



BRIAN TAYLOR
STATE FIRE MARSHAL

September 30, 2025

Mr. William Wood
Inspections Field Supervisor – Inspections Department – Guilford County
400 West Market Street
Greensboro, NC 27401

RE: 2018 NC Residential Code (NCRC) Table R302.1 Exterior Walls

Mr. Wood:

This letter is in response to your request for a formal interpretation from the Office of State Fire Marshal ("OSFM") dated 1/23/25 and received by OSFM the same day. This formal response letter serves to complete the documentation requested by William Wood of Guilford County. Thank you for your patience in waiting for this formal interpretation response while our office handled other commitments. Requests are addressed below in the order in which they are posed.

Stated in relevant parts from Appendix E form and email:

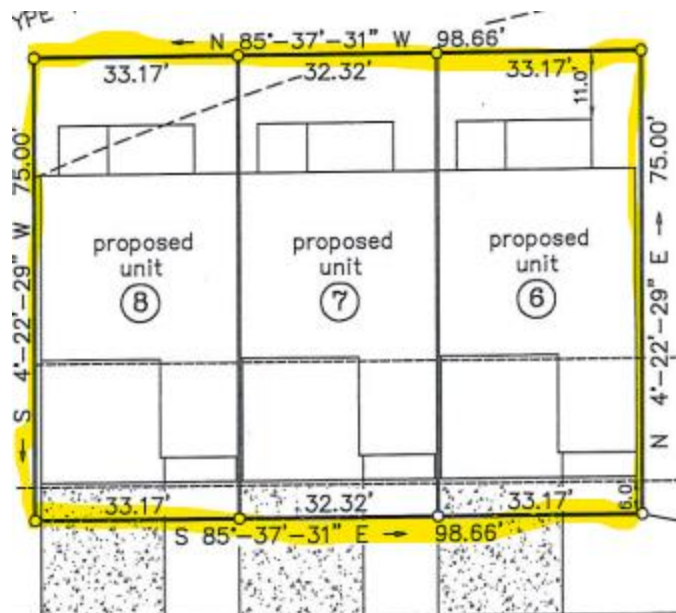
"The code section(s), Interpretations and HB 166 seem to be conflicting. We would just like a little clarification as to which one is correct.

I am writing to request a formal interpretation of section R302.1, Table R302.1, previous formal interpretations and the requirements of HB 166/SL 2024-49. They seem to be conflicting, and the "sunset" date appears to be when the new code is approved, and changes are made. However, there are no changes specific to townhomes that I can see in the copy of the 2024 NCRC that I have from the engineering newsletter links. Units 6 & 8 are the specific units in question, but the project is just starting so they will all be questionable with a 0 deeded lot line. In the "Site plan" PDF the distances between buildings is shown as well as the "deeded property lines" around the groups of townhomes. The sides are a 0 setback, the front is 8' and the back is 11'. I tried requesting a deed restriction during review per the interpretations but was told that it was unclear..... Hence the reason I am seeking clarification. The word doc. Is a copy of both code tables from 2018 & 2024, HB 166 & a link to the interpretation. The "completed form" PDF is the required Appendix E form for request for formal interpretation.

Below is a snapshot of what I received from permit application for a site plan. The highlighted line is confirmed as the portion that the owner will own, all other is common area."

OFFICE OF STATE FIRE MARSHAL

1202 MAIL SERVICE CENTER | RALEIGH NC 27699 -1202 | TEL 919.647.0000 | FAX 866.851.6508 | NCOSFM.GOV



Remarks:

Attachment A is comprised of the request for formal interpretation as well as all supporting information submitted with the request.

Code Analysis: The scope of the 2018 North Carolina Residential Code (NCRC) includes one or more detached one-and-two-family dwellings and townhouses located on a parcel not more than three stories above grade plane in height with a separate means of egress and their accessory structures not more than three stories above grade plane in height.

2018 NCRC, Table R302.1 provides requirements related to a building's location on a property, including minimum fire resistance ratings and minimum fire separation distances for exterior walls, projections, openings in walls and penetrations for all buildings and structures within the scope of the 2018 NCRC.

"FIRE SEPARATION DISTANCE" is defined in 2018 NCRC, Chapter 2 as the distance between the exterior surface of a building and one of the following three locations: the nearest interior lot line; the centerline of a street, alley or public way; or an imaginary line placed between two buildings on the same lot.

North Carolina General Assembly Session Law 2024-49, Section 2.2, which became law on 9/11/24, directs that the Code be amended, notwithstanding Section R302 and Table R302.1 within the North Carolina Residential Code, to clarify that a fire separation distance between the exterior end wall of a townhouse building having a fire-resistance rating of 0 hours and the closest interior lot line may be less than 3 feet when any exterior elements of an adjacent townhouse or building are located at a distance equal to or greater than 6 feet. Additionally, the law states that the separation of an exterior end wall of a townhouse building less than 6 feet shall provide a minimum cumulative fire-resistance rating of 2 hours.



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2018 NC Residential Code
Table R302.1 EXTERIOR WALLS (220315 Item B-4)

**TABLE R302.1
EXTERIOR WALLS**

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E 119 or UL 263 with exposure from both sides	< 3 feet <u>≤ 5 feet²</u>
	Not fire-resistance rated	0 hours	≥ 3 feet <u>> 5 feet²</u>
Projections	Fire-resistance rated	1 hour on the underside	< 3 feet <u>≤ 5 feet²</u>
	Not fire-resistance rated	0 hours	≥ 3 feet <u>> 5 feet²</u>
Openings in walls	Not allowed	N/A	< 3 feet <u>≤ 5 feet²</u>
	Unlimited	0 hours	≥ 3 feet <u>> 5 feet²</u>
Penetrations	All	Comply with Section R302.4	< 3 feet <u>≤ 5 feet²</u>
		None required	≥ 3 feet <u>> 5 feet²</u>

For SI: 1 foot = 304.8 mm.

N/A = Not Applicable.

a. Fire separation distance requirement for multiple dwellings on a single parcel.

The delayed effective date of this Rule is January 1, 2025.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.

....

[RB] FIRE SEPARATION DISTANCE. The distance measured from the building face to one of the following:

1. To the closest interior *lot line*.
2. To the centerline of a street, an alley or public way.
3. To an imaginary line between two buildings on the *lot*.

The distance shall be measured at a right angle from the face of the wall.

....



FIRE-RESISTANCE REQUIREMENTS FOR TOWNHOUSE END UNITS

SECTION 2.2.(a) Definitions. – For purposes of this section, "Code" means the North Carolina State Building Code collection, and amendments to the Code, as adopted by the Council. As used in this section, "Council" means the Building Code Council. On or after January 1, 2025, "Council" means the Residential Code Council.

SECTION 2.2.(b) Fire Resistance for Exterior Wall Rule. – Until the effective date of the rules to amend the Code that the Council is required to adopt pursuant to this section, the Council and local governments enforcing the Code shall follow the provisions of subsection (c) of this section as it relates to Section R302 and Table R302.1 within the North Carolina Residential Code.

SECTION 2.2.(c) Implementation. – Notwithstanding Section R302 and Table R302.1 within the North Carolina Residential Code, a fire separation distance between the exterior end wall of a townhouse building having a fire-resistance rating of 0 hours and the closest interior lot line may be less than 3 feet when any exterior elements of an adjacent townhouse or building are located at a distance equal to or greater than 6 feet. Any separation of an exterior end wall of a townhouse building less than 6 feet shall provide a minimum cumulative fire-resistance rating of 2 hours.

SECTION 2.2.(d) Additional Rulemaking Authority. – The Council shall adopt rules to amend Section R302 and Table R302.1 to be consistent with subsection (c) of this section. Notwithstanding G.S. 150B-19(4), the rule adopted by the Council pursuant to this section shall be substantively identical to the provisions of subsection (c) of this section. Rules adopted pursuant to this section are not subject to Part 3 of Article 2A of Chapter 150B of the General Statutes. Rules adopted pursuant to this section shall become effective as provided in G.S. 150B-21.3(b1), as though 10 or more written objections had been received as provided in G.S. 150B-21.3(b2).

Page 10

Session Law 2024-49

Senate Bill 166

SECTION 2.2.(e) Sunset. – This section expires when permanent rules adopted as required by subsection (d) of this section become effective.

....

.....

Conclusions: 2018 NCRC, Table R302.1 requires the exterior walls of all buildings and structures within the scope of the 2018 NCRC to have a minimum of a 1-hour fire-resistance rating if the minimum fire separation distance to the closest interior lot line is less than 3 feet. 2018 NCRC, Table R302.1 allows the exterior walls of all buildings and structures within the scope of the 2018 NCRC to have a 0-hour fire-resistance rating if the minimum fire separation distance to the closest interior lot line is more than or equal to 3 feet. North Carolina General Assembly Session Law 2024-49, Section 2.2 provides an exception for the end walls of townhouse end units only to the requirements of 2018 NCRC, Section R302 and Table R302. Per the law, the end wall of a townhouse end unit that is allowed by 2018 NCRC, Table R302.1 to have a 0-hour fire-resistance rating may be located less than 3 feet from the closest interior lot line when exterior elements of an adjacent townhouse or building added later are located at a distance equal to or greater than 6 feet. If the added adjacent townhouse or building is located less than 6 feet from a townhouse with a 0-hour fire resistance rated end wall, a minimum cumulative fire-resistance rating of 2 hours shall be provided between the two townhouses or building and townhouse.



**OFFICE OF STATE
FIRE MARSHAL**
NC DEPARTMENT OF INSURANCE

Sincerely,

David Rittlinger, PE, LEED AP
Division Chief – Codes & Interpretations
North Carolina Office of State Fire Marshal

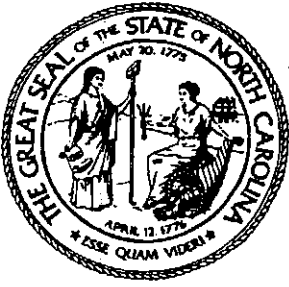
cc: Nathan Childs, NCDOJ, counsel for NC Building Code Council, nchilds@ncdoj.gov
Nicki Shaffer, NCDOJ, counsel for NC Residential Code Council, wshaffer@ncdoj.gov
Pak Yip, NCOSFM, Chief Code Consultant, pak.yip@ncdoi.gov



ATTACHMENT A

(see attached pdf)





**APPENDIX E
APPEALS
NORTH CAROLINA
BUILDING CODE COUNCIL**
1429 Rock Quarry Road, Suite 105
Raleigh, North Carolina 27610
(919) 647-0008
david.rittlinger@ncdoi.gov

GS 153A-374, GS 160A-434
Formal Interpretation by NCDOI ☒ X
Appeal of Local Decision to NCDOI _____

Hearing Date _____ / _____ / _____
GS 143-140, GS 143-141
Appeal of Local Decision to NCBCC _____
Appeal of NCDOI Decision to NCBCC _____

APPELLANT William Wood **PHONE** (336) 430 - 1157 **x** _____
REPRESENTING Guilford County, N.C.
ADDRESS 400 W. Market St
CITY Greensboro **STATE** N.C. **ZIP** _____
E-MAIL wwood@guilfordcountync.gov **FAX** (_____) _____ - _____

North Carolina State Building Code, Volume 2018 NCRC - Section Table R302.1/HB 166-SL2024-49
Code Int. 9/18/12 & 3/21/19

REQUEST ONE: ☒ [X] Formal Interpretation by NCDOI ☐ [] Appeal of Local Decision to NCBCC
☐ [] Appeal of Local Decision to NCDOI ☐ [] Appeal of NCDOI Decision to NCBCC

Type or print. Include all background information as required by the referenced General Statutes and the attached policies. Attach additional supporting information.

REASON: The code section(s), Interpretations and HB 166 seem to be conflicting.
We would just like a little clarification as to which one is correct.

Signature William J. Wood **APPEAL TO NCDOI/NCBCC**
DATE: 1-23-25 FORM 3/14/17

2018 NCRC:

TABLE R302.1 EXTERIOR WALLS



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Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E119 or UL 263 with exposure from both sides	< 3 feet < 5 feet ^a
	Not fire-resistance rated	0 hours	≥ 3 feet > 5 feet ^a
Projections	Fire-resistance rated	1 hour on the underside	< 3 feet < 5 feet ^a
	Not fire-resistance rated	0 hours	> 3 feet > 5 feet ^a
Openings in walls	Not allowed	N/A	< 3 feet < 5 feet ^a
	Unlimited	0 hours	> 3 feet > 5 feet ^a
Penetrations	All	Comply with Section R302.4	< 3 feet < 5 feet ^a
		None required	> 3 feet > 5 feet ^a

For SI: 1 foot = 304.8 mm.
N/A = Not Applicable.

^a Fire separation distance requirement for multiple dwellings on a single parcel.
(The delayed effective date of this Rule is January 1, 2025.)

2024 NCRC:

TABLE R302.1(1) TABLE R302.1(1)
EXTERIOR WALLS

EXTERIOR WALL ELEMENT		MINIMUM FIRE-RESISTANCE RATING	MINIMUM FIRE SEPARATION DISTANCE
Walls	Fire-resistance rated	1 hour—tested in accordance with ASTM E119, UL 263 with exposure from both sides	< 3 feet < 5 feet ^c
	Not fire-resistance rated	0 hours	3 feet > 5 feet ^c
Projections	Fire-resistance rated	1 hour on the underside, or heavy timber, or fire-retardant-treated wood ^{a, b}	< 3 feet < 5 feet ^c
	Not fire-resistance rated	0 hours	> 3 feet > 5 feet ^c
Openings in walls	Not allowed	NA	< 3 feet < 5 feet ^c
	Unlimited	0 hours	3 feet > 5 feet ^c
Penetrations	All	Comply with Section R302.4	< 3 feet < 5 feet ^c
		None required	3 feet > 5 feet ^c

For SI: 1 foot = 304.8 mm.
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- ^a The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.
- ^b The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.
- ^c Fire separation distance requirement for multiple dwellings on a single parcel.

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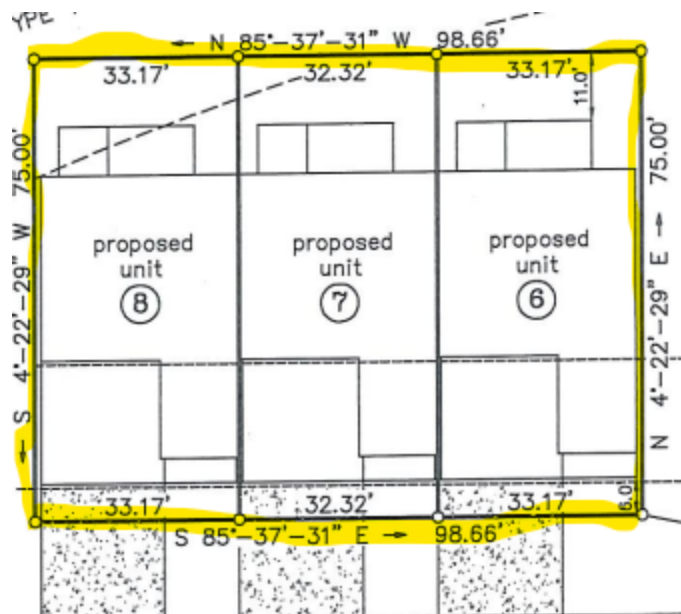
From: [William Wood](#)
To: [Rittlinger, David B](#)
Cc: [Cole Perkinson](#); [Dittman, Daniel E](#)
Subject: [External] R302.1 & HB 166/SL2024-49
Date: Thursday, January 23, 2025 3:38:15 PM
Attachments: [image001.png](#)
[image533389.png](#)
[image125664.png](#)
[image280825.png](#)
[image933674.png](#)
[OakdaleForest Site plan.pdf](#)
[Formal interpretation Request R302.1.docx](#)
[Completed form R302.1 Interpretation.pdf](#)

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Mr. Rittlinger

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Please let me know if you have any questions or need anything else.

Thanks in advance!!

Regards,

William Wood

Building Inspection Field Supervisor

336-430-1157

wwood@guilfordcountync.gov



William Wood

Inspections Field Supervisor

Inspections Department

Guilford County Government

400 West Market Street, Greensboro, NC 27401

336-641-3707 | f: 336-641-6460

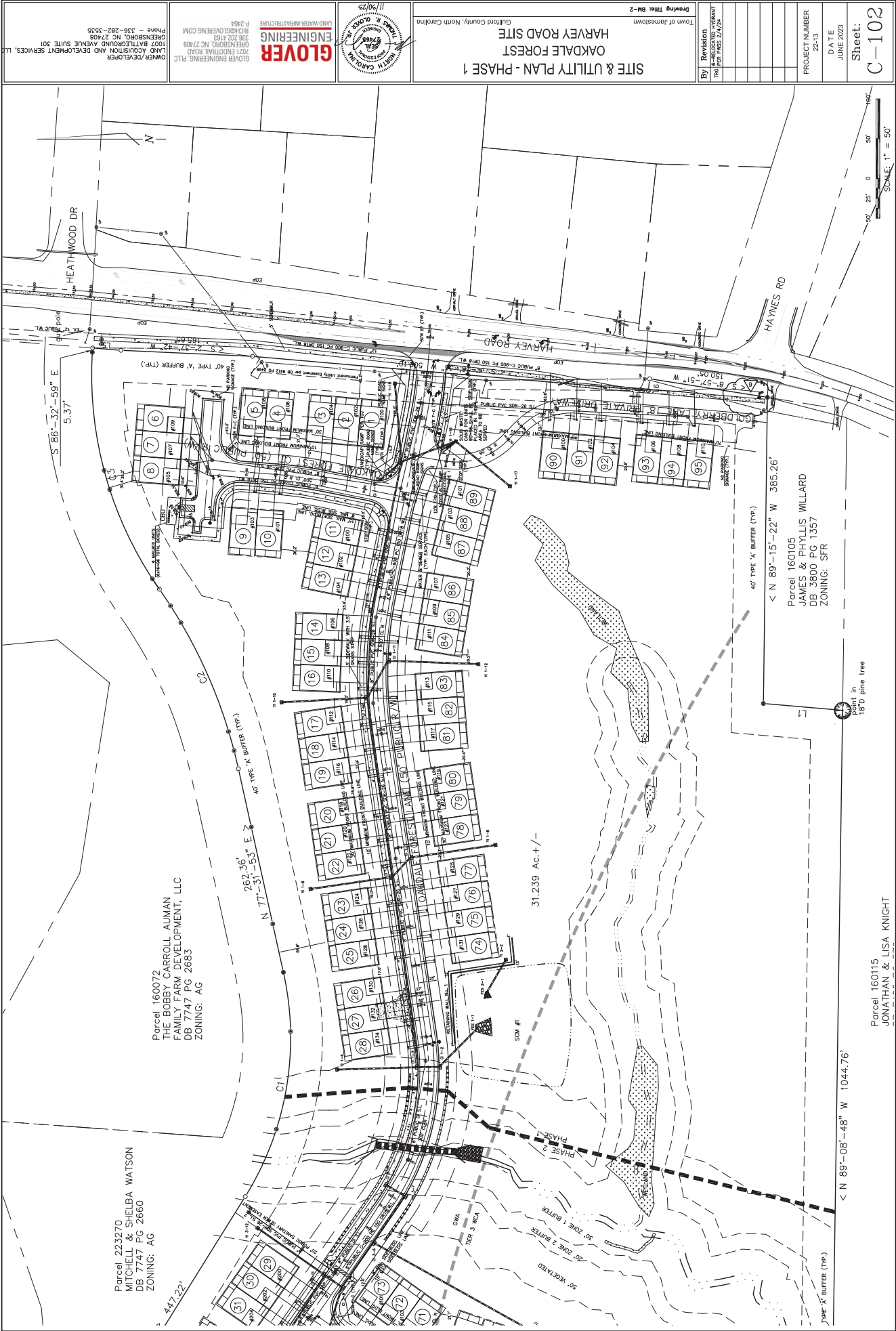
wwood@guilfordcountync.gov | www.guilfordcountync.gov



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MITCHELL & SHELBA WATSON
DB 7747 PG 2660
ZONING: AG

Parcel 160072
THE BOBBY CARROLL AUMAN
FAMILY FARM DEVELOPMENT, LLC
DB 7747 PG 2663
ZONING: AG

Parcel 160105
JAMES & PHYLLIS WILLARD
DB 3800 PG 1357
ZONING: SFR

< N 89°-08'-48" W 1044.76'

Parcel 160115
JONATHAN & LISA KNIGHT

point in
15' D pine tree

TYPE 'A' BUFFER (TYP.)

40' TYPE 'A' BUFFER (TYP.)

N 77°-31'-53" E 262.36'

S 86°-32'-59" E 5.37'

SCALE: 1" = 50'

SITE & UTILITY PLAN - PHASE 1
OAKDALE FOREST
HARVEY ROAD SITE
Guilford County, North Carolina



GLOVER ENGINEERING
LAND-WATER-INFRASTRUCTURE
P.0604
GREENSBORO, NC 27409
7021 ENDORFAL ROAD
GREENSBORO, NC 27409
Phone - 336-282-2535
FAX - 336-282-2535
OWNER/DESIGNER
LAND ACQUISITION AND DEVELOPMENT SERVICES, LLC

By	Revision
J. Knight	1.0
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