#### TOWN OF ANGIER BOARD OF ADJUSTMENT AGENDA January 23, 2024 6:30 P.M. Municipal Building 28 North Raleigh Street Angier, North Carolina 27501

- 1. Opening
- 2. Pledge Of Allegiance
- 3. Invocation
- 4. Approval of Previous Meeting Minutes
- 5. Swearing in of Witnesses for Evidentiary Hearings
- 6. New Business
  - A. Variance Application <u>Applicant:</u> Tara DiDonato <u>Location of Property:</u> 7841 Lagenaria Dr. <u>Variance Request</u>:Reduce the side setback in R-10 zoning District by 2.7 feet
  - B. Special Use Permit Application <u>Applicant</u>: Mattamy Homes <u>Location of Property</u>: 350 S. Raleigh St., Angier, NC <u>Special Use Request</u>: Construct 168 Townhomes in R-15 Zoning District
- 7. Old Business

None.

8. Adjournment

#### Town of Angier Board of Adjustment Tuesday, October 24, 2023 Municipal Building 28 N. Raleigh Street Angier, North Carolina 27501 Minutes

The Town of Angier Board of Adjustment met in regular session on Tuesday, October 24, 2023, inside the Municipal Building Board Room, 28 N. Raleigh Street. Mayor Bob Smith presided, calling the meeting to order at 6:30 p.m.

Mayor Bob Smith Commissioner Loru Boyer Hawley Commissioner Jim Kazakavage Commissioner Alan Coats
Emily Plemons
Haley Plumley Lee Marshall
Town Manager Elizabeth Krige Town Clerk Veronica Hardaway Planning Director Jeff Jones Town Attorney Dan Hartzog, Jr.

2. Pledge of Allegiance: Mayor Bob Smith led the pledge of allegiance.

**3.** Invocation: Mayor Smith offered the invocation.

**4.** Approval of the July **25**, **2023** Board of Adjustment Meeting Minutes: The Town Board unanimously approved the minutes as presented.

**Board Action:** The Town Board unanimously voted to approve the July 25, 2023 Board of Adjustment Meeting Minutes as presented.

**Motion:** Commissioner Kazakavage **Vote:** 5-0; unanimous

**5.** Swearing in of Witnesses: The following persons giving testimony during the evidentiary hearings on the agenda were duly sworn by the Town Clerk.

James Goff, property owner

#### 6. New Business

#### A. Special Use Permit

Applicant: Gabriella Terry Property Address: 254 N. Broad St., Angier, NC Special Use Request: Convert Single Family House to Office Space in R-10 Zoning District

Mayor Smith opened the Evidentiary Hearing.

Planning Director Jeff Jones stated that a Special Use Permit Application has been submitted by Gabriella Terry for property located at 254 N. Broad St. Professional offices are allowed as a Special Use in the R-10 zoning district. Parking for this use would be 1 parking space per 300 square feet of office use. If the entire house is considered office space, 8 parking spaces would be required on site.

James Goff, 905 Old US Hwy 421, Lillington, is the owner of the property in question. The applicant, Gabriella Terry, has been renting a commercial building from him in Clayton for approximately 9 years for her catering business. Her business has grown and so has the need for office space. Ms. Terry is wanting to utilize the property in question for office space and storage and to be able to hire additional staff. There would be no problem with the required 8 parking spaces.

The Board had concern with having various vehicles parked in the driveway not having enough space for ingress and egress; however, Mr. Goff assured them that parking would be located at the back of the building to free up the driveway area. Mr. Jones stated this building would be a low impact office space without any foot traffic.

Mayor Smith closed the Evidentiary Hearing.

The Board of Adjustment shall find that the following conditions exist prior to granting approval of a Special Use Permit Application:

- *A.* The requested use will not impair the integrity or character of the surrounding or adjoining districts; *It was the consensus of the Board this does apply*
- B. The requested use will not be detrimental to the health, morals, or welfare; It was the consensus of the Board this does apply
- C. Adequate utilities, access streets, drainage, sanitation, and/or other necessary facilities have been provided; **It was the consensus of the Board this does apply**
- D. That adequate measures have been taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; It was the consensus of the Board this does apply

E. That the Special Use shall, in all other aspects, conform to the applicable regulations of the district in which is located, except as such regulations may, in each instance, be modified by the Board of Adjustment; **It was the consensus of the Board this does apply** 

**Board Action:** Based on findings A-E of the Special Use Permit Approval Criteria, the Board voted to approve the Special Use Permit to convert a single-family house to office space in R-10 zoning district located at 254 N. Broad St., Angier, NC.

Motion:Commissioner HawleyVote:5-0; unanimous

**6.** Adjournment: Mayor Smith entertained a motion to adjourn the meeting. Motion to adjourn was unanimous at approximately 6:55pm.

Motion: Commissioner Hawley Vote: 5-0; unanimous

Robert K. Smith Chairman / Board of Adjustment

Attest:

Veronica Hardaway, Town Clerk



### Town of Angier BOARD OF ADJUSTMENT January 23, 2024



Staff Contact: Jeff Jones, AICP (919) 639-2071 jajones@angier.org

Applicant: Property Owner: Location: PIN#: Tara DiDonato Same as Applicant 7841 Lagenaria Drive, Angier NC 0675-22-8865

Variance Request: Reduce Side Setback by 2.7 feet in R-10 Zoning District

**Property in Question – .26 Acres** 



### **Proposed Site Plan**



### Applicable Ordinance Requirements: UDO Section 3.4.2 Dimensional Table

District	Minimum Area (square feet)	Minimum Lot Width (feet)	Front Setback (feet)	Corner Side Setback (feet)	Side Setback (feet)	Rear Setback (feet)	Maximum Height (feet)
OSR	30,000	100	35	20	10	25	35 <sup>4</sup>
RA-30	30,000	100	35	20	10	25	35 <sup>4</sup>
R-15	15,000	80	25	20	10	20	35 <sup>4</sup>
R-10	10,000	60	20	20	10	15	35 <sup>4</sup>
R-6	6,000	50	15 (alley loaded) 20 (front loaded)	15	5	15	35 <sup>4</sup>

#### **Case Summary:**

Property owner is proposing to add an addition to their home, the addition to the home for a bedroom creates a setback issue in which the addition encroaches into the setback by 2.7 feet.

#### **Board Decision:**

#### Variance Approval Criteria:

Such variances may be granted in such individual case of unnecessary hardship only upon findings by the board of adjustment after an evidentiary hearing that the following conditions exist:

- A. Unnecessary hardship would result from the strict application of the ordinance.
- B. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. A variance may be granted when necessary and appropriate to make a reasonable accommodation under the Federal Fair Housing Act for a person with a disability.
- C. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
- D. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

APPLIC APPLIC APPLIC Phone: (9)	ATION FOR VARIANCE Planning Department 55 N. Broad Street W. O. Box 278, Angier, NC 27501 19) 331-6702 Fax: (919) 639-6130	Ε
То	tal Fee:	
F	Receipt:	
Heavin		
Hearin		
Applicant Information		
Owner of Record:	Applicant:	
Name: Tara Dibonato	Name: Tara Dibonato	
Address: Total Logendria Dr	Address:	1
E-mail: tomo proceeding Com	- E-mail: torogonal com	
Phone: 511-320-04-04	Phone: 571-220-04-04	
01-000-060-1	21-200-01004	
Property Description		
PIN(s): 0615-22-8865	Acreage: 0.26 acres	
Address/SR No .: 7841 Lagenaria Dr. A	ngier, NG 27501	
Directions from Lillington: Head W toward No	in St. turn right on S. Main St. contil	nue anto
NC-210 N/N MainSt, t	urn left onto NC.55 W/N Paleigh St, turn	Left onto
Deed Book: 1035 Page: 0321	Plat Book: Page:	Laga de la Co
Existing Zoning: Town of Pingier	Township: Niddle Cre	ek
Ordinance Text to be Varied: (attac Section 3.4.2 Dimensional Table.	h additional sheets if necessary)	
Reason/Justification for Variance	<b>2:</b> (attach additional sheets if necessary)	^
<ul> <li>Attachments</li> <li>Written description of property from recorde</li> <li>Recorded map of property at scale of not less</li> </ul>	d deed s than one (1) inch = 200 feet	
<b>Signatures</b> The undersigned applicant hereby certifies that, to the information supplied with this application is true and $12/5/12023$	the best of his or her knowledge and belief, d accurate:	all
Property Owner Signature Date	Authorized Agent Signature D	ate
· · · · · · · · · · · · · · · · · · ·		

FINDINGS OF FACT (The Board of Adjustment will evaluate the application to ensure that **all** of the following provisions are fulfilled).

A. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.

B. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. (Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting this variance).

C. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

D. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

I am hoping to extend the jack and jill bedrooms on the second floor, anticipating my fourth child. The left corner of the extended bedroom will extend 2.7 feet into a 10-foot property setback on the left side of the house. The left corner of the bedroom will only occupy 7.5 sq. ft of the 5,266 sq. ft setback area. The only physical structure on the first floor in the setback will be a 2-foot by 2-foot column supporting the second floor. The setback on the other side of the property is also 10 feet.

Since the corner of the bedroom will only extend in the property setback of 2.7 feet and only occupy 0.14 % of the setback area, I request property variance to allow the extension. Please see the attached plot plan.

Unfortunately, the original site plan we received when purchasing our home, incorrectly labeled the setback distance as 15 feet, leading us to brainstorm and create the best home addition suitable for our growing family. Instead of relying on that informal site plan, I hired a surveyor to measure and document an accurate site plan, resulting in the realization that the setback distance was determined at 10 feet, since the home was built at an angle on the property.

The integrity of the overall structure would not be as sound and presentable if the addition was to be adjusted to remove the corner overhang. This would also potentially result in a window into my children's room, with a view of our neighbors' home, rather than the backyard, as it is now and would continue to be if this exception is granted. With the current

view and planned view matching, my children have privacy, my neighbors have privacy, and we have an additional level of safety while overseeing our children in the backyard.

The proposed addition follows the standard theme of the community, utilizing matching columns and framework of not only the existing house, but other homes in the neighborhood. The aesthetic would not conflict or bring any negative attention to the home, property, development, or overall community.

Between the safety, aesthetic, commitment to regulations/requirements/thorough planning, and our dedication to the community, I hope you will strongly consider granting this request.

Written Description of Property:

Wonderful floorplan, Smooth 9' Ceilings on first floor, powder room with pedestal sink downstairs. Built-ins around fireplace in Great Room. Kitchen has granite countertops and island. Formal Living and Dining Room. Large Master Suite with vaulted ceiling, master bath w/double vanity, garden tub and separate shower. Jack and Jill Bathroom between 2 bedrooms, plus additional bedroom and bathroom. 12x14 Deck on Rear of home. Beautiful Stamped Concrete Patio with Fireplace on rear.

DocuSign Envelope ID: 93D6C8C4-503B-4649-88EF-414E50DC2020

#### OFFER TO PURCHASE AND CONTRACT

[Consult "Guidelines" (Form 2G) for guidance in completing this form]

For valuable consideration, the receipt and legal sufficiency of which are hereby acknowledged, Buyer offers to purchase and Seller upon acceptance agrees to sell and convey the Property on the terms and conditions of this Offer To Purchase and Contract and any addendum or modification made in accordance with its terms (together the "Contract").

1. TERMS AND DEFINITIONS: The terms listed below shall have the respective meaning given them as set forth adjacent to each term.

- (a) "Seller": Mohler Homes Inc.
- (b) "Buver": Nicholas DiDonato Tara DiDonato

(c) "Property": The Property shall include all that real estate described below together with all appurtenances thereto including the improvements located thereon and the fixtures and personal property listed in Paragraphs 2 and 3 below.

**NOTE:** If the Property will include a manufactured (mobile) home(s), Buyer and Seller should consider including the Manufactured (Mobile) Home provision in the Additional Provisions Addendum (Standard Form 2A11-T) with this offer.

Zip: 27501

Street Address: \_\_\_\_\_7841 Langenaria Drive City: \_\_Angier County: \_\_\_\_\_wake \_\_\_\_\_\_, North Carolina

NOTE: Governmental authority over taxes, zoning, school districts, utilities and mail delivery may differ from address shown.

Legal Description: (Complete ALL applicable)







### Town of Angier BOARD OF ADJUSTMENT January 23, 2024



Staff Contact: Jeff Jones (919) 639-2071 jajones@angier.org

Applicant:
<b>Property Owner:</b>
Location:
<b>PIN #:</b>

Mattamy Homes Ted Honeycutt and Trudy & Timothy Stephenson 350 S. Raleigh St., Angier, NC 0673-57-8318 & 0673-67-6577

### Special Use Permit Request: 168 Townhomes in R-15 Zoning

#### **PROJECT OVERVIEW**

The Town has received a request from Mattamy Homes to construct 168 townhomes on approximately 31.37 acres, located along S. Raleigh St. Townhomes are considered a permitted use. However, special regulations related to the number of units (over 20 units) requires a special use permit.

#### The Proposed Subdivision information:

Number of lots: 168 (3 bedroom units) Density: 5.36 Units to an acre Minimum Lot size: 2,400 square feet Average Lot size: 2,800 square feet Building Separation: 20 feet minimum Parking required – 3 bedrooms per unit \* 1 per bedroom + 1 additional parking space per unit = 672 parking spaces. Parking to be provided for in garages/driveways and in common parking areas throughout the neighborhood.

*Special uses*. Board of adjustment review and approval of special use permit subject to district provisions, other applicable requirements, and conditions of approval. Some special uses may also be subject to special requirements outlined in chapter 4.

*Special use permits.* The development and execution of this section is based on the division of the Town of Angier into districts within which the use of land and buildings and the bulk and location of buildings and structures in relation to the land are substantially uniform. Special uses may be established, under certain conditions and with the proper controls, in such as manner as to minimize any adverse effects. In granting approval of a special use permit, the board of adjustment shall impose such reasonable terms and conditions as it may deem necessary for the protection of the public health, general welfare, and public interest.

#### Town of Angier Comprehensive Plan

Angier Comprehensive Plan designates these properties as 'medium density.'

#### Medium Density Residential (typical density 4.4 units to an acre)

*Medium Density Residential District (R-10).* The R-10 District is established to promote the health of the town's medium density neighborhoods and to provide for their expansion along the same traditional lines along which they were established. The district shall be applied in areas currently or proposed to be served by public water and sewer facilities. The minimum lot size is 10,000 square feet with water and sewer.

#### **Development Standards**

- 4.2.10 Multifamily residential.
  - A. All multifamily residential developments with 20 or more proposed units shall require a special use permit from the board of adjustment.
  - B. Dimensional requirements for multifamily residential developments shall be as follows:

Maximum density	12 dwelling units per acre (with public water and sewer)
Minimum public street frontage	150 feet if 20 or more units, 100 feet if less than 20 units
Front setback (project perimeter)	Projects equal to or greater than 10 acres: 100 feet Projects between 5 and 10 acres: 50 feet Projects less than 5 acres: 25 feet
Side setback (project perimeter)	30 feet
Rear setback (project perimeter)	30 feet
Minimum building separation	10 feet

Maximum units per structure	Single-story structure: 6 units
	Multistory structure: 18 units

- C. All structures shall be a minimum of ten feet from all internal parking areas, and drive-isles.
- D. Project perimeter setback areas shall be free of any structures, excluding access ways and signs.
- E. Amenities and accessory structures shall be permitted as an accessory use to the primary use.
- F. Developments of 50 units or more shall provide two means of ingress and egress.

(Ord. No. 2010.1, 12-7-2010; Ord. of 3-5-2019)

## Properties in Question – 31.37 Acres at 350 S. Raleigh St.



## Zoning Map:



### **Board Decision:**

#### If Board approves Special Use Permit:

Applicant will be allowed to proceed with developing the Townhome community. All Ordinance requirements and applicable State permitting will be required prior to construction.

#### If Board Denies Special Use Permit:

Applicant will not be allowed to proceed with the Townhomes community.

#### Special Use Permit Approval Criteria:

The Board Of Adjustment Shall Find That The Following Conditions Exist Prior To Granting Approval Of A Special Use Permit Application:

A. The Requested Use Will Not Impair The Integrity Or Character Of The Surrounding Or Adjoining Districts;

B. The Requested Use Will Not Be Detrimental To The Health, Morals, Or Welfare;

C. Adequate Utilities, Access Streets, Drainage, Sanitation And/Or Other Necessary Facilities Have Been Or Are Being Provided;

D. That Adequate Measures Have Been Or Will Be Taken To Provide Ingress And Egress So Designed As To Minimize Traffic Congestion In The Public Streets; And

E. That The Special Use Shall, In All Other Respects, Conform To The Applicable Regulations Of The District In Which It Is Located, Except as such regulations may, in each instance, be modified by the board of adjustment.



## **TECHNICAL REVIEW COMMITTEE (TRC)**

Town of Angier, North Carolina Planning Department 55 N. Broad Street West / PO Box 278, Angier, NC 27501 Phone: (919) 331-6702 / Fax: (919) 639-6130

## Development Name: Phase (If applicable): Development Type:

Major Subdivision Preliminary Plat Major Subdivision Final Plat Minor Subdivision Plat Planned Development (PUD) Commercial Site Plan
 Multi-Family Site Plan
 Partial Site Plan / Site Revision

Planning Staff only File Number:

## **Applicant Information**

#### **Owner of Record:**

Name:	Ted W. Hor	neycutt & Sue B. Honeycutt
Address	S Cross	s St
City/Sta	te/Zip:	Angier, NC 27501
E-mail:		
Phone:		
Fax:		
Mobile:		

#### **Representative:**

Name:	Mike Roselli, PE, PLA
Address:	1149 Executive Drive
City/Stat	e/Zip: Cary, NC 27511
E-mail:	mroselli@underfootengineering.com
Phone:	919-576-9733
Fax:	
Mobile:	

#### **Developer:**

Name: Mattamy Homes, LLC.
Address: <u>11000 Regency Parkway, Suite 110</u>
City/State/Zip: Cary, NC 27518
E-mail:
Phone:
Fax:
Mobile:

#### Engineer/Surveyor:

Name:	Mike Roselli, PE, PLA	
Address: 1149 Executive Drive		
City/State/Zip: Cary, NC 27511		
E-mail:	mroselli@underfootengineering.com	
Phone:	919-576-9733	
Fax:		
Mobile:		

### **Property Description**

PIN(s):	0673-57-8318
---------	--------------

- Acres: 20.458

Deed Book: 740 Page: 341	
Current Zoning:	Future Land Use Classification:
Open Space & Recreation (OSR)	Open Space & Recreation (OSR)
🗌 RA-30	Low Density Residential (LDR)
☑ R-15	Medium Density Residential (MDR)
☑ R-10	High Density Residential (HDR)
🗌 R-6	Residential Mixed Use (RMU)
Office & Institutional (O&I)	Office Institutional (O&I)
Central Business (CB)	Commercial Mixed Use (CMU)
General Commercial (GC)	Central Business (CB)
Commerce Park (CP)	Commercial (COM)
Conditional Zoning :	Light Industrial (LI)

## **Environmental Description**

Does this site contain any perennial, intermittent streams or rivers?  Yes No						
Does this site contain any Flood Zone areas?   Yes   No   If YES, approximate acreage:   Acres   Does this site lie within a Watershed?   Yes   No   If applicable, what is the total amount of impervious surfaces?   +/- 14.14 AC   Were any wetlands observed on the site? Yes No Unique Features (Cemeteries, etc): Adjoining Agricultural Uses: Crops (Nursery or Row Crops) Equestrian Hog Poultry Voluntary Agricultural District Other:						
Project Description						
SINGLE FAMILY SUBDIVISIONS COMMERCIAL/MULTIFAMILY						
Masonry Structure						
Single Story Structure						
Total number of						
lots/units: 168						
Total acreage of proposed open space:     14.47     acres						
Total acreage of proposed active recreational space: <u>4.96</u> acres						
Business Type/Description:						
Hours & Days of Operation:						
Utilities Impact						
Water:       Public       Sewer:       Public       Electrical:       Above Ground         Private (Well)       Private (Septic       Underground						
System) Distance (in feet) to pearest water line: 3						
Distance (in feet) to nearest sewer line: 0						
Distance (in feet) to the nearest fire hydrant: 0						
Final Plats:						
Have all Town of Angier Public Works requirements been completed? 🛛 Yes 🛛 No Have inspections been completed by Public Works and Fire Marshal? 🗌 Yes 🛛 No						
<b>Traffic Analysis Impact</b> Has a Traffic Impact Analysis (TIP) been required by NC DOT for this development? X Yes \[\[\] No						

Please list any anticipated circulation improvements that will accompany the development:

Characteristics of road(s) within development:					
🗌 Private Roads	Town of Angier	🗌 NC DOT			
Have you received S	treet Name Pre-Appro	oval from GIS? 🛛 Yes	🗌 No		

674

#### Attachments (Must be submitted with application) . AL . 7 .

	MAJOR SUB. PRELIMINARY PLAT	MAJOR SUB. FINAL PLAT	MINOR SUB. PLAT	COMMERCIAL SITE PLAN	MULTIFAMILY SITE PLAN	PARTIAL SITE PLAN
PLEASE PROVIDE 3 PAPER COPIES OF:						
Site Plan/Subdivision Plan/Master Plan	•	•	•	•	•	•
Plat Of Survey	•	•	•	•	•	•
As-Built Drawings		٠	•			
PLEASE PROVIDE 1 COPY OF: All items are re-	quired if a	applicabl	е			
Street Name Pre-Approval Letter	٠	•	•		•	
Preliminary Soils Report	•		•			
HOA Documents & Restrictive Covenants		•	•	•	•	
Land Use Application (Zoning Approval)				•	•	•
Final Soils Report		•				
Traffic Impact Analysis (if required)	•			•		
Stormwater Management Permit & Plan		٠	•	•	•	•
Erosion Control Plan		•	•	•	•	•

Item	Fee	Subtotal	Total Due
PLANNED DEVELOPMENT MASTER PLAN	-		
Master Plan Review Fee	\$300.00		
Additional Per Unit Fee	\$1.00		
MAJOR SUBDIVISION PRELIMINARY PLAT			
Plat Review Fee	\$300.00	\$300.00	
Additional Per Lot Fee	\$5.00	\$900.00	\$1,200.00
MAJOR SUBDIVISION FINAL PLAT	-	-	
Planning Review Fee	\$200.00		
MINOR SUBDIVISION PLAT (1-2 New Lots)			
Planning Review Fee	\$100.00		
MINOR SUBDIVISION PLAT (3-5 New Lots)			
Planning Review Fee	\$200.00		
COMMERCIAL SITE PLAN			
Site Plan Review Fee	\$400.00		
Partial/Revised Site Plan Review Fee	\$100.00		
Construction Drawings Review Fee	\$400.00		
Storm Drainage Review Fee	\$350.00		
Land Use Application Fee	\$35.00		

### Signatures

The undersigned applicant hereby certifies that, to the best of his or her knowledge and belief, all information supplied with this application is true and accurate:

Property Owner Signature Date

Authorized Agent Signature

Date

This document must be signed by the property owner <u>and/or</u> the authorized agent, or a letter of authorization must be provided. All questions provided herein <u>must</u> be addressed to prevent the application from being considered incomplete. All documents required <u>must</u> be submitted. If any of these items are not addressed the TRC will <u>not</u> review the application.



## **TECHNICAL REVIEW COMMITTEE (TRC)**

Town of Angier, North Carolina Planning Department 55 N. Broad Street West / PO Box 278, Angier, NC 27501 Phone: (919) 331-6702 / Fax: (919) 639-6130

## Development Name: Phase (If applicable): Development Type:

Major Subdivision Preliminary Plat Major Subdivision Final Plat Minor Subdivision Plat Planned Development (PUD) Commercial Site Plan
 Multi-Family Site Plan
 Partial Site Plan / Site Revision

Planning Staff only File Number:

## **Applicant Information**

#### Owner of Record:

Name: Trudy Chappel Stephenson & Timothy Arden Stephenson

Address:	219 Star	ncil Road
City/State	/Zip:	Angier, NC 27501
E-mail:		
Phone:		
Fax:		
Mobile:		

#### **Representative:**

Name:	Mike Roselli, PE, PLA
Address:	1149 Executive Drive
City/Stat	e/Zip: Cary, NC 27511
E-mail:	mroselli@underfootengineering.com
Phone:	919-576-9733
Fax:	
Mobile:	

#### **Developer:**

Name: <u>Name</u> :	Mattamy Homes, LLC.
Address:	11000 Regency Parkway, Suite 110
City/State	e/Zip: Cary, NC 27518
E-mail:	
Phone:	
Fax:	
Mobile:	

#### Engineer/Surveyor:

Name:	Mike Roselli, PE, PLA
Address	1149 Executive Drive
City/Stat	te/Zip: Cary, NC 27511
E-mail:	mroselli@underfootengineering.com
Phone:	919-576-9733
Fax:	
Mobile:	

### **Property Description**

PIN(s): 0673-67-6577

Acres: 10.914

Deed Book: 2878 Page: 187	
Current Zoning:	Future Land Use Classification:
Open Space & Recreation (OSR)	Open Space & Recreation (OSR)
🗌 RA-30	Low Density Residential (LDR)
☑ R-15	Medium Density Residential (MDR)
🗌 R-10	High Density Residential (HDR)
🗌 R-6	Residential Mixed Use (RMU)
Office & Institutional (O&I)	Office Institutional (O&I)
Central Business (CB)	Commercial Mixed Use (CMU)
General Commercial (GC)	Central Business (CB)
Commerce Park (CP)	Commercial (COM)
Conditional Zoning :	Light Industrial (LI)

## **Environmental Description**

Does this site contain any perennial, intermittent streams or rivers?  Yes No						
Does this site contain any Flood Zone areas?   Yes   No   If YES, approximate acreage:   Acres   Does this site lie within a Watershed?   Yes   No   If applicable, what is the total amount of impervious surfaces?   +/- 14.14 AC   Were any wetlands observed on the site? Yes No Unique Features (Cemeteries, etc): Adjoining Agricultural Uses: Crops (Nursery or Row Crops) Equestrian Hog Poultry Voluntary Agricultural District Other:						
Project Description						
SINGLE FAMILY SUBDIVISIONS COMMERCIAL/MULTIFAMILY						
Masonry Structure						
Single Story Structure						
Total number of						
lots/units: 168						
Total acreage of proposed open space:     14.47     acres						
Total acreage of proposed active recreational space: <u>4.96</u> acres						
Business Type/Description:						
Hours & Days of Operation:						
Utilities Impact						
Water:       Public       Sewer:       Public       Electrical:       Above Ground         Private (Well)       Private (Septic       Underground						
System) Distance (in feet) to pearest water line: 3						
Distance (in feet) to nearest sewer line: 0						
Distance (in feet) to the nearest fire hydrant: 0						
Final Plats:						
Have all Town of Angier Public Works requirements been completed? 🛛 Yes 🛛 No Have inspections been completed by Public Works and Fire Marshal? 🗌 Yes 🛛 No						
<b>Traffic Analysis Impact</b> Has a Traffic Impact Analysis (TIP) been required by NC DOT for this development? X Yes \[\[\] No						

Please list any anticipated circulation improvements that will accompany the development:

Characteristics of road(s) within development:					
🗌 Private Roads	Town of Angier	🗌 NC DOT			
Have you received S	treet Name Pre-Appro	oval from GIS? 🛛 Yes	🗌 No		

674

#### Attachments (Must be submitted with application) . AL . 7 .

	MAJOR SUB. PRELIMINARY PLAT	MAJOR SUB. FINAL PLAT	MINOR SUB. PLAT	COMMERCIAL SITE PLAN	MULTIFAMILY SITE PLAN	PARTIAL SITE PLAN
PLEASE PROVIDE 3 PAPER COPIES OF:						
Site Plan/Subdivision Plan/Master Plan	•	•	•	•	•	•
Plat Of Survey	•	•	•	•	•	•
As-Built Drawings		٠	•			
PLEASE PROVIDE 1 COPY OF: All items are re-	quired if a	applicabl	е			
Street Name Pre-Approval Letter	٠	•	•		•	
Preliminary Soils Report	•		•			
HOA Documents & Restrictive Covenants		•	•	•	•	
Land Use Application (Zoning Approval)				•	•	•
Final Soils Report		•				
Traffic Impact Analysis (if required)	•			•		
Stormwater Management Permit & Plan		•	•	•	•	•
Erosion Control Plan		•	•	•	•	•

Item	Fee	Subtotal	Total Due
PLANNED DEVELOPMENT MASTER PLAN	-		
Master Plan Review Fee	\$300.00		
Additional Per Unit Fee	\$1.00		
MAJOR SUBDIVISION PRELIMINARY PLAT			
Plat Review Fee	\$300.00	\$300.00	
Additional Per Lot Fee	\$5.00	\$900.00	\$1,200.00
MAJOR SUBDIVISION FINAL PLAT	-	-	
Planning Review Fee	\$200.00		
MINOR SUBDIVISION PLAT (1-2 New Lots)			
Planning Review Fee	\$100.00		
MINOR SUBDIVISION PLAT (3-5 New Lots)			
Planning Review Fee	\$200.00		
COMMERCIAL SITE PLAN			
Site Plan Review Fee	\$400.00		
Partial/Revised Site Plan Review Fee	\$100.00		
Construction Drawings Review Fee	\$400.00		
Storm Drainage Review Fee	\$350.00		
Land Use Application Fee	\$35.00		

### Signatures

The undersigned applicant hereby certifies that, to the best of his or her knowledge and belief, all information supplied with this application is true and accurate:

814-23 2 Property Owner Signature Date

Authorized Agent Signature

Date

This document must be signed by the property owner <u>and/or</u> the authorized agent, or a letter of authorization must be provided. All questions provided herein <u>must</u> be addressed to prevent the application from being considered incomplete. All documents required <u>must</u> be submitted. If any of these items are not addressed the TRC will <u>not</u> review the application.



## **TECHNICAL REVIEW COMMITTEE (TRC)**

Town of Angier, North Carolina Planning Department 55 N. Broad Street West / PO Box 278, Angier, NC 27501 Phone: (919) 331-6702 / Fax: (919) 639-6130

## Development Name: Phase (If applicable): Development Type:

Major Subdivision Preliminary Plat Major Subdivision Final Plat Minor Subdivision Plat Planned Development (PUD) Commercial Site Plan
 Multi-Family Site Plan
 Partial Site Plan / Site Revision

Planning Staff only File Number:

## **Applicant Information**

#### **Owner of Record:**

Name:	WKM Prop	erties, LLC
Address:	9417 P	urfoy Road
City/Stat	te/Zip:	Fuquay-Varina, NC 27526
E-mail:		
Phone:		
Fax:		
Mobile:		

#### **Representative:**

Name:	Mike Roselli, PE, PLA
Address:	1149 Executive Drive
City/Stat	e/Zip: Cary, NC 27511
E-mail:	mroselli@underfootengineering.com
Phone:	919-576-9733
Fax:	
Mobile:	

#### **Developer:**

Name: Mattamy Homes, LLC.	
Address: 11000 Regency Parkwo	ay, Suite 110
City/State/Zip: Cary, NC 27518	
E-mail:	
Phone:	
Fax:	
Mobile:	

#### Engineer/Surveyor:

Name:	Mike Roselli, PE, PLA				
Address:	Address: 1149 Executive Drive				
City/Stat	e/Zip: Cary, NC 27511				
E-mail:	mroselli@underfootengineering.com				
Phone:	919-576-9733				
Fax:					
Mobile:					

### **Property Description**

PIN(s): 0673-77-0753

Acres: 1.00

Acres: 1.00	
Deed Book: 3563 Page: 0420	
Current Zoning:	Future Land Use Classification:
Open Space & Recreation (OSR)	Open Space & Recreation (OSR)
🗌 RA-30	Low Density Residential (LDR)
🗌 R-15	Medium Density Residential (MDR)
🗌 R-10	🗌 High Density Residential (HDR)
🗌 R-6	Residential Mixed Use (RMU)
Office & Institutional (O&I)	Office Institutional (O&I)
Central Business (CB)	Commercial Mixed Use (CMU)
General Commercial (GC)	Central Business (CB)
Commerce Park (CP)	Commercial (COM)
Conditional Zoning :	Light Industrial (LI)

## **Environmental Description**

Does this site contain any perennial, intermittent streams or rivers?  Yes  No
Does this site contain any Flood Zone areas?   Yes   No   If YES, approximate acreage:   Acres   Does this site lie within a Watershed?   Yes   No   If applicable, what is the total amount of impervious surfaces?   +/- 14.14 AC   Were any wetlands observed on the site? Yes No Unique Features (Cemeteries, etc): Adjoining Agricultural Uses: Crops (Nursery or Row Crops) Equestrian Hog Poultry Voluntary Agricultural District Other:
Project Description
SINGLE FAMILY SUBDIVISIONS COMMERCIAL/MULTIFAMILY
Masonry Structure
Single Story Structure
Total number of
lots/units: 168
Total acreage of proposed open space:     14.47     acres
Total acreage of proposed active recreational space: <u>4.96</u> acres
Business Type/Description:
Hours & Days of Operation:
Utilities Impact
Water:       Public       Sewer:       Public       Electrical:       Above Ground         Private (Well)       Private (Septic       Underground
System) Distance (in feet) to pearest water line: 3
Distance (in feet) to nearest sewer line: 0
Distance (in feet) to the nearest fire hydrant: 0
Final Plats:
Have all Town of Angier Public Works requirements been completed? 🛛 Yes 🛛 No Have inspections been completed by Public Works and Fire Marshal? 🗌 Yes 🛛 No
<b>Traffic Analysis Impact</b> Has a Traffic Impact Analysis (TIP) been required by NC DOT for this development? X Yes \[\[\] No

Please list any anticipated circulation improvements that will accompany the development:

Characteristics of roa	ad(s) within developm	ent:	
🗌 Private Roads	Town of Angier	🗌 NC DOT	
Have you received S	treet Name Pre-Appro	oval from GIS? 🛛 Yes	🗌 No

674

#### Attachments (Must be submitted with application) . AL . 7 .

	MAJOR SUB. PRELIMINARY PLAT	MAJOR SUB. FINAL PLAT	MINOR SUB. PLAT	COMMERCIAL SITE PLAN	MULTIFAMILY SITE PLAN	PARTIAL SITE PLAN
PLEASE PROVIDE 3 PAPER COPIES OF:						
Site Plan/Subdivision Plan/Master Plan	•	•	•	•	•	•
Plat Of Survey	•	•	•	•	•	•
As-Built Drawings		٠	•			
PLEASE PROVIDE 1 COPY OF: All items are re-	quired if a	applicabl	е			
Street Name Pre-Approval Letter	٠	•	•		•	
Preliminary Soils Report	•		•			
HOA Documents & Restrictive Covenants		•	•	•	•	
Land Use Application (Zoning Approval)				•	•	•
Final Soils Report		•				
Traffic Impact Analysis (if required)	•			•		
Stormwater Management Permit & Plan		•	•	•	•	•
Erosion Control Plan		•	•	•	•	•

Item	Fee	Subtotal	Total Due
PLANNED DEVELOPMENT MASTER PLAN	-		
Master Plan Review Fee	\$300.00		
Additional Per Unit Fee	\$1.00		
MAJOR SUBDIVISION PRELIMINARY PLAT			
Plat Review Fee	\$300.00	\$300.00	
Additional Per Lot Fee	\$5.00	\$900.00	\$1,200.00
MAJOR SUBDIVISION FINAL PLAT	-	-	
Planning Review Fee	\$200.00		
MINOR SUBDIVISION PLAT (1-2 New Lots)			
Planning Review Fee	\$100.00		
MINOR SUBDIVISION PLAT (3-5 New Lots)			
Planning Review Fee	\$200.00		
COMMERCIAL SITE PLAN			
Site Plan Review Fee	\$400.00		
Partial/Revised Site Plan Review Fee	\$100.00		
Construction Drawings Review Fee	\$400.00		
Storm Drainage Review Fee	\$350.00		
Land Use Application Fee	\$35.00		

#### **Signatures**

The undersigned applicant hereby certifies that, to the best of his or her knowledge and belief, all information supplied with this application is true and accurate:

01 Property Owner Signature

Authorized Agent Signature

Date

This document must be signed by the property owner <u>and/or</u> the authorized agent, or a letter of authorization must be provided. All questions provided herein <u>must</u> be addressed to prevent the application from being considered incomplete. All documents required <u>must</u> be submitted. If any of these items are not addressed the TRC will <u>not</u> review the application.



## SOUTH CROSS SPECIAL USE PERMIT WRITTEN RESPONSES

#### Public Convenience & Welfare

#### 1. Why are you requesting this use?

According to Angier Zoning Ordinance 4.2.10 Multifamily Residential, "All multifamily residential developments with 20 or more proposed units shall require a special use permit from the board of adjustment". According to the Angier Planning Department, though the intent of the builder is to build fee-simple townhomes for individual sale, townhomes are considered multifamily.

#### 2. How will this use benefit the citizens of the Town of Angier?

The project will provide additional housing and diversify the surrounding developments, contributing beneficial factors for successful growth in the Town of Angier. The proposed development will provide an increased tax base, increasing revenue generated during development and home sales. An increase in building permits and associated inspection fees is to be expected, as well as an increase in property taxes.

#### **On-Site & Surrounding Land Uses**

#### How will the use you are requesting affect the surrounding properties, residents, and business in the area? Describe in detail <u>why and how</u> it will or will not affect the surrounding area.

Construction of the proposed development will be contained within the boundaries of the site to prevent the proposed development from impeding adjacent properties. This proposed development will provide connectivity to existing properties and businesses, providing road connectivity and utility stubs at the property line to promote future connectivity in an orderly fashion. This can be seen on the Subdivision Plan and Preliminary Utility Plan found within the Preliminary Plat submittal.

#### Utilities, Access Roads, Drainage, etc...

## 4. Describe the driveway (width and surface) that you will be using to enter and exit the property.

The proposed roadway is 35' back-to-back with a 60' right-of-way, in compliance with the Town of Angier road cross section specifications. Roadway will be paved according to the Town of Angier paving design specifications. Proposed roadway (R001) will connect to S. Raleigh Street.

#### 5. Describe the drainage of this property.

The proposed site drainage will be treated within the site via use of on-site stormwater control measures (SCMs). The site is currently proposing the development of two (2) SCMs (wet ponds) to ensure functionality and capacity. As on-site stormwater permitting efforts are ongoing with the Town as well as NCDEQ, the final configuration is subject to



change. However, the development will meet all applicable stormwater ordinances and engineering requirements, ensuring that the site continues to drain according to its existing drainage patterns and meeting all water quality and quantity requirements.

#### 6. How is your trash and garbage going to get to the landfill?

Trash and garbage will be collected either via local Town of Angier Trash & Recycling Service or private trash collection.

#### Traffic

#### 7. Describe the traffic conditions and sight distances at the road that serves the property.

Per the findings of the Traffic Impact Analysis (TIA) from McAdams, S. Raleigh Street, the primary road that serves the property, is a 35 mph road with an Annual Average Daily Traffic (AADT) of 13,500 vehicles per day (2021). Sight distance for the intersection of R001 and S. Raleigh Street will be in accordance with the NCDOT Sight Distance Triangle design specifications.

## 8. What is the approximate distance between your driveway and the next nearest driveway or intersection?

The approximate distance between the intersection of proposed R001 and S. Raleigh Street is 600 feet north from the intersection of S. Raleigh Street and S Broad Street E, and 750 feet south from the intersection of S. Raleigh Street and W McIver Street.

#### General

#### 9. How many employees will this development employ?

Not applicable. This is a residential development.

#### 10. What is the estimated investment of the development?

Not applicable. This is a residential development.

#### 11. What experience do you have in the proposed field?

Mattamy is the largest privately held home builder in North America.

#### Conditions

## 12. State any conditions that you would be willing to consider as part of the approved Special Use Permit.

- 1. The number of dwelling units will be limited to one hundred and sixty-eight (168).
- 2. To promote variations in building appearance, each building shall have two distinct facades.
- 3. A varied color palette shall be utilized on buildings throughout the subdivision to include a harmonious mix of colors for siding.



- 4. All homes shall have a 1-car garage minimum.
- 5. Variation in front façade shall include at least two of the following:
  - a. Changes in exterior materials such as brick, masonry, board and batten, horizontal siding, or shake siding.
    - b. Changes in rooflines, directions, or materials
    - c. Addition of front dormers, shed roofs, or gables
    - d. Addition/variation of a front porch, balcony, covered entry, portico or stoop.
    - e. Addition of decorative trim, shake, horizontal trim, gable brackets, or air vents/windows on gables.
    - f. Addition of shutters, window trim, or window grids.
- 6. Northern boundary along R001 will be upgraded from a Type A buffer to a Type B buffer.
- 7. Any roadway improvements required as part of the NCDOT TIA review shall be a condition of Construction Drawing approval.
- 8. Any sanitary sewer improvements required for adequate downstream capacity as part of a Town of Angier Wastewater Collection System analysis review shall be a condition of Construction Drawing approval.
- Connections to Oak Wood Drive and Crestview Drive are included as part of this development. Issuance of building permits and certificates of occupancy shall not be withheld if the developer cannot obtain temporary construction easements to complete the connections shown.
- 13. Additional comment the Board should consider in reviewing your application.

N/A



IMPERVIOUS TAB	LE				RO	AD CENTERLINE C
	SF	AC	CURVE	RADIUS	LENGTH	CHORD BEARIN
L TRACT AREA	1366477	31.37	Cl	300 00'	79 70'	\$81°02'44"E
RVIOUS AREA IN LOTS (X SF PER LOT)	350784	8.05		500.00	//./0	301 02 44 L
DWAY IMPERVIOUS	264669	6.08	C2	230.00'	115.75'	\$87°51'06''E
KIOSK IMPERVIOUS AREA	446	0.01	C3	230.00'	8.25'	N02°22'16''E
L	615899	14.14	0.1		5 201	



		,
AD CENTER LINE TABLE	RLINE E	
EARING	DISTANCE	
8° 39' 23''E	735.00'	
3° 26' 06''E	31.37'	
7° 43' 53''E	209.26'	
1° 20' 37''E	549.79'	
3° 23' 56''E	85.28'	
1° 20' 37''E	927.00'	
1° 20' 37''E	143.62'	
3° 39' 23''E	1259.54'	
1° 20' 37''E	435.00'	
3° 39' 23''E	795.00'	
1° 20' 37''E	93.31'	
		•

# \_\_\_\_\_\_S 11°57'24" E 188.12' (TIE)

--WKM TRACT MAINTAINED TO THIS € EXTENT\_114.56'







- STORMWATER BMP. 5. ADJACENT OPEN SPACE WILL BE RECORDED AS LOTS ARE RECORDED.
- TREES SHALL NOT BE PLANTED IN ANY TOWN OF ANGIER SANITARY SEWER EASEMENTS. 7. ALL SIGHT DISTANCE TRIANGLES ARE IN ACCORDANCE WITH AASHTO STANDARDS.
- 8. ALL PROPOSED PAVEMENT SECTIONS ARE MINIMUM STANDARDS. FINAL PROPOSED PAVEMENT SECTION DESIGNS WILL NEED TO BE PROVIDED TO THE TOWN AND NCDOT FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF ANY BASE MATERIAL. 9. THE DEVELOPER WILL BE RESPONSIBLE FOR ALL INSTALLATION COSTS ASSOCIATED WITH STREET
- LIGHTING ALONG PROPOSED STREET AND ADJACENT STREET REQUIRED PER TOWN OF ANGIER STREET LIGHTING SPECIFICATIONS. THE DEVELOPER SHALL CONTACT DUKE PROGRESS ENERGY AFTER PLAN APPROVAL AND PRIOR TO CONSTRUCTION IN ORDER TO DEVELOP A STREET LIGHTING PLAN FOR THE SUBDIVISION. 10. REFER TO DETAIL ON THIS SHEET FOR TYPICAL ROAD CROSS SECTIONS.
- 11. ADA RAMPS SHALL BE CONSTRUCTED TO NCDOT SPECIFICATIONS WITH A 4'X4' LANDING AREA AN 48" PASSING DISTANCE BEHIND RAMP. 12. SUBDIVISION MAIL WILL BE HANDLED BY CLUSTER BOX UNITS (CBUS). STANDARD SIZES APPROVED E THE USPS HAVE BEEN CHOSEN AND CONTAIN EXTRA BOXES. CBUS SHALL HAVE REAR-LOADING
- DELIVERY ACCESS. 13. CONTRACTOR MUST REFER TO THE ARCHITECTURAL/BUILDING PLANS "OF RECORD" FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSION
- AND EXACT BUILDING UTILITY LOCATIONS. 14. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, UNLESS NOTED OTHERWISE. 15. SIZE TO BE DETERMINED AT TIME OF CONSTRUCTION BUT IN ACCORDANCE WITH ANGIER
- REQUIREMENTS. **PAVEMENT MARKING & SIGNAGE NOTES**
- 1. ALL PAVEMENT MARKINGS AND STREET SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES OR LOCAL JURISDICTIONAL REQUIREMENTS. 2. PAVEMENT MARKINGS SHALL BE THERMOPLASTIC AND SHALL COMPLY WITH NCDOT STANDARDS AND SPECIFICATIONS.
- 3. SIGNS MUST USE PRISMATIC SHEETING AND MEET THE MINIMUM RETROREFLECTIVITY LEVELS SHOWN IN THE LATEST EDITION OF THE MUTCD. SIGNS PROVIDED FOR PEDESTRIAN CROSSINGS SHALL USE THE STRONG YELLOW-GREEN COLORING. 4. ALL SPECIALTY TRAFFIC CONTROL AND STREET NAME SIGNS AND POSTS MUST COMPLY WITH LOC.
- JURISDICTIONAL STANDARDS AND SPECIFICATIONS. STREET NAME SIGNS SHALL ADHERE TO THE MUTCD OR LOCAL JURISDICTIONAL REQUIREMENTS RELATED TO COLOR, LETTER CASE, AND LETTE HEIGHT



### TYP. TOWNHOUSE BUILDING DETAIL NOT TO SCALE

## OPEN SPACE CALCULATIONS

	SF	AC	%
TOTAL AREA OF PROJECT	1366477	31.37	
OPEN SPACE	SF	AC	
REQUIRED (UDO ARTICLE 6.3.2.)	273295	6.27	20.0%
PROVIDED			
OPEN SPACE 1 (REC - SEE BELOW)	349,591	8.03	55.4%
OPEN SPACE 2	25,553	0.59	4.1%
OPEN SPACE 3	10,031	0.23	1.6%
OPEN SPACE 4	7,423	0.17	1.2%
OPEN SPACE 5	3,430	0.08	0.5%
OPEN SPACE 6	5,228	0.12	0.8%
OPEN SPACE 7	16,403	0.38	2.6%
OPEN SPACE 8	5,228	0.12	0.8%
OPEN SPACE 9	57,856	1.33	9.2%
OPEN SPACE 10	58,376	1.34	9.3%
OPEN SPACE 11 (REC - SEE BELOW)	91,362	2.10	14.5%
TOTAL	630481	14.47	230.7%
	05	10	
	3F	AC	F077 OF O0
REQUIRED (UDO - ARTICLE 6.3.3.)	136,648	3.14	50% OF OS
	215,935	4.92	F0 (77
PART OF OPEN SPACE T (AMENITY AREA 4)	115,670	2.66	53.6%
GREEN, IRAILS, & DUG PARK			
PART OF OPEN SPACE TT (AMENITY AREA 3)	36,810	0.85	17.0%
PARI OF OPEN SPACE 9 (AMENITY AREA I)	31,776	0.73	14.7%
PARI OF OPEN SPACE 10 (AMENITY AREA 2)	31,678	0.73	14.7%
TOTAL	215934	4.96	158.02%

## PARKING SPACE CALCULATIONS

REQUIRED PARKI	NG	UNITS	672
PROPOSED PARK	(ING	UNITS	SPACES
	2-CAR CARAGE	56	112
	1-CAR GARAGE	112	112
	2-CAR DRIVEWAYS	168	336
	OFF-STREET SURFACE PARKING	114	114
	TC	DTAL	674
		•	





	1			
		PLA	N REVISIONS	
	#	DATE	REVISION	BY
		2023.12.15		JI
G				
ND				
BY				
۹S,		1	$\mathbf{Q11}$	
		KNOV		
		AL	WAYS CALL 811	
		BEI It's fa	st. It's free. It's the law.	
N	PRC	DJECT:		
AL		ΔΙΓ		
ĸ				
		N	MAJUK	
		SUB	DIVISION	
		PRE	LIMINARY	(
			PLAT	
			· <b>—</b> / ()	
				-
		250		
		350 ANC	5. каleigh 51. GIER, NC 27501	
		_		
	PRO	DJECT #:	C	22029
	DR/ REV	awn BY: /IEWED BY: SUBMITTAI ·	აიაა	JT MR 3.08.31
	SC	ALE:	1020	"=100'
%		F ANI	OR REVIEW D APPROVAI	
	PPF			
)%				
4% 1%				
5% 2%				
3% 3%		mati	amyhome	S
3% 2%				
3% 5%				
7%				
2C	PRE	PARED BY:		
6%				
)%				
7% 7%				
2%				
72				
ES 12		unc	derfoo	t
12 36		ENG	INEERING	-
14 74		1149	EXECUTIVE CIRCLE	
		NCBELS	919.576.9733 23847   NCBOLA CARA	
		SEALED:		_
		 . \\	CAP-"	
			OFESSION L	
		The	HAR	
		 	040768	
	1	50	WGINEE V	
			AELA RONN	
			AELA. ROUNT 2023, 12, 7	15

OVERALL

SUBDIVISION PLAN

C-200





## **SOUTH CROSS TOWNHOMES**

Traffic Impact Analysis, Angier, NC / June 2023

Prepared by: McAdams



## **SOUTH CROSS TOWNHOMES**

ANGIER, NORTH CAROLINA

## TRAFFIC IMPACT ANALYSIS

PROJECT NUMBER: PREPARED BY: REVIEWED BY:

SPEC23119 Tyler Huggins Nate Bouquin, PE, PTOE

DATE: JUNE 2023



621 HILLSBOROUGH STREET, SUITE 500 RALEIGH, NC 27603 NC LIC. # C-0293





#### **EXECUTIVE SUMMARY**

The proposed residential development will be located north of Tippet Road, west of S. Raleigh Street, and south of W. Depot Street in Angier, NC. Site access will be served via one (1) full movement driveway on S. Raleigh Street and a connection to South Cross Street. The site is currently undeveloped and is expected to consist of a maximum of 200 townhomes. The proposed site is expected to be built-out by the year 2028. The purpose of this Traffic Impact Analysis (TIA) is to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to mitigate the impacts on the roadway network.

A TIA Scoping Checklist was reviewed and approved by the North Carolina Department of Transportation (NCDOT) and the Town of Angier (Town), reviewing the TIA scope and assumptions. The scoping checklist and approval correspondence is provided in the appendix of this study. Based on the approved scoping, the following intersections are included in this TIA study area:

- > S. Raleigh Street and W. Depot Street
- > W. Depot Street and W. Church Street
- > W. Church Street and S. Cross Street
- > S. Raleigh Street and Tippet Road
- > S. Raleigh Street and Site Drive 1 (*Proposed*)

To determine the traffic impacts of the proposed development, the following analysis scenarios are included in this study:

- > Existing (2023) Traffic Conditions
- > No-Build (2028) Traffic Conditions
- > Build (2028) Traffic Conditions

Peak hour traffic counts were conducted at the existing study intersections in April 2023 and balanced between study intersections, as appropriate, to determine Existing (2023) traffic volumes. To account for adjacent developments and background development growth, a 4% annual growth rate of was applied to the existing traffic volumes to determine the No-Build (2028) traffic volumes. Adjacent developments were assumed to be included in this growth rate and no additional site trips were added to this study.

Based on the Institute for Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition, and the suggested method of trip calculations provided in NCDOT's *Rate vs. Equation spreadsheet* trips for the proposed development were calculated for weekday daily, weekday AM peak hour, and weekday PM peak hour. A summary of this trip generation is provided in Table ES-1.

TABLE ES-1: TRIP GENERATION									
Land Use (ITE Code)	Calculation		Daily	Daily AM Peak Hour			PM Peak Hour		
	Density	Methodology	Trips	Enter	Exit	Total	Enter	Exit	Total
Townhomes (215)	200 DU	Adjacent / Equation	1,474	25	73	98	68	48	116

The peak hour site traffic was distributed throughout the network according to the site trip distribution approved by NCDOT and Town staff within the scoping document. This site traffic was added onto the No-Build (2028) traffic volumes to determine the Build (2028) traffic volumes for the capacity analysis.

Capacity analysis was conducted at all study intersections according to NCDOT and Town guidelines utilizing the methodology contained in the Institute of Transportation Engineers (ITE) *Highway Capacity Manual*. Refer to Table ES-2 for a summary of the capacity analysis results.



### SOUTH CROSS TOWNHOMES > TRAFFIC IMPACT ANALYSIS

TABLE ES-2: CAPACITY ANALYSIS SUMMARY						
		A P	Weekday AM	Peak Hour	Weekday PM F	Peak Hour
Intersection	Conditions	P R O A C H	LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	Overall Delay (seconds)
	Existing (2023)	EB WB NB SB	D (42) D (44) D (38) C (22)	C (35)	D (40) D (39) C (33) C (30)	C (35)
S. Raleigh Street and W. Depot Street	No-Build (2028)	EB WB NB SB	F (116) E (56) D (45) C (28)	E (57)	F (123) D (52) D (38) C (32)	E (61)
	Build (2028)	EB WB NB SB	F (138) E (61) D (48) C (28)	E (63)	F (156) E (56) D (39) C (33)	E (70)
	Existing (2023)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A
W. Church Street and S. Cross Street	No-Build (2028)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A
	Build (2028)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A
	Existing (2023)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	D (33) E (46) A (9) A (9)	N/A	E (39) E (48) A (9) A (9)	N/A
W. Church Street and W. Depot Street	No-Build (2028)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	F (55) F (103) A (10) A (10)	N/A	F (77) F (115) A (10) A (10)	N/A
	Build (2028)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	F (57) F (130) A (10) A (10)	N/A	F (79) F (133) A (10) A (10)	N/A

#### SOUTH CROSS TOWNHOMES > TRAFFIC IMPACT ANALYSIS

TABLE ES-2: CAPACITY ANALYSIS SUMMARY CONT.D						
	Existing (2023)	EB <sup>2</sup> NB <sup>1</sup> SB	C (21) A (8) 	N/A	C (19) A (9) 	N/A
S. Raleigh Street and Tippet Road	No-Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	D (33) A (9) 	N/A	D (28) A (10) 	N/A
	Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	D (35) A (9) 	N/A	D (32) A (10) 	N/A
S. Raleigh Street and Site Drive 1	Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	C (16) A (8) 	N/A	C (18) A (9) 	N/A

Based on the findings in the TIA, the improvements below have been recommended to be constructed by the **developer** to mitigate traffic impacts by the proposed development:

South Cross Street

> Construct an extension of South Cross Street from the current terminus to serve as an access for the proposed development with one (1) ingress lane and one (1) egress lane.

S. Raleigh Street and Site Drive 1

- > Construct Site Drive 1 with one (1) ingress lane and one (1) egress lane.
- > Provide stop control on the eastbound approach of the proposed site driveway.

Figure ES-1, on the following page, provides a graphical representation of recommended improvements at the study intersections.



## **McAdams**

### SOUTH CROSS TOWNHOMES > TRAFFIC IMPACT ANALYSIS

#### **TABLE OF CONTENTS**

INTRODUCTION	10
EXISTING CONDITIONS	13
NO-BUILD CONDITIONS	16
BUILD CONDITIONS	18
CAPACITY ANALYSIS	22
S. RALEIGH STREET + W. DEPOT STREET	23
W. CHURCH STREET + S. CROSS STREET	24
W. CHURCH STREET + W. DEPOT STREET	25
S. RALEIGH STREET + TIPPET ROAD	27
S. RALEIGH STREET+ SITE DRIVE 1	28
CONCLUSION / RECOMMENDATIONS	29

#### **FIGURES**

FIGURE 1 – SITE LOCATION MAP	11
FIGURE 2 – SITE PLAN	12
FIGURE 3 – EXISTING LANE CONFIGURATIONS	14
FIGURE 4 – EXISTING (2023) TRAFFIC VOLUMES	15
FIGURE 5– NO-BUILD (2028) TRAFFIC VOLUMES	17
FIGURE 6 – SITE TRIP DISTRIBUTION	19
FIGURE 7 – SITE TRIP ASSIGNMENT	20
FIGURE 8 – BUILD (2028) TRAFFIC VOLUMES	21
FIGURE 9 – RECOMMENDED LANE CONFIGURATIONS	30

## **McAdams**

### SOUTH CROSS TOWNHOMES > TRAFFIC IMPACT ANALYSIS

#### **TABLES**

TABLE 1: ROADWAY CHARACTERISTICS	13
TABLE 2: TRIP GENERATION	18
TABLE 3: HIGHWAY CAPACITY MANUAL – LEVELS OF SERVICE + DELAY CRITERIA	22
TABLE 4: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + W. DEPOT STREET	23
TABLE 5: CAPACITY ANALYSIS SUMMARY OF W. CHURCH STREET + S. CROSS STREET	24
TABLE 6: CAPACITY ANALYSIS SUMMARY OF W. CHURCH STREET + W. DEPOT STREET	25
TABLE 7: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + TIPPET ROAD	27
TABLE 8: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + SITE DRIVE 1	28

#### **APPENDICES**

APPENDIX A: TIA SCOPING CHECKLIST
APPENDIX B: COUNT DATA
APPENDIX C: TRAFFIC SIGNAL INFOMATION
APPENDIX D: CAPACITY ANALYSIS RESULTS – S. RALEIGH STREET + W. DEPOT STREET
APPENDIX E: CAPACITY ANALYSIS RESULTS – W. CHURCH STREET + S. CROSS STREET
APPENDIX F: CAPACITY ANALYSIS RESULTS – W. CHURCH STREET + W. DEPOT STREET
APPENDIX G: CAPACITY ANALYSIS RESULTS – S. RALEIGH STREET + TIPPEET ROAD
APPENDIX H: CAPACITY ANALYSIS RESULTS – S. RALEIGH STREET + SITE DRIVE 1
APPENDIX I: TURN LANE WARRANTS
APPENDIX J: SIGNAL WARRANT ANALYSIS



## TRAFFIC IMPACT ANALYSIS SOUTH CROSS TOWNHOMES

Angier, NC

#### INTRODUCTION

The proposed residential will be located north of Tippet Road, west of S. Raleigh Street, and south of W. Depot Street in Angier, NC. Site access will be served via one (1) full movement driveway on S. Raleigh Street and a connection to South Cross Street. The purpose of this Traffic Impact Analysis (TIA) is to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to mitigate the impacts on the roadway network. The site is currently undeveloped and is expected to consist of the following land uses at full buildout:

> 200 townhomes

The proposed site is to be built-out by the year 2028. A TIA Scoping Checklist was reviewed and approved by the North Carolina Department of Transportation (NCDOT) and the Town of Angier (Town), outlining the TIA scope and assumptions. The scoping document and approval correspondence is provided in Appendix A. Based on the approved scoping; the following intersections are included in this TIA study area:

- > S. Raleigh Street and W. Depot Street
- > W. Depot Street and W. Church Street
- > W. Church Street and S. Cross Street
- > S. Raleigh Street and Tippet Road
- > S. Raleigh Street and Site Drive 1 (Proposed)

Refer to Figure 1 for a map of the study area. Figure 2 provides the most up to date preliminary site plan available at time of preparation of this study.

To determine the traffic impacts of the proposed development, the following analysis scenarios are included in this study:

- > Existing (2023) Traffic Conditions
- > No-Build (2028) Traffic Conditions
- > Build (2028) Traffic Conditions







DSES ONLY. ALL DIMENSIONS AND YIELDS SUBJECT TO VERIFICATION/CLARIFICATION WITH JURISDICTIONAL ENTITIES

## SOUTH CROSS CONCEPT C MATTAMY HOMES



VICINITY MAP

## SITE DATA

COUNTY PIN	AC	DB:PG
0673-57-8318	+/- 20.50 AC	740:0341
0673-67-6577	+/- 10.32 AC	2878:0187
TOTAL:	+/- 30.82 AC	
EXISTING ZONING:	ANGIER - R-1	5
CURRENT LAND USE	VACANT	
WATERSHED:	UPPER SOUTH	H RIVER
RIVER BASIN:	CAPE FEAR F	RIVER
FIRM MAP:	3720066200J	- MAP REVISED 10.03.2006
TOWNHOUSE - 20' X 70' UNITS (140' ) DENSITY:	( 120' OVERALL): 18 5.84 DU/AC	0 DU
OPEN SPACE REQUIREMENT (UDO 6 ACTIVE RECREATION SPACE (UDO 6	.3.3): 6.16 AC (209 .3.3): 3.08 AC (509	6) 6 of open space requirement)
PARKING REQUIREMENT PER TOWN REQUIREMENT - 1.5 PER BEDROG ASSUMING 3 BR UNITS:	UDO (3.3.2 - PERMIT OM PLUS 1 PER BEDI 720 SPACES	TED USES TABLE) ROOM OVER 2. (4 PER DU)

PROVIDED PER LOT:	540 SPACES (1-CAR GARAGE AND 2-CAR DRIVEWAY)
PROVIDED ON SITE:	180 SPACES
TOTAL:	720 SPACES

SITE REQUIRE	MENTS	REQUIRED 15,000 SF 80'	PROPOSED 16,800 SF 140'
MIN. BUILDING SETBACK MAX. BUILDING HEIGHT	FRONT SETBACK SIDE SETBACK SIDE SETBACK (CORNER) REAR SETBACK	25' 10' 20' 15' 35'	25' 10' 20' 15' 35'

TYP. TOWNHOUSE BUILDING DETAIL

#### CONCEPT NOTES

- THIS YIELD STUDY EXHIBIT IS FOR PLANNING PURPOSES ONLY AND SUBJECT TO VERIFICATION/CLARIFICATION OF ALL ASSUMPTIONS MADE AND ALL EXISTING AND PROPOSE TURES SHOWN HEREIN. TING BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON GIS INFORMATION. FUL
- BOUNDARY, TOPO, AND DELINEATION OF ENVIRONMENTAL FEATURES (STREAMS W) BU WEILANDS, PONDS, ETC...) WILL BE REQUIRED PRIOR TO DESIGN AND MAY EFFECT THE I according to harnett county gis a sanitary sewer line runs along S. cross St and
- ames st. CCORDING TO HARNETT COUNTY GIS A WATER MAIN RUNS ALONG S. CROSS ST AND JAMES ST
- ACCORDING TO HARNETI COUNTY GIS A WATER MAIN RUINS ALONG S. CROSS ST AND JAMES. THE NEAREST HYDRANT IS LOCATED 90 SOUTH OF THE INTERSECTION OF S. CROSS ST AND JAME AND ROT PROFENDING AND AND ROT PROFENDING AND AND ROT PROFECTION STANDARDS, DETERMINATION ANY IMPACT FINAL SUBDIVISION LAYOUT THIS LAYOUT IS DONE WITHOUT BENEFIT OF AN ENVIRONMENTAL REVIEW OF THE EXTENTS AND LOCATIONS OF EXISTING STREAMS AND POON FOOD ON THE SUBJECT PACELS. DETERMINATION ANY IMPACT FINAL SUBDIVISION LAYOUT, PROPOSED SUBJING DAYOUT.





#### **EXISTING CONDITIONS**

The proposed development is located in an area primarily consisting of residential and agricultural land uses. Figure 3 provides a graphical representation of the existing lane configuration, storage capacity, traffic control type, and intersection spacing within the study area. Roadway characteristics within the study area is shown in Table 1. Annual Average Daily Traffic (AADT) data is provided based on the most recent count data provided by NCDOT. This AADT data provides the average Vehicles Per Day (vpd) for the subject facility based on typical operations. This AADT data is provided for informational purposes only and is not utilized for capacity analysis calculations within this study.

TABLE 1: ROADWAY CHARACTERISTICS							
Road Name	Route # Maintained By Typical Cross Section		Speed Limit	AADT (year of data)			
W. Depot Street	NC 210	NCDOT	2-lane undivided	35 mph	13,000 vpd (2021)		
S. Raleigh Street	NC 55	NCDOT	2-lane undivided/ 2-lane divided w/ TWLTL	35 mph	13,500 vpd (2021)		
Tippet Road	SR 1507	NCDOT	2-lane undivided	35 mph	6,040 vpd (2023)*		
W. Church Street	N/A	Town	2-lane undivided	25 mph	620 vpd (2023)*		
S. Cross Street	N/A	Town	2-lane undivided	25 mph	50 vpd (2023)*		

Existing peak hour turning movement counts were conducted in April 2023 during typical weekday AM (7:00 – 9:00 AM) and weekday PM (4:00 – 6:00 PM) peak hours. This data was collected at the following existing study intersections:

- > S. Raleigh Street and W. Depot Street
- > W. Depot Street and W. Church Street
- > W. Church Street and S. Cross Street
- > S. Raleigh Street and Tippet Road

Peak hour traffic volumes were determined from these traffic counts and balanced between study intersections, where appropriate. Traffic count data is provided in Appendix B. Refer to Figure 4 for the Existing (2023) peak hour traffic volumes. Current signal plans were obtained from NCDOT and is included in Appendix C.

The Existing (2023) traffic volumes were analyzed utilizing the current lane configurations to determine existing operations for the study area.









#### **NO-BUILD CONDITIONS**

In order to account for background growth in the study area prior to the proposed developments buildout year of 2028, the existing traffic count volumes were grown at a set growth rate. Per the approved scoping checklist, the existing traffic counts were grown at a 4% annual growth rate to determine projected traffic volumes. Adjacent developments were assumed to be included in this growth rate and no additional site trips were added to this study. Refer to Figure 5 for the No-Build (2028) traffic volumes.

Based on coordination with the Town and NCDOT during scoping, it was determined that there were no background roadway improvements to be included under future traffic conditions.





#### **BUILD CONDITIONS**

The proposed development is expected to consist of 200 townhomes. Based on the Institute for Transportation Engineers (ITE) *Trip Generation Manual*, 11<sup>th</sup> Edition, and the suggested method of trip calculations provided in NCDOT's *Rate vs. Equation spreadsheet*, trips for the proposed development were calculated for weekday daily, weekday AM peak hour, and weekday PM peak hour. A summary of this trip generation is provided in Table 2.

TABLE 2: TRIP GENERATION									
	Donaitu	Calculation	Daily	aily AM Peak Hour PM Peak H			ak Hour	Hour	
Land Use (ITE Code)	Density	Methodology	Trips Enter Exit		Exit	Total	Enter	Exit	Total
Townhomes (215)	200 DU	Adjacent / Equation	1,474	25	73	98	68	48	116

Based on the existing traffic patterns, population centers surrounding the development, and engineering judgment the site trips were distributed according to the regional distributions listed as follows:

- > 55% to/from the north via S. Raleigh Street
- > 10% to/from the south via S. Raleigh Street
- > 10% to/from the east via W. Depot Street
- > 10% to/from the south via W. Depot Street
- > 10% to/from the west via Tippet Road
- > 5% to/from the north via S. Cross Street

The trip generation and distribution were approved by NCDOT and the Town within the scoping checklist provided in Appendix A. Refer to Figure 6 for the detailed trip distribution percentages within the study area.

The trip distribution was applied to the trip generation to determine the trip assignment for the proposed development site trips at all study intersections. Refer to Figure 7 for the site trip assignment. To determine the future traffic volumes at the study intersections with buildout of the proposed site, the No-Build (2028) traffic volumes were added to the site trip assignment to determine Build (2028) traffic volumes. Refer to Figure 8 for the Build (2028) traffic volumes.



10%









#### CAPACITY ANALYSIS

The intersections and analysis scenarios included in this study were analyzed to determine the potential impact by the proposed development and to recommend improvements to mitigate any potential impacts. The capacity analysis reviews the level of service (LOS), delay, and vehicle queues expected under each analysis scenario utilizing the methodology contained in the *Highway Capacity Manual* (HCM), 6<sup>th</sup> Edition, published by the Transportation Research Board.

LOS is a qualitative measurement of traffic operations based on the average total vehicle delay of the movement, approach, or intersection. The HCM includes six levels of service, ranging from level "A" (free flow conditions) to level "F" (where over-saturated conditions are evident). Table 3 provides a summary of the thresholds for each LOS under both unsignalized (stop-control) and signalized operations.

TABLE 3: HIGHWAY CAPACITY MANUAL – LEVELS OF SERVICE + DELAY CRITERIA							
Level of Service (LOS)	Unsignalized	Signalized					
	Average Control Delay (Seconds per vehicle)	Average Control Delay (Seconds per vehicle)					
А	≤ 10	≤ 10					
В	> 10 and ≤ 15	> 10 and ≤ 20					
С	> 15 and ≤ 25	> 20 and ≤ 35					
D	> 25 and ≤ 35	> 35 and ≤ 55					
E	> 35 and ≤ 50	> 55 and ≤ 80					
F	> 50	> 80					

A computer software package, Synchro (version 11.1), was utilized for the analysis of operations within this study. Within this software package, SimTraffic was also used to review queue lengths and the operations of intersections within the context of location and spacing in the study area. The capacity analysis summary table for each study intersection provides the delay and LOS for each approach and overall intersection, when appropriate. More detailed queues and delay information is provided in the appendix.

Per the NCDOT *Congestion Management Capacity Analysis Guidelines*, several assumptions were applied to the full study. A summary of these assumptions is provided below:

- > A Peak Hour Factor (PHF) of 0.90 was used for all analysis scenarios and intersections.
- > A heavy vehicle percentage of 2% was applied to all analysis scenarios and intersections.
- For allowable movements with volumes less than four (4), a volume of four (4) was applied in the capacity analysis. In order to present accurate information within the traffic volume figures, this was not applied to those conditions.

#### S. RALEIGH STREET + W. DEPOT STREET

The intersection of S. Raleigh Street and W. Deport Street is currently a signalized, four-leg intersection. This intersection was analyzed under Existing (2023), No-Build (2028), and Build (2028) conditions.

Table 4 provides the capacity analysis for the subject intersection with the lane configurations and traffic control shown in the table. Refer to Appendix D for the Synchro capacity analysis reports.

TABLE 4: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + W. DEPOT STREET							
Conditions	A P		Weekday AM P	eak Hour	Weekday PM Pe	Weekday PM Peak Hour	
	P R O A C H	Lane Configurations	LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	Overall Delay (seconds)	
Existing (2023)	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	D (42) D (44) D (38) C (22)	C (35)	D (40) D (39) C (33) C (30)	C (35)	
No-Build (2028)	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	F (116) E (56) D (45) C (28)	E (57)	F (123) D (52) D (38) C (32)	E (61)	
Build (2028)	EB WB NB SB	1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH-RT 1 LT, 1 TH, 1 RT	F (138) E (61) D (48) C (28)	E (63)	F (156) E (56) D (39) C (33)	E (70)	

Capacity analysis of Existing (2023) conditions indicate that the intersection of S. Raleigh Street and W. Deport Street is expected to operate at an overall LOS C during the weekday AM and PM peak hours.

When comparing overall intersection delays from No-Build (2028) to Build (2028) conditions, the addition of development traffic does not cause a degradation in LOS or increases in delays of greater than 25%; which does not trigger the requirement for mitigation based on guidelines within the NCDOT Policy on Street and Driveway Access to North Carolina Highways (Driveway Manual). Additionally, the proposed development is expected to account for approximately 3% of the overall traffic at this intersection during the weekday AM and weekday PM peak hours. Due to the minor impacts by the proposed development at this intersection, no improvements are recommended.

#### W. CHURCH STREET + S. CROSS STREET

The intersection of W. Church Street and S. Cross Street is currently an unsignalized four-leg intersection. This intersection was analyzed under Existing (2023), No-Build (2028), and Build (2028) conditions.

Table 5 provides the capacity analysis for the subject intersection with the lane configurations and traffic control shown in the table. Refer to Appendix E for the Synchro capacity analysis reports.

TABLE 5: CAPACITY ANALYSIS SUMMARY OF W. CHURCH STREET + S. CROSS STREET							
Conditions	A P	Lane Configurations	Weekday AM P	eak Hour	Weekday PM Peak Hour		
	P R O A C H		LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	Overall Delay (seconds)	
Existing (2023)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A	
No-Build (2028)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A	
Build (2028)	EB <sup>1</sup> WB <sup>1</sup> NB <sup>2</sup> SB <sup>2</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	A (7) A (7) A (9) A (9)	N/A	A (7) A (7) A (9) A (9)	N/A	

1. Level of service for major-street left-turn movement.

2. Level of service for minor-street approach.

Capacity analysis of Existing (2023), No-Build (2028), and Build (2028) conditions indicates that both the major-street left-turn movements and minor-street approaches at the intersection of W. Church Street and S. Cross Street are expected to operate at LOS A during the weekday AM and PM peak hours. The proposed development is expected to account for a negligible increase in delay during both the weekday AM and weekday PM peak hours. Due to the acceptable operations and minor impacts at this intersection by the proposed development, no improvements are recommended.

#### W. CHURCH STREET + W. DEPOT STREET

The intersection of W. Church Street and W. Depot Street is currently an unsignalized, four-leg intersection. This intersection was analyzed under Existing (2023), No-Build (2028), and Build (2028) conditions.

Table 6 provides the capacity analysis for the subject intersection with the lane configurations and traffic control shown in the table. Refer to Appendix F for the Synchro capacity analysis reports.

TABLE 6: CAPACITY ANALYSIS SUMMARY OF W. CHURCH STREET + W. DEPOT STREET							
Conditions	A P		Weekday AM P	eak Hour	Weekday PM Peak Hour		
	P R O A C H	Lane Configurations	LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	eak Hour Overall Delay (seconds) N/A N/A N/A	
Existing (2023)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	D (33) E (46) A (9) A (9)	N/A	E (39) E (48) A (9) A (9)	N/A	
No-Build (2028)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	F (55) F (103) A (10) A (10)	N/A	F (77) F (115) A (10) A (10)	N/A	
Build (2028)	EB <sup>2</sup> WB <sup>2</sup> NB <sup>1</sup> SB <sup>1</sup>	1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT 1 LT-TH-RT	F (57) F (130) A (10) A (10)	N/A	F (79) F (133) A (10) A (10)	N/A	

1.Level of service for major-street left-turn movement.

2.Level of service for minor-street approach.

Capacity analysis of Existing (2023) conditions indicate that the intersection of W. Church Street and W. Depot Street operates at LOS A for the major street left-turn movements and at LOS E for the minor-street approach during the weekday AM and PM peak hours, with the exception of the eastbound minor-street approach (LOS D).

Under No-Build (2028), and Build (2028) conditions, the major street left-turn movements are expected to operate at LOS A while the minor-street approaches are expected to operate at LOS F. These levels-of service are not uncommon for stop-controlled minor-street approaches at intersections with heavy mainline traffic volumes. Based on SimTraffic analysis, the upstream effects of the signalized intersection along S. Raleigh Street provides breaks in the mainline traffic for service of the minor-street turning traffic at this intersection.

Although poor levels-of-service are not uncommon for minor-street approaches at intersections with heavy mainline traffic volumes, a signal was considered under Build (2028) conditions to improve operations. The potential need for signalization was evaluated based on the guidelines contained within the *Manual on Uniform Traffic Control Devices* (MUTCD). Weekday AM and PM peak hour volumes from Build (2028) traffic conditions were utilized to evaluate the peak hour (warrant 3) warrant. Based on the results of this warrant, this intersection is not expected to satisfy the peak hour warrant during either the weekday AM or PM peak hours. Since the peak hour warrant is not expected to be met under Build (2028) conditions, it is unlikely that the longer period 8-hour (warrant 1) or 4-hour warrant (warrant 2) from the MUTCD would be met, which NCDOT typically favors in determining the need for signalization. As a result, signalization is not recommended at this intersection by the proposed development. Refer to Appendix J for a summary of the peak hour signal warrant analysis at this intersection.



#### SOUTH CROSS TOWNHOMES > TRAFFIC IMPACT ANALYSIS

It should be noted that the proposed development is expected to account for less than 1% of the overall traffic at this intersection. Additionally, the high growth rate assumed for this analysis has degraded the No-Build (2028) conditions to LOS F for the major-street left-turn movements. This intersection is also located just inside the Town limits where the speed limit reduces to 35 mph. This reduced speed limit is expected to result in additional gaps in traffic sufficient for turns from the minor street approaches. Due to the low volume of site traffic at this intersection and limited feasible improvements, no improvements are recommended.

#### S. RALEIGH STREET + TIPPET ROAD

The intersection of S. Raleigh Street and Tippet Road is currently an unsignalized three-leg intersection. This intersection was analyzed under Existing (2023), No-Build (2028), and Build (2028) conditions.

Table 7 provides the capacity analysis for the subject intersection with the lane configurations and traffic control shown in the table. Refer to Appendix G for the Synchro capacity analysis reports.

TABLE 7: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + TIPPET ROAD							
Conditions	A P		Weekday AM	Peak Hour	Weekday PM	Weekday PM Peak Hour	
	P R O A C H	Lane Configurations	LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	Peak Hour Overall Delay (seconds) N/A N/A N/A	
Existing (2023)	EB <sup>2</sup> NB <sup>1</sup> SB	1 LT-RT 1 LT-TH 1 TH-RT	C (21) A (8) 	N/A	C (19) A (9) 	N/A	
No-Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	1 LT-RT 1 LT-TH 1 TH-RT	D (33) A (9) 	N/A	D (28) A (10) 	N/A	
Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	1 LT-RT 1 LT-TH 1 TH-RT	D (35) A (9) 	N/A	D (32) A (10) 	N/A	

1.Level of service for major-street left-turn movement.

2.Level of service for minor-street approach.

Capacity analysis of Existing (2023), No-Build (2028), and Build (2028) conditions indicate that the intersection of S. Raleigh Street and Tippet Road operates at LOS A for the major street left-turn movements and LOS D for the minor-street approach during the weekday AM and PM peak hours.

When comparing overall intersection delays from No-Build (2028) to Build (2028) conditions, the addition of development traffic does not cause a degradation in LOS or increases in delays of greater than 25%; which does not trigger the requirement for mitigation based on guidelines within the NCDOT Policy on Street and Driveway Access to North Carolina Highways (Driveway Manual). Additionally, the proposed development is expected to account for less than 2% of the overall traffic at this intersection during the weekday AM and weekday PM peak hours. Due to the acceptable operations and minor impacts at this intersection by the proposed development, no improvements are recommended.

#### S. RALEIGH STREET+ SITE DRIVE 1

The future intersection of S. Raleigh and Site Drive 1 is expected to operate as an unsignalized, three-leg intersection. This intersection was analyzed under Build (2028) conditions.

Table 8 provides the capacity analysis for the subject intersection with the lane configurations and traffic control shown in the table. Refer to Appendix H for the Synchro capacity analysis reports.

TABLE 8: CAPACITY ANALYSIS SUMMARY OF S. RALEIGH STREET + SITE DRIVE 1							
Conditions	A P P R O A C H	Lane Configurations	Weekday AM	Peak Hour	Weekday PM Peak Hour		
			LOS and Approach Delay (seconds)	Overall Delay (seconds)	LOS and Approach Delay (seconds)	Overall Delay (seconds)	
Build (2028)	EB <sup>2</sup> NB <sup>1</sup> SB	<b>1 LT-RT</b> 1 LT, TH 1 TH- <b>RT</b>	C (16) A (8) 	N/A	C (18) A (9) 	N/A	

Improvements recommended by the Developer are shown in **bold**.

1.Level of service for major-street left-turn movement.

2.Level of service for minor-street approach.

Capacity analysis of Build (2028) conditions indicate that the intersection of S. Raleigh Street and Site Drive 1 is expected to operate at LOS C or better for the major-street left-turn movement and minor-street approach during the weekday AM and PM peak hours.

A right-turn lane was considered at this intersection based on methodology outlined in the Policy on Street and Driveway Access to North Carolina Highways (published by NCDOT). Based on the findings from the turn lane warrant analysis, the intersection does not meet criteria to warrant an exclusive right-turn lane due to the expected low volume of turning traffic into the site at this intersection. Additionally, due to the limited property frontage along S. Raleigh Street, sufficient right-of-way is not expected to be available for a southbound right-turn at this driveway. Based on the NCDOT turn lane warrants and the acceptable operations, no turn lanes are recommended at the subject intersection.

#### **CONCLUSION / RECOMMENDATIONS**

The purpose of this Traffic Impact Analysis is to determine the potential traffic impacts of this development and to identify transportation improvements that may be required to mitigate the impacts on the roadway network. The proposed residential development will be located north of Tippet Road, west of S. Raleigh Street, and south of W. Depot Street Angier, NC. Site access will be served via one (1) full movement driveway on S. Raleigh Street and a connection to South Cross Street. The site is currently undeveloped and is expected to consist of a maximum of 200 townhomes. The proposed site is expected to be built-out by the year 2028.

Based on the approved scoping, the following intersections were included in this TIA study area:

- > S. Raleigh Street and W. Depot Street
- > W. Depot Street and W. Church Street
- > W. Church Street and S. Cross Street
- > S. Raleigh Street and Tippet Road
- > S. Raleigh Street and Site Drive 1 (*Proposed*)

#### **Recommended Improvements by Developer**

South Cross Street

> Construct an extension of South Cross Street from the current terminus to serve as an access for the proposed development with one (1) ingress lane and one (1) egress lane.

S. Raleigh Street + Site Drive 1

- > Construct Site Driveway #1 with one (1) ingress lane and one (1) egress lane.
- > Provide stop control on the eastbound approach of the proposed site driveway.

