REPORT OF GEOTECHNICAL CONSULTING SERVICES

PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

UES PROJECT NO. 2030.2400057.0000
UES REPORT NO. 2103466

PREPARED FOR:

Attention: Mr. Jeff Prescott
Prescott Architects
625 Harbor Boulevard, Suite 6
Destin, FL 32541

PREPARED BY:

Universal Engineering Sciences, LLC
1712 Airport Road
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August 8, 2024

August 8, 2024

Prescott Architects
625 Harbor Boulevard, Suite 6
Destin, Florida 32541

Attention: Mr. Jeff Prescott – President
jeff@prescottarchitects.com

Reference: Report of Geotechnical Consulting Services
Path of Grace DORM
941 S Church Street, Santa Rosa Beach, Walton County, Florida
UES Project No. 2030.2400057.0000
UES Report No. 2103466

Dear Mr. Prescott:

Universal Engineering Sciences (UES) has completed a geotechnical exploration at the referenced site in Walton County, Florida. The scope of our exploration was planned in conjunction with and authorized by you. This exploration was performed in accordance with generally accepted soil and foundation engineering practices. No other warranty, either express or implied, is made.

The following report presents the results of our field exploration with a geotechnical engineering interpretation of those results with respect to the project characteristics as provided to us. We have included our estimates of the seasonal high groundwater level at the boring locations and geotechnical recommendations for site preparation and shallow foundation design parameters.

We appreciate the opportunity to have worked with you on this project and look forward to a continued association. Please do not hesitate to contact us if you should have any questions, or if we may further assist you as your plans proceed.

Respectfully Submitted,
UNIVERSAL ENGINEERING SCIENCES, LLC
Certificate of Authorization No. 549

BRANDON J. TARR LICENSE No. 83259 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Brandon Tarr
DN: cn=Brandon Tarr, o=Universal Engineering Sciences, ou=Branch Manager - Panama City, email=btarr@universalengineering.com, c=US
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Charles Hunter, E.I.
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Engineer Intern No. 1100022801

Brandon J. Tarr, P.E.
Branch Manager
Florida P.E. No. 83259

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1.0 PROJECT DESCRIPTION

Project information was provided to us by the Client. We understand that this project will consist of the design and construction of two (2) new structures connected by a breezeway. We further understand that a new single-story pre-engineered metal building (PEMB) will be utilized for the cafeteria portion of the project which covers a plan area of +/- 7,929 square feet and that a new two-story timber frame building will be utilized for the dormitory portion which covers a plan area of +/- 11,828 square feet. The project is located at 941 South Church Street in Santa Rosa Beach, Florida. At the time of our field exploration, the site was undeveloped cleared land with some surficial grass ground cover. We were provided with a copy of the preliminary architectural review set (signed, Jeff Prescott, Prescott Architects, and dated 4/26/2024) for our use in performing our field exploration program.

We understand that the structures have been planned for a shallow foundation system. Preliminary structural loading and site grading information was provided via email correspondence at the time of this report. We understand that structural loads will be carried by continuous strip footings (maximum load of 3 kips per linear foot) and isolated spread foundations (maximum load of 25 kips). We understand a minimum finished floor elevation of +12.9' with an existing site elevation of about +10' (NAVD 1988). Based on the provided information, we have assumed that finished grades in the proposed structure areas of the site will require the placement of 3 feet or less of structural fill.

Should any of the above information or assumptions made by UES be inconsistent with the planned development and construction, we request that you contact us immediately to allow us the opportunity to review the new information in conjunction with our report and revise or modify our engineering recommendations accordingly, as needed.

No site or project facilities/improvements, other than those described herein, should be designed using the soil information presented in this report. Moreover, UES will not be responsible for the performance of any site improvement so designed and constructed.

2.0 PURPOSE

The purposes of this exploration were:

- to explore and evaluate the subsurface conditions at the site with special attention to potential problems that may impact the proposed development,
- to provide our estimates of the seasonal high groundwater level at the boring locations, and
- to provide geotechnical engineering recommendations for site preparation and foundation design parameters.

This report presents an evaluation of site conditions on the basis of geotechnical procedures for site characterization. The recovered samples were not examined, either visually or analytically, for chemical composition or environmental hazards. We would be pleased to provide you with a proposal for these services at your request.

Our exploration was not designed to specifically address the potential for surface expression of deep geological conditions, such as sinkhole development related to karst activity. This evaluation requires a more extensive range of field services than those performed in this study. We would be pleased to conduct an exploration to evaluate the probable effect of the regional geology upon the proposed construction, if you so desire.

3.0 SITE DESCRIPTION

The subject site is located at 941 S Church Street in Santa Rosa Beach, Walton County, Florida. Specifically, the site is located within Walton County Parcel ID: 27-2S-20-33210-000-0340, as shown on the attached Figure A-1. At the time of drilling, the site was undeveloped cleared land with some surficial grass ground cover.

3.1 SOIL SURVEY

There are two (2) native soil types mapped within the general area of site according to the USDA NRCS Soil Survey of Walton County. A brief summary of the mapped surficial (native) soil type(s) are presented in Table I.

TABLE I
SUMMARY OF PUBLISHED SOIL DATA

Soil Symbol	Soil Type	Hydrologic Group	Drainage Characteristics	Depth of Published Seasonal High GWT (feet)
21	Leon sand, 0 to 2 percent slopes	A/D	Poorly drained	0 – 1.5
27	Rutlege fine sand, 0 to 2 percent slopes	A/D	Very poorly drained	0 – 0.5

3.2 TOPOGRAPHY

According to topographic information provided on the preliminary architectural plans, the pre-development ground surface elevation in the structure areas was approximately +10 feet (NAVD 1988).

4.0 SCOPE OF SERVICES

The services conducted by UES during our geotechnical exploration were as follows:

- Drilled eleven (11) Standard Penetration Test (SPT) borings within the proposed building footprints to a depth of approximately 20 feet below existing grade.
- Secured samples of representative soils encountered in the soil borings for review, laboratory analysis and classification by a Geotechnical Engineer.
- Measured the existing site groundwater levels and provided an estimate of the seasonal high groundwater level at the boring locations.
- Conducted laboratory testing on selected soil samples obtained in the field to determine their engineering properties.
- Assessed the existing soil conditions with respect to the proposed construction.

- Prepared a report which documents the results of our exploration and analysis with geotechnical engineering recommendations.

5.0 FIELD EXPLORATION

The SPT soil borings were performed with a track mounted drill rig during the period of July 16 through July 22, 2024. Horizontal or vertical survey control was not provided for the test boring locations during our field exploration program. UES personnel located the borings by using the provided site plan and a handheld GPS device. The indicated boring locations should be considered accurate to the degree of the methodologies used. The approximate boring locations have been shown in Appendix A. Samples of the soils recovered will be held in our laboratory for 60 days unless we are notified otherwise.

5.1 SPT Borings

To explore the subsurface conditions present within the area of the proposed structures, we located and drilled a total of eleven (11) SPT borings to a depth of approximately 20 feet below the existing ground surface. The SPT borings were performed in general accordance with the procedures of ASTM D 1586 "Standard Method for Penetration Test and Split-Barrel Sampling of Soils." SPT sampling was performed continuously to 10 feet to detect variations in the near surface soil profile and on approximate 5 feet centers thereafter.

6.0 LABORATORY TESTING

The soil samples recovered from the test borings were returned to our laboratory and visually classified in general accordance with ASTM D 2487 "Standard Classification of Soils for Engineering Purposes" (Unified Soil Classification System). We selected representative soil samples from the borings for laboratory testing to aid in classifying the soils and to help to evaluate the general engineering characteristics of the site soils. The results of these tests are shown on the boring logs in Appendix B. A summary of the tests performed is shown in Table II.

TABLE II
LABORATORY METHODOLOGIES

Test Performed	Number Performed	Reference
Grain Size Analysis (#200 wash only)	14	ASTM D 1140 "Amount of Material in Soils Finer than the No. 200 (75 - µm) sieve"
Moisture Content	14	ASTM D 2216 "Laboratory Determination of Water (Moisture) Content of Soil by Mass"
Organic Content	2	AASHTO T 267 "Determination of Organic in Soils by Loss on Ignition"

7.0 SUBSURFACE CONDITIONS

7.1 Generalized Soil Profile

The results of our field exploration and laboratory analysis, together with pertinent information obtained from the SPT borings, such as soil profiles, penetration resistance and groundwater levels are shown on the boring logs included in Appendix B. The Key to Boring Logs, Soil Classification Chart is also included in Appendix B. The soil profiles were prepared from field logs after the recovered soil samples were examined by a Geotechnical Engineer.

The stratification lines shown on the boring logs represent the approximate boundaries between soil types and may not depict exact subsurface soil conditions. The actual soil boundaries may be more transitional than depicted. A generalized profile of the soils encountered at our boring locations is presented in Table III. For detailed soil profiles, please refer to the attached boring logs.

TABLE III
GENERALIZED SOIL PROFILE

Typical Depth (feet, bls)		Soil Description	Range of SPT "N" Values (blows/ft)
From	To		
Surface	12	Very loose to medium dense fine SAND with varying fines content [SP, SP-SM]	1 to 11
12	17	Very loose to loose slightly silty and silty SAND **with some to many organics/roots** [SP, SP-SM, SM] **(B-2 & B-5 only)**	1 to 9
17	20*	Loose to medium dense SAND with varying fines content [SP, SP-SM]	6 to 16

* denotes maximum termination depth of the borings

7.2 Notable Findings – Very Loose & Buried Highly Organic Soil Conditions

A notable finding during the exploration program was the presence of very loose SAND [SP, SP-SM] soil conditions encountered at each boring location across the site at depths ranging from 6 feet to 17 feet below current site grades. The very loose soil conditions noted above will require special consideration during the site work phase of the project as outlined within the subsequent sections of this report.

Another notable finding during the exploration program was the presence of very loose silty SAND with many organics [SM] at boring location B-5 between the depths of about 12 feet to 17 feet below existing site grades at the time of our field exploration. Loose SAND, with silt [SP-SM] and some organics was also present at boring location B-2 between the depths of about 12 feet to 17 feet below existing site grades at the time of our field exploration. Representative samples from the boring locations were selected for laboratory testing and were found to have organic contents ranging from about 6.2 percent to 20 percent with corresponding moisture contents ranging from 39 to 70 percent.

Depending upon the depth below the ground surface, the general state of geotechnical practice is that soils with organic contents less than about 5 percent are considered suitable to remain in-place to support structures, utilities, and pavements. Soils with organic contents between about 5 to 10 percent are considered marginal to remain in-place to support structures, utilities, and pavements. Soils with organic contents greater than about 10 percent are considered unsuitable to remain in-place to support structures, utilities, and pavements. In addition to organic content, site groundwater levels, in-situ moisture content, and relative density are important to consider.

Based upon our review of the field and laboratory data, the buried organic soils found at the boring locations would be considered suitable to remain in-place beneath the proposed structure based on our evaluation of the provided structural loading and site grading information and their depth encountered below existing site grades. However, this site will require special site preparation procedures due to the potential for settlement of the very loose / organic soil layers during site construction from the combination of the fill placement

required to achieve finished grades and the structural loads imposed on the subgrade from the planned construction. Therefore, we recommend the proposed building areas and at least 5 feet beyond be compacted and filled with a **minimum 5-foot high soil surcharge above the maximum finished floor elevation**.

Site grading information was provided at the time of this report. Based on this information, we understand the proposed building areas of the site will require engineered fill placement of 3 feet or less above current site grades. We have provided special design considerations for the fill placement, soil surcharge program, and building construction within Section 10 & 10.1 of this report.

If it is determined that the structural loads or site grades will exceed our assumptions within this report, the zone of soil that is significantly influenced by the applied foundation and soil surcharge loads should be determined. This analysis will determine whether the structure may be supported by conventional shallow foundations without experiencing excessive total or differential settlements.

8.0 GROUNDWATER CONDITIONS

8.1 EXISTING GROUNDWATER LEVEL

We measured the water levels in the boreholes during our exploration. The encountered groundwater levels were found to range from approximately 1.6 feet to 2.7 feet below existing grades in the test borings. The encountered groundwater level at each boring location has been shown on the attached boring logs. Fluctuations in groundwater levels should be anticipated throughout the year, primarily due to seasonal variations in rainfall, surface runoff, and other factors that may vary from the time the borings were conducted.

8.2 SEASONAL HIGH GROUNDWATER LEVEL

Based on historical data, the rainy season in Northwest Florida occurs between June and September of the year. In order to estimate the seasonal high-water level at the boring locations, many factors are examined, including the following:

- Measured groundwater level
- Drainage characteristics of existing soil types
- Current & historical rainfall data
- Natural relief points (such as lakes, rivers, wetlands, etc.)
- Man-made drainage systems (ditches, canals, retention basins, etc.)
- On-site types of vegetation
- Review of available data (soil surveys, USGS maps, etc.)
- Redoximorphic features (mottling, striping, etc.)

Based on the results of our field exploration and the factors listed above, we estimate that the normal, stabilized seasonal high groundwater level will form between the existing ground surface and depths of 1.5 feet below existing grade at the specific test boring locations. Please refer to the boring logs attached in Appendix B for more information at the specific test boring locations.

It should be noted that the estimated seasonal high-water levels do not provide any assurance that groundwater levels will not exceed these estimated levels during any given year in the future. Should the impediments to surface water drainage be present, or should rainfall intensity and duration, or total rainfall quantities, exceed the normally anticipated rainfall quantities, groundwater levels might exceed our seasonal high estimates. Further, it should be understood that changes in the surface hydrology and subsurface drainage from on-site and/or off-site improvements could have significant effects on the normal and seasonal high groundwater levels.

9.0 FOUNDATION DESIGN RECOMMENDATIONS

The following recommendations have been made based upon a review of the attached soil test data, our understanding of the proposed construction, and experience with similar projects and subsurface conditions. The applicability of geotechnical recommendations is very dependent upon project characteristics such as improvement locations, structural design loads, and grade alterations. UES must review the final site and grading plans to validate all recommendations rendered herein.

Additionally, if subsurface conditions are encountered during construction which were not encountered in the borings, those conditions should be immediately reported to UES for observation and recommendations.

9.1 Structural and Grading Information

Preliminary structural loading information was provided via email correspondence with the Client at the time of this report. We understand that structural loads will be carried by continuous strip footings (maximum load of 3 kips per linear foot) and isolated spread foundations (maximum load of 25 kips).

Site grading details were also provided at the time of this report. We understand a proposed finished floor elevation of +12.9' with an existing site elevation of about +10' (NAVD 1988). Based on the information provided, we have assumed that finished grades in the proposed structure areas of the site will require the placement of 3 feet or less of structural fill.

Prior to finalizing any design, the structural/grading information outlined above should be confirmed by the Structural/Civil Engineer for the project. This is crucial to our evaluation and estimates of settlements. If any of this information is incorrect or if you anticipate any changes, please inform Universal Engineering Sciences immediately so that we may review and modify our recommendations as appropriate.

9.2 Analysis

Based on the results of the soil borings, the near surface soils within the proposed building area appear to be very loose to medium dense sands and are considered suitable to support the proposed structure with normal, good practice site preparation procedures outlined within Section 10.0 of this report.

9.3 Bearing Pressure

Provided our suggested site preparation procedures are followed, we recommend designing shallow spread foundations for a **maximum allowable net soil bearing pressure of 2,500 pounds per square foot (psf)**. The allowable net bearing pressure is that pressure that may

be transmitted to the soil in excess of the minimum surrounding overburden pressure. The allowable bearing pressure should include dead load plus sustained live load. Per Section 1805.4.1 of the Florida Building Code (FLBC), the foundations should be designed for the most unfavorable effects due to the combinations of loads specified in Section 1605.3 of the FLBC.

9.4 Foundation Size

The minimum width recommended for an isolated column footing is 24 inches. For continuous wall or slab on grade foundations, the minimum footing width should comply with the current FLBC, but under no circumstances should be less than 18 inches. Even though the maximum allowable soil bearing pressure may not be achieved, these minimum width recommendations should control the size of the foundations.

If it is determined that the structural loads will exceed our assumptions contained within this report, the zone of soil that is significantly influenced by the applied foundation loads should be determined. This analysis will determine whether the structure may be supported by conventional shallow foundations without experiencing excessive total or differential settlements.

9.5 Bearing Depth

The exterior foundations should bear at a depth of at least 18 inches below the finished exterior grade and the interior foundations should bear at a depth of at least 12 inches below finished floor elevation to provide confinement to the bearing level soils in accordance with the FLBC. We recommend stormwater and surface water be diverted away from the building exterior, both during and after construction, to reduce the possibility of erosion beneath the exterior footings.

9.6 Bearing Material

The foundations may bear on either the compacted suitable native soils or compacted structural backfill. The bearing level soils should exhibit a density of at least 95 percent of the maximum dry density as determined by ASTM D 1557 (modified Proctor) **to a depth of at least 1 foot below foundation level** as described in Section 10.0 of this report. In addition to compaction, the bearing soils must exhibit stability and be free of "pumping" conditions.

9.7 Settlement Estimates

Post-construction settlement of the structure will be influenced by several interrelated factors, such as (1) subsurface stratification and strength/compressibility characteristics of the bearing soils to a depth of approximately twice the width of the footing; (2) footing size, bearing level, applied loads, and resulting bearing pressures beneath the foundation; (3) site preparation and earthwork construction techniques used by the Contractor, and (4) external factors, including but not limited to vibration from offsite sources and groundwater fluctuations beyond those normally anticipated for the naturally-occurring site and soil conditions which are present. **We estimate the total post-construction vertical settlement of the proposed structure to be on the order of 1 inch or less.**

Differential settlement results from differences in applied bearing pressures and the variations in the compressibility characteristics of the subsurface soils. **Assuming our site preparation procedures outlined in this report are followed and properly implemented, we**

anticipate post-construction differential settlement of ½ inch or less over 40 feet of continuous footing or similarly spaced isolated foundations.

9.8 FLOOR SLABS

Conventional floor slabs may be supported upon the suitable native soil or compacted fill and should be structurally isolated from other foundation elements or adequately reinforced to prevent distress due to differential movements. For the slab design, we recommend using a subgrade modulus (k) of 125 pounds per cubic inch (pci), which can be achieved by preparing the subgrade soils as recommended in this report. We recommend using a sheet vapor barrier (in accordance with Florida Building Code requirements) beneath the building slabs-on-grade to help control moisture migration through the slabs.

10.0 SITE PREPARATION

We recommend normal, good practice site preparation procedures for the new construction areas. ***These procedures include: stripping the site of root systems greater than 0.5 inch in diameter, surficial vegetation, topsoil, and any other deleterious materials present in the proposed building areas of the site.*** Following stripping, the exposed subgrade soils should be moisture-conditioned, thoroughly compacted and verified, and all subgrade and subsequent fill/backfill soils should be properly densified. A more detailed description of this work has been presented in this section.

1. Prior to construction, existing underground utility lines within the construction areas should be located. It should be noted that if underground pipes are not properly removed or plugged, they may serve as conduits for subsurface erosion which may lead to excessive settlement of the overlying structure.

2. Perform any necessary remedial dewatering prior to any earthwork operations. Dewatering should be performed to a depth of at least 2 feet below the bottom of any excavations. Dewatering means and methods are the sole responsibility of the Contractor.

3. Strip the proposed construction limits of construction debris, vegetation, topsoil, roots, organics, debris, and other deleterious materials within and 5 feet beyond the perimeter of the proposed building areas. We strongly recommend that the stripped surface be observed and probed by a representative of UES.

4. Once stripping and cut operations are completed, the existing soils within the entire building footprints and 5 feet beyond laterally on all sides should be thoroughly moisture conditioned, and surface compacted using a heavy roller (minimum 8-ton roller with a minimum 5-foot drum diameter) until obtaining a minimum density of at least 95 percent of the modified Proctor maximum dry density (ASTM D 1557) to a depth of 1 foot below the compacted surface. A minimum of eight (8) complete coverages (in perpendicular directions) should be made in the building construction areas with the compaction equipment to improve the uniformity and increase the density of the underlying soils.

   Additional site preparation recommendations will be rendered in the field (i.e. undercutting and backfilling) if the test results indicate loose soil conditions are still present after compaction operations have been completed.

5. Place fill/backfill as necessary. Fill should consist of clean sand with less than 10 percent soil fines and be free of organics, debris and other deleterious materials. Place fill in maximum 12-inch loose, uniform lifts and compact each lift to at least 95 percent of the modified Proctor maximum dry density.

   As noted previously very loose and buried organic soil conditions were encountered below the proposed building footprints. We recommend that a minimum 5-foot-high soil surcharge be placed and compacted over the proposed building footprints and 5-foot margins beyond. The surcharge fill material should be constructed to a height of at least 5 feet above the maximum finished floor elevation. We estimate (based on prior experience, and absent definitive data from consolidation testing) that the elapsed "sit" time required for the fill to settle sufficiently so that vertical construction of the proposed structures may commence will be at least 30 days with the addition of 5 feet of compacted surcharge soils **above the maximum finished floor elevation**.

   We recommend placing at least two (2) settlement plates within each building footprint to monitor settlement of the underlying soils as the filling progresses and the soil surcharge loading is applied. The fabrication and placement of the settlement plates at the site should be performed by UES. Settlement readings at each location should be taken weekly by a survey crew to measure the magnitude of settlement. The results will be evaluated on a regular basis to determine when the soil surcharge material can be removed and building construction may proceed. A summary letter will be prepared containing the data obtained during the monitoring program and releasing the building pads for further construction.

6. Test the subgrade and each lift of fill for compaction at a frequency of not less than one test per 2,500 square feet in the foundation area, or a minimum of 3 test locations, whichever is greater.

7. Prior to the placement of reinforcing steel and concrete, verify compaction within the footing trenches to a depth of 1 foot. The footing excavations should be compacted to a minimum density of at least 95 percent of the modified Proctor maximum dry density. We recommend performing verification testing at a frequency of one test per 75 linear feet in continuous footings and each isolated foundation. Re-compaction of the foundation excavation bearing level soils, if loosened by the excavation process, can typically be achieved by making several passes with a walk-behind vibratory sled or jumping jack compactor.

Stability of the compacted soils is essential and independent of compaction and density control. If the near surface soils or the structural fill experience "pumping" conditions, terminate all earthwork activities in that area. Pumping conditions occur when there is too much water present in the soil-water matrix. The disturbed soils should be dried in place by scarification and aeration prior to any additional earthwork activities.

Vibrations produced during vibratory compaction operations at the site may be significantly noticeable within 100 feet and may cause distress to adjacent structures if not properly regulated. Provisions should be made to monitor these vibrations so that any necessary modifications in the compaction operations can be made in the field before potential damage occurs. UES can provide vibration monitoring services to help document and evaluate the effects of the surface compaction operation on existing structures. It is

recommended that large vibratory rollers remain a minimum of 50 feet from existing structures. Within this zone, the use of a static roller or small hand guided plate compactors is recommended.

10.1 Special Design Considerations – Soil Surcharge Waiting Period & Ancillary Structures

Based on the soil conditions encountered (i.e. – very loose / buried organic material), there is potential for an intolerable amount of settlement to occur due to the combination of the fill soil required to be placed in order to achieve finished site grades and the structural loads imposed on the soils from the proposed construction. Therefore, we recommend that a minimum 5-foot-high soil surcharge be placed and compacted over the proposed building footprint and 5-foot margins beyond. The surcharge fill material should be constructed to a height of 5 feet above the maximum finished floor elevation. We estimate (based on prior experience, and absent definitive data from consolidation testing) that the elapsed "sit" time required for the fill to settle sufficiently so that vertical construction of the proposed structures may commence will be at least 30 days with the addition of 5 feet of compacted surcharge soils **above the maximum finished floor elevation**.

We recommend placing at least two (2) settlement plates within each building footprint **at the native subgrade elevation prior to the placement of any fills soils** to monitor settlement of the underlying very loose / organic soils as the import filling progresses and the soil surcharge loading is applied. The fabrication and placement of the settlement plates at the site should be performed by UES. Settlement readings at each location should be taken weekly by a survey crew to measure the magnitude of settlement. The results will be evaluated on a regular basis to determine when building construction may proceed. A summary letter will be prepared containing the data obtained during the monitoring program and releasing the building pads for further construction.

The applicability of geotechnical recommendations is very dependent upon project characteristics such as improvement locations, grade alterations, and foundation bearing elevations. UES must review the final site construction and grading plans to validate all recommendations rendered herein.

11.0 DEWATERING AND EXCAVATION CONSIDERATIONS

Where excavations will extend only a few feet below the groundwater level, a sump pump may be sufficient to control the groundwater. Deeper excavations may require well points and/or sock drains to control the groundwater. Regardless of the method(s) used, we recommend drawing down the water level at least 2 feet below the bottom of the excavation. The actual method(s) of dewatering should be determined by the Contractor. The design and discharge of the dewatering system must be performed in accordance with applicable regulatory criteria (i.e., water management district, etc.) and compliance with such criteria is the sole responsibility of the Contractor.

It should be noted that the soil borings encountered buried highly organic soil conditions at depths as shallow as about 12 feet below existing grades. **Given the organic nature of these soils we recommend that any required dewatering operation(s) in this area be performed to a maximum depth of 8 feet below existing grades.** In the event that dewatering method(s) are performed to greater depths the organic soils encountered, if dewatered, will consolidate under the weight of the sandy overburden soils which could cause excessive

settlements and detrimental structural damage to surrounding structures, roadways, associated infrastructure, and any other site improvements.

Excavations should be sloped as necessary to prevent slope failure and to allow backfilling. As a minimum, temporary excavations below 4-foot depth should be sloped in accordance with OSHA regulations. Where lateral confinement will not permit slopes to be laid back, the excavation should be shored in accordance with OSHA requirements. During excavation, excavated material should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth. Provisions for maintaining worker safety within excavations is the sole responsibility of the Contractor.

12.0 CONSTRUCTION RELATED SERVICES

We recommend the Owner retain UES to provide construction monitoring and testing services during the site preparation procedures for confirmation of the adequacy of the earthwork operations. Field tests and observations include verification of foundation subgrades by monitoring earthwork operations and performing quality assurance tests of the placement of compacted structural fill courses. We can also provide settlement plate construction & installation, concrete testing, reinforcing steel inspections, structural steel inspection, timber frame inspections, and general construction observation services.

The geotechnical engineering design does not end with the advertisement of the construction documents. The design is an on-going process throughout construction. Because of our familiarity with the site conditions and the intent of the engineering design, we are most qualified to address site problems or construction changes, which may arise during construction, in a timely and cost-effective manner.

13.0 LIMITATIONS

This report has been prepared for the exclusive use of ***Prescott Architects,*** and other designated members of the Design/Construction Team associated with the proposed construction for the specific project discussed in this report. No other site or project facilities should be designed using the soil information contained in this report. As such, UES will not be responsible for the performance of any other site improvement designed using the data in this report.

This report should not be relied upon for final design recommendations or professional opinions by unauthorized third parties without the expressed written consent of UES. Unauthorized third parties that rely upon the information contained herein without the expressed written consent of UES assume all risk and liability for such reliance.

The recommendations submitted in this report have been based upon the data obtained from the soil borings performed at the locations indicated on the Boring Location Plan and from other information as referenced. This report does not reflect any variations which may occur between the boring locations. The nature and extent of such variations may not become evident until construction. If variations become evident, it will then be necessary for a re-evaluation of the recommendations of this report after performing on-site observations during the construction period and noting the characteristics of the variations.

Borings for a typical geotechnical report are widely spaced and generally not sufficient for reliably detecting the presence of isolated, anomalous surface or subsurface conditions, or

reliably estimating unsuitable or suitable material quantities. Accordingly, UES does not recommend relying on our boring information for estimation of material quantities unless our contracted services ***specifically*** include sufficient exploration for such purpose(s) and within the report we so state that the level of exploration provided should be sufficient to detect anomalous conditions or estimate such quantities. Therefore, UES will not be responsible for any extrapolation or use of our data by others beyond the purpose(s) for which it is applicable or intended.

All users of this report are cautioned that there was no requirement for UES to attempt to locate any man-made buried objects or identify any other potentially hazardous conditions that may exist at the site during the course of this exploration. Therefore no attempt was made by UES to locate or identify such concerns. UES cannot be responsible for any buried man-made objects or environmental hazards which may be subsequently encountered during construction that are not discussed within the text of this report. We can provide this service, if requested.

During the early stages of most construction projects, geotechnical issues not addressed in this report may arise. Because of the natural limitations inherent in working with the subsurface, it is not possible for a geotechnical engineer to predict and address all possible problems. A GBC/The Geotechnical Business Council publication, "Important Information About This Geotechnical Engineering Report," appears in Appendix C, and will help explain the nature of geotechnical issues.

Further, we present documents in Appendix C: Constraints and Restrictions, to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

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[END OF REPORT]

APPENDIX A

UES™

SITE LOCATION

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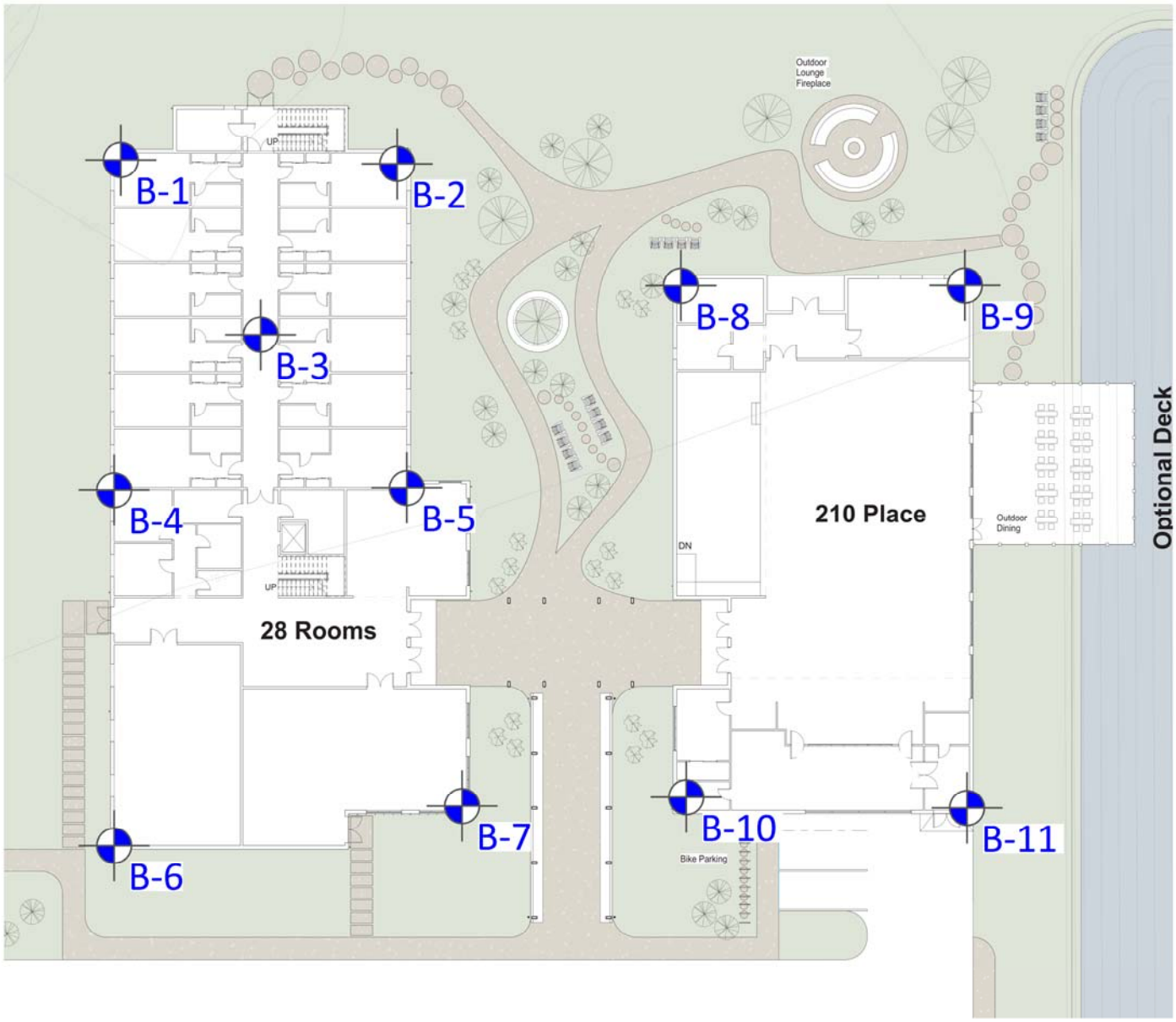
UES™

PATH OF GRACE DORM – 941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

SITE LOCATION MAP

DRAWN BY: CH	CHECKED BY: BT	PROJECT NO: 2030.2400057.0000	SCALE: NTS
DATE: 8/7/2024	DATE: 8/8/2024	REPORT NO: 2103466	PAGE NO: A-1

PATH OF GRACE DORM



LEGEND

BORING LOCATION

BORING LOCATION PLAN

SCALE: NTS

NOTE: BASE MAP PROVIDED BY OTHERS

UES	UNIVERSAL ENGINEERING SCIENCES, LLC 1712 AIRPORT ROAD PANAMA CITY, FL 32405	PROJECT NAME	PATH OF GRACE DORM - 941 S CHURCH STREET	
		PROJECT NUMBER	2030.2400057.0000	U.E.S. DOCS # 2103466
		PROJECT LOCATION	SANTA ROSA BEACH, WALTON COUNTY, FLORIDA	
		PROJECT ENGINEER	CHARLES HUNTER, E.I.	
		DATE OF SUB-SURFACE EXPLORATION	JULY 16 - JULY 22, 2024	SHEET NUMBER A-2

Map Scale: 1:657 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 5 10 20 30

Feet
0 30 60 120 180

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 16N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Walton County, Florida
Survey Area Data: Version 23, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 11, 2021—Apr 3, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
21	Leon sand, 0 to 2 percent slopes	1.3	66.8%
27	Rutlege fine sand, 0 to 2 percent slopes	0.6	33.2%
Totals for Area of Interest		**1.9**	**100.0%**

APPENDIX B

UES™

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	1

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-1** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.6
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 0.5

DATE STARTED: 7/16/24
DATE FINISHED: 7/16/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0				▽		Very loose gray, brown, tan SAND, with silt [SP-SM]						
1				▼								
2		1/12"-1-1	1				9.6	26				
3						Loose tan SAND, with silt [SP-SM]						
4		1-2-2-4	4									
5						Loose gray, tan SAND, with silt [SP-SM]						
6		4-5-5-6	10									
7						Loose light brown, gray SAND, with silt [SP-SM]						
8		5-4-3-3	7									
9						Very loose gray SAND, with silt [SP-SM]						
10		1-2-1-1	3				6.6	27				
11												
12												
13												
14												
15		1-2-1	3									
16												
17						Medium dense dark brown SAND [SP]						
18												
19												
20		5-7-9	16			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	2

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-2** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.7
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 0.5

DATE STARTED: 7/16/24
DATE FINISHED: 7/16/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0				▽		Loose dark brown SAND, with silt [SP-SM], some wood/roots						
1												
2		2-3-4-3	7	▼		Loose tan SAND, with silt [SP-SM]						
3												
4		2-3-4-9	7			Loose light brown, gray SAND, with silt [SP-SM]						
5												
6		3-4-5-3	9			Loose to very loose gray, brown SAND, with silt [SP-SM]						
7												
8		2-3-2-1	5									
9												
10		1-1-2-2	3									
11												
12						Loose gray, brown SAND, with silt [SP-SM], some organics						
13												
14												
15		1-2-2	4				5.3	39				6.2
16												
17						Medium dense brown SAND [SP]						
18												
19												
20		3-5-9	14			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	3

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-3** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.6
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 0.5

DATE STARTED: 7/17/24
DATE FINISHED: 7/17/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0				▽		Loose dark brown SAND, with silt [SP-SM]						
1				▼								
2		2-2-3-3	5			Loose tan, brown SAND [SP]						
3												
4		3-5-5-6	10			Medium dense light brown, gray SAND [SP]						
5												
6		3-5-6-5	11			Very loose to loose gray SAND, with silt [SP-SM]						
7												
8		3-2-1-1	3									
9												
10		1-2-2-1	4									
11												
12						Loose dark brown SAND, with silt [SP-SM]						
13												
14												
15		2-3-6	9									
16												
17						Medium dense brown, dark brown SAND [SP]						
18												
19												
20		5-7-9	16			Boring Terminated at 20'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	4

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-4** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.7
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 0.5

DATE STARTED: 7/17/24
DATE FINISHED: 7/17/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0				▽		Loose dark brown, tan SAND, with silt [SP-SM]						
1				▼								
2		2-3-2-3	5			Loose tan SAND [SP]						
3												
4		3-4-5-4	9			Loose brown SAND [SP]						
5												
6		4-5-4-6	9			Very loose gray SAND [SP]						
7												
8		2-1-1-2	2				4.9	26				
9												
10		2-1-1-1	2									
11												
12												
13												
14												
15		1-2-1	3									
16												
17						Medium dense brown, light gray SAND [SP]						
18												
19												
20		3-5-7	12			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	5

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-5** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.8
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0												
1				▽		Loose dark brown SAND, with silt [SP-SM]						
2		2-2-3-3	5	▼								
3						Loose brown, tan SAND [SP]0						
4		3-3-4-5	7									
5						Medium dense gray, brown SAND, with silt [SP-SM]						
6		3-5-6-5	11				6.2	20				
7						Loose to very loose gray SAND, with silt [SP-SM]						
8		2-3-2-1	5									
9												
10		1-1-1-2	2									
11												
12						Very loose dark brown silty SAND [SM], many organics						
13												
14												
15		2-1-1	2				15	70				20
16												
17						Medium dense gray, brown SAND [SP]						
18												
19												
20		3-5-7	12			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
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PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-6** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.9
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1

DATE STARTED: 7/22/24
DATE FINISHED: 7/22/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0						Loose gray, tan SAND [SP]						
1				▽								
2		2-3-3-3	6	▼		Loose tan SAND, with silt [SP-SM]						
3												
4		3-4-3-5	7			Loose light gray, brown SAND [SP]	7.7	19				
5												
6		3-3-4-5	7			Very loose gray, brown SAND, with silt [SP-SM]						
7												
8		2-2-1-1	3				5.7	28				
9												
10		2-1-1-1	2									
11												
12												
13												
14												
15		1-2-1	3									
16												
17						Medium dense gray, brown SAND [SP]						
18												
19												
20		4-6-9	15			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	7

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-7** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.9
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0						Loose tan, brown SAND [SP]						
1				▽								
2		2-2-2-3	4	▼		Loose light tan SAND [SP]						
3												
4		2-3-4-5	7			Loose brown SAND [SP]						
5												
6		4-5-5-5	10			Loose to very loose gray SAND, with silt [SP-SM]						
7												
8		2-3-3-2	6									
9												
10		2-1-2-2	3									
11												
12												
13												
14												
15		1-2-1	3									
16												
17						Medium dense gray, brown SAND [SP]						
18												
19												
20		5-7-8	15			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	8

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-8** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.9
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0						Loose dark brown SAND, with silt [SP-SM]						
1				▽								
2		2-3-3-4	6	▼		Loose brown SAND [SP]						
3												
4		3-4-4-6	8			Loose light gray, brown SAND [SP]						
5												
6		3-4-5-4	9			Loose to very loose gray SAND, with silt [SP-SM]						
7												
8		2-3-1-1	4									
9												
10		1-1-2-1	3									
11												
12												
13												
14												
15		2-1-2	3									
16												
17						Medium dense light gray, brown SAND [SP]						
18												
19												
20		5-6-8	14			Boring Terminated at 20'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
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PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-9** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 1.9
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./ DAY)	ORGANIC CONTENT (%)
0												
1				▽		Loose dark brown SAND, with silt [SP-SM]						
2		3-3-5-4	8	▼								
3						Loose to medium dense brown SAND [SP]						
4		4-5-5-6	10									
5												
6		4-6-5-5	11			Very loose gray SAND, with silt [SP-SM]						
7												
8		2-2-1-1	3				5.4	27				
9												
10		1-1-1-2	2									
11												
12												
13												
14												
15		1/12"-1	1				7.2	24				
16												
17						Medium dense gray, brown SAND [SP]						
18												
19												
20		3-5-7	12			Boring Terminated at 20'						

NEW LOGO 2030.2400057.0000 PATH OF GRACE DORM.GPJ PANAMA CITY TEMPLATE.GDT 8/7/24

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	10

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-10** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 2.5
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1.5

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./DAY)	ORGANIC CONTENT (%)
0						Loose brown, tan SAND, with silt [SP-SM]						
1				▽								
2		2-2-3-4	5	▼		Loose tan SAND, with silt [SP-SM]						
3												
4		3-4-5-5	9			Medium dense light tan SAND [SP]						
5												
6		4-5-6-5	11			Loose to very loose gray SAND, with silt [SP-SM]						
7												
8		3-3-2-1	5									
9												
10		2-1-1-1	2				5.6	27				
11												
12												
13												
14												
15		1-2-1	3									
16												
17						Medium dense dark brown SAND [SP]						
18												
19												
20		3-5-8	13				3.3	25				
						Boring Terminated at 20'						

UNIVERSAL ENGINEERING SCIENCES
BORING LOG

PROJECT NO.:	2030.2400057.0000
REPORT NO.:	2103466
PAGE:	11

PROJECT: PATH OF GRACE DORM
941 S CHURCH STREET
SANTA ROSA BEACH, WALTON COUNTY, FLORIDA

BORING DESIGNATION: **B-11** SHEET: **1 of 1**
SECTION: TOWNSHIP: RANGE:

CLIENT: PRESCOTT ARCHITECTS

LOCATION: PER BORING LOCATION PLAN

REMARKS:

G.S. ELEVATION (ft): NG
WATER TABLE (ft): 2.7
DATE OF READING: 7/22/24
EST. W.S.W.T. (ft): 1.5

DATE STARTED: 7/18/24
DATE FINISHED: 7/18/24
DRILLED BY: L.P.
TYPE OF SAMPLING: ASTM D-1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N VALUE	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT./DAY)	ORGANIC CONTENT (%)
0												
1				▽		Loose dark brown SAND, with silt [SP-SM]						
2		3-4-6-6	10				8.4	13				
3				▼		Medium dense to loose brown SAND, with silt [SP-SM]						
4		5-6-5-6	11									
5												
6		4-5-5-4	10			Loose gray SAND [SP]						
7												
8		4-4-4-5	8				4.7	24				
9												
10		4-5-5-6	10									
11												
12												
13												
14												
15		1-1-1	2									
16												
17												
18												
19												
20		2-2-4	6			Boring Terminated at 20'						

KEY TO BORING LOGS

SYMBOLS AND ABBREVIATIONS

SYMBOL	DESCRIPTION
N-Value	No. of Blows of a 140-lb. Weight Falling 30 Inches Required to Drive a Standard Spoon 1 Foot
WOR	Weight of Drill Rods
WOH	Weight of Drill Rods and Hammer
	Sample from Auger Cuttings
	Standard Penetration Test Sample
	Thin-wall Shelby Tube Sample (Undisturbed Sampler Used)
RQD	Rock Quality Designation
	Stabilized Groundwater Level
	Seasonal High Groundwater Level (also referred to as the W.S.W.T.)
NE	Not Encountered
GNE	Groundwater Not Encountered
BT	Boring Terminated
-200 (%)	Fines Content or % Passing No. 200 Sieve
MC (%)	Moisture Content
LL	Liquid Limit (Atterberg Limits Test)
PI	Plasticity Index (Atterberg Limits Test)
NP	Non-Plastic (Atterberg Limits Test)
K	Coefficient of Permeability
Org. Cont.	Organic Content
G.S. Elevation	Ground Surface Elevation

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAINED SOILS More than 50% retained on the No. 200 sieve*	GRAVELS 50% or more of coarse fraction retained on No. 4 sieve	CLEAN GRAVELS	GW	Well-graded gravels and gravel-sand mixtures, little or no fines
			GP	Poorly graded gravels and gravel-sand mixtures, little or no fines
		GRAVELS WITH FINES	GM	Silty gravels and gravel-sand-silt mixtures
			GC	Clayey gravels and gravel-sand-clay mixtures
	SANDS More than 50% of coarse fraction passes No. 4 sieve	CLEAN SANDS 5% or less passing No. 200 sieve	SW**	Well-graded sands and gravelly sands, little or no fines
			SP**	Poorly graded sands and gravelly sands, little or no fines
		SANDS with 12% or more passing No. 200 sieve	SM**	Silty sands, sand-silt mixtures
			SC**	Clayey sands, sand-clay mixtures
FINE-GRAINED SIOLS 50% or more passes the No. 200 sieve*	SILTS AND CLAYS Liquid limit 50% or less		ML	Inorganic silts, very fine sands, rock flour, silty or clayey fine sands
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS Liquid limit greater than 50%		MH	Inorganic silts, micaceous or diamicaceous fine sands or silts, elastic silts
			CH	Inorganic clays or clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity
			PT	Peat, muck and other highly organic soils

*Based on the material passing the 3-inch (75 mm) sieve
** Use dual symbol (such as SP-SM and SP-SC) for soils with more than 5% but less than 12% passing the No. 200 sieve

RELATIVE DENSITY
(Sands and Gravels)
Very loose – Less than 4 Blow/Foot
Loose – 4 to 10 Blows/Foot
Medium Dense – 11 to 30 Blows/Foot
Dense – 31 to 50 Blows/Foot
Very Dense – More than 50 Blows/Foot

CONSISTENCY
(Silts and Clays)
Very Soft – Less than 2 Blows/Foot
Soft – 2 to 4 Blows/Foot
Firm – 5 to 8 Blows/Foot
Stiff – 9 to 15 Blows/Foot
Very Stiff – 16 to 30 Blows/Foot
Hard – More than 30 Blows/Foot

RELATIVE HARDNESS
(Limestone)
Soft – 100 Blows for more than 2 Inches
Hard – 100 Blows for less than 2 Inches

MODIFIERS

These modifiers Provide Our Estimate of the Amount of Minor Constituents (Silt or Clay Size Particles) in the Soil Sample
Trace – 5% or less
With Silt or With Clay – 6% to 11%
Silty or Clayey – 12% to 30%
Very Silty or Very Clayey – 31% to 50%

These Modifiers Provide Our Estimate of the Amount of Organic Components in the Soil Sample
Trace – Less than 3%
Few – 3% to 4%
Some – 5% to 8%
Many – Greater than 8%

These Modifiers Provide Our Estimate of the Amount of Other Components (Shell, Gravel, Etc.) in the Soil Sample
Trace – 5% or less
Few – 6% to 12%
Some – 13% to 30%
Many – 31% to 50%

FIELD PROCEDURES

Standard Penetration Test Borings (Mud-Rotary Advanced)

To aid in evaluating the subsurface conditions present on the site, we located and drilled one or more Standard Penetration Test (SPT) borings to the depths indicated on the attached Boring Logs.

In this procedure, the boring was advanced by rotary drilling techniques using a circulating bentonite fluid for borehole flushing and stability. At 1½- to 5-foot intervals, the drilling tools were removed from the borehole and a split-barrel sampler was inserted to the borehole bottom and driven 18 inches into the soil using a 140-pound hammer falling an average 30 inches per hammer blow. The number of blows for the final 12 inches of penetration is termed the “penetration resistance, blow count, or N-value”. This value is an index to several in-place geotechnical properties of the material tested, such as relative density and Young’s Modulus.

After driving the sampler 18 inches (or less if in extremely dense/hard materials), the sampler was retrieved from the borehole and a representative sample of the material within the split-barrel sampler was placed in a labeled plastic container and sealed. After completing the drilling operations, the samples obtained from the boring were transported to our laboratory where they were examined by a member of our geotechnical staff. This procedure was performed in general accordance with the latest revision of ASTM D 1586, Standard Test Method for Standard Penetration Test and Split-Barrel Sampling of Soils.

LABORATORY PROCEDURES

Natural Moisture Content Test

One or more samples of the soils found during our subsurface exploration were chosen for natural moisture content testing. In this test, the soil sample is placed into a metal pan of known weight, weighed, dried for a minimum of 12 hours in a 110 ± 5°C oven, and then weighed again to record the weight of water released during drying. The natural moisture content of the soil is termed the ratio of "pore" or "free" water in a given mass of material to the mass of solid material particles. This test was conducted in general accordance with ASTM D 2216, Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass.

Percent -200 Soil Fines Content Test

One or more samples of the soils found during our subsurface exploration were chosen to determine the percentage of silt and clay fines present in the individual samples. In this test, the Natural Moisture Content test (ASTM D 2216) was performed and the sample was then washed over a No. 200 mesh sieve. The materials present in the sample that did not pass through the No. 200 sieve was then placed back in its original pan and dried until the water retained from the wet-sieve process was totally evaporated. Once dried, the sample was weighed again to determine the weight of fines removed during the wet-sieve process. The percent of soil by weight passing the No. 200 sieve is termed the percentage of fines or portion of the sample in the silt and clay size range. This test was conducted in general accordance with ASTM D 1140, Standard Test Methods for Amount of Material in Soils Finer Than the No. 200 (75-µm) Sieve.

Organic Content Test

One or more samples of the soils found during our subsurface exploration were chosen to determine the organic contents of the individual samples. The organic content test involves performing the Natural Moisture Content test (ASTM D 2216) and then placing 10 to 40 grams of the mixed and dried soil sample into a porcelain crucible of known weight. The crucible (with sample) was then placed into a Barnstead|Thermolyne Model 1400 Muffle Furnace and ignited at a temperature of 455 ± 10°C for 6 hours. After six hours, the crucible was then allowed to cool in a desiccator to prevent moisture entry from the lab's atmosphere. Once cool to the touch, the crucible was removed from the desiccator and then weighed to determine the mass of organic materials disintegrated during the ignition process. The organic content of the soil is defined as the percentage of combustible organic materials present in a given amounts of the dried soil sample. This test was conducted in general accordance with AASHTO T 267, Standard Method of Test for Determination of Organic Content in Soils by Loss on Ignition.

APPENDIX C

UES™

Important Information about This

Geotechnical-Engineering Report

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

While you cannot eliminate all such risks, you can manage them. The following information is provided to help.

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

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

Read the Full Report

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

Geotechnical Engineers Base Each Report on a Unique Set of Project-Specific Factors

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

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

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

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

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

Subsurface Conditions Can Change

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

Most Geotechnical Findings Are Professional Opinions

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

A Report's Recommendations Are Not Final

Do not overrely on the confirmation-dependent recommendations included in your report. *Confirmation-dependent recommendations are not final,* because geotechnical engineers develop them principally from judgment and opinion. Geotechnical engineers can finalize their recommendations *only* by observing actual subsurface conditions revealed during construction. *The geotechnical engineer who developed your report cannot assume responsibility or liability for the report's confirmation-dependent recommendations if that engineer does not perform the geotechnical-construction observation required to confirm the recommendations' applicability.*

A Geotechnical-Engineering Report Is Subject to Misinterpretation

Other design-team members' misinterpretation of geotechnical-engineering reports has resulted in costly

problems. Confront that risk by having your geotechnical engineer confer with appropriate members of the design team after submitting the report. Also retain your geotechnical engineer to review pertinent elements of the design team's plans and specifications. Constructors can also misinterpret a geotechnical-engineering report. Confront that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing geotechnical construction observation.

Do Not Redraw the Engineer's Logs

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

Give Constructors a Complete Report and Guidance

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

Read Responsibility Provisions Closely

Some clients, design professionals, and constructors fail to recognize that geotechnical engineering is far less exact than other engineering disciplines. This lack of understanding has created unrealistic expectations that have led to disappointments, claims, and disputes. To help reduce the risk of such outcomes, geotechnical engineers commonly include a variety of explanatory provisions in their reports. Sometimes labeled "limitations," many of these provisions indicate where geotechnical engineers' responsibilities begin and end, to help others recognize their own responsibilities and risks. *Read these provisions closely.* Ask questions. Your geotechnical engineer should respond fully and frankly.

Environmental Concerns Are Not Covered

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

Obtain Professional Assistance To Deal with Mold

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

Rely, on Your GBC-Member Geotechnical Engineer for Additional Assistance

Membership in the Geotechnical Business Council of the Geoprofessional Business Association exposes geotechnical engineers to a wide array of risk-confrontation techniques that can be of genuine benefit for everyone involved with a construction project. Confer with you GBC-Member geotechnical engineer for more information.

GEOTECHNICAL BUSINESS COUNCIL
of the Geoprofessional Business Association

8811 Colesville Road/Suite G106, Silver Spring, MD 20910
Telephone: 301/565-2733 Facsimile: 301/589-2017
e-mail: info@geoprofessional.org www.geoprofessional.org

CONSTRAINTS & RESTRICTIONS

The intent of this document is to bring to your attention the potential concerns and the basic limitations of a typical geotechnical report.

WARRANTY

Universal Engineering Sciences has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices, and makes no other warranty either expressed or implied as to the professional advice provided in the report.

UNANTICIPATED SOIL CONDITIONS

The analysis and recommendations submitted in this report are based upon the data obtained from soil borings performed at the locations indicated on the Boring Location Plan. This report does not reflect any variations which may occur between these borings.

The nature and extent of variations between borings may not become known until excavation begins. If variations appear, we may have to re-evaluate our recommendations after performing on-site observations and noting the characteristics of any variations.

CHANGED CONDITIONS

We recommend that the specifications for the project require that the contractor immediately notify Universal Engineering Sciences, as well as the owner, when subsurface conditions are encountered that are different from those present in this report.

No claim by the contractor for any conditions differing from those anticipated in the plans, specifications, and those found in this report, should be allowed unless the contractor notifies the owner and Universal Engineering Sciences of such changed conditions. Further, we recommend that all foundation work and site improvements be observed by a representative of Universal Engineering Sciences to monitor field conditions and changes, to verify design assumptions and to evaluate and recommend any appropriate modifications to this report.

MISINTERPRETATION OF SOIL ENGINEERING REPORT

Universal Engineering Sciences is responsible for the conclusions and opinions contained within this report based upon the data relating only to the specific project and location discussed herein. If the conclusions or recommendations based upon the data presented are made by others, those conclusions or recommendations are not the responsibility of Universal Engineering Sciences.

CHANGED STRUCTURE OR LOCATION

This report was prepared in order to aid in the evaluation of this project and to assist the architect or engineer in the design of this project. If any changes in the design or location of the structure as outlined in this report are planned, or if any structures are included or added that are not discussed in the report, the conclusions and recommendations contained in this report shall not be considered valid unless the changes are reviewed and the conclusions modified or approved by Universal Engineering Sciences.

USE OF REPORT BY BIDDERS

Bidders who are examining the report prior to submission of a bid are cautioned that this report was prepared as an aid to the designers of the project and it may affect actual construction operations.

Bidders are urged to make their own soil borings, test pits, test caissons or other investigations to determine those conditions that may affect construction operations. Universal Engineering Sciences cannot be responsible for any interpretations made from this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which will affect construction operations.

STRATA CHANGES

Strata changes are indicated by a definite line on the boring logs which accompany this report. However, the actual change in the ground may be more gradual. Where changes occur between soil samples, the location of the change must necessarily be estimated using all available information and may not be shown at the exact depth.

OBSERVATIONS DURING DRILLING

Attempts are made to detect and/or identify occurrences during drilling and sampling, such as: water level, boulders, zones of lost circulation, relative ease or resistance to drilling progress, unusual sample recovery, variation of driving resistance, obstructions, etc.; however, lack of mention does not preclude their presence.

WATER LEVELS

Water level readings have been made in the drill holes during drilling and they indicate normally occurring conditions. Water levels may not have been stabilized at the last reading. This data has been reviewed and interpretations made in this report. However, it must be noted that fluctuations in the level of the groundwater may occur due to variations in rainfall, temperature, tides, and other factors not evident at the time measurements were made and reported. Since the probability of such variations is anticipated, design drawings and specifications should accommodate such possibilities and construction planning should be based upon such assumptions of variations.

LOCATION OF BURIED OBJECTS

All users of this report are cautioned that there was no requirement for Universal Engineering Sciences to attempt to locate any man-made buried objects during the course of this exploration and that no attempt was made by Universal Engineering Sciences to locate any such buried objects. Universal Engineering Sciences cannot be responsible for any buried man-made objects which are subsequently encountered during construction that are not discussed within the text of this report.

TIME

This report reflects the soil conditions at the time of exploration. If the report is not used in a reasonable amount of time, significant changes to the site may occur and additional reviews may be required.

UES

Universal Engineering Sciences, LLC
GENERAL CONDITIONS

SECTION 1: RESPONSIBILITIES **1.1** *Universal Engineering Sciences, LLC*, and its subsidiaries and affiliated companies ("UES"), is responsible for providing the services described under the Scope of Services. The term "UES" as used herein includes all of UES's agents, employees, professional staff, and subcontractors. **1.2** The Client or a duly authorized representative is responsible for providing UES with a clear understanding of the project nature and scope. The Client shall supply UES with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys, plans and specifications, and designs, to allow UES to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product. **1.3** The Client acknowledges that UES's responsibilities in providing the services described under the Scope of Services section is limited to those services described therein, and the Client hereby assumes any collateral or affiliated duties necessitated by or for those services. Such duties may include, but are not limited to, reporting requirements imposed by any third party such as federal, state, or local entities, the provision of any required notices to any third party, or the securing of necessary permits or permissions from any third parties required for UES's provision of the services so described, unless otherwise agreed upon by both parties in writing.

SECTION 2: STANDARD OF CARE **2.1** Services performed by UES under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of UES's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, express or implied, is made. **2.2** Execution of this document by UES is not a representation that UES has visited the site, become generally familiar with local conditions under which the work is to be performed, or correlated personal observations with the requirements of the Scope of Services. It is the Client's responsibility to provide UES with all information necessary for UES to provide the services described under the Scope of Services, and the Client assumes all liability for information not provided to UES that may affect the quality or sufficiency of the services so described.

SECTION 3: SITE ACCESS AND SITE CONDITIONS **3.1** Client will grant or obtain free access to the site for all equipment and personnel necessary for UES to perform the work set forth in this Agreement. The Client will notify any possessors of the project site that Client has granted UES free access to the site. UES will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Scope of Services. **3.2** The Client is responsible for the accuracy of locations for all subterranean structures and utilities. UES will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against UES, and agrees to defend, indemnify, and hold UES harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 4: BILLING AND PAYMENT **4.1** UES will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications. **4.2** Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, on past due accounts. **4.3** If UES incurs any expenses to collect overdue billings on invoices, the sums paid by UES for reasonable attorneys' fees, court costs, UES's time, UES's expenses, and interest will be due and owing by the Client.

SECTION 5: OWNERSHIP AND USE OF DOCUMENTS **5.1** All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, as instruments of service, shall remain the property of UES. Neither Client nor any other entity shall change or modify UES's instruments of service. **5.2** Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose. **5.3** UES will retain all pertinent records relating to the services performed for a period of five years following submission of the report or completion of the Scope of Services, during which period the records will be made available to the Client in a reasonable time and manner. **5.4** All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by UES, are prepared for the sole and exclusive use of Client, and may not be given to any other entity, or used or relied upon by any other entity, without the express written consent of UES. Client is the only entity to which UES owes any duty or duties, in contract or tort, pursuant to or under this Agreement.

SECTION 6: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS **6.1** Client represents that a reasonable effort has been made to inform UES of known or suspected hazardous materials on or near the project site. **6.2** Under this agreement, the term hazardous materials include hazardous materials, hazardous wastes, hazardous substances (40 CFR 261.31, 261.32, 261.33), petroleum products, polychlorinated biphenyls, asbestos, and any other material defined by the U.S. EPA as a hazardous material. **6.3** Hazardous materials may exist at a site where there is no reason to believe they are present. The discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. The discovery of unanticipated hazardous materials may make it necessary for UES to take immediate measures to protect health and safety. Client agrees to compensate UES for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials. **6.4** UES will notify Client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client will make any disclosures required by law to the appropriate governing agencies. Client will hold UES harmless for all consequences of disclosures made by UES which are required by governing law. In the event the project site is not owned by Client, Client it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials. **6.5** Notwithstanding any other provision of the Agreement, Client waives any claim against UES, and to the maximum extent permitted by law, agrees to defend, indemnify, and save UES harmless from any claim, liability, and/or defense costs for injury or loss arising from UES's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with possible reduction of the property's value. Client will be responsible for ultimate disposal of any samples secured by UES which are found to be contaminated.

SECTION 7: RISK ALLOCATION **7.1** Client agrees that UES's liability for any damage on account of any breach of contract, error, omission, or professional negligence will be limited to a sum not to exceed $50,000 or UES's fee, whichever is greater. If Client prefers to have higher limits on contractual or professional liability, UES agrees to increase the limits up to a maximum of $1,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or $400.00, whichever is greater. If Client prefers a $2,000,000.00 limit on contractual or professional liability, UES agrees to increase the limits up to a maximum of $2,000,000.00 upon Client's written request at the time of accepting UES's proposal provided that Client agrees to pay an additional consideration of four percent of the total fee, or $800.00, whichever is greater. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance. **7.2** Client shall not be liable to UES and UES shall not be liable to Client for any incidental, special, or consequential damages (including lost profits, loss of use, and lost savings) incurred by either party due to the fault of the other, regardless of the nature of the fault, or whether it was committed by Client or UES, their employees, agents, or subcontractors; or whether such liability arises in breach of contract or warranty, tort (including negligence), statutory, or any other cause of action. **7.3** As used in this Agreement, the terms "claim" or "claims" mean any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or any other act giving rise to liability.

SECTION 8: INSURANCE **8.1** UES represents it and its agents, staff and consultants employed by UES, is and are protected by worker's compensation insurance and that UES has such coverage under public liability and property damage insurance policies which UES deems to be adequate. Certificates for all such policies of insurance shall be provided to Client upon request in writing. Within the limits and conditions of such insurance, UES agrees to indemnify and save Client harmless from and against loss, damage, or liability arising from negligent acts by UES, its agents, staff, and consultants employed by it. UES shall not be responsible for any loss, damage or liability beyond the amounts, limits, and conditions of such insurance or the limits described in Section 7, whichever is less. The Client agrees to defend, indemnify, and save UES harmless for loss, damage or liability arising from acts by Client, Client's agents, staff, and others employed by Client. **8.2** Under no circumstances will UES indemnify Client from or for Client's own actions, negligence, or breaches of contract. **8.3**

To the extent damages are covered by property insurance, Client and UES waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance.

SECTION 9: DISPUTE RESOLUTION **9.1** All claims, disputes, and other matters in controversy between UES and Client arising out of or in any way related to this Agreement will be submitted to mediation or non-binding arbitration, before and as a condition precedent to other remedies provided by law. **9.2** If a dispute arises and that dispute is not resolved by mediation or non-binding arbitration, then: (a) the claim will be brought in the state or federal courts having jurisdiction where the UES office which provided the service is located; and (b) the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, expert witness fees, and other claim related expenses.

SECTION 10: TERMINATION **10.1** This agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or in the case of a force majeure event such as terrorism, act of war, public health or other emergency. Such termination shall not be effective if such substantial failure or force majeure has been remedied before expiration of the period specified in the written notice. In the event of termination, UES shall be paid for services performed to the termination notice date plus reasonable termination expenses. **10.2** In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by the Agreement, UES may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expense of termination or suspension shall include all direct costs of UES in completing such analyses, records, and reports.

SECTION 11: REVIEWS, INSPECTIONS, TESTING, AND OBSERVATIONS **11.1** Plan review, private provider inspections, and building inspections are performed for the purpose of observing compliance with applicable building codes. Threshold inspections are performed for the purpose of observing compliance with an approved threshold inspection plan. Construction materials testing ("CMT") is performed to document compliance of certain materials or components with applicable testing standards. UES's performance of plan reviews, private provider inspections, building inspections, threshold inspections, or CMT, or UES's presence on the site of Client's project while performing any of the foregoing activities, is not a representation or warranty by UES that Client's project is free of errors in either design or construction. **11.2** If UES is retained to provide construction monitoring or observation, UES will report to Client any observed work which, in UES's opinion, does not conform to the plans and specifications provided to UES. UES shall have no authority to reject or terminate the work of any agent or contractor of Client. No action, statements, or communications of UES, or UES's site representative, can be construed as modifying any agreement between Client and others. UES's performance of construction monitoring or observation is not a representation or warranty by UES that Client's project is free of errors in either design or construction. **11.3** Neither the activities of UES pursuant to this Agreement, nor the presence of UES or its employees, representatives, or subcontractors on the project site, shall be construed to impose upon UES any responsibility for means or methods of work performance, superintendence, sequencing of construction, or safety conditions at the project site. Client acknowledges that Client or its contractor is solely responsible for project jobsite safety. **11.4** Client is responsible for scheduling all inspections and CMT activities of UES. All testing and inspection services will be performed on a will-call basis. UES will not be responsible for tests and inspections that are not performed due to Client's failure to schedule UES's services on the project, or for any claims or damages arising from tests and inspections that are not scheduled or performed.

SECTION 12: ENVIRONMENTAL ASSESSMENTS Client acknowledges that an Environmental Site Assessment ("ESA") is conducted solely to permit UES to render a professional opinion about the likelihood or extent of regulated contaminants being present on, in, or beneath the site in question at the time services were conducted. No matter how thorough an ESA study may be, findings derived from the study are limited and UES cannot know or state for a fact that a site is unaffected by reportable quantities of regulated contaminants as a result of conducting the ESA study. Even if UES states that reportable quantities of regulated contaminants are not present, Client still bears the risk that such contaminants may be present or may migrate to the site after the ESA study is complete.

SECTION 13: SUBSURFACE EXPLORATIONS **13.1** Client acknowledges that subsurface conditions may vary from those observed at locations where borings, surveys, samples, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by UES will be based solely on information available to UES at the time of service. UES is responsible for those data, interpretations, and recommendations, but will not be responsible for other parties' interpretations or use of the information developed or provided by UES. **13.2** Subsurface explorations may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated. UES is unable to eliminate totally cross-contamination risk despite use of due care. Since subsurface explorations may be an essential element of UES's services indicated herein, Client shall, to the fullest extent permitted by law, waive any claim against UES, and indemnify, defend, and hold UES harmless from any claim or liability for injury or loss arising from cross-contamination allegedly caused by UES's subsurface explorations. In addition, Client agrees to compensate UES for any time spent or expenses incurred by UES in defense of any such claim with compensation to be based upon UES's prevailing fee schedule and expense reimbursement policy.

SECTION 14: SOLICITATION OF EMPLOYEES Client agrees not to hire UES's employees except through UES. In the event Client hires a UES employee within one year following any project through which Client had contact with said employee, Client shall pay UES an amount equal to one-half of the employee's annualized salary, as liquidated damages, without UES waiving other remedies it may have.

SECTION 15: ASSIGNS Neither Client nor UES may delegate, assign, sublet, or transfer its duties or interest in this Agreement without the written consent of the other party.

SECTION 16: GOVERNING LAW AND SURVIVAL **16.1** This Agreement shall be governed by and construed in accordance with the laws of the jurisdiction in which the UES office performing the services hereunder is located. **16.2** In any of the provisions of this Agreement are held illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired and will survive. Limitations of liability and indemnities will survive termination of this agreement for any cause.

SECTION 17: INTEGRATION CLAUSE **17.1** This Agreement represents and contains the entire and only agreement and understanding among the parties with respect to the subject matter of this Agreement, and supersedes any and all prior and contemporaneous oral and written agreements, understandings, representations, inducements, promises, warranties, and conditions among the parties. No agreement, understanding, representation, inducement, promise, warranty, or condition of any kind with respect to the subject matter of this Agreement shall be relied upon by the parties unless expressly incorporated herein. **17.2** This Agreement may not be amended or modified except by an agreement in writing signed by the party against whom the enforcement of any modification or amendment is sought.

SECTION 18: WAIVER OF JURY TRIAL Both Client and UES waive trial by jury in any action arising out of or related to this Agreement.

SECTION 19: INDIVIDUAL LIABILTY PURSUANT TO FLORIDA STAT. 558.0035, AN INDIVIDUAL EMPLOYEE OR AGENT OF UES MAY NOT BE HELD INDIVIDUALLY LIABLE FOR NEGLIGENCE.