

PROJECT NAME: **Proposed Townhomes**
PROJECT LOCATION **SW 9th Avenue**
Pompano Beach, Florida
PROJECT NUMBER: **2023-36**

DATE: **09/10/2023**
CALCULATED BY: **J.C.M.**
REV #1
REV. #2:
REV. #3:

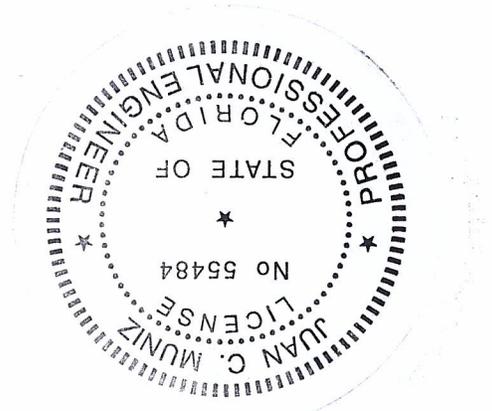
SHEET 1 OF 3

ON-SITE DRAINAGE CALCULATIONS

Digitally
signed by
Juan Muniz
Date:
2023.09.14
22:02:51
-04'00'

This item has been digitally
signed and sealed by
Juan C. Muniz, PE
on the date adjacent to the seal.

Printed copies of this document
are not considered signed and
sealed and the signature must
be verified on any electronic
copies.



09-15-2023

Juan C. Muniz, P.E. #55484

PREPARED BY:

JCM CONSULTANTS, INC.
CIVIL ENGINEERS • LAND PLANNERS



8401 S.W. 184th STREET
PALMETTO BAY, FL. 33157
PH: (305) 772-0088
FAX: (305) 278-1118

DRC

PZ23-12000050
03/20/2024

PROJECT NAME: **Proposed Townhomes**
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SHEET 2 OF 3

SITE DATA AND CRITERIA:

SOUTH FLORIDA WATER MANAGEMENT METHOD
INTENSITY: (5 year – 1 Hour) = 6.7 In./Hr.

RUNOFF COEFFICIENTS: PERVIOUS AREAS = 0.40
IMPERVIOUS AREAS = 0.90

Rim Elevation = 5.00

Water Table Elevation = 1.5

HYDRAULIC “K” FACTOR:

$K_1 = 8.6066 \times 10^{-5}$

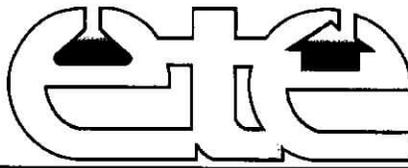
LAND USE TABLE:

Total drainage area = 0.26 Acres
Total Impervious Area = 0.12 Acres
Total Pervious Area = 0.14 Acres

WEIGHTED C: 0.70

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03/20/2024



EASTCOAST TESTING & ENGINEERING, INC.

1900 NW 33rd Street - Bay #4
Pompano Beach, Florida 33064
Broward (954) 972.7645 (SOIL)

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SEPTEMBER 11, 2020

**REPORT OF GEOTECHNICAL EXPLORATION &
ENGINEERING ANALYSIS - RECOMMENDATION**

FOR

PIQUE INTERNATIONAL GROUP

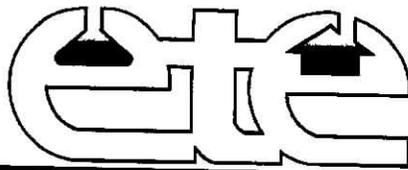
PROPOSED TWO STORY BUILDING

**ID #4942-02-04-0150
POMPANO BEACH, FLORIDA
BROWARD COUNTY, FLORIDA**

THRESHOLD/SPECIAL INSPECTIONS, BORINGS, DENSITY, CONCRETE, ASPHALT, ETC, A "GEOTECHNICAL TESTING LAB"

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September 11, 2020

Report of Engineering Evaluation for: Pique International Group

Project : Proposed Two Story Building, (5 Unit Town Home & Drainage) - Vacant

Location: ID #4942-02-04-150
Pompano Beach, Florida
Broward County, Florida

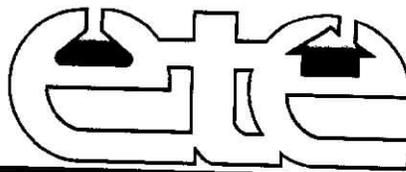
To Whom it May Concern;

As per your request EastCoast Testing & Engineering, Inc. performed the standard penetration test borings at the above referenced location. The purpose of this investigation was to provide information concerning the site and subsurface conditions in order to provide site preparation and foundation design recommendations for support of the proposed construction. This report presents our findings and foundation recommendations.

We understand that plans and information with regards for this project consist of a new two story five unit Town-Home consisting of reinforced block masonry walls, conventional concrete and wood truss. Elevations for the test borings were not provided at the time of our subsurface exploration. Final floor elevation for the existing residence were not given. We will assume the site will require approximately +/-1.0-2.0 feet of engineered fill to reach construction grade. Major intersections for this project location are East Dixie Highway and SW 9th Avenue in the City of Pompano Beach, Florida, Broward County, Florida.

STANDARD PENETRATION TEST BORINGS

The test boring locations were determined by our drill supervisor and are indicated on the test boring report logs and site location map. A review of our test borings indicates the upper level of subsoils are comprised of fine-grained sands with some/little limestone, root, silt and debris, (topsoil) in a loose compaction condition to a depth of approximately +/-1.0-2.0 feet below grade. Below this surface layer our borings disclosed multifarious stratum of fine-grained sands, and organic stained sands with little silt modifiers, (non-plastic) which varied from a very loose to medium dense state of consolidation which continued to +/-15.0 feet below the existing surface grade elevation. These sand substratum terminated our subsurface exploration at fifteen feet, maximum penetration.



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Page #2. Lab #723904
Pompano Beach, Florida

The results of our subsurface study confirm that the site is favorable for shallow foundations using geotechnical considerations. Existing subsurface conditions can support construction designed for support for a maximum net allowable soil bearing capacity of 2000 pounds per square foot after de-grubbing, (undercutting) in-situ densification, backfilling and compaction. The proposed structure can be supported on shallow foundations. Detailed recommendations follow in the remaining sections of the report.

In order to prepare the site to support new construction designed for a net allowable soil bearing capacity of 2000 psf, we recommend the following procedures be implemented.

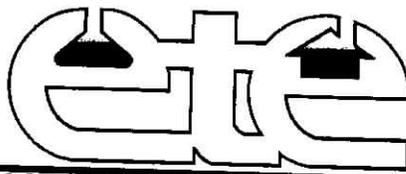
- 1. The proposed building pad area and all new foundation elements, (footers) shall be cleared, and undercut to a minimum depth of +/-2.0-3.0 feet plus a minimum horizontal distance of five feet outside the perimeter. Care should be taken so as to insure the complete removal of any deleterious materials encountered including any topsoil, construction debris, asphaltic concrete, concrete, organics, grass, rubble, vegetation, stumps, roots, foreign material, debris, silts, clays or muck.*
- 2. Once this has been inspected and approved by the engineer, compact the bottom of the excavated area with ten, (perpendicular) overlapping passes in each of two directions with a large single smooth drum static/vibratory roller, (10-12 metric tons or larger) until the bottom 24" of the excavation have been compacted in excess of 98% of the materials modified maximum dry density as per ASTM D-1557. Field density-moisture tests and/or cone penetrometer tests shall be performed to verify the resultant compaction effort prior to the next phase of construction. Densification shall continue until no further settlement can be visually discerned at the subgrade surface. Each pass of the roller should overlap the preceding pass by one half of the width of the vibratory drum. Maximum speed of the roller should be two feet per second. For optimum compaction efficiency we recommend that the soils be within +/-2% of optimum moisture at the time of densification.*
- 3. Once this has been achieved and verified by a geotechnical representative from this office or by the project engineer the proposed building pad area may be brought to construction grade utilizing clean granular fills. The construction fill may be placed in lifts not to exceed twelve inches in compacted thickness. Each lift should be compacted to a minimum density of 98% of the materials modified proctor density as per ASTM D-1557. Clean granular fills shall be construed to mean granular material containing no more than 5% by weight organic and clayey matter and no man-made debris. It shall be free of vegetation, foreign material, roots, fiber, branches, leaves, and should not contain any rock and gravel larger than 3 inches or 50% of th compacted layer thickness.*

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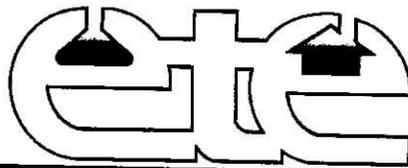
Page #3. Lab #723904
Pompano Beach, Florida

4. Suitable materials for use as backfill consist of the following: GW, (well-graded gravel, and well-graded gravel with sand) GP, (poorly graded gravel and poorly graded gravel with sand) SW, (well-graded sand) or SP, (poorly graded sand). Suitable materials excavated and stockpiled at the site may be reused for backfill within the foundation after tested for approval by the engineer. Following and during the clearing and excavation stage the area shall be witnessed by an inspector from this laboratory or by the engineer for approval prior to in-situ densification. The excavated surface and each 12" compacted lift of on-site or imported fill material within the footing and slab areas shall be tested to within 98% of the Soils Modified Maximum Dry Density as per ASTM D-1557 and verified with field density-moisture relationships. No vibration shall take place in the vicinity of any existing structure as this may cause localized damage to nearby structures.

Footing embedment shall be of sufficient depth below the adjacent grade so as to comply with all local and area building codes. Minimum footing widths of 18" and 36" are recommended for continuous wall footings and individual column pads respectively, although they may not develop the full allowable bearing pressures. To assure a safety factor against bearing capacity failure, the foundation bottoms should be placed a minimum of 18 inches below the lowest adjacent grade. Foundation elements may be designed as isolated footings or as a monolithic type of foundation/slab system, as long as ample consideration is given to the increased shear stresses inherent in monolithic systems at the slab to footing interfaces. Surface compaction specifications shall be verified utilizing in place density tests at the frequency of one test per 100 lf of wall footing, and one test per column pad. Slab areas and undisturbed pad lifts may be tested at the frequency of two tests per 2500 sf., but in no case less than three per lift. Reinforcement for footings should be proportioned to meet the requirements of ACI 318, latest edition, and other applicable codes.

Slab-on-grade construction may be employed for the ground floor of the structure. Ground floor slabs can bear directly on the densified structural fill after the backfill and compaction operations have been completed. Proper joints shall be provided at the junctions of the slabs with the building walls and columns so that a small amount of independent movement can occur without causing damage. A modulus of subgrade value of 120 pounds per cubic inch (pci) may be used for ground floor slab design.

Foundations designed and constructed in accordance with the recommendations of this report are expected to sustain a maximum total settlement of 1 inch and differential settlements between adjacent footings of not more than 1/2 inch or approximately one-half of the total settlement. Distortions that occur along the wall footings due to differential settlement should not be more than one in 500.



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An impervious membrane should be installed between the underside of the floor slab and the soil substrate to serve as a barrier to moisture rises from the subgrade. Ordinarily, a 10-mil thick film of polyethylene is sufficient for this purpose. However, some floor coverings may have a comparatively sensitive tolerance to moisture flux that a thin polyethylene film cannot suppress. Under these conditions, other types of moisture membranes may need to be considered.

The natural ground water table was found at +/-4'8"-4'10" at the time of our subsurface exploration. Fluctuation, however in the groundwater levels should be expected due to rainfall variations, seasonal climatic changes, construction activity and other on-site specific factors.

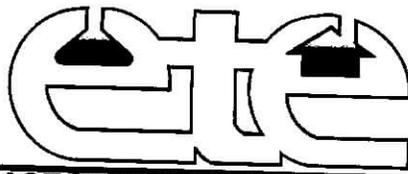
CONSTRUCTION PLAN & SPECIFICATIONS REVIEW

It is recommended that this office be provided the opportunity to make a general review of the foundation and earthwork plans and specifications prepared from the recommendations presented in this report.

Our report has been written in a guideline recommendation format and is not appropriate for use as a specification-type format. It is recommended that this report not be made a part of the contract documents, however, it should be made available to prospective contractors for information purposes.

CONSTRUCTION RELATED SERVICES

We recommend the owner retain Eastcoast Testing & Engineering, Inc. to perform construction materials testing and observations on this site. Field tests and observations include foundation and pavement subgrades by performing quality assurance testing on the placement of compacted structural fills, and pavement courses. We can also provide concrete testing, pavement section testing, structural steel testing, general construction observation services, and Special Inspection services.



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Page #5. Lab #723904
Pompano Beach, Florida

LIMITATIONS

Our geotechnical exploration study has been performed, our findings obtained, and our recommendations prepared in accordance with generally accepted geotechnical engineering conclusions and practices. EastCoast Testing & Engineering, Inc., (ETE) is not responsible for any independent conclusions, opinions or recommendations made by others based on the data contained in this report.

This report does not reflect any variations which may occur away from the soil borings. The discovery of any subsurface conditions which deviates from the data obtained during this geotechnical investigation should be reported to us for further analysis and evaluation.

The Standard Penetration Test ASTM D-1586

The Standard Penetration Test is the most commonly employed tool utilized to identify in-situ subsurface soil conditions. The "N" values obtained from the boring provide an accurate estimation of internal soil characteristics such as relative density, internal shear strength, angle of internal friction, and the approximate range of the soil's unit weight. These "N" values represent the resistance of a 2-inch diameter split spoon sampler driven by a 140-pound hammer free falling 30 inches. Each drive of the 24 inches long split spoon is divided into four six-inch increments. The second and third increments are totaled to produce the "N" value found on your report.

The Standard Penetration Test also allows for the recovery of soil samples which are returned to our laboratory and visually examined and classified. The SPT samples are available for laboratory testing if requested. Samples are generally held for 30-90 days unless otherwise directed by the client.

An approximate ground water table is obtained from the borehole upon completion of the drilling procedures. This water table is useful in the general evaluation of particular soil conditions, and may give the contractor some insight into what can be anticipated during construction. It should be noted that the ground water level will fluctuate seasonally. This level may also be affected by local draw-downs, soil conditions, and the watershed's contribution to the underlying aquifer. It should not be construed to be a measure of the soil's permeability, or of the de-watering characteristics of the site.



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Page #6. Lab #723904
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Although the standard penetration test is one of the most reliable methods used to identify soil characteristics and types, it may only represent a small fraction of the materials actually deposited at the site. As is common industry practice, we have assumed a uniformity of a profile between borings to provide a subsoil profile for engineering purposes. This profile is strictly based on the data obtained from the borings, and if unusual or varying conditions are found we should be notified immediately.

A test is expressly representative of the immediate location tested, and the reliability of the conclusions is a direct result of the quantity of tests performed. Any variation in location may reveal similarly some changes in the depth, thickness, texture, and conditions of the stratum encountered.

Unless specifically stated otherwise, and specifically directed and prearranged by the client, all elevations are taken with respect to the existing ground surface at the time of testing. Boring locations are usually obtained in the field by pacing off distances and approximating right angles to landmarks and property corners. More precise locations may be obtained from on site surveys and placement of the boring locations by a Land Surveyor, Registered in the State of Florida. These services are provided at additional costs and are beyond the scope of this report.

The data presented herein was obtained for the specific purposes stated in this report, and should not be misconstrued to apply to any other circumstance, project, or ancillary use unless so specified and addressed by the engineer of record.

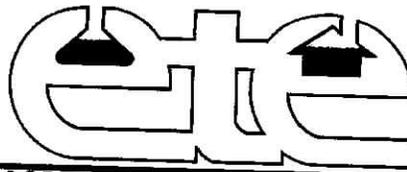
Thank you for using EASTCOAST TESTING AND ENGINEERING, INC., for your geotechnical needs. Should you need further assistance with this or any other project, please contact this office.

Respectfully Submitted;
EASTCOAST TESTING & ENGINEERING, INC.
Certification of Authorization #3425

 9/13/2020
Mohammed A. Hai, P.E.
Senior Geotechnical Engineer
Florida Registration No. 59345


Craig Smith, President

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APPENDIX

TEST BORING LOGS
BORING LOCATION MAP
SITE LOCATION MAP

THRESHOLD/SPECIAL INSPECTIONS, BORINGS, DENSITY, CONCRETE, ASPHALT, ETC, A "GEOTECHNICAL TESTING LAB"

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TEST BORING REPORT

LABORATORY NUMBER: **723904-A** BORING NUMBER: **1**

CLIENT: **PIQUE INTERNATIONAL GROUP** CUSTOMER # **-**

PROJECT: **PROPOSED 2-STORY 5-UNIT TOWNHOME - VACANT** CREW CHIEF: **H.E.**

PROJECT ADDRESS: **ID #4942-02-04-0150 - POMPANO BEACH, FLORIDA** DRILLER: **K.W.**

BORING LOCATION: **- 30' NORTH & 25' WEST OF THE SE PROPERTY CORNER** DRILL RIG # **F350**

GROUND WATER: **+/-4'10"** DATE: **08/31/20** ELEV: **N/F** CASING: **3"**

SURVEY NOT GIVEN UNLESS NOTED: (B.E.G.) BELOW EXISTING GRADE LOCATIONS: ~ APPROX UNLESS STAKED

DEPTH FEET	SAMPLE NUMBER	BORING NUMBER: 1	PAGE NUMBER: 01/01	N VALUES	SPT BLOWS PER 6"	
		VISUAL SOIL CLASSIFICATION/AASHTO M145/ASTMD2487	DEPTH			
1	1	GRAY FINE-GRAINED SAND LITTLE LIMESTONE, SILT & ROOT, (TOPSOIL)	0.0"-1.5'	11	5	6
2					5	5
3	2	DARK GRAY FINE-GRAINED SAND LITTLE LIMESTONE, SILT & ROOT, (SP)	1.5-2.5'	12	7	7
4	3	GRAY-BROWN FINE-GRAINED SAND, (SP)	2.5-6.5'	13	5	6
5					7	7
6					6	8
7					6	4
8	4	DARK BROWN ORGANIC STAINED SAND LITTLE SILT, (SP-SM)	6.5-10.0'	6	2	2
9					1	2
10					3	4
11						
12						
13						
14						
15						
16						

BOTTOM OF BORING @ 10.0 FEET

STANDARD PENETRATION TEST BORING:

BLOWS PER FOOT ON 2" O.D. SAMPLER WITH A 140 LB. HAMMER FALLING 30"

SOIL INVESTIGATION & SAMPLING BY AUGER BORINGS: A.S.T.M. D 1452/STANDARD PENETRATION TEST ASTM D1586. THE SAMPLES COLLECTED CONSTITUTE A MINUTE PERCENTAGE OF THE SUBSOILS AT THE SITE. AS A MUTUAL PROTECTION THE SOILS WILL BE STORED IN OUR LABORATORY FACILITIES FOR A MAXIMUM OF THREE (3) MONTHS. THE OWNER, ARCHITECT AND/OR ENGINEER ARE ENCOURAGED TO VISUALLY INSPECT SAMPLES PRIOR TO PURCHASE OF PROPERTY AND DESIGN OF THE STRUCTURE.

RESPECTFULLY SUBMITTED,
EASTCOAST TESTING & ENGINEERING, INC.,
CERTIFICATE OF AUTHORIZATION #3425

 9/13/2020
MOHAMMED A. HAI, P.E.
SENIOR GEOTECHNICAL ENGINEER
FLORIDA REGISTRATION No. 59345


CRAIG SMITH, PRESIDENT

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TEST BORING REPORT

LABORATORY NUMBER: **723904-B** BORING NUMBER: **2**

CLIENT: PIQUE INTERNATIONAL GROUP CUSTOMER # **-**

PROJECT: PROPOSED 2-STORY 5-UNIT TOWNHOME - VACANT CREW CHIEF: **H.E.**

PROJECT ADDRESS: ID #4942-02-04-0150 - POMPANO BEACH, FLORIDA DRILLER: **K.W.**

BORING LOCATION: ~ 70' NORTH & 45' WEST OF THE SE PROPERTY CORNER DRILL RIG # **F350**

GROUND WATER: +/-4'10" DATE: 08/31/20 ELEV: N/F CASING: **3"**

SURVEY NOT GIVEN UNLESS NOTED: (B.E.G.) BELOW EXISTING GRADE LOCATIONS: ~ APPROX UNLESS STAKED

DEPTH FEET	SAMPLE NUMBER	BORING NUMBER: 2	PAGE NUMBER: 01/01	N VALUES	SPT BLOWS PER 6"	
1	1	VISUAL SOIL CLASSIFICATION/AASHTO M145/ASTMD2487				
2		GRAY FINE-GRAINED SAND LITTLE LIMESTONE, SILT & ROOT, (TOPSOIL)		0.0'-1.5'	4	6
3	2	GRAY FINE-GRAINED SAND LITTLE LIMESTONE & SILT, (SP)		1.5-2.5'	18	8
4	3	GRAY FINE-GRAINED SAND, (SP)		2.5-7.0'	10	5
5					10	5
6					10	5
7					10	6
8	4	DARK GRAY-BROWN ORGANIC STAINED SAND LITTLE SILT, (SP-SM)		7.0-13.0'	6	3
9					6	1
10					2	1
11					2	1
12					2	1
13					2	1
14	5	DARK BROWN FINE-GRAINED SAND LITTLE SILT, (SP)		13.0-15.0'	3	1
15					3	1
16		BOTTOM OF BORING @ 15.0 FEET			1	2

STANDARD PENETRATION TEST BORING: BLOWS PER FOOT ON 2" O.D. SAMPLER WITH A 140 LB. HAMMER FALLING 30"

SOIL INVESTIGATION & SAMPLING BY AUGER BORINGS: A.S.T.M. D 1452/STANDARD PENETRATION TEST ASTM D1586. THE SAMPLES COLLECTED CONSTITUTE A MINUTE PERCENTAGE OF THE SUBSOILS AT THE SITE. AS A MUTUAL PROTECTION THE SOILS WILL BE STORED IN OUR LABORATORY FACILITIES FOR A MAXIMUM OF THREE (3) MONTHS. THE OWNER, ARCHITECT AND/OR ENGINEER ARE ENCOURAGED TO VISUALLY INSPECT SAMPLES PRIOR TO PURCHASE OF PROPERTY AND DESIGN OF THE STRUCTURE.

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TEST BORING REPORT

LABORATORY NUMBER: 723904-C	BORING NUMBER: 3
CLIENT: PIQUE INTERNATIONAL GROUP	CUSTOMER #: -
PROJECT: PROPOSED 2-STORY 5-UNIT TOWNHOME - VACANT	CREW CHIEF: H.E.
PROJECT ADDRESS: ID #4942-02-04-0150 - POMPANO BEACH, FLORIDA	DRILLER: K.W.
BORING LOCATION: ~ 30' SOUTH & 60' WEST OF THE NE PROPERTY CORNER	DRILL RIG #: F350
GROUND WATER: +/-4'8" DATE: 08/31/20 ELEV: N/F	CASING: 3"

SURVEY NOT GIVEN UNLESS NOTED: (B.E.G.) BELOW EXISTING GRADE LOCATIONS: ~ APPROX UNLESS STAKED

DEPTH FEET	SAMPLE NUMBER	BORING NUMBER: 3	PAGE NUMBER: 01/01	N VALUES	SPT BLOWS PER 6"	
		VISUAL SOIL CLASSIFICATION/AASHTO M145/ASTMD2487	DEPTH			
1	1	DARK GRAY FINE-GRAINED SAND LITTLE LIMESTONE, ROOT, SIT & DEBRIS	0.0"-2.0'	7	3	4
2					3	3
3	2	BROWN FINE-GRAINED SAND, (SP)	2.0-6.5'	9	4	5
4					4	5
5					5	5
6				8	3	2
7					1	1
8	3	DARK GRAY-BROWN ORGANIC STAINED SAND SOME/LITTLE SILT, (SP-SM)	6.5-9.0'	2	1	1
9					1	1
10	4	BROWN FINE-GRAINED SAND SOME/LITTLE LIMESTONE & SILT, (SP-SM)	9.0-10.0'	2	1	3
11						
12						
13						
14						
15						
16		BOTTOM OF BORING @ 10.0 FEET				

STANDARD PENETRATION TEST BORING: BLOWS PER FOOT ON 2" O.D. SAMPLER WITH A 140 LB. HAMMER FALLING 30"

SOIL INVESTIGATION & SAMPLING BY AUGER BORINGS: A.S.T.M. D 1452/STANDARD PENETRATION TEST: ASTM D1586. THE SAMPLES COLLECTED CONSTITUTE A MINUTE PERCENTAGE OF THE SUBSOILS AT THE SITE. AS A MUTUAL PROTECTION THE SOILS WILL BE STORED IN OUR LABORATORY FACILITIES FOR A MAXIMUM OF THREE (3) MONTHS. THE OWNER, ARCHITECT AND/OR ENGINEER ARE ENCOURAGED TO VISUALLY INSPECT SAMPLES PRIOR TO PURCHASE OF PROPERTY AND DESIGN OF THE STRUCTURE.

**RESPECTFULLY SUBMITTED,
EASTCOAST TESTING & ENGINEERING, INC.,
CERTIFICATE OF AUTHORIZATION #3425**

M. HAI 9/13/2020
MOHAMMED A. HAI, P.E.
SENIOR GEOTECHNICAL ENGINEER
FLORIDA REGISTRATION No. 59345

Craig Smith
CRAIG SMITH, PRESIDENT

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THRESHOLD/SPECIAL INSPECTIONS, BORINGS, DENSITY, CONCRETE, ASPHALT, ETC, A "GEOTECHNICAL TESTING LAB"

DRC

**PZ23-12000050
03/20/2024**



EASTCOAST TESTING & ENGINEERING, INC.

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FACSIMILE #954-971-8872
ESTABLISHED 1981 ETE@BELLSOUTH.NET

SEPTEMBER 13, 2020

Lab No. 723904.EX

TEST REPORT OF: S. F. W. M. D. Exfiltration
(FDOT Usual Open Hole)
CLIENT: PIQUE INTERNATIONAL GROUP
ENGINEER: NOT FURNISHED
PROJECT: PROPOSED DRAINAGE @ SW 9th AVENUE & SOUTH DIXIE HIGHWAY
POMPAÑO BEACH, FLORIDA - ID #4942-02-4-0150
TESTED BY: HAROLD E. & KEVIN W. ON SEPTEMBER 11, 2020

RESULTS OF TEST

TEST LOCATION:

EXFILTRATION #1: APPROX. AS SHOWN ON PRELIMINARY PLANS, (SEE ATTACHED)

DEPTHS

SOIL DESCRIPTIONS

0.0- 1.5'	GRAY-BROWN FINE-GRAINED SAND LITTLE LIMESTONE, SILT & ROOT, (TOPSOIL)
1.5- 5.5'	GRAY-BROWN FINE-GRAINED SAND LITTLE/TRACE LIMESTONE, (SP)
5.5- 10.0'	VERY DARK BROWN ORGANIC STAINED SAND LITTLE SILT, (SP-SM)

Depth of Test Hole	10.0 ft.		
Water Table	4.83 ft.		
TIME		TOTAL FLOW - GALLONS	G.P.M.
10 MINUTES		22.6 Gallons	2.26

AVERAGE CUBIC FEET/SECOND:
HYDRAULIC CONDUCTIVITY:

Q= 0.00503509
K= 8.6066E-05
K= 8.6066 X 10⁻⁵ CFS/FT²/FT.HEAD

Respectfully Submitted By:
EASTCOAST TESTING ENGINEERING, INC.
Certificate of Authorization #3425

M. A. H. AI
MOHAMMED A. HAI, P.E.
SENIOR GEOTECHNICAL ENGINEER
FLORIDA REGISTRATION NO. 59345

CRAIG SMITH
CRAIG SMITH, PRESIDENT

DRC

23' ASPHALT PVMT.

SW 9TH AVENUE

18.75' PWY

F.I.P. 1/2"

165.50'(R&M)

F.I.P. 1/2"

FOR SOIL BORING TEST

22' ASPHALT PVMT.

X STREET

62.87'(R&M)

B-2



PROPOSED TWO STORY BLD.
5 UNITS TOWNHOMES
(750 SQ.FT. MIN EACH UNIT)

B-1



62.87'(R&M)

F.I.P. 1/2"

165.50'(R&M)

F.I.P. 1/2"



1-95

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PZ23-12000050

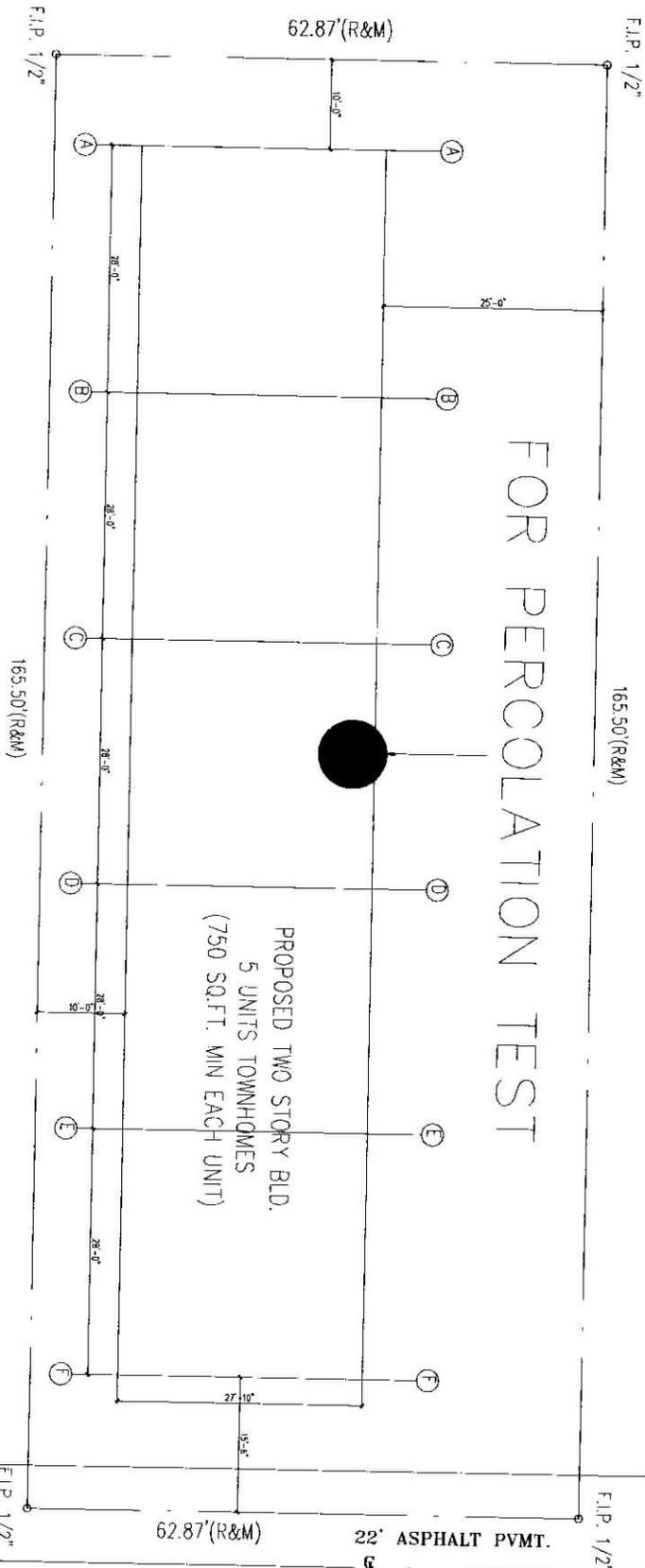
03/20/2024

23' ASPHALT PVMT.
SW 9TH AVENUE

18.75' PWY

FOR PERCOLATION TEST

PROPOSED TWO STORY BLD.
5 UNITS TOWNHOMES
(750 SQ.FT. MIN EACH UNIT)



I-95

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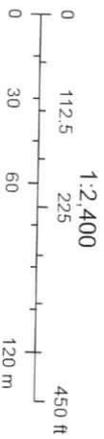
PZ23-1200050
03/20/2024

Property Id: 494202040150

**Please see map disclaimer



August 25, 2020



Flight Date: Between Dec 15, 2019 and Jan 26, 2020 Broward County Property Appraiser

DRC

PZ23-12000050
03/20/2024