STATE OF FLORIDA FLORIDA BOARD OF PROFESSIONAL ENGINEERS

FILED

Department of Business and Professional Regulation

Deputy Agency Clerk

CLERK Brandon Nichols
Date 6/28/2018
File # 2018-05068

FLORIDA BOARD OF PROFESSIONAL ENGINEERS,

FILED Florida Engineers

Management Corporation 6/28/2018 Clerk: Rebecca Valentine

Petitioner,

FEMC Case No. 2015023764

v.

GARY SANTTI, P.E.,

Respondent,

FINAL ORDER ADOPTING SETTLEMENT STIPULATION

THIS CAUSE came before the FLORIDA BOARD OF PROFESSIONAL ENGINEERS ("Board"), pursuant to Sections 120.569 and 120.57(4), Florida Statutes, on June 21, 2018 in Orlando, Florida, for the purpose of considering a Settlement Stipulation (attached hereto as "Exhibit A to Final Order") entered into between the parties in this cause. Upon consideration of the stipulation, the documents submitted in support thereof, and the arguments of the parties, it is hereby:

ORDERED AND ADJUDGED that the Settlement Stipulation as submitted be, with the exception that the Reprimand from the original stipulation is removed, and is hereby adopted *in toto* and incorporated herein by reference. Accordingly, the parties shall adhere to and abide by all the terms and conditions of the stipulation.

This Final Order shall take effect upon being filed with the Clerk of the Department of Business and Professional Regulation.

DONE AND ORDERED this 38 day of JUNE, 2018.

FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Zana Raybon, Executive Director

For KENNETH TODD, P.E., CHAIRMAN

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing filed *Final Order Adopting Settlement Stipulation* has been furnished by U.S. First Class Mail to Gary A. Santti, P.E. by service upon his attorney of record: David Rankin, Esquire, 13000 North Dale Mabry Highway, Lutz, Florida 33618 this & day of _______, 2018.

Rebecca Valentine,

Paralegal

STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS

FLORIDA BOARD OF PROFESSIONAL ENGINEERS

Petitioner,

GARY A. SANTTI., P.E.

FEMC Case No: 2015023764

Respondent,

SETTLEMENT STIPULATION

GARY A. SANTTI, P.E. ("Respondent") and the Florida Board of Professional Engineers ("Board") by and through the Florida Engineers Management Corporation ("FEMC"), hereby stipulate and agree to the following joint stipulation and Final Order of the Board, incorporating this Stipulation in the above-styled manner.

STIPULATED FACTS

- 1. For all times pertinent hereto, Respondent was a licensed engineer in the State of Florida, having been issued license number PE 43731.
- 2. Respondent was charged by an Administrative Complaint ("Compliant") filed by FEMC, and properly served upon Respondent with violations of Chapters 471 and 455, Florida Statutes. A true and correct copy of the filed Administrative Complaint is attached hereto and incorporated by reference as "Exhibit A to Settlement Stipulation".

STIPULATED CONCLUSIONS OF LAW

1. Respondent, in his capacity as a licensed engineer, admits that in such capacity he is subject to provisions of Chapters 455 and 471, Florida Statutes, and the jurisdiction of the Department of Business and Professional Regulations ("Agency"), FEMC, and the Board.

2. Respondent admits that the facts set forth in the Complaint, if proven, constitute violations of Chapters 455 and 471, Florida Statutes, as alleged in the Complaint.

STIPULATED DISPOSITION OF LAW

- 1. Respondent shall, in the future, comply with Chapters 471 and 455, Florida Statutes, and the rules promulgated pursuant thereto.
- 2. Should Respondent fail to comply with the terms of the Final Order, an administrative complaint for failure to comply with final order will automatically be opened against Respondent.
- 3. Respondent's shall pay an <u>ADMINISTRATIVE FINE</u> of \$1,000.00 and <u>COSTS</u> of \$14,603.25 to the Board one (1) year of the date that the Final Order adopting this Stipulation is filed with the Agency Clerk. The FINE and COSTS payments shall be made in quarterly payments of \$3900.81 each ninety (90) days after the entry of the FINAL ORDER.
 - 4. Respondent's license to practice engineering shall be **REPRIMANDED**.
- 5. Respondent shall <u>APPEAR</u> before the Board when this Stipulation is presented. Respondent must be prepared to discuss: how this situation occurred, what improvements and quality control measures Respondent plans to implement to improve Respondent's work product, and how Respondent intends to prevent this circumstance from occurring in the future.
- 6. Respondent shall be placed on <u>PROBATION</u> for two (2) years from the date the Final Order adopting this Stipulation is filed with the Agency Clerk., with the following terms:
 - a. Respondent shall successfully complete a Board-approved course in **BASIC ENGINEERING PROFESSIONALISM AND ETHICS** within one (1) year of the date the Final Order adopting this Stipulation is filed with the Agency Clerk. <u>Prior to that date</u>, Respondent shall submit to the Board a Certificate of Completion of the course. <u>It is the Respondent's responsibility to notify the Board that he has completed the course in a timely manner</u>. Respondent may contact the Florida Engineering Society ("FES"),

125 South Gadsden St., Tallahassee, FL 32301, (850)224-7121, for information regarding the availability of such courses in Florida; however, if the FES provides any information regarding such a course to the Respondent, the Respondent <u>must</u> submit that course information to the FEMC for review and determination as to whether or not it will comply with the Board's requirements. Respondent may also elect to complete one of the following correspondence courses offered by:

Murdough Center for Engineering Professionalism
Texas Tech University, PO Box 41023, Lubbock, Texas 79409
Engineering Ethics Basic
Engineering Ethics Intermediate
Engineering Ethics Advanced
Telephone 806-742-3525; Fax 806-742-0444; E-mail: engineering.ethics@ttu.edu

EPD Program
Auburn University
Engineering Extension Service
217 Ramsay Hall, Auburn, Alabama 36849-5331
Ethics and Professionalism
Phone 800-446-0382 or 334-844-4370

An Accredited College or University course if that course information is first submitted to the FEMC for review and determination as to whether or not it will comply with the Board's requirements.

Courses offered by Continuing Education Programs or Professional Business Programs (Exp. SunCam, Inc., C2Ed), are not Board Certified, and will not meet the requirements.

- b. Respondent shall successfully complete the **STUDY GUIDE** which has been prepared by the Board and which will be furnished to Respondent, regarding the Engineering Practice Act, Chapter 471, Florida Statutes, and the Rules of the Board. Respondent is required to provide a personal email address that will be used to access the on-line study guide. The study guide must be completed within thirty (30) days of the date on which the Final Order incorporating this Stipulation is filed with the Agency Clerk.
- c. Respondent shall submit to the Board a detailed list of all completed projects (signed, sealed, and dated), by the Respondent for **PROJECT REVIEW** at six

(6) and eighteen (18) month intervals from the date the Final Order adopting this Stipulation is filed with the Agency Clerk. The projects shall include: all geotechnical engineering (subsurface remediation) projects and reports signed and sealed by Respondent.

d. A FEMC Consultant will select two (2) projects from each submitted list for review. Respondent is responsible for promptly furnishing any set of completed plans (signed, sealed, and dated), calculations, and any other supporting documentation requested by the Consultants. The Respondent must sign, date, and seal all materials that are submitted for project review using a non-embossed, seal. Sealed project review materials may be copied and submitted electronically, if desired by the Respondent. Respondent is also responsible for the Consultant's fees for reviewing the projects, and shall remit payment in the amount of \$2,000.00 by check or money order made payable in the name of the Board's Consultant at the time that the project lists are submitted to FEMC. In the event that the project review cost exceeds \$2,000,00, then the Respondent is responsible for the deficiency. In the event that the cost of the reviews is less than \$2,000.00, then the unused portion will be refunded to respondent. Should the Consultant return an unfavorable report concerning Respondent's projects, that report shall be submitted to the Probable Cause Panel for determination of whether additional disciplinary proceedings should be initiated.

e. If the Respondent has not performed engineering services on a sufficient number of projects to make the submissions required by 6c., above, the initial or, if applicable, the subsequent submission required by the terms of probation shall be extended for a period of six (6) months to allow Respondent to perform the services necessary for

perform sufficient engineering services to meet the requirements of the terms of probation, Respondent's license will be placed on voluntary inactive status as defined in Section 455.227, Florida Statutes, by the Board, without any further necessity for action on the part of Respondent. Respondent's license shall remain on such status, provided Respondent meets the requirements of Section 455.227, unless and until Respondent notifies the Board that he wishes to recommence practice and obtains Board authorization to reactivate his license under such terms of probation that the Board deems appropriate at that time.

- f. Should the Respondent fail to timely comply with the terms of the Final Order with regard to the Project Reviews discussed herein, this case will be submitted to the Probable Cause Panel for review and determination of whether additional disciplinary action should be taken.
- 8. Respondent acknowledges that neither Respondent's attendance at the Board Meeting when this Stipulation is presented, nor any continuing education or college level courses taken as a requirement of the terms of this Stipulation may be used to comply with the continuing education requirements of Chapter 61G15-22, Florida Administrative Code.
- 9. It is expressly understood that this Stipulation is subject to approval of the Board and FEMC and has no force and effect until the Board issues a Final Order adopting this agreement.
- 10. This Stipulation is executed by Respondent for the purpose of avoiding further administrative action with respect to this cause. In this regard, Respondent authorizes the Board to review and examine all investigative file materials concerning Respondent prior to or in conjunction with consideration of the Stipulation. Furthermore, should this joint Stipulation not

be accepted by the Board, it is agreed that presentation to and by the Board shall not unfairly or illegally prejudice the board or any of its members from further participation, consideration or resolution of these proceedings.

- 11. Respondent expressly waives all further procedural steps and expressly waives all rights to seek judicial review of or otherwise challenge or contest the validity of the joint Stipulation of Facts, Conclusions of Law, imposition of discipline and the Final Order of the Board incorporating said Stipulation.
- 12. Respondent waives the right to seek any attorney's fees or costs from the Board in connection with this disciplinary proceeding.

WHEREFORE, the parties hereto request the Board to enter a Final Order accepting and implementing the terms contained herein.

Gary A. Santti, P.E.

Respondent

Case No. 2015023764

APPROVED this 3 day of M

2018.

Zana Raybor, Executive Director Florida/Board of Professional Engineers

JOYN J. RIMES, III Prosecuting Attorney

STATE OF FLORIDA FLORIDA BOARD OF PROFESSIONAL ENGINEERS

FILED

repartment of Business and Professional Regulation

Deputy Agency Clerk

CLERK Evette Lawson-Proctor

Date 1/23/2018 File#

FLORIDA BOARD OF PROFESSIONAL ENGINEERS,

FILED
Florida Engineers
Management Corporation
1/23/2018 Clerk: Rebecca Valentine

Petitioner,

GARY SANTTI, P.E.,

Respondent,

FEMC Case No. 2015023764

ADMINISTRATIVE COMPLAINT

COMES NOW the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner, Florida Board of Professional Engineers, hereinafter referred to as "Petitioner," and files this Administrative Complaint against GARY SANTTI, P.E., hereinafter referred to as "Respondent." This Administrative Complaint is issued pursuant to Sections 120.60 and 471.038, Florida Statutes. Any proceeding concerning this complaint shall be conducted pursuant to Section 120.57, Florida Statutes. In support of this complaint, Petitioner alleges the following:

- 1. Petitioner, Florida Board of Professional Engineers, is charged with regulating the practice of engineering pursuant to Chapter 455, Florida Statutes. This complaint is filed by the Florida Engineers Management Corporation (FEMC) on behalf of Petitioner. FEMC is charged with providing administrative, investigative, and prosecutorial services to the Florida Board of Professional Engineers pursuant to Section 471.038, Florida Statutes (1997).
- 2. Respondent is, and has been at all times material hereto, a licensed professional engineer in the State of Florida, having been issued license number PE 43731. Respondent's last known address is 6510 Abaco Drive, Apollo Beach, Florida 33572.

- 3. On November 25, 2013 Respondent signed and sealed a Geological and Geotechnical Investigation for the De La Cruz residence (De La Cruz Project) at 4540 E. Lambright Street, Tampa Florida. On December 13, 2013 Respondent signed and sealed a Stabilization Report for the De La Cruz residence.
- 4. On December 10, 2013 Respondent signed and sealed a Geological and Geotechnical Investigation for the Alvarez Residence at 4601 Bostick Circle, Tampa, Florida (Alvarez Project). On March 19, 2014 Respondent signed and sealed a Foundation Stabilization Report for the Alvarez residence.
- 5. On December 2, 2013 Respondent signed and sealed a Geotechnical Investigation for the Aguiar Residence at 4503 W. Knox Street, Tampa, Florida (Aguiar Project). December 13, 2013 Respondent signed and sealed a Foundation Stabilization Report for the Aguiar residence.
- 6. On September 30, 2013 Respondent signed and sealed a Subsidence Investigation for the Castro Residence (Castro Project). On June 20, 2014 Respondent signed and sealed a Foundation Stabilization Investigation for the Castro Residence at 2605 W. Juneau, Tampa, Florida.
- 7. The engineering documents that Respondent sealed and signed for the De La Cruz Project, the Alvarez Project, the Aguiar Project, and the Castro Project all contained boring logs, geotechnical reports and structural remediation conclusions and opinions that were virtually verbatim copies of data and conclusions found in signed and sealed engineering documents that had been prepared by other engineering firms.
- 8. Specifically, Respondent's documents for the De La Cruz Project and the Castro Project replicated a very significant portion of the engineering work originally issued by SDII Global on April 11, 2013 for the De La Cruz Project and September 30, 2013 for the Castro Project.

Respondent had no involvement as a professional engineer in the collecting of the data or the formulation of the conclusions contained in the SDII Global reports for the De La Cruz or Castro Projects.

- 9. Respondent's documents for the Alvarez Project and the Aguiar Project replicated a very significant portion of the engineering work originally issued by Geohazards on June 17, 2010 for the Alvarez Project and on January 23, 2013 for the Aguiar Project. Respondent had no involvement as a professional engineer in the collecting of the data or the formulation of the conclusions contained in the SDII Global reports for the Alvarez or Castro Aguiar.
- 10. Section 471.033(1) (j), Florida Statutes, states as follows: "(1) The following acts constitute grounds for which the disciplinary actions in subsection (3) may be taken: (j) Affixing or permitting to be affixed his or her seal, name, or digital signature to any final drawings, specifications, plans, reports, or documents that were not prepared by him or her or under his or her responsible supervision, direction, or control." The standard to be applied to determine whether a Professional Engineer is in "responsible supervision, direction, or control" is set out in Rule 61G15-18.011(1). As stated herein, Respondent included virtually verbatim reproduction of the data and conclusions originally produced by Geohazards and SDII Global reports when Respondent had no involvement in the collecting of the data or the preparation of the Geohazards and SDII Global reports. As a result, Respondent was not in "responsible supervision, direction, or control" of the very significant portions of Respondent's engineering documents for the De la Cruz, Alvarez, Aguiar and Castro Reports which replicated the data and the conclusions contained in the Geohazards and SDII Global reports for the same projects.
- 11. On December 13, 2013 (Aguiar and De La Cruz Projects), March 19, 2014 (Alvarez Project) and June 27, 2014 (Castro Project), Respondent signed, sealed and dated

Foundation Stabilization Reports. In the Foundation Stabilization Reports for each of the De la Cruz, Alvarez, Aguiar and Castro Projects listed herein Respondent stated that "the foundation stabilization was completed in accordance with applicable code regulations, industry practices and practices..." In the same Foundation Stabilization Reports Respondent also stated that "the foundation repairs are sufficient to prevent settlement of the structure."

- 12. The Foundation Stabilization Reports for the De la Cruz, Alvarez, Aguiar and Castro Projects are engineering certifications as that term is defined in Rule 61G15-18.011(4), Florida Administrative Code, ("a statement signed and/or sealed by a professional engineer representing that the engineering services addressed therein, as defined in Section 471.005(6), F.S., have been performed by the professional engineer, and based upon the professional engineer's knowledge, information and belief, and in accordance with commonly accepted procedures consistent with applicable standards of practice,...").
- Castro Projects are materially deficient in that contrary to the explicit statements in the Foundation Stabilization Reports, the De la Cruz, Alvarez, Aguiar and Castro Projects do not comply with accepted standards of engineering practice applicable to sinkhole subsidence remediation. Standard accepted sinkhole remediation industry practice is to underpin structures on 4 to 6 foot centers around the entire perimeter of the residential structure. The spacing of the underpinning of the structures in the De la Cruz, Alvarez, Aguiar and Castro Projects far exceed this spacing. Therefore, the underpinning spacing does not meet standard industry practice and accepted standards of engineering practice. The result is that where there is sinkhole activity at the De la Cruz, Alvarez, Aguiar and Castro Project locations, additional damage is likely to occur to the structure as a result of inadequate underpinning.

De La Cruz Project

- 14. Respondent's engineering documents for the De La Cruz Project are materially deficient as follows:
- A. Respondent's Stabilization Report for the De La Cruz Project provides that the structure will be stabilized by underpinning. However, this remediation ignores the effect of the underpinning upon an interior load-bearing structural wall running north to south that forms the west wall of the original building.
- B. Respondent's Stabilization Report contains underpinning that is materially inadequate. The underpinning in the Stabilization Report fails to acknowledge that the continuous strip foundation that was identified as supporting the original structure is a flexible foundation intended to be continuously earth supported. It does not possess sufficient section properties or reinforcement to function as a "pile cap" or "grade beam".
- C. Additionally, the underpinning plan in the Stabilization Report is inadequate in that the plan purports to show only three (3) underpins each to be installed on the east and west perimeter walls. Exact locations for the pins are not specified. The length of these walls is approximately 40 feet, based on Property Appraiser floor plan dimensions. The east side foundation was reported to be a continuous strip footing. The west side (addition) was reported to be a concrete slab on grade with a thickened edge; however, it is more likely a simple concrete slab on grade without a discernible foundation and without even basic (minimum) reinforcement since it was probably a carport originally. As depicted on Respondent's Stabilization Report, there appears to be a pin near the center with the other two being approximately equally spaced away from the center one about 10 feet on center. That means there are two significantly cantilevered

sections of foundation placed into negative moment without any reinforcement at all to resist these forces. Moreover, 10 foot spacing for underpins on these types of foundations is greatly in excess of what constitutes accepted engineering practice.

- D. The underpinning plan in the Stabilization Report is inadequate with respect to the single pins shown on the north and south sides of the residence; the one on the south side is located near the center of the original residence which is approximately 24 feet in width. This creates a cantilevered section of foundation of approximately 12 feet. The west side addition to the residence adds another 10 feet. This would create an extremely eccentrically loaded foundation condition assuming that it was a continuous foundation. Lastly, the final pin (pin No. 8) does not support any structure at all since it is located on a porch.
- E. The Stabilization Report plans are inadequate in that the plans do not present any pin design criteria, driving criteria, applied loading, anticipated load capacity, or any reasonable specifications necessary to govern their installation. Lacking this information, it is impossible to estimate how many pins would be necessary to support the foundation load(s) for the residence. However, it is reasonable to conclude that if the 8 underpins set out in the Stabilization Report plans were installed, it is clear that they are not capable of performing their intended purpose and as a result structural damage may ultimately result.

Alvarez Project

- 15. Respondent's engineering documents for the Alvarez Project are materially deficient as follows:
- A. In the Foundation Stabilization Report Respondent states that the foundations were stabilized by pushing 6 steel underpins around the foundation of the house to depths of 46 to 52 feet below ground surface (plus 28 chemical grout points to a maximum depth

of 5 feet below ground). However, Respondent's geotechnical data shows that the limestone under the residence is very hard and cannot be penetrated by these pins at depths ranging from 15 to 25 feet below ground surface. Therefore it would be impossible for underpins to be installed to 46 feet or deeper because it would have to penetrate very hard limestone for over 20 feet. Since this could not feasibly be done Respondent's Foundation Stabilization Report is materially in error.

- B. Respondent's Foundation Stabilization Report and underpin plan ignores principal structural elements that should have been taken into account thus leaving load bearing interior walls unsupported.
- C. Respondent's underpinning plan is materially inadequate. The underpinning plan fails to acknowledge that the continuous foundation(s) that were identified are flexible foundations intended to be continuously earth supported. Foundations of this type do not possess sufficient section properties or reinforcement to function as a "pile cap" or "grade beam."
- D. Additionally, Respondent's underpinning plan shows a total of six (6) underpins to be installed. The underpinning plan identifies two on the west side, two on the east side (near the north and south corners), one on the north, and one on the south. Four of the six pins are located on adjuncts (additions) to the original structure. As a result, significant segment of the foundation are not pinned at all. Therefore cantilevered areas of foundation would be created placing the areas into negative moment conditions without any reinforcement at all to resist these types of forces. Moreover, large sections of eccentrically loaded foundations would also be created.
- E. The underpinning plans do not present any pin design criteria, driving criteria, applied loading, anticipated load capacity, or any reasonable specifications necessary to govern their installation. Lacking this information, it is impossible to estimate how many pins

would be necessary to support the foundation load(s) for the residence; however, it is clear that the 6 pins prescribed are not sufficient. Therefore it is clear that the remediation prescribed in the Foundation Stabilization Report will not provide the stabilization intended and as a result structural damage may ultimately result.

Aguiar Project

- 16. Respondent's engineering documents for the Aguiar Project are materially deficient as follows:
- A. The underpin plan in the Foundation Stabilization Report on page 260 and the Chemical Grout plan on p. 261 each have several notes in a text box; the second to last refers to this program as a "structural stabilization proposal"; however, the last note says "the proposed plan is not intended to [deal] with any deep soil or sinkhole conditions that might exist at the site nor intended to be a replacement for a compaction grouting program." If this is the case, the underpinning and shallow chemical grout will be ineffective if sinkhole conditions exist beneath the house. Deep seated sinkhole conditions would cause the near surface soils to settle (i.e., subside) or collapse due to untreated underlying soft soils, despite the perimeter of the house "stabilized" with surface chemical grout injections and grouted underpins as prescribed.
- B. Respondent recommended grouted underpins around the perimeter of the house, extending to "competent rock", which according to the borings logs (p. 272-276) ranges from 35 to 45 feet deep. However, the Foundation Stabilization Report (48) shows (on page 299) that all of the underpins extended to depths of 46 55 feet, all of which are deeper than reported depth of competent rock (a.k.a. refusal conditions). As soon as the underpins hit competent rock they would not have been able to be advanced further for any significant distance due to the resistance of the rock.

- C. Respondent's underpinning plan purports to show grand total of twenty-five (25) grout injected pier underpins to be installed at this residence. The underpinning plan identifies ten to be installed on the north side addition, four on the converted carport (southwest quadrant), seven on the original main structure, and four on a covered front porch. It should be noted that of the purported 25 pins to be installed, less than half are utilized on the original main structure and four (4) on a front porch that has only two (2) masonry pilasters. The porch is not structural and the underpinning would therefore be superfluous. Significant lengths of foundation are not pinned at all. Cantilevered areas of foundation are created placing them into negative moment conditions without any reinforcement at all to resist these types of forces. Large sections of eccentrically loaded foundations are also created.
- D. The plans do not present any pin design criteria, driving criteria, applied loading, anticipated load capacity, or any reasonable specifications necessary to govern their installation. Lacking this information, it is impossible to estimate how many pins would be necessary to support the foundation load(s) for the residence; however, the pins designated by Respondent are not sufficient.
- E. With respect to the Foundation Stabilization Report, it would be highly unusual and unlikely for the installation pressures to be absolutely identical for all 25 pins as shown in the Report and, as a result, this finding does not seem to be representative of actual field conditions and therefore the conclusions in the Report are materially erroneous. With respect to the accompanying grout report, apparently only 50 cubic yards (cy) of grout was used which averages about 2cy per pin. While some small variance is shown in the grout takes between pins, this finding does not seem to be representative of actual field conditions and therefore the conclusions in the Report are also materially erroneous.

Castro Project

- 17. Respondent's engineering documents for the Castro Project are materially deficient as follows:
- A. Respondent's Stabilization Report for the Castro Project provides that the structure will be stabilized by underpinning and chemical grouting, However, Respondent's proposed grout plan differed substantially from Respondent's completed chemical grouting program in that the back wall of the house within the lanai area was not chemically grouted, leaving an approximate 35-foot long section of the wall not treated as planned.
- B. Respondent's Stabilization Report contains underpinning that is materially inadequate. The underpinning in the Stabilization Report fails to acknowledge that the continuous strip foundation of the main house and the thickened edge foundation of the converted garage that were identified as supporting the original structure, is a flexible foundation intended to be continuously earth supported. Neither foundation section possesses sufficient section properties or reinforcement to function as a "pile cap" or "grade beam."
- C. Additionally, the underpinning plan in the Stabilization Report is inadequate in that the plan purports to show only eight (8) underpins total on the perimeter walls. The house is approximately 40 feet x 28 feet, based on Property Appraiser floor plan dimensions. The west side foundation was reported to be a continuous strip footing 4 inches thick. The east side was reported to be a concrete slab on grade with a 7-inch thick thickened edge and was probably a garage or carport originally. As depicted on Respondent's Stabilization Report, there is just one underpin at the west side of the back (north) wall of the house, leaving an unsupported length of over 30 feet. This includes the portion of the back wall with the lanai that has no chemical grout, such that the 35-foot long back wall of the house at the lanai has neither chemical grouting

nor underpinning. That means there are two significantly cantilevered sections of foundation placed into negative moment without any reinforcement at all to resist these forces.

D. The 8 underpins set out in Stabilization Report plans as installed are not capable of performing their intended purpose and as a result structural damage may ultimately result. In the event of a sinkhole occurrence (collapse or a subsidence event), the foundations will be mostly unsupported by the inadequate number of underpins; and the chemically grouted soil would also subside and lose contact with the foundation, leaving unsupported foundations.

Engineering Certifications

- Project) and June 27, 2014 (Castro Project), Respondent signed, sealed and dated Foundation Stabilization Reports for the listed Projects. In the Foundation Stabilization Reports for each of the De la Cruz, Alvarez, Aguiar and Castro Projects listed herein Respondent stated that "the foundation stabilization was completed in accordance with applicable code regulations, industry practices and practices ..." In the same Foundation Stabilization Reports Respondent also stated that "the foundation repairs are sufficient to prevent settlement of the structure."
- 19. The Foundation Stabilization Reports for the De la Cruz, Alvarez, Aguiar and Castro Projects are engineering certifications as that term is defined in Rule 61G15-18.011(4), Florida Administrative Code, ("a statement signed and/or sealed by a professional engineer representing that the engineering services addressed therein, as defined in Section 471.005(6), F.S., have been performed by the professional engineer, and based upon the professional engineer's knowledge, information and belief, and in accordance with commonly accepted procedures consistent with applicable standards of practice,...").

- 20. Respondent's engineering certifications for the De la Cruz, Alvarez, Aguiar and Castro Projects are materially deficient in that contrary to Respondent's explicit statement in the Foundation Stabilization Reports regarding the De la Cruz, Alvarez, Aguiar and Castro Projects as completed do not comply with accepted standards of engineering practice applicable to sinkhole subsidence remediation. Standard accepted sinkhole remediation industry practice is to underpin structures on 4 to 6 foot centers around the entire perimeter of the residential structure. The spacing of the underpinning of the structures in the De la Cruz, Alvarez, Aguiar and Castro Projects far exceed this spacing. Therefore, the underpinning spacing does not meet standard industry practice and accepted standards of engineering practice. The result is that where there is sinkhole activity at the De la Cruz, Alvarez, Aguiar and Castro Project locations, additional damage is likely to occur to the structure as a result of inadequate underpinning.
- 21. Moreover, Respondent's engineering certifications De la Cruz, Alvarez, Aguiar and Castro Projects are also materially deficient in that the statement that "the foundation repairs are sufficient to prevent settlement of the structure" is materially inaccurate. The repairs as completed will only minimize settlement under some conditions, but will not prevent settlement as certified by Respondent.
- 22. Section 471.033(1)(g), Florida Statutes, provides that an engineer is subject to discipline for engaging in negligence in the practice of engineering. Rule 61G15-19.001(4), Fla. Admin Code, provides that negligence constitutes "failure by a professional engineer to utilize due care in performing in an engineering capacity or failing to have due regard for acceptable standards of engineering principles." Rule 61G15-19.001(4) also provides that "[f]ailure to comply with the procedures set forth in the Responsibility Rules as adopted by the Board of Professional Engineers shall be considered as non-compliance with this section unless the deviation or departures there

from are justified by the specific circumstances of the project in question and the sound professional judgment of the professional engineer."

COUNT I

- 23. Petitioner realleges and incorporates Paragraphs One (1) through Ten (10) as if fully set forth in this Count One.
- 24. As set forth in Paragraphs Three (3) through Ten (10) Respondent sealed, signed and dated engineering reports for the Castro, De La Cruz, Alvarez, and Aguiar Projects which contained virtually verbatim reproductions of the data and conclusions originally produced by Geohazards and SDII Global reports when Respondent had no involvement in the collecting of the data or the preparation of the Geohazards and SDII Global reports.
- 25. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(j), Florida Statutes, by affixing Respondent's seal and signature final reports and documents that were not prepared by Respondent or Respondent's responsible supervision, direction, or control.

COUNT II

- 26. Petitioner realleges and incorporates Paragraphs One (1) through Six (6), Fourteen (14) and Twenty Two (22) as if fully set forth in this Count Two.
- 27. Respondent's engineering reports for the De La Cruz Project contain deficiencies including; but not limited to, those set forth in Paragraph Fourteen (14). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing final engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents

for the De la Cruz Project and (2) the final engineering documents for the De la Cruz Project were not issued in compliance with acceptable engineering principles.

28. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4) by engaging in negligence in the practice of engineering.

COUNT III

- 29. Petitioner realleges and incorporates Paragraphs One (1) through Six (6), Fifteen (15) and Twenty Two (22) and as if fully set forth in this Count Three.
- 30. Respondent's engineering reports for the Alvarez Project contain deficiencies including; but not limited to, those set forth in Paragraph Fifteen (15). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing final engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Alvarez Project and (2) the final engineering documents for the Alvarez Project were not issued in compliance with acceptable engineering principles.
- 31. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4) by engaging in negligence in the practice of engineering.

COUNT IV

32. Petitioner realleges and incorporates Paragraphs One (1) through Six (6), Sisteen (16) and Twenty Two (22) as if fully set forth in this Count Four.

- Respondent's engineering reports for the Aguiar Project contain deficiencies including; but not limited to, those set forth in Paragraph Sixteen (16). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing final engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Aguiar Project and (2) the final engineering documents for the Aguiar Project were not issued in compliance with acceptable engineering principles.
- 34. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4) by engaging in negligence in the practice of engineering.

COUNT V

- 35. Petitioner realleges and incorporates Paragraphs One (1) through Six (6), Seventeen (17) and Twenty Two (22) as if fully set forth in this Count Five.
- 36. Respondent's engineering reports for the Castro Project contain deficiencies including; but not limited to, those set forth in Paragraph Seventeen (17). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing final engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of the final engineering documents for the Castro Project and (2) the final engineering documents for the Castro Project were not issued in compliance with acceptable engineering principles.

37. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4) by engaging in negligence in the practice of engineering.

COUNT VI

- 38. Petitioner realleges and incorporates Paragraphs One (1) through Six (6), Eleven (11) through Thirteen (13) and Twenty (20) through Twenty-two (22) as if fully set forth in this Count Six,
- 39. Respondent's engineering certifications De la Cruz, Alvarez, Aguiar and Castro Projects contain deficiencies including; but not limited to, those set forth in Paragraphs Twenty (20) and Twenty One (21). As a result of those deficiencies, Respondent violated the provisions of Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4), F. A. C., by sealing and signing final engineering documents that were issued and filed for public record when such documents were materially deficient in that Respondent: (1) did not exercise due care in the preparation of engineering certifications De la Cruz, Alvarez, Aguiar and Castro Projects and (2) engineering certifications De la Cruz, Alvarez, Aguiar and Castro Projects were not issued in compliance with acceptable engineering principles.
- 40. Based on the foregoing, Respondent is charged with violating Section 471.033(1)(g), Florida Statutes, and Rule 61G15-19.001(4) by engaging in negligence in the practice of engineering.

WHEREFORE, the Petitioner respectfully requests the Board of Professional Engineers to enter an order imposing one or more of the following penalties: permanent revocation or suspension of the Respondent's license, restriction of the Respondent's practice, imposition of an administrative fine, issuance of a reprimand, placement of the Respondent on probation, the

assessment of costs related to the investigation and prosecution of this case, other than costs associated with an attorney's time, as provided for in Section 455.227(3), Florida Statutes, and/or any other relief that the Board deems appropriate.

SIGNED this day of One of

Zana Raybon Executive Director

BY: John J. Rimes, III Proseguting Attorney

COUNSEL FOR FEMC:

John J. Rimes, III
Prosecuting Attorney
Florida Engineers Management Corporation
2639 North Monroe Street, Suite B-112
Tallahassee, Florida 32303
Florida Bar No. 212008
JR/rv

PCP DATE: January 10, 2018

PCP Members: FLEMING, BRACKEN & MATTHEWS

CERTIFICATE OF SERVICE

Rebecca Valentine, Paralegal