Date: <u>8/31/2021</u> Job: <u>Barbara Simonian</u> Location: <u>352 Northwest Scenic Lake Drive</u> Lake City, FL 32055

PUSH PIER DESIGN ANALYSIS

The load requirements for the pilings designed to assist in supporting the identified areas of the subject residence were determined. The selected piling locations and the specific piling are identified on the Pier Identification and Location Plan attached. The calculated total loads on the piles in the specific location, including both dead and live loads are documented in the attached table which is designated as Attachment "A". Based on the total load requirements for each of these piles, the push pier driver is to be employed. The push pier driver should be employed with a calculated load of <u>6,000</u> lbs., which will provide pile capacity, including the 2 to 1 safety factor of <u>12,000</u> lbs. which is greater than the maximum calculated total load of <u>6,000</u> lbs. which occurs on the pile identified as no. <u>1</u>. Based on this analysis, the use of the push pier driver for the ECP piles with a specific load of <u>12,000</u> lbs. and a minimum depth of 15' is approved and certified as meeting all the requirements of the Florida Building Code 2020 7th Edition, and good engineering practice. This is not to be the primary support structure, but a supplement support to assist in support of the weight of the structure, which will reduce the total pressure on the existing soils. After completion of installation, Cool and Cobb Engineering Company shall be supplied with a drilling log of the location and depths of each pile installed so they can evaluate the installation and prepare the "As Built" drawings.

General Notes:

- 1. A log of each pile to be kept by Contractor noting depth for each pile.
- 2. Piles installed less than 48" apart are to be battered 10° away from each other.
- 3. All pile calculations are based on a maximum spacing of 8'-0".
- 4. This design is based on the loads of the structure placed on the shallow soils under the structure.
- 5. No deep soils geotechnical testing information was provided for this design.
- 6. This design does not address any possible sink hole activity as defined in Florida Statute § 627.706.

<u>8/31/2021</u> Kenneth F Wheeler, P.E. State of Florida Professional Engineer No. 60417



Digitally signed by Kenneth F Wheeler:A01410D0000 0177F9B0868D000175 94 Date: 2021.08.31 15:09:55 -04'00' This item has been electronically sealed by Kenneth F. Wheeler using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

203 W. Main St. Avon Park, FL 33825 Office: (863) 657-2323 Fax: (863) 657-2324



Foundation Professionals of Florida P.O. Box 1625 Lake City, Florida 32056 www.foundationprosfl.com

Project Address Barbara Simonian 352 Northwest Scenic Lake Drive Lake City, FL 32055

Created By Conner Rawlins (386) 406-2191 08/26/2021

Repair Plan



N/A

Foundation Type:

Construction:

Wood Frame

Concrete - Shallow Spread Footing

Digitally signed by Kenneth F

Date: 2021.08.31

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Wheeler:A01410D00000 177F9B0868D00017594

Veneer: Brick



8/31/2021 Kenneth F. Wheeler, P.E. PE# 60417

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Cool and Cobb Engineering Co. 203 W. Main St. Avon Park, FL 33825

8/31/2021 Date: Job: Barbara Simonian Location: 352 Northwest Scenic Lake Drive Lake City, FL 32055 Attachment "A" Total Load on Pile (Live Load + Dead Load) PILE NO. TOTAL CALCULATE LOAD 1 6,000 lbs 2 6,000 lbs This item has been electronically sealed by Kenneth F. Wheeler using a digital signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies. 6,000 lbs Maximum Total Load on Pile: Digitally signed by Cool and Cobb Engineering Co. Kenneth F 203 W. Main St. 8/31/2021 Wheeler:A01410D00000 Avon Park, FL 33825 Kenneth F Wheeler, P.E. 177F9B0868D00017594 PE# 60417 Date: 2021.08.31

Cool and Cobb Engineering Company



15:10:49 -04'00'





ECP Steel Pier ™ - PPB-300 Pier System



PPB-300 Utility Bracket Details

- ity Bracket Details
- Ultimate Capacity 68,000 lb
- Standard Lift 4"
- Fully Adjustable Unlimited Lift Capability
- Installs From Outside or Inside Structure
- Installs With Portable Equipment
- Installed With Little or No Vibration
- Installs To Rock or Verified Load Bearing Stratum
- 100% of Piers Field Load Tested During Installation



PPB-300 Utility Bracket Application Drawing

EARTH CONTACT PRODUCTS 1-866-327-0007 15612 S Keeler Terr.

15612 S Keeler Terr. Olathe, Ks 66062 Phone:913-393-0007 Fax:913-393-0008 info@getecp.com www.getecp.com

8/31/2021 Kenneth F. Wheeler, P.E. PE# 60417

Cool and Cobb Engineering Co. 203 W. Main St. Avon Park, FL 33825