On-site Homes, LLC
2931 Breezewood Ave
Suite 202
Fayetteville, NC 28303

11/16/2023

Attention : David Sigmon
Travina Love

RE: Daily Field Report for 11/14/2023
2815 Lemuel Black Road (CMT) Lillington, NC
Building & Earth Project No : RD230684

Ladies and Gentlemen:

On this date, representative(s) of Building & Earth were present to perform construction material testing services at this project site. Our testing and observations for this date include the following:

FO-1 : Field Observations made on this date.

- Foundation Inspection — For Information Only

Comment 1 : Based on our observations and test results, we recommend digging a test pit at the back right corner of the lot to investigate the void at 3 feet below subgrade to determine the cause. Building and Earth should be present while this takes place.

ST-1 : In place field density testing was performed for Finished Subgrade Soils -Building. The field density testing was performed in general accordance with ASTMD6938, using values from the laboratory proctors. One(1) in-place field density test was performed on this date. The testing results indicate that in-place compaction and moisture content at the location and depth tested meet or exceed the specified requirements outlined in the project plans and specifications. For additional details of our testing, please refer to the attached Field Density Test Report.

Closing

The testing and observations identified above have been reviewed by our project manager. If you have questions regarding this information, please do not hesitate to contact us.

Respectfully Submitted,
Building & Earth Sciences, LLP

Enclosures : FO-1, ST-1

610 Spring Branch Road
Dunn, NC 28334
Phone 910-292-2085 Fax 910-292-2192
www.BuildingandEarth.com

Rachael Heath
Reviewed By

Field Observations Report

Project Name:	**2815 Lemuel Black Road (CMT) Lillington, NC**	Project Number:	**RD230684**
Client Name:	**On-site Homes, LLC**	Placement#:	**FO-1**
Contractor:	**On-site Homes, LLC**	Technician:	**Paul Harris**
Monitoring:	**DCP**		

1 : Foundation Inspection

We arrived onsite to evaluate the building pad area for this residential lot. We understand the residence has been designed to be supported on a monolithic slab foundation. Upon arrival, the contractor had not finished excavating the footings. Our evaluation as documented in this report includes:

1) A visual description of the residential lot
2) Comments on any improvements that hat affect the foundations of the residence
3) Hand rod probing of the footing excavations
4) Performing Dynamic Cone Penetration (DCP) tests at representative locations
5) Soil Density tests on fill, if applicable.

Visual Description of the Lot:

The lot generally slopes left to right. Building locations are referenced from the street looking at the front of the residence. Maximum relief across the lot is approximately 2 feet. Surface water runoff appears to drain right to left.

Comments on Improvements:

The site has been undercut to remove organic soils. It appears that 6 inches of topsoil has been removed from the building pad area.

Structural fill has been placed at the site to level the building pad. Based on our observations, we understand the pad has been filled according to the following:

Section----------Thickness of Fill
Left Front----------24 inches of fill
Left Rear----------24 inches of fill
Center----------12 inches of fill
Right Front----------2 inches of fill
Right Rear----------2 inches of fill

Measurements:
1) How far is the nearest slope from the edge of the foundation? No slope

Future Footing Tests

Hand Rod Probing: Our representative performed hand rod probing of the surface of the building pad. Hand rod probing of the bearing material generally showed an average penetration of approximately 1 inch.

DCP Testing: Our representative performed Dynamic Cone Penetration (DCP) testing in general accordance with ASTM STP-399 at four representative locations to a depth of 36-48 inches. Our representative did not observe water within the DCP boreholes as noted below.

The following information provides the results of our hand auger borings and DCP testing:

Test 1: [Front Right Corner]

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Monitoring:	**DCP**		

-- Depth----"N"------Soil Color---USCS--------
--- FSG ---- 14 ----- grayish brown-- SM --------
--- -1' ------ 11 ----- grayish brown ---- SM ---------
--- -2' ------ 12 ------- light brown----- SCSM-----
--- -3' ------ 14.5 ------ light brown ----- SCSM-----

Test 2: [Front Left Corner]

-- Depth----"N"------Soil Color---USCS-------
--- FSG ---- 9.5---- grayish brown-- SM --------
--- -1' ------ 11 ----- grayish brown ---- SM ---------
--- -2' ------ 15+ ------ light brown----- SCSM-----
--- -3' ------ 14.5 ------ light brown ----- SCSM-----

Test 3: [Back Left Corner]

-- Depth----"N"------Soil Color---USCS--------
--- FSG ---- 9------- grayish brown-- SM --------
--- -1' ------ 11 ----- grayish brown ---- SM ---------
--- -2' ------ 11 ------ light brown----- SM-----
--- -3' ------ 13.5 ---- light brown ----- SM-----

Test 4: [Back Right Corner]

-- Depth----"N"------Soil Color---USCS--------
--- FSG ---- 10-------- grayish brown-- SM --------
--- -1' ------ 13.5 ----- grayish brown ---- SM ---------
--- -2' ------ 4 ---------- light brown----- SC/SM-----
--- -3' ------ 0(1-1.5' void) ------
--- -4' ------ 15+------ reddish brown----- SC/SM-----

Soil Density Testing:

Soil density testing was performed using the sand cone method of compaction in general accordance with ASTM D1556. The results of our tests are attached as ST-1.

Results:

Based on our observations and test results, we recommend digging a test pit at the back right corner of the lot to investigate the void at 3 feet below subgrade to determine the cause.

Notes: DCP testing at the back right corner of the slab revealed a 1-1.5 foot deep void starting at approximately 2.5 feet. Length and width of the void are unknown.

Comments

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Field Observations Report

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Monitoring:	**DCP**		

Comment	Log Date	Log Time
Based on our observations and test results, we recommend digging a test pit at the back right corner of the lot to investigate the void at 3 feet below subgrade to determine the cause. Building and Earth should be present while this takes place.	11/16/2023	07:44:34

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Photographs

Picture ID	
69534	

Picture ID	
69535	

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BUILDING & EARTH
Geotechnical, Environmental, and Materials Engineers

ST-1

Test Date: 11/14/2023
Field Technician: Paul Harris
Tests requested by: N/R
Results provided to: N/R

Report of Field Density Testing

Project Name:	2815 Lemuel Black Road (CMT) Lillington, NC	Ambient Temperature:	55-65
Project Number:	RD230684	Weather:	Clear
Project Location:	Lillington, NC	Wind Conditions:	Calm
Client:	On-site Homes, LLC	Results Provided To:	N/R
Contractor:	On-site Homes, LLC	Superintendent:	N/R

Notes:
1 Test location by technician
2 Elevation by Contractor
3 Fill/backfill placed prior to technician arriving

Design & Specification Data

Area ID	Area Description	Depth (ft)	Test Method	% Compaction	Moisture Range	
					Min	Max
FSG-Bldg	Finished Subgrade Soils -Building	0.0 - 2.0	ASTM D-698	95 %	- 10.0	+ 10.0

Laboratory Proctors

Proctor ID	Description of Material	USCS/AASHTO	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
1-point			110.2	10.8%

Density Test Data

Test #	IDs		Test Type	Location	Probe Depth (in)	Elev. (ft)	Dry Density(pcf)	% Moisture	% Compaction	Result
	Area	Proctor								
1	FSG-Bldg	1-point	ASTMD6938	Finished Subgrade Soils -Building : Center of pad :		FSG	107.1	8.0	97%	PASS

Equipment Used: 28503-Troxler3430
Last Calibration:
Standard Counts: Density:
Moisture:

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