

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

04/18/2025

Attention : Blake Dickerhoff
Chris Adams

RE: Daily Field Report for 04/16/2025
Lot 78 Magnolia Ridge (CMT) Lillington, NC
Building & Earth Project No : RD250319

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 compacting the surface soils with a vibratory roller before the placement of structural fill soils.

ST-1 : In place field density testing was performed for Finished Subgrade Soils -Building. The field density testing was performed in general accordance with ASTM D1556 and ASTM D6938, 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 indicated that Test #(s) ST-1-1 and ST-1-2 do not meet 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

Rachael Heath

Reviewed By

Field Observations Report

Project Name:	Lot 78 Magnolia Ridge (CMT) Lillington, NC	Project Number:	RD250319
Client Name:	Dream Finders Homes-Carolinas	Placement#:	FO-1
Contractor:	Dream Finders Homes-Carolinas	Technician:	Hernan Perdomo
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. 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 sloped. The site slopes downward from left to right, back to front. 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 Left.

Comments on Improvements:

The site has been stripped. It appears that 2 inches of topsoil has been removed from the building pad area.

Structural fill has not been placed at the site to level the building pad. According to conversations with Chris Adams, approximately 50 inches of fill will be placed to finished subgrade.

Measurements:

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

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 6 inches.

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 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 Center]

```
-- Depth---"N"-----Soil Color---USCS-----
-- FSG ---- 4 ---- Light Brown ---- SP/SM -----
-- -1' ---- 4 ---- Light Brown ---- SP/SM -----
-- -2' ---- 4 ---- Light Brown ---- SP/SM ----
-- -3' ---- 3.5 ---- Light Brown ---- SP/SM----
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Test 2: [Back Center]

```
--- Depth---"N"-----Soil Color---USCS-----
--- FSG ---- 4.5 ---- Light Brown ---- SP/SM -----
```

Field Observations Report

Project Name: **Lot 78 Magnolia Ridge (CMT) Lillington, NC** Project Number: **RD250319**
 Client Name: **Dream Finders Homes-Carolinas** Placement#: **FO-1**
 Contractor: **Dream Finders Homes-Carolinas** Technician: **Hernan Perdomo**
 Monitoring: **DCP**

--- -1' ----- 4.5 ----- Light Brown ----- SP/SM -----
 --- -2' ----- 3.5----- Light Brown ----- SP/SM -----
 --- -3' ----- 4 ----- Light Brown ----- SP/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 compacting the surface soils with a vibratory roller before the placement of structural fill soils.

Comments

Comment	Log Date	Log Time
Based on our observations and test results, we recommend compacting the surface soils with a vibratory roller before the placement of structural fill soils.	04/17/2025	13:51:42

Field Observations Report

Project Name:	Lot 78 Magnolia Ridge (CMT) Lillington, NC	Project Number:	RD250319
Client Name:	Dream Finders Homes-Carolinas	Placement#:	FO-1
Contractor:	Dream Finders Homes-Carolinas	Technician:	Hernan Perdomo
Monitoring:	DCP		

Photographs

Picture ID	
105070	

Field Observations Report

Project Name: **Lot 78 Magnolia Ridge (CMT) Lillington, NC** Project Number: **RD250319**
 Client Name: **Dream Finders Homes-Carolinas** Placement#: **FO-1**
 Contractor: **Dream Finders Homes-Carolinas** Technician: **Hernan Perdomo**
 Monitoring: **DCP**

Photographs

Picture ID	
105071	
105072	

Field Observations Report

Project Name: **Lot 78 Magnolia Ridge (CMT) Lillington, NC** Project Number: **RD250319**
 Client Name: **Dream Finders Homes-Carolinas** Placement#: **FO-1**
 Contractor: **Dream Finders Homes-Carolinas** Technician: **Hernan Perdomo**
 Monitoring: **DCP**

Photographs

Picture ID	
105073	
105074	



ST-1

Test Date: 04/16/2025
Field Technician: Hernan Perdomo
Tests requested by: chris
Results provided to: Chris

Report of Field Density Testing

Project Name: Lot 78 Magnolia Ridge (CMT) Lillington, NC Ambient Temperature: 60-80
Project Number: RD250319 Weather: Partly Cloudy
Project Location: Lillington, NC Wind Conditions: Breezy
Client: Dream Finders Homes-Carolinas Results Provided To: Chris
Contractor: Dream Finders Homes-Carolinas Superintendent: Chris

- Notes:
- 1 Test location by technician
 - 2 Elevation by Technician
 - 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			107.0	8.5%

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 : Rigth front corner 18' N : 6' E		FSG	99.4	5.3	93%	FAILED
2	FSG-Bldg	1-point	ASTMD6938	Finished Subgrade Soils -Building : Correlation Front Left Corner :	6	FSG	100.1	4.0	94%	FAILED

Equipment Used: 68060-Troxler3430
Last Calibration: 00/00/0000

Standard Counts: Density: 2199
Moisture: 736

Rachael Heath

Reviewed By