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Exhibit W. Claiborne Site Preliminary Geotechnical Engineering Report

February 15, 2015

Baton Rouge Area Chamber
564 Laurel Street
Baton Rouge, LA 70801

Attention : Mr. Jim A. Cavanaugh
Site Development Director
Email: jim@brac.org
Phone: (225) 339-1163

Re: **General Geotechnical Site Characterization Report**
Claiborne Plantation
Iberville Parish, Louisiana
PSI Project No. 0254771

Dear Mr. Cavanaugh:

Professional Service Industries, Inc. is pleased to submit this General Geotechnical Site Characterization Report for the Claiborne Plantation Site Study. This report includes the results of field and laboratory testing, and information regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on-site roadways, requirements of soil augmentation for construction of a typical 100,000 square feet (sf) industrial manufacturing building and depth of groundwater.

We appreciate the opportunity to perform this Preliminary Geotechnical Site Evaluation Report. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Nicholas K. Miller, P.E.
Project Engineer
Geotechnical Services

Reda M. Bakeer, Ph.D., P.E.
Senior Vice President

Name: Nicholas K. Miller, P.E.
Date: February 15, 2016
License No.: 40111
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GENERAL GEOTECHNICAL SITE CHARACTERIZATION REPORT

CLAIBORNE PARISH SITE
IBERVILLE PARISH, LOUISIANA
PSI PROJECT NO.: 0254771

PREPARED FOR

BATON ROUGE AREA CHAMBER
564 LAUREL STREET
BATON ROUGE, LA 70801

FEBRUARY 15, 2015

BY
PROFESSIONAL SERVICE INDUSTRIES, INC.
11950 INDUSTRIPLEX BLVD.
BATON ROUGE, LOUISIANA 70809

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PROJECT INFORMATION

Project Authorization

Professional Service Industries, Inc. (PSI) has completed a General Geotechnical Site Study at the Claiborne Plantation site, located in Iberville Parish, Louisiana. Our services were provided in general accordance with PSI Proposal No. 254-155351, dated June 23, 2015. Authorization to provide our services was provided by Mr. Kyle Zeringue (Senior Vice President, Business Development, Baton Rouge Area Chamber) who signed our Proposal on January 6, 2016.

Project Description

The primary objectives for this preliminary report are to provide general information regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on-site roadways, requirements of soil augmentation for construction of a typical 100,000 square feet (sf) industrial manufacturing building, and the depth of free groundwater table. This genera geotechnical site characterization report will provide an initial baseline of the site subsurface conditions that will likely be encountered during future site development. However, as with any geotechnical investigation, particularly given the size of this subject site and the relatively limited number of borings performed, variations between borings may and should be expected to exist, and there remains a distinct possibility that other conditions may exist on site that were not encountered within the scope of this exploration.

The opinions and information to be presented in this report are estimates for preliminary consideration only, are based on limited geotechnical exploration, and are not to be used for final design and construction. A detailed geotechnical exploration and analyses should be performed once design and function of the proposed development have been finalized.

Purpose and Scope of Services

The purposes of PSI's geotechnical services are to:

- Perform 5 soil borings at the site per the request of the Client;
- Evaluate general subsurface soil conditions and groundwater depth at the subject site;
- Perform limited laboratory testing on selected soil samples recovered from the borings; and,
- Provide a general discussion regarding the compatibility of this site with industrial development, suitability of soils for building foundations and on-site pavement improvement, and requirements of soil augmentation for construction of a typical 100,000 square foot industrial manufacturing building.

The scope of services did not include an environmental assessment for determining the presence or absence of wetlands, or hazardous or toxic materials in the soil, surface water, groundwater, or air on or below, or around this site. Any statements in this report or on the boring logs regarding odors, colors, and unusual or suspicious items or conditions are strictly for informational purposes. Prior to development of this site, an environmental assessment is advisable. Additionally, PSI did not provide any service to investigate or detect the presence of moisture, mold or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence or the amplification of the same. Client acknowledges that mold is ubiquitous to the environment with mold amplification occurring when building materials are impacted by moisture. Client further acknowledges that site conditions are outside of PSI's

control, and that mold amplification will likely occur, or continue to occur, in the presence of moisture. As such, PSI cannot and shall not be held responsible for the occurrence or recurrence of mold amplification.

SITE AND SUBSURFACE CONDITIONS

Site Location and Description

The subject site is approximately 1,050 acres in size and is located on the south side of LA Highway 405 beginning approximately 1¼ mile east of its intersection with Cannonburg road and extending 1¼ miles to the Iberville/Ascension Parish line in White Castle, Iberville Parish, Louisiana. The site extends southward approximately 2 miles from the LA Highway 405. It is bound by LA Highway 405 to the north and elsewhere by mostly undeveloped, rural/agricultural land. The site is currently used primarily for agricultural purposes and contains several dirt and gravel access farm roads. The site also contains several developments including a residential structure, silos, and farm equipment storage barns. Several ditches and other runoff conveyances were observed during our field reconnaissance.

PSI's truck-mounted and ATV-mounted drill rigs were used to perform this field exploration. The truck-mounted drill rig experienced difficulty traversing the site over the existing farm roads within a few days of rain events and was subsequently replaced with a track-mounted drill rig. All of the borings were located just off of existing field roads. PSI made no attempt to enter the cultivated portions of the site.

Site Geology

Based on the Geological Map of Louisiana (1984), the site is located within the Natural Levees Formation (Qnl) geologic unit. The Natural Levees geologic unit is characterized by gray and brown silt and silty clay with some very fine sand. Per the U.S. Geological Society (USGS), these deposits are encountered on past and present courses of major streams. Natural Levee deposits in the site vicinity are relatively weak and compressible in nature. A drainage or seepage drainage feature is located in the western portion of the site.

Field Exploration

The field exploration included mobilization to the site by a PSI drilling crew, drilling of the soil borings, and recovering soil samples from the soil borings. Borings B-1 and B-5 were extended to a depth of approximately 40 feet below the existing ground surface. Borings B-2 and B-4 were extended to a depth of about 20 feet below the existing ground surface. Boring B-3 was extended to a depth of approximately 80 feet below existing grade. Refer to the Boring Location Plan given in the Appendix for the approximate boring locations.

Drilling and sampling activities were performed in general accordance with referenced ASTM procedures or other accepted methods. The boreholes were backfilled with a cement/bentonite grout mixture per LADOTD and LDEQ requirements.

Undisturbed samples of cohesive soils were generally obtained using three-inch-diameter, thin-wall tube samplers (Shelby tube) in general accordance with the procedures for "Thin-Walled Tube Geotechnical Sampling of Soils" (ASTM D1587). These samples were extruded in the field with a hydraulic ram and were identified according to boring number and depth, wrapped in

aluminum foil, placed in polyethylene plastic wrapping to protect against moisture loss and transported to the laboratory in containers to minimize disturbance.

For cohesionless soils, Standard Penetration Tests (SPT) were performed to obtain standard penetration values of the soil using a 140-pound hammer, falling 30 inches. The test is performed by lowering the standard penetrometer sampler to the bottom of the previously cleaned drill hole and advanced by blows from the hammer. The number of blows is recorded for each of the three consecutive 6-inch increments. The "SPT-N" value is obtained by adding the second and the third incremental numbers. The results of the standard penetration test indicate the relative density of cohesionless soils, and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components. Soil samples were obtained utilizing a two-inch O.D. split-barrel sampler in general accordance with procedures for "Penetration Test and Split-Barrel Sampling of Soils" (ASTM D 1586). These samples were also identified according to boring number and depth, placed in polyethylene plastic wrapping to protect against moisture loss and transported to the laboratory.

Laboratory Testing

Selected soil samples were tested in the laboratory to determine material properties for our evaluation. Visual classifications were performed in the laboratory. Physical testing included determination of moisture contents, Atterberg limits classification testing and unconfined compressive strength or unconsolidated undrained triaxial shear tests to supplement the field pocket penetrometer and torvane testing. The laboratory testing was performed in general accordance with ASTM standard procedures. Samples not altered by laboratory testing will be retained for sixty days from the date of this report and then be discarded.

Subsurface Conditions

Boring B-1 encountered very soft to stiff lean and fat clay to a depth of about 22 feet below the existing ground surface (bgs). A relatively thin loose silty sand stratum was encountered beneath the clay followed by a thin stratum of firm fat clay. Loose, poorly graded sand was encountered below a depth of about 27 feet bgs to the terminal depth of the boring of 40 feet.

Borings B-2 and B-4 generally encountered firm to very stiff lean (only in B-4) and fat clay soils to the terminal depth of 20 feet bgs.

Boring B-3 encountered firm to stiff lean and fat clay soils to a depth of about 8 feet bgs. These soils were underlain by a very loose to loose sand stratum extending from about 8 to 25 feet bgs. Soft to firm lean and fat clay soils were encountered beneath the sand to a depth of around 62 feet bgs. Silt with sand and clay was generally present below that depth to the terminal depth of the boring at 80 feet; however, a thin statum of medium dense sand was encountered between about 73 and 75 feet bgs within this silt interval.

Boring B-5 generally encountered soft to very stiff fat clay to a depth of about 32 feet bgs which is underlain by a thin stratum of firm lean clay with sand followed by silty clayey sand to the terminal depth of the boring at about 40 feet. The upper clay soils were stiff to very stiff and transitioned to a soft to firm consistency beneath about 8 feet bgs. The relative density of the silty clayey sand encountered at around 38 feet bgs would be considered loose to medium dense.

The above subsurface description is generalized in nature to highlight the major subsurface stratification features and material characteristics. The boring logs included in the Appendix should be reviewed for specific information at the individual boring locations. These records include soil descriptions, stratifications, penetration resistances, locations of the samples, and laboratory test data. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials and the actual transition may be gradual. This is particularly important considering the site size and the limited number of borings performed which were all performed within the immediate vicinity of the existing farm roads.

Groundwater Information

Groundwater was encountered in four of the five borings during the exploration. The groundwater depth measured in the borings during our drilling activities are shown in the following table.

Table 1: Groundwater Depth Measured During Drilling

Boring	Groundwater Depth During Drilling (feet below the existing ground surface)
B-1	12
B-2	16
B-3	10
B-4	16
B-5	Not Encountered

It should be noted that groundwater level fluctuations at this site may occur due to seasonal and climatic variations, the stage of the Mississippi River due to its relative close proximity to the subject site, alteration of drainage patterns, land usage and ground cover. Additionally, perched water may be encountered in discontinuous zones within the overburden. This condition develops as rainwater in entrapped in the more pervious surface cultivated soils underlain by less pervious cohesive soils. We recommend the Contractor determine the actual groundwater levels at the time any future construction activities begin.

Seismic Design Considerations

The design of structures must consider dynamic forces resulting from seismic events. These forces are dependent upon the magnitude of the earthquake event as well as the properties of the soils that underlie the site. As part of the procedure to evaluate seismic forces, the evaluation of the Seismic Site Class, which categorizes the site based upon the characteristics of the subsurface profile within the upper 100 feet of the ground surface, is required. To define the Site Class for this site, we have interpreted the results of soil test borings drilled within the subject site and estimated appropriate soil properties below the base of the borings to a depth of 100 feet as permitted by the International Building Code, 2012 edition. The estimated soil properties were based upon our experience with subsurface conditions in the general site area. Based upon our evaluation, the subsurface conditions within the site are consistent with the characteristics of a Site Class “E” as defined in Table 20.3-1 of the ASCE Standard 7-10. This assessment can and should be better defined by performing additional deep borings and associated geotechnical laboratory testing.

EVALUATION AND DISCUSSIONS

The type and depth of foundation suitable for a given structure primarily depends on several factors including the subsurface conditions, the function of the structure, the loads it may carry, the cost of the foundation and the criteria set by the Design Engineer with respect to vertical and differential movements which the structure can withstand without damage. Detailed column loads for a typical 100,000 sq. ft. industrial manufacturing building were not provided at the time of this study; however, the structural column loads are anticipated to be on the order of 100 kips, with wall loads on the order of about 5 kips per lineal foot. Grading plans are also not available at this time; although, we anticipate fill material on the order of about 4 feet may be required to achieve final grades. The proposed designs should also consider the requirements of the U.S. Army Corps of Engineers (USACE) with regard to any construction to be made within 1,500 feet from the existing flood protection structure along the adjacent Mississippi River.

Again, it should be noted that the exploration locations were performed on or near the shoulder of existing farm roads. No attempt was made to enter cultivated areas typically used for planting crops. It should be assumed that the upper soils encountered in the cultivated areas will require significantly more effort to achieve proper compaction and may contain far more organic material and other additives (fertilizers, etc.) in the upper soils than the areas explored during this preliminary exploration.

The choice of type of deep foundation should be based on the tolerance criteria for the performance of the structures and economics of construction. Grade supported foundations or surface coverings will likely be governed by the anticipated load and settlement tolerances, particularly where a significant amount of new fill is placed. Driven piles should be viable foundation types considering the subsurface and groundwater conditions encountered and should be anticipated to carry the structural loads anticipating that settlement will occur as a result of new fill, building and slab loads. As previously discussed, construction in some areas of the site will be subjected to review and approval of the USACE. Lightly-loaded equipment pads may be able to be supported on shallow spread footings, or mat foundations, as long as the PVR issues described below are mitigated and settlement potential considered. Prior to new fill placement, site preparation should include removal of surficial topsoil, organic materials, and soft soil or demucking of wet areas or drainage conveyances and proofrolling in the presence of the Geotechnical Engineer to assess general stability and firmness prior to fill placement.

Based on the limited number of soil borings, field data and laboratory test results, the proposed site is generally feasible for industrial development. The subsurface soils explored are suitable for building foundations and site roadways after proper preparation. Fat clay soils with high shrink/swell potential (Plasticity Indices ranging from 29 to 61) were encountered near the ground surface (upper 8 feet) across the site. Potential Vertical Rise (PVR) should be further evaluated considering new fill that may be placed at the site to achieve final grades. PVR in portions of this site could be mitigated by undercutting the fat clay soils to a predetermined depth and replacing with moisture-conditioned, properly compacted lean clay (CL) soils, or with the addition of chemical treatment such as lime mixing. Based on the anticipated new fill thickness on the order of around 4 feet, PVR is not anticipated to adversely impact the project with great significance. The effects of PVR should be considered if lesser fills are planned. The suitability of reuse of excavated soils (ponds, etc.) as structural fill may require the use of lime treatment or soil mixing.

Site pavements should be underlain by at least 12 inches of properly compacted low plasticity engineered fill material or otherwise or chemically treated with lime prior to base material placement due to the near surface fat clay soils. At this time, we assume pavement areas will receive at least two to four feet of fill to achieve final grades.

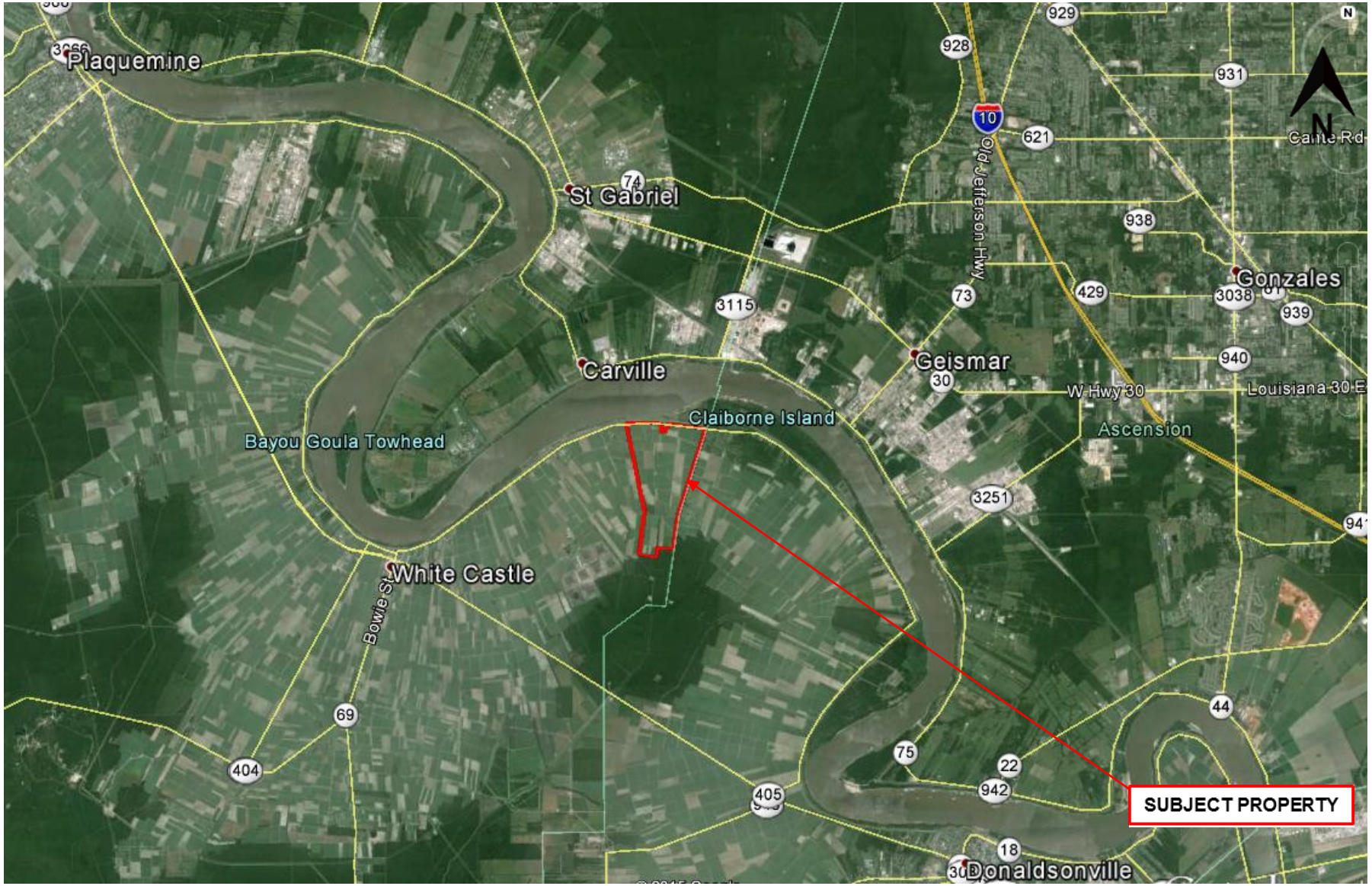
Areas within 1,500 feet of the existing levee to the north of the site should anticipate USACE interaction per the Hurricane and Storm Damage Risk Reduction System (HSDRRS) Design Guidelines and will likely be subject to the requirements of the Lower Mississippi Valley (MVN) and New Orleans District (NOD) requirements. Special permitting should also be anticipated for any geotechnical borings, new fill or excavations, and any loading or changes in loading configurations within the referenced area of the site. Supplemental exploration and sampling methods, laboratory testing and engineering analysis (including, but not limited to, slope stability, seepage analysis, and settlement analysis) following the HSDRRS Design Guidelines may be required for the project. Additionally, the USACE permits typically prohibit excavation or deep foundation installation during periods of high water (typically late April through late July but may vary dependent on the weather conditions in the region) as detailed by the permit requirements. Strict monitoring of pile driving is also mandated by the USACE in terms of vibration and potential impact on the adjacent flood protection system.

As stated previously, PSI's opinions and information presented in this site evaluation report are provided for planning purposes and preliminary considerations only; they are based on a very limited geotechnical exploration, and are not to be used for final design and construction.

REPORT LIMITATIONS

The preliminary information submitted in this report is based on the available subsurface data obtained by PSI at the time of our field exploration. PSI warrants that the preliminary findings contained herein have been made in accordance with generally accepted drilling procedures and visual soil classification methods in the local area. No other warranties are implied or expressed. This report has been prepared for the exclusive use of the Baton Rouge Area Chamber for the specific purpose of determining general subsurface information at the subject site to develop a general geotechnical site characterization.

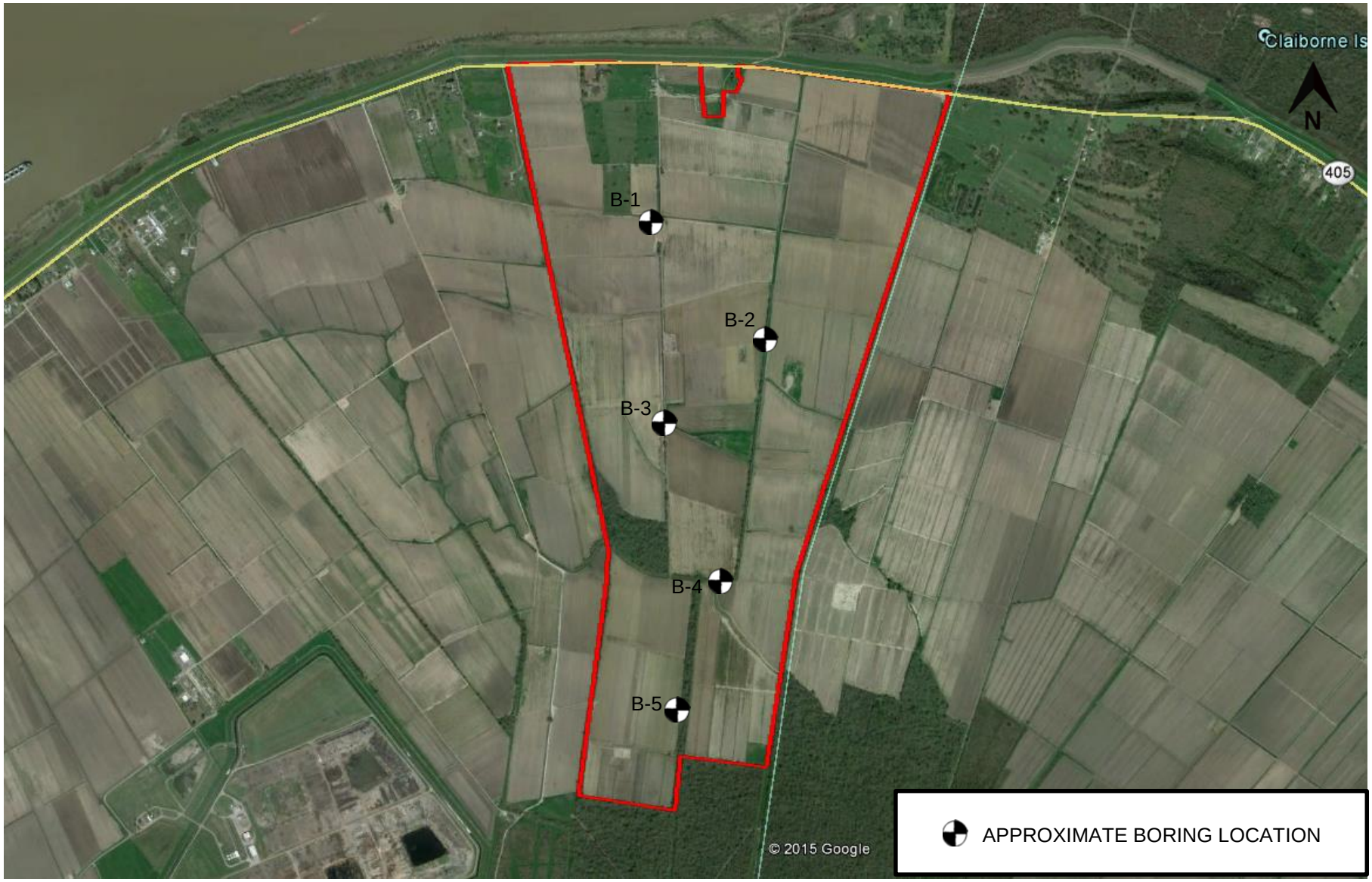
APPENDIX



SITE VICINITY MAP

PSI PROJECT NO.: 0254771

GEOTECHNICAL SITE CHARACTERIZATION
CLAIBORNE PLANTATION
IBERVILLE PARISH, LOUISIANA



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BORING LOCATION PLAN

PSI PROJECT NO.: 0254771

GEOTECHNICAL SITE CHARACTERIZATION
CLAIBORNE PLANTATION
IBERVILLE PARISH, LOUISIANA

LOG OF BORING B-1

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: WET ROTARY | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
0		CL		Stiff gray **LEAN CLAY**, with gravel and shell fragments (POSSIBLE FILL)	12	22										
2.5					16	10										
5.0		CH		Soft to firm gray **FAT CLAY**, with silt and sand seams		31						0.33	0.38			86
7.5						33	51	22	29			0.25				
10.0						35								0.25		
12.5				▽												
15.0						33								0.15		
17.5		CH		Very soft gray **FAT CLAY**, with sand layers		44							0.11	0.20		76
20.0																
22.5		SM		Loose gray **SILTY SAND**	5	29				21						
25.0		CH		Firm gray **FAT CLAY**, with sand seams												
27.5		SP-SM		Loose gray **SAND** with silt		63							0.34	0.25		67
30.0																
32.5					6	23				8						
35.0																
37.5					9	22				9						
40.0				Boring terminated at 40 feet												
42.5																
45.0																
47.5																
50.0																

DEPTH OF BORING: 40 FEET
DATE DRILLED: 1/19/16
NOTE:

▽ GROUNDWATER DURING DRILLING: 12 FEET
▼ GROUNDWATER UPON COMPLETION: N /A
▼ DELAYED GROUNDWATER: N / A

BORINGLOG_BATONROUGE - PSIHOUSTON.GDT - 2/15/16 18:21 - 0254

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Baton Rouge, Louisiana 70809
(225) 293-8378

LOG OF BORING B-2

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: SOLID STEM AUGER | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
		CH		Stiff gray **FAT CLAY**, with gravel and shell fragments (POSSIBLE FILL)	10	27	64	20	44							
2.5		Ch		Firm to stiff gray **FAT CLAY**		32						0.67	0.82			90
5.0						30						1.00				
7.5						33						0.50				
				-silt and sand seams and gravel, 8 to 10 feet		34	86	25	61			0.67				
10.0				-trace organic, 8 to 15 feet												
12.5																
						36						0.50	0.32			84
15.0				▽												
17.5				-sand seams, below 18 feet		39								0.30		
20.0				Boring terminated at 20 feet												
22.5																
25.0																
27.5																
30.0																
32.5																
35.0																
37.5																
40.0																
42.5																
45.0																
47.5																
50.0																

DEPTH OF BORING: 20 FEET
DATE DRILLED: 1/19/16
NOTE:

▽ GROUNDWATER DURING DRILLING: 16 FEET
▼ GROUNDWATER UPON COMPLETION: N /A
▼ DELAYED GROUNDWATER: N / A

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LOG OF BORING B-3

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: WET ROTARY | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
		CL		Firm brown **LEAN CLAY** with root fibers and sand (POSSIBLE FILL)		14					○	1.50				
2.5		CH		Firm to stiff brown **FAT CLAY** with silt		27	53	18	35		▲			0.30	0.32	90
5.0						23	53	18	35		○	1.17				
7.5					4	27				59						
		SP		Very loose to loose gray **SAND** ▽	2	31										
10.0																
12.5																
					2	33										
15.0																
17.5																
					WOH	34										
20.0																
22.5																
					6	34										
25.0		CL		Firm gray **LEAN CLAY** with trace sand												
27.5																
						47	37	20	17	99	▲			0.30	0.24	81
30.0																
32.5																
					2	44										
35.0																
37.5																
						39					△			0.25		
40.0																
42.5																
						38					△			0.40		
45.0																
47.5		CH		Soft to firm gray sandy **FAT CLAY**												
						30	64	23	41	52	△			0.15		
50.0																

DEPTH OF BORING: 80 FEET
DATE DRILLED: 2/9/16
NOTE:

▽ GROUNDWATER DURING DRILLING: 10 FEET
▼ GROUNDWATER UPON COMPLETION: N /A
▼ DELAYED GROUNDWATER: N / A

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LOG OF BORING B-3

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: WET ROTARY | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
52.5																
					4	34										
55.0																
57.5																
						52					△▲			0.25	0.35	73
60.0																
62.5		MH		Firm gray **SILT** with sand and clay												
						26					○	0.33				
65.0																
67.5																
					5	38				68						
70.0																
72.5		SC-SM		Medium dense gray **Sand** with clay and silt												
					16	29				35						
75.0																
77.5		MH		Medium dense gray **SILT** with sand and clay												
					10	32				81						
80.0				Boring terminated at 80 feet												
82.5																
85.0																
87.5																
90.0																
92.5																
95.0																
97.5																
100.0																

DEPTH OF BORING: 80 FEET
DATE DRILLED: 2/9/16
NOTE:

BORINGLOG_BATONROUGE - PSIHOUSTON.GDT - 2/15/16 18:21 - 0254

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LOG OF BORING B-4

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: SOLID STEM AUGER | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
0		CL		Very stiff brown **LEAN CLAY** with sand	8	19										
2.5						17	43	17	26	83		1.50				
5.0						17						1.41				
7.5					5	28				88						
		CH		Firm Gray **FAT CLAY**		49	81	21	60					0.20	0.38	75
10.0																
12.5																
15.0						39								0.25		
17.5																
20.0						34	75	21	54					0.30	0.48	86
				Boring terminated at 20 feet												
22.5																
25.0																
27.5																
30.0																
32.5																
35.0																
37.5																
40.0																
42.5																
45.0																
47.5																
50.0																

DEPTH OF BORING: 20 FEET
DATE DRILLED: 2/9/16
NOTE:

▽ GROUNDWATER DURING DRILLING: 16 FEET
▼ GROUNDWATER UPON COMPLETION: 14 1/2 FEET
▼ DELAYED GROUNDWATER: N / A

BORINGLOG_BATONROUGE - PSIHOUSTON.GDT - 2/15/16 18:21 - 0254

psi Information To Build On
Engineering • Consulting • Testing
Professional Service Industries, Inc.
11950 Industriplex Blvd
Baton Rouge, Louisiana 70809
(225) 293-8378

LOG OF BORING B-5

CLAIBORNE PLANTATION
LA HIGHWAY 405
IBERVILLE PARISH, LOUISIANA

TYPE OF BORING: WET ROTARY | LOCATION: BUILDING AREA | PSI Project No.: 0254771

DEPTH, FT.	SOIL TYPE	USCS SYMBOL	SAMPLES	SOIL DESCRIPTION	N-BLOWS/FT.	MOISTURE CONTENT (%)	LIQUID LIMIT (LL)	PLASTIC LIMIT (PL)	PLASTICITY INDEX (PI)	% PASSING No. 200 SIEVE	SHEAR STRENGTH (tsf) ○ HP ● UC △ TV ▲ UU 0.0 0.5 1.0 1.5	SHEAR STRENGTH (tsf) HAND PEN (tsf)	SHEAR STRENGTH (tsf) UC (tsf)	SHEAR STRENGTH (tsf) TORVANE (tsf)	SHEAR STRENGTH (tsf) UU (tsf)	UNIT DRY WEIGHT (pcf)
		CH		Stiff to very stiff brown **FAT CLAY** with trace silt and organic		18						1.42				
2.5						19	61	20	41			1.42				
5.0						24				92		1.25			1.32	100
7.5						25						0.92				
		CH		Soft to firm gray **FAT CLAY** with trace silt trace organic, 8 to 10 feet		23						0.50				
10.0																
12.5																
15.0						34	55	18	37					0.45		
17.5																
20.0						51								0.55		
22.5																
25.0						38								0.45	0.23	82
27.5																
30.0						32								0.65		
32.5		CL		Firm gray **LEAN CLAY** with sand												
35.0						33	40	20	20	85						
37.5		SC-SM		Medium dense gray **SILTY CLAYEY SAND**	10	35				31						
40.0				Boring terminated at 40 feet												
42.5																
45.0																
47.5																
50.0																

DEPTH OF BORING: 40 FEET
DATE DRILLED: 2/9/16
NOTE:

▽ GROUNDWATER DURING DRILLING: NOT ENCOUNTERED
▼ GROUNDWATER UPON COMPLETION: N /A
▼ DELAYED GROUNDWATER: N / A

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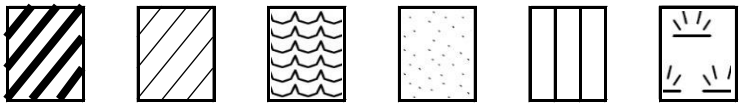
KEY TO TERMS AND SYMBOLS USED ON LOGS

SOIL TYPE



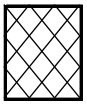
FAT CLAY | LEAN CLAY | ORGANIC CLAY | SAND | SILT | PEAT

SAMPLER TYPE

NO RECOVERY | AUGER SAMPLE | SHELBY TUBE | SPLIT SPOON

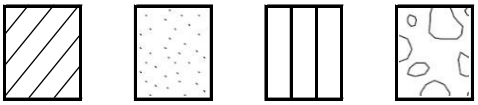
SOIL TYPE

GRAVEL

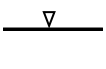


FILL

MODIFIERS



CLAYEY | SANDY | SILTY | GRAVELY



GROUNDWATER DURING DRILLING

GROUNDWATER UPON COMPLETION

UNIFIED SOIL CLASSIFICATION SYSTEM - ASTM D 2487 (1980)

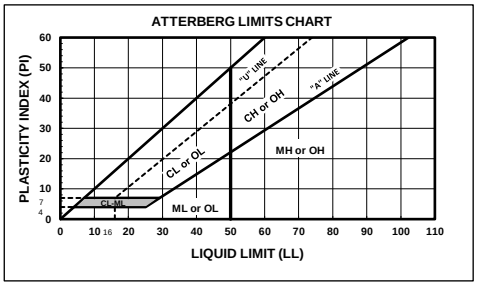
MAJOR DIVISIONS			LETTER SYMBOL	TYPICAL DESCRIPTIONS
COARSE-GRAINED SOILS LESS THAN 50% PASSING NO. 200 SIEVE	GRAVEL & GRAVELLY SOILS LESS THAN 50% PASSING NO. 4 SIEVE	CLEAN GRAVEL (LITTLE OR NO FINES)	GW	WELL-GRADED GRAVEL, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
			GP	POORLY GRADED GRAVEL, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
		WITH APPRECIABLE FINES	GM	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN 50% PASSING NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)	SW	WELL-GRADED SAND
			SP	POORLY-GRADED SANDS
		WITH APPRECIABLE FINES	SM	SILTY SANDS
			SC	CLAYEY SANDS
FINE-GRAINED SOILS MORE THAN 50% PASSING NO. 200 SIEVE	SILTS AND CLAYS LIQUID LIMIT < 50		ML	INORGANIC SILTS & VERY FINE SANDS, CLAYEY SILT W/ LOW PLASTICITY INDEX
			CL	INORGANIC LEAN CLAYS GRAVELLY, SANDY, OR SILTY LEAN CLAYS
			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS W/LOW PLASTICITY INDEX
	SILTS AND CLAYS LIQUID LIMIT ≥ 50		MH	INORGANIC SILTS W/ HIGH PLASTICITY INDEX, ELASTIC SILTS
			CH	INORGANIC FAT CLAYS GRAVELLY, SANDY, OR SILTY FAT CLAYS
			OH	ORGANIC CLAYS OF MED TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOIL			PT	PEAT AND OTHER HIGHLY ORGANIC SOILS
UNCLASSIFIED FILL MATERIALS				ARTIFICIALLY DEPOSITED AND OTHER UNCLASSIFIED SOILS AND MAN-MADE SOIL MIXTURES

CONSISTENCY OF COHESIVE SOILS

CONSISTENCY	SHEAR STRENGTH IN TONS/FT^2
VERY SOFT	0 TO 0.125
SOFT	0.125 TO 0.25
FIRM	0.25 TO .50
STIFF	0.50 TO 1.00
VERY STIFF	1.00 TO 2.00
HARD	> 2.00 OR 2.00+

RELATIVE DENSITY - GRANULAR SOILS

CONSISTENCY	N-VALUE (BLOWS/FOOT)
VERY LOOSE	0-4
LOOSE	4-9
MEDIUM DENSE	10-29
DENSE	30-49
VERY DENSE	> 50 OR 50+



ABBREVIATIONS

HP - HAND PENETROMETER

TV - MINIATURE TORVANE

FV - FIELD TORVANE

UC - UNCONFINED COMPRESSION TEST

UU - UNCONSOLIDATED UNDRAINED TRAIXIAL

CU - CONSOLIDATED UNDRAINED

NOTE: BORING LOGS INDICATE SHEAR STRENGTH AS OBTAINED BY ABOVE TESTS

CLASSIFICATION OF GRANULAR SOILS

U.S. STANDARD SIEVE SIZE(S)

6"	3"	3/4"	4	10	40	200

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY	CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE		

152	76.2	19.1	4.76	2.0	0.42	0.074	0.002

GRAIN SIZE IN MM