

107 Saint Francis St. - Suite 2900, Mobile, AL 36602 T 251.343.4366 Fax 251.343.6902

ADDENDUM NUMBER 3

October 10, 2024

PROJECT: CL-036-21 Africatown Welcome Center

1959 Bay Bridge Cutoff Road

Mobile, AL 36602 MM Project # 502100719

ARCHITECT: Mott MacDonald

This addendum forms a part of and modifies the Construction Documents for the above project. Receipt of this Addendum shall be acknowledged in the submission of a proposal to the Owner. This Addendum will be issued to registered bidders. It is the responsibility of the General Contractor to forward all addenda to his/her applicable subcontractors and material suppliers.

Incorporate into the Contract Documents the following additions, deletions, changes, clarifications, etc.:

GENERAL:

DOCUMENTS:

Geotechnical Report

DRAWINGS:

Sheet E205 Site Electrical

QUESTIONS:

- 1. Will you provide a GeoTech Report?
 - a. The Geotechnical report is attached.
- 2. Sheet E205 seems to be partially cut off. Can we get a full size print of that drawing?
 - a. Sheet E205 is attached.
- 3. Would an equal Cat-5e cable system by The Siemon Company be an acceptable substitution?
 - a. Siemens Cat5e cable will be acceptable provided it meets all specifications.
- 4. Please confirm whether the Aruba network switch is to be OFE or contractor provided Ref: E201 keynote B.

GENERAL NOTES:

- THE CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF POWER OUTLETS WITH THE FINAL LOCATION OF THE
 NETWORK RACK (CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED) PRIOR TO ROUGH IN. THE CONTRACTOR
 SHALL COORDINATE WITH THE OWNER AND PROVIDE AND INSTALLA WIRE MANAGEMENT SYSTEM IN ACCORDANCE
 WITH INDUSTRY STANDARDS. COORDINATE LOCATION OF CABLE TRAY WITH FINAL LOCATION OF NETWORK RACK.
 FOR COMMUNICATIONS OUTLET. PROVIDE A DEEP 4" SQUARE BOX WITH 34" CONDUIT AND BUSHINGS ON BOTH ENDS
- 2. FOR COMMUNICATIONS OUTLET, PROVIDE A DEEP 4' SQUARE BOX WITH 3/4' CONDUIT AND BUSHINGS ON BOTH ENDS TO ACCESSIBLE AREA ABOVE THE CEILING. PROVIDE 2 CATSE CABLES FROM THE DEVICE LOCATION TO THE NETWORK RACK. MOUNT AT 18' AFF UNLESS OTHERWISE NOTED. THE ELECTRICAL CONTRACTOR IS TO INSTALL, TERMINATE, TEST(QUALIFIED FOR 1 GIG) AND LABEL ALL CABLING FROM THE NETWORK RACK TO THE WALL DEVICES. THE CONTRACTOR SHALL UTILIZE TIA WIRING STANDARD-B FOR TERMINATING THE CATSE CABLES. TWO CABLES TO BE RUN PER WALL JACK. TWO PORT FACEPLATES SHALL BE USED IN ALL LOCATIONS WITH EACH PLATE LABELED TO SHOW WHICH PORT IT CONNECTS TO IN THE IT ROOM. THE CITY OF MOBILE UTILIZES THE COM-SCOPE 108232703 CATSE JACK. DEVICE PLATES ARE TO BE APPROVED BY OWNER.

 A TELEVISION COAXIAL OUTLET IS TO BE MOUNTED AT THE TELEVISION. COORDINATE EXACT LOCATION WITH THE ARCHITECT AND OWNER PRIOR TO ROUGH IN. PROVIDE AND INSTALL AN RG-6 CABLE FROM THE DEVICE LOCATION TO THE CABLE TV DISTRIBUTION POINT.

INSTALL TWIST AND LOCK NEMA L5-30R PLUGS AT IT SERVER RACK

- INSTALL TWO(2) 2" SPARE CONDUITS IN SCH 40 PVC FROM IT ROOM TO NEW 24"x36"x24" POLYMER CONCRETE
 HANDHOLE WITH TIER 2 LID IN GRASSY AREA PLAN NORTH FOR FUTURE USE. INSTALL TWO(2) 2" SPARE CONDUITS IN
 SCH 40 PVC FROM IT ROOM TO NEW 24"x36"x24" POLYMER CONCRETE HANDHOLE WITH TIER 2 LID IN GRASSY AREA
 SOUTH OF MONUMENT SIGN PLAN EAST FOR FUTURE USE. INCLUDE THE INSCRIPTION "FIBER OPTIC" ON EACH LID.

 8. FIAITLE 4588 CABILING STANDARD SHALL BE LISED FOR ALL CAT. SE CABILIST. SEE SPECIFICATIONS FOR MORE DETAIL
- EIA/TIA 568B CABLING STANDARD SHALL BE USED FOR ALL CAT-5E CABLES. SEE SPECIFICATIONS FOR MORE DETAIL.
 PROPER CABLE MANAGEMENT SHALL BE USED FOR A NEAT AND TIDY APPEARANCE OF THE CABLES.
 THE OWNER IS TO BE CONSULTED BEFORE INSTALLING EQUIPMENT.

KEYNOTES:

A. JUNCTION BOXES TO BE INSTALLED FOR MAGNETIC LOCKS.

B. POWER FOR SUBMERSSIBLE FOUNTAIN PUMP

- C. 19" RACK TO BE BOLTED TO THE FLOOR. NETWORK SWITCH SHALL BE ARUBA RBQ67A 6200M 24 OR 48G 4SFP+ LAYER 3. INCLUDE CATS E PATCH PANEL ALLEN TEL AT55B-PNL-24. INCLUDE APC SMART 1500VA UPS FOR IT RACK. SEE SPECIFICATIONS FOR ADDITIONAL DETAIL.
- D. INSTALL CAT 5E CABLE TO THIS LOCATION FOR FUTURE WIFL ADD 50' OF CABLE AT EACH LOCATION.
- a. Network switch and other devices listed in Appendix B IT and Security and their installation will be covered by the IT allowance. For clarification, Cabling infrastructure and other above ceiling or in wall items will be part of the base bid. The Aruba network switch or preapproved equivalent is to be OFE and purchase of switches shall be coordinated through the City of Mobile's IT Department. The COM IT contact will be Greg Holliday, 251.208-7148.
- 5. Will All Weather STPE from the Henry Company be considered an acceptable substitution for Section 072726
 - a. All Weather STPE shall be an acceptable substitution provided it is compatible with all related exterior envelope and finish systems.

END OF ADDENDUM NUMBER 3



~ Geotechnical Evaluations ~ Construction Materials Testing ~ Geosciences ~ Infrastructure Management Services ~

REPORT OF:

SOILS EXPLORATIONS AND GEOTECHNICAL STUDIES
FOR THE PROPOSED

AFRICATOWN WELCOME CENTER
AT 1959 BAY BRIDGE CUTOFF ROAD
IN MOBILE, ALABAMA

Professional Services Since 1974

904 Butler Drive, Mobile, AL 36693 251.666.7197 FAX: 251.666.7380

www.geoengr.com

Geotechnical Engineering-Testing, Inc.

PROFESSIONAL ENGINEERS

Geotechnical Evaluations - Geosciences - Construction Materials - Pavement Management

October 23, 2023

Roger Washington Jr.
City of Mobile
Architectural Engineering Department
P.O. Box 1827
Mobile, AL 36633

Email: roger.washington@cityofmobile.org

Re: Report of Soils Explorations and Geotechnical Engineering Studies for the Proposed Africatown Welcome Center at 1959 Bay Bridge Cutoff Road in Mobile, Alabama (GET Project Number 23-177)

Mr. Washington:

Geotechnical Engineering-Testing, Inc. (GET) is pleased to submit this report of our soils explorations and geotechnical engineering evaluations for the proposed Africatown Welcome Center at 1959 Bay Bridge Cutoff Road in Mobile, Alabama. This report includes the results of the soil test borings and laboratory soils tests performed for these evaluations along with our recommendations for building foundation and pavement design and construction. Our services were performed in general accordance with our proposal dated January 9, 2023 and they were authorized by City of Mobile notice-to-proceed dated September 18, 2023.

This report has been prepared to aid in the evaluation of this site and to assist in the design of the project. The recommendations provided are based in part on the project information provided to GET and only apply to the specific project and site discussed in this report.

Please call Hank Oakes, P.E. if you have any questions regarding this report.

Sincerely,

GEOTECHNICAL ENGINEERING-TESTING, INC.

Hank M. Oakes, P.E. Sr. Project Engineer

Alabama License No. 19576

904 Butler Drive • Mobile, Alabama 36693 • 251.666.7197 www.geoengr.com

TABLE OF CONTENTS

	page
INTRODUCTION	1
SITE DESCRIPTION	2
SOILS EXPLORATIONS PROGRAM	
Boring Locations	2
Soil Borings	2
Laboratory Testing	3
SUBSURFACE CONDITIONS	3
GEOTECHNICAL RECOMMENDATIONS	
General Site Preparation	5
Building Foundations	6
Concrete Floor Slabs	6
Paved Parking and Drives	6
ENGINEERING SERVICES DURING CONSTRUCTION	7
LIMITATIONS	8
APPENDICES	
Google Earth® Image with Site Plan and Soil Test Boring Locations	Α
Logs of Boring	В
Laboratory Test Reports	С

INTRODUCTION

Geotechnical Engineering-Testing, Inc. has completed the authorized soils explorations and geotechnical engineering studies for the proposed Africatown Welcome Center at 1959 Bay Bridge Cutoff Road in Mobile, Alabama. The soils explorations have included nine exploratory soil test borings, visual descriptions of the soils encountered, and laboratory tests on selected soil samples. The engineering study has included the planning, coordination, and supervision of the soils explorations program, evaluations of the results of the soils explorations, development of recommendations for site preparation, building foundation design and construction, pavement design and construction, and the preparation of this report.

Our understanding of the project was based primarily on email and telephone correspondence with the project architect, Andrew Marasca, of Mott MacDonald. A 15% Schematic Design drawing dated June 9, 2023 was provided to us on about June 22, 2023 and a Civil Site Plan dated December 21, 2022 was provided to us on about September 18, 2023. The schematic drawing indicates that the planned Welcome Center building will be a one-story structure with plan dimensions of about 32 ft X 110 ft. The building will be located near the center of the property with the long dimension oriented in the northwest-southeast direction. For purposes of this report, the long dimension will be assumed to run east-west with the building entrance on the south side. Covered porches, about 10 to 12 ft wide, will be constructed on the south, west, and north sides of the building making the overall under-roof building area about 55 ft X 122 ft. The paved driveway will access the site from Bay Bridge Cutoff Road which borders the east side of the property. A paved parking lot will be constructed on the south side of the building. North and west of the building will generally be lawn area with walking paths and a contemplation garden. A preliminary site plan, from the 15% Schematic Design drawing, is overlaid on a Google Earth® image and included in Appendix A of this report. We understand that the Site Plan, on the north side of the building, has changed.

Information provided indicates that planned construction will require only minor changes to the existing site topography. That is, finished grades will be near existing site grades. Specifically, we understand the building design finished floor elevation is +33.5 ft and the existing grades within the planned building area vary from about +33.5 ft (south side) to about +31 ft (north side).

Details of our findings and recommendations are presented in the following sections of this report.

SITE DESCRIPTION

The site for the planned Welcome Center lies at the intersection of Bay Bridge Road, on the north side of the property, and Bay Bridge Cutoff Road. The property is bounded on the west by a Southern Railway railroad track and on the south by apparently vacant residential properties. There is an existing paved driveway and parking lot on the property. Otherwise, the site is generally open, with sparse trees, and is grass-covered.

Topographic data on the site plan indicates that the southwest portion of the property, where the building and parking lot will be constructed, is relatively flat and level, near elevation +33 to +34 ft. Immediately north of the building location, the ground surface slopes downward toward the northeast to about elevation +15 ft.

SOILS EXPLORATIONS PROGRAM

The procedures for the field explorations and laboratory testing programs utilized on this project are summarized in the following sections of this report.

Boring Locations

Nine soil test borings were performed for this project; five within the planned building footprint area and four within planned paved areas. The boring locations were selected by our firm based on the site plan provided to us. We overlaid the preliminary site plan on a Google Earth® image and from there we picked GPS coordinates of the selected boring locations. Using these coordinates and a network rover, submeter GPS surveying instrument, soil test boring locations were established in the field. The approximate boring locations are shown on the image included in Appendix A of this report.

Soils Borings

The soil test borings in the building footprint area were performed using our MOBILE B37 drill rig. Borings were extended to depths of 30 ft to 75 ft. The boreholes were advanced using the rotary wash method in which a bentonite slurry drilling fluid is circulated through the borehole to

stabilized the sides and bottom and to transport soil cuttings to the surface. Standard penetration tests (SPT's) were performed and split spoon soil samples were collected continuously to a depth of 7.5 ft, at 2.5 ft center-to-center intervals from 7.5 ft to 20 ft, and then at the standard 5-ft interval to the boring termination depths. At some boring locations, undisturbed tube samples were collected within strata of cohesive soils.

The soil test borings in the planned paved areas were performed using an approximate 4-inch diameter bucket-type hand auger. A grab sample of each type of soil encountered, as determined visually, was collected.

Boring and sampling operations were conducted in general accordance with standard procedures.

Depths where samples were collected and the results of the standard penetration tests are shown on the Logs of Boring included in Appendix B of this report.

Soil samples were field logged, sealed in moisture-tight plastic bags, and, along with the sealed tube samples, transported to our laboratory. At the laboratory the soil samples were visually examined by a staff engineer to verify or adjust field classifications.

Laboratory Testing

Selected samples were subjected to laboratory tests to aid the engineering evaluations. Tests included moisture content, Atterberg limits, percent finer than a #200 sieve, and unconfined compressive strength. The tests were performed in general accordance with standard laboratory soil testing procedures. Test results are shown on the Logs of Boring opposite the samples tested and on shear test report forms included in Appendix C of this report.

SUBSURFACE CONDITIONS

The Geological Map of Alabama indicates that the geological setting of the project site is alluvial, coastal and low terrace deposits of the Quaternary System, Holocene Series. The soils of this formation consist of very pale-orange to grayish-orange varicolored fine to coarse quartz sand containing clay lenses and gravel in places. Gravel composed of quartz and chert pebbles. Coastal deposits include fine to medium quartz sand with shell fragments and accessory heavy minerals

along Gulf beaches; fine to medium quartz sand, silt, clay, peat, mud and ooze in Mississippi Sound, Little Lagoon, bays, lakes, streams, and estuaries.

According to the USGS Mapping of Sinkholes/Possible Sinkholes, the project site is not located in an area of sinkhole susceptibility or where sinkholes are known to have occurred.

The soil test borings for this project indicated that the near-surface soils were relatively consistent with loose to firm silty sands from the surface to depths of about 1.5 ft overlaying medium to stiff sandy clays to depths of about 6 ft. Below the 6 ft depth, firm silty sands and medium to stiff to very stiff sandy clays were generally encountered to about the 30 ft depth but the soil stratification was irregular and varied from boring to boring. Below 30 ft, boring B-3 encountered firm fine sand to about 42 ft and then dense fine sand to the 75-ft boring termination depth. Details of the soils encountered are shown on the respective Logs of Boring.

The soil borings are representative of subsurface conditions at their respective locations and vertical reaches. However, local variations characteristic of the subsurface materials of the region are likely to exist. The boring logs and related information are based on the driller's logs and visual examination of recovered samples in the laboratory. The delineation between soil types shown on the logs is approximate and the descriptions represent the interpretation of subsurface conditions at the designated boring location on the date drilled.

Boreholes were left open and several days after drilling was completed ground water depths were measured. As shown on the Logs of Boring, measured water levels varied from a depth of 16 ft to a depth of 29 ft. It is unlikely that the true ground water level varies to this extent within the confines of the building footprint. However, the measurements were evidence that the ground water level is several feet below the ground surface.

GEOTECHNICAL RECOMMENDATIONS

The recommendations provided below are based on our understanding of the project as described in the **INTRODUCTION**, the subsurface data collected, our engineering evaluations regarding the geotechnical matters, our experience on projects in proximity to this site, and the typical climate conditions of the area. If our understanding of the project is incorrect, we should be

provided accurate information and should be provided the opportunity to review our recommendations taking into consideration the new project information.

General Site Preparation

The building and pavement areas should be cleared and grubbed, i.e., remove topsoil, vegetation, asphalt pavement, and any other deleterious materials. The clearing and grubbing should extend at least 5 ft outside the perimeters of the construction areas. We anticipate that, except for removal of tree stumps, clearing and grubbing will require removal of no more than 6 inches of soil.

It is noted that the silty sands that will remain after clearing and grubbing have relatively high percentages of materials passing a number 200 sieve. These type soils are not inherently unsuitable for supporting buildings and pavements but our experience indicates that they are likely moisture sensitive, meaning they will become unstable and easily disturbed when wetted by rainfall. Thus, we recommend that, for expediency, the upper silty sands, to a depth of about 1.5 ft, be removed from the construction areas and replaced with compacted imported select soils. The silty sands that are excavated may be stockpiled on site and reused for grading or landscaping outside building and pavement areas. After removal of the upper silty sands, the remaining soils should be graded to facilitate runoff of stormwater. That is, even after removal of the moisture sensitive soils, rain water should not be allowed to pond on the insitu subgrade soils or they may also become unstable.

Imported select soils should be used as backfill and fill. They should consist of inorganic sands with no more than about 20 percent passing a number a number 200 sieve and with a plasticity index of no more than six. Imported select soils should be placed in about 8-inch loose lifts and each lift should be compacted prior to placement of the succeeding lift. Within the building footprint area, including the covered porch areas, imported select soils that are placed at elevations lower than the design foundation elevation(s) should be compacted to at least 100 percent of standard proctor density (ASTM D 698). Imported select soils placed at or above the design foundation elevation(s) should be compacted to at least 95 percent of standard proctor density. Imported select soils placed within paved drive and parking areas should be compacted to at least 95 percent of standard proctor density.

Building Foundations

Undisturbed insitu soils and/or imported select fill soils, placed and compacted as recommended above, should be suitable for supporting the planned Welcome Center building on shallow foundations. We recommend that shallow foundations be designed and constructed to bear at least 2 ft below the lowest adjacent final grades. Shallow foundations should have a minimum width of 2 ft. If soils at the bottoms of foundation excavations become disturbed, the soils should be compacted to at least 100 percent standard proctor density for the full depth of disturbance. Alternately, if approved by the structural engineer, disturbed soils may be excavated and foundations may be thickened to compensate for the overexcavation. If these recommendations are/will be followed, continuous or spread foundations may be designed based on the allowable bearing pressures shown in the table below.

Foundation			Foundati	on Width		
Bearing	2	Ft	3	Ft	4	Ft
Depth*	Continuous	Square	Continuous	Square	Continuous	Square
2 Ft	2250 PSF	2150 PSF	2600 PSF	2400 PSF	2950 PSF	2700 PSF
3 Ft	2650 PSF	2550 PSF	3000 PSF	2800 PSF	3000 PSF	3000 PSF
4 Ft	3000 PSF	2950 PSF	3000 PSF	3000 PSF	3000 PSF	3000 PSF

^{*}Below lowest adjacent final grade

If wider or deeper foundations are required, they may be designed based on an allowable bearing pressure of 3000 psf.

Concrete Floor Slabs

Concrete floor slabs may be constructed directly on the imported select fill soils placed and compacted as recommended above. We do recommend inclusion of a vapor barrier between the soil and the concrete slab.

We recommend that concrete floor slabs be designed based on a modulus of subgrade reaction, k, of 200 pci.

Paved Parking and Drives

We anticipate that traffic at the Welcome Center will be primarily automobiles and lightweight vehicles. However, busses or other heavy vehicles may access portions of the paved areas. Site

preparation of the paved areas was addressed above. In addition to the above, we recommend that the top 8 inches of subgrade soils, the soils immediately beneath the pavement base layer, be compacted to at least 100 percent of standard proctor density. Our recommended pavement sections are shown in the table below.

Recomme	nded Pavement Sections	S
Required Materials	Standard Duty	Medium Duty
Crushed Aggregate Base	6"	6"
Asphalt Upper Binder Layer	Not Required	2.5"
Asphalt Wearing Surface Layer	2"	2"

Pavement sections should be constructed in accordance with the latest edition of the "Alabama Department of Transportation Standard Specifications for Highway Construction". Pavement materials should comply with specific material requirements as follows:

Crushed Aggregate Base ALDOT 825-B

Asphaltic Concrete Binder Mix - ALDOT 424-B ESAL Range C/D

Asphaltic Concrete Wearing Mix - ALDOT 424-A ESAL Range C/D

ENGINEERING SERVICES DURING CONSTRUCTION

The engineering recommendations provided in this report are based on the information obtained from the soils explorations and laboratory testing program. Regardless of the thoroughness of geotechnical explorations, there is a possibility that conditions at locations remote from borings will be different from those at specific boring locations and that conditions will not be as anticipated by the designers or constructors. In addition, the construction process may itself alter soil conditions. Therefore, we recommend that a representative of the geotechnical engineer of record observe and document soil conditions encountered and the construction procedures used during the site preparation and foundation construction phases of the project. Unanticipated conditions and/or inadequate procedures should be reported to the design team along with timely recommendations to remediate such conditions or procedures. This representative could also perform the construction materials testing services that are typically required.

LIMITATIONS

We prepared this report to aid in the evaluation of this site and to assist in the design of the project. The recommendations provided are based in part on the project information provided to GET and only apply to the specific project and site discussed in this report. If the project description or stated assumptions are incorrect or if additional information is available, correct or additional information should be conveyed to GET for review. Recommendations can then be modified if warranted.

Our professional services for this project have been performed, findings obtained, and recommendations prepared in accordance with generally accepted engineering principles and practices. The services identified herein were completed in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing in the same locality and under similar conditions as this project. No other representation, expressed or implied, is included or intended, and no warranty or guarantee is included or intended in this report or any other instrument of service.

APPENDIX A GOOGLE EARTH® IMAGE WITH SITE PLAN AND SOIL TEST BORING LOCATIONS



APPENDIX B LOGS OF BORING

PROJECT NAME:

DATE DRILLED:

BORING DEPTH: 0 FT.

G.E.T. PROJ. NUMBER:

BORING ELEV.:

WATER DEPTH:

PROJECT LOCATION:

DATUM:

BORING NUMBER: LEGEND

GEOTECHNICAL ENGINEERING

DRILL RIG:

REMARKS:

BORING LOCATION:

DRILL METHOD:

DRILL CREW:

DEPTH IN	LOG	DESCRIPTION	SAMPLE	S.I	P.T.	W.C.	ATTER	RBERG ITS	DRY UNIT	% MINUS	SHEAR STRENGTH	UNIFIED CLASS
FEET			NO.	N _f	N _c	%	L.L.	P.I.	WT. pcf	#200	tsf	CLASS
5 —		TOPSOIL		ASTM D1586 b hammer)	rden by							
10 —		CLAY		- -	sand corrected for overburden by	ght			oic ft	#200 sieve		System
20 —		SILT		ined in the er weight	d correcte	dry soil weight			ds per cubic ft	solls finer than #200	meter	ssification
25 —		GRAVEL ORGANICS		penetration test value determined in the field es penetration of sampler under weight of 104	value of san	6			spunod lios	of 0	Cohesion, tons per square ft Angle of Internal fiction, degrees Vane shear strength, tons per square ft Values measure with a pocket penetrometer	Classification according to the Unified Classification System
30 —		PEAT		on test val ation of sa	ion test va n, 1974	Percent water content based			Dry unit weight of soil.	- Percent by weight	Cohesion, tons per square ft Angle of Internal fiction, degrees Vane shear strength, tons per sq Values measure with a pocket p	ng to the U
35 —		SILTY SAND (EXAMPLE OF A SOIL MIXTURE)		penetrations ses penetra	Nc - Standard penetration test Peck-Hansen-Thornburn, 1974	cent water	Limit	Plasticity Index		00 - Percei	Cohesion, tons per square fit Angle of Internal fiction, degr Vane shear strength, tons pe Values measure with a pock	n accordin
45 —		SPLIT-SPOON SAMPLE (STANDARD PENETRATION TEST) UNDISTURBED TUBE SAMPLE		Standard OH indicat	- Standar sk-Hanser	. % - Per	Liquid Limit		Unit Wt., pcf	Minus #200	0 4 /	assificatio
50 —		SAMPLE NOT RECOVERED		N (NC)	Pec	W.C.	L,L,	Ę.	5	%	- d w v	Ö
55 —		VANE SHEAR B.T. @ 0 FT										
60 —												
65 —												
70 —												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY

DATE DRILLED: 9/26/23

BORING DEPTH: 30 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 18 FT.

REMARKS:



BORING NUMBER: B-1

BORING LOCATION: SEE AERIAL

IMAGE

	DRILL	CREW:	ES, BT, RS(LOGGER)										
	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.		Р.Т.	W.C.	ATTER		DRY UNIT WT.	% MINUS #200	SHEAR STRENGTH tsf	UNIFIED CLASS
ļ					N,	N _c		L.L.	P.I.	pcf	#200		
	0 —		3" Topsoil	1	9								
ĺ	3	1:1:1:5	Loose brown silty sand	2	9		10						
	100		Stiff yellowish brown sandy clay	3	11							c*=0.88	
	5 —		()	4	10		22	43	25		59.3		CL
	2 7	-{: : : ×		5	16								
	-		Firm yellowish red silty sand	6	15		14						
	10 —		N.										
	÷		Firm yellowish red silty clayey sand	7	19								
	*		7	8	11		18						
	15 —		Stiff yellowish red sandy clay										
MOD DEET BURING LOS WILD NO VALUES 23-17 AFRICATIONN WELCOME CENTER, GFJ DE IT ALGO I 10/20/23	=	1////											
1.00	3		1	9	12								
2 1 1 2	20 —		N.										
200	7												
	=		Firm yellowish red silty sand	10	10		21						
3	25 —		V.										
	-	-											
3	-		1	11	12								
2	30 —		B.T. @ 30 FT	-									
3	2	-											
775	=	1											
	35 —												
	-												
	3												
1	40 —												
1	NOTE:	The stratifica	tion lines shown represent the approximate bounda level stated is for conditions at the time of boring a	ary between :	soil types nay fluctu	and the tr ate large	ansition manual	nay be gra	idual. The	e or seasor	Rev	iewed By:	
L													

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY

DATE DRILLED: 9/25/23

BORING DEPTH: 30 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 16 FT.

REMARKS:



BORING NUMBER: B-2

BORING LOCATION: SEE AERIAL

IMAGE

DRILL CREW: ES, BT, RS(LOGGER)

	DEPTH IN	LOG	DESCRIPTION	SAMPLE	S.F	ν.Т,	W.C.	ATTER LIM	BERG ITS	DRY UNIT WT.	% MINUS	SHEAR STRENGTH	UNIFIED CLASS
	FËET			NO.	N _t	N _c	%	L.L.	P.I.	pcf	#200	tsf	CLASS
	0 —		3" Topsoil Firm dark brown silty sand	1	10								
			Medium to stiff yellowish brown, yellowish red, light gray sandy clay	2 T-1 3	8 - 16		21	56	39	106	61.2	c=1.76	СН
	5		X ¬	4 5	9 13		24						
	10		∆ X	6	9								
	10 —			T-2	в		25						
3	15		Firm to loose yellowish red to light red silty sand	8	8								
J GETI_AL.GDT 10/20/23	20 —			9	10		27						
IN WELCOME CENTER.GI	25 —		Firm light red fine sand w/ silt	10	10								
7 AFRICATOW	30		B.T. @ 30 FT	11	11		17						
OD DEEP BORING LOG W/O NC VALUES 23-177 AFRICATOWN WELCOME CENTER.GPJ GETI_AL.GDT 10/20/23	35 —												
ID DEEP BORING L	40 —		ation lines show appropriate the approximate bound									iewed Bv:	

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

Reviewed By:

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY

DATE DRILLED: 9/21/23

BORING DEPTH: 75 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 29 FT.

REMARKS:



BORING NUMBER: B-3

BORING LOCATION: SEE AERIAL

IMAGE

DRILL CREW: ES, BT, RS(LOGGER)

Î	DEPTH IN	LOG	DESCRIPTION	SAMPLE NO.	S.F	Р.Т _g	W.C.	ATTER LIM		DRY UNIT WT.	% MINUS	SHEAR STRENGTH	UNIFIED CLASS
	FEET			NO.	N _t	N _c	/0	L.L.	P.I.	pcf	#200	tsf	
	0 —		Firm dark brown silty sand	1	14								
			X	2	13								
	4		Stiff light brown & yellowish red sandy clay	3	10		19	44	27		42.7	c*=1.10	sc
	5 —		X	4	10		28					c*=0.40	
	-			5	17								
	10 —		Firm reddish yellow fine sand w/ silt	6	16		15						
	=			T-1	-								
	15 —		Stiff light gray & red fat clay w/ sand	8	9		28	76	49		77.1	c*=1.10	СН
T 10/20/23	=			T-2	2								
ETI_ALG	20 —		X	9	14		24	38	21		54.5		CL
ER.GPJ 6	3		Stiff light red & yellowish brown sandy clay										
VALUES 23-177 AFRICATOWN WELCOME CENTER.GPJ GETI_AL.GDT 10/20/23	25 —		X	10	14								
OWN WEL	i —												
7 AFRICAT	30 —		Firm light brown & light red silty sand	11	15		29						
ES 23-17;													
NC VALU	35 —		X	12	14								
LOG W/C	=		Firm light brown fine sand										
MOD DEEP BORING LOG W/O NC	40 —		X	13	14		25						
NOD DE	NOTE: TI	he stratific	cation lines shown represent the approximate bound	ary between	soil types	and the tr	ansition n	nay be gra	dual. The			iewed By:	

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE

CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY

DATE DRILLED: 9/21/23

BORING DEPTH: 75 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 29 FT.

REMARKS:



BORING NUMBER: B-3

BORING LOCATION: SEE AERIAL

IMAGE

	DRILL	CREW:	ES, BT, RS(LOGGER)										
	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.		Р.Т.	W.C.	ATTER LIM		DRY UNIT WT.	% MINUS #200	SHEAR STRENGTH tsf	UNIFIED CLASS
3					N _t	N _c		L.L.	P.I.	pcf	#200	tai	
	40 —		Firm light brown fine sand										
	45 —			14	37								
	50 —			15	35		25						
/20/23	55 —			16	31								
3PJ GETI_AL.GDT 10	60 —		Dense light brown fine sand	17	33		25						
N WELCOME CENTER.	65 — -			18	39								
23-177 AFRICATOWN	70 —			19	35		24						
MOD DEEP BORING LOG WIO NC VALUES 23-177 AFRICATOWN WELCOME CENTER GPJ GETI_AL.GDT 10/20/23	75 —		B.T. @ 75 FT	20	33								
OD DEEP BORING	80 —					and the		agu ba a	edual Th		 	riewed By:	
MC	NOTE: T	ne stratific roundwate	ation lines shown represent the approximate bound r level stated is for conditions at the time of boring a	nd the level	nay fluctu	and the tr ate large	amounts t	for other o	onditions	or seasoi	ns.	ioned by.	

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY DRILL CREW: ES, BT, RS(LOGGER) DATE DRILLED: 9/25/23

BORING DEPTH: 30 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 24 FT.

REMARKS:



BORING NUMBER: B-4

BORING LOCATION: SEE AERIAL

IMAGE

DEPTH	LOG	DESCRIPTION	SAMPLE	S.F	Р.Т.	w.c.	ATTER LIM	RBERG ITS	DRY UNIT	% MINUS	SHEAR STRENGTH	UNIFIED CLASS
IN FEET	200	BESSKII HON	NO.	N _r	N _c	%	L.L.	P.I.	WT. pcf	#200	tsf	CLASS
0 —		4" Topsoil Stiff yellowish brown to yellowish	1 T-1 2	14 - 11		22	53	36	102	50.9	c=0.95	СН
5 —		red sandy clay	3	9		19						
			5	9								
10 —		Loose light red silty sand w/ trace ironstone	6	10		22						
Ē			7	8			11				c*=0.50	
15 —		Stiff yellowish red & yellowish brown sandy clay	8	8		30	41	23		70.9	c*=0.75	CL
-			T-2	*								
20 —			9	18		23	35	17		54.7		CL
_		Very stiff red & light gray sandy clay	10	19								
25 —		<u> </u>	10	13								
30 —			11	20								
-		B.T. @ 30 FT										
35 —												
=												
40 —												

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DRILL RIG: MOBILE B37

DRILL METHOD: MUD ROTARY

DATE DRILLED: 9/25/23

BORING DEPTH: 30 FT.

BORING ELEV.:

DATUM:

WATER DEPTH: 18 FT.

REMARKS:



BORING NUMBER: B-5

BORING LOCATION: SEE AERIAL

IMAGE

DRILL CREW: ES, BT, RS(LOGGER)

	DEPTH IN	LOG	DESCRIPTION	SAMPLE	S.F	P.T.	W.C.	ATTER LIM	RBERG	DRY UNIT WT.	% MINUS	SHEAR STRENGTH	UNIFIED CLASS
	FEET			NO.	N _t	N _c	%	L.L.	P.I.	pcf	#200	tsf	OBAGG
	0 —		3" Asphalt Loose red silty sand	1	6								
	-		Medium consistency brown sandy silty clay	2	5		13	24	12		57.5		CL
	5 —		Loose yellowish red clayey sand	3	8		17 18				34.3 38.3		
	-		<u>X</u>	5	7 13		22				28.1		
	10 —		Firm to loose yellowish brown silty sand	6	8								
	=			T-1	#		28	27	7		55.8		CL-ML
23	15 —		Medium consistency yellowish red & light gray sandy clay	8	7						\$ 2		
10/20/2	=			T-2	2								
GETI_AL.GDT	20 —			9	10		23						
ER.GPJ	; -		Firm light red silty clayey sand										
VALUES 23-177 AFRICATOWN WELCOME CENTER.GPJ GETI_AL.GDT 10/20/23	25 — —		X	10	13								
RICATOWN W	30 —	ZI III	Firm light brown fine sand	11	15		31						
S 23-177 AF	30		B.T. @ 30 FT										
	35 —												
MOD DEEP BORING LOG W/O NC	40 —												
MOD DE	NOTE: T	he stratific	cation lines shown represent the approximate bound or level stated is for conditions at the time of boring a	ary between	soil types	and the tr	ansition n	nay be gra	dual. The	e or seaso	Rev	iewed By:	

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

PROJECT LOCATION: 1959 BAY BRIDGE

CUTOFF ROAD, MOBILE, ALABAMA

CENTER

DATE DRILLED: 9/21/23

BORING DEPTH: 5 FT.

BORING ELEV.:

DATUM:

WATER DEPTH:

DRILL RIG:

DRILL METHOD: HAND AUGER

REMARKS:

BORING NUMBER: A-1

GEOTECHNICAL ENGINEERING

TESTING, INC.

BORING LOCATION: SEE AERIAL

IMAGE

DRILL CREW: ES, BT, RS(LOGGER)

G.E.T. PROJ. NUMBER: 23-177

DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.F	P.T _{ay}	W.C. %	ATTER	RBERG ITS	DRY UNIT WT. pcf	% MINUS #200	INSITU CBR (DCP)	UNIFIED CLASS
FEET	200	DEGONII TION	NO.	N,	N _c	%	L.L.	P.I.	WT. pcf	#200	(DCP)	CLASS
0 —		4" Topsoil										
1 —		Light brown silty sandy clay	1			7				54.6		
2 —												
3 —		Yellowish red sandy clay										
4			2									
5 —		DT 0.557										
		B.T. @ 5 FT										
6 —												
7 —												
8												
9 —												
=												
10 —		iifaatian lines ahaum conceant the approx										

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

HAND_AUGER 23-177 AFRICATOWN WELCOME CENTER.GPJ GETI_AL.GDT 10/20/23

CENTER

DATE DRILLED: 9/21/23

BORING DEPTH: 5 FT.

BORING ELEV.:

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

DATUM:

WATER DEPTH:

DRILL RIG:

DRILL METHOD: HAND AUGER

G.E.T. PROJ. NUMBER: 23-177

REMARKS:

BORING NUMBER: A-2

GEOTECHNICAL ENGINEERING

TESTING, INC.

BORING LOCATION: SEE AERIAL

IMAGE

DRILL	CREW:	ES,BT, RS(LOGGER)						MAGE				
DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.	S.I	Р.Т _№	W.C.	_	RBERG IITS	DRY UNIT WT.	% MINUS	INSITU CBR	UNIFIED CLASS
			110.	N _t	N _c	,,,	L.L.	P,I.	WT.	#200	(DCP)	
1 —	77776	3" Topsoil Dark brown to brown silty sand w/ some shell near surface	1 2		140	9						
3 —		Yellowish brown lean clay w/ sand	3			20	39	22		76.7		CL
5 —		B.T. @ 5 FT										
6 —												
6 — 7 — 8 — 9 — —												
7 —												
'												
_												
8 —												
-												
9 —												
=												
10		ere et e	:									

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

HAND_AUGER 23-177 AFRICATOWN WELCOME CENTER.GPJ GETI_AL.GDT 10/20/23

CENTER

G.E.T. PROJ. NUMBER: 23-177

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

WATER DEPTH:

BORING ELEV.:

DATE DRILLED: 9/21/23

BORING DEPTH: 5 FT.

DRILL RIG:

DRILL METHOD: HAND AUGER

REMARKS:

DATUM:

BORING NUMBER: A-3

BORING LOCATION: SEE AERIAL

IMAGE

DRILL CREW: ES,BT, RS(LOGGER) ATTERBERG LIMITS DRY UNIT INSITU DEPTH % MINUS S.P.T. UNIFIED SAMPLE W.C. CBR (DCP) DESCRIPTION IN FEET CLASS WT. L.L. P.I. N_r N_{c} pcf 4" Topsoil 48.9 10 Brown silty sand 2 Yellowish brown sandy clay B.T. @ 5 FT HAND_AUGER 23-177 AFRICATOWN WELCOME CENTER, GPJ GETI_AL, GDT 10/20/23 6

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

CENTER

DATE DRILLED: 9/21/23

BORING DEPTH: 5 FT.

BORING ELEV.:

PROJECT LOCATION: 1959 BAY BRIDGE CUTOFF ROAD, MOBILE, ALABAMA

G.E.T. PROJ. NUMBER: 23-177

DATUM:

WATER DEPTH:

DRILL RIG:

DRILL METHOD: HAND AUGER

REMARKS:

BORING NUMBER: A-4

GEOTECHNICAL ENGINEERING

TESTING, INC.

BORING LOCATION: SEE AERIAL

IMAGE

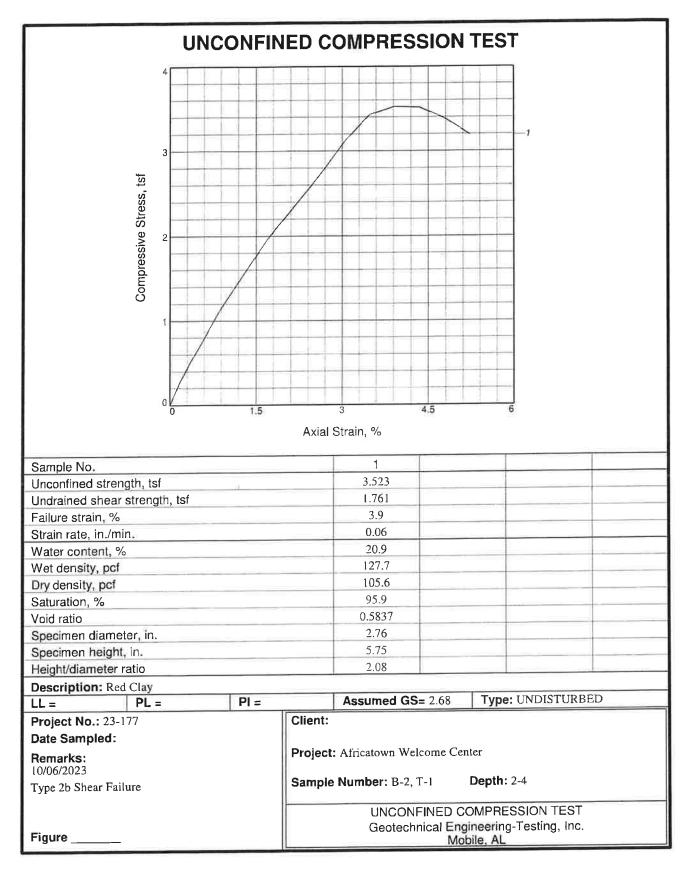
DRILL CREW: ES.BT. RS(LOGGER)

DRILL CREW: ES,BT, RS(LOGGER)													
	DEPTH IN FEET	LOG	DESCRIPTION	SAMPLE NO.		P.T.	W.C.		RBERG ITS	VV I	% MINUS #200	INSITU CBR (DCP)	UNIFIED CLASS
					N,	N _c		L.L.	P.I.	pcf	#200	(561)	
	1 —		4" Topsoil										
	2 — 3 —		Strong brown sandy clay	1			18	45	29		50.3		CL
	4 — 5 —		B.T. @ 5 FT	-									
I UZUIZ3	6 —		в.1. @ эгі										
. I	-												
COME CENTER GET GET ALLED	7 —												
T OCINI LIV	=												
- 1	8 —												
מאאסורטוערער בוייסי	9 —												
ממבע לפיווי או	_												
E	10	1							-				

NOTE: The stratification lines shown represent the approximate boundary between soil types and the transition may be gradual. The groundwater level stated is for conditions at the time of boring and the level may fluctuate large amounts for other conditions or seasons.

HAND_AUGER 23-177 AFRICATOWN WELCOME CENTER, GPJ GETI_AL, GDT 10/20/23

APPENDIX C LABORATORY TEST REPORTS



UNCONFINED COMPRESSION TEST 1.5 1.5 1.5 1.5 Axial Strain, %

1	
1.890	
0.945	
5.8	
0.06	
23.8	
125.7	
101.5	
98.4	
0.6476	
2.77	
5.65	
2.04	
	0.945 5.8 0.06 23.8 125.7 101.5 98.4 0.6476 2.77 5.65

 Description: Red Clay

 LL =
 PL =
 Pi =
 Assumed GS= 2.68
 Type: UNDISTURBED

Project No.: 23-177

Date Sampled:

Remarks: 10/06/2023

Type 2A Shear Failure

Client:

Project: Africatown Welcome Center

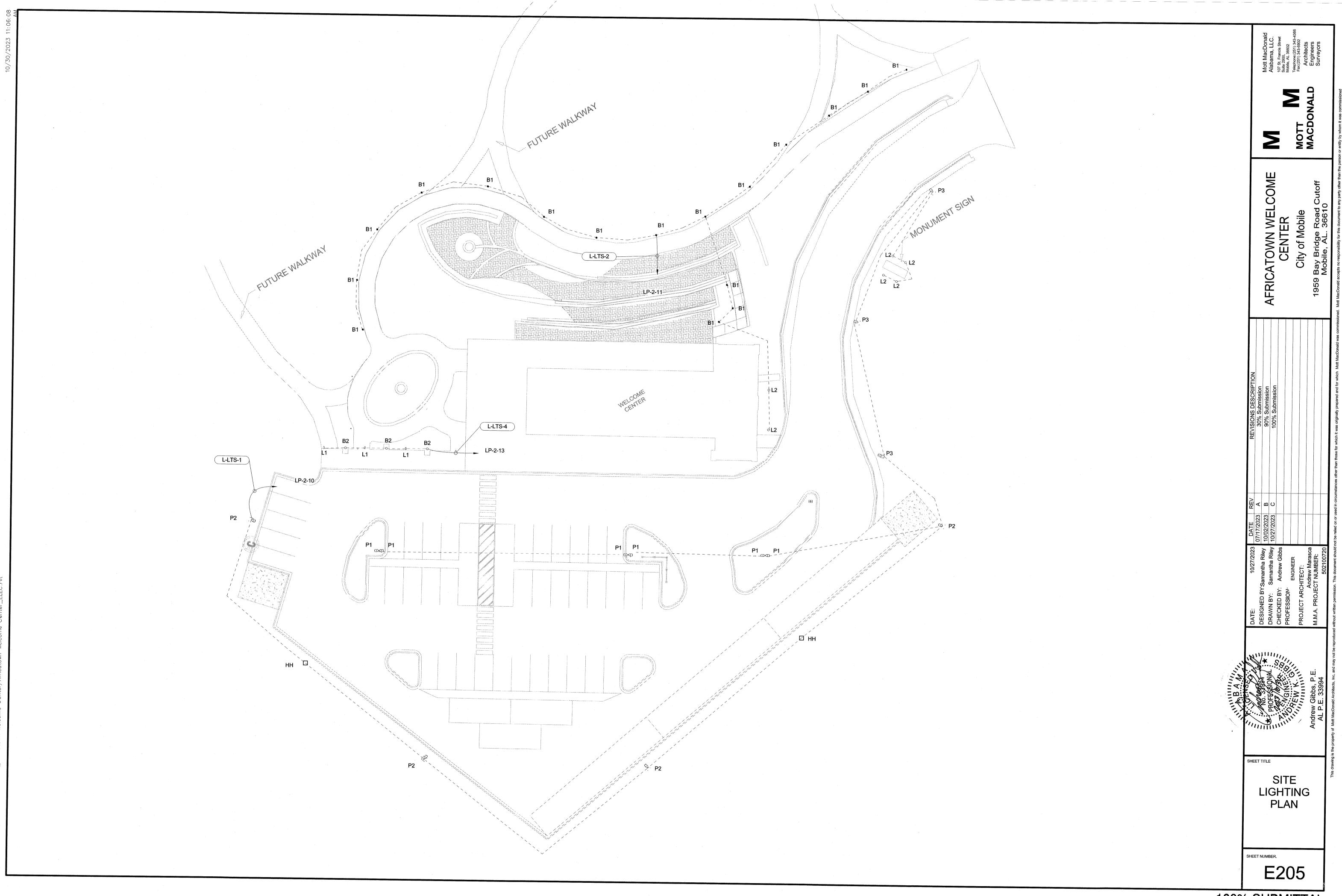
Sample Number: B-4, T-1

Depth: 1-3

Figure _____

UNCONFINED COMPRESSION TEST Geotechnical Engineering-Testing, Inc. Mobile, AL

Tested By: BJ



100% SUBMITTAL