### Cool and Cobb Engineering Company

Date: <u>2/24/2022</u>

Job: Jennifer Blevins

Location: 2495 South Marion Ave Lake City, FL 32025

# 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 \_2,200\_\_\_ lbs., which will provide pile capacity, including the 2 to 1 safety factor of \_4,400\_\_\_ lbs. which is greater than the maximum calculated total load of \_2,200\_\_ lbs. which occurs on the pile identified as no. \_2\_. Based on this analysis, the use of the push pier driver for the ECP piles with a specific load of \_4,400\_\_ 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.

#### 2/24/2022

Kenneth F Wheeler, P.E. State of Florida Professional Engineer No. 60417



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

Fax: (863) 657-2324

Contractor: Foundation Professionals



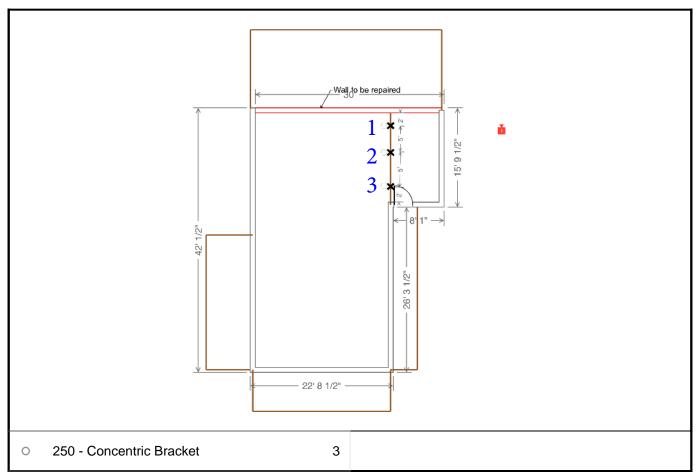
## Foundation Professionals of Florida

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

# Project Address Jennifer Lee 2495 South Marion Avenue Lake City

Created By Conner Rawlins (386) 406-2191 02/22/2022

### Repair Plan



Year structure was built:

**Construction:** 

N/A

Wood Frame

**Foundation Type:** 

Veneer:

Crawlspace with Block Stem Wall

Wood Siding



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

## Cool and Cobb Engineering Company

Date:	2/24/2022			
Job:	Jennifer Blevins			
Location:	2495 S Marion Ave			
	Lake City, FL 32025			
		Attachment "A"		
	Total Load on Pile	(Live Load + D	Dead Load)	
PILE NO.		TOTAL	CALCULATE LOAD	
1			2,410 lbs	
2			2,680 lbs	
3			2,410 lbs	
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		Maximum Total Load on Pile:	2,680 lbs	

2/24/2022

Kenneth F Wheeler, P.E. PE# 60417



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017594 Date: 2022.02.24 11:29:43 -05'00' Cool and Cobb Engineering Co. 203 W. Main St. Avon Park, FL 33825



### **PPB-250--Concentric Bracket**



Product Specifications	
Anchor Style	Concentric Pier
Component	Pier Bracket
Capacity	54 Kip
Bearing Surface	100 square inches
Lift Capacity	Fully Adjustable for Unlimited Lift
Coating	Black
Standard Package	40
Standard Package Unit	Each Bracket w/ starter section
Weight	62 lbs.
Min Order Qty	1

### **Notes**

Concentric Bracket

2/24/2022 Kenneth F. Wheeler, P.E. PE #60417 Cool and Cobb Engineering Co. 203 W. Main St. Avon Park, FL 33825