ADDRESS . : 205 CHERRY HILL DR SUBDIV: OAKMONT PH1 SC3 52LOTS
CONTRACTOR : GML DEVELOPMENT INC PHONE : (919) 793-5237
OWNER . . : OAKMONT DEV PTNRS LLC PHONE :
PARCEL . . : 03-0507-01- -0046- -28-
APPL NUMBER: 14-50033813 CP NEW RESIDENTIAL (SFD)
DIRECTIONS : T/S: 06/02/2014 04:11 PM JBROCK ----
OAKMONT #108

STRUCTURE: 000 000 49X46 5BDR SLAB W/ GARAGE
FLOOD ZONE . . . . : FLOOD ZONE X
BEDROOMS . . . . . : 5000000.00 PROPOSED USE . . . . . : SFD
SEPTIC - EXISTING? . . . . : NEW TANK WATER SUPPLY . . . . . : COUNTY

PERMIT: CPSF 00 CP * SFD

TYP/SQ	REQUESTED / COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
A814 01	7/21/14	TW	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 002556777
	7/18/14	AP	205 cherry hill dr lillington 27546
			T/S: 07/18/2014 05:05 PM TWARD
B101 01	7/21/14	MR	R*BLDG FOOTING / TEMP SVC POLE TIME: 17:00 VRU #: 002556801
	7/21/14	AP	T/S: 07/21/2014 12:47 PM MREARIC
B103 01	7/25/14	MR	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 002558948
	7/25/14	AP	T/S: 07/25/2014 01:08 PM MREARIC
P309 01	7/30/14	FS	R*PLUMB UNDER SLAB VRU #: 002560563
	7/30/14	AP	T/S: 07/30/2014 03:23 PM FSPIVEY
B111 01	8/01/14	TI	R*BLDG SLAB INSP/TEMP SVC POLE TIME: 17:00 VRU #: 002561512
	11	AP-MR	T/S: 07/31/2014 10:42 AM VBROWN

COMMENTS AND NOTES

98 also

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

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

BUILDING & EARTH

07/29/2014

Field Observations Report

Project Name:	**Lot 108 Oakmont, McKee Homes**	Project Number:	**RD 140322**
Client Name:	**McKee Homes**	Placement#:	**FO-1**
Contractor:	**McKee Homes**	Technician:	**William Cook**
Monitoring:	**DCP**		

1 : Observation of Lot 108 Oakmont Passed

Our representative arrived to perform Dynamic Cone Penetrometer (DCP) testing to measure the consistency of the near surface soils for the support of the planned residential structure.

At the time of our arrival, Plumbers were installing pipes. The stem wall was in place and has been filled with imported soils.

Lot slopes to the back and left side of the lot stem wall is 1'-3' high. Probing with a hand rod showed a consistent surface with 1-3 inch penetration.

Our representative performed two tests to characterize the existing soils at the site.

Location 1:Average DCP for -FSG' was 5.5 blows; Red Silty Sand
Center Left Wall---------- -1' was 8 blows; Red Silty Sand
---------- -2' was 7.5 blows; Red Silty Sand
---------- -3' was 8 blows; Brown Silty Sand
---------- -4' was +15 blows; Brown Silty Sand

Location 2:Average DCP for -FSG' was 7 blows; Red Silty Sand
Next to Left Side Garage Wall---- -1' was 6.5 blows; Red Silty Sand
25' Back from front wall---------- -2' was +15 blows; Brown Silty Sand
---------- -3' was +15 blows; Brown Silty Sand

2 : Project Management Review Passed

Our client has authorized Building & Earth Sciences to perform an evaluation of the prepared building pad for this project. The structure has a stem wall foundation, and the foundation walls have been backfilled to the slab grade using structural fill soils. It appears that between 1 and 3 feet of structural fill soils have been placed to achieve the slab grade. The intent of our testing was to determine if the newly placed structural fill soils have been compacted to 95% to support the floor slab and the interior lug footings.

Our evaluation included hand rod probing the entire area for consistency, performing hand auger borings with DCPs, and performing in place density tests to confirm compaction. Based upon our hand rod probing, the surface soils are firm and resistant to penetration. At selected locations, hand auger borings were advanced at 2 locations within the backfilled area. At 12-inch increments in the hand auger boring, to a depth of 4 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 our testing, the soils below the surface have been compacted properly at the locations tested.

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.

Therefore based upon the results of our testing, the newly placed fill soils have been compacted adequately to provide support for the interior lug foundations and the floor slab. Additionally, inclement weather (rain or snow), as well as construction traffic across the

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Field Observations Report

Project Name:	**Lot 108 Oakmont, McKee Homes**	Project Number:	**RD 140322**
Client Name:	**McKee Homes**	Placement#:	**FO-1**
Contractor:	**McKee Homes**	Technician:	**William Cook**
Monitoring:	**DCP**		

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.

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Rachael Heath
Reviewed By

BUILDING & EARTH
Geotechnical, Environmental, and Materials Engineers

ST-1

Test Date: 07/29/2014
Field Technician: William Cook
Tests requested by: N/R
Results provided to: N/R

Report of Field Density Testing

Project Name: Lot 108 Oakmont, McKee Homes
Project Number: RD 140322
Project Location: Lillington, NC
Client: McKee Homes
Contractor: McKee Homes

Ambient Temperature: 70-90
Weather: Partly Cloudy
Wind Conditions: Breezy
Results Provided To: N/R
Superintendant: N/R

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			117.6	11.0%

Density Test Data

Test #	IDs		Test Type	Location	Elev. (ft)	Dry Density(pcf)	% Moisture	% Compaction	Result
	Area	Proctor							
1	FSG-Bldg	1-point	ASTMD1556	Finished Subgrade Soils -Building : Center Left Wall 4' Right :	FSG	113.7	7.6	97%	PASS

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

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