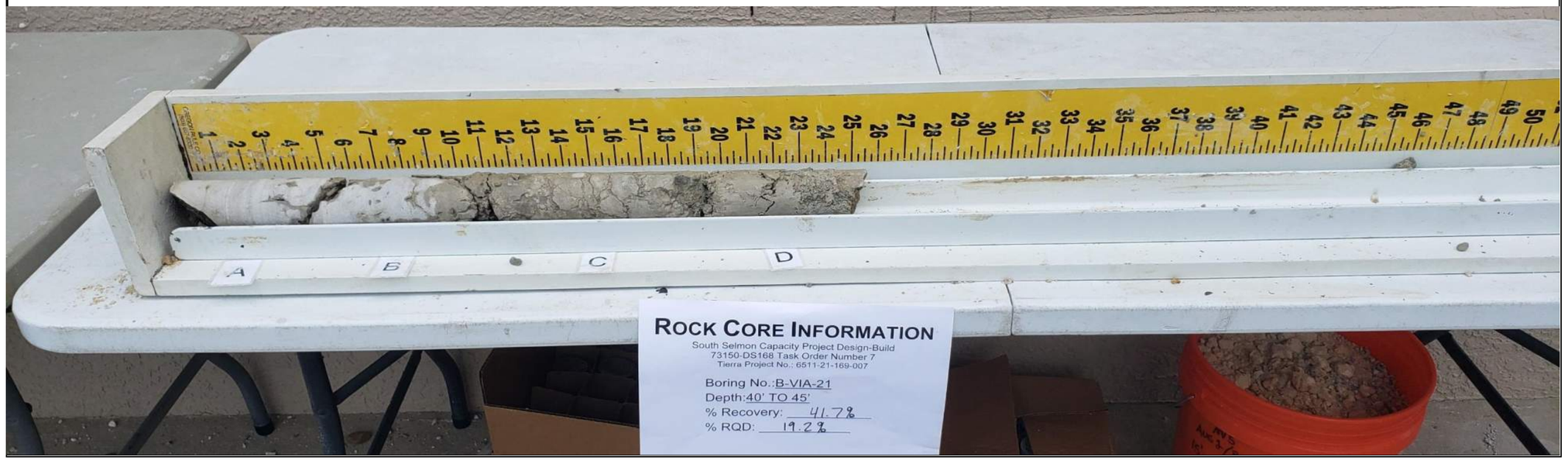
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-21
Depth: 30.0' to 35.0'

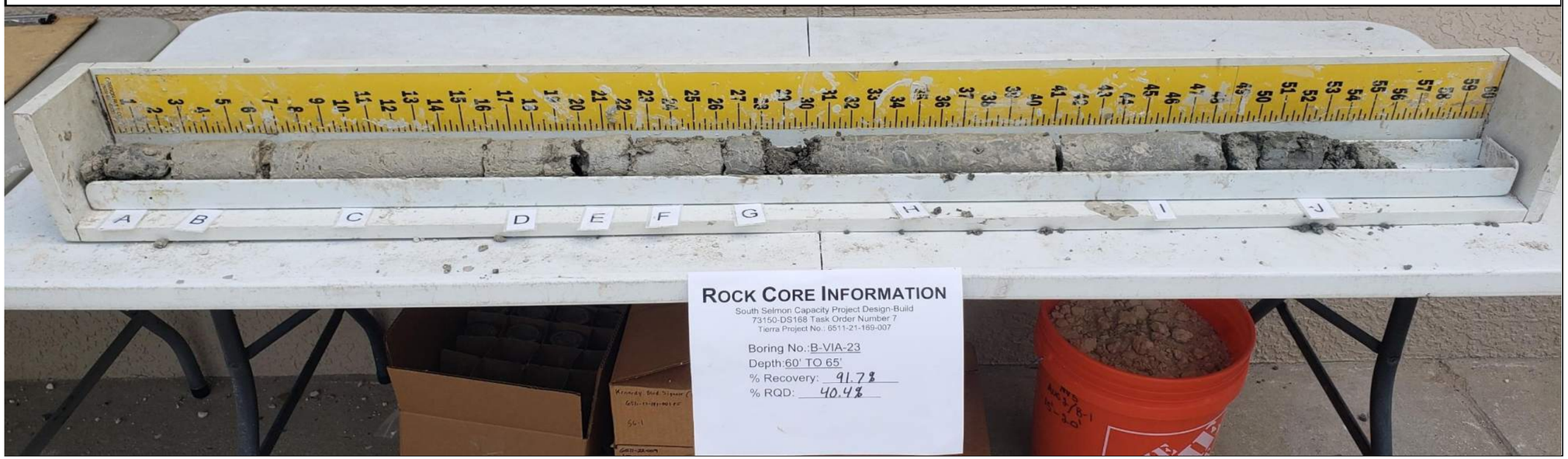


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-21
Depth: 40.0' to 45.0'

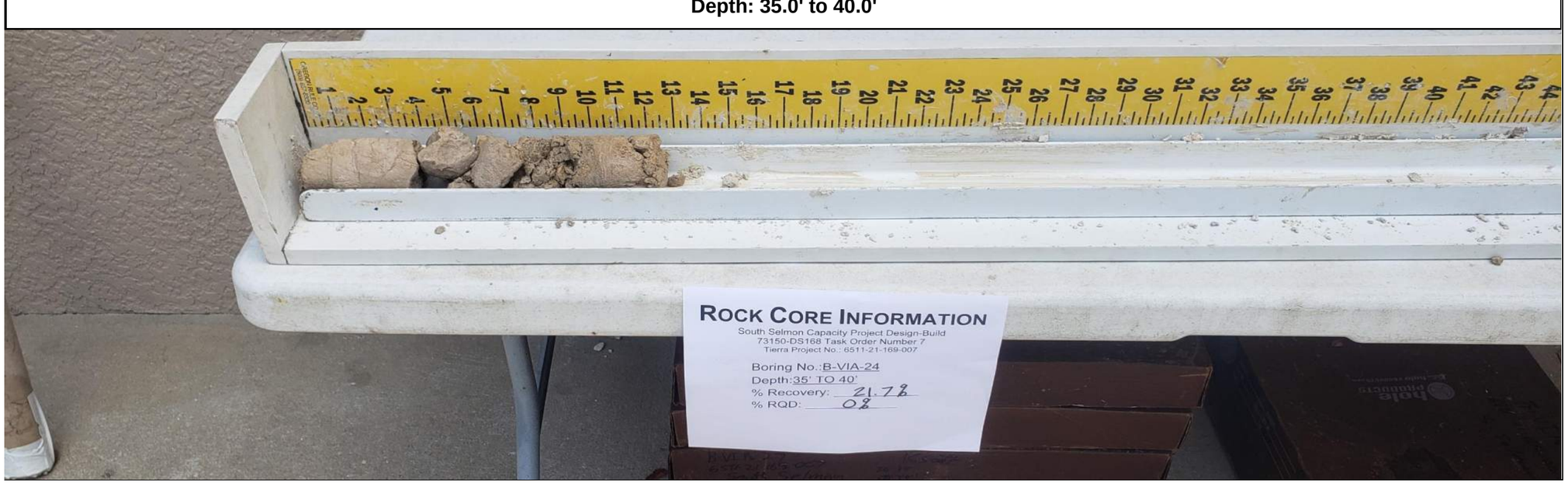


South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-23
Depth: 50.0' to 55.0'

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-23
Depth: 60.0' to 65.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-24
Depth: 35.0' to 40.0'



TIERRA
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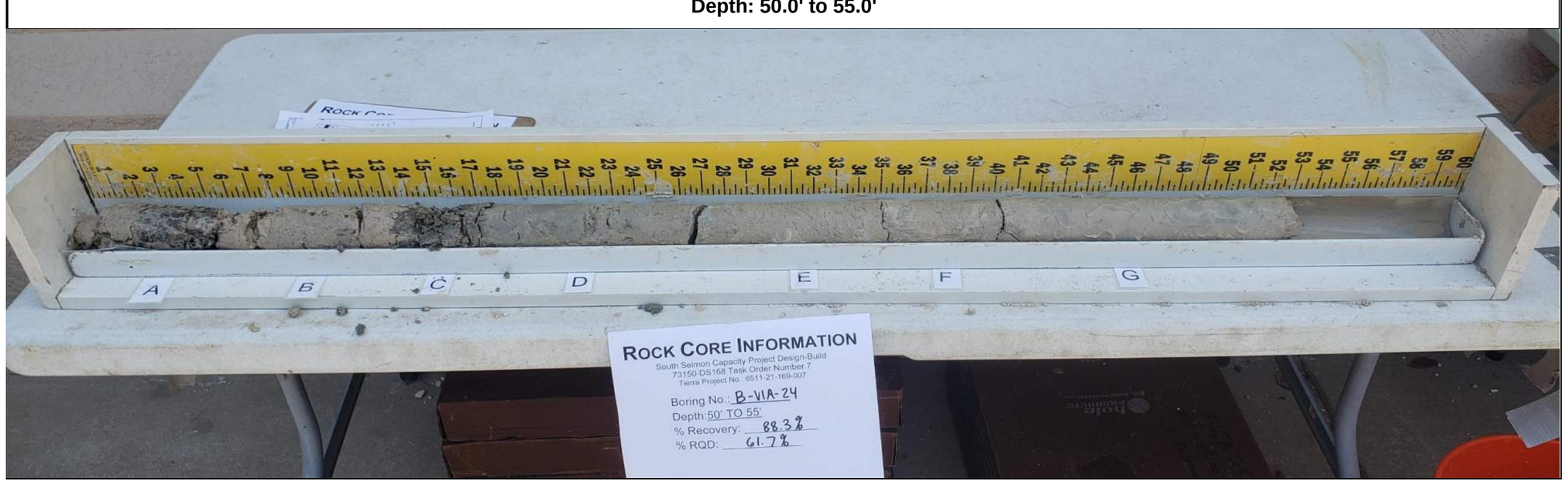
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-24
Depth: 50.0' to 55.0'



TIERRA
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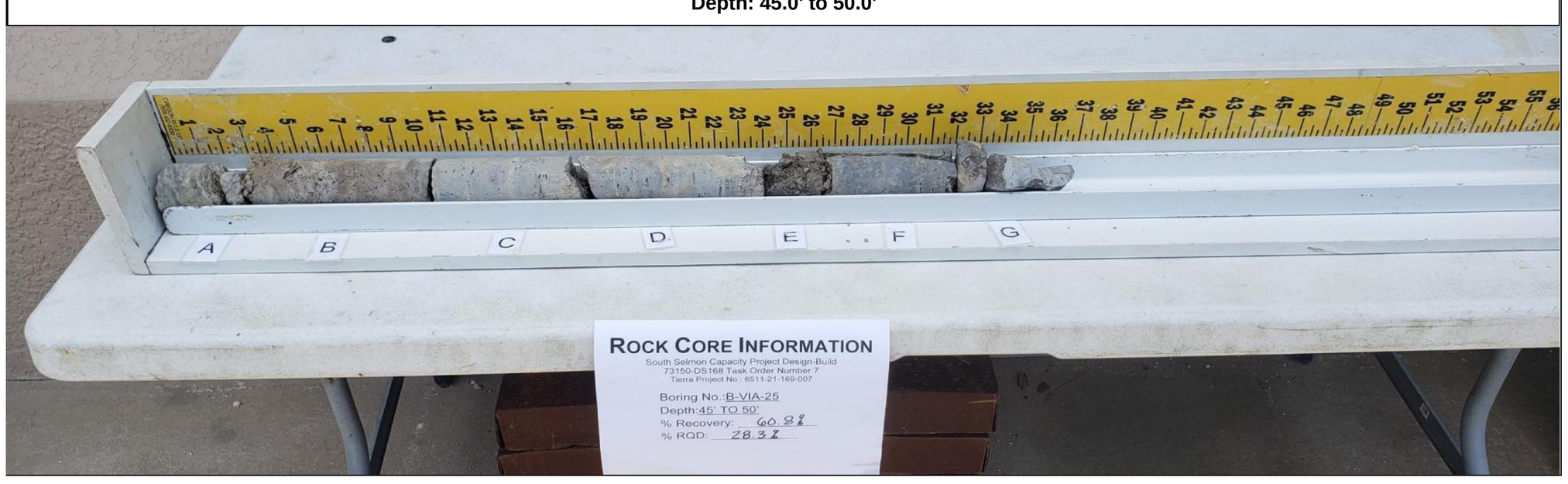
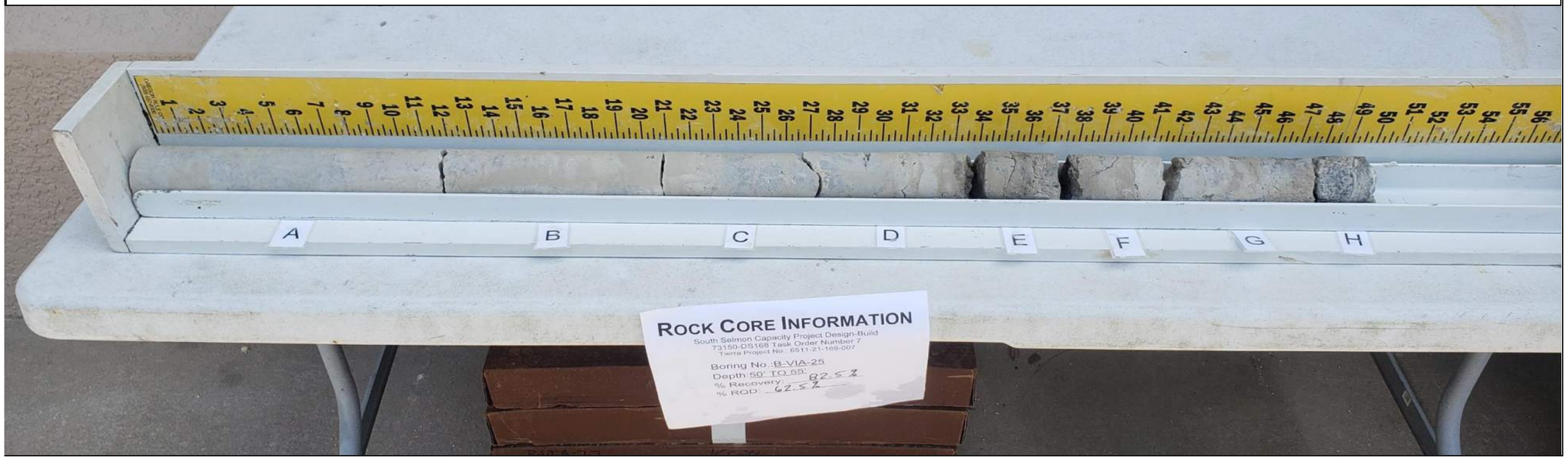
ENVIRONMENTAL • ENGINEERING

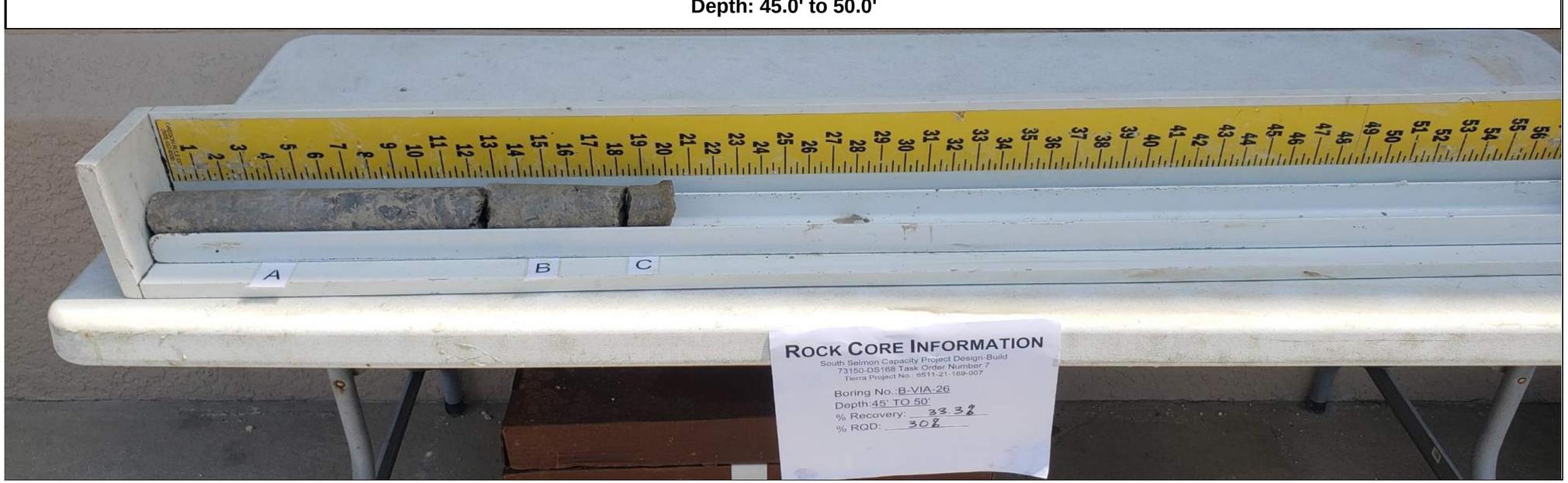
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-25
Depth: 45.0' to 50.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-25
Depth: 50.0' to 55.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-26
Depth: 45.0' to 50.0'



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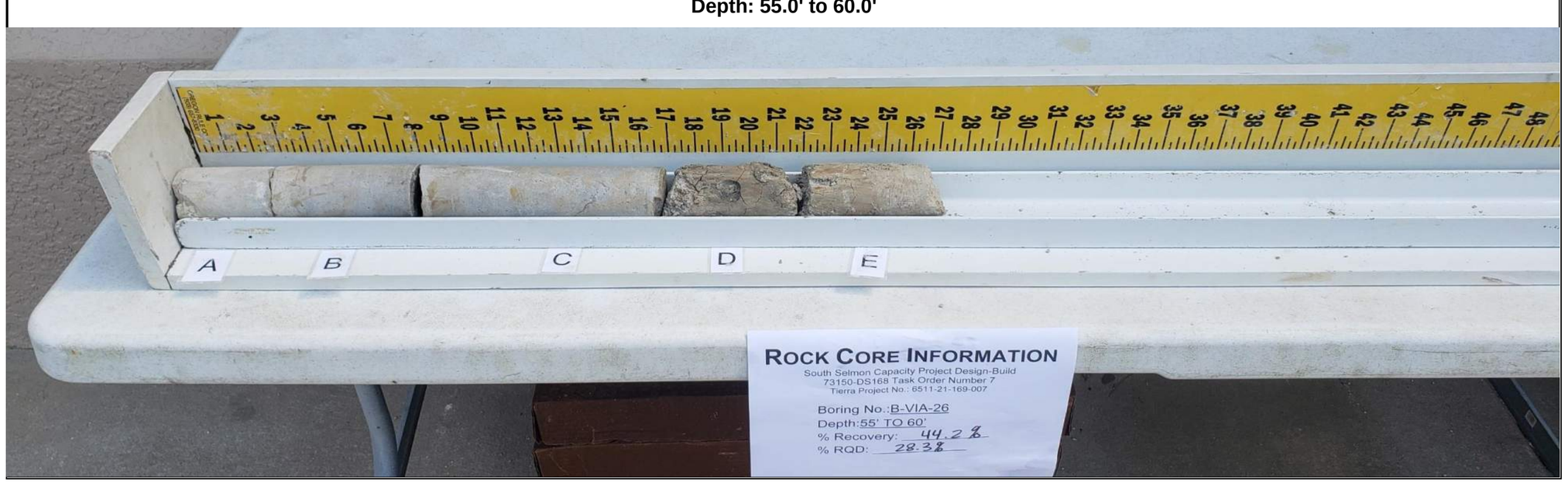
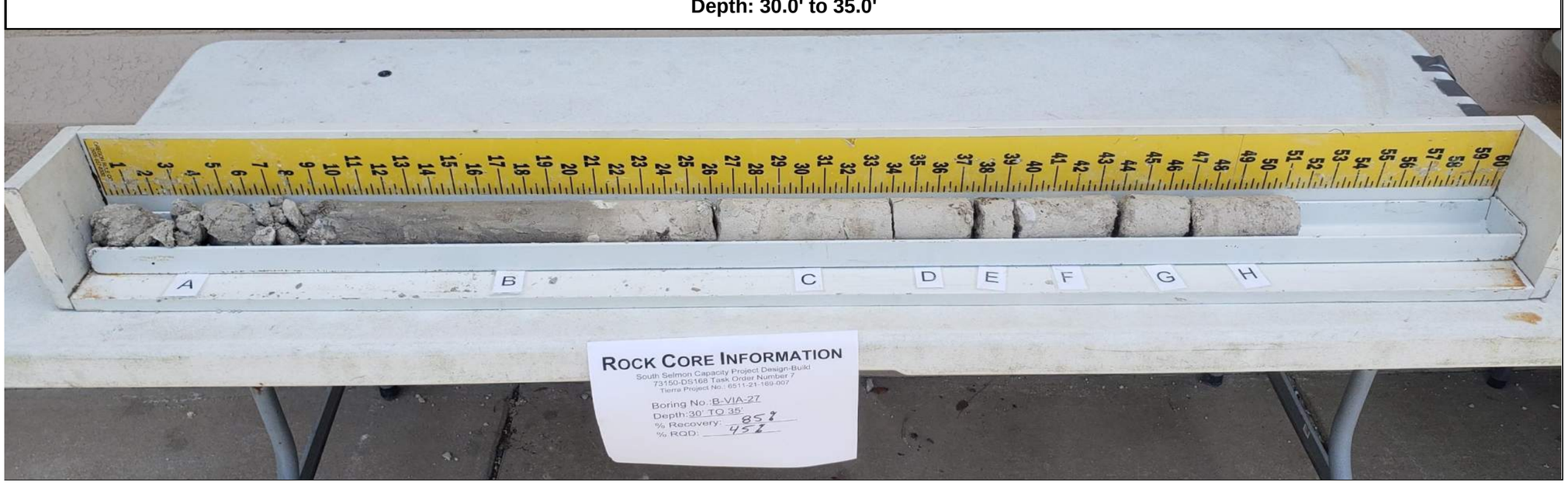
South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-26
Depth: 55.0' to 60.0'



South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-27
Depth: 30.0' to 35.0'



TIERRA
GEOTECHNICAL • MATERIALS
ENVIRONMENTAL • ENGINEERING

South Selmon Expressway Improvements from Himes Avenue to Whiting Street
Hillsborough County, Florida
THEA Project No. HI-0012
Tierra Project No. 6511-21-169-007
Boring: B-VIA-27
Depth: 50.0' to 55.0'