Cool and Cobb Engineering Company

Date: 5/5/2022

Job: <u>Lake City Chamber - Joey O'Hern</u>

Location: 162 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 23,000 lbs., which will provide pile capacity, including the 2 to 1 safety factor of 46,000 lbs. which is greater than the maximum calculated total load of 23,000 lbs. which occurs on the pile identified as no. 3 . Based on this analysis, the use of the push pier driver for the ECP piles with a specific load of 46,000 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. This design is based on the loads of the structure placed on the shallow soils under the structure.
- 4. No deep soils geotechnical testing information was provided for this design.
- 5. This design does not address any possible sink hole activity as defined in Florida Statute § 627.706.

5/5/2022

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

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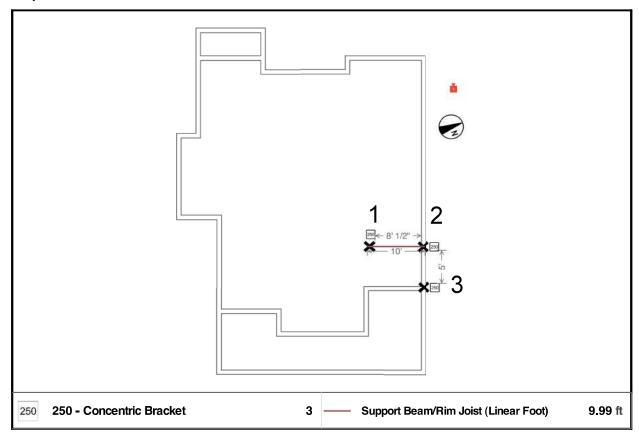


Foundation Professionals of P.O. Box 1625 Lake City, Florida 32056 www.foundationprosfl.com

Project Address Joey O'Hern 162 South Marion Avenue Lake City, FL 32025

Created By **Conner Rawlins** (386) 406-2191 01/05/2022

Repair Plan



Year structure was built:

1920

Foundation Type:

Crawl Space with CMU/Brick Piers

Construction:

Wood Frame

Two - Story

Veneer:

Wood Siding



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Cool and Cobb Engineering Company

Date:	5/5/2022	
Job:	Joey O'Hern	
Location:	162 South Marion Ave	
	Lake City, FL 32025	
		Attachment "A"
	Total Load on Pile	(Live Load + Dead Load)
PILE NO.		TOTAL CALCULATE LOAD
1		1,950 lbs
2		1,950 lbs
3		23,000 lbs
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		Maximum Total Load on Pile: 23,000 lbs

5/5/2022

Kenneth F Wheeler, P.E. PE# 60417



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