

05/12/2025

**Dream Finders Homes-Carolinas** 2919 Breezewood Avenue Suite 400 Fayetteville, NC 28303

Attention : Blake Dickerhoff Chris Adams

**RE:** Daily Field Report for 05/10/2025 Lot 528 Creekside Oaks North (CMT) Lillington, NC Building & Earth Project No: RD250413

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:

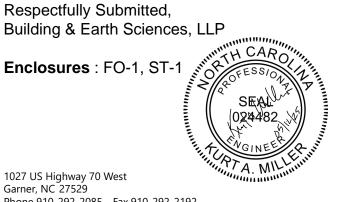
### FO-1 : Field Observations made on this date.

<ul> <li>Foundation Inspection</li> </ul>	Passed
<ul> <li>Project Management Review</li> </ul>	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 and ASTMD6938, using the results of field one-point as compared to the laboratory proctors. A total of 2 in-place field density tests were 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.



Phone 910-292-2085 Fax 910-292-2192 www.BuildingandEarth.com

Rachael Heat



# **Field Observations Report**

Project Name:	Lot 528 Creekside Oaks North (CMT) Lillington, NC	Project Number:	RD250413
Client Name:	Dream Finders Homes-Carolinas	Placement#:	FO-1
Contractor:	Dream Finders Homes-Carolinas	Technician:	Richard Stanek
Monitoring:	DCP		

#### **Foundation Inspection** 1:

Passed

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. Our evaluation as documented in this report includes:

- 1) A visual description of the residential lot
- 2) Comments on any improvements that 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 is relatively flat. Building locations are referenced from the street looking at the front of the residence. Maximum relief across the lot is approximately 1 foot. Surface water runoff appears to drain to the back.

Comments on Improvements:

The site has been stripped of surface cover and topsoil. It appears that 4-6 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	<ul> <li>Thickness of Fill</li> </ul>
Left Front	12 inches of fill
Left Rear	12 inches of fill
Center	12 inches of fill
Right Front	12 inches of fill
Right Rear	12 inches of fill

DCP Testing: Our representative performed Dynamic Cone Penetration (DCP) testing in general accordance with ASTM STP-399 at two representative locations to a depth of 36 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]

-- Depth----"N"-----Soil Color---USCS--------- FSG ---- 15+ ----- Brown ----- SC ---------- -1' ----- 15+ ----- Red ----- SC ---------- -2' ----- 15+ ----- Red Gray ----- SC --------- -3' ----- 15+ ----- Brown ----- SP -----

Test 2: [Back Left Corner]

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Rachael Heath Reviewed By



## **Field Observations Report**

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Client Name:	Dream Finders Homes-Carolinas	Placement#:	FO-1
Contractor:	Dream Finders Homes-Carolinas	Technician:	Richard Stanek
Monitoring:	DCP		

---- FSG ----- 9 ----- Brown ----- SC ---------- -1' ------ 15+ ------ Red ----- SC ---------- -2' ----- 15+ ------ Red Gray ----- SC -------- -3' ----- 15+ ----- Red Gray ----- SC -----

### Soil Density Testing:

Soil density testing was performed using the sand cone method of compaction and Aggregate by Nuclear Methods in general accordance with ASTM D1556 and D6938. The results of our tests are attached as ST-1.

#### Results:

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 1.5 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 2 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.

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Monitoring:	DCP					

	Photographs					
Picture ID	Site					
106597						
Picture ID	Drainage					
106598						

2///////////

### 1027 US Highway 70 West Garner, NC 27529 Phone 910-292-2085 Fax 910-292-2192 www.BuildingandEarth.com

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Geotechnical, Environmental, and Materials Engineers

ST-1

Test Date: 05/10/2025 Field Technician: Richard Stanek Tests requested by: N/R Results provided to: N/R

	Geotechnic	ai, Environmei	ntal, and Plateria	is engineers		Results	provide	ed to	: N/R					
				Report of Field Den	sity Te	esting								
	Cont	imber: Lil imber: RE cation: Lil Client: Dr ractor: Dr	lington, NC 0250413 lington, NC eam Finders	ide Oaks North (CMT) Homes-Carolinas Homes-Carolinas	Wii Result	t Temperat Weat nd Conditio s Provided uperintend	her: S ons: B I To: N	50-80 Sunny Breez N/R N/R	/					
Note	2 3	Elevation	by Technicia											
				Design & Specific	ation I	Data								
Are	a ID		Area	Description	Depth (ft) Test		Depth (ft) Test Method		Test Method		% Compact	_	sture nge Max	
FSG	Bldg	F	inished Subg	grade Soils -Building	0.0 - 2	.0 AST	M D-69	98	95 %	- 10.0	+ 10.0			
				Laboratory Pr	octors									
	tor ID		Description of Material						JSCS/AASHTO		SHTO Maximum Dry Density (pcf)		Optin Mois Conter	ture
1-р	oint			Density Test	Data				117.8	13.0	)%			
Test #	Area	IDs Proctor	Test Type	Location	Probe Depth (in)		Dr <u>y</u> Density		% Moisture	% Compaction	Result			
1	FSG-Bldg	1-point	ASTMD6938	:	6	For Informatio Only	r 119	.3	10.7	100+	PASS			
2	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Soils -Building : Front right corner :		FSG	117	.4	11.7	100%	PASS			
Equipment Used:33548-Troxler3430Standard Counts:Density:2022Last Calibration:10/23/2023Moisture:672														

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