



# GeoTechnologies, Inc.

Geotechnical and Construction Materials Testing Services

July 20, 2022

Paul & Patricia McComas  
1448 Thompson Road  
Bunnlevel, NC 28323

Re: Report of Subsurface Investigation  
511 Pine Wood Road Pole Barn  
Sanford, North Carolina  
GeoTechnologies Project No. 1-22-0716-EA

Dear Mr. & Mrs. McComas,

GeoTechnologies, Inc. has completed the authorized investigation to evaluate subsurface soil conditions for the above reference project in Sanford, North Carolina. It is our understanding that a pole barn type building is proposed for construction and that the timber poles will bear 54 inches below existing grade. Subsurface conditions were investigated by performed four hand auger borings at the staked corners of the proposed building as indicated on the attached Figure 1. The hand auger borings were extended to depths of 10 feet below existing grade. The consistency of the soils was evaluated utilizing dynamic cone penetrometer (DCP) testing methods.

Fill soils were encountered in each boring to depths of up to 4 feet. Undisturbed soils were encountered underlying the fill soils. The fill and undisturbed soils encountered in each boring consisted of medium dense silty fine to medium sands. DCP resistances ranged from 9 to in excess of 15 blows per 1.75 inches. Groundwater was not encountered in the borings.

The results of our borings indicated that subsurface conditions onsite are suitable for an allowable soil bearing pressure of 2,500 psf. Base on the provided information and test borings, the timber poles are expected to bear on the medium dense undisturbed sands. GeoTechnologies recommends that all foundation excavations be evaluated by a geotechnical engineer to verify that suitable bearing materials have been reached. If any areas are encountered which are found to be soft/unsuitable, those areas should be repaired as recommended by the geotechnical engineer. Typical repairs of unsuitable soils include over-excavation as determined by the geotechnical engineer, and backfilling to design subgrade elevation using washed #57 or #67 stone. The bottom of all foundation excavations should be free of water, loose soils, and debris prior to placement of concrete. Concrete should not be placed on frozen subgrades and should be placed as soon as possible after excavations and inspections are complete.

511 Pine Wood Rd.  
July 20, 2022  
Page 2

GeoTechnologies, Inc. appreciates the opportunity to be of service on this phase of the project. Please contact us if you have any questions concerning this letter or if we may be of additional service on this or other projects.

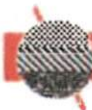
Sincerely,  
GeoTechnologies, Inc.,



Lance S. Littmann, E.I.  
Staff Engineer



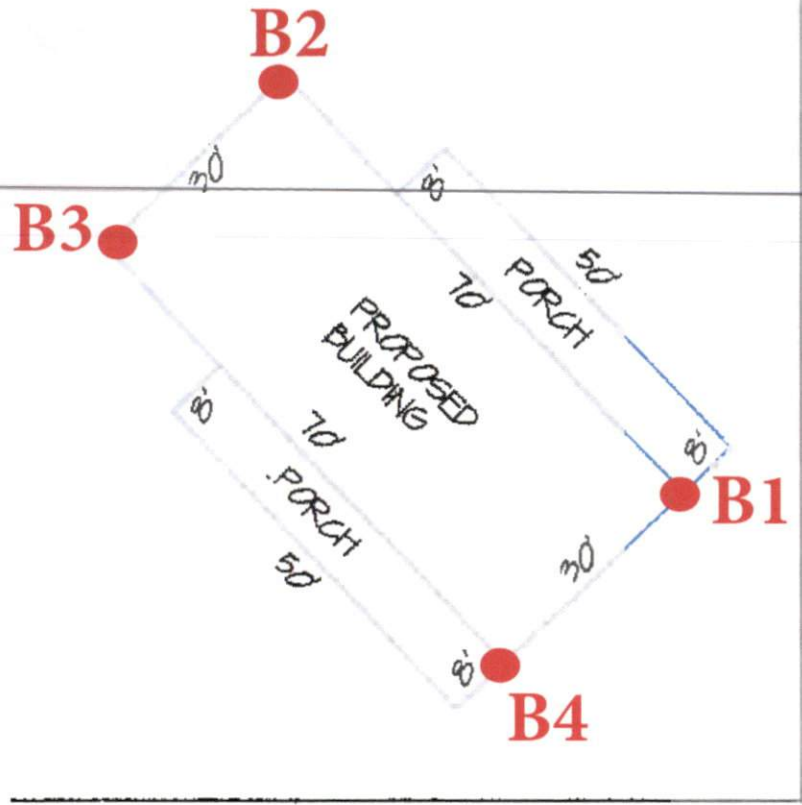
Mark R. Potratz, PE  
NC License No. 25955



GeoTechnologies, Inc.

www.geotechpa.com

# Figure 1 - Boring Locations



INSET

AREA  
4.98 ACRES  
216,929 SQ. FT.

PROPOSED  
BUILDING  
(SEE INSET)

724.87'

1138'

PROPOSED 12' DRIVE

232.0'

1152'

387.4'

726.07'

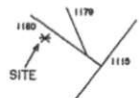
PINE

# Table 1

**Test Boring Summary**  
511 Pine Wood Road - Sanford, North Carolina  
GeoTechnologies Project No. 1-22-0716-EA

Boring	Depth	Material Description	USCS Classification	Dynamic Cone Penetrometer	
				Depth (ft.)	Blows per 1.75"
B-1	0 - 2.5'	Fill - Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-4.5	9,12,12
	2.5' - 10'	Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-7	10,11,11
		Dry at Time of Boring			-10
B-2	0 - 3.5'	Fill - Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-4.5	10,9,11
	3.5' - 10'	Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-7	12,12,12
		Dry at Time of Boring			-10
B-3	0 - 4'	Fill - Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-4.5	10,10,10
	4' - 10'	Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-7	11,11,12
		Dry at Time of Boring			-10
B-4	0 - 2'	Fill - Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-4.5	12,11,12
	2' - 10'	Medium Dense Tan & Orange Silty Fine to Medium SAND	SM	-7	15+
		Dry at Time of Boring			-10





**MINIMUM BUILDING SETBACKS**  
 FRONT - 35'  
 SIDELINES - 10'  
 SIDE STREET - 20'  
 REAR - 25'



I, MELVIN A. GRAHAM, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 4121, PAGE 733, ETC.); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION FOUND IN BOOK N/A, PAGE N/A; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS 1:10,000; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47-30 AS AMENDED, WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 2 DAY OF MARCH, A.D. 2022

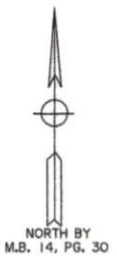
*Melvin A. Graham*  
 MELVIN A. GRAHAM, PLS. REGISTRATION NUMBER L-3471

NOT TO SCALE  
 VICINITY MAP

NOTE:  
 THIS SURVEY IS OF AN EXISTING PARCEL OR PARCELS OF LAND AND DOES NOT CREATE A NEW STREET OR CHANGE AN EXISTING STREET.  
*Melvin A. Graham*  
 SURVEYOR

STATE OF NORTH CAROLINA  
 COUNTY OF HARNETT  
 I, *Yvonne K. Pruitt*, REVIEW OFFICER OF HARNETT COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING. *3-17-22*  
 DATE: *3-17-22* REVIEW OFFICER: *Yvonne K. Pruitt*

NOTE:  
 THIS PROPERTY IS SUBJECT TO ANY AND ALL EASEMENTS, RIGHT OF WAYS, AND AGREEMENTS OF RECORD PRIOR TO THIS PLAT.



LOT 55  
 M.B. 14, PG. 30  
 PLAT # 2011-672  
 ISMAEL LEDEZMA  
 D.B. 3935, PG. 963

PINE WOOD ROAD S.R. 1180  
 60' R/W (PAVED ROAD)

LOT 54  
 4.98 AC.

TRACT 10  
 PLAT # 2011-672  
 PRESTON GEIST  
 D.B. 3909, PG. 151

LOT 53  
 M.B. 14, PG. 30  
 AMBER LYNN PETREE  
 D.B. 3323, PG. 494

LOT 52  
 M.B. 14, PG. 30

TRACT 12  
 PLAT # 2011-672  
 PRESTON GEIST  
 D.B. 3959, PG. 151

TRACT 11  
 PLAT # 2011-672  
 JASON WOLVINGTON  
 D.B. 3686, PG. 957

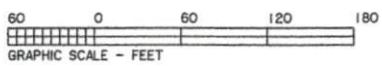
NOTES:  
 PROPERTY CONSIST OF ALL OF THE LEONARD P. McCOMAS and PATRICIA SUE McCOMAS PROPERTY AS RECORDED IN D.B. 4121, PG. 733 HARNETT COUNTY REGISTRY.

ALL AREAS BY COORDINATE METHOD  
 PROPERTY ZONED RA-20R  
 PID # 03958612 0016  
 PIN # 9586-12-0608.000  
 REID # 0028568

FOR REGISTRATION  
 Matthew S. Willis  
 REGISTER OF DEEDS  
 Harnett County, NC  
 2022 MAR 07 01:17:33 PM  
 BK: 2022 PG: 104-104  
 SHE: 431-80  
 INSTRUMENT # 202204074  
 VRODRIGUEZ  
 202204074

NORTH CAROLINA, HARNETT COUNTY  
 PRESENTED FOR REGISTRATION ON THE 17th DAY  
 OF MARCH 2022 BY *Melvin A. Graham*  
 RECORDED AT MAP NUMBER *2022-104*  
*Matthew S. Willis*  
 REGISTER OF DEEDS - 2022 DEPUTY  
*By: V. G. Rodriguez*

- LEGEND:  
 EIP-EXISTING IRON PIPE OR IRON ROD  
 NIP-NEW IRON PIPE OR IRON ROD  
 RRS-NEW RAILROAD SPIKE  
 ERS-EXISTING RAILROAD SPIKE  
 NPN-NEW P.C. NAIL  
 EPK-EXISTING P.C. NAIL  
 ECM-EXISTING CONCRETE MONUMENT  
 CL-CENTUR LINE  
 PP-POWER POLE  
 LP-LIGHT POLE  
 R/W-RIGHT OF WAY  
 CP-CALCULATED POINT  
 -E- ELECTRICITY  
 \* - GROUND ELEVATION  
 -X-X- FENCE



TOWNSHIP	COUNTY	STATE
BARBECUE	HARNETT	NC
SURVEY FOR		DATE:
(OWNER) LEONARD PAUL McCOMAS PATRICIA SUE McCOMAS PINE WOOD ROAD SANFORD, NC 27332		02/24/2022
		SCALE:
		1" = 60'
		PROJECT:
		2222
MELVIN A. GRAHAM, PLS. 3679 NICHOLSON ROAD CAMERON, NC 28326 PHONE (919)499-6174		REVISION: