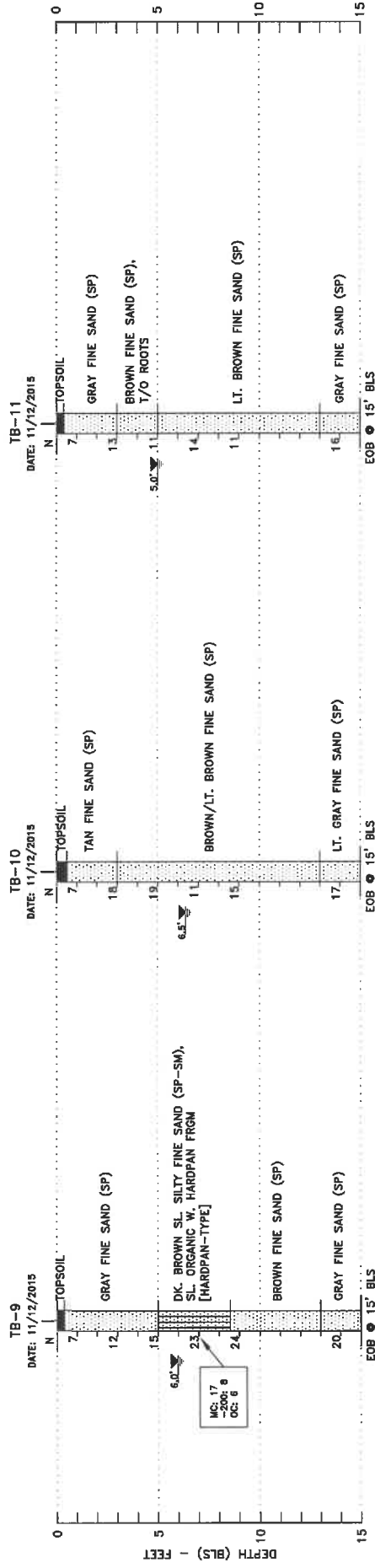


LEGEND:

- TOPSOIL
- FINE SAND (SP)
- SLIGHTLY SILTY FINE SAND (SP-SM)
- W. HARDPAN FRAGMENTS [HARDPAN-TYPE]

	ANDERSEN ANDRE CONSULTING ENGINEERS, INC. 573 SW Billmore Street, Port St. Lucie, FL 34983 772-807-9191 www.AACEInc.com Certificate of Authorization No. 28794	SOIL BORING PROFILES	GEOTECHNICAL ENGINEERING EVALUATION MARINER VILLAGE SQUARE MARTIN COUNTY, FLORIDA	Drawn by: PGA	Date: November 2015
				Checked by: DPA	Date: November 2015
				AACE File No: 15-185	Sheet No. 3



LEGEND:

- TOPSOIL
- FINE SAND (SP)
- SLIGHTLY SILTY FINE SAND (SP-SM)
- W. HARDPAN FRAGMENTS [HARDPAN-TYPE]



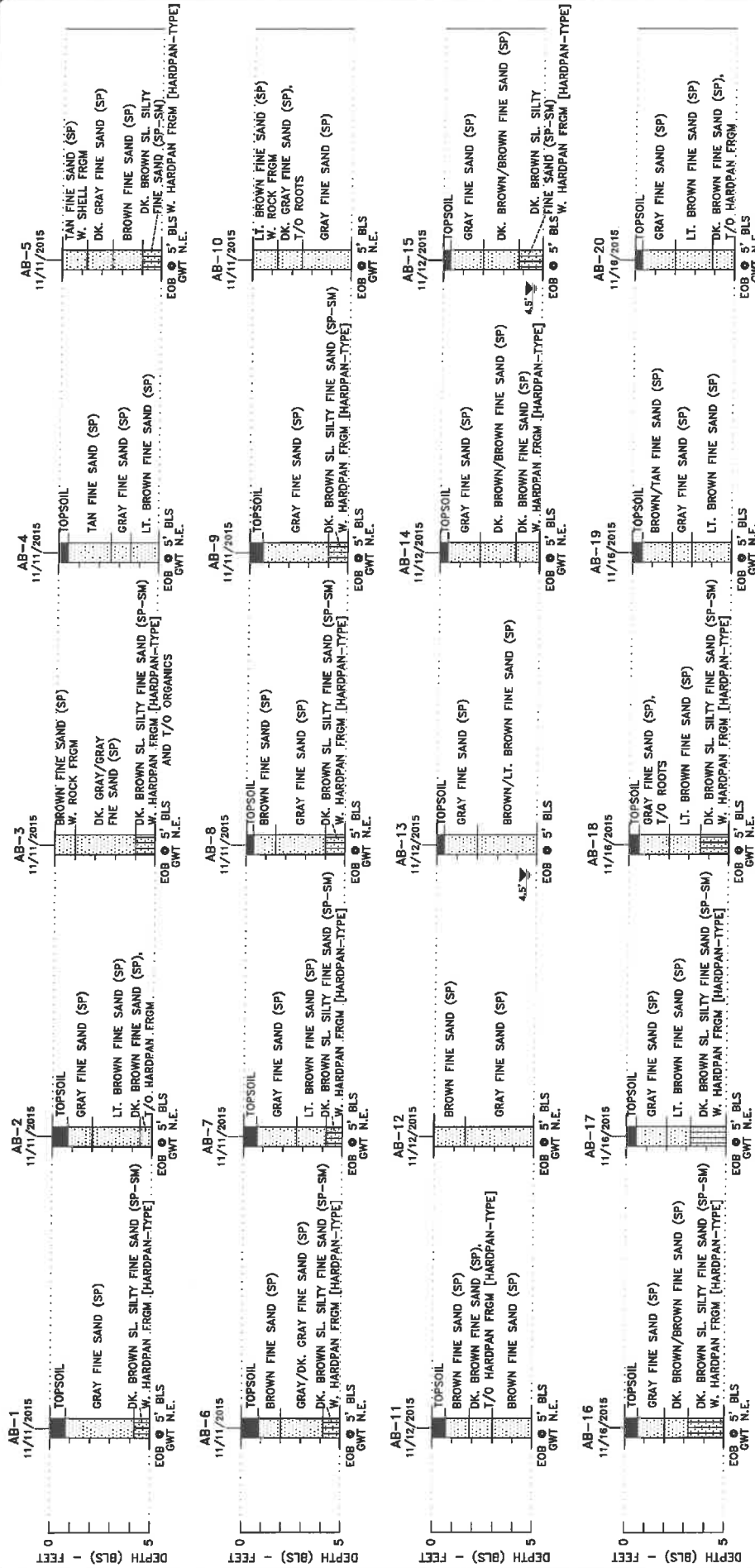
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
573 SW Billmore Street, Port St. Lucie, FL 34983 772-307-9191 www.AAACEInc.com
Certificate of Authorization No. 26794

SOIL BORING PROFILES

GEOTECHNICAL ENGINEERING EVALUATION
MARINER VILLAGE SQUARE
MARTIN COUNTY, FLORIDA

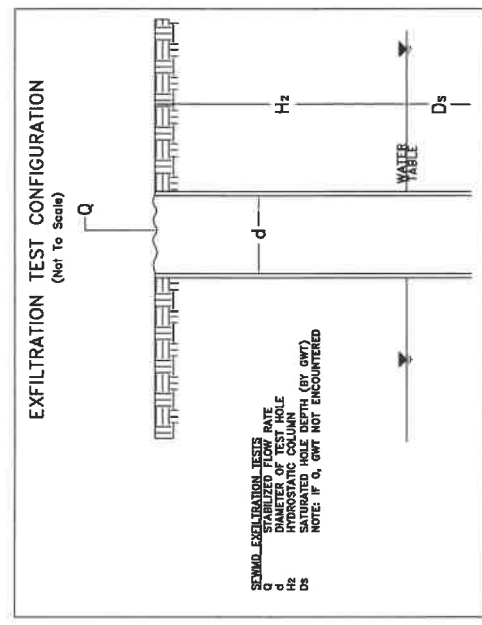
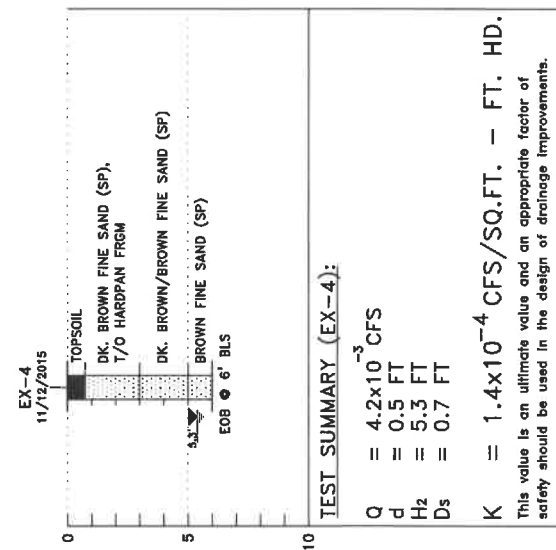
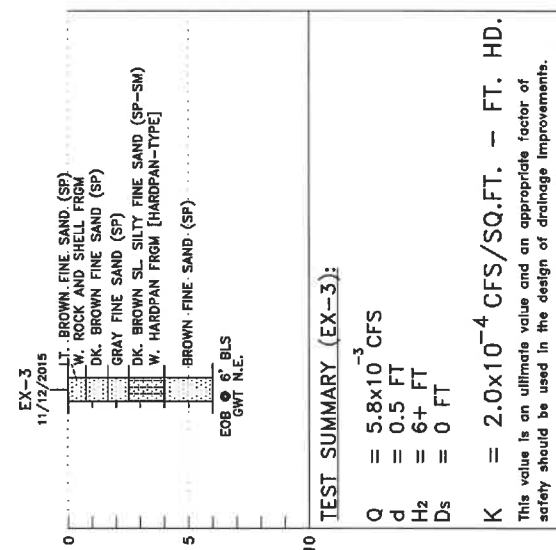
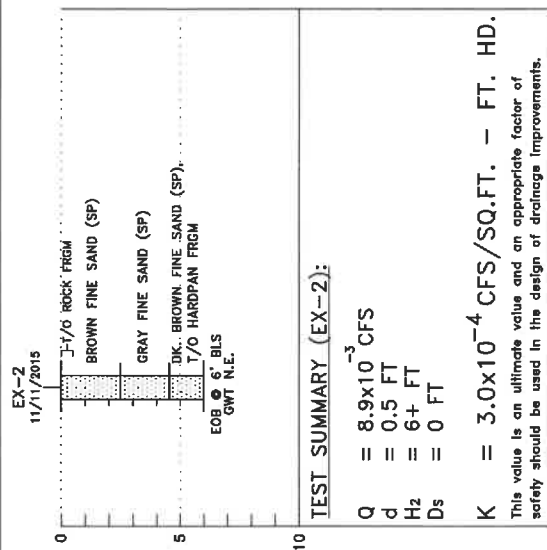
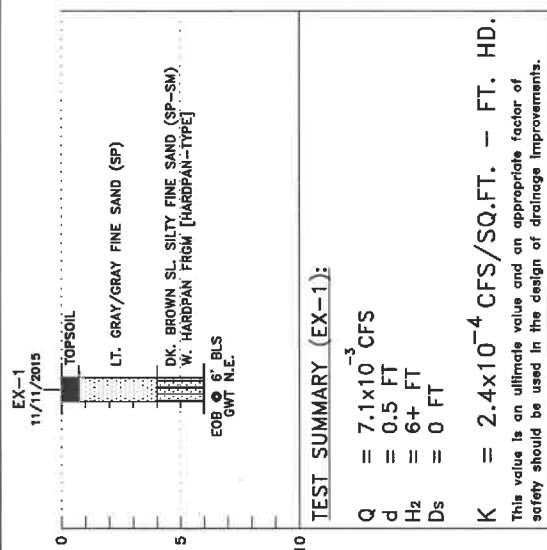
Drawn by: PGA
Checked by: DPA
AAACE File No: 15-185

Date: November 2015
Date: November 2015
Sheet No. 4



LEGEND:

- TOPSOIL
- FINE SAND (SP)
- SLIGHTLY SILTY FINE SAND (SP-SM)
- W. HARDPAN FRGM [HARDPAN-TYPE]



LEGEND:

- TOPSOIL
- FINE SAND (SP)
- SLIGHTLY SILTY FINE SAND (SP-SM)
- W. HARDPAN FRAGMENTS [HARDPAN-TYPE]

APPENDIX I

USDA Soil Survey Information

Soil Map—Martin County, Florida
(Mariner Square Village)



Map Scale: 1:5,130 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84












































1084

Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

MAP LEGEND

 Area of Interest (AOI)	 Spoil Area
 Soils	 Stony Spot
 Soil Map Unit Polygons	 Very Stony Spot
 Soil Map Unit Lines	 Wet Spot
 Soil Map Unit Points	 Other
 Special Point Features	 Special Line Features
 Blowout	 Water Features
 Borrow Pit	 Streams and Canals
 Clay Spot	 Transportation
 Closed Depression	 Rails
 Gravel Pit	 Interstate Highways
 Gravelly Spot	 US Routes
 Landfill	 Major Roads
 Lava Flow	 Local Roads
 Marsh or swamp	 Background
 Mine or Quarry	 Aerial Photography
 Miscellaneous Water	
 Perennial Water	
 Rock Outcrop	
 Saline Spot	
 Sandy Spot	
 Severely Eroded Spot	
 Sinkhole	
 Slide or Slip	
 Sodic Spot	

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: <http://websoilsurvey.nrcs.usda.gov>
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: Martin County, Florida
Survey Area Data: Version 13, Sep 21, 2015

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

Date(s) aerial images were photographed: Feb 14, 2015—May 8, 2015

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

Martin County, Florida (FL085)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Waveland and Immokalee fine sands	87.7	82.9%
13	Placid and Basinger fine sands, depressional	15.2	14.3%
99	Water	3.0	2.8%
Totals for Area of Interest		105.8	100.0%

Martin County, Florida

4—Waveland and Immokalee fine sands

Map Unit Setting

National map unit symbol: 1jq7n
Mean annual precipitation: 56 to 64 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Immokalee and similar soils: 40 percent
Waveland and similar soils: 40 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Waveland

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
Eg - 4 to 43 inches: fine sand
Bh1 - 43 to 47 inches: fine sand
Bh2 - 47 to 77 inches: loamy fine sand
Cg1 - 77 to 91 inches: fine sand
Cg2 - 91 to 99 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 30 to 50 inches to ortstein
Natural drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat):
 Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Very low (about 1.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Other vegetative classification: South Florida Flatwoods
(R156BY003FL), Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Description of Immokalee

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy marine deposits

Typical profile

A - 0 to 6 inches: fine sand
E - 6 to 35 inches: fine sand
Bh - 35 to 54 inches: fine sand
BC - 54 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat):
Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Low (about 5.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Other vegetative classification: South Florida Flatwoods
(R156BY003FL), Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Minor Components

Basinger

Percent of map unit: 4 percent
Landform: Drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Other vegetative classification: Slough (R156BY011FL), Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)

Lawnwood

Percent of map unit: 4 percent

Landform: Marine terraces on flatwoods

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods

(R156BY003FL), Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Placid

Percent of map unit: 3 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Freshwater Marshes and Ponds

(R156BY010FL), Sandy soils on stream terraces, flood plains, or

in depressions (G156BC145FL)

Jonathan

Percent of map unit: 3 percent

Landform: Rises on marine terraces

Landform position (three-dimensional): Interfluve

Down-slope shape: Convex

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods

(R156BY003FL), Sandy soils on rises, knolls, and ridges of mesic

uplands (G156BC121FL)

Nettles

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods

(R156BY003FL), Sandy soils on flats of mesic or hydric lowlands

(G156BC141FL)

Salerno

Percent of map unit: 3 percent

Landform: Flatwoods on marine terraces

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Other vegetative classification: South Florida Flatwoods
(R156BY003FL), Sandy soils on flats of mesic or hydric lowlands
(G156BC141FL)

Data Source Information

Soil Survey Area: Martin County, Florida
Survey Area Data: Version 13, Sep 21, 2015

Martin County, Florida

13—Placid and Basinger fine sands, depressional

Map Unit Setting

National map unit symbol: 1jq7x
Mean annual precipitation: 56 to 64 inches
Mean annual air temperature: 72 to 79 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Placid and similar soils: 45 percent
Basinger and similar soils: 40 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Placid

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 17 inches: fine sand
Cg - 17 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Moderate (about 6.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D

Other vegetative classification: Freshwater Marshes and Ponds (R156BY010FL), Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL)

Description of Basinger

Setting

Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Sandy marine deposits

Typical profile

A - 0 to 4 inches: fine sand
Eg - 4 to 22 inches: fine sand
Bh/Eg - 22 to 42 inches: fine sand
Cg - 42 to 80 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: Frequent
Salinity, maximum in profile: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum in profile: 4.0
Available water storage in profile: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7w
Hydrologic Soil Group: A/D
Other vegetative classification: Freshwater Marshes and Ponds (R156BY010FL), Sandy soils on stream terraces, flood plains, or in depressions (G156BC145FL)

Minor Components

Lawnwood

Percent of map unit: 8 percent
Landform: Marine terraces on flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Other vegetative classification: South Florida Flatwoods (R156BY003FL), Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)

Sanibel

Percent of map unit: 7 percent

Landform: Depressions on marine terraces

Landform position (three-dimensional): Dip

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Freshwater Marshes and Ponds
(R156BY010FL), Organic soils in depressions and on flood plains
(G156BC645FL)

Data Source Information

Soil Survey Area: Martin County, Florida

Survey Area Data: Version 13, Sep 21, 2015

APPENDIX II

Laboratory Testing Results



ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Moisture Content (ASTM D2216), Percent Fines Passing US No. 200 Sieve (ASTM D1140)

Job No: 15-185

Project: Mariner Square Village

Location: Martin County, FL

Station: NA

Date: 11/16/15

Technician RL

Sample ID	Pan #	Tare weight [grams]	Wet Weight Before Wash		Dry Weight Before wash		Water Weight [grams]	Dry Weight After wash		Moisture (%)	Fines (%)
			Soil + tare weight [grams]	Soil weight [grams]	Soil + tare weight [grams]	Soil weight [grams]		Soil + tare weight [grams]	Soil weight [grams]		
TB-1 #4	T15	85.6	206.5		188.2	102.6	18.3	178.6	93.0	18	9
TB-4 #3	P36	86.7	207.6		187.8	101.1	19.8	180.5	93.8	20	7
TB-5 #3	P37	88.2	205.4		178.9	90.7	26.5	170.1	81.9	29	10
TB-5 #5	P43	87.2	201.1		185.7	98.5	15.4	178.0	90.8	16	8
TB-6 #3	P38	86.7	201.0		174.9	88.2	26.1	165.4	78.7	30	11
TB-9 #3	P22	86.3	195.3		179.2	92.9	16.1	172.0	85.7	17	8
TB-2 #5	T6	86.2	211.2		192.2	106.0	19.0	189.1	102.9	18	3
TB-2 #6	T17	85.7	195.6		177.0	91.3	18.6	172.9	87.2	20	4
TB-2 #7	T22	86.8	212.7		188.3	101.5	24.4	186.2	99.4	24	2
TB-4 #6	P1	86.1	207.3		183.7	97.6	23.6	179.8	93.7	24	4
TB-6 #7	P27	87.2	215.9		190.2	103.0	25.7	186.9	99.7	25	3
TB-8 #5	P23	85.9	199.3		181.0	95.1	18.3	177.1	91.2	19	4



ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

Organic Content Work Sheet (AASHTO T-267 / ASTM D2974)

Project Name: **Mariner Square Village**
 File Number: **15-185**
 Sample Location: **Varies**
 Sample Description: **Refer to Log**

USCS/AASHTO: **NA**
 Date Sampled: **Varies**
 Date Tested: **11/16/2015**
 Tested By: **SM**

Loss On Ignition (LO) Test

Sample ID	TB-1 #4
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P13
Wt. Of Tare (g) - A	22.3
b.i. Wt. Of Tare+Soil+Orgn (g) - B	63.8
a.i. Wt. Tare+Soil (g) - C	62.2
% Organics: $100 \times (B-C)/(B-A)$	4

Loss On Ignition (LO) Test

Sample ID	TB-4 #3
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P95
Wt. Of Tare (g) - A	24.1
b.i. Wt. Of Tare+Soil+Orgn (g) - B	60.3
a.i. Wt. Tare+Soil (g) - C	58.3
% Organics: $100 \times (B-C)/(B-A)$	6

Loss On Ignition (LO) Test

Sample ID	TB-3 #3
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P60
Wt. Of Tare (g) - A	27.8
b.i. Wt. Of Tare+Soil+Orgn (g) - B	52.8
a.i. Wt. Tare+Soil (g) - C	51.5
% Organics: $100 \times (B-C)/(B-A)$	5

Loss On Ignition (LO) Test

Sample ID	TB-6 #3
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P42
Wt. Of Tare (g) - A	22.5
b.i. Wt. Of Tare+Soil+Orgn (g) - B	59.9
a.i. Wt. Tare+Soil (g) - C	58.8
% Organics: $100 \times (B-C)/(B-A)$	3

Loss On Ignition (LO) Test

Sample ID	TB-9 #3
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P8
Wt. Of Tare (g) - A	27.8
b.i. Wt. Of Tare+Soil+Orgn (g) - B	53.0
a.i. Wt. Tare+Soil (g) - C	51.5
% Organics: $100 \times (B-C)/(B-A)$	6

Loss On Ignition (LO) Test

Sample ID	
Sample Location	
Depth	
Tare Number	
Wt. Of Tare (g) - A	
b.i. Wt. Of Tare+Soil+Orgn (g) - B	
a.i. Wt. Tare+Soil (g) - C	
% Organics: $100 \times (B-C)/(B-A)$	

Loss On Ignition (LO) Test

Sample ID	TB-5 #5
Sample Location	As noted on log
Depth	As noted on log
Tare Number	P18
Wt. Of Tare (g) - A	24.1
b.i. Wt. Of Tare+Soil+Orgn (g) - B	56.3
a.i. Wt. Tare+Soil (g) - C	54.3
% Organics: $100 \times (B-C)/(B-A)$	6

Loss On Ignition (LO) Test

Sample ID	
Sample Location	
Depth	
Tare Number	
Wt. Of Tare (g) - A	
b.i. Wt. Of Tare+Soil+Orgn (g) - B	
a.i. Wt. Tare+Soil (g) - C	
% Organics: $100 \times (B-C)/(B-A)$	

Notes: b.i - before ignition, a.i - after ignition
 report organics to 0.1%

APPENDIX III

AACE Project Limitations and Conditions

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
(revised January 24, 2007)

Project Limitations and Conditions

Andersen Andre Consulting Engineers, Inc. has prepared this report for our client for his exclusive use, in accordance with generally accepted soil and foundation engineering practices. No other warranty, expressed or implied, is made herein. Further, the report, in all cases, is subject to the following limitations and conditions:

VARIABLE/UNANTICIPATED SUBSURFACE CONDITIONS

The engineering analysis, evaluation and subsequent recommendations presented herein are based on the data obtained from our field explorations, at the specific locations explored on the dates indicated in the report. This report does not reflect any subsurface variations (e.g. soil types, groundwater levels, etc.) which may occur adjacent or between borings.

The nature and extent of any such variations may not become evident until construction/excavation commences. In the event such variations are encountered, Andersen Andre Consulting Engineers, Inc. may find it necessary to (1) perform additional subsurface explorations, (2) conduct in-the-field observations of encountered variations, and/or re-evaluate the conclusions and recommendations presented herein.

We at Andersen Andre Consulting Engineers, Inc. recommend that the project specifications necessitate the contractor immediately notifying Andersen Andre Consulting Engineers, Inc., the owner and the design engineer (if applicable) if subsurface conditions are encountered that are different from those presented in this report.

No claim by the contractor for any conditions differing from those expected in the plans and specifications, or presented in this report, should be allowed unless the contractor notifies the owner and Andersen Andre Consulting Engineers, Inc. of such differing site conditions. Additionally, we recommend that all foundation work and site improvements be observed by an Andersen Andre Consulting Engineers, Inc. representative.

SOIL STRATA CHANGES

Soil strata changes are indicated by a horizontal line on the soil boring profiles (boring logs) presented within this report. However, the actual strata's changes may be more gradual and indistinct. Where changes occur between soil samples, the locations of the changes must be estimated using the available information and may not be at the exact depth indicated.

SINKHOLE POTENTIAL

Unless specifically requested in writing, a subsurface exploration performed by Andersen Andre Consulting Engineers, Inc. is not intended to be an evaluation for sinkhole potential.

MISINTERPRETATION OF SUBSURFACE SOIL EXPLORATION REPORT

Andersen Andre Consulting Engineers, Inc. is responsible for the conclusions and recommendations presented herein, based upon the subsurface data obtained during this project. If others render conclusions or opinions, or make recommendations based upon the data presented in this report, those conclusions, opinions and/or recommendations are not the responsibility of Andersen Andre Consulting Engineers, Inc.

CHANGED STRUCTURE OR LOCATION

This report was prepared to assist the owner, architect and/or civil engineer in the design of the subject project. If any changes in the construction, design and/or location of the structures as discussed in this report are planned, or if any structures are included or added that are not discussed in this report, the conclusions and recommendations contained in this report may not be valid. All such changes in the project plans should be made known to Andersen Andre Consulting Engineers, Inc. for our subsequent re-evaluation.

USE OF REPORT BY BIDDERS

Bidders who are reviewing this report prior to submission of a bid are cautioned that this report was prepared to assist the owners and project designers. Bidders should coordinate their own subsurface explorations (e.g.; soil borings, test pits, etc.) for the purpose of determining any conditions that may affect construction operations. Andersen Andre Consulting Engineers, Inc. cannot be held responsible for any interpretations made using this report or the attached boring logs with regard to their adequacy in reflecting subsurface conditions which may affect construction operations.

IN-THE-FIELD OBSERVATIONS

Andersen Andre Consulting Engineers, Inc. attempts to identify subsurface conditions, including soil stratigraphy, water levels, zones of lost circulation, "hard" or "soft" drilling, subsurface obstructions, etc. However, lack of mention in the report does not preclude the presence of such conditions.

LOCATION OF BURIED OBJECTS

Users of this report are cautioned that there was no requirement for Andersen Andre Consulting Engineers, Inc. to attempt to locate any man-made, underground objects during the course of this exploration, and that no attempts to locate any such objects were performed. Andersen Andre Consulting Engineers, Inc. cannot be responsible for any buried man-made objects which are subsequently encountered during construction.

PASSAGE OF TIME

This report reflects subsurface conditions that were encountered at the time/date indicated in the report. Significant changes can occur at the site during the passage of time. The user of the report recognizes the inherent risk in using the information presented herein after a reasonable amount of time has passed. We recommend the user of the report contact Andersen Andre Consulting Engineers, Inc. with any questions or concerns regarding this issue.

Important Information about Your 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 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 your geotechnical engineering report without first conferring with the geotechnical engineer who prepared it. *And no one — not even you — should apply the 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.

A Geotechnical Engineering Report is Based on A Unique Set of Project-Specific Factors

Geotechnical engineers consider a number of 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,

- elevation, configuration, location, orientation, or weight of the proposed structure,
- 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 study was performed. *Do not rely on a geotechnical engineering report* whose adequacy may have been affected by: the passage of time; by man-made events, such as construction on or adjacent to the site; or by natural events, such as floods, earthquakes, or groundwater fluctuations. *Always* contact the geotechnical engineer before applying the 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 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 construction recommendations included in your report. *Those 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 recommendations if that engineer does not perform construction observation.*

A Geotechnical Engineering Report Is Subject to Misinterpretation

Other design team members' misinterpretation of geotechnical engineering reports has resulted in costly problems. Lower 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. Contractors can also misinterpret a geotechnical engineering report. Reduce that risk by having your geotechnical engineer participate in prebid and preconstruction conferences, and by providing 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 Contractors a Complete Report and Guidance

Some owners and design professionals mistakenly believe they can make contractors liable for unanticipated subsurface conditions by limiting what they provide for bid preparation. To help prevent costly problems, give contractors the complete geotechnical engineering report, *but* preface it with a clearly written letter of transmittal. In that letter, advise contractors 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 contractors have sufficient time to perform additional study. Only then might you be in a position to give contractors 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 contractors do not 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.

Geoenvironmental Concerns Are Not Covered

The equipment, techniques, and personnel used to perform a *geoenvironmental* study differ significantly from those used to perform a *geotechnical* study. For that reason, a geotechnical engineering report does not usually relate any geoenvironmental 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 geoenvironmental 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, a number of 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 ASFE-Member Geotechnical Engineer for Additional Assistance

Membership in ASFE/THE BEST PEOPLE ON EARTH exposes geotechnical engineers to a wide array of risk management techniques that can be of genuine benefit for everyone involved with a construction project. Confer with your ASFE-member geotechnical engineer for more information.

ASFE THE GEOPROFESSIONAL BUSINESS ASSOCIATION

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

Copyright 2012 by ASFE, Inc. Duplication, reproduction, or copying of this document, in whole or in part, by any means whatsoever, is strictly prohibited, except with ASFE's specific written permission. Excerpting, quoting, or otherwise extracting wording from this document is permitted only with the express written permission of ASFE, and only for purposes of scholarly research or book review. Only members of ASFE may use this document as a complement to or as an element of a geotechnical engineering report. Any other firm, individual, or other entity that so uses this document without being an ASFE member could be committing negligent or intentional (fraudulent) misrepresentation.



lucido&associates

**TRANSMITTAL
(VIA HAND DELIVERY)**

Date:	April 8, 2019		
To:	Peter Walden Martin County Growth Management Dept.		
From:	Shirley Lyders		
Subject:	Mariner Village Square PUD, Revised Master Site Plan and Phase 2 Final Site Plan (Martin County Project #M160-011)	Project No.	18-360

Pursuant to Article 10.6.B of the Development Review Procedures, attached is the certification regarding the posting of the project sign for your records.

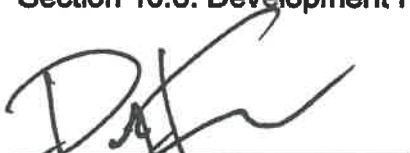
Doug Fitzwater
220 Hibiscus Avenue
Stuart, FL 34996

Ms. Shirley Lyders
Lucido & Associates
701 SE Ocean Blvd.
Stuart, FL 34994

Notice Proposed Development
Mariner Village Square PUD
File Number M160-011

Dear Ms. Lyders:

This is to certify that the above referenced sign was installed per Martin County requirements and comply with the standards of the notice provisions of Article 10, Section 10.6: Development Review Procedures.


Doug Fitzwater

State of Florida
County of Martin

Doug Fitzwater, who is personally known to me, acknowledged the forgoing instrument before me on April 3, 2020


Notary Public, State of Florida





**BEFORE THE BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA
DEVELOPMENT ORDER**

RESOLUTION NUMBER _____

**[REGARDING DENIAL OF REVISED MASTER AND PHASE 2 FINAL SITE PLAN
APPROVAL FOR MARINER VILLAGE SQUARE PUD**

WHEREAS, this Board has made the following determinations of fact:

1. Ribbin Ventures, LLC. submitted an application for a Revised PUD master and phase 2 Final site plan for the Mariner Village Square project, located on lands legally described in Exhibit A, attached hereto.
2. This Board held a public meeting on the application on February 25, 2020.
3. At the public meeting, all interested parties were given an opportunity to be heard.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF MARTIN COUNTY, FLORIDA, THAT:

- A. The request for a Revised master and phase 2 Final Site Plan for the Mariner Village Square PUD project is denied because XXXXX.
- B. This resolution shall be recorded in the public records of Martin County. A copy of this resolution shall be forwarded to the applicant(s) by the Growth Management Department subsequent to recording.

DULY PASSED AND ADOPTED THIS 25TH DAY OF FEBRUARY, 2020.

ATTEST:

BOARD OF COUNTY COMMISSIONERS
MARTIN COUNTY, FLORIDA

BY: _____
CAROLYN TIMMANN
CLERK OF THE CIRCUIT COURT
AND COMPTROLLER

BY: _____
HAROLD E. JENKINS, CHAIRMAN

APPROVED AS TO FORM AND LEGAL
SUFFICIENCY:

BY: _____
KRISTA A. STOREY
SENIOR ASSISTANT COUNTY ATTORNEY

ATTACHMENTS:

Exhibit A, Legal Description

Exhibit "A"
Legal Description

Lot 25 of the Plat of THE ELLIPSE, according to the Plat thereof as recorded in Plat Book 11 at Page 84 of the Public Records of Martin County, Florida.

Total Acreage: 8.34

PCN: 05-39-41-002-000-00250-6

LOT 24
1000 sq. ft.
1000 sq. ft.



DPQJ-1

Peter W. Walden
Principal Planner
Martin County Growth Management Department
pwalden@martin.fl.us Office 772-219-4923
2401 SE Monterey Road Stuart, FL 34996

COUNTY
EXHIBIT # 2

Experience

Principal Planner, Martin County, FL

2018- present

- Project Coordinator- development application and land development regulation review
- Project Coordinator for all County projects for development review.
- Manage and process all zoning variances.
- Provide assistance with permitting and zoning applications.
- Draft Land Development Regulation amendments.

Senior Planner, Martin County, FL.

2015- 2018

- **Development Review:** Project coordinator for development and zoning applications.
- Provide review of development applications for consistency with the Comprehensive Growth Management Plan and the Land Development Regulations.

Development Compliance Planner, City of Palm Beach Gardens, Palm Beach Gardens, FL.

2014- 2015

- **Development Review:** Review development and permit applications for compliance with land development code. Monitor development construction for compliance with development orders and environmental compliance. Provide related documents; draft time extensions, build out determinations, administrative amendments.

Zoning Compliance, Village of North Palm Beach, NPB, FL.

2012- 2014

- **Plan Review:** Member of the DRC, participate in all development review, focus on zoning regulations and land development policy and compliance. Review building permits for code compliance. Prepare and present projects to the Planning Commission, and maintain all corresponding files.

Sales Associate, The Home Depot, Jupiter, FL

2010-2012

- Worked as a Sales Associate while attending FAU.

Landscape Design Manager, Ginn Company, Celebration, FL.

2004-2008

- Part of a development team responsible for managing the construction and maintenance of Resort Communities.
- Projects included: golf courses, land development and earthwork, utilities and irrigation, streetscapes, mitigation projects and wetland construction, parks, Clubhouses, and PGA Tour events in the southeast and the Bahamas.
- Worked with project managers and consultants on development compliance with SFWMD, DEP, Army Corp of Engineers, and local municipalities.

Education & Certifications

Florida Atlantic University, Boca Raton, FL (GPA 3.8)

B.P.M. Bachelor of Public Management (Administration), minor in Geography, May 2012

Course work in; Urban Planning, GIS, Emergency Management, Program Evaluation, Transportation

Indian River State College, Stuart, FL (GPA: 3.75)

A.A, Environmental Science, May 2010

Government Internship, Town of Jupiter, FL. May-August 2011 Planning and Zoning, Business Development

Member of the American Planning Association

FILED FOR RECORD
COMMISSION RECORDS
MARTIN COUNTY, FL
Date 02/25/2020
CAROLYN TIMMANN
CLERK OF CIRCUIT COURT
By MKV D.C.