August 18, 2021

Aaron Simque
Aaron Simque Homes
426 SW Commerce Dr, Ste 130
Lake City, FL 32325

Reference: Subsurface Exploration, Lot 34, The Preserve at Laura Lake, Lake City, Columbia County
Earthworks Job No.: TAL21E-0051, Parcel No. 03-4S-16-02731-034

Dear Aaron Simque,

Earthworks Geotechnical, Inc. (**Earthworks**) has prepared the attached geotechnical report subsequent to the geotechnical site investigation performed August 14, 2021 at the referenced property.

In summary, highly plastic soils were encountered and groundwater was observed in the boreholes while drilling. DCP results indicate the soils within the proposed footprint will have adequate bearing pressure to a depth of six (6) feet and then the soils capacity drops. Due to the highly plastic soils and low bearing capacity encountered, Earthworks recommends a specialized foundation for the proposed residential structure.

Should you have any questions regarding this project or report, please do not hesitate to contact our office at (850) 385-5288. Earthworks would be pleased to continue providing geotechnical services throughout the implementation of the project. We look forward to working with you and your organization on this and future projects.

Sincerely

John Eaglin

Sales & Marketing Team Leader
Staff Engineer

Certified to this date:
August 18, 2021
Respectfully,

R. MICHAEL LATIMER LICENSE No. 41970 STATE OF FLORIDA PROFESSIONAL ENGINEER

Digitally signed by Robert M Latimer
Date: 2021.08.18 15:17:30 -04'00'

R. Michael Latimer, P.E.
Lic# 41970

Disclaimer: This geotechnical site investigation and subsequent report has been prepared based upon my best training, knowledge, and experience and is warranted only as my best opinion.

Earthworks Geotechnical, Inc.
2236 Capital Circle NE Ste. 202
Tallahassee, FL 32308

Phone: (850) 385-5288
Email: info@decengrs.com
Website: decengrs.com

1 Project Information:

Earthworks was contracted by Aaron Simque on August 05, 2021 to conduct a subsurface exploration and visual analysis of the subsurface conditions at the proposed project site.

Based on the scope of work and deliverable services defined in Quote No. 1555, it is Earthworks understanding that the following services are to be provided,

1. Install four (4.0) soil borings to a depth of ten (10.0) feet below existing ground surface (**BGS**).
2. Visually classify soil.
3. Access the local soil bearing pressure through DCP testing.
4. Preparation of this report.

2 Subsurface Exploration Program

The corners of the proposed structure were flagged by the client. The approximate location of the borings are provided in figure 1. The Borings identified as B1, B2, B3, and B4 in Table 1 were installed within the footprint of the proposed structure. Borings were installed in general accordance with ASTM D 1452, and representative soil samples were visually classified per ASTM D 2488 continuously from the ground surface to a depth of ten (10.0) feet BGS.

3 Site & Subsurface Conditions

The boreholes were observed while drilling and after completion for the presence and level of groundwater. Groundwater was observed at a depth of approximately nine and a half (9.5) feet BGS.

The characteristics of the subsurface materials examined are provided in Table 1. Approximate soil bearing values are given in column five labeled Bearing, and in the following column Soil Descriptions are provided. Traces of highly plastic soils (i.e. Pipe clay) were encountered.

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Table 1: Characteristics of subsurface materials examined.

Boring	Depth[1]	GW[2]	DCP	Bearing[3]	Soil Description[4]
B1	0.0 – 2.0	–	15	3750	Brown/Gray Fine Sand, Yellowish Fine Sand With Traces of Gray Pipe Clay
B1	2.0 – 4.0	–	10	2500	Gray Fine Sand
B1	4.0 – 6.0	–	8	2000	Dark Gray Sand, White Sand
B1	6.0 – 8.0	–	2	500	Dark Gray Sand, With Traces of Organics
B1	8.0 – 10.0	Yes	6	1500	Brown Slightly Clayey Sand
B2	0.0 – 2.0	–	–	–	Brown/Gray Fine Sand, Yellowish Fine Sand With Traces of Gray Pipe Clay
B2	2.0 – 4.0	–	–	–	Gray Fine Sand
B2	4.0 – 6.0	–	–	–	Dark Gray Sand, White Sand
B2	6.0 – 8.0	–	–	–	Dark Gray Sand, With Traces of Organics
B2	8.0 – 10.0	Yes	–	–	Brown Slightly Clayey Sand
B3	0.0 – 2.0	–	–	–	Brown/Gray Fine Sand, Yellowish Fine Sand With Traces of Gray Pipe Clay
B3	2.0 – 4.0	–	–	–	Gray Fine Sand
B3	4.0 – 6.0	–	–	–	Dark Gray Sand, White Sand
B3	6.0 – 8.0	–	–	–	Dark Gray Sand, With Traces of Organics
B3	8.0 – 10.0	Yes	–	–	Brown Slightly Clayey Sand
B4	0.0 – 2.0	–	–	–	Brown/Gray Fine Sand, Yellowish Fine Sand With Traces of Gray Pipe Clay
B4	2.0 – 4.0	–	–	–	Gray Fine Sand
B4	4.0 – 6.0	–	–	–	Dark Gray Sand, White Sand
B4	6.0 – 8.0	–	–	–	Dark Gray Sand, With Traces of Organics
B4	8.0 – 10.0	Yes	–	–	Brown Slightly Clayey Sand

[1] Feet (ft) below existing ground surface; [2] Groundwater encountered.; [3] Approximate bearing pressure (psf);
[4] Visual Classification per ASTM D 2488; [5] – indicates no value reported.

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Figure 1: Boring location.

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