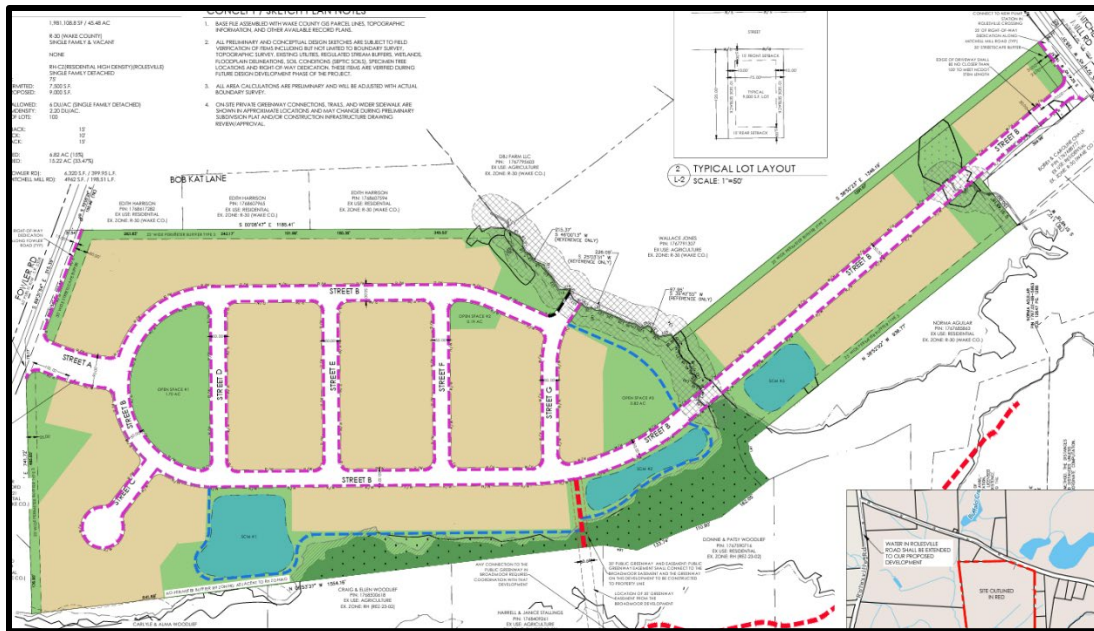


Memo

To: Town of Rolesville Planning Board
From: Michael Elabarger, Assistant Planning Director
Meredith Gruber, Planning Director
Date: June 23, 2025
Re: REZ-24-04 – Rezoning Map Amendment Application
6520 Fowler Road / 6521 Mitchell Mill Road

Background

The Town of Rolesville Planning Department received a Rezoning application in November 2024 for properties located at 6520 Fowler Road (PIN 1768-60-2816) and 6521 Mitchell Mill Road (PIN1767-69-6199), which total approximately 45.48 acres. The rezoning request is to change the zoning from Wake County's R-30 Residential District to the Town's Land Development Ordinance (LDO) Residential High (RH) Density District s a Conditional Zoning District (RH-CZ). The application includes a Concept Site Plan and proposed Conditions of Approval.



Rezoning Concept Site Plan

The proposed Conditions of Approval are included as Attachment 6. As per LDO Section 3.3.B.2., Conditions and site-specific standards imposed in a conditional district shall be standards above and beyond the requirements of this LDO; conditions shall not lesser the standards in this LDO. Conditions shall be limited to those that address the conformance of the development and use of

the site to the Rolesville Comprehensive Plan or the impacts reasonably expected to be generated by the development or use of the site.

The proposed Conditions of Approval address the following topics:

- Conformance with the Concept Site Plan;
- Prohibited Uses;
- Maximum of 100 Single Family Detached Lots;
- Architectural Standards;
- Pollinator Garden;
- Community Amenities.

Annexation ANX-25-01

A Voluntary Annexation Petition (ANX 25-01) has also been submitted, reviewed, and processed simultaneously with this rezoning request. There will be a combined Legislative Hearing with both the Annexation Petition and Rezoning Application at a future Town Board of Commissioners' meeting.

Applicant Justification

The Applicant provided a justification statement noting that the project proposes only single family detached uses, which are the least dense residential type that is contemplated by the Residential Medium land use category (see attached application).

Neighborhood Meeting

The Applicant conducted a neighborhood meeting for this Rezoning request on February 18, 2025; a meeting report follows this Staff Memo as an attachment.

Comprehensive Plan

Land Use

The 2017 Comprehensive Plan's Future Land Use Map designates the subject property, and the entire surrounding area between Fowler and Mitchell Mill Roads, as appropriate for Medium-Density Residential development. Per the Plan, this is defined as predominantly single family residential uses with portions of duplex, townhomes, and/or multifamily residential. These are lots or tracts at a density range of three to five dwelling units per gross acre.

Community Transportation Plan

The Town of Rolesville's Community Transportation Plan (CTP, adopted 2021) includes recommendations for Thoroughfares, Collectors, and intersections. There are no planned roadways within or through the subject property. This project will make frontage improvements to both Fowler Road and Mitchell Mill Road as part of the subdivision Construction Infrastructure Drawing design/review/approval process pending this Rezoning request.

Greenway and Bike Plans

This site is outside the scope of the 2022 Greenway and Bike Plans, but the project is providing a public Greenway connection to the adjacent Broadmoor project and its public Greenway system.

Consistency

The Applicant's rezoning request is consistent with the Town of Rolesville's Comprehensive Plan for the following reasons:

- The proposed single family detached housing type fits within the Medium Density Residential land use description.
- The proposed vehicular circulation network enables equal access to the two bordering thoroughfare type roadways.
- The proposed pedestrian network and connectivity to the neighboring Broadmoor subdivision increases mobility for the future residents.

Traffic Impact Analysis

The Town's on-call consulting firm, Stantec, has prepared the Traffic Impact Analysis (TIA) for this proposed subdivision. The TIA notes a total of 1,010 total daily trips for the proposed residential use. The traffic study also defines specific improvements for Rolesville Road at Mitchell Mill Road, Fowler Road at Driveway A, and Mitchell Mill Road at Driveway B. Please see the attached draft TIA report.

As per Land Development Ordinance (LDO) Section 9.2.5.B. Connectivity, streets shall be interconnected and connect with adjacent streets external to the subdivision to provide multiple routes for pedestrian and vehicle trips. Implementation of any access points or associated improvements recommended by a Traffic Impact Analysis (TIA) are required.

Development Review

The Technical Review Committee (TRC) reviewed this Rezoning application, with all comments pertinent to the consideration of the general development plan being resolved. Note that this does not mean that all LDO subdivision and/or site development regulations have been demonstrated, as the attached Concept Site Plan is only a conceptual plan, and not an engineered and dimensioned layout.

Staff Recommendation

The specifics of this Rezoning as committed to in the proposed Conditions of Approval make this request consistent with the Future Land Use plan vision in this area, and thus consistent with the main tenet of the Comprehensive Plan. This project commits to only Single-family Detached dwelling units (foregoing any more dense housing style) and calculates to a density of just 2.2 dwelling units per acre, well below the prescribed 3-5 units per acre. For these reasons Staff finds the Rezoning request compatible and not in conflict with the guidance of the Comprehensive Plan.

Proposed Motion

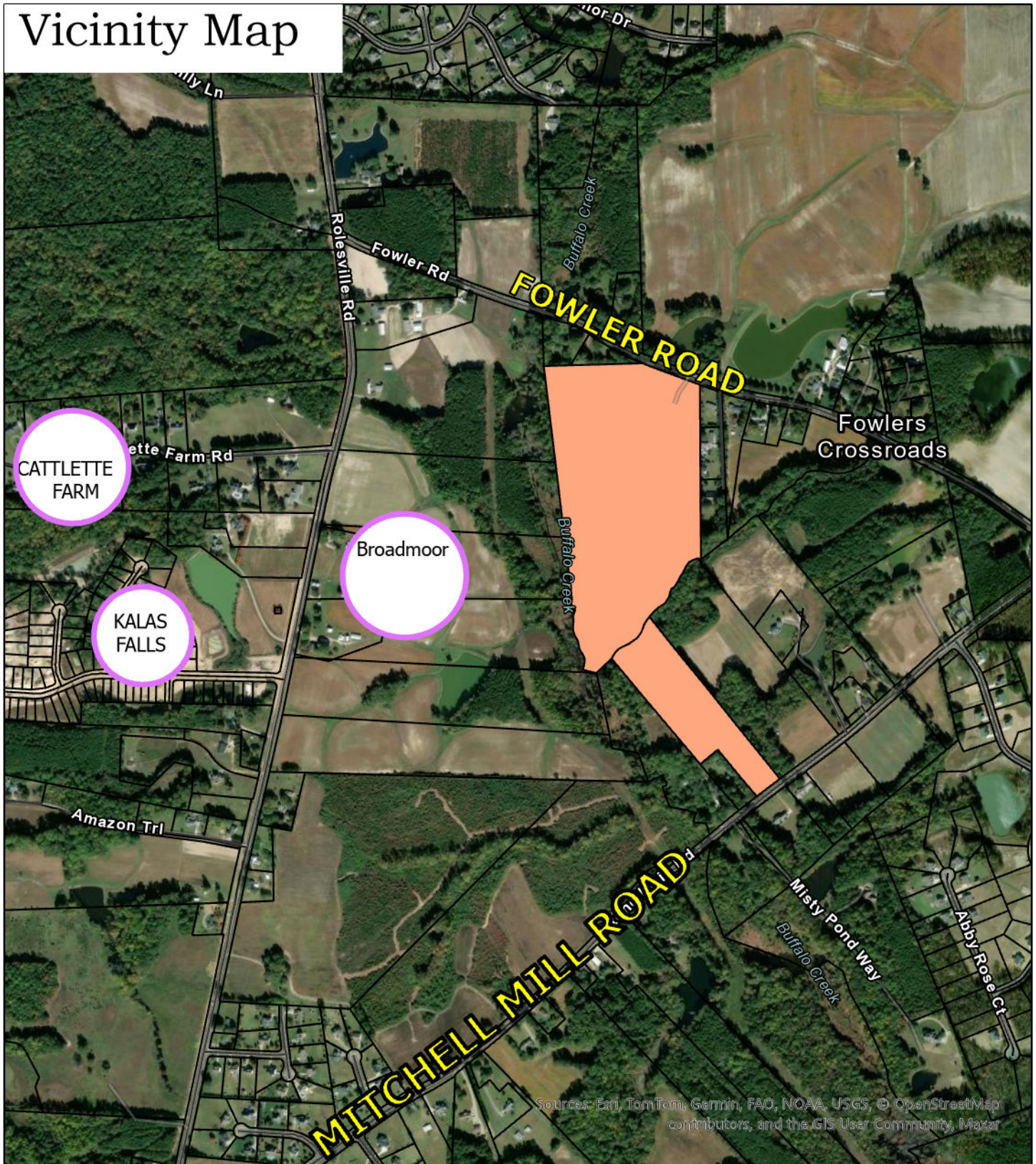
Motion to recommend (approval or denial, along with mention of Consistency or Inconsistency with the Comprehensive Plan) to the Town Board of Commissioners of Rezoning request REZ-24-04 – 6520 Fowler Rd/6521 Mitchell Mill Road.

Attachments

1	Vicinity Map
2	Existing Zoning Map
3	Future Land Use Map
4	Map Amendment Application

5	Concept Site Plan
6	Proposed Conditions of Approval dated 2024-10-25
7	Neighborhood Meeting Package
8	Traffic Impact Analysis (TIA) report dated June 12, 2025
9	NCDOT TIA submittal checklist

Vicinity Map



Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, Maxar



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Zoning Map

SITE

Legend

Rolesville_Zoning_ Zoning Classification

- RL
- RM
- RM-CZ
- RH
- RH-CZ
- R&PUD
- R&PUD-CZ
- MH
- OP
- OP-CZ
- GC
- GC-CZ
- TC
- GI
- GI-CZ
- Property

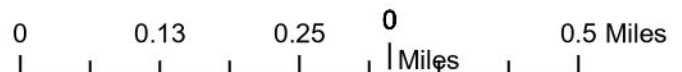
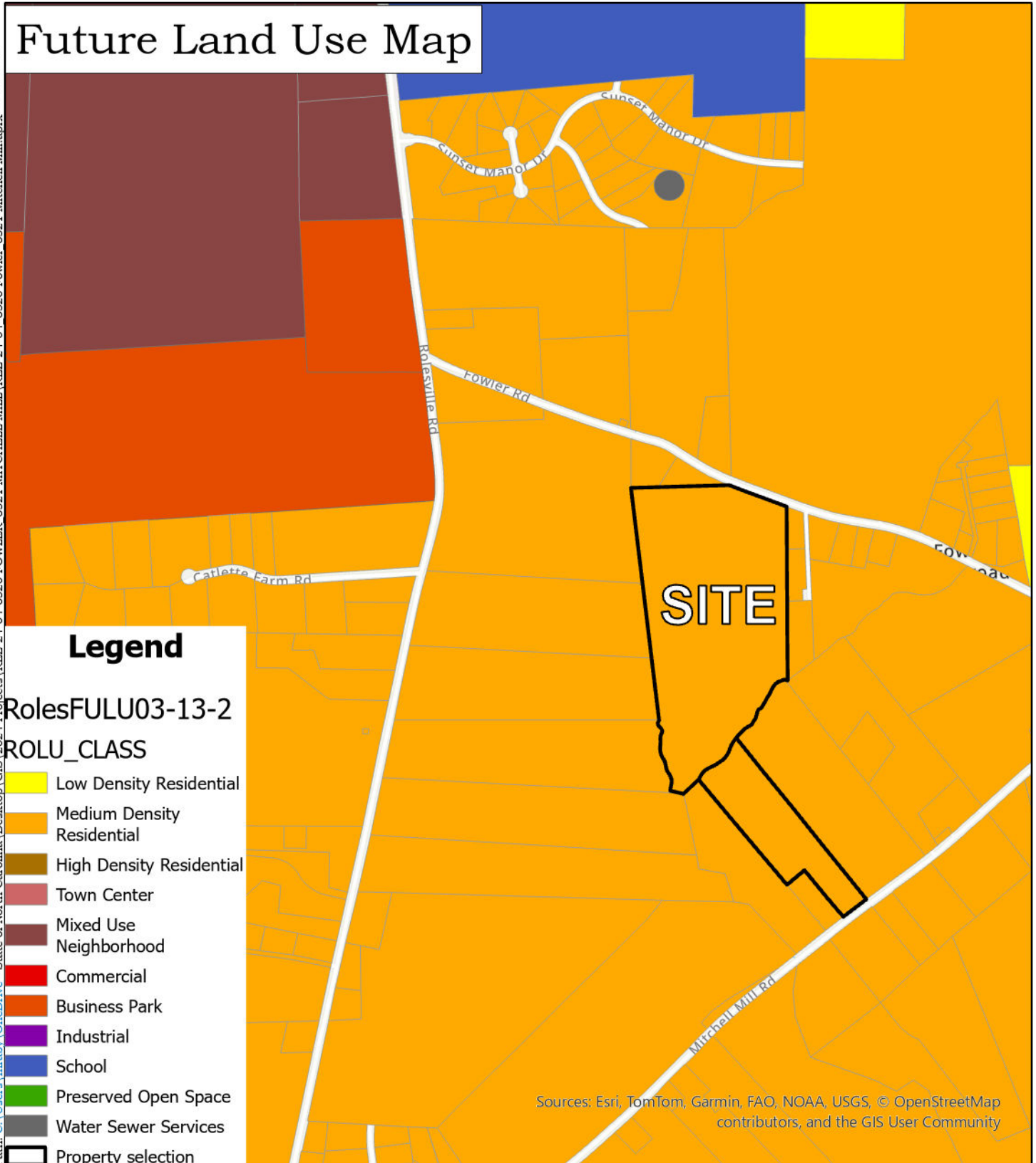
Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community



0 0.13 0.25 0 0.5 Miles

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Future Land Use Map



Zoning Map Change (Rezoning) Application

Town of Rolesville Planning Department | PO Box 250 | Rolesville, NC 27571 | 919-554-6517 | planning@rolesville.nc.gov

Planning Department Home Page: [Official Town Webpage](#)

APPLICATION INFORMATION:

Site Address(es): 6520 Fowler Road and 6521 Mitchell Mill Road	Site Area (in acres): 45.48
Rezoning Type: ☐ General ☒ Conditional	Location: ☒ County Limits ☐ Town Limits ☐ ETJ
Existing Zoning District(s): R-30 (Wake County)	Proposed Zoning District(s): RH (Residential High Density) – Conditional District
Zoning Overlay(s): None	Associated Previous Case Number(s): N/A
PIN(s): 1768-60-2816 and 1767-69-6199	
PID(s):	
Current Use(s): Single Family Detached Dwelling and vacant	Proposed Use(s): Single Family Detached Dwellings

APPLICATION MINIMUM REQUIREMENTS / GUIDANCE::

☒ Completed application and checklist below.	
☒ If the request is for a <i>Conditional District</i> per LDO Section 3.3., submittal shall include a separate document being a list of written Conditions of Approval that can include exhibits, plans, maps, etc. Provide a Date and space for revision Dates; this document will always be referenced including its Date.	☒ A Concept (nee site) Plan may be submitted, considered, and approved as part of a <i>Conditional District</i> request; it shall be clearly incorporated into a written condition for “general compliance” upon future Development Application reviews and approvals. Provide a Date and space for revision Dates; this document will always be referenced including its Date. See Next page for details.
☒ Completed Property Owner's Consent Form . If multiple owners, each owner must complete their own form.	☐ Presubmittal meeting notes and date (if applicable).
☐ Traffic Impact Analysis (TIA), ITE Trip Generation Letter, or Letter/Email from Planning staff confirming TIA is not required. (LDO Section 8.C.5)	☐ The Activity Center (AC) and Neighborhood Commercial (NC) zoning districts shall require submittal of a Concept (nee site) Plan per LDO Sections 3.4.1 and 3.4.2.
☐ Upon application receipt and completeness check, an INVOICE for the application fee will be created and issued via email to Applicant.	
☐ Any additional supporting documents that may have been requested by Staff may have been provided.	

Contact Information

Property Owner(s) Barbara J. Richards

Address 7925 STONY HILL RD

City/State/Zip WAKE FOREST NC 27587

Phone c/o Collier Marsh (919) 835-4663

Email c/o Collier Marsh colliermarsh@parkerpoe.com

Applicant / Agent (Business & Contact Name) Collier Marsh, Parker Poe Adams & Bernstein LLP

Address 301 Fayetteville Street, Suite 1400

City/State/Zip Raleigh, NC 27601

Phone (919) 835-4663

Email colliermarsh@parkerpoe.com

Engineer/Architect (Business & Contact Name) Pam Porter, PLA, LEED AP

Phone (919) 484-8880

Email pam@tmtla.com

Preferred Point of Contact: ☐ Owner ☐ Applicant ☐ Engineer/Architect ☒ Registered Agent/Attorney

Concept Plan Minimum Requirements (Required for AC or NC Districts, optional for Conditional Districts.) :

- ☒ A vicinity map of the site, illustrating the boundaries of the site, north arrow, and scale reference

☒ Site Data Table of typical property information (Property Legal Description, acreage, etc.) Last Revised: April 10, 2023

☐ If Commercial - Square footage of proposed building/use/development or Coverage, approximate parking calculations, if multi-family the number of Dwelling units, etc.

☒ If Residential – Number of proposed development lots (including by type of lots/use), density (proposed/permitted), approximate parking calculations,

☒ Required/Provided calculations for open space

☒ Existing and Proposed Use and Zoning District of property and adjacent properties

☒ Drawing depicting the details provided above and general concept of development such as –

 - Lot layout and size/dimension of lots,
 - Proposed building layout and/or general footprint locations
 - Vehicular circulation / street layout including existing/proposed right-of-way widths (public, alley, private)
 - Pedestrian circulation including Greenways / Sidepaths / Bike Lanes,
 - General Utility access and points of connection / extensions,
 - Buffers (Street/Perimeter), Open/communal spaces, stormwater control measures etc.

☒ Name, address, and contact information for property owner and/or Applicant

☒ Name/information of professional who created Concept Plan

☐ Any other information requested by Planning Department staff

Rezoning Justification

Provide a **separate document** titled “Statement of Justification” (including Date) that addresses each/all of the following:

1. Is the application consistent with the Comprehensive Plan, Community Transportation Plan, Bicycle and Greenway Plans, and any other adopted Town policy plans?
2. Is the application in conflict with any provision of the LDO or the Town Code of Ordinances?
3. Does the application correct any errors in the existing zoning present at the time it was adopted?
4. Does the rezoning allow uses that are compatible with existing and permitted uses on surrounding land/properties?
5. Would the application ensure efficient development within the Town, including the capacity and safety of the street network, public facilities, and other similar considerations?
6. Would the application result in a logical and orderly development pattern?
7. Would the application result in adverse impacts on water, air, noise, storm water management, wildlife, vegetation, wetlands, and the natural functioning of the environment?
8. If a **Conditional district** providing proposed Conditions of Approval, do they address and mitigate the impacts reasonably expected to be generated by the development or use of the property, can they reasonably be implemented, and can they be enforced for the subject property, and will they result in no greater impact on adjacent properties or the community at large than would be expected to occur by the permitted uses and the minimum development standards of the corresponding General zoning district.

Property Owner Notification List

Per UDO ____, provide list of all property owners within 300 feet of the subject site (per Wake County tax records at the time of filing this application) as they will be required to receive a Notification Letter regarding the Public Hearing before the Town Board of Commissioners (when scheduled). If needed, provide additional sheets to insure all are included.

WAKE COUNTY PIN	NAME	MAILING ADDRESS	ZIP CODE
		See Attached Exhibit C	

Property Owner's Consent & Authorization Form

Property Owner's Consent is required for each Development Application. A completed and signed copy of this form is required to be included with every Application submittal.

For Property with more than one owner, each owner must sign a separate copy of this form.

For Applications with more than one Applicant/representative, enter all names in this form, or submit separate forms.

In the event that the Owner of Property is an organization/entity, proof of signature authority on behalf of the organization/entity (ie Secretary of State business registration) must be attached to this form.

Authorization by Property Owner(s)

I, Samuel Albert Richards, as attorney in fact for Barbara J. Richards,

(property owner's printed legal name; include signatory name and title if signing for a company)

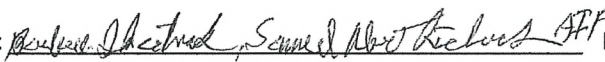
swear and affirm that I am the owner of property at 6520 Fowler road and 6521 Mitchell Mill,

(property address, legal description; provide separate sheet if required)

as shown in the records of Wake County, North Carolina, which is the subject of this Application

(Type and Case # Fowler Road Rezoning and Annexation; Case nos. TBD).

I further affirm that I am fully aware of the Town's Application, fee(s), and procedural requirements, and consent to this Application. I authorize the below listed person(s) to submit this Application and serve as representative/point of contact for this Application.

Property Owner's Signature:  Date: 10-30-24

Applicant/Agent/Contact persons:	
Print:	Signature:
Collier Marsh	

Property Owner's Consent & Authorization Form

Property Owner's Consent is required for each Development Application. A completed and signed copy of this form is required to be included with every Application submittal.

For Property with more than one owner, each owner must sign a separate copy of this form.

For Applications with more than one Applicant/representative, enter all names in this form, or submit separate forms.

In the event that the Owner of Property is an organization/entity, proof of signature authority on behalf of the organization/entity (ie Secretary of State business registration) must be attached to this form.

Authorization by Property Owner(s)

I, Amy R. Harrison, as attorney in fact for Barbara J. Richards,

(property owner's printed legal name; include signatory name and title if signing for a company)

swear and affirm that I am the owner of property at 6520 Fowler road and 6521 Mitchell Mill,

(property address, legal description; provide separate sheet if required)

as shown in the records of Wake County, North Carolina, which is the subject of this Application

(Type and Case # Fowler Road Rezoning and Annexation; Case nos. TBD).

I further affirm that I am fully aware of the Town's Application, fee(s), and procedural requirements, and consent to this Application. I authorize the below listed person(s) to submit this Application and serve as representative/point of contact for this Application.

Property Owner's Signature: Barbara J. Richards by Date: 10-30-2011
Amy R. Harrison AIF

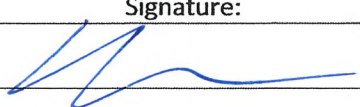
Applicant/Agent/Contact persons:	
Print:	Signature:
Collier Marsh	

EXHIBIT A

Fowler Road Rezoning Justification Statement

1. Is the application consistent with the Comprehensive Plan, Community Transportation Plan, Bicycle and Greenway Plans, and any other adopted Town policy plans?

The application is consistent with the Comprehensive Plan, Community Transportation Plan, Bicycle and Greenway Plans, and other adopted Town policy plans that apply to the property. The Town's Future Land Use Map designates the property as Medium Residential, which is described as, "Predominantly single-family residential uses with portions of duplex, townhouse or multifamily residential. These are lots or tracts at a density range of three to five dwelling units per gross acre including the preserved open space areas along limited non-residential uses under planned unit development or form-based code provisions." The proposed zoning is consistent with the Residential Medium designation. Although the proposed zoning district is RH, the actual density proposed is approximately 2 units per acre. In addition, the project proposes only single family detached uses, which are the least dense residential type that is contemplated by the Residential Medium designation.

2. Is the application in conflict with any provision of the LDO or the Town Code of Ordinances?

The applicant is not aware of conflicts with any provision of the LDO or the Town Code of Ordinances.

3. Does the application correct any errors in the existing zoning present at the time it was adopted?

There are no known errors in the existing zoning that this application corrects.

4. Does the rezoning allow uses that are compatible with existing and permitted uses on surrounding land/properties?

Yes, the rezoning would allow uses that are compatible with existing and permitted uses on surrounding land/properties. The adjacent Woodlief project contains a combination of townhomes and single family detached homes. This project is consistent with the Woodlief development, but transitions downward in density with only single family detached homes.

5. Would the application ensure efficient development within the Town, including the capacity and safety of the street network, public facilities, and other similar considerations?

Yes, the application will ensure efficient development within the Town. The properties associated with this project will be annexed into the Town. A Traffic Impact Analysis will be performed to ensure that the project mitigates any impacts it has on traffic in the study area.

6. Would the application result in a logical and orderly development pattern?

Yes, the application results in a logical and orderly development pattern. The project will be developed in accordance with the Town's Ordinances and LDO. The adjacent Woodlief project

EXHIBIT A

Fowler Road Rezoning Justification Statement

contains a combination of townhomes and single family detached homes. This project is consistent with the Woodlief development, but transitions downward in density with only single family detached homes.

7. Would the application result in adverse impacts on water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment?

This application will not result in adverse impacts on water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment. As shown in the accompanying concept plan, the project protects environmentally sensitive areas. The project also proposes 33.9% open space, well beyond the required 15.1% open space. The property is also in the Buffalo Creek Watershed area, and will adhere to the regulations put forth to protect the watershed. Stormwater control measures will be reviewed and approved by Town staff in order to ensure that the watershed is well protected in this regard. Any other items of concern will be addressed during the application process.

THE BARBARA ANN JONES RICHARDS TRACTS (PINS 1768.04-60-2816
& 1767.02-69-6199) TO BE ANNEXED INTO THE TOWN OF ROLESVILLE

Being all of those tracts or parcels of land located
in Wake Forest Township, Wake County, North Carolina,
and more particularly described:

Beginning at a tack in a stone, said stone located at the
northwest corner of the subject tract (Barbara Ann Jones
Richards - Pin 1768.04-60-2816), then along the southern
property line of the Alford Tracts (Pins 1768.04-51-8609
and 1768.04-61-0621),
North 88°34'18" East 741.72 feet to an existing nail in
the centerline of Fowler Road (S.R. 2308 - 60' Public R/W),
then, along the centerline of Fowler Road,
South 69°31'54" East 315.39 feet to an existing nail,
then, leaving the centerline of Fowler Road,
South 00°08'47" East 1,185.41 feet along the western prop-
erty line of the Edith Harrison Tracts (Pins 1768.04-
61-7282, 1768.04-60-7965, and 1768.04-60-7594) to an exist-
ing iron pipe, then South 19°17'59" West 11.14 feet to a
computed point in the centerline of Jones Creek, then,
following the run of Jones Creek,
South 29°30'12" West 34.21 feet to a computed point,
South 57°32'58" West 16.00 feet to a computed point,
North 89°13'54" West 12.49 feet to a computed point,
South 70°03'16" West 17.55 feet to a computed point,
South 18°59'17" West 14.48 feet to a computed point,
South 63°45'33" West 20.62 feet to a computed point,
South 20°24'01" West 31.53 feet to a computed point,
North 79°39'40" West 7.41 feet to a computed point,
South 49°45'27" West 33.39 feet to a computed point,
South 62°35'00" West 37.78 feet to a computed point,
South 00°36'33" East 16.93 feet to a computed point,
South 04°43'29" East 16.97 feet to a computed point,
North 75°00'08" West 11.31 feet to a computed point,
South 60°42'13" West 19.87 feet to a computed point,
South 36°36'47" West 16.83 feet to a computed point,
South 10°54'28" West 8.67 feet to a computed point,
South 44°52'04" West 14.47 feet to a computed point,
South 02°32'51" West 16.09 feet to a computed point,
South 29°28'40" West 13.33 feet to a computed point,
South 01°17'28" East 10.33 feet to a computed point,
South 24°14'08" West 13.22 feet to a computed point,
South 22°03'43" West 38.30 feet to a computed point,
South 26°52'18" West 28.92 feet to a computed point,
South 11°16'25" West 23.29 feet to a computed point,
South 35°17'58" West 13.69 feet to a computed point,

South 17°57'36" West 10.92 feet to a computed point,
South 27°09'59" East 13.64 feet to a computed point,
South 23°59'33" West 9.37 feet to a computed point,
South 57°36'24" West 21.84 feet to a computed point,
South 29°24'20" West 14.25 feet to a computed point,
South 10°34'18" East 31.31 feet to a computed point,
South 55°27'59" West 8.34 feet to a computed point,
then, along the property line of Wallace G. Jones
(Pin 1767.02-79-1307), South 38°52'23" East 1320.84
feet to nail set at the centerline of Mitchell Mill
Road (S.R. 2224 - 60' Public R/W), then, along the
centerline of Mitchell Mill Road, South 52°41'45" West
198.51 feet to a nail set, then leaving the center-
line of Mitchell Mill Road, North 38°52'49" West
399.75 feet along the property line of Bobby Ray &
Carolyn C. Chalk (Pin 1767.02-68-8777) to an iron
pipe found, then South 51°48'18" West 150.00 feet
to a set rebar, then along the property line of Nor-
ma Aguilar (Pin 1767.02-68-5863), North 38°52'02"
West 936.77 feet to a computed point in the run of
Jones Creek, then along the run of Jones Creek,
South 69°55'53" West 9.38 feet to a computed point,
South 87°33'25" West 16.01 feet to a computed point,
South 66°02'25" West 40.47 feet to a computed point,
South 45°16'52" West 53.88 feet to a computed point
in the run of Buffalo Creek; then, along the run of
Buffalo Creek and along the Donnie L. & Patsy Woodlief
property, North 37°52'33" West 162.05 feet to a computed
point, North 19°58'53" West 110.90 feet to a computed point,
North 22°56'00" West 133.74 feet to a computed point,
and North 08°29'35" East 92.71 feet to a computed
point, in the creek, then leaving the run of Buffalo
Creek, along the Janice Gayle W. Stallings and
Harrell Stallings property, the Billy Craig Woodlief
and Ellen Woodlief Holding property, and the Carlyle
D. Woodlief and Alma D. Woodlief property (pins
1768.03-40-9261, 1768.04-50-0618, & 1768.04-51-1519,
respectively), North 06°53'37" West 1554.16 feet to
the point and place of beginning and being two tracts
to be annexed into the Town Of Rolesville and having
a total area of 46.106 acres.

FOWLER ROAD REZONING

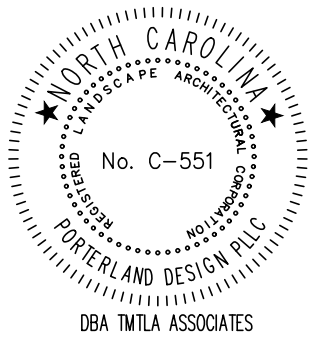
REZ-24-04

6520 FOWLER ROAD & 6521 MITCHELL MILL ROAD
ROLESVILLE, NC

PIN# 1768-60-2816 & 1767-69-6199



Know what's below.
Call before you dig.
Dial 811 or 1-800-632-4949



SUBMITTAL DATES

FIRST SUBMITTAL 11/1/2024
SECOND SUBMITTAL 1/02/2025
THIRD SUBMITTAL 4/01/2025

SHEET INDEX

L-0 COVER SHEET
L-2 CONCEPTUAL PLAN

owner:
Richards, Barbara Ann Jones
6721 mitchell mill rd,
zebulon nc 27597-8416

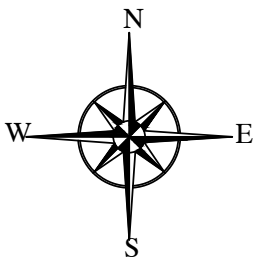
landscape architect/design professional:
TMTLA Associates
5011 Southpark Drive, Ste. 200
Durham, North Carolina 27713
(919) 484-8880
Contact: Pam Porter, PLA

developer/applicant:
Hopper Communities
1616 Cleveland Avenue
Charlotte, NC 28203
(919) 805-4801
contact: Bill Harrell

legal:
Parker Poe Adams & Bernstein
301 Fayetteville St #1400
Raleigh, NC 27601
(919) 828-0564
contact: Collier Marsh



VICINITY MAP
1" = 500'



REVISIONS:

1/2/2025	

COVER SHEET
FOWLER ROAD REZONING
6520 FOWLER ROAD & 6521 MITCHELL MILL ROAD
ROLESVILLE, NC

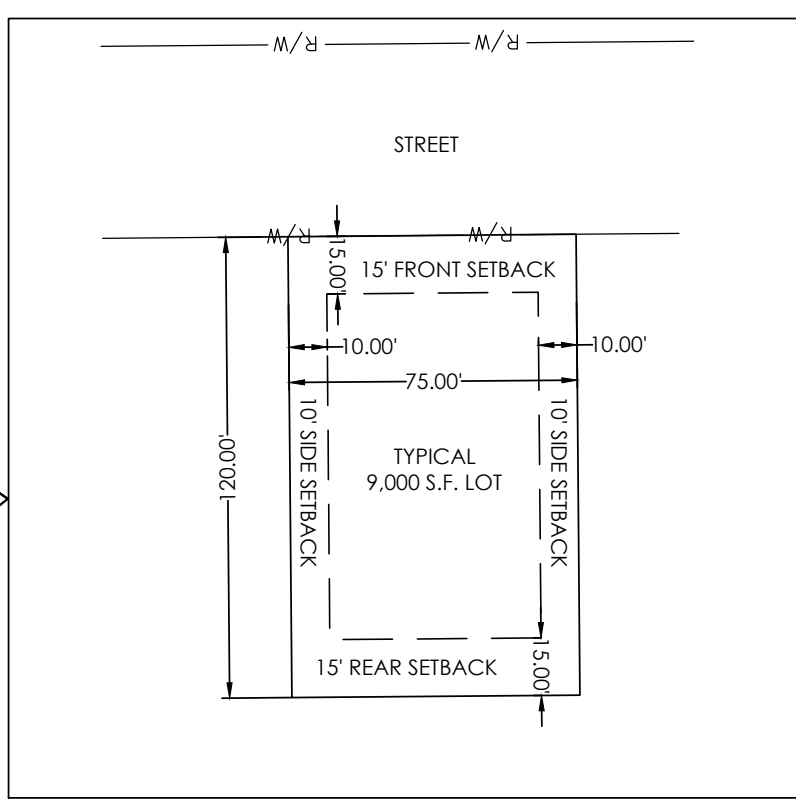
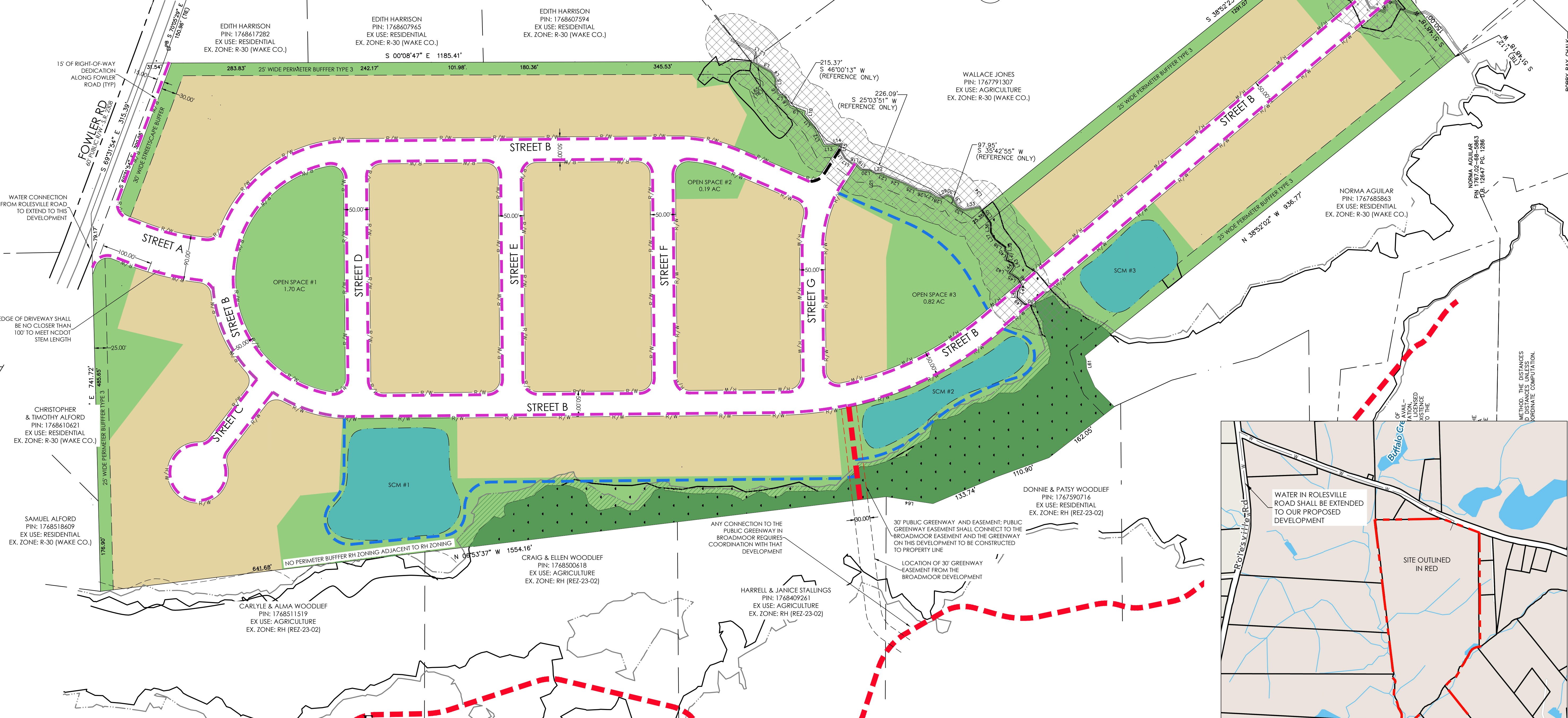
SCALE:
AS NOTED
DRAWN BY:
PMP
PROJECT #
24076
DATE:
11/1/2024
SHEET
L-0
OF XX

SITE DATA

TOTAL AREA: 1,981,108.8 SF / 45.48 AC
EX. ZONING: R-30 (WAKE COUNTY)
EX. USE: SINGLE FAMILY & VACANT
OVERLAYS: NONE
PROPOSED ZONING: RH-CZ (RESIDENTIAL HIGH DENSITY) (ROLESVILLE)
PROPOSED USE: SINGLE FAMILY DETACHED
MINIMUM LOT WIDTH: 75'
MINIMUM LOT SIZE PERMITTED: 7,500 S.F.
MINIMUM LOT SIZE PROPOSED: 9,000 S.F.
MAXIMUM DENSITY ALLOWED: 6 DU/AC (SINGLE FAMILY DETACHED)
PROPOSED MAXIMUM DENSITY: 2.20 DU/AC.
MAXIMUM NUMBER OF LOTS: 100
FRONT BUILDING SETBACK: 15'
SIDE BUILDING SETBACK: 10'
REAR BUILDING SETBACK: 15'
OPEN SPACE REQUIRED: 6.82 AC (15%)
OPEN SPACE PROVIDED: 15.22 AC (33.47%)
ROW DEDICATION (FOWLER RD): 6,320 S.F. / 399.95 L.F.
ROW DEDICATION (MITCHELL MILL RD): 4,962 S.F. / 198.51 L.F.

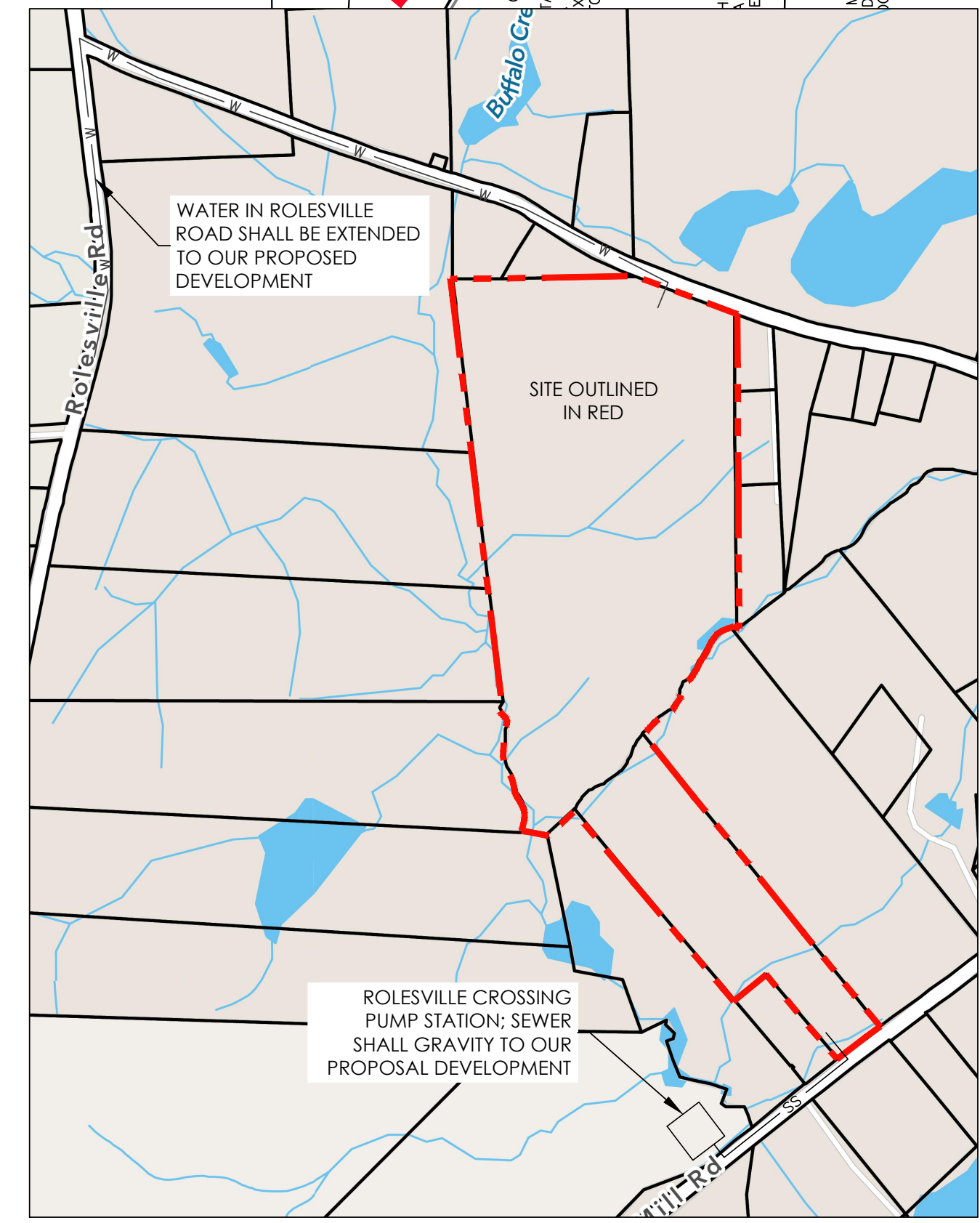
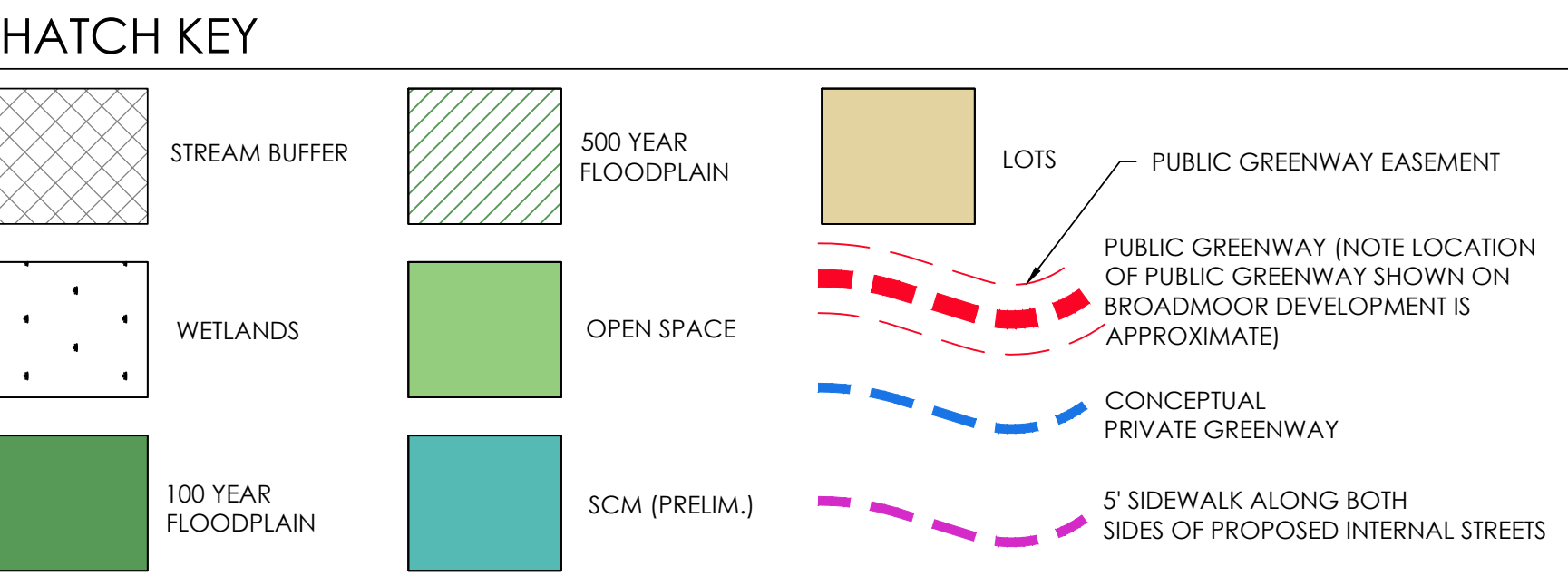
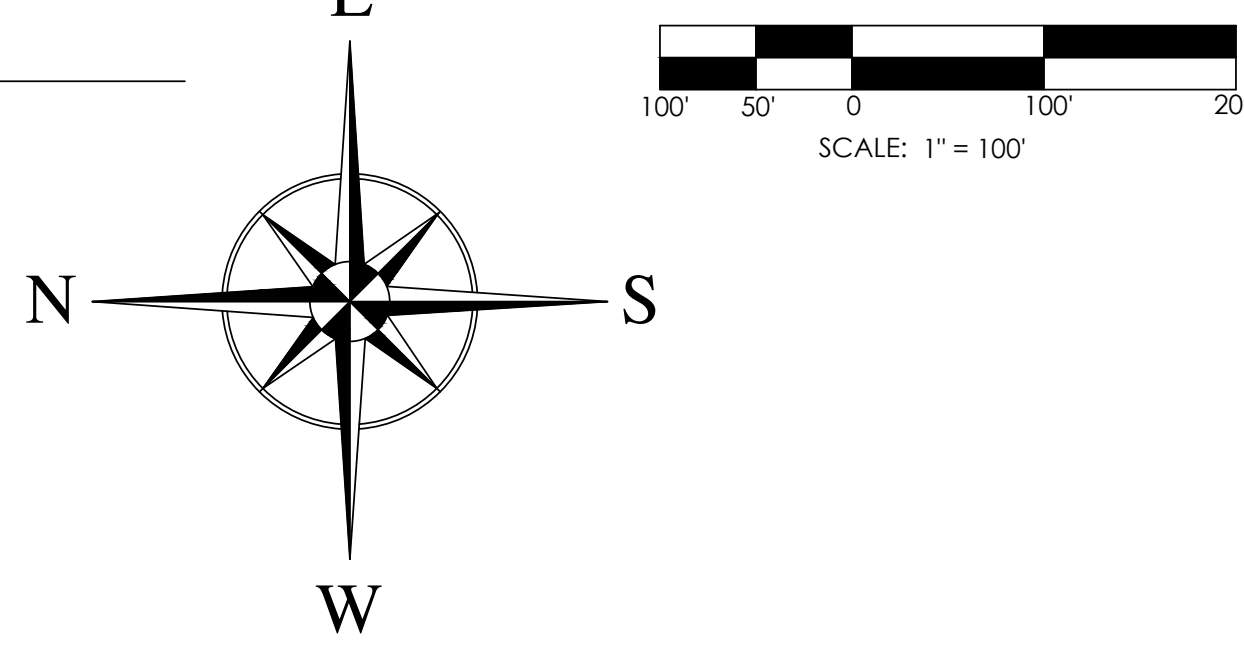
CONCEPT / SKETCH PLAN NOTES

1. BASE FILE ASSEMBLED WITH WAKE COUNTY GIS PARCEL LINES, TOPOGRAPHIC INFORMATION, AND OTHER AVAILABLE RECORD PLANS.
2. ALL PRELIMINARY AND CONCEPTUAL DESIGN SKETCHES ARE SUBJECT TO FIELD VERIFICATION OF ITEMS INCLUDING BUT NOT LIMITED TO BOUNDARY SURVEY, TOPOGRAPHIC SURVEY, EXISTING UTILITIES, REGULATED STREAM BUFFERS, WETLANDS, FLOODPLAIN DELINEATIONS, SOIL CONDITIONS (SEPTIC SOILS), SPECIMEN TREE LOCATIONS AND RIGHT-OF-WAY DEDICATION. THESE ITEMS ARE VERIFIED DURING FUTURE DESIGN DEVELOPMENT PHASE OF THE PROJECT.
3. ALL AREA CALCULATIONS ARE PRELIMINARY AND WILL BE ADJUSTED WITH ACTUAL BOUNDARY SURVEY.
4. ON-SITE PRIVATE GREENWAY CONNECTIONS, TRAILS, AND WIDER SIDEWALK ARE SHOWN IN APPROXIMATE LOCATIONS AND MAY CHANGE DURING PRELIMINARY SUBDIVISION PLAT AND/OR CONSTRUCTION INFRASTRUCTURE DRAWING REVIEW/APPROVAL.



2 TYPICAL LOT LAYOUT
L-2 SCALE: 1"=50'

1 CONCEPT PLAN
L-2 SCALE: 1"=100'



3 PRELIMINARY UTILITY CONNECTIONS
L-2 SCALE: 1"=500'



REVISIONS:

1/2/2025	

EXHIBIT B

Fowler Road Rezoning Conditions October 25, 2024

1. The development of the property shall be in substantial conformance with the accompanying Concept Plan. Locations shown for committed elements including, but not limited to greenways, streets, and open areas shown on the Concept Plan, may be adjusted to conform to LDO requirements or as permitted as a minor adjustment by the Land Development Administrator.
2. The following uses shall be prohibited:
 - a. Dwelling, single-family attached;
 - b. Dwelling, double family;
 - c. Dwelling, multiple family;
 - d. Boarding House/Dormitory;
 - e. Family Care Facility;
 - f. Live-work unit;
 - g. Residential Care; and
 - h. Telecommunications tower.
3. There shall be a maximum of 100 single-family detached units.
4. All single-family detached dwellings shall adhere to the following conditions:
 - a. Siding Material:
 - i. If masonry (such as brick veneer or faux stone product) is not the predominant first floor finish (greater than 50%), then the front elevation shall have at least two (2) styles of fiber cement siding (i.e. lap, shake, or board and batten, etc.);
 - ii. Vinyl material is prohibited except for soffits, fascia, and corner boards;
 - iii. No dwelling unit shall be constructed with an exterior elevation or color palette that is identical to the dwelling unit on either side or directly across the street.

EXHIBIT B

Fowler Road Rezoning Conditions October 25, 2024

- b. Garages: A minimum 2-car side-by-side (not tandem) garage shall be provided;
 - c. Roofs: Roof materials shall be asphalt shingles, metal, copper, wood, or a combination of these materials.
 - d. Building Foundations:
 - i. Building foundations along the front façade shall have an exposed height above finished grade of at least 18" and must be finished with masonry product such as brick veneer or faux stone product.
 - ii. Any foundation facing a public street must be finished with masonry product such as brick veneer or faux stone product.
 - e. Rear Yard Amenity: An unenclosed patio, deck, or screened-in porch of at least 64 square feet.
5. Pollinator Garden: The development shall include at least one pollinator garden. The pollinator garden shall be a landscaped garden in which at least seventy five percent (75%) of all plants, excluding grasses, are native milkweeds and other nectar-rich flowers. The final location(s) of pollinator garden shall be determined at subsequent stages of approval and will be identified on the landscape plan submitted with the construction drawings. The pollinator garden shall be constructed prior to the issuance of the 75th residential building permit.
6. Community Amenities: The development shall include one tot-lot and one dog park. Locations will be determined at subsequent stages of approval and will be identified on the construction drawings. The tot-lot and dog park shall be constructed prior to the issuance of the 75th residential building permit.

[SIGNATURE PAGE FOLLOWS]

EXHIBIT B

**Fowler Road Rezoning Conditions
October 25, 2024**

Property Owner Authorization

Property Addresses: 6520 Fowler Road and 6521 Mitchell Mill Road

PINs: 1768-60-2816 and 1767-69-6199

Barbara J. Richards Samuel Albert Richards AIF 10-30-24

Barbara J. Richards

Date

By Samuel Albert Richards, as her attorney in fact

Barbara J. Richards By Amy R. Harrison AIF
Date 10-30-2024

Barbara J. Richards

Date

By Amy R. Harrison, as her attorney in fact

Fowler Road Rezoning

February 18, 2025 Neighborhood Meeting Minutes

The Applicant held a neighborhood meeting for the Fowler Road rezoning at the Village Church located at 410 Southtown Circle. The following members of the project team were in attendance to present and answer questions: Bill Harrell with Hopper Communities, Pamela Porter with TMTLA Associates, and Collier Marsh with Parker Poe. Three neighbors attended during the course of the one hour meeting.

Due to the small number of attendees, the meeting did not follow the formal presentation and question and answer format. Instead, the meeting was conversational. The applicant explained the proposed rezoning and the project. The neighbors in attendance were familiar with other nearby projects and discussed how this project fits in well with the community and development patterns. One neighbor adjacent to the property mentioned that he wanted to make sure surveyors or other construction workers stayed within the boundaries of the development site and the applicant team discussed the best ways to ensure the property lines were followed.

6520 Fowler Rd & 6521 Mitchell Mill Rd Rezoning/Annexation

2/18/25 Neighborhood Meeting Sign-In Sheet

Name

Address

Email

[illegible]



**REZ-24-04: Fowler Road
Traffic Impact Analysis**

Rolesville, North Carolina

June 12, 2025

Prepared for:

Town of Rolesville
502 Southtown Circle
Rolesville, NC 27571

Applicant:

Hopper Communities
1616 Cleveland Avenue
Charlotte, NC 28203

Prepared by:

Stantec Consulting Services Inc.
801 Jones Franklin Road
Suite 300
Raleigh, NC 27606

Sign-off Sheet

This document entitled REZ-24-04 Fowler Road Traffic Impact Analysis was prepared by Stantec Consulting Services Inc. ("Stantec") for the account of Town of Rolesville (the "Client"). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec's professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by Breyer Roberts
(signature)

Breyer Roberts, EI

Reviewed by Austyn Beci
(signature)

Austyn Beci, PE

Approved by Matt Peach
(signature)

Matt Peach, PE, PTOE



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Executive Summary

The proposed Fowler Road development (Rezoning Application 24-04) is located on the south side of Fowler Road east of the intersection of Rolesville Road and north of Mitchell Mill Road west of the intersection with Fowler Road in Rolesville, NC. The parcel is currently zoned as R-30 (Wake County). The applicant is pursuing a rezoning to a new zoning district, Rolesville Residential High Density (RH) that would allow for single-family detached dwelling units in the form of higher-density residential.

The site is anticipated to be completed in 2030 and consists of 100 units of single-family (detached) homes. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual, it is estimated that at full build-out the development is expected to generate 1,010 new trips per average weekday. In the AM and PM peak hours, the development is expected to generate 74 trips (19 entering and 55 exiting) and 99 trips (63 entering and 36 exiting); respectively. Access to the site is envisioned to be provided two full-movement driveways. One along Fowler Road and another along Mitchell Mill Road.

The purpose of this report is to evaluate the proposed development in terms of traffic conditions, evaluate the ability of the adjacent roadways to accommodate the additional traffic volumes, and recommend transportation improvements needed to mitigate congestion that may result from the additional site traffic. This report presents trip generation, trip distribution, traffic analysis, and recommendations for transportation improvements needed to meet anticipated traffic demands. This report examines the following scenarios for the AM and PM peak hours:

- 2025 Existing
- 2030 No-Build
- 2030 Build
- 2030 Build Improved

Capacity analysis for the AM and PM peak hours in each scenario was performed for the following existing intersections:

- US 401 Bypass at SR 1003 (Young Street)
- US 401 Bypass at SR 1003 (Young Street) East U-Turn
- US 401 Bypass at SR 1003 (Young Street) West U-Turn
- SR 1003 (Young Street) at SR 2305 (Quarry Road)
- SR 1003 (Young Street / Rolesville Road) at Rolesville High School
- SR 1003 (Rolesville Road) at SR 2308 (Fowler Road)
- SR 1003 (Rolesville Road) at SR 2224 (Mitchell Mill Road)
- SR 2224 (Mitchell Mill Road) at SR 2308 (Fowler Road)

The results of the capacity analysis at these existing and planned intersections, in addition to the driveways, are summarized in Tables ES-1:



Table ES-1: Level of Service Summary Table

Level of Service (Delay in seconds/vehicle)	2025 Existing		2030 No-Build		2030 Build		2030 Build- Improved	
	AM	PM	AM	PM	AM	PM	AM	PM
US 401 Bypass Eastbound at Young Street	A (8.4)	A (9.7)	B (13.5)	C (22.8)	B (14.2)	C (27.6)		
US 401 Bypass Westbound at Young Street	A (9.2)	A (6.4)	C (24.5)	A (8.8)	C (25.8)	A (8.8)		
US 401 Bypass U-Turn East of Young Street	A (6.3)	A (2.9)	A (6.4)	A (2.6)	A (6.4)	A (2.6)		
US 401 Bypass U-Turn West of Young Street	A (3.4)	A (5.4)	A (4.5)	B (13.7)	A (4.6)	B (14.1)		
Young Street at Quarry Road / The Point North Driveway	F (92.2)	C (21.2)	E (57.8)	D (47.9)	E (62.6)	D (53.2)		
Rolesville Road at Rolesville HS Driveway / The Point South Driveway	F (83.6)	C (17.1)	E (71.0)	C (23.4)	E (75.0)	C (24.1)		
Rolesville Road at Fowler Road	B (11.8)	B (10.8)	B (17.1)	B (17.2)	B (17.8)	B (18.3)		
Rolesville Road at Mitchell Mill Road	C (20.2)	B (12.8)	E (63.8)	C (26.2)	E (70.5)	C (27.7)	D (47.1)	B (18.2)
Mitchell Mill Road at Fowler Road	A (9.7)	A (8.6)	B (10.9)	A (9.5)	B (10.9)	A (9.6)		
Fowler Road at Driveway A					B (10.4)	B (10.2)	B (10.4)	B (10.2)
Mitchell Mill Road at Driveway B					B (10.8)	A (9.7)	B (10.8)	A (9.7)



Signalized Intersection
 Unsignalized Intersection
 Intersection not Analyzed in Scenario
 ## Delay Exceeds 300 Seconds



Rolesville's LDO⁸, Section 8.E, establishes the following Level of Service Standards:

1. *The traffic impact analysis must demonstrate that the proposed development would not cause build-out-year, peak-hour levels of service on any arterial or collector road or intersection within the study area to fall below Level of Service (LOS) "D," as defined by the latest edition of the Highway Capacity Manual, or, where the existing level of service is already LOS "E" that the proposed development would not cause the LOS to fall to the next lower letter grade.*
2. *If the road segment or intersection is already LOS "F," the traffic impact analysis must demonstrate that the proposed development, with any proposed improvements, would not cause build-out year peak-hour operation to degrade more than five (5) percent of the total delay on any intersection approach.*

Based on the findings of this study, specific improvements have been identified and should be completed as part of the proposed development. Intersections where no improvements are recommended are locations that do meet the LOS Standards specified in the LDO⁸ or are not otherwise recommended. These recommendations are illustrated in Figure ES-1.

Averette Road, Young Street, and Rolesville Road Corridor Study

It is recommended that the applicant coordinate their improvements with the findings of the Averette Road, Young Street, and Rolesville Road Corridor Study to ensure consistency with future addendums to the Community Transportation Plan.

US 401 Bypass at Young Street

- No improvements are recommended at this intersection.

US 401 Bypass East U-Turn

- No improvements are recommended at this intersection.

US 401 Bypass West U-Turn

- No improvements are recommended at this intersection.

Young Street at Quarry Road

- No improvements are recommended at this intersection.

Young Street/Rolesville Road at Rolesville HS Driveway

- No improvements are recommended at this intersection.

Rolesville Road at Fowler Road

- No improvements are recommended at this intersection.



Rolesville Road at Mitchell Mill Road

- Construct an exclusive eastbound left-turn lane with 275 feet of full-width storage and appropriate taper.
- The above recommendation will require modification of the planned traffic signal.

Mitchell Mill Road at Fowler Road

- No improvements are recommended at this intersection.

Fowler Road at Driveway A

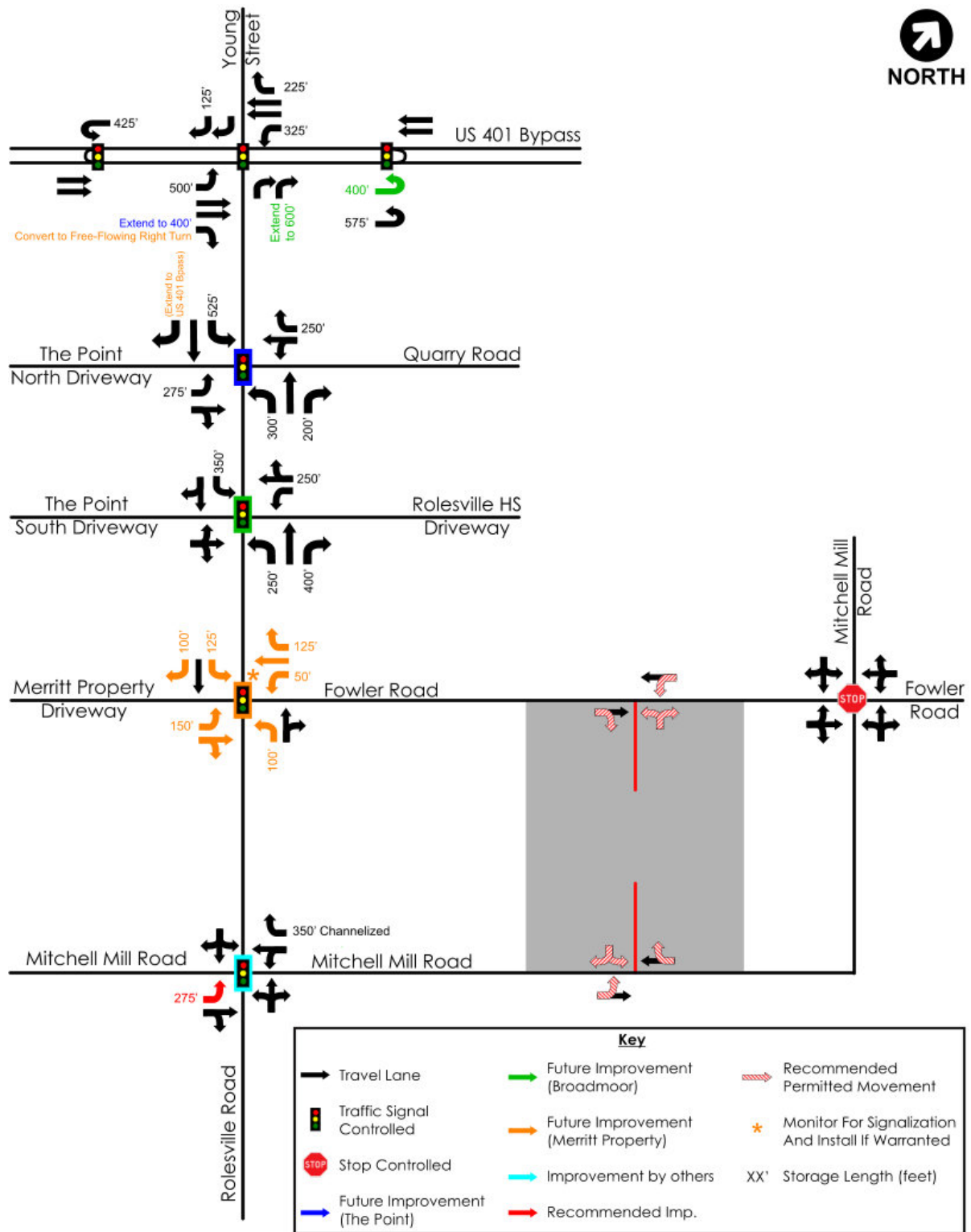
- Construct Driveway A as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.

Mitchell Mill Road at Driveway B

- Construct Driveway B as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.



Figure ES-1: Recommended Improvements



1.0 INTRODUCTION

The proposed Fowler Road development (Rezoning Application 24-04) is located on the south side of Fowler Road east of the intersection of Rolesville Road and north of Mitchell Mill Road west of the intersection with Fowler Road in Rolesville, NC. The parcel is currently zoned as R-30 (Wake County). The applicant is pursuing a rezoning to a new zoning district, Rolesville Residential High Density (RH) that would allow for single-family detached dwelling units in the form of higher-density residential.

The site location is shown in Figure 1. The site plan, prepared by TMTLA Associates, can be found in Figure 2. The traffic analysis considers future build conditions during the build-out year (2030). The analysis scenarios are as follows:

- 2025 Existing
- 2030 No-Build
- 2030 Build
- 2030 Build Improved

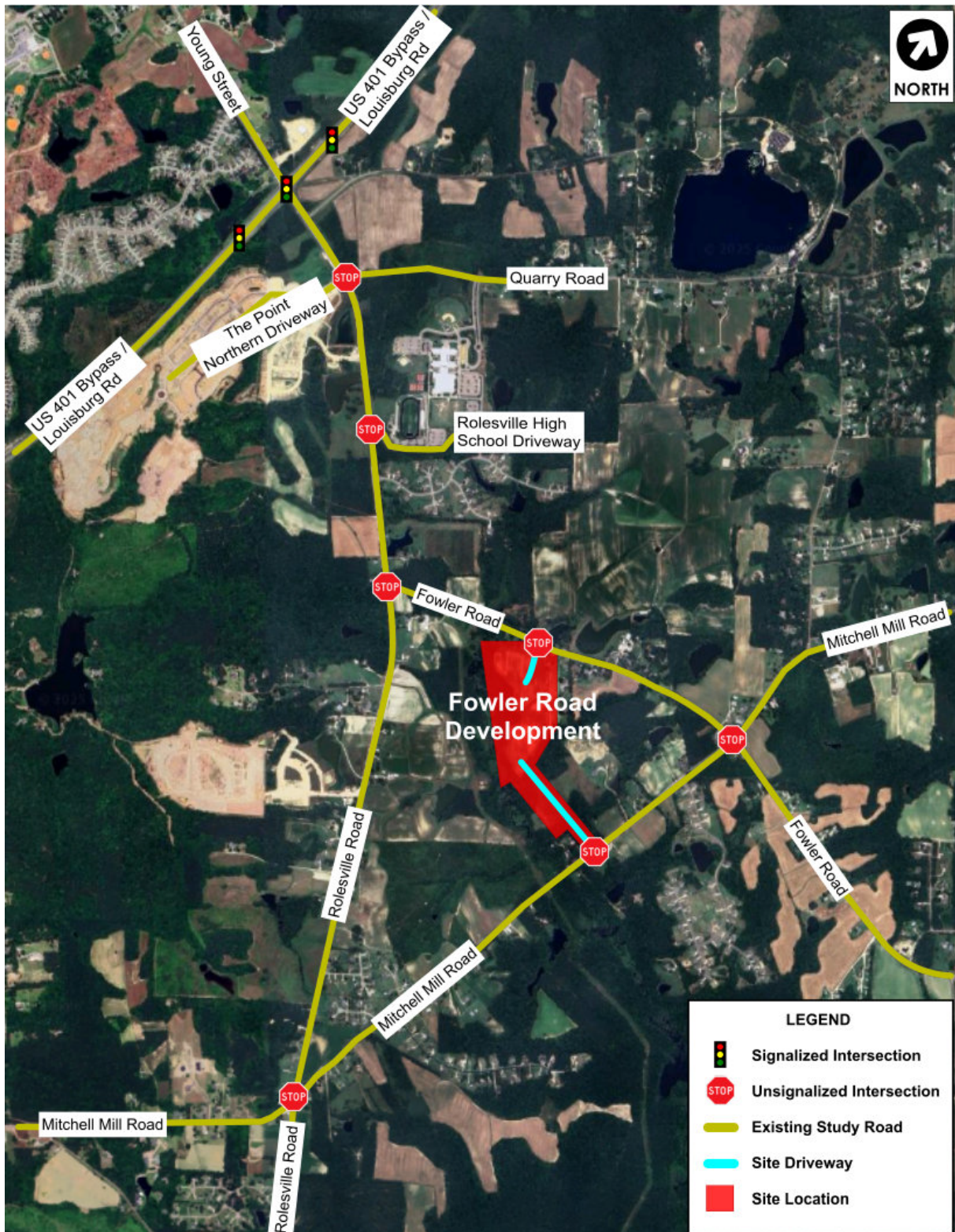
The purpose of this report is to evaluate the development in terms of projected vehicular traffic conditions, evaluate the ability of the adjacent roadways to accommodate the additional traffic, and recommend transportation improvements needed to mitigate congestion that may result from additional site traffic. This report presents trip generation, trip distribution, traffic analyses, and recommendations for improvements needed to meet anticipated traffic demands. The analysis examines the AM and PM peak hours for the aforementioned analysis scenarios.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Introduction
June 12, 2025

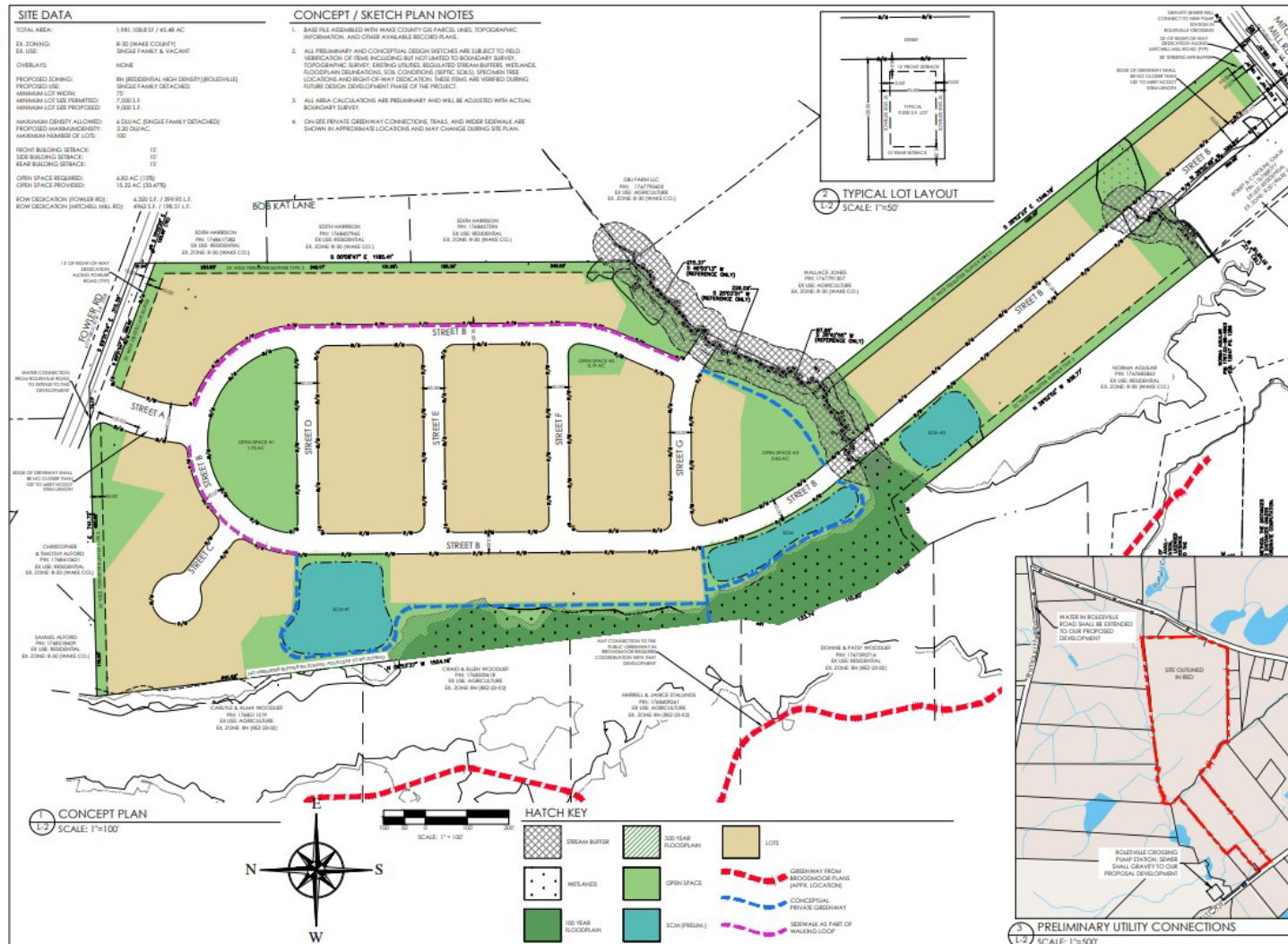
Figure 1: Site Location



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Introduction
June 12, 2025

Figure 2: Site Plan



TMTLA ASSOCIATES
LANDSCAPE ARCHITECTURE & LAND PLANNING
3011 SOUTHWEST AVE., STE. 200 DALLAS, TX 75216
P: (214) 400-8888 E: info@tmtla.com

REVIEWS:

DATE	BY

CONCEPT PLAN
HOPPER COMMUNITIES
DALLAS, TX 75216

SCALE: AS NOTED
DRAWN BY: VXX
PROJECT # 24076
DATE: 06-16-2024
SHEET C-1
OF XX

2.0 INVENTORY OF TRAFFIC CONDITIONS

2.1 STUDY AREA

Stantec coordinated with the Town of Rolesville and the North Carolina Department of Transportation (NCDOT) to determine the appropriate study area and assumptions. The following existing intersections were agreed upon to be analyzed to determine the impacts associated with this development. These intersections are shown in Figure 1.

- US 401 Bypass at SR 1003 (Young Street)
- US 401 Bypass at SR 1003 (Young Street) East U-Turn
- US 401 Bypass at SR 1003 (Young Street) West U-Turn
- SR 1003 (Young Street) at SR 2305 (Quarry Road)
- SR 1003 (Young Street / Rolesville Road) at Rolesville High School
- SR 1003 (Rolesville Road) at SR 2308 (Fowler Road)
- SR 1003 (Rolesville Road) at SR 2224 (Mitchell Mill Road)
- SR 2224 (Mitchell Mill Road) at SR 2308 (Fowler Road)

2.2 PROPOSED ACCESS

Access to the site is envisioned to be provided by one access along Fowler Road and one access along Mitchell Mill Road. The first access (Driveway A) is located approximately 2200' east of the intersection of Fowler Road and Rolesville Road. The second access (Driveway B) is located approximately 2500' west of the intersection of Mitchell Mill Road and Fowler Road.

2.3 EXISTING CONDITIONS

Table 1 provides a detailed description of the existing study area roadway network. All functional classification¹ and average annual daily traffic (AADT)² information were obtained from NCDOT.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Inventory of Traffic Conditions
June 12, 2025

Table 1: Existing Conditions

Road Name	Road Number	Primary Cross-Section	Functional Classification ¹	AADT ² (2023)	Speed Limit (mph)	Maintenance Agency
US 401 Bypass	US 401	4-Lane Divided	Other Principal Arterial	20,000 vpd	55	NCDOT
Young Street / Rolesville Road	SR 1003	2-Lane Undivided	Minor Arterial	4,700-8,200 vpd	45	NCDOT
Quarry Road	SR 2305	2-Lane Undivided	Local Road	2,100 vpd	45	NCDOT
Rolesville High School Driveway	-	2-Lane Undivided	-	-	-	Private
Fowler Road	SR 2308	2-Lane Undivided	Major Collector	1,600 vpd	45	NCDOT
Mitchell Mill Road	SR 2224	2-Lane Undivided	Major Collector	1,800-5,300 vpd	45	NCDOT

¹*TWLTL = Continuous Two-Way Left-Turn Lane

The existing lane configuration and traffic control for the study area intersections are illustrated in Figure 3.

2.4 FUTURE CONDITIONS

The following sub-sections discuss the projects that are anticipated to modify the study area intersections between 2025 and the future year 2030. The future year lane configuration and traffic control for the study area intersections are illustrated in Figure 4.

2.4.1 Broadmoor (aka Woodlief Assemblage)

The following improvements are currently proposed to be implemented in association with the development of the Broadmoor site:

US 401 Bypass at Young Street

- Extend the northbound right-turn lane from 250 feet of full-width storage to 600 feet of full-width storage and appropriate taper.
- Restripe eastern Young Street U-turn location to provide a second eastbound U-turn Lane with 400 feet of full-width storage and appropriate taper.

Young Street at Rolesville HS Driveway / The Point South Driveway

- Monitor the intersection for the installation of a traffic signal. When signalized, the westbound approach should be striped as an exclusive left-turn lane with a shared thru/right-turn storage lane to avoid the use of split-phasing.
- This report assumes that a traffic signal will be installed and operational in the future year of 2028.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Inventory of Traffic Conditions
June 12, 2025

A copy of the TIA is contained in the Appendix. The Broadmoor development is discussed in more detail in Section 4.3.2

2.4.2 The Point

The following improvements are currently proposed to be implemented in association with the development of The Point:

US 401 Bypass at Young Street

- Extend the existing eastbound right-turn lane to 400 feet of full-width storage and appropriate taper.

Young Street at Quarry Road / The Point North Driveway

- Construct the North Driveway as a full-movement driveway onto Young Street across from Quarry Road.
- Construct the North Driveway with one ingress lane and one egress lane with an exclusive eastbound left-turn lane with 275 feet of full-width storage and appropriate taper.
- Construct a northbound left-turn lane with 300 feet of full-width storage and appropriate taper.
- Construct a northbound right-turn lane with 200 feet of full-width storage and appropriate taper.
- Construct a southbound right-turn lane with 300 feet of full-width storage and appropriate taper.
- Restripe the existing lane on westbound Quarry Road to a shared thru/left-turn lane.
- Install a traffic signal at the intersection.

Young Street at Rolesville High School Driveway / The Point South Driveway

- Construct the South Driveway as a full-movement driveway onto Young Street across from the Rolesville High School Driveway.
- Construct the North Driveway with one ingress lane and one egress lane.
- Construct a northbound left-turn lane with 250 feet of full-width storage and appropriate taper.

A copy of the TIA is contained in the Appendix. The Point development is discussed in more detail in Section 4.3.5.

2.4.3 Merritt Property

The following improvements are currently proposed to be implemented in association with the development of the Merritt Property:

US 401 Bypass at Young Street

- Modify the eastbound right-turn such that the movement is a free-flowing right-turn from the US 401 Bypass onto southbound Young Street.

Rolesville Road at Fowler Road

- Extend Fowler Road from its current terminus at Rolesville Road to the west as shown on the site plan.
- Modify the existing intersection to provide full-movement access from eastbound Fowler Road onto Rolesville Road.
- Provide adequate sight distance for the eastbound approach of Fowler Road at the intersection.
- Provide signing and striping such that the intersection operates as a two-way stop-controlled intersection. However, the intersection is recommended to be evaluated against the warrants for the installation of a traffic



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Inventory of Traffic Conditions

June 12, 2025

signal as outlined in the Manual on Uniform Traffic Control Devices. If warranted and approved by NCDOT, a traffic signal is recommended to be installed at the intersection.

- Construct an exclusive southbound left-turn lane with 125 feet of full-width storage and appropriate taper.
- Construct an exclusive southbound right-turn lane with 100 feet of full-width storage and appropriate taper.
- Construct an exclusive northbound left-turn lane with 100 feet of full-width storage and appropriate taper.
- Construct an exclusive eastbound left-turn lane with 150 feet of full-width storage and appropriate taper.
- Construct an exclusive westbound left-turn lane with 50 feet of full-width storage and appropriate taper.
- Construct an exclusive westbound left-turn lane with 125 feet of full-width storage and appropriate taper.

It should be noted that this report assumes that the traffic signal planned for the intersection of Rolesville Road at Fowler Road is installed and operational in all future year (i.e. 2030) analysis scenarios. A copy of the TIA as well as NCDOT Congestion Management's recommendations is contained in the Appendix.

2.4.4 Rolesville Road at Mitchell Mill Road

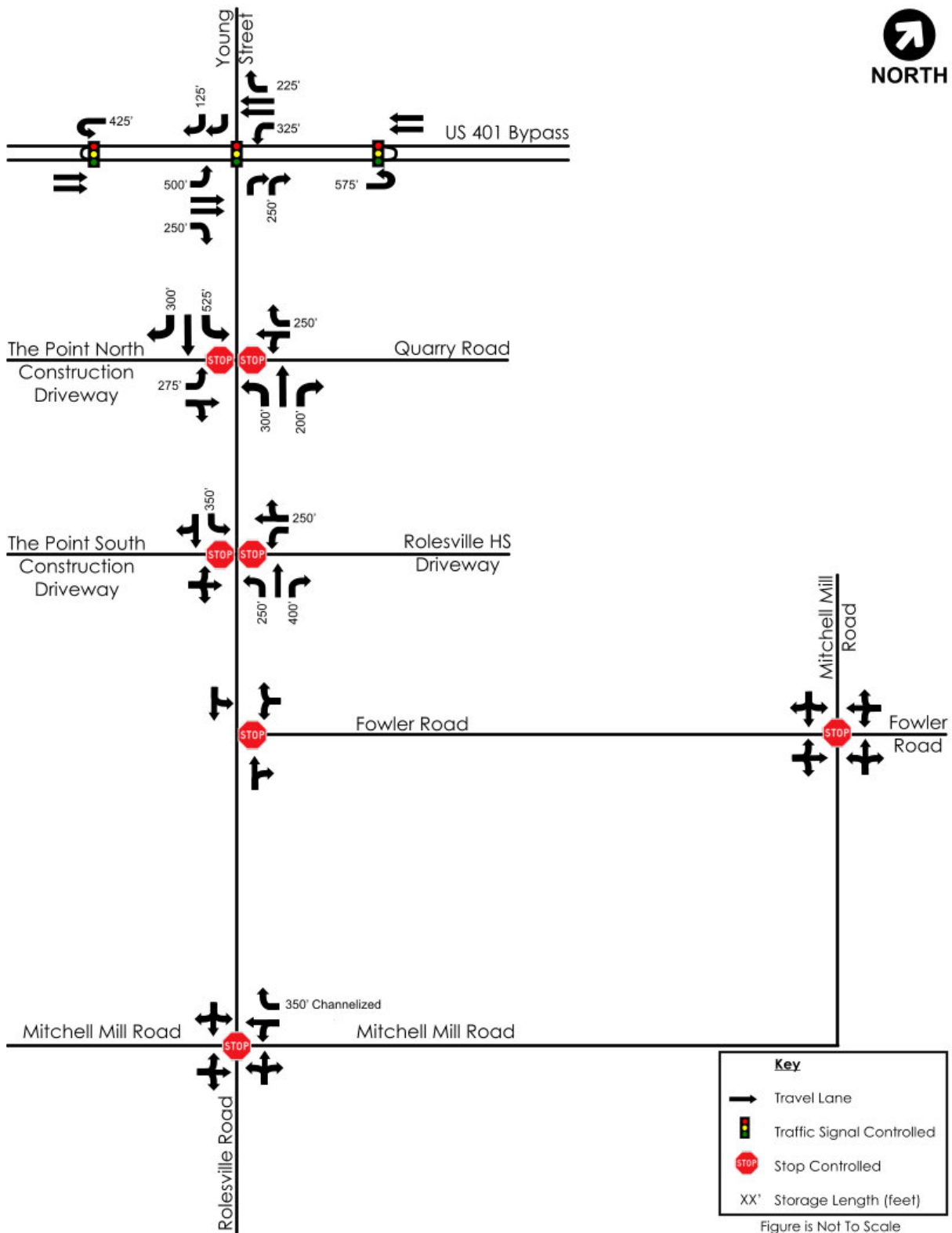
Currently, several developments along the Young Street / Rolesville Road corridor have committed to monitoring the intersection of Rolesville Road at Mitchell Mill Road for the installation of a traffic signal. When warranted, a traffic signal will be installed at the intersection. This report assumes that a traffic signal is installed and operational in the future year of 2028.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Inventory of Traffic Conditions
June 12, 2025

Figure 3: 2025 Existing Lanes and Traffic Control



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Inventory of Traffic Conditions
June 12, 2025

Figure 4: 2030 No-Build Lanes and Traffic Control

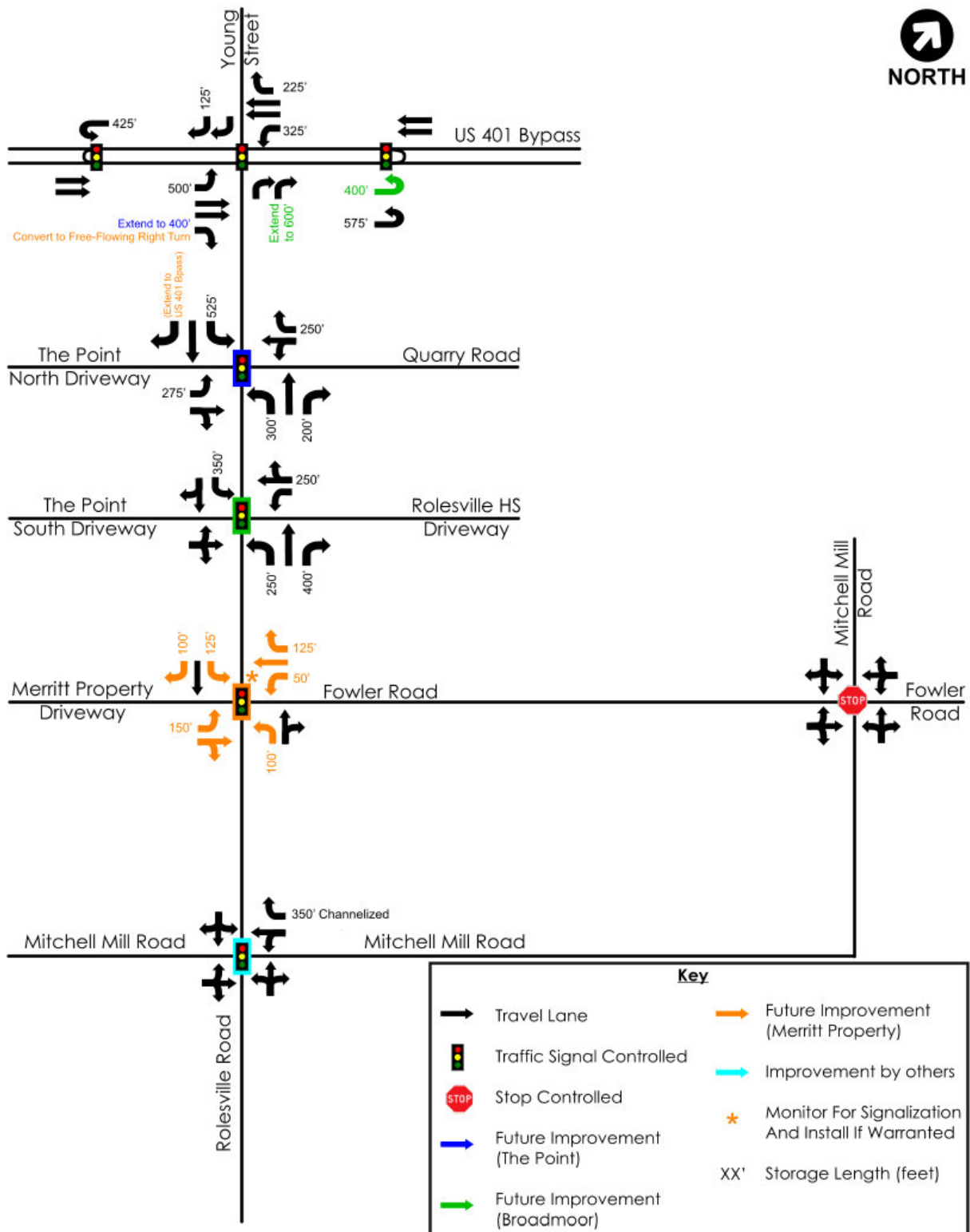


Figure is Not To Scale



3.0 TRIP GENERATION AND DISTRIBUTION

3.1 TRIP GENERATION

Trip generation for the proposed development was performed using the 11th Edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual³. The Rate Versus Equation spreadsheet published by NCDOT⁴ was used to supplement the ITE methodology. Trip generation for the proposed development is shown in Table 2.

Table 2: Trip Generation

Land Use	Size (DU)	Daily	AM Peak			PM Peak		
		Total	Total	Enter	Exit	Total	Enter	Exit
Single-Family Resident (LUC 210)	100	1010	74	19	55	99	63	36
Total Trips Generated		1010	74	19	55	99	63	36

3.2 SITE TRIP DISTRIBUTION

To accurately determine the effect of the proposed development on the surrounding roadway network, an estimate of the expected distribution of traffic entering and exiting the site is needed. These percentages were developed using a combination of existing traffic volume counts, historic AADTs provided by NCDOT, and engineering judgment. This trip distribution was submitted as part of NCDOT's TIA Scoping Checklist contained in the Appendix. All traffic volume calculations can be found in the Appendix.

- 20% to/from the west on US 401 Bypass
- 15% to/from the north on Young Street
- 15% to/from the east on US 401 Bypass
- 5% to/from the east on Fowler Road
- 5% to/from the east on Mitchell Mill Road
- 10% to/from the south on Rolesville Road
- 30% to/from the west on Mitchell Mill Road

The trip distribution for the proposed development is shown in Figure 5. The trip assignment is shown in Figure 6.



Figure 5: Trip Distribution

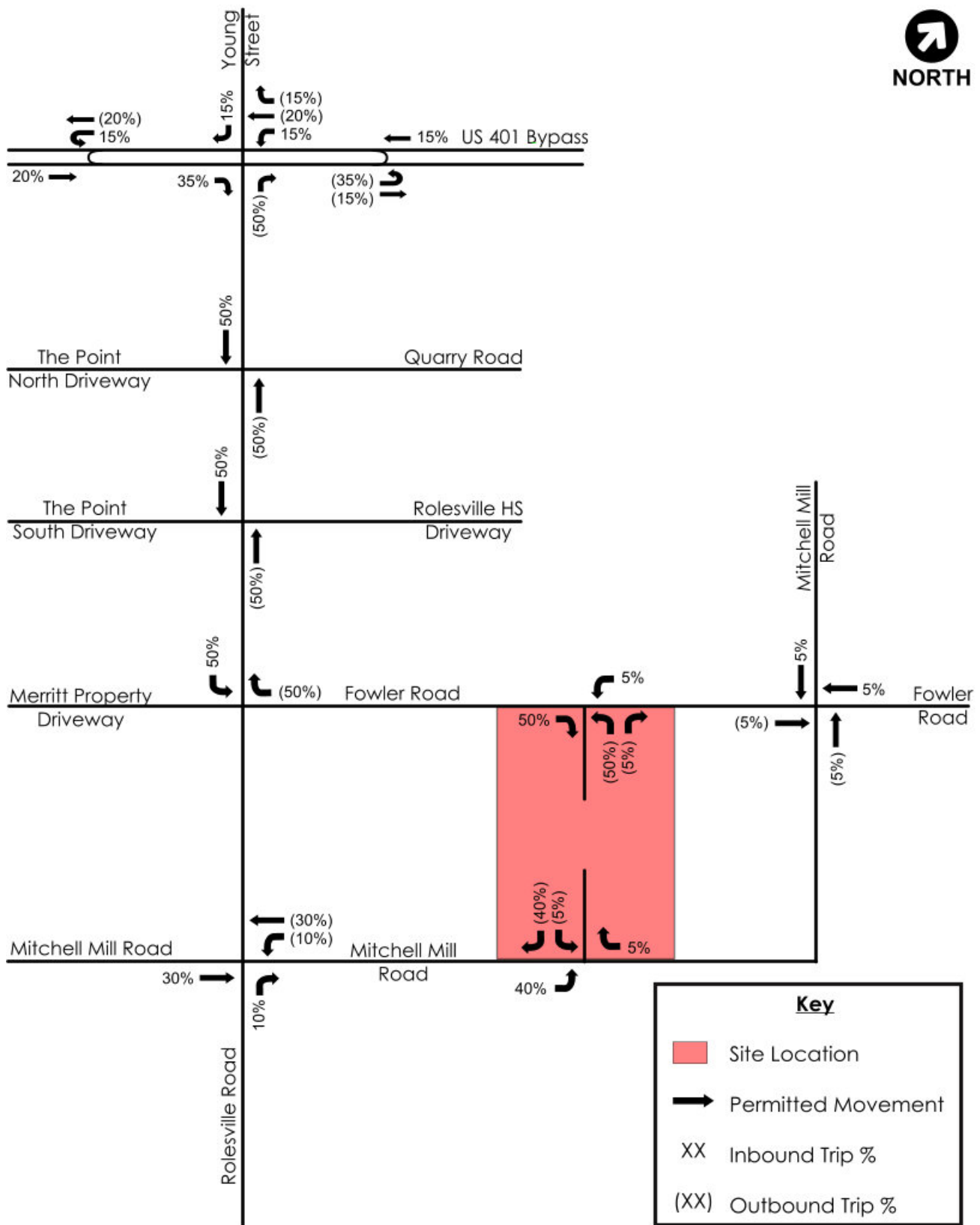
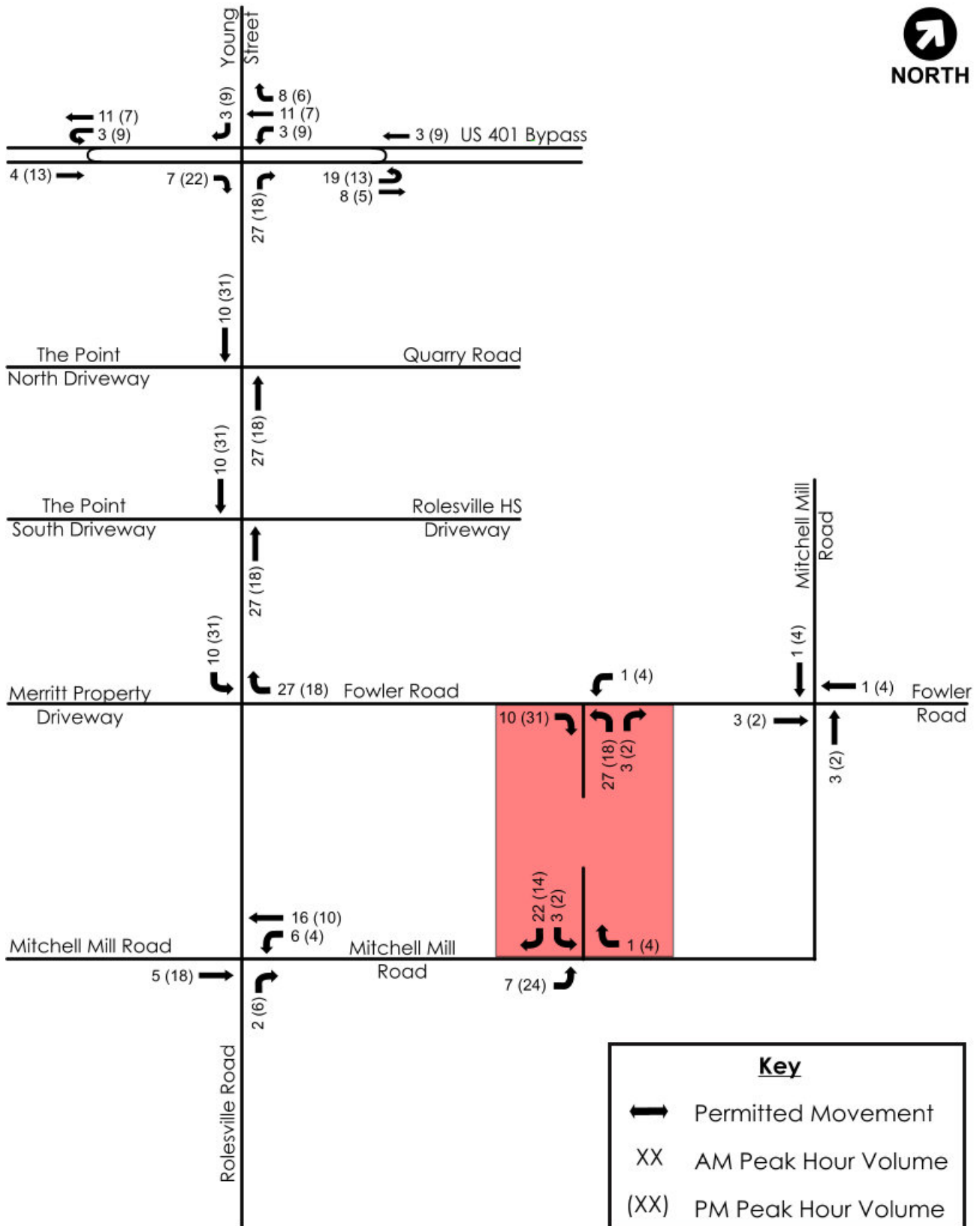


Figure 6: Trip Assignment



4.0 TRAFFIC VOLUMES

All traffic volume calculations can be found in the Appendix.

4.1 DATA COLLECTION

Morning (6:30 – 9:00 AM) and evening (4:00 – 6:00 PM) turning movement counts were taken at the study intersections on Wednesday, April 9, 2025, while schools were in session. Traffic counts were not balanced due to the distance between study intersections and the number of driveways between them. The 2025 existing traffic volumes are shown in Figure 7. All traffic count data can be found in the appendix.

4.2 BACKGROUND TRAFFIC GROWTH

Background traffic growth is the increase in traffic volumes due to usage growth and non-specific growth throughout the area. The 2025 counts were grown by a 2.0 percent annual rate to estimate the 2030 volumes. The growth in vehicles because of this future traffic growth is shown in Figure 10.

4.3 ADJACENT DEVELOPMENT TRAFFIC

There are nine (9) developments proposed to be constructed within and nearby the study area: 1216 Rolesville Road, Broadmoor, Kalas Falls, Merritt Property, Rolesville Crossing, Rolesville Town Campus, The Point, The Preserve at Moody Farm, and Tucker-Wilkins. The total trips associated with these developments are shown in Figure 11. The following subsections highlight salient data for each of the approved developments.

4.3.1 1216 Rolesville Road

1216 Rolesville Road is a mixed-use development project located along the west side of Rolesville Road between Rolesville High School and Fowler Road. The proposed development is expected to consist of 68 units of single-family attached housing and 30,000 square feet of retail. The development is anticipated to be fully built-out by 2029. A copy of the traffic study prepared by Ramey Kemp Associates, can be found in the Appendix.

4.3.2 Broadmoor (fka Woodlief Assemblage)

Broadmoor is a residential development project located along the east side of Rolesville Road between Fowler Road and Mitchell Mill Road. The proposed development is expected to consist of 158 units of single-family detached housing and 95 units of multifamily housing. The development is anticipated to be fully built-out by 2029. The improvements associated with the Broadmoor development are discussed in Section 2.4.1. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.3.3 Kalas Falls

Kalas Falls is a residential development project located along the west side of Rolesville Road between Fowler Road and Mitchell Mill Road. The proposed development is expected to consist of 487 units of single-family detached



Traffic Volumes
June 12, 2025

housing and 108 units of low-rise multifamily housing. The development is currently under construction and not yet completed. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.3.4 Merritt Property

The Merritt Property is a mixed-use development along the west side of Rolesville Road near the intersection with Fowler Road. The proposed development is expected to consist of 227 units of senior adult single-family (detached) homes, 278 units of senior adult multi-family (attached) homes, 21,000 square feet of retail, and a 15,000 square foot pharmacy with a drive thru. The development is anticipated to be fully built-out by 2028. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.3.5 Rolesville Crossing

Rolesville Crossing is a residential development project located in the northeast quadrant of the intersection of Rolesville Road and Mitchell Mill Road. The proposed development is expected to consist of 233 units of single-family detached housing and 125 units of low-rise multifamily housing. The development is anticipated to be fully built-out by 2026. A copy of the traffic study prepared by Ramey Kemp & Associates, Inc., can be found in the Appendix.

4.3.6 Rolesville Town Campus

Rolesville Town Campus is a mixed-use development project located on the west side of Young Street north of the intersection of Young Street and US 401 Bypass. The proposed development is expected to consist of multiple government buildings including a 34,000 square-foot town hall, a 26,200 square-foot police station, a 23,900 square-foot fire station, 22,500 square-foot community center, and a 12,000 square-foot county library. The development is anticipated to be fully built-out by 2030. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.3.7 The Point

The Point is a proposed mixed-use development project located along the west side of Young Street near the US 401 Bypass. The proposed development is expected to consist of up to 621 units of single-family detached housing, 320 units of low-rise multifamily housing, and 112,800 square-feet of retail space. The development is expected to be built in phases and is currently under construction and not yet completed. The improvements associated with The Point development are discussed in Section 2.4.2. A copy of the traffic study prepared by Kimley-Horn and Associates, can be found in the Appendix.

4.3.8 The Preserve at Moody Farm

Moody Farm is a residential development project located along the west side of Rolesville Road between Fowler Road and Mitchell Mill Road. The proposed development is expected to consist of 82 units of single-family detached housing. The development is anticipated to be fully built-out by 2028. A copy of the traffic study prepared by Stantec, can be found in the Appendix.



4.3.9 Tucker-Wilkins

The Tucker-Wilkins property is a residential development project located along the west side of Rolesville Road between Fowler Road and Mitchell Mill Road. The proposed development is expected to consist of 27 units of single-family detached housing and 64 units of low-rise multifamily housing. The development is anticipated to be fully built-out by 2028. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.4 NO-BUILD TRAFFIC VOLUMES

The 2030 No-Build traffic volumes consist of the sum of the 2025 Existing traffic volumes (Figure 7), the Background traffic growth (Figure 8), and the adjacent development growth (Figure 9). The 2030 No-Build traffic volumes are shown in Figure 10.

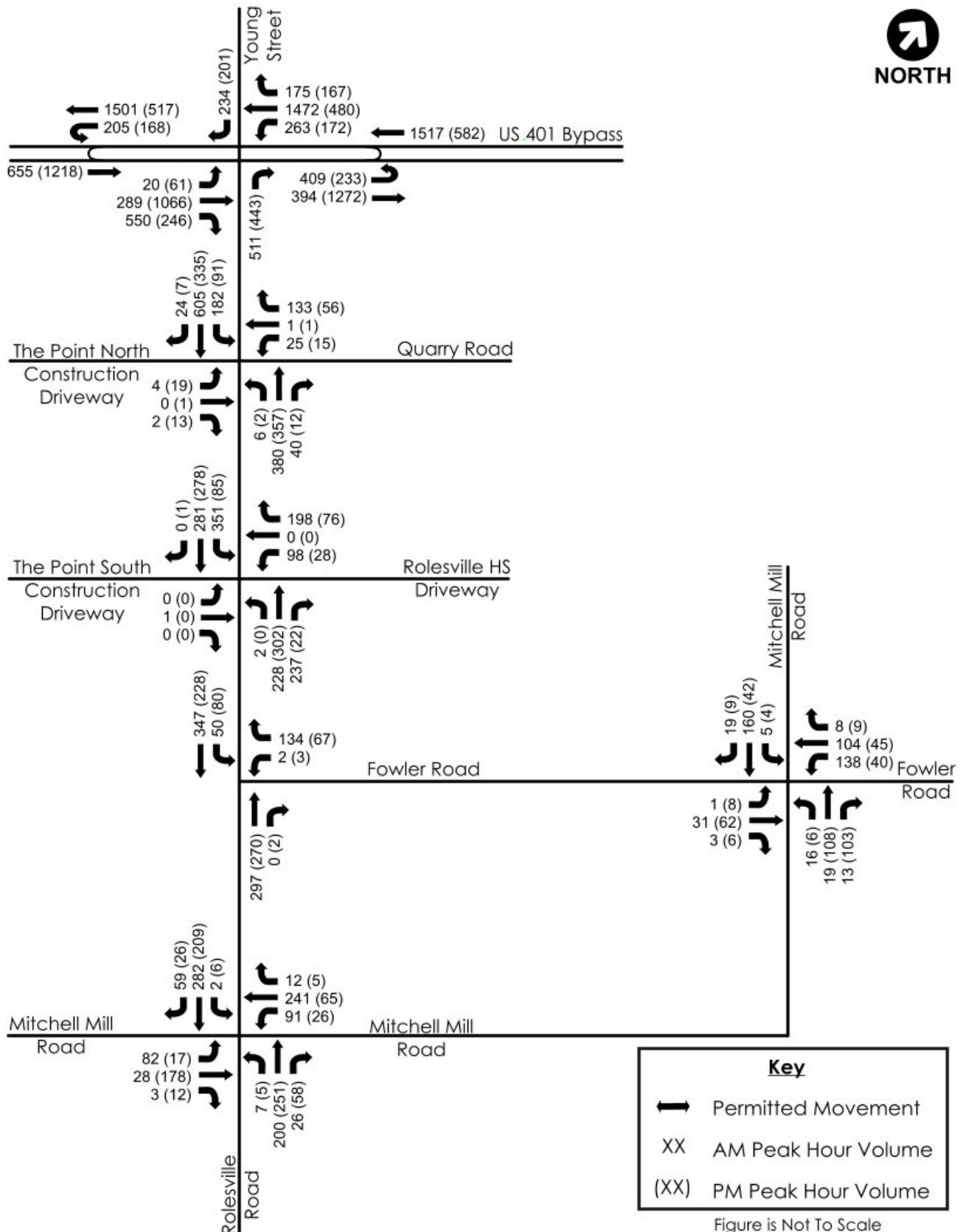
4.5 BUILD TRAFFIC VOLUMES

The 2029 Build traffic volumes include the 2029 No-Build traffic and the proposed development traffic discussed in Section 3.0. The 2030 Build traffic volumes are shown in Figure 11.



Traffic Volumes
June 12, 2025

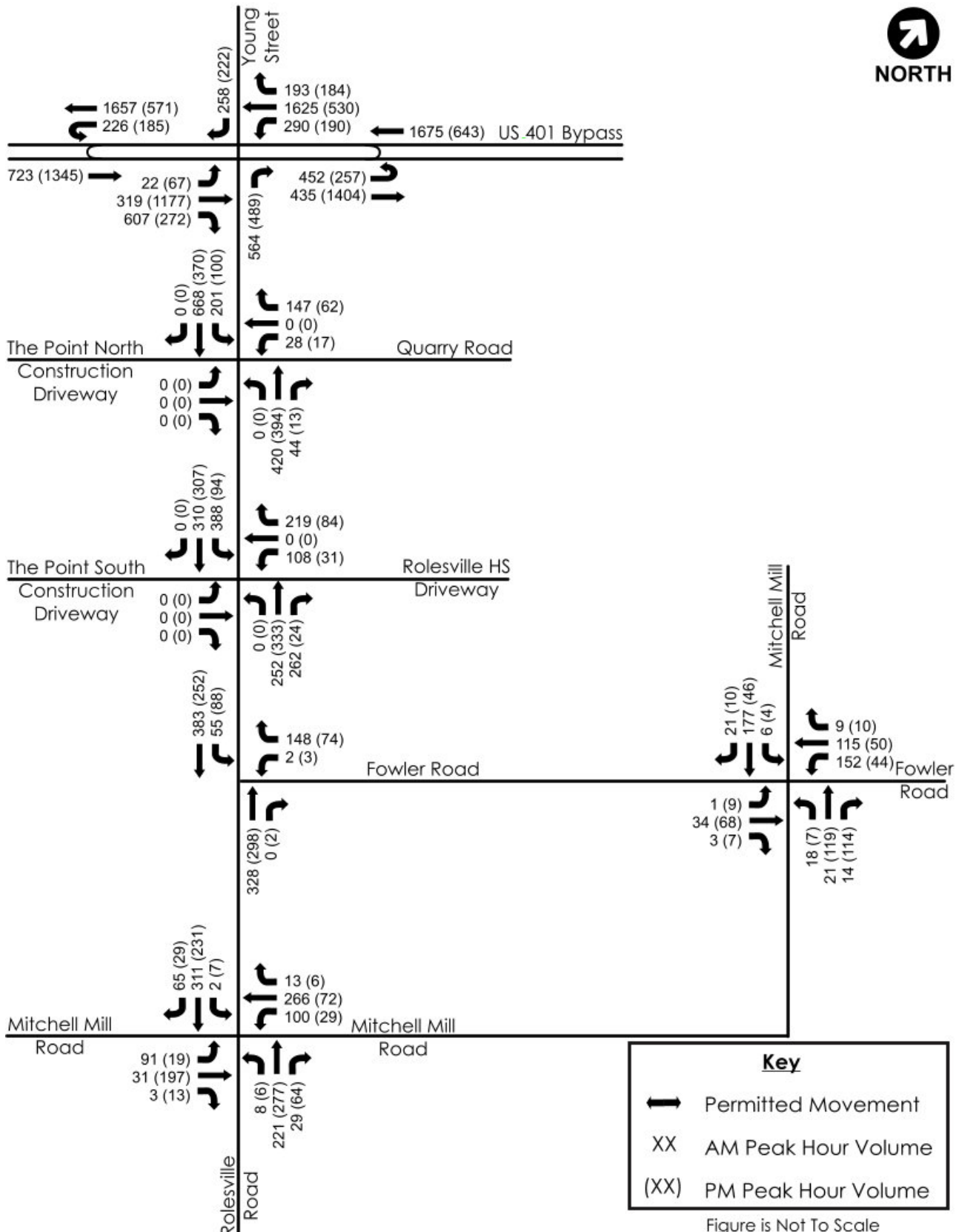
Figure 7: 2025 Existing Traffic Volumes



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

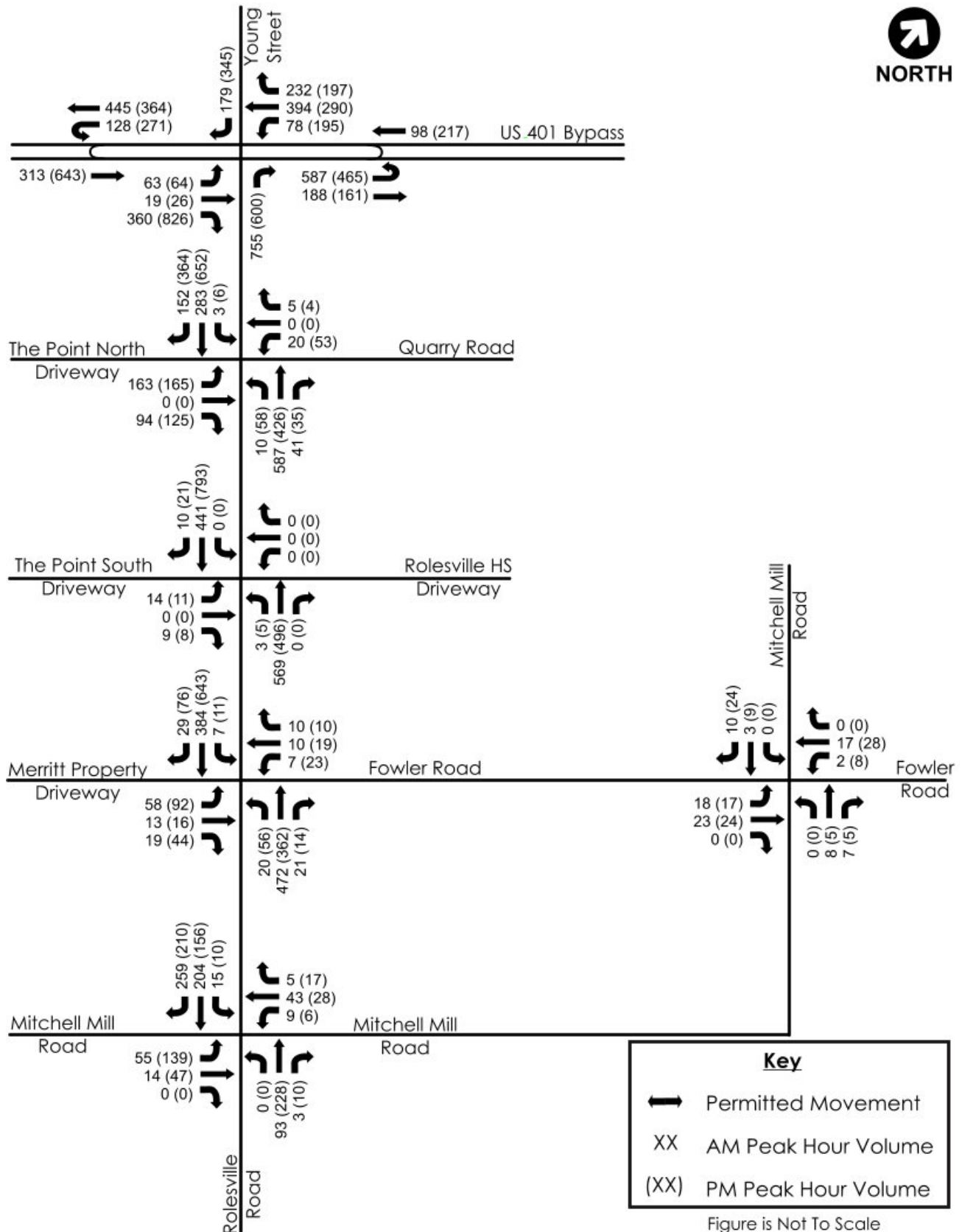
Traffic Volumes
June 12, 2025

Figure 8: Background Traffic Growth



Traffic Volumes
June 12, 2025

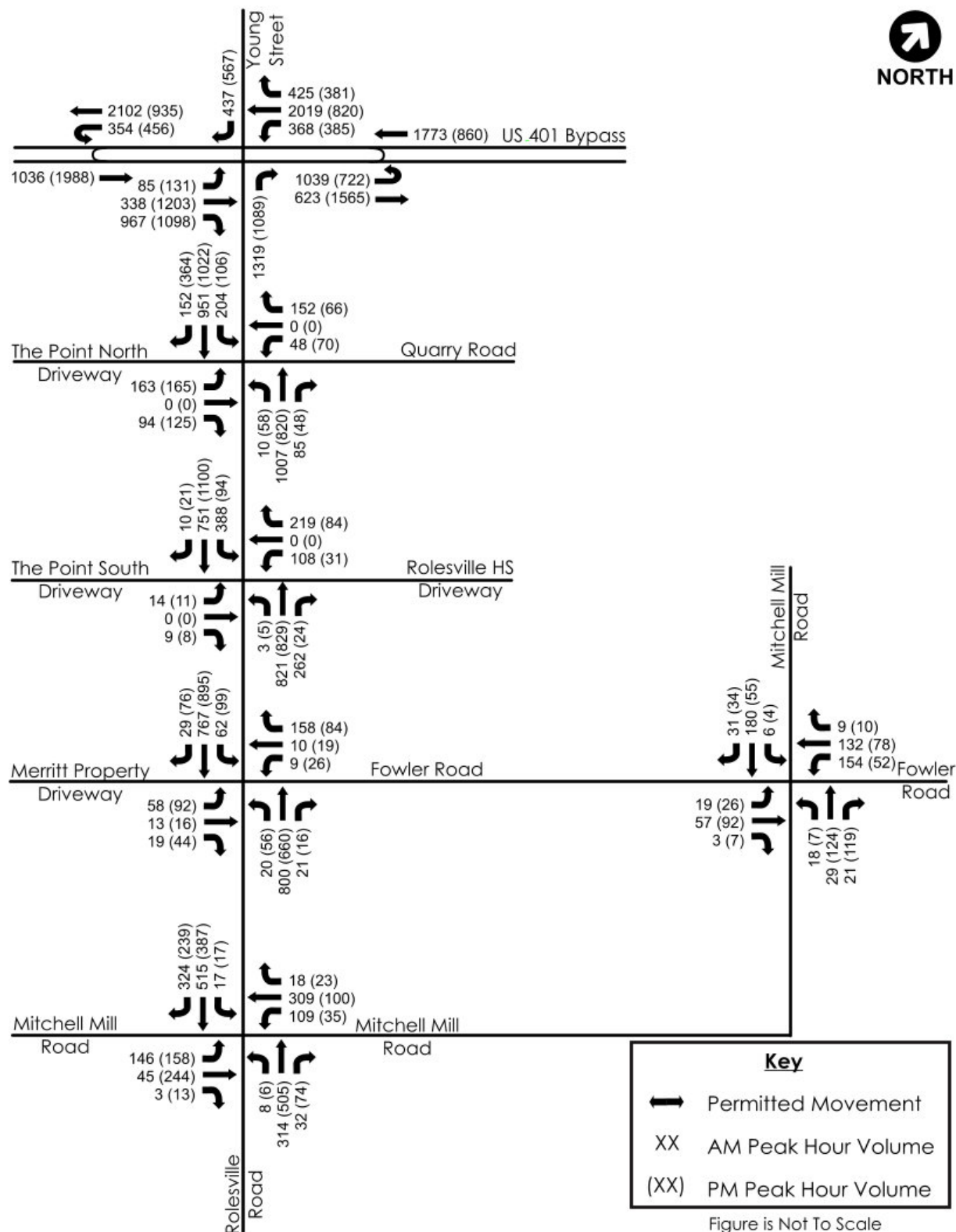
Figure 9: Adjacent Development Traffic Volumes



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Traffic Volumes
June 12, 2025

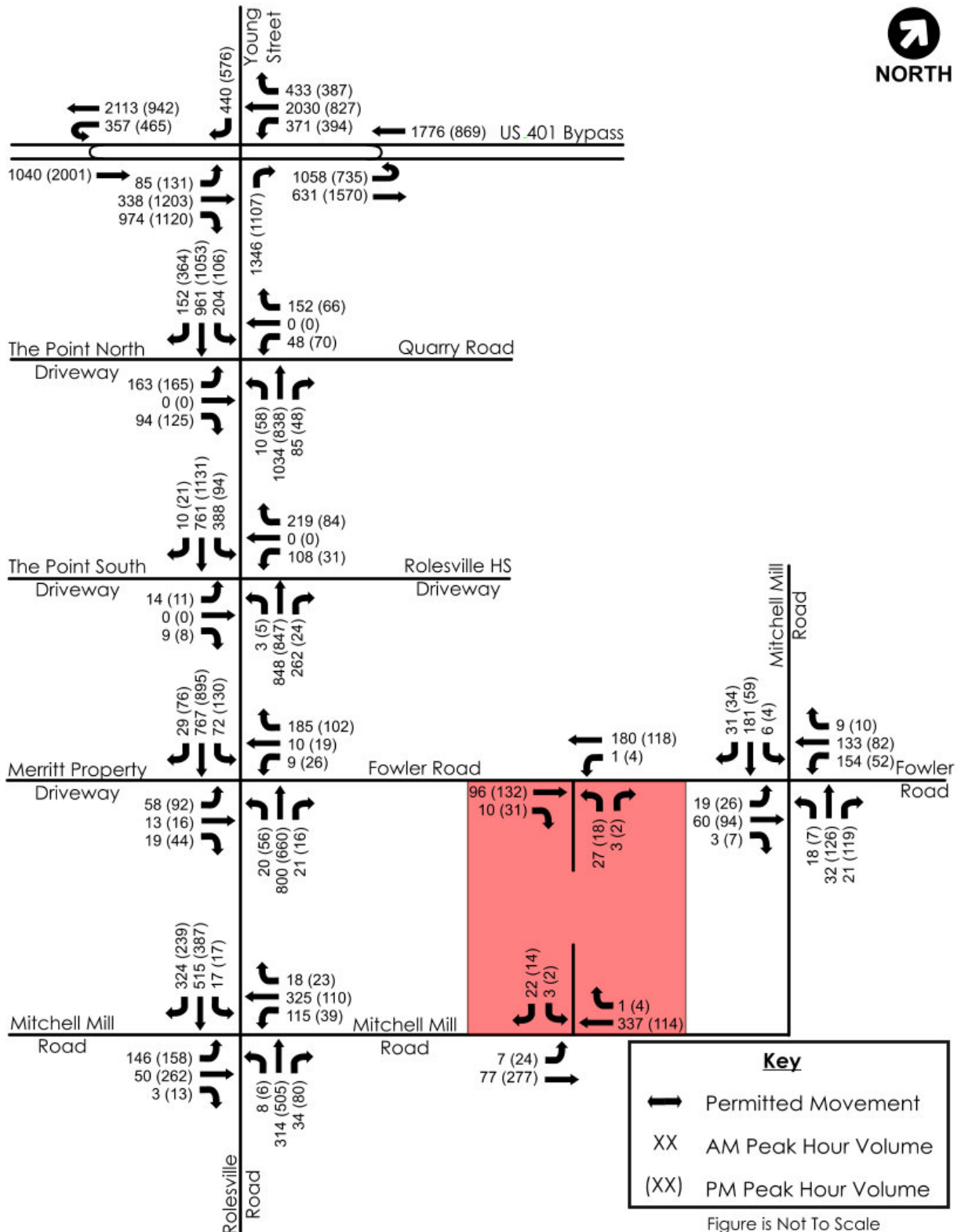
Figure 10: 2030 No-Build Traffic Volumes



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Traffic Volumes
June 12, 2025

Figure 11: 2030 Build Traffic Volumes



5.0 CAPACITY ANALYSIS

Capacity analyses were performed for the roadway network in the study area. The traffic analysis program Synchro Version 11 was used to analyze all signalized and stop-controlled intersections according to methods put forth by the Transportation Research Board's Highway Capacity Manual⁶ (HCM). The HCM defines capacity as the "maximum rate or flow at which persons or vehicles can be reasonably expected to traverse a point or uniform section of a line or roadway during a specified period under prevailing roadway, traffic, and control conditions, usually expressed as vehicles per lane per hour."

Level of service (LOS) is a term used to describe different traffic conditions and is defined as a "qualitative measure describing operational conditions within a traffic stream, and their perception by motorists or passengers." LOS varies from Level A, representing free flow, to Level F where traffic breakdown conditions are evident. At an unsignalized intersection, the primary traffic on the main roadway is uninterrupted. Therefore, the overall delay for the intersection is usually less than what is calculated for minor street movements. The overall intersection delay and the delay for the intersections' minor movement(s) are reported in the summary tables of this report. LOS D is acceptable for signalized intersections in suburban areas during peak periods. For unsignalized intersections, it is common for some of the minor street movements or approaches to be operating at LOS F during peak hour conditions and that is not necessarily indicative of an area that requires improvements.

Capacity analyses were completed following *NCDOT Capacity Analysis Guidelines*⁶ as well as the *Draft NCDOT Capacity Analysis Guidelines Best Practices*⁷. Table 3 presents the criteria of each LOS as indicated in the HCM.

Table 3: Level of Service Criteria

Level of Service (LOS)	Signalized Intersection Control Delay (seconds/vehicle)	Unsignalized Intersection Control Delay (seconds/vehicle)
A	≤ 10	≤ 10
B	>10 and ≤ 20	>10 and ≤ 15
C	>20 and ≤ 35	>15 and ≤ 25
D	>35 and ≤ 55	>25 and ≤ 35
E	>55 and ≤ 80	>35 and ≤ 50
F	>80	>50

The Town of Rolesville's Land Development Ordinance (LDO)⁸, Section 8.E, establishes the following Level of Service Standards:

1. *The traffic impact analysis must demonstrate that the proposed development would not cause build-out-year, peak-hour levels of service on any arterial or collector road or intersection within the study area to fall below Level of Service (LOS) "D," as defined by the latest edition of the Highway Capacity Manual, or, where the existing level of service is already LOS "E" that the proposed development would not cause the LOS to fall to the next lower letter grade.*



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Capacity Analysis

June 12, 2025

2. *If the road segment or intersection is already LOS "F," the traffic impact analysis must demonstrate that the proposed development, with any proposed improvements, would not cause build-out year peak-hour operation to degrade more than five (5) percent of the total delay on any intersection approach.*

All Synchro files and detailed printouts can be found in the Appendix.



5.1 2025 EXISTING

In the base year, under the existing geometric conditions, the eastbound left-turn and westbound left/thru from Quarry Road and the westbound left-turn from Rolesville High School onto Rolesville Road operate at LOS F in the AM peak hour. The remaining study area intersections and movements operate at an acceptable level in both peak hours. The results from the 2025 Existing analysis are shown in Table 4. Instances where the overall intersection or lane group operate at LOS F are highlighted in the table.

Table 4: 2025 Existing Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
	US 401 Bypass Eastbound at Young Street	Overall		8.4	9.7	A	A				
		EB	T	8.7	7.2	A	A	58	108	98	185
			R	1.3	0.2	A	A	12	0	222	13
		NB	R	20.2	24.6	C	C	125	134	256	219
		WB	L	0.1	0.1	A	A	0	0	185	168
	US 401 Bypass Westbound at Young Street	Overall		9.2	6.4	A	A				
		WB	T	7.4	2.1	A	A	159	17	285	107
			R	0.1	0.1	A	A	0	0	0	0
		EB	L	0	0	A	A	0	0	52	84
		SB	R	28.2	23.5	C	C	85	67	230	166
	US 401 U-Turn East of Young Street	Overall		6.3	2.9	A	A				
		WB	T	7.6	4	A	A	214	55	314	104
		EB	U	1.4	0.1	A	A	25	0	474	154
	US 401 U-Turn West of Young Street	Overall		3.4	5.4	A	A				
		EB	T	4.2	6	A	A	63	145	78	107
		WB	U	1.0	0.6	A	A	7	2	140	161
	Young Street at Quarry Road	NB	L	9.2	8	A	A	0	0	7	7
		EB	L	177.9	28.8	F	D	13	10	30	40
			TR	49.3	12.7	E	B	8	3	29	28
		WB	LT	218.2	25	F	D	73	8	48	19
			R	12.4	11.1	B	B	23	8	62	26
		SB	L	9	8.4	A	A	18	8	98	64
			Rolesville Road at Rolesville HS Driveway	NB	L	7.9	7.9	A	A	0	0
EB	LTR			44.2	17.1	E	C	10	3	38	34
WB	L			230	20.7	F	C	188	10	104	52
	TR			12.6	11.4	B	B	35	13	117	74
SB	L			8.9	8.2	A	A	33	8	90	52
	Rolesville Road at Fowler Road	WB	LR	11.8	10.8	B	B	23	10	63	36
		SB	LT	8.1	8.1	A	A	3	5	84	92
	Rolesville Road at Mitchell Mill Road	NB	LTR	15.4	13.9	C	B	63	75	102	112
		EB	LTR	12.9	12.6	B	B	25	45	76	103
		WB	LT	25.7	11.1	D	B	145	18	242	70
			R	9.1	8.7	A	A	3	0	0	0
		SB	LTR	20.9	12.3	C	B	123	50	245	124
	Mitchell Mill Road at Fowler Road	NB	LTR	8.3	8.8	A	A	5	28	49	80
		EB	LTR	8.2	8.3	A	A	5	10	42	61
		WB	LTR	10.4	8.5	B	A	43	13	77	49
		SB	LTR	9.5	8	A	A	28	5	79	53

*Maximum queue extends off the SimTraffic network and may be longer than recorded

Intersection or Lane Group Operates at LOS E

Intersection of Lane Group Operates at LOS F

5.2 2030 NO-BUILD

In the 2030 No-Build conditions, the analysis assumes the improvements associated with the adjacent developments are constructed. These improvements are discussed in Section 2.4. Synchro LOS and delay results for the 2030 No-Build analysis scenario are listed in Table 5. Instances where the overall intersection or lane group operate at LOS E or F are highlighted in the table.

In the future year of 2030 without the proposed development in-place, the intersections along the US 401 Bypass and the signalized intersection of Rolesville Road at Fowler Road operate at an acceptable overall LOS, whereas all other signalized intersections operate at LOS E. Observation of the simulation runs showed lengthy queues along northbound Rolesville Road/Young Street in the AM peak hour and southbound Rolesville Road/Young Street in the PM peak hour. The following movements operate at LOS F in the AM and/or PM peak hours:

- Young Street at Quarry Road / The Point North Driveway – northbound thru (AM Peak)
- Young Street at Quarry Road / The Point North Driveway – southbound left (AM Peak)
- Rolesville Road at Rolesville HS Driveway / The Point South Driveway – northbound thru (AM Peak)
- Rolesville Road at Rolesville HS Driveway / The Point South Driveway – southbound left (AM Peak)
- Rolesville Road & Mitchell Mill Road – eastbound left-thru-right (AM Peak)



Table 5: 2030 No-Build Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)		
				AM	PM	AM	PM	AM	PM	AM	PM	
	US 401 Bypass Eastbound at Young Street	Overall		13.5	22.8	B	C					
		EB	T	19.8	26.3	B	C	60	320	852	863	
			R	6.8	6.6	A	A	529	349	460	460	
		NB	R	20.6	44.0	C	D	441	373	1462*	1371*	
	WB	L	0.2	0.3	A	A	0	0	426	417		
	US 401 Bypass Westbound at Young Street	Overall		24.5	8.8	C	A					
		WB	T	24.1	5.2	C	A	585	93	792	533	
			R	0.4	0.4	A	A	0	0	140	491	
		EB	L	0	0	A	A	0	0	103	89	
	SB	R	54.4	21.5	D	C	190	150	1030*	912		
	US 401 U-Turn East of Young Street	Overall		6.4	2.6	A	A					
		WB	T	10.1	4.8	B	A	300	93	810	176	
		EB	U	0.1	0.1	A	A	0	0	607	221	
	US 401 U-Turn West of Young Street	Overall		4.5	13.7	A	B					
		EB	T	5.3	16.5	A	B	114	542	1032	1021	
		WB	U	2.1	1.7	A	A	8	28	511	563	
	Young Street at Quarry Road / The Point North Driveway	Overall		57.8	48.1	E	D					
		EB	L	47.8	49.0	D	D	164	168	374	291	
			TR	31.6	36.2	C	D	73	126	1049	293	
		WB	LT	31.7	35.9	C	D	60	82	193	104	
			R	22.3	19.5	C	B	115	56	202	82	
		NB	L	34.0	41.3	C	D	6	42	399	400	
			T	83.1	36.2	F	D	649	732	2129*	1812	
		R	18.8	17.9	B	B	39	31	300	300		
			SB	L	198.9	58.3	F	E	308	143	625	625
				T	23.1	73.8	C	E	932	1030	1367*	1376*
	R	7.9	15.1	A	B	88	224	1411*	1426*			
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway	Overall		71.0	23.4	E	C					
		EB	LTR	29.3	33.2	C	C	37	34	89	58	
		WB	L	35.6	34.4	D	C	111	43	159	78	
			TR	49.0	40.1	D	D	232	94	374*	181	
		NB	L	24.3	18.8	C	B	3	5	253	95	
			T	126.6	26.0	F	C	854	750	2156*	620	
		R	28.0	15.6	C	B	206	17	500	200		
		SB	L	109.5	27.7	F	C	422	61	450	218	
			TR	19.3	19.4	B	B	545	582	1812	334	
	Rolesville Road at Fowler Road	Overall		17.1	17.2	B	B					
		EB	L	40.2	41.2	D	D	69	97	244	113	
			TR	35.1	34.6	D	C	44	67	541	105	
		WB	L	33.2	32.5	C	C	19	37	35	56	
			T	32.8	30.9	C	C	20	29	471	32	
		R	26.8	21.2	C	C	120	68	214	84		
		NB	L	10.6	14.4	B	B	19	47	181	199	
			TR	23.8	19.9	C	B	752	495	784	454	
		SB	L	39.7	36.5	D	D	60	78	176	168	
T	3.9		9.5	A	A	222	381	306	304			
R	2.7		5.4	A	A	7	24	121	127			
	Rolesville Road at Mitchell Mill Road	Overall		63.8	26.2	E	C					
		EB	LTR	159.7	43.0	F	D	213	320	345	451	
		WB	LT	39.2	16.4	D	B	309	79	363	121	
			R	13.8	13.9	B	B	17	20	0	0	
		NB	LTR	11.6	18.0	B	B	144	283	818	872	
		SB	LTR	76.7	25.2	E	C	602	403	1845	933	
	Mitchell Mill Road at Fowler Road	NB	LTR	8.9	10.0	A	A	10	40	58	103	
		EB	LTR	9.0	9.3	A	A	10	18	64	85	
		WB	LTR	12.0	9.5	B	A	58	20	91	66	
		SB	LTR	10.6	8.6	B	A	38	13	94	61	

*Maximum queue extends off the SimTraffic network and may be longer than recorded

Intersection or Lane Group Operates at LOS E

Intersection of Lane Group Operates at LOS F



5.3 2030 BUILD

As part of the 2030 Build analysis, the proposed driveways were added to the network as detailed in Section 2.2.

With the proposed development in-place, the operations of the Young Street/Rolesville Road corridor are similar compared to the 2030 No-Build conditions with significant queues along Young Street and Rolesville Road in the northbound and southbound direction during the AM and PM peak hours. The operations surrounding US 401 Bypass and Young Street remain similar to the No-Build scenario, excluding the Southbound right movement at US 401 Bypass Westbound at Young Street, which now operates at LOS F in the PM peak hour.

While the Synchro results showed that the US 401 Bypass eastbound intersections operated at LOS A and B, the SimTraffic simulation runs showed significant queuing stemming from the eastbound thru movement at the US 401 Bypass Eastbound & Young Street intersection. Substantial queuing was also observed at the northbound right movement and southbound right movement at US 401 Bypass and Young Street. In the 2030 No-Build scenario, the Young Street southbound right queue extended beyond the link distance 20% of the AM peak hour. In the 2030 Build scenario, this spillback queue extended off the network 61% of the AM peak hour. In the 2030 No-Build scenario, the Young Street northbound right queue extended beyond the link distance 23% of the AM peak hour and 15% of the PM peak hour. In the 2030 Build scenario, this spillback queue extended off the network 19% of the AM peak hour and 17% of the PM peak hour.

The following movements operate at LOS F during one or both peak hours:

- US 401 Bypass Westbound at Young Street –southbound right (AM peak)
- Young Street at Quarry Road / The Point North Driveway – northbound thru (AM peak)
- Young Street at Quarry Road / The Point North Driveway – southbound left (AM peak)
- Young Street at Quarry Road / The Point North Driveway – southbound thru (PM peak)
- Rolesville Road at Rolesville HS Driveway / The Point South Driveway – northbound thru (AM peak)
- Rolesville Road at Rolesville HS Driveway / The Point South Driveway – southbound left – (AM peak)
- Rolesville Road at Mitchell Mill Road – eastbound left-thru-right (AM Peak)
- Rolesville Road at Mitchell Mill Road – southbound left-thru-right (AM Peak)

Synchro LOS and delay results for the 2030 Build scenario are listed in Table 6. Instances where the overall intersection or lane group operate at LOS E or F are highlighted in the table.



Table 6: 2030 Build Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
	US 401 Bypass Eastbound at Young Street	Overall		14.2	27.6	B	C				
		EB	T	21.0	35.2	C	D	59	329	849	804
			R	6.9	7.2	A	A	546	352	460	441
		NB	R	21.6	49.7	C	D	455	400	1458*	1453*
	US 401 Bypass Westbound at Young Street	WB	L	0.2	0.3	A	A	0	0	412	361
		Overall		25.8	8.8	C	A				
		WB	T	20.4	5.3	C	A	577	105	747	519
			R	0.4	0.4	A	A	0	0	140	466
	US 401 U-Turn East of Young Street	EB	L	0	0	A	A	0	0	96	104
		SB	R	80.5	21.6	F	C	202	152	1052*	963
		Overall		6.4	2.6	A	A				
		WB	T	10.2	4.8	B	A	302	94	732	192
	US 401 U-Turn West of Young Street	EB	U	0.1	0	A	A	0	0	566	207
		Overall		4.6	14.1	A	B				
		EB	T	5.3	17.0	A	B	114	548	1039	1022
	US 401 U-Turn West of Young Street	WB	U	2.4	1.8	A	A	7	29	504	566
		Overall		62.6	53.2	E	D				
			Young Street at Quarry Road / The Point North Driveway	EB	L	47.8	49.0	D	D	164	168
TR	33.7				36.2	C	D	98	126	854	574
WB	LT			31.9	35.9	C	D	60	82	248	98
	R			22.3	19.5	C	B	115	56	221	85
NB	L			34.6	40.8	C	D	6	42	327	400
	T			96.1	38.8	F	D	675	755	2166*	2039
SB	R			18.7	18.1	B	B	38	30	300	300
	L			198.9	58.3	F	E	308	143	625	625
	T			23.8	85.6	C	F	945	1072	1367*	1369*
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway			R	7.9	15.1	A	B	88	224	1420*
		Overall		75.0	24.1	E	C				
		EB	LTR	29.3	33.2	C	C	37	34	89	64
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway	WB	L	35.6	34.4	D	C	111	43	179	78
			TR	49.0	40.1	D	D	232	94	374*	170
		NB	L	23.0	19.2	C	B	3	5	248	62
			T	128.1	27.2	F	C	884	776	2158*	596
		SB	R	26.4	15.7	C	B	202	18	500	150
			L	133.7	27.2	F	C	431	59	444	159
			TR	18.6	20.1	B	C	514	585	1932	360
	Rolesville Road at Fowler Road	Overall		17.8	18.3	B	B				
		EB	L	40.2	41.2	D	D	69	97	221	132
			TR	35.1	34.6	D	C	44	67	480	99
		WB	L	33.2	32.5	C	C	19	37	43	57
			T	32.8	30.9	C	C	20	29	405	40
			R	27.7	21.0	C	C	139	79	209	88
		NB	L	10.7	15.1	B	B	19	47	152	199
			TR	24.6	21.5	C	C	752	513	790	448
		SB	L	39.6	37.8	D	D	70	100	168	205
			T	4.2	9.8	A	A	239	382	349	406
R	2.9		5.5	A	A	7	24	167	122		
	Rolesville Road at Mitchell Mill Road	Overall		70.5	27.7	E	C				
		EB	LTR	158.4	43.1	F	D	217	327	278	366
		WB	LT	38.6	16.1	D	B	323	84	402	158
			R	13.2	13.3	B	B	17	20	45	0
		NB	LTR	12.4	19.9	B	B	151	307	911	927
		SB	LTR	91.7	27.7	F	C	613	415	2004	1372
	Mitchell Mill Road at Fowler Road	NB	LTR	9.0	10.1	A	B	10	40	55	107
		EB	LTR	9.1	9.4	A	A	13	18	66	77
		WB	LTR	12.1	9.6	B	A	60	23	105	66
		SB	LTR	10.7	8.7	B	A	38	13	83	57
	Fowler Road at Driveway A	NB	LR	10.4	10.2	B	B	5	3	52	38
		WB	LT	7.5	7.6	A	A	0	0	8	11
	Mitchell Mill Road at Driveway B	EB	LT	8.1	7.5	A	A	0	3	28	35
		SB	LR	10.8	9.7	B	A	3	3	38	36

*Maximum queue extends off the SimTraffic network and may be longer than recorded

- Intersection or Lane Group Operates at LOS E
- Intersection of Lane Group Operates at LOS F



5.4 2030 BUILD IMPROVED

5.4.1 Proposed Improvements

The 2030 Build Improved capacity analysis results are shown in Table 7. Instances where the overall intersection or lane group operate at LOS E or F are highlighted in the table. Based on the findings of this study, specific improvements have been identified and should be completed as part of the proposed development.

Averette Road, Young Street, and Rolesville Road Corridor Study

It is recommended that the applicant coordinate their improvements with the findings of the Averette Road, Young Street, and Rolesville Road Corridor Study to ensure consistency with future addendums to the Community Transportation Plan.

Rolesville Road at Mitchell Mill Road

- Construct an exclusive eastbound left-turn lane with 275 feet of full-width storage and appropriate taper.
- The above recommendation will require modification of the planned traffic signal.

Fowler Road at Driveway A

- Construct Driveway A as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.

Mitchell Mill Road at Driveway B

- Construct Driveway B as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.

With the recommended improvements in place, the proposed driveways continue to operate at acceptable levels of service. With the addition of the exclusive left-turn lane on Mitchell Mill Road at Rolesville Road, the intersection improves from an overall LOS of E to LOS D in the AM peak hour.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Capacity Analysis
June 12, 2025

Table 7: 2030 Build Improved Level of Service and Delay

Intersection		Approach	Lane Group	Delay (sec./veh.)		Level of Service (LOS)		95th % Queue (feet)		Max. Obs. Queue (feet)	
				AM	PM	AM	PM	AM	PM	AM	PM
	Rolesville Road at Mitchell Mill Road	Overall		47.1	18.2	D	B				
		EB	L	119.7	23.8	F	C	225	99	277	132
			TR	19.9	23.6	B	C	49	151	216	181
		WB	LT	40.5	20.7	D	C	421	89	473	133
			R	19.3	14.7	B	B	23	20	135	0
		NB	LTR	14.2	14.0	B	B	195	290	887	561
	Fowler Road at Driveway A	SB	LTR	54.2	17.9	D	B	806	403	1500	806
		NB	LR	10.4	10.2	B	B	5	3	52	35
	Mitchell Mill Road at Driveway B	WB	LT	7.5	7.6	A	A	0	0	3	13
		EB	LT	8.1	7.5	A	A	0	3	24	40
		SB	LR	10.8	9.7	B	A	3	3	38	38

*Maximum queue extends off the SimTraffic network and may be longer than recorded

-  Intersection or Lane Group Operates at LOS E
-  Intersection or Lane Group Operates at LOS F



6.0 RECOMMENDATIONS

Based on the findings of this study, specific improvements have been identified and should be completed as part of the proposed development. Intersections where no improvements are recommended are locations that do meet the LOS Standards specified in the LDO⁸. These recommendations are shown in Figure 12.

Averette Road, Young Street, and Rolesville Road Corridor Study

It is recommended that the applicant coordinate their improvements with the findings of the Averette Road, Young Street, and Rolesville Road Corridor Study to ensure consistency with future addendums to the Community Transportation Plan.

US 401 Bypass at Young Street

- No improvements are recommended at this intersection.

US 401 Bypass East U-Turn

- No improvements are recommended at this intersection.

US 401 Bypass West U-Turn

- No improvements are recommended at this intersection.

Young Street at Quarry Road

- No improvements are recommended at this intersection.

Young Street/Rolesville Road at Rolesville HS Driveway

- No improvements are recommended at this intersection.

Rolesville Road at Fowler Road

- No improvements are recommended at this intersection.

Rolesville Road at Mitchell Mill Road

- Construct an exclusive eastbound left-turn lane with 275 feet of full-width storage and appropriate taper.
- The above recommendation will require modification of the planned traffic signal.

Mitchell Mill Road at Fowler Road

- No improvements are recommended at this intersection.



Fowler Road at Driveway A

- Construct Driveway A as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.

Mitchell Mill Road at Driveway B

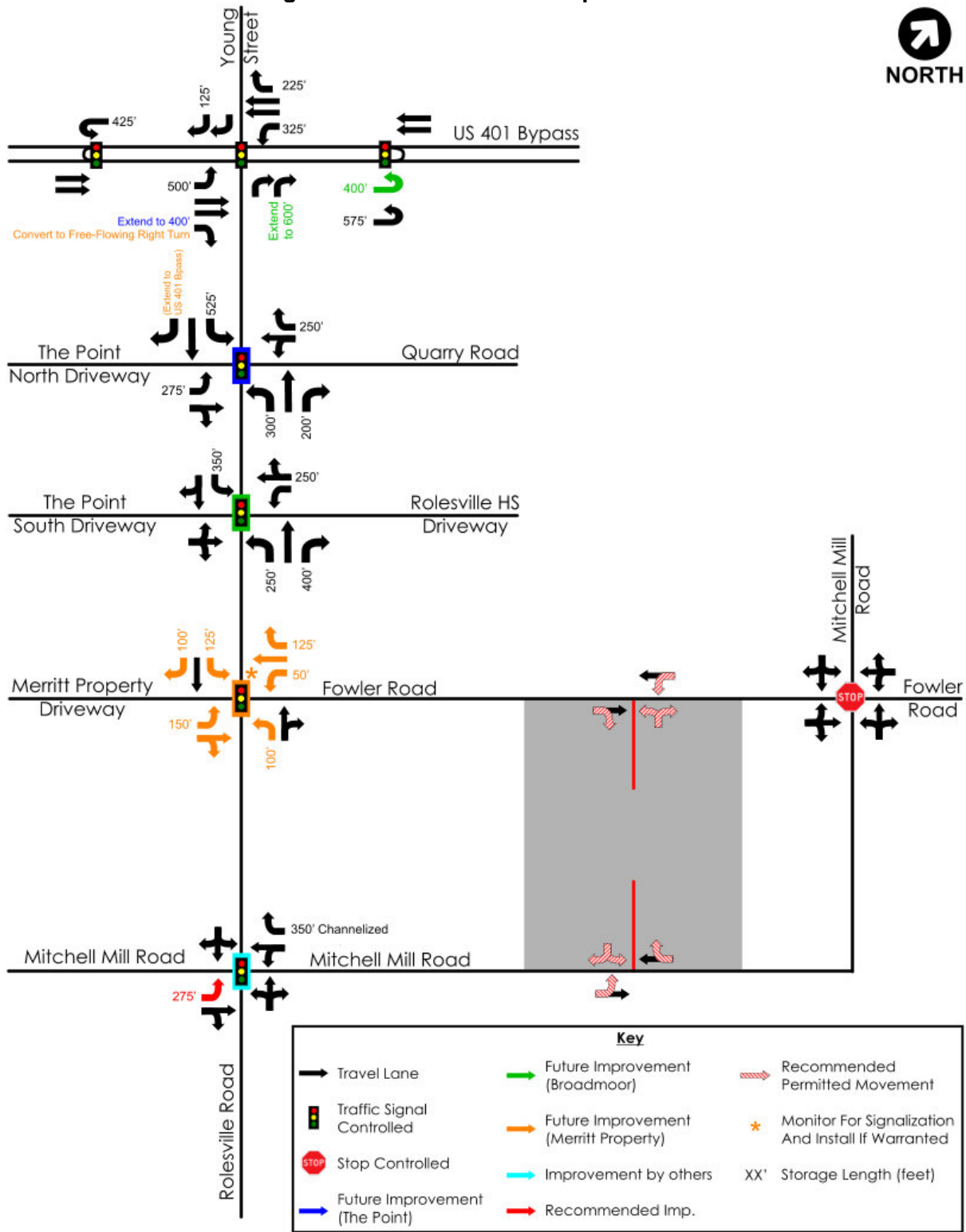
- Construct Driveway B as a full-movement access point consisting of one ingress lane and one egress lane. The egress lane shall operate as a shared left / right-turn lane.
- Traffic control is recommended to be provided by a stop sign controlling traffic exiting the proposed development.



REZ-24-04 FOWLER ROAD TRAFFIC IMPACT ANALYSIS

Recommendations
June 12, 2025

Figure 12: Recommended Improvements



References

June 12, 2025

7.0 REFERENCES

¹ **NCDOT Functional Classification Map**,

<http://ncdot.maps.arcgis.com/home/webmap/viewer.html?layers=029a9a9fe26e43d687d30cd3c08b1792>

² **2020 NCDOT Average Daily Traffic Volumes**,

<https://ncdot.maps.arcgis.com/apps/webappviewer/index.html?id=964881960f0549de8c3583bf46ef5ed4>

³ **Trip Generation (11th Edition)**, Institute of Transportation Engineers (ITE), September 2021.

⁴ **NCDOT Trip Generation Rate Equation Recommendations**,

<https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/DRAFT%20-%20Trip%20Generation%20Rate%20Eqn.xlsm>

⁵ **Highway Capacity Manual 6th Edition: A Guide for Multimodal Mobility Analysis**. Washington D.C.: Transportation Research Board, 2016.

⁶ **NCDOT Capacity Analysis Guidelines**. North Carolina Department of Transportation (NCDOT), March 2022,

<https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/Standards%20-%20Capacity%20Analysis%20Guidelines.pdf>

⁷ **Draft NCDOT Capacity Analysis Guidelines: Best Practices**. North Carolina Department of Transportation (NCDOT), March 2022,

<https://connect.ncdot.gov/resources/safety/Congestion%20Mngmt%20and%20Signing/Best%20Practices%20-%20Capacity%20Analysis%20Guidelines.pdf>

⁸ **Land Development Ordinance**. Town of Rolesville, June 1, 2021,

<https://www.rolesvillenc.gov/code-ordinances>

8.0 APPENDIX

- Scoping Correspondence
- Site Plan
- Raw Traffic Count Data
- Adjacent Development Information
- Traffic Volume Calculations
- Synchro Files
- Synchro & SimTraffic Reports





NCDOT TIA Submittal Checklist



Submittal: Final Sealed TIA Report **Document Date:** 6/12/2025

Project Name: Fowler Road Rezoning **Previous Name:** If Applicable _____

NCDOT Division: 5 **District:** 1 **County:** Wake **Municipality:** Rolesville

TIA Consultant: Stantec **Submitted By:** Matt Peach

Phone Number: 919-865-7375 **Email:** Matt.Peach@Stantec.Com

TIA Scoping Checklist Approval Date: 4/17/2025 **Unadjusted Daily Site Trips:** 1010

- ☒ The approved TIA Scoping Checklist is included in this submittal.
- ☐ LOS D or better is expected at all study intersections after proposed mitigations.
- ☒ The study report is sealed by a NC Professional Engineer with expertise in traffic engineering.
- ☒ This study has identified all known deficiencies with and without the proposed development.
- ☒ This study has identified mitigation measures to adequately accommodate the site trips.

Explain here if any of the boxes above are unchecked:

Intersections along the corridor are anticipated to operate at LOS E in the AM peak hour in the build scenario. The same intersections operate at LOS E during the no-build conditions and is attributed to traffic generated by Rolesville High School. All intersections in the PM peak hour are anticipated to operate at LOS D or better.

The undersigned affirms that, except for the deviations noted below, the TIA submittal conforms to the current [NCDOT Congestion Management Capacity Analysis Guidelines](#), [Policy on Street and Driveway Access to North Carolina Highways](#), and the TIA Scoping Checklist approved by the NCDOT District Office. The undersigned also acknowledges that the TIA will be rejected if the deviations and justifications are not properly documented and approved by NCDOT.

Deviations and Justifications (e.g., changes in site plan, development schedule, site trip and off-site trip estimates, study area, data collection, analysis period and method. Attached separate sheets if needed.)

TIA Consultant's Signature
(Professional Engineer of TIA Record)

Matt Peach
Print Name

6/15/2025
Date