H & H Homes
2919 Breezewood Avenue
Suite 400
Fayetteville, NC 28303

01/28/2022

Attention : Eric Baxley
Jimmy Barnard
Tim Adams

RE: Daily Field Report for 01/27/2022
Lot 684 Manor @ Lexington MLP (CMT) Cameron, NC
Building & Earth Project No : RD220062

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	Passed
• Project Management Review	Passed

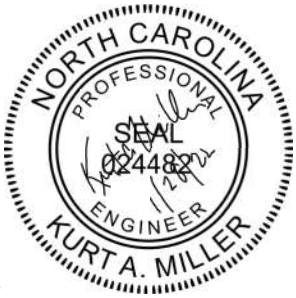
ST-1 : In place field density testing was performed for Finished Subgrade Soils -Building. The field density testing was performed in general accordance with ASTMD1556, using the results of field one-point as compared to the laboratory proctors. One(1) in-place field density test was performed on this 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:	**Lot 684 Manor @ Lexington MLP (CMT) Cameron, NC**	Project Number:	**RD220062**
Client Name:	**H & H Homes**	Placement#:	**FO-1**
Contractor:	**H & H Homes**	Technician:	**Joshua Johnson**
Monitoring:	**DCP**		

1 : Foundation Inspection Passed

Our evaluation included hand rod probing and advancing hand auger with Dynamic Cone Penetrometer (DCP) testing. Based upon our hand rod probing, the soils are firm to a depth of 36 inches. To confirm these results, hand auger borings were advanced at 4 locations across the building envelope. At 12-inch increments in the hand auger boring, to a depth of 3 feet, Dynamic Cone Penetrometer (DCP) Testing was performed in accordance with ASTM STP-399. The following data was retrieved from this testing:

Test 1: [Back right corner]

-- Depth----"N"------Soil Color---USCS--------Notes:
--- FSG -- 10 --- Dark Brown --- SM --------
--- -1' ---- 12 --- Light Tan ---- SM ---------
--- -2' ---- 7 --- Orange -------- SM -----
--- -3' ---- 12.5 --- Orange -------- SM -----

Test 2: [Front right corner]

-- Depth----"N"------Soil Color---USCS--------Notes:
--- FSG -- 10.5 --- Light tan --- SM --------
--- -1' ---- 11 --- Brown ------ SM ---------
--- -2' ---- 8 --- Brown -------- SM -----
--- -3' ---- 12 --- Brown -------- SM -----

Test 3: [Front left corner]

-- Depth----"N"------Soil Color---USCS--------Notes:
--- FSG -- 11 --- Light tan --- SM --------
--- -1' ---- 11.5 --- Brown ------ SM ---------
--- -2' ---- 7 --- Brown -------- SC/SM -----
--- -3' ---- 11 --- Brown -------- SC/SM ---

Test 4: [Back left corner]

-- Depth----"N"------Soil Color---USCS--------Notes:
--- FSG -- 10 --- Light tan --- SM --------
--- -1' ---- 10 --- Brown ------ SM ---------
--- -2' ---- 7.5 --- Brown -------- SM -----
--- -3' ---- 10.5 --- Brown -------- 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:

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Field Observations Report

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Contractor:	**H & H Homes**	Technician:	**Joshua Johnson**
Monitoring:	**DCP**		

Based on our observations and test results, the newly placed fill/existing soils appear to be suitable to provide support for the floor slab and footings, provided the floor slab has a loading of less than 150 pounds per square foot, and the footings have a design bearing capacity of 2,000, or less.

2 : Project Management Review Passed

Our client has authorized Building & Earth Sciences to perform an evaluation of the prepared building pad for this project. We understand that the structure will have a monolithic slab-on-grade floor system that will have foundations and a floor slab that will be supported by the newly placed structural fill soils. It appears that between 1 and 2 feet of structural fill soils have been placed to achieve the desired grades. The intent of our testing was to determine if the newly placed structural fill soils are adequate to provide a bearing capacity of 2,000 psf for the foundations, and have been compacted to 95% to support the floor slab for the new structure.

Our evaluation included hand rod probing, advancing hand auger borings with DCPs and performing a density test on the surface. Based upon our hand rod probing the newly placed soils are firm and resistant to significant penetration. Hand auger borings were then advanced at 4 selected location across the building envelope to determine the consistency of the below grade soils. At 12-inch increments in the hand auger boring, to a depth of 3 feet, Dynamic Cone Penetrometer (DCP) Testing was performed in accordance with ASTM STP-399. With proper evaluation, DCP Testing can be correlated to both bearing capacity and percent compaction. Based upon the results of this testing, the below grade soils that will support the foundations and floor slab are acceptable.

While on site, our representative also performed in place density testing to confirm compaction of the surface soils. Our testing was performed using the sand cone method in general accordance with ASTM D-1556. Our results were compared to an in-field proctor that was performed in general accordance with ASTM D-698. Based upon our tests results, the soils have been properly compacted at the surface.

It is important to note that our testing was isolated to the upper 3 feet. As such, we are not able to comment upon the settlement characteristics of deeper soils. Additionally, inclement weather (rain or snow), as well as construction traffic across the pad, can compromise the stability and support characteristics of the surface soils. If the surface soils become compromised, it will be necessary to return to the site for re-testing. This decision should be executed by your onsite Quality Control and Superintendents.

Field Observations Report

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Contractor:	**H & H Homes**	Technician:	**Joshua Johnson**
Monitoring:	**DCP**		

Photographs

Picture ID	
37190	

Picture ID	
37191	

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Field Observations Report

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Photographs

Picture ID	
37192	

Picture ID	
37193	

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BUILDING & EARTH
Geotechnical, Environmental, and Materials Engineers

ST-1

Test Date: 01/27/2022
Field Technician: Joshua Johnson
Tests requested by: N/R
Results provided to: N/R

Report of Field Density Testing

Project Name:	Lot 684 Manor @ Lexington MLP (CMT) Cameron, NC	Ambient Temperature:	45-65
Project Number:	RD220062	Weather:	Mostly Sunny
Project Location:	Cameron, NC	Wind Conditions:	Calm
Client:	H & H Homes	Results Provided To:	N/R
Contractor:	H & H Homes	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			113.6	14.7%

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	ASTMD1556	Finished Subgrade Soils -Building : Back Right Corner :		FSG	109.2	7.7	96%	PASS

Equipment Used:
Last Calibration:
Standard Counts:
Density:
Moisture:

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