

Takla Engineering, PLLC

NC Firm License # P-1952

Consulting | Design | Efficiency

PO Box 71298 Durham, NC 27722 | Office@TaklaEngr.com

Alfred A. Takla, PE

Andy A. Takla, PE

AlfredTakla@TaklaEngr.com

AndyTakla@TaklaEngr.com

NC PE License # 047507

NC PE License # 050695

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Project: Serenity Lot 314
Location: 253 Inspiration Way, Fuquay-Varina, NC
Company: ICG Homes
Care Of: Will Dodge
Subject: Footing and 3rd Party Inspection
Job Number: 1-2174-25



As requested, engineer(s) from Takla Engineering visited the above referenced site on April 3rd, 2025 to evaluate the bearing capacity of the sub-grade soils supporting:

- ☒ Foundation wall and/or interior pier footings including attached garage
- ☐ Turndown monoslab on grade and interior lug footings including attached garage
- ☒ Front porch foundation wall footings
- ☒ Rear porch post footings
- ☐ Detached garage turndown footings

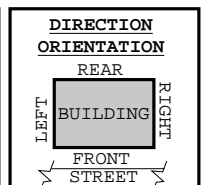
*Patio slabs with no thickened or lug footings are outside the scope of our inspection.

Observations of lot topography, vegetation, and soil characteristics were made to characterize the site. In-situ subgrade soil bearing capacity was evaluated by means of probing excavation bottoms with a 1/2" diameter steel probe rod and/or a static cone penetrometer (SCPT) with a 60 degree cone assembly, friction sleeve, and pressure gauge readings correlating with blow counts from a Dynamic Cone Penetrometer (DCP). The evaluations indicate the average bearing capacity of the soils directly supporting the above referenced elements meet or exceed the minimum 2000 pounds per square foot as referenced by NCRC 2018, Chapter 4 and engineered specifications. It is important to note that this evaluation did not include mechanical soil borings, standard Proctor tests, or density testing. Additionally, this assessment does not address site drainage, which is crucial for maintaining long-term bearing capacity. Drainage design and implementation are outside the scope of this evaluation.

We also performed a 3rd party monoslab inspection in-lieu of city inspector using the plan provided by the builder and approved by municipal building inspections department. Based on our inspection, we verify the following:

- Depth and size of footings mentioned above meets or exceeds per plan specifications and code requirements.
- Locations of all footing excavations are found to be per plans.
- Footings are prepared in compliance with NCRC 2018 Chapter 4 (Sections R401-R404).
- **All conditions are acceptable to receive concrete.**

Limitations of Inspection: Services provided are in accordance with the standard of practice for structural engineering, the North Carolina Residential Code (2018 edition) and within the limits imposed by scope, schedule and budget. The determinations contained in this report are based on conditions observed at the time of the evaluation. No guarantees or warranties, expressed or implied, under this agreement or otherwise, shall be construed in connection with services provided. Sequencing, shoring, means and methods of construction are considered beyond the scope of this report. All information used to form decisions and recommendations provided to engineer are taken as truthful. Takla Engineering assumes no responsibility for untruthful statements provided by any party. Lastly, while every effort has been made to ensure accuracy in the preparation of this document, the maker cannot guarantee against human error nor evaluations of structural elements which are concealed from visual inspection.



Harnett COUNTY INSPECTIONS DEPARTMENT

3RD PARTY INSPECTION FORM

RECORD OF THE INSPECTION OF A COMPONENT OR ELEMENT BY A NC LICENSED ARCHITECT OR ENGINEER

Project Information:

Residential Single-Family Project: <input checked="" type="radio"/> Y <input type="radio"/> N	Commercial Project: Y <input checked="" type="radio"/> N
Code Enforcement Project No:	Permit No: SFD2503-0144
Project Name: Serenity Lot 314	Owner:
Project Address: 253 Inspiration Way	Suite No:
Date Inspected: 4-3-2025	Contractor Name: ICG Homes
Component Inspected: Footing and 3rd Party Inspection (Will Dodge)	

Responsible Licensed NC Architect or NC Engineer

Name:	Alfred Takla, PE
Firm Name:	Takla Engineering, PLLC
Phone Numbers:	Office: 919-258-2648 Mobile: 919-332-7903
Email Address:	alfredtakla@taklaengr.com
Mailing Address:	PO Box 71298 Durham, NC 27722

APPLICABLE CODE: NCRC 2018

2018 NCBC = 2018 NC Building Code; 2018 NCRC = 2018 NC Residential Code

Describe Element/Component/Type of Inspection: *

House Crawl Space Subgrade and 3rd Party Inspection
(With Front and Rear Porch and Attached Garage)

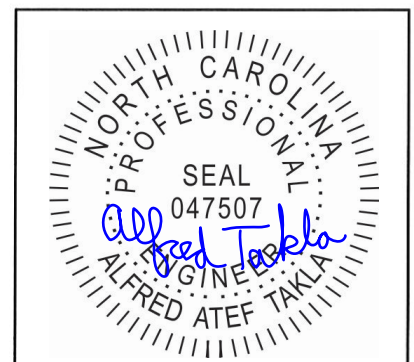
*(subgrade form/letter may also be required)

Attestation/Signature:

By signing below, I certify that the component and/or element of the building as identified on this form has been inspected by me or someone under my direct supervision per subsection (b2) of NC G.S. 153A-352 and is in compliance with the approved plans & specifications for the project. This inspection is in compliance with all of the requirements of the above referenced code. Attach any additional documents if needed.

Alfred Takla

Licensed Architect or Engineer



Inspection Department disclaimer:

Upon the receipt of a signed written document as required under subsection (a) of Article 160A-413.5., Code Enforcement shall be discharged and released from any liabilities, duties and responsibilities imposed by this article or in common law from any claim arising out of or attributed to the component or element in the construction of the building for which the signed written document was submitted. Be aware that this inspection will be noted in all inspection records including the Certificate of Occupancy or Certificate of Compliance. This inspection does not address any local ordinances or zoning requirements.