ADDENDUM NO. 5

REQUEST FOR PROPOSAL (RFP) No. 2024-002
TOWN OF GOLDEN BEACH
CONSTRUCTION OF WELLNESS CENTER

Date of Addendum: February 20, 2025

SUPPLEMENTS/REVISIONS TO ORIGINAL RFP DOCUMENTS BELOW:

TO ALL PROSPECTIVE PROPOSERS:

Proposers for the above-referenced project shall take note of the following supplemental or additional information, changes, additions, deletions, clarifications, response to questions, and/or specifications to the RFP Documents, which shall become a part of the RFP and shall take precedence over anything shown or described otherwise.

Proposers are reminded to please acknowledge receipt of this Addendum in your RFP Proposal submittal, Acknowledgment (Form 4).

I. Requests for Information (RFIs)/Responses.

The attached RFIs and Responses are provided and included as part of this Addendum No. 5. Also attached is the 2021 Geotechnical Engineering Study Report prepared by TSF.

End of Document

REQUEST FOR INFORMATION (RFI)	
RFI # 001	SUBMITTED TO: (Town Clerk – Town of Golden Beach)
DATE: 2025.02.18	
NEEDED BY:	SUBMITTED BY:
PROJECT: WELLNESS CENTER PROJECT	
PROJECT #: RFP 2024-002 (Wellness Center)	

RFI DESCRIPTION

1. Per Addendum #4, please provide the Geotechnical Report for "the adjacent Civic Center."
2. According to the Insurance Requirements stated in Section 3.10 of the RFP, Professional Liability Insurance is required. From our experience, this insurance requirement is typically met through the Architect and Engineers of Record. Please confirm we do not need to carry a Professional Liability Insurance Policy for this project.

ATTACHMENTS:

SUBMITTED BY:

RESPONSE TO RFI

1. See attached Geotechnical Report together with Addendum #5.
2. The Architect maintains insurance per the AIA B101 Standard Owner-Architect Agreement. Recommend the G.C. follow the insurance requirements for the AIA A201 General Conditions of the Contract for Construction which only includes professional liability insurance as applicable. The Town of Golden Beach to confirm.

RESPONSE BY: Eric Dempsey Architect, LLC	DATE: 2025.02.18

REQUEST FOR INFORMATION (RFI)	
RFI # 002	SUBMITTED TO: Lissette Perez / Town Clerk
DATE: 02/12/2025	
NEEDED BY:	SUBMITTED BY: Cesar Zavala – Bosk Contracting, LLC
PROJECT: Golden Beach Wellness Center	
PROJECT #: RFP 2024-002 (Wellness Center)	

RFI DESCRIPTION
1.- Please provide the HVAC controls vendor.
ATTACHMENTS:

RESPONSE TO RFI
Carrier/ Automated Logic is the basis of design controls vendor/manufacturer. Approved equivalent manufacturers are Trane, Siemens, Honeywell.

RESPONSE BY: Eric Dempsey Architect, LLC & ECF Consultants	DATE: 2025.02.18

REQUEST FOR INFORMATION (RFI)	
RFI # 003	SUBMITTED TO: Lissette Perez / Town Clerk
DATE: 02/12/2025	
NEEDED BY:	SUBMITTED BY: Cesar Zavala – Bosk Contracting, LLC
PROJECT: Golden Beach Wellness Center	
PROJECT #: RFP 2024-002 (Wellness Center)	

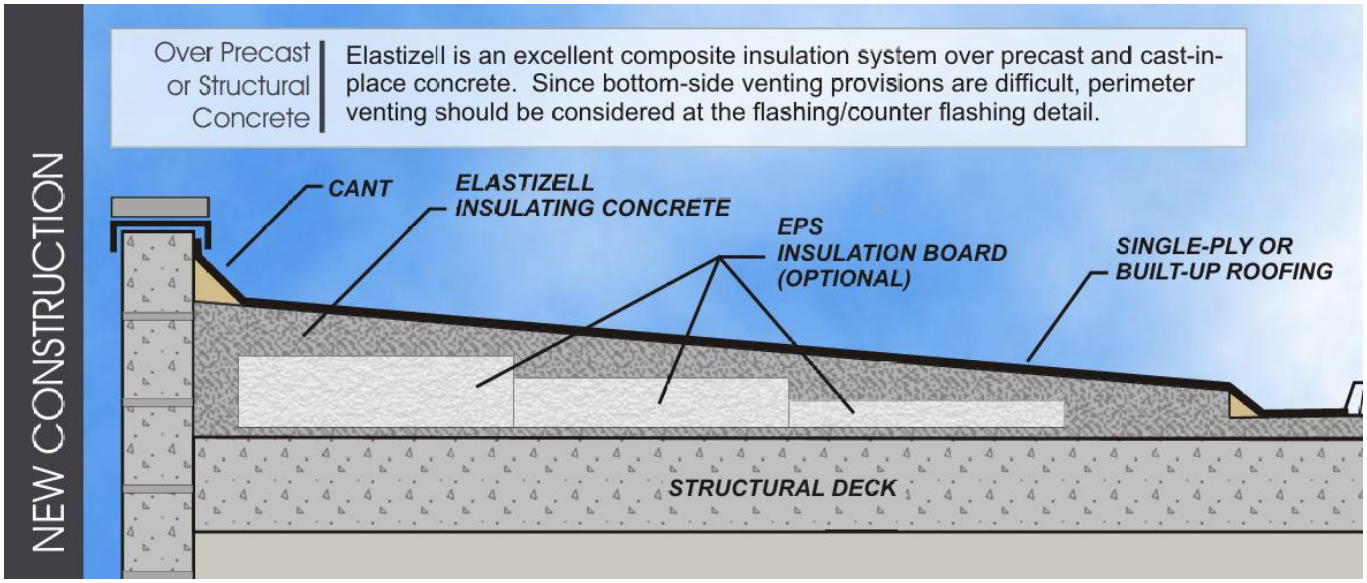
RFI DESCRIPTION

1.- Please provide roofing materials and specifications.

ATTACHMENTS:

RESPONSE TO RFI

Cellucrete Elastizell is the basis of design.
http://www.cellucrete.com/downloads/roofing.pdf



Other alternative suppliers include GAF or Celcore. Product submittals available on product supplier websites.

RESPONSE BY: Eric Dempsey Architect, LLC	DATE: 2025.02.18

REQUEST FOR INFORMATION (RFI)	
RFI # 004	SUBMITTED TO: Lissette Perez / Town Clerk
DATE: 02/12/2025	
NEEDED BY:	SUBMITTED BY: Cesar Zavala – Bosk Contracting, LLC
PROJECT: Golden Beach Wellness Center	
PROJECT #: RFP 2024-002 (Wellness Center)	

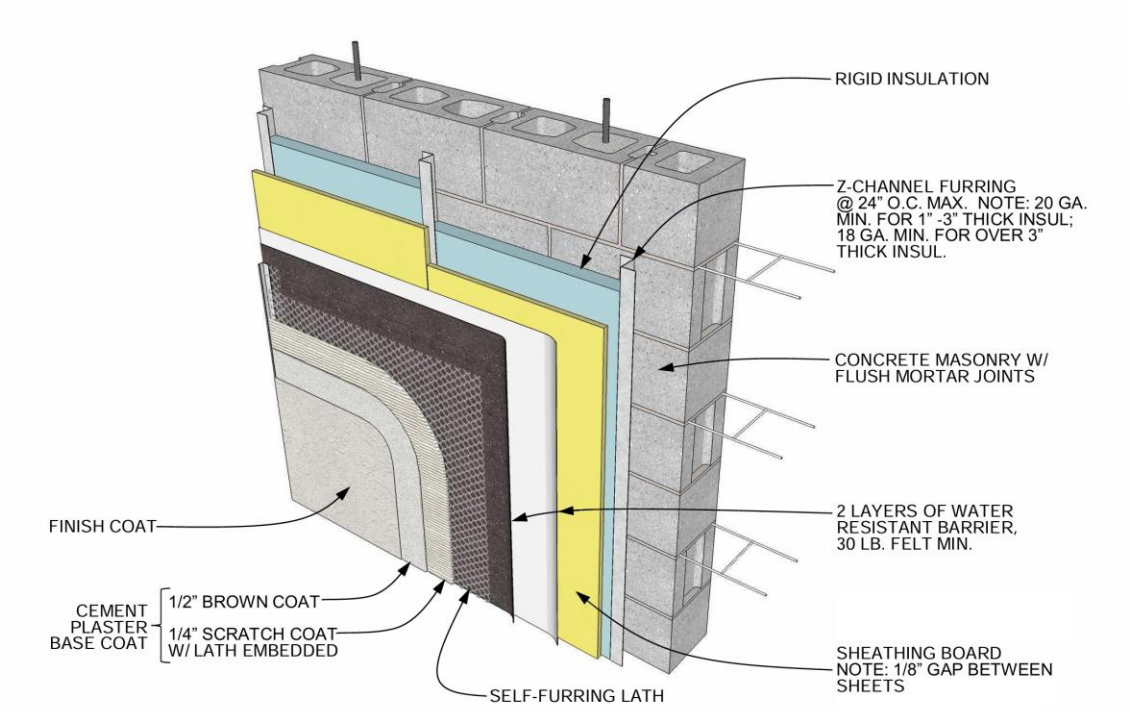
RFI DESCRIPTION

1.- There is stucco finish in the exterior part, it shows as 3 coats of it. What type of stucco is it?
2.- What level should be interior finish be?
3.- in the exterior part of the project there is a metal lathe shown or metal furring. Could you provide some details regarding it?

ATTACHMENTS:

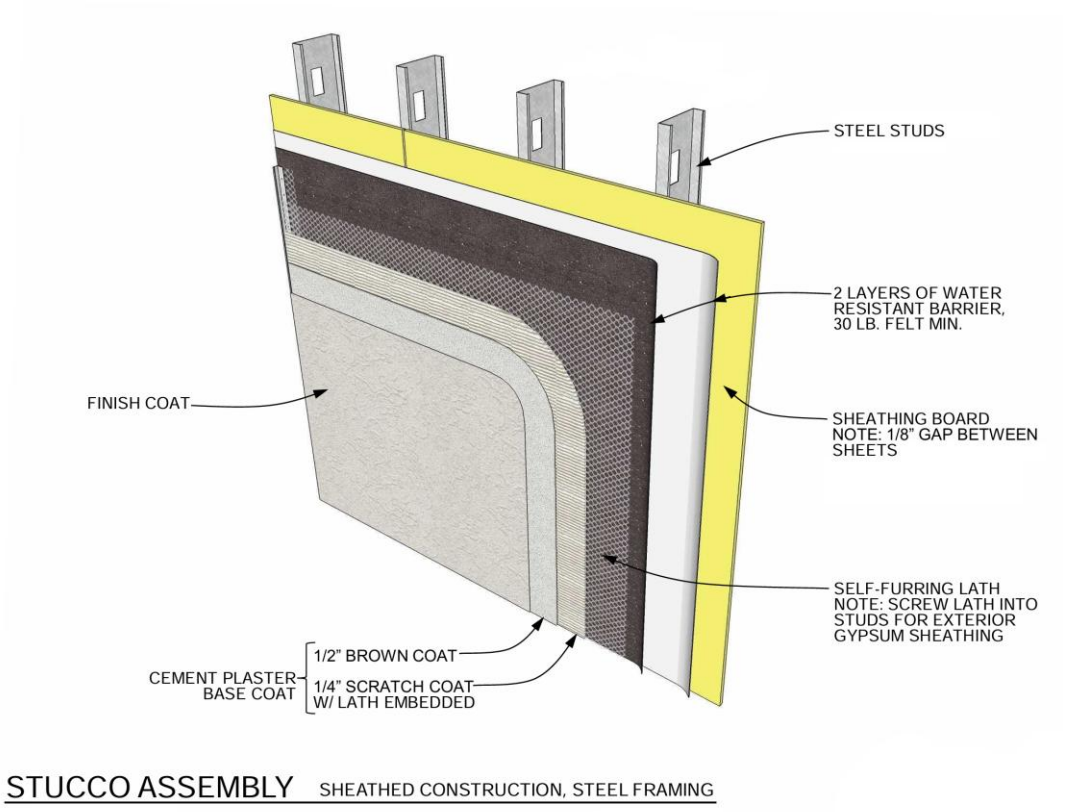
RESPONSE TO RFI

1. Level 1 (Smooth exterior finish) Follow IMI guidelines. www.imiweb.org
2. See above.
3. See below details.



STUCCO ASSEMBLY STUCCO OVER CMU W/ INSULATION

REQUEST FOR INFORMATION (RFI)



STUCCO ASSEMBLY SHEATHED CONSTRUCTION, STEEL FRAMING

RESPONSE BY: Eric Dempsey Architect, LLC	DATE: 2025.02.18

REQUEST FOR INFORMATION (RFI)	
RFI # 005	SUBMITTED TO: Lissette Perez / Town Clerk
DATE: 02/19/2025	
NEEDED BY:	SUBMITTED BY: David P. Gerrits
PROJECT: Golden Beach Wellness Center	
PROJECT #: RFP 2024-002 (Wellness Center)	

RFI DESCRIPTION

Good morning Lissett, I just want to confirm that a bid bond and a 5,000,000.00 letter of credit is required for the submission. Typically one or the other is required and a 5,000,000 letter of credit is very steep. Please advice

David P Gerrits
President
Gerrits Construction Inc

ATTACHMENTS:

RESPONSE TO RFI

The Administration wanted to clarify that for RFP 2024-002 Construction of Wellness Center, you are only required to submit a bid bond, not a letter of credit for $5,000,000.00.

RESPONSE BY: Lissette Perez / Town Clerk	DATE: 2025.02.19

Revised July 12, 2021
September 15, 2020

Mr. David Gerrits, President
Gerrits Construction, Inc.
P.O. Box 810813
Boca Raton, FL 33434
Email: david@gciconstructs.com

Re: Geotechnical Engineering Study Report
Proposed Community Center-Golden Beach
107-13 Golden Beach Drive
Town of Golden Beach, Florida
TSF File No. 7111-20-283

Dear David:

TSF is pleased to transmit our Geotechnical Engineering Study Report for the above referenced project. This report includes the results of field testing, geotechnical recommendations for foundation, as well as general site development.

We appreciate the opportunity to perform this Geotechnical Study and look forward to continued participation during the construction phase of this project. If you have any questions pertaining to this report, or if we may be of further service, please contact our office.

Respectfully submitted,

TSF

7/14/2021

Francois Thomas, P.E.
Principal Engineer
FL Registration No. 56381

7/14/21

Ramakumar Vedula, P.E.
Principal Engineer
FL Registration No. 54873

FT/ KV:

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Page No.

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1.0 EXECUTIVE SUMMARY

An exploration and evaluation of the subsurface conditions was completed for the proposed Community Center-Golden Beach located at 107-13 Golden Beach Drive in the Town of Golden Beach, Florida.

Based on visual classifications, the subsoils typically consisted of about 2 to 4 feet of uncontrolled fill (sand with limerock mix) followed by alternate layers of sand (SP), sand with shell (SP) and organic silt (OL) extending to approximately 15 to 20 feet below grades. The organic silt layers ranged in thickness from 2 to 8 feet and were found at various depths in the borings. The upper soils were underlain by sandy limestone extending to the termination depth of the borings.

Based on the SPT N-values recorded, the soils explored are predominantly in the medium density to very loose condition. The very loose density soils exist immediately below the upper fill zone and extent to depths of 15 and 20 feet of the ground surface. The limestone is soft to moderately hard. **Please note that above normal excavation efforts should be expected for excavations within the limestone. Also, boulder-like fill should be expected when excavating the limestone stratum.**

Groundwater depth in the boring generally was about 3 feet below existing grade.

It is our understanding that due to exiting soil conditions, piles are being considered to support the proposed structure. The proposed structure could be supported on Auger Cast-in-Place (ACIP) piles installed into the limestone. The slab should be structurally supported.

We expect a properly reinforced 16-inch-diameter ACIP pile installed 35 feet or a 14-inch-diameter ACIP pile installed 35 feet into the moderately hard limestone is expected to achieve a compressive capacity on the order of 125 tons, and 100 tons, respectively. Geotechnical details related to site development, foundation design and construction considerations are included in subsequent sections of this report.

The owner/designer should not rely solely on this Executive Summary and must read and evaluate the entire contents of this report prior to utilizing our engineering recommendations in preparation of design/construction documents.

2.0 PROJECT INFORMATION

2.1 Project Authorization

TSF has completed a geotechnical exploration for the proposed Community Center-Golden Beach located at 107-13 Golden Beach Drive in the Town of Golden Beach, Florida. Our services were authorized by Mr. David Gerrits, President of Gerrits Construction, Inc. by signing TSF Proposal No. 2008-493, dated August 13, 2020.

2.2 Project Description

Our understanding of the project is based on information provided by Mr. David Gerrits of Gerrits Construction, Inc. We understand that the proposed construction will include a 2-story structure. The 1st floor will be 14 feet high and will be used as on-grade parking.

We also understand that column and wall loads will be about 400 kips and 15.0 kips per linear foot, respectively. We understand the proposed building area is currently covered with existing play courts, vegetation and grass.

The geotechnical recommendations presented in this report are based on the available project information, and the subsurface materials described in this report. If any of the noted information is incorrect, please inform TSF in writing so that we may amend the recommendations presented in this report if appropriate and if desired by the client. TSF will not be responsible for the implementation of its recommendations when it is not notified of changes in the project.

2.3 Purpose and Scope of Services

The purpose of this study was to explore the subsurface conditions at the site to enable an evaluation of acceptable foundation systems for the proposed construction. This report briefly outlines the testing procedures, describes the site and subsurface conditions, and presents geotechnical recommendations for foundation design and general site development.

Our field work consisted of drilling six (6) Standard Penetration Test (SPT) borings to a depth of 50 below existing grade in the building area, three (3) percolation tests per SFWMD Standards, plus the preparation of this geotechnical report. This report briefly outlines the testing procedures, presents available project information, describes the site and subsurface conditions, and presents geotechnical recommendations regarding the following:

- Foundation soil preparation requirements.
- Foundation recommendations.
- Comments regarding factors that may impact construction and performance of the proposed construction.

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

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Site Location and Description

The project site is located within the existing John Tweddle Park located at 107-13 Golden Beach Drive in the Town Golden Beach, Florida. At the time of this exploration, the site was currently covered by play courts, vegetation and grass.

3.2 Subsurface Conditions

Review of the "Soil Survey of Miami-Dade County, Florida", prepared by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS), indicates the site is mapped as follows:

Map Unit 10 – Udorthents, limestone substratum-Urban land complex
Map Unit 15 – Urban land, 0 to 2 percent slopes

Subsurface conditions at the site were explored with engineering borings located as shown on the Boring Location Plan, Sheet 1. The study included the drilling of six (6) Standard Penetration Test (SPT) borings to a depth of 50 below existing grade in the building area. The borings were located in the field by TSF representatives.

The borings were drilled using a truck mounted B-53 drill rig, and mud rotary and casing procedures. Samples of the in-place materials were recovered at frequent intervals using a standard split spoon driven with a 140-pound hammer freely falling 30 inches (the SPT sampling after ASTM D 1586). The samples of the in-place soils were returned to our laboratory for classification by a geotechnical engineer. The samples were classified in general accordance with the Unified Soil Classification System (ASTM D 2488).

Based on visual classifications, the subsoils typically consisted of about 2 to 4 feet of uncontrolled fill (sand with limerock mix) followed by alternate layers of sand (SP), sand with shell (SP) and organic silt (OL) extending to approximately 15 to 20 feet below grades. The organic silt layers ranged in thickness from 2 to 8 feet and were found at various depths in the borings. The upper soils were underlain by sandy limestone extending to the termination depth of the borings. Based on the SPT N-values recorded, the soils explored are predominantly in the medium density to very loose condition. The very loose density soils exist immediately below the upper fill zone and extent to depths of 15 and 20 feet of the ground surface. The limestone is soft to moderately hard. The soil profiles are presented on Sheets 2 and 3 in the Appendix.

The above subsurface description is of a generalized nature intended to highlight the major subsurface stratification features and material characteristics. The boring logs should be reviewed for specific information at individual boring locations. These records include soil descriptions, stratifications, and penetration resistances. The stratifications shown on the boring logs represent the conditions only at the actual boring locations. Variations may occur and should be expected between boring locations. The stratifications represent the approximate boundary between subsurface materials, and the actual transition may be gradual. Water level information obtained during field operations is also shown on the boring logs. The samples that were not altered by laboratory testing will be retained for 30 days from the date of this report and then will be discarded.

3.3 Groundwater Information

Groundwater levels were measured in the borings when first encountered during drilling. The depth to the free water surface at the time of drilling generally was about 3 feet below the existing ground surface. The groundwater is expected to fluctuate with seasonal and tidal changes. We expect the groundwater to, typically, fluctuate within about 2 ft from where it was encountered during the drilling operation. At this time, information is not available to assess if groundwater will impact the proposed foundation construction.

In general, the seasonal high groundwater level is not intended to define a limit or ensure that future seasonal fluctuations in groundwater levels will not exceed the estimated levels. Post-development groundwater levels could exceed the normal seasonal high groundwater level estimate as a result of a series of rainfall events, changed conditions at the site that alter surface water drainage characteristics, or variations in the duration, intensity, or total volume of rainfall. We recommend that the Contractor determine the actual groundwater levels at the time of the construction to determine groundwater impact on his or her construction procedures.

3.4 Borehole Permeability (BHP) Test Results

Three (3) BHP tests were performed using the usual open-hole, constant head methodology per South Florida Water Management District Standard. The holes were approximately 5, 10, 15, and 20 feet deep below the existing ground surface. The holes were drilled with a solid stem auger so that soil samples could be retrieved for visual classification by an engineer. The borings were completed as open well with gravel pack (6-20 silica sand). The well screen slot widths were 0.020 inches. Water from the drill rig tank was then pumped into the open well, and the amount of water required maintaining a constant head was recorded. The results of our field permeability tests are attached in the Appendix.

4.0 EVALUATION AND RECOMMENDATIONS

4.1 Geotechnical Discussion

The geotechnical study completed for the proposed development confirms that the site is suitable for the planned construction when viewed from a soil mechanics and foundation engineering perspective. Based on subsurface conditions encountered, a deep foundation should be considered to support the proposed structure. The proposed structure could be supported on Auger Cast-in-Place (ACIP) piles installed into the limestone. The slab should be structurally supported.

We expect a properly reinforced 16-inch-diameter ACIP pile installed 35 feet or a 14-inch-diameter ACIP pile installed 35 feet into the moderately hard limestone is expected to achieve a compressive capacity on the order of 125 tons, and 100 tons, respectively.

4.2 Site Preparation

To prepare for construction, we recommend that existing topsoil, concrete, and asphalt surfaces be removed from the proposed construction areas. The building footprint should be **lightly compacted** with a self-propelled roller (Ingersoll-Rand SD-100D or equivalent) and until the subsoils achieve 90 percent of maximum dry density per ASTM D 1557 (Modified Proctor) to a depth of at least 12 inches below the existing grade. **Existing utilities should be identified and removed from the building footprint area or re-routed as required. Underground pipes that cannot be removed should be pressure grouted**. The compaction should encompass the entire footprint of the structure plus a 10-foot wide perimeter that extends beyond the maximum lines of the superstructure.

Structural fill used to raise the site to structure bottom levels should consist of clean sand and/or sand and gravel (ASTM D 2487), with a maximum of 12 percent passing the U.S. Standard No. 200 sieve. The structural fill should be placed in thin lifts (12-inch thick loose measure or less), near the optimum moisture content for compaction, and be compacted to at least 90 percent of maximum dry density (ASTM D 1557).

Above normal excavation efforts should be expected for excavations within limestone strata. In addition, boulder like fill should be expected when excavating the limerock fill/limestone stratum and should be budgeted accordingly.

Existing building structures and foundations near the proposed construction need to be protected against vibrations. Near existing buildings (within 50 feet), proofrolling/compaction should be performed in a static mode. The subsoils should be compacted to achieve 95 percent of maximum dry density (ASTM D 1557) to a depth of at least 12 inches below the stripped grade. Ground vibrations induced by the compaction operations should be closely monitored to assess if there is a potential impact to any existing adjacent structures.

In places where additional structural fill is required to achieve design grade, each lift of compacted engineered fill should be tested by a representative of the geotechnical engineer prior to placement of subsequent lifts. The edges of compacted fill should extend 5 feet beyond the edges of buildings prior to sloping.

4.3 Foundation Recommendations (Auger-cast Pile Foundation)

As mentioned above, the proposed structures could be supported on Auger-cast-in-place (ACIP) piles installed into the limestone. The tension of this pile is essentially developed in-side shear (skin friction) between the periphery of the grouted pile and the subsoil through which the pile penetrates. A properly reinforced 16-inch-diameter or 14-inch ACIP pile installed 35 feet into the moderately hard limestone is expected to achieve a compressive capacity on the order of 125 tons, and 100 tons, respectively. The ACIP pile design criteria presented below should be verified by load tests.

Augercast Pile Design Parameter	**16-inch-diameter Pile**	**14-inch-diameter Pile**
Compressive Capacity	125 tons	100 tons
Tension Capacity	60 tons	55 tons
Minimum Pile Spacing	4 ft on-center	4 ft on-center
Grout Compressive Strength	4000 lbs/in^2	4000 lbs/in^2
Pile Embedment	Minimum 10 ft into the limestone	Minimum 10 ft into the limestone
Estimated Typical Pile Length	35 ft below existing grade(1)	35 ft below existing grade(1)
Estimated Average Settlement	About 1/2 inch	About 1/2 inch
Steel Reinforcement	five #6 bars full length with #3 ties(2)	five #5 bars full length with #3 ties(2)

Note: (1) Some pile may need to be drilled deeper if relatively weaker conditions are encountered.
(2) The steel reinforcing presented above is the recommended minimum reinforcing only. Adequate pile reinforcing must be designed by the Structural Engineer to resist all axial, bending, tensile, and shear stresses.

Organic soils encountered in the upper 15 to 20 feet are not expected to resist lateral loads. We recommend that piles be battered for lateral resistance. Piles could be battered at 1H:6V to resist lateral loads.

The pile capacity recommended previously is controlled by stresses developed in the subsurface materials only. Allowable stresses for the selected pile section may impose more stringent restrictions on pile capacity and should be checked by the structural engineer.

Pile foundations designed and constructed in accordance with the recommendations of this report are estimated to sustain a maximum vertical total settlement of about ½ inch for a single pile. Owing to the granular nature of the subsurface materials that will provide support of the piling, we expect the foundation settlements to occur virtually as rapidly as the structural loads are applied. **Above normal drilling efforts should be expected for ACIP pile installation within limestone strata.**

4.4 Ground Floor Slab Recommendations

We understand that the ground floor will be used as on-grade parking. We recommend the procedures described in “Site Preparation” section of this report be used to prepare the floor slab subgrade. The

ground floor slab should be designed as a structural slab and designed to resist hydrostatic uplift forces, if applicable, under a flood/100-year storm event. The slabs should be adequately waterproofed and reinforced to carry the loads that are to be applied.

4.5 Utilities

The majority of the soft organic soil layers extend to about 15 to 20 feet below grades. The drainage and sewer lines will be impacted (settle) if located above soft organic materials, particularly if grades are raised. In our opinion, the deep utilities will need to be supported on piles.

As an alternative to supporting the utilities on piles, the designer could consider removal of unsuitable soils (the trench bottom excavated to suitable soils), and the resulting excavation backfilled with clean sands/gravel. This alternative will depend on the location, size and depth of pipes. This alternative will require the use of flexible joints to help accommodate minor settlement that can occur due to the presence of organic soils.

All utilities should be installed per the requirements of the Civil Engineering drawings and specifications. When backfilling over utility lines, the fill should be placed in lifts and compacted to at least 95% of the material's maximum dry density as determined by the Modified Proctor Compaction Test (ASTM D 1557). The loose lift thickness is expected to vary between 6 inches and 12 inches depending on the compaction equipment used by the contractor. **Above normal excavation efforts should be expected for excavations within limestone strata. In addition, boulder like fill should be expected when excavating the limerock fill/limestone stratum and should be budgeted accordingly.**

4.6 Construction Excavation and Dewatering

Above normal dewatering efforts should be expected to dewater the deep excavations if any anticipated for the construction. Well points or sock drains will be required along with cut-off walls to satisfactorily dewater deep excavations. Alternatively, tremie seal cofferdam could be a viable option for dewatering the deep excavations.

If excavations extend below about 3 feet from ground surface, dewatering should be expected. Open sump pumps will be required to satisfactorily dewater shallow excavations. Well points or sock drains will be required to satisfactorily dewater slightly deeper excavations. Prior to the onset of excavation and dewatering, pending environmental issues, if any, should be cleared by the governing agency. The dewatering requirements should be revisited after the design is finalized and the footing bottom elevations are established.

We recommend that excavations be cut on slopes of 2H: 1V or flatter. Where restrictions will not permit slopes to be laid back as recommended above, the excavation should be shored in accordance with OSHA requirements. During construction, excavated materials should not be stockpiled at the top of the slope within a horizontal distance equal to the excavation depth.

5.0 REPORT LIMITATIONS

The recommendations submitted are based on the available subsurface information obtained by TSF for the proposed project. If there are any revisions to the plans for this project or if deviations from the subsurface conditions noted in this report are encountered during construction, TSF should be notified immediately to determine if changes in the foundation recommendations are required. If TSF is not retained to perform these functions, TSF will not be responsible for the impact of those conditions of the project.

The geotechnical engineer warrants that the findings, recommendations, specifications, or professional advice contained herein have been made in accordance with generally accepted professional geotechnical engineering practices in the local area. No other warranties are implied or expressed.

After the plans and specifications are more complete, the geotechnical engineer should be retained and provided the opportunity to review the final design plans and specifications to check that our engineering recommendations have been properly incorporated into the design documents.

This report has been prepared for the exclusive use of Gerrits Construction, Inc. for the specific application to the proposed Community Center-Golden Beach in the Town of Golden Beach, Florida.

APPENDIX

USDA Soil Survey Information
Boring Location Plan – Sheet 1
Soil Profiles – Sheets 2 and 3
Summary of Borehole Permeability Test Results
Summary of Laboratory Test Results

Soil Map—Miami-Dade County Area, Florida

Map Scale: 1:1,490 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N 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 1:24,000.

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: Miami-Dade County Area, Florida
Survey Area Data: Version 12, Jun 9, 2020

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

Date(s) aerial images were photographed: Jan 2, 2019—Mar 26, 2019

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
10	Udorthents, limestone substratum-Urban land complex	3.8	37.6%
15	Urban land, 0 to 2 percent slopes	6.2	62.4%
Totals for Area of Interest		**10.0**	**100.0%**

NAL. VERIFY
ALE ABOVE.

TEST
EPTH

ION
NEER.

S TO
TO

SUGGESTED BORING
LOCATIONS (6 TOTAL)(TYP.)

BHP-1

BHP-2

BHP-3

B-6

B-5

B-4

B-3

B-2

B-1

PERCOLATION TEST
15' DEPTH

NTS

N

BORINGS LOCATION PLAN

Approximate Location of SPT Borings

Approximate Location of BHP Test

DRAWN BY: NG CHECKED BY: KV	APPROVED BY: FT DATE: 09-14-2020	ENGINEER OF RECORD: FRANCOIS THOMAS, P.E. FLORIDA LICENSE NO.: 56381	TIERRA SOUTH FLORIDA 2765 VISTA PARKWAY, S-10 WEST PALM BEACH, FL 33411	SCALE: NTS	PROJECT NUMBER: 7111-20-283	GEOTECHNICAL ENGINEERING SERVICES PROPOSED COMMUNITY CENTER MIAMI-DADE COUNTY, FLORIDA	Sheet: 1

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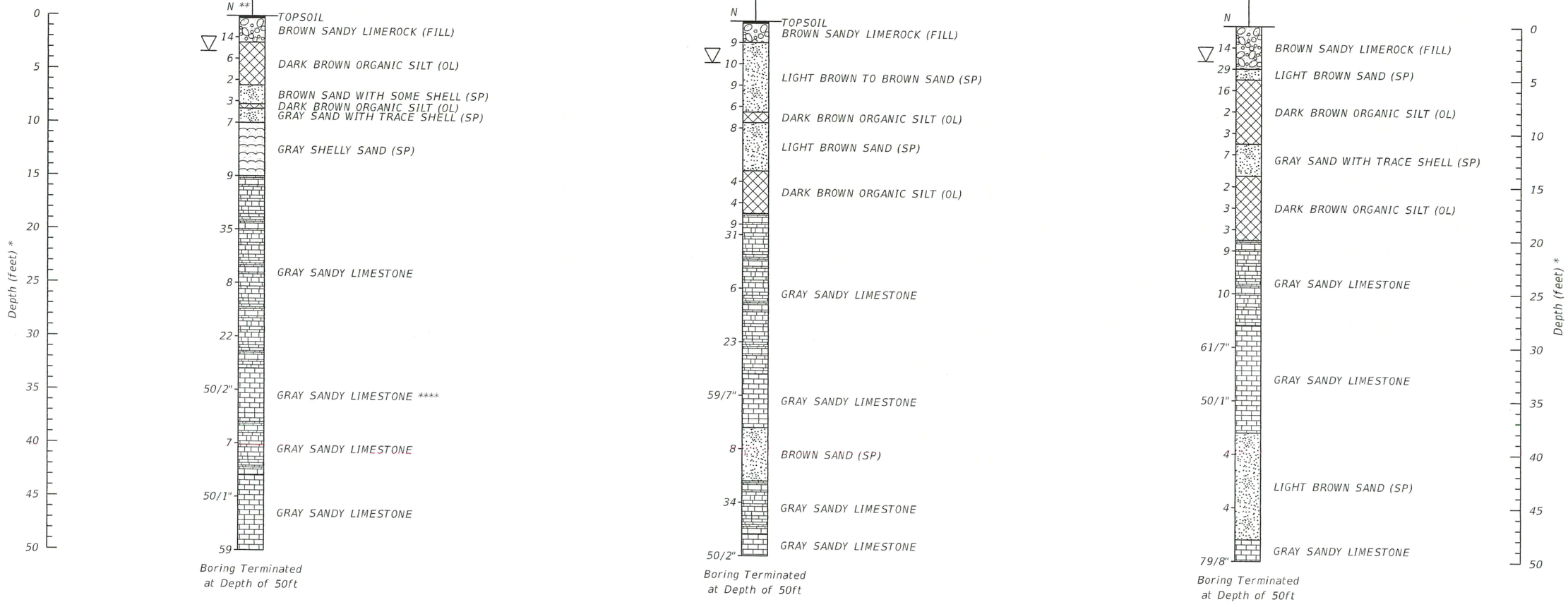


LEGEND

- Topsoil
- Sandy Gravel
- Muck
- Sand
- Shelly Sand
- Limestone Soft
- Limestone Hard
- ▽ ENCOUNTERED GROUNDWATER TABLE
- N NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12" PENETRATION AND THEY WERE OBTAINED USING AN AUTOMATIC HAMMER. (UNLESS OTHERWISE NOTED.)

NOTES

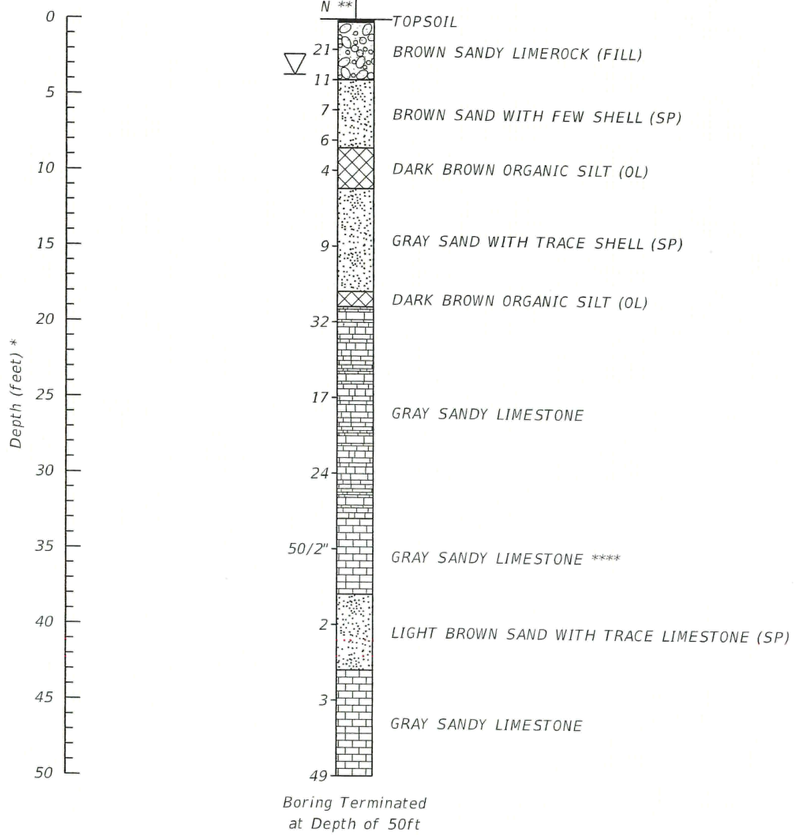
* DENOTES DEPTH IN FEET FROM EXISTING GROUND SURFACE

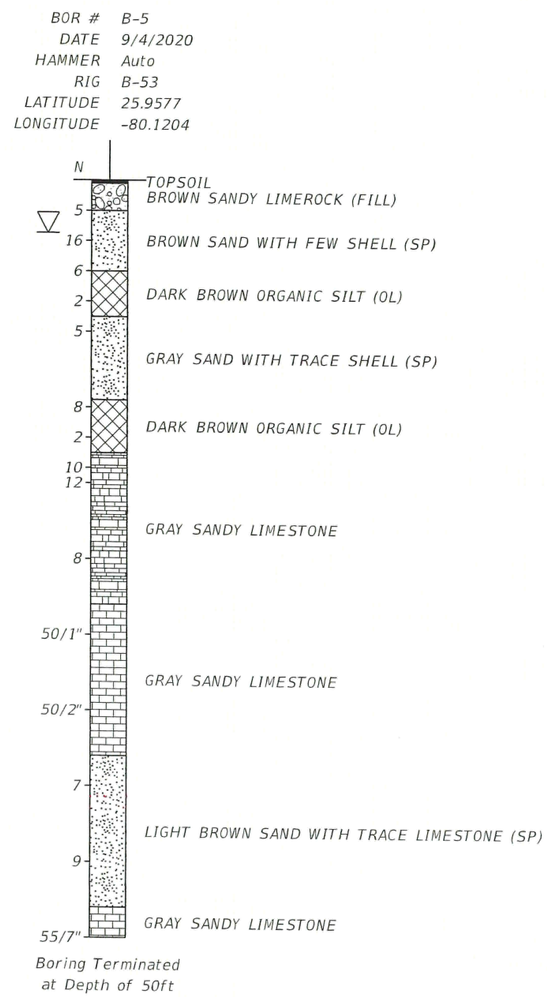
** SPT N-VALUES SHOWN ABOVE WERE OBTAINED USING AUTOMATIC HAMMERS. GENERALLY DESIGN CORRELATIONS AND PROGRAMS USE SAFETY HAMMER N-VALUES. HENCE, THE ABOVE N-VALUES NEED TO BE MULTIPLIED BY 1.24 TO OBTAIN EQUIVALENT SAFETY HAMMER N-VALUES FOR DESIGN PURPOSE.

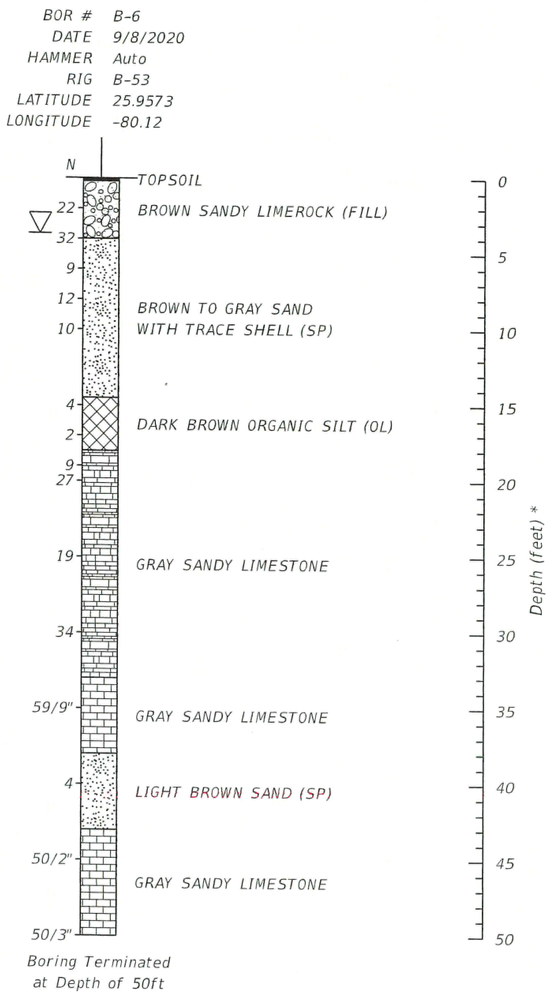
*** LATITUDE AND LONGITUDE ARE APPROXIMATE, BASED ON HANDHELD GPSMap GARMIN 78s. ACTUAL BORING LOCATIONS COULD VARY

**** THE LIMESTONE STRATA ENCOUNTERED WITHIN THE PROJECT SITE CORRESPOND TO ROCK FORMATION THAT TYPICALLY OFFER HIGH RESISTANCE TO EXCAVATION AND DRILLING. SPECIAL EQUIPMENT AND BREAKING TOOLS ARE TIPICALLY REQUIRED TO EXCAVATE AND DRILL WITHIN THESE LIMESTONE LAYERS. THESE LIMESTONE LAYERS ARE ALSO DIFFICULT TO DEWATER DUE TO ITS HIGH POROSITY AND PERMEABILITY.

DRAWN BY: NG CHECKED BY: KV	APPROVED BY: FT DATE: 09-14-2020	ENGINEER OF RECORD: FRANCOIS THOMAS, P.E. FLORIDA LICENSE NO.: 56381	TIERRA SOUTH FLORIDA 2765 VISTA PARKWAY, S-10 WEST PALM BEACH, FL 33411	SCALE: NTS	PROJECT NUMBER: 7111-20-283	GEOTECHNICAL ENGINEERING SERVICES PROPOSED COMMUNITY CENTER MIAMI-DADE COUNTY, FLORIDA	Sheet: 2







LEGEND

- Topsoil
- Sandy Gravel
- Muck
- Sand
- Shelly Sand
- Limestone Soft
- Limestone Hard
- ∇ ENCOUNTERED GROUNDWATER TABLE
- N NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12" PENETRATION AND THEY WERE OBTAINED USING AN AUTOMATIC HAMMER. (UNLESS OTHERWISE NOTED.)

NOTES

* DENOTES DEPTH IN FEET FROM EXISTING GROUND SURFACE

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Summary of Borehole Permeability Test Results

Proposed Community Center
Golden Beach, Florida
TSF Project No. 7111-20-283

Test Location	Date Performed	Diameter		Depth of Hole	Depth to Groundwater Level Below Ground Surface (Feet)		Hydraulic Head, H_2	Saturated Hole Depth, Ds	Average Flow Rate, Q	Hydraulic Conductivity (K)
		Hole (Inches)	Casing (Inches)	(Feet)	Prior to Test	During Test	(Feet)	(Feet)	(gpm)	($ft^3/sec/ft^2$-ft Head)
BHP-1	9/8/2020	6	4	15.0	2.8	0.0	2.8	12.2	3.0	1.65E-04
BHP-2	9/8/2020	6	4	15.0	3.3	0.0	3.3	11.7	1.0	4.76E-05
BHP-3	9/8/2020	6	4	5.0	3.7	0.0	3.7	1.3	2.5	4.46E-04
BHP-3	9/8/2020	6	4	10.0	3.7	0.0	3.7	6.3	2.0	1.41E-04
BHP-3	9/8/2020	6	4	20.0	3.7	0.0	3.7	16.3	1.5	4.77E-05

Note:

(1) The above hydraulic conductivity values represent an ultimate value. The designer should decide on the required factor of safety

(2) The hydraulic conductivity values were calculated based on the South Florida Water Management Districts's USUAL OPEN HOLE CONSTANT HEAD percolation test procedure.

(3) Casing diameter was used for the calculation of hydraulic conductivity values.

Summary of Laboratory Test Results
Proposed Community Center
Miami-Dade County, Florida

TSF Project No. 7111-20-283

Boring Number	Sample Depth (ft)	USCS Symbol	Sieve Analysis, Percentage Passing								Atterberg Limits			Organic Content (%)	Natural Moisture Content (%)
			3/4"	3/8"	#4	#10	#40	#60	#100	#200	Liquid Limit	Plastic Limit	Plasticity Index		
B-1	2.5-4.0	SM;OL	-	-	-	-	-	-	-	-				14.3	126.1
B-3	17.0-19.0	SM;OL	-	-	-	-	-	-	-	-				29.5	276.6
B-5	15.0-17.0	SM;OL	100	100	93	59	34	27	22	19				-	326.4
B-5	17.0-19.0	SM;OL	-	-	-	-	-	-	-	-				31.2	144.6
B-6	14.5-15.0	SM;OL	-	-	-	-	-	-	-	-				29.8	277.1
P-2	8.0-13.5	SM;OL	-	-	-	-	-	-	-	-				78.3	534.8