

Baucom Business Plaza, LLC
461 Cedar Rock Trail
Fuquay Varina, NC 27526

02/10/2025

Attention : Jim Moore

RE: Daily Field Report for 01/29/2025
Baucom Business Plaza - Fuquay Varina NC
Building & Earth Project No : RD250053

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.

- Soil Observation
- DCPs last building footings

For Information Only
Passed

ST-2 : In place field density testing was performed for Moisture Check. 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 5 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.

Comment 1 : PM Note: Building and Earth was prepared to perform soil density testing by NCDOT Conventional Density Testing methods (volumeter) by a NCDOT certified technician (Mr. Joshua Casey, HiCAMS #11057) on this day. However, upon arrival to the site our volumeter malfunctioned and could not be used to perform today's testing.

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-2

Field Observations Report

Project Name: Baucom Business Plaza - Fuquay Varina NC	Project Number: RD250053
Client Name: Baucom Business Plaza, LLC	Placement#: FO-1
Contractor: KLB Construction	Technician: Joshua S. Casey
Monitoring: DCP	

1 : Soil Observation

Our technician arrived on site to perform soil density testing by NCDOT Conventional Density method (volumeter) on this day. However, upon arrival our equipment malfunctioned and could not be used. Density testing was performed by sand cone and nuclear density methods, with a nuclear gauge correlation performed to calibrate the nuclear gauge to the soil being tested. Please see ST-2 for testing results.

2 : DCPs last building footings

Passed

Our technician was onsite to perform a shallow foundation inspection for Building BR2 at various footing locations across the building. The foundation requires a bearing capacity of 2000 psf. Excavations were complete upon our arrival onsite and the bearing soils appeared to be relatively flat and free of organic material and debris. Bearing soils appeared to consist mostly of moist, tan sandy clay. No standing water was noted on the bearing surface. Hand rod probing was performed on 100% of the bearing surface with average penetration of approximately 2-4 inches. Our representative performed Dynamic Cone Penetration (DCP) testing in general accordance with ASTM STP-399 at 4 representative locations to a depth of 36 inches. Water was not observed within the DCP boreholes.

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

Test 1:

--- Depth---"N"-----	Soil Color-----	USCS----	Notes
--- BOF----- 7.5-----	Tan -----	CL-----	Soils appeared to be dry of optimum moisture
--- -1'----- 15-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -2'----- 15-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -3'----- 13-----	Tan -----	CL-----	Soils appeared to be near optimum moisture

Test 2:

--- Depth---"N"-----	Soil Color-----	USCS----	Notes
--- BOF----- 10-----	Tan -----	CL-----	Soils appeared to be dry of optimum moisture
--- -1'----- 15+-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -2'----- 15+-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -3'----- 15+-----	Tan -----	CL-----	Soils appeared to be near optimum moisture

Test 3:

--- Depth---"N"-----	Soil Color-----	USCS----	Notes
--- BOF----- 11-----	Tan -----	CL-----	Soils appeared to be dry of optimum moisture
--- -1'----- 15-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -2'----- 15+-----	Tan -----	CL-----	Soils appeared to be near optimum moisture
--- -3'----- 15+-----	Tan -----	CL-----	Soils appeared to be near optimum moisture

Test 4:

--- Depth---"N"-----	Soil Color-----	USCS----	Notes

Field Observations Report

Project Name:	Baucom Business Plaza - Fuquay Varina NC	Project Number:	RD250053
Client Name:	Baucom Business Plaza, LLC	Placement#:	FO-1
Contractor:	KLB Construction	Technician:	Joshua S. Casey
Monitoring:	DCP		

--- BOF----- 9----- Tan ----- CL----- Soils appeared to be dry of optimum moisture
--- -1'----- 11----- Tan ----- CL----- Soils appeared to be near optimum moisture
--- -2'----- 14 ----- Gray ----- CL----- Soils appeared to be near optimum moisture
--- -3'----- 11----- Tan ----- CL----- Soils appeared to be near optimum moisture

*BOF=Bottom of Footing

Results:

Based on our observations and test results, the required bearing capacity of (2,000 psf) is available at the location and elevations tested on this date.

To minimize the potential for future softening of the bearing materials due to water infiltration; reinforcing steel and concrete placement should be completed as soon as practically possible or concrete mud mat should be placed. Any water infiltration should be removed through gravity drainage and/or sump pits and pumping. Any foundations that meet bearing capacity requirement today and experience water infiltration before concrete placement, should be retested by Building & Earth Sciences.



ST-2

Test Date: 01/29/2025
 Field Technician: James Johnson
 Tests requested by: Brandon Beasley
 Results provided to: Efrain Zavala with KLB Construction

Report of Field Density Testing

Project Name: Baucom Business Plaza - Fuquay Varina NC Ambient Temperature: 40-50
 Project Number: RD250053 Weather: Overcast
 Project Location: Fuquay Varina, NC Wind Conditions: Moderate
 Client: Baucom Business Plaza, LLC Results Provided To: Efrain Zavala with KLB Construction
 Contractor: KLB Construction Superintendent: Brandon Beasley

- Notes:
- 1 Test location by technician
 - 2 Elevation by Contractor
 - 3 Fill/backfill monitored by technician

Design & Specification Data

Area ID	Area Description	Depth (ft)	Test Method	% Compaction	Moisture Range	
					Min	Max
Moisture	Moisture Check	0.0 - 20.0	AASHTO T-99	95 %	- 5.0	+ 5.0

Laboratory Proctors

Proctor ID	Description of Material	USCS/AASHTO	Maximum Dry Density (pcf)	Optimum Moisture Content (%)
1-point			108.0	15.0%

Density Test Data

Test #	IDs		Test Type	Location	Probe Depth (in)	Elev. (ft)	Dry Density(pcf)	% Moisture	% Compaction	Result
	Area	Proctor								
1	Moisture	1-point	ASTMD1556	Moisture Check : Storm drain drop inlet box #20 (turning lane) 15' West : 12' South		-1' FSG	112.9	12.8	100+	PASS
2	Moisture	1-point	ASTMD6938	Moisture Check : Correlation test for information only	6		109.9	13.6	100+	PASS
3	Moisture	1-point	ASTMD6938	Moisture Check : Storm drain drop inlet box 1 (turning lane) 39' West : 30' South	6	-1' FSG	110.7	15.5	100+	PASS
4	Moisture	1-point	ASTMD6938	Moisture Check : Storm drain drop inlet box 20 (turning lane) 18' West : 78' South	6	FSG	111.0	15.3	100+	PASS
5	Moisture	1-point	ASTMD6938	Moisture Check : Storm drain drop inlet box 1 (turning lane) 42' West : 99' North	6	FSG	109.1	13.7	100+	PASS

Equipment Used: 28503-Troxler3430
 Last Calibration: 00/00/0000

Standard Counts: Density: 1610
 Moisture: 642

Josh Casey
 Reviewed By



ST-2



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Comments

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Photographs

Picture ID	Contractor placing and compacting backfill for turning lane.	Picture ID	Contractor compacting backfill for turning lane.
100296		100318	

Picture ID	Turning lane.	Picture ID	Contractor compacting fill soils for turning lane.
100319		100320	