Stantec

REZ 24-01: Merritt Property
Traffic Impact Analysis

Rolesville, North Carolina

August 22, 2024

Prepared for:

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Sign-off Sheet

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Table of Contents

LIST OF TABLES

LIST OF FIGURES

Executive Summary

The proposed Merritt Property development (Rezoning Application 24-01) is located on the west side of Rolesville Road northwest of the intersection with Fowler Road in Rolesville, NC. The parcel is currently zoned as Residential Low Density (RL). The applicant is pursuing a rezoning to a new zoning district, Residential Urban (RU) that would allow for age-targeted single-family detached and attached dwelling units in the form of higher-density residential with limited non-residential uses.

The site is anticipated to be completed in 2028 and consists of 232 units of senior adult single-family (detached) homes, 251 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. Using the Institute of Transportation Engineers (ITE) Trip Generation Manual, it is estimated that at full build-out the development is expected to generate 4,690 new trips per average weekday. In the AM and PM peak hours, the development is expected to generate 223 trips (97 entering and 126 exiting) and 349 trips (188 entering and 161 exiting); respectively. Access to the site is envisioned to be provided by a driveway located along Rolesville Road, as well as extending Fowler Road to the west from its current terminus at Rolesville Road, adding a fourth leg to the existing three-legged intersection.

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:

- 2024 Existing
- 2028 No-Build
- 2028 Build
- 2028 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)

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

Table ES-1: Level of Service Summary Table

Level of Service (Delay in seconds/vehicle)	2024 Existing		2028 No-Build		2028 Build		2028 Build-Improved	
	AM	PM	AM	PM	AM	PM	AM	PM
US 401 Bypass Eastbound at Young Street	A (9.3)	A (6.9)	A (9.1)	B (12.0)	A (9.0)	B (13.7)	A (8.3)	B (13.7)
US 401 Bypass Westbound at Young Street	B (13.2)	A (7.8)	C (20.4)	A (9.6)	C (22.1)	A (9.7)	C (22.1)	A (9.7)
US 401 Bypass U-Turn East of Young Street	A (3.2)	A (2.5)	C (29.9)	B (15.2)	C (33.7)	B (15.8)	C (33.7)	B (15.8)
US 401 Bypass U-Turn West of Young Street	A (2.3)	A (3.7)	A (3.1)	A (4.1)	A (3.1)	A (4.4)	A (3.1)	A (4.4)
Young Street at Quarry Road / The Point North Driveway	C (18.6)	B (12.1)	C (23.5)	C (25.9)	C (26.8)	C (32.4)	C (24.2)	C (25.8)
Rolesville Road at Rolesville HS Driveway / The Point South Driveway	E (41.9)	B (11.5)	D (37.4)	A (6.2)	D (42.8)	A (7.0)	D (42.0)	A (7.3)
Rolesville Road at Merritt Property Driveway					F (##)	D (33.9)	B (13.0)	D (25.8)
Rolesville Road at Fowler Road	B (11.8)	B (10.6)	F (104.8)	F (##)	F (##)	F (##)	C (20.8)	B (19.5)
Rolesville Road at Mitchell Mill Road	C (18.7)	B (13.0)	D (41.2)	C (21.0)	D (47.9)	C (23.5)	D (48.1)	C (22.9)

Signalized Intersection

Unsignalized Intersection

Intersection not Analyzed in Scenario

Delay Exceeds 300 Seconds

Rolesville's 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.*

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.*

As shown in Table ES-1, the proposed development impacts the intersection of Rolesville Road at Fowler Road. In addition, there are significant queuing concerns along eastbound US 401 Bypass in the SimTraffic simulation runs as a result of the proposed development.

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 not meet the LOS Standards specified in the LDO[8] 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 site plan and 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

- Construct a second southbound travel lane from Young Street southward to the intersection of Young Street and Quarry Road, where the lane drops as an exclusive right-turn into the Point development.
- The above recommendation will require the reconfiguration of the eastbound right-turn from the US 401 Bypass that operates under the control of a yield sign. It is recommended that this yield sign be removed and new signing and striping to be installed to provide a free-flowing right-turn from the US 401 Bypass onto Young Street.

Young Street at Quarry Road / The Point North Driveway

- No improvements are recommended at this intersection.

Young Street at Rolesville HS Driveway / The Point South Driveway

- No improvements are recommended at this intersection.

Rolesville Road at Merritt Property Driveway

- Construct the northernmost driveway as a right-in / right-out access point with one ingress lane and one egress lane.
- Construct an exclusive southbound right-turn lane with 100 feet of full-width storage and appropriate taper.

Rolesville Road at Fowler Road

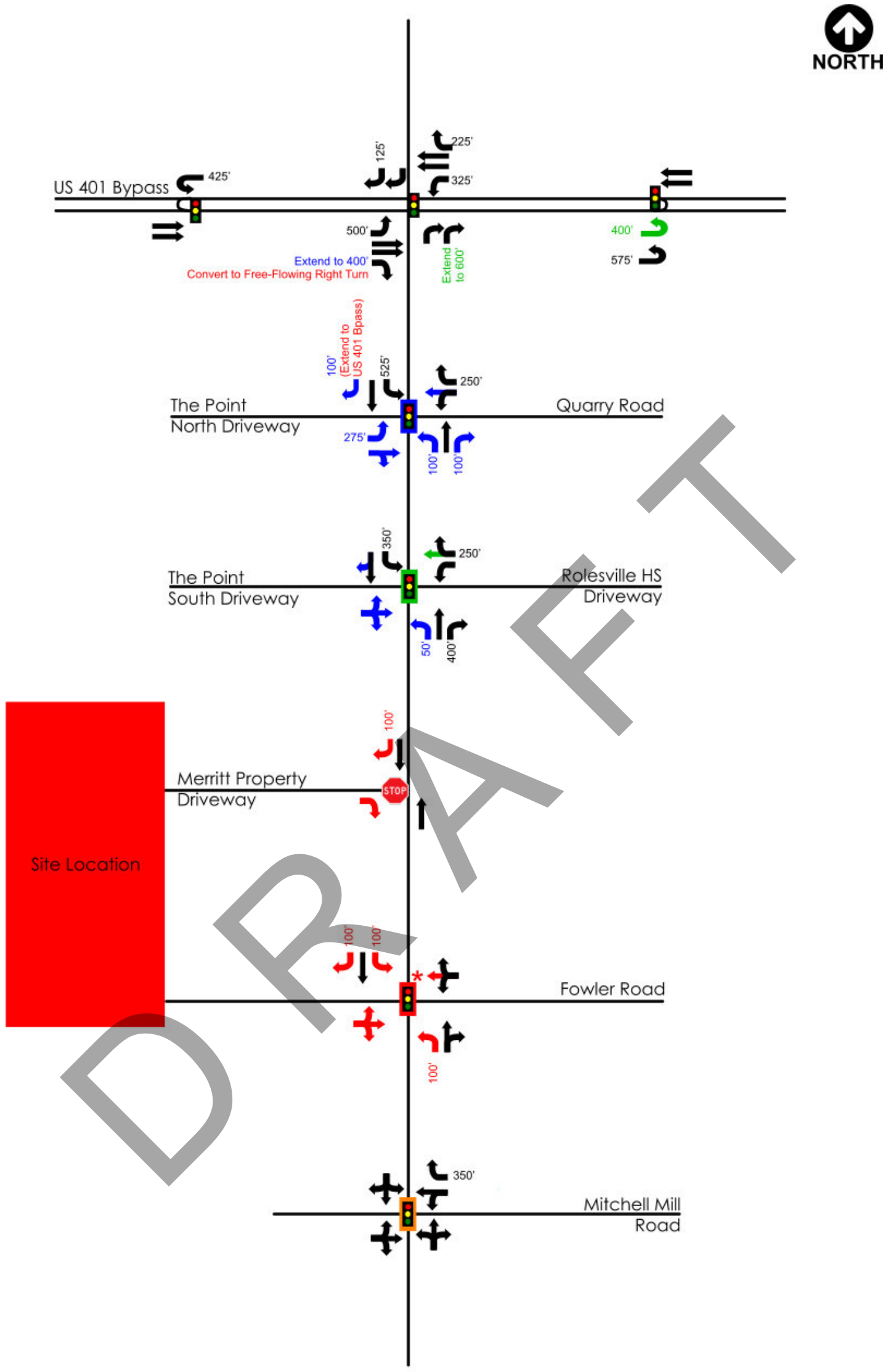
- Extend Fowler Road from its current terminus at Rolesville Road to the west as shown on the site plan.
- Modify the existing intersection to provide full-movement access from eastbound Fowler Road onto Rolesville Road.
- Provide adequate sight distance for the eastbound approach of Fowler Road at the 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 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 100 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.

Rolesville Road at Mitchell Mill Road

- No improvements are recommended at this intersection.

Figure ES-1: Recommended Improvements



1.0 INTRODUCTION

The proposed Merritt Property development (Rezoning Application 24-01) is located on the west side of Rolesville Road northwest of the intersection with Fowler Road in Rolesville, NC. The parcel is currently zoned as Residential Low Density (RL). The applicant is pursuing a rezoning to a new zoning district, Residential Urban (RU) that would allow for age-targeted single-family detached and attached dwelling units in the form of higher-density residential with limited non-residential uses.

The site is anticipated to be completed in 2028 and consists of 232 units of senior adult single-family (detached) homes, 251 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 site location is shown in Figure 1. The site plan, prepared by American Engineering, can be found in Figure 2.

The traffic analysis considers future build conditions during the build-out year (2028). The analysis scenarios are as follows:

- 2024 Existing
- 2028 No-Build
- 2028 Build
- 2028 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.

Figure 1: Site Location

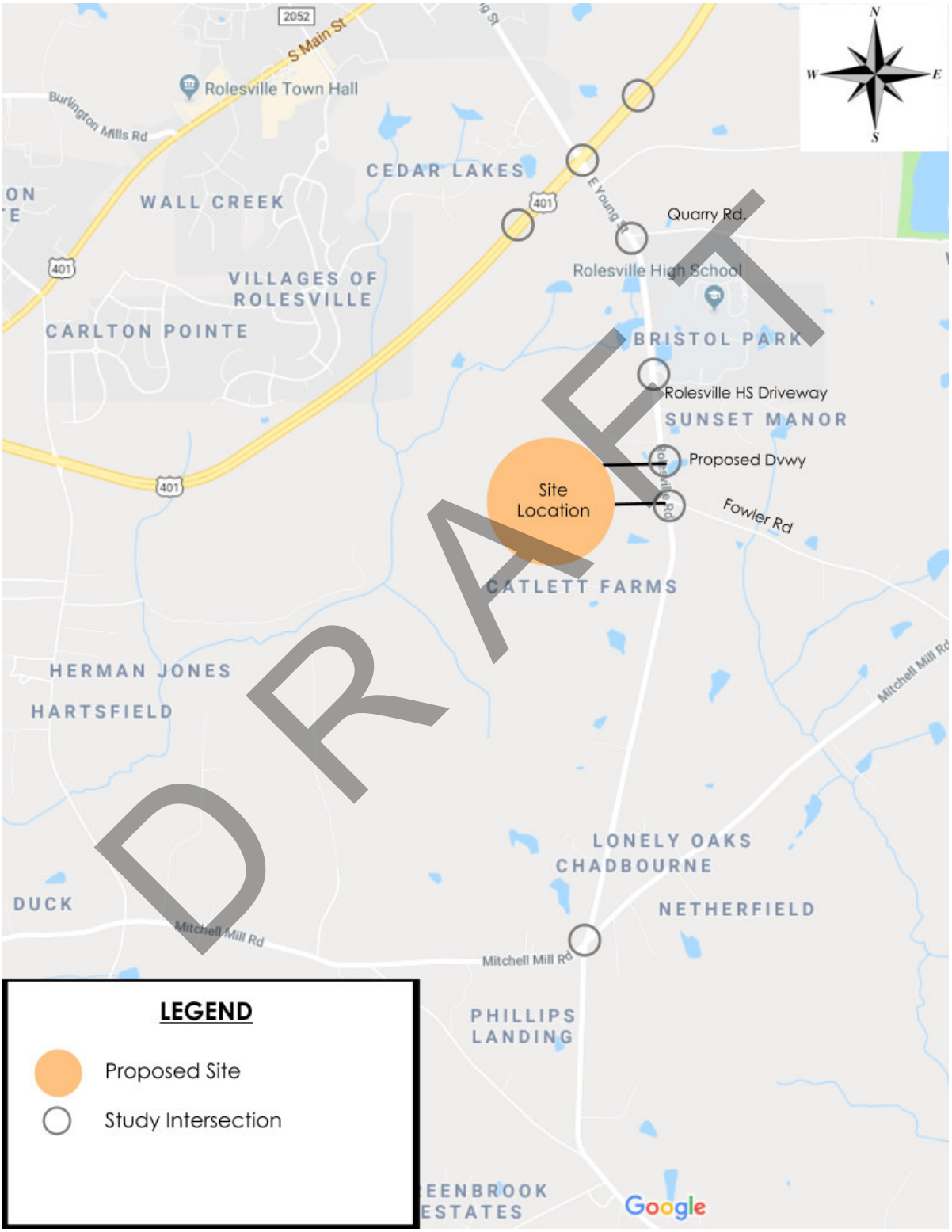
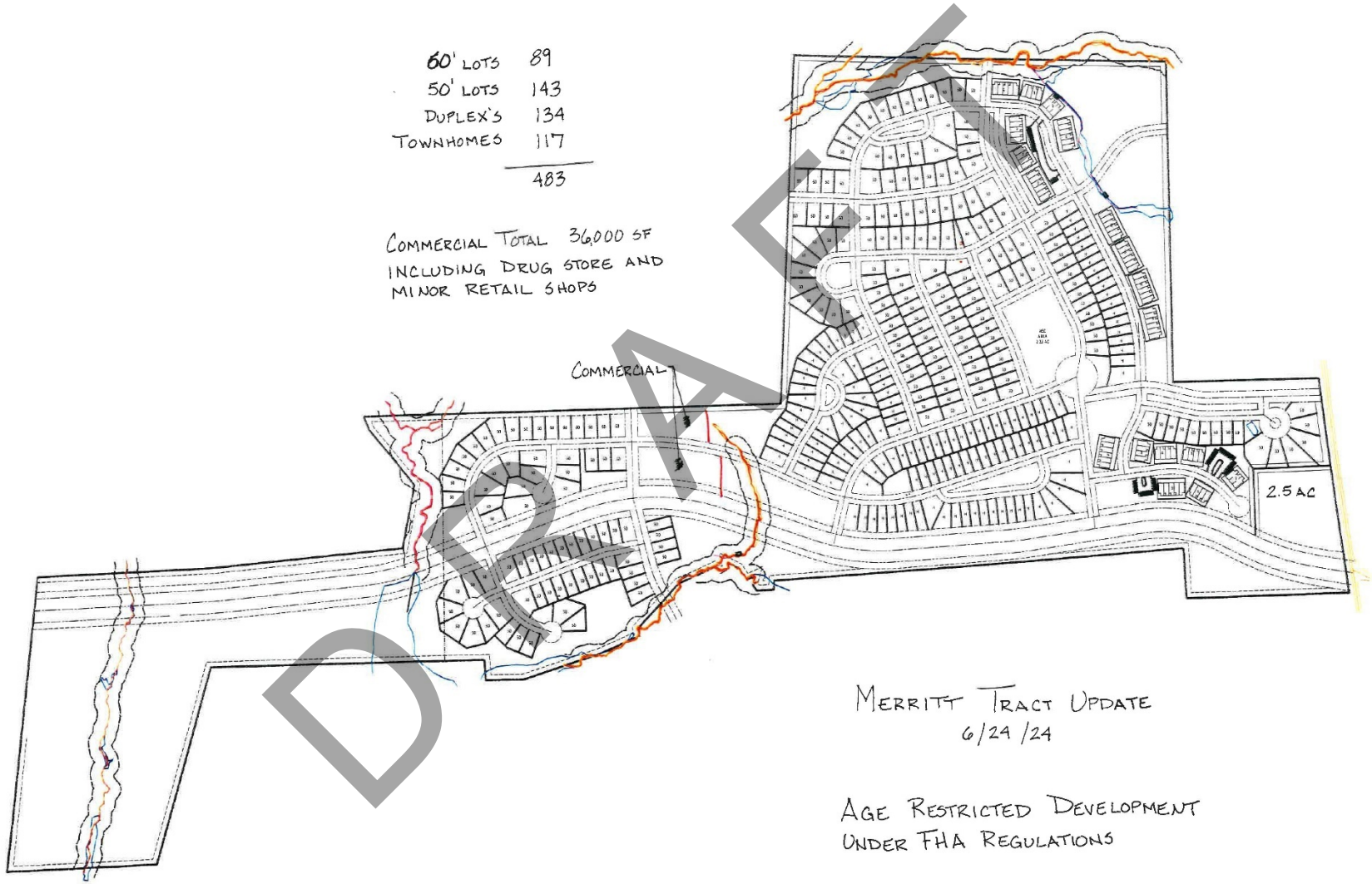


Figure 2: Site Plan



2.0 INVENTORY OF TRAFFIC CONDITIONS

2.1 STUDY AREA

Stantec coordinated with the Town of Rolesville, the applicant, 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 Young Street
- US 401 Bypass at Young Street East U-Turn
- US 401 Bypass at Young Street West U-Turn
- Young Street at Quarry Road
- Young Street / Rolesville Road at Rolesville High School
- Rolesville Road at Fowler Road
- Rolesville Road at Mitchell Mill Road

2.2 PROPOSED ACCESS

Access to the site is envisioned to be provided by two accesses located along Rolesville Road. The first and northernmost driveway (Site Driveway) is located approximately 400’ north of the existing intersection of Fowler Road The second and southernmost driveway (Fowler Road Extension) is an extension of Fowler Road across Rolesville Road running through the development.

In the current site plan, Fowler Road is proposed as a 4-lane divided roadway with two 12’ lanes in each direction, a 14’ median and 6’ sidewalks on both sides of the roadway. The dedicated right-of-way width of Fowler Road Extension is 110’ In total. There are proposed to be 7 access points to the Merritt Property development from Fowler Road Extension, 5 to the north of Fowler Road Extension and 2 to the south of Fowler Road Extension.

2.3 EXISTING CONDITIONS

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

Table 1: Existing Conditions

Road Name	Road Number	Primary Cross-Section	Functional Classification[1]	AADT[2] (year)	Speed Limit (mph)	Maintenance Agency
US 401 Bypass	US 401	4-Lane Divided	Other Principal Arterial	18,500 vpd (2021)	55	NCDOT
Young Street / Rolesville Road	SR 1003	2-Lane Undivided	Minor Arterial	4,600-5,400 vpd (2021)	45	NCDOT
Quarry Road	SR 2305	2-Lane Undivided	Local Road	1,000 vpd (2015)	45	NCDOT
Rolesville High School Driveway	-	2-Lane Undivided	-	-	-	Private
Fowler Road	SR 2308	2-Lane Undivided	Major Collector	1,300 vpd (2021)	45	NCDOT
Mitchell Mill Road	SR 2224	2-Lane Undivided	Major Collector	2,400 vpd (2021)	45	NCDOT4-

*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 2024 and the future year 2028. The future year lane configuration and traffic control for the study area intersections are illustrated in Figure 4.

2.4.1 Broadmoor (fka 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.

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 100 feet of full-width storage and appropriate taper.
- Construct a northbound right-turn lane with 100 feet of full-width storage and appropriate taper.
- Construct a southbound right-turn lane with 100 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 50 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 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.

Figure 3: 2024 Existing Lanes and Traffic Control

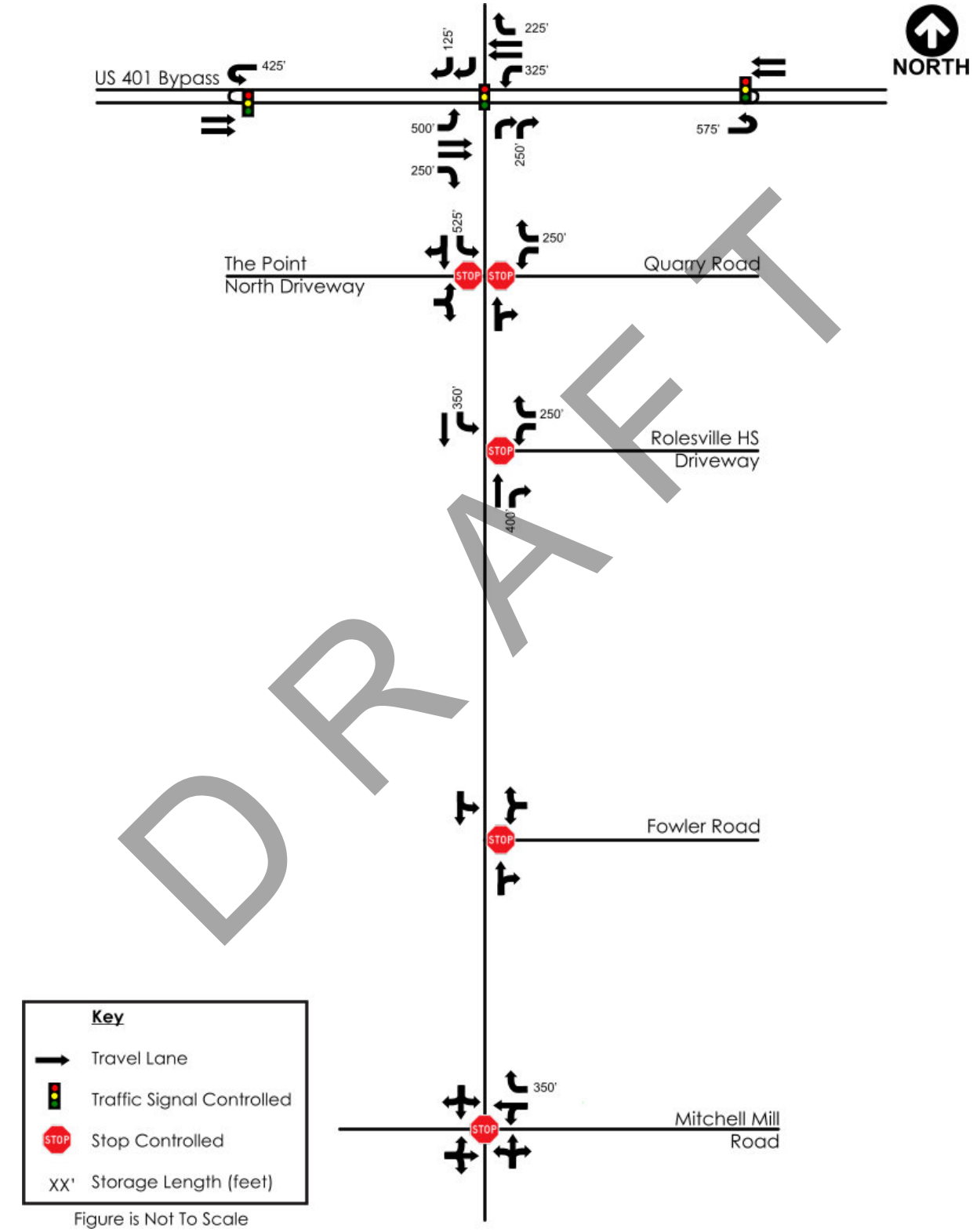


Figure 4: 2028 No-Build Lanes and Traffic Control

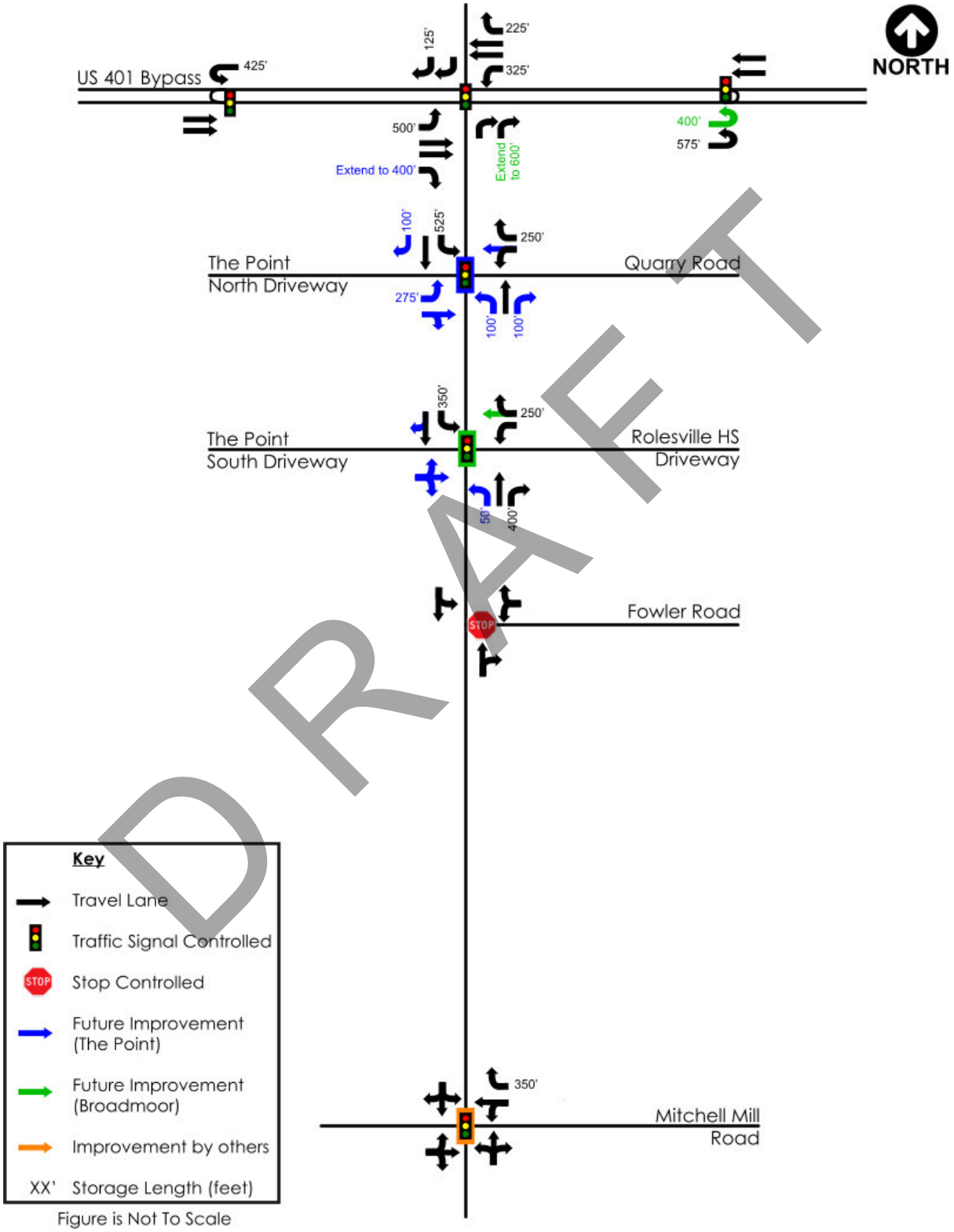


Figure is Not To Scale

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 Manual[3]. The Rate Versus Equation spreadsheet published by NCDOT[4] was used to supplement the ITE methodology. Trip generation for the proposed development is shown in Table 2.

Internally captured trips are trips that begin and end on the project site and do not access the external roadway network. The NCHRP 684 Internal Trip Capture Estimation Tool was used to estimate the trips internally captured between the residential and retail uses within the Merritt Property development.

Pass-by trips are trips already on the roadway network that will make a trip to the site as they pass by on the adjacent street. The ITE Trip Generation Manual indicates that 50% of the pharmacy PM trips will be pass-by traffic, with no pass-by allowance in the AM peak hour.

Table 2: Trip Generation

Land Use	Size	Daily			AM Peak			PM Peak		
		Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit
Senior Adult Single-Family (LUC 251)	232 Units	1212	606	606	74	24	50	85	52	33
Senior Adult Multi-Family (LUC 252)	251 Units	750	375	375	49	17	32	63	35	28
Strip Retail Plaza (LUC 822)	21,000 GFA	1116	558	558	47	28	19	132	66	66
Pharmacy with Drive-Thru (LUC 881)	15,000 GFA	1626	813	813	56	29	27	154	77	77
Internal Capture Trips		-14	-6	-8	-3	-1	-2	-11	-5	-6
Pass-By Trips								-74	-37	-37
Total Trips Generated		**4690**	**2346**	**2344**	**223**	**97**	**126**	**349**	**188**	**161**

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.

- 30% 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
- 15% to/from the west on Mitchell Mill Road
- 10% to/from the east on Fowler Road
- 10% to/from the south on Rolesville Road
- 5% to/from the east on Quarry Road

The trip distribution for the proposed development is shown in Figure 5. The trip assignment is shown in Figure 6. The pass-by distribution and assignment for the proposed development is shown in Figure 7 and Figure 8.

Figure 5: Trip Distribution

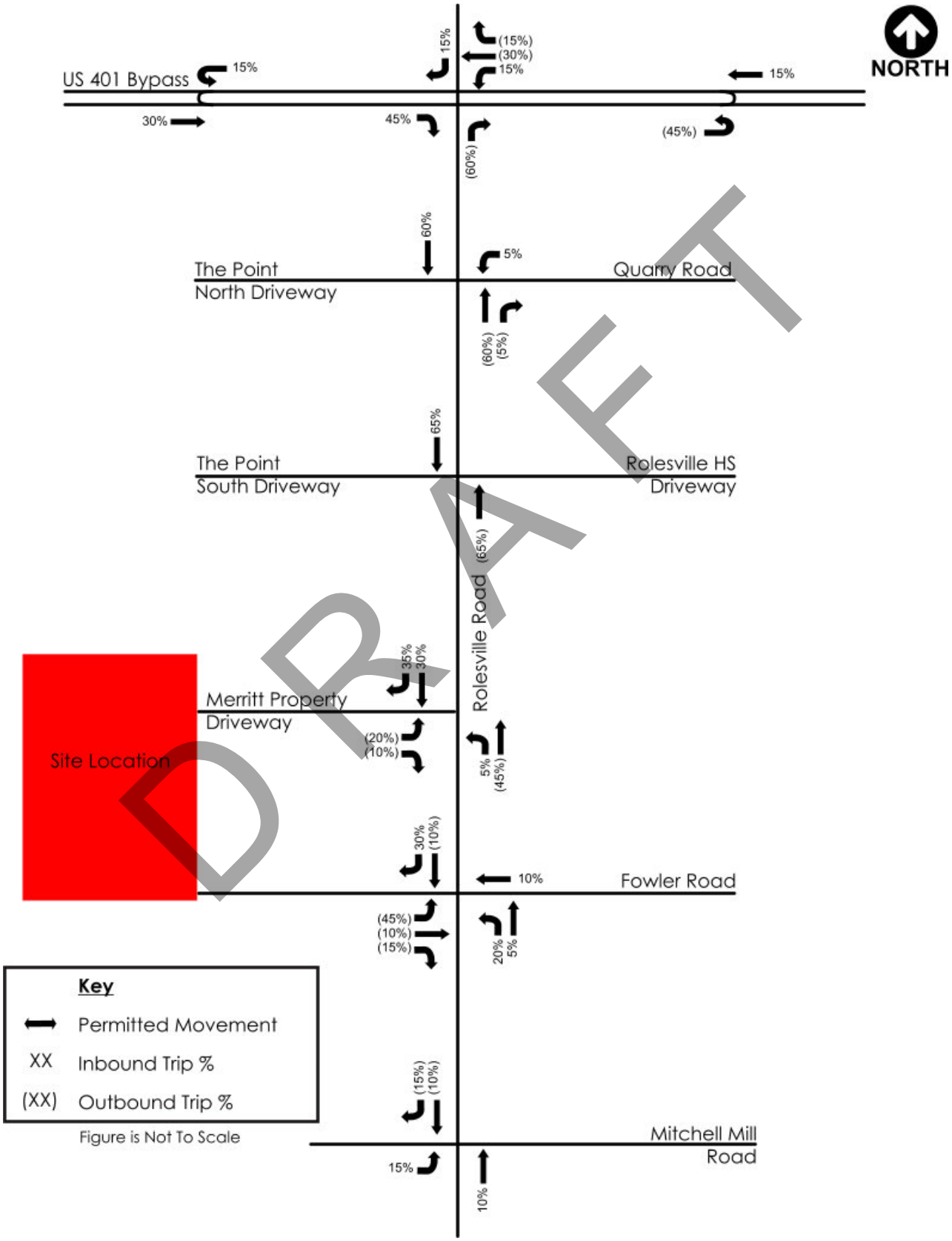


Figure 6: Trip Assignment

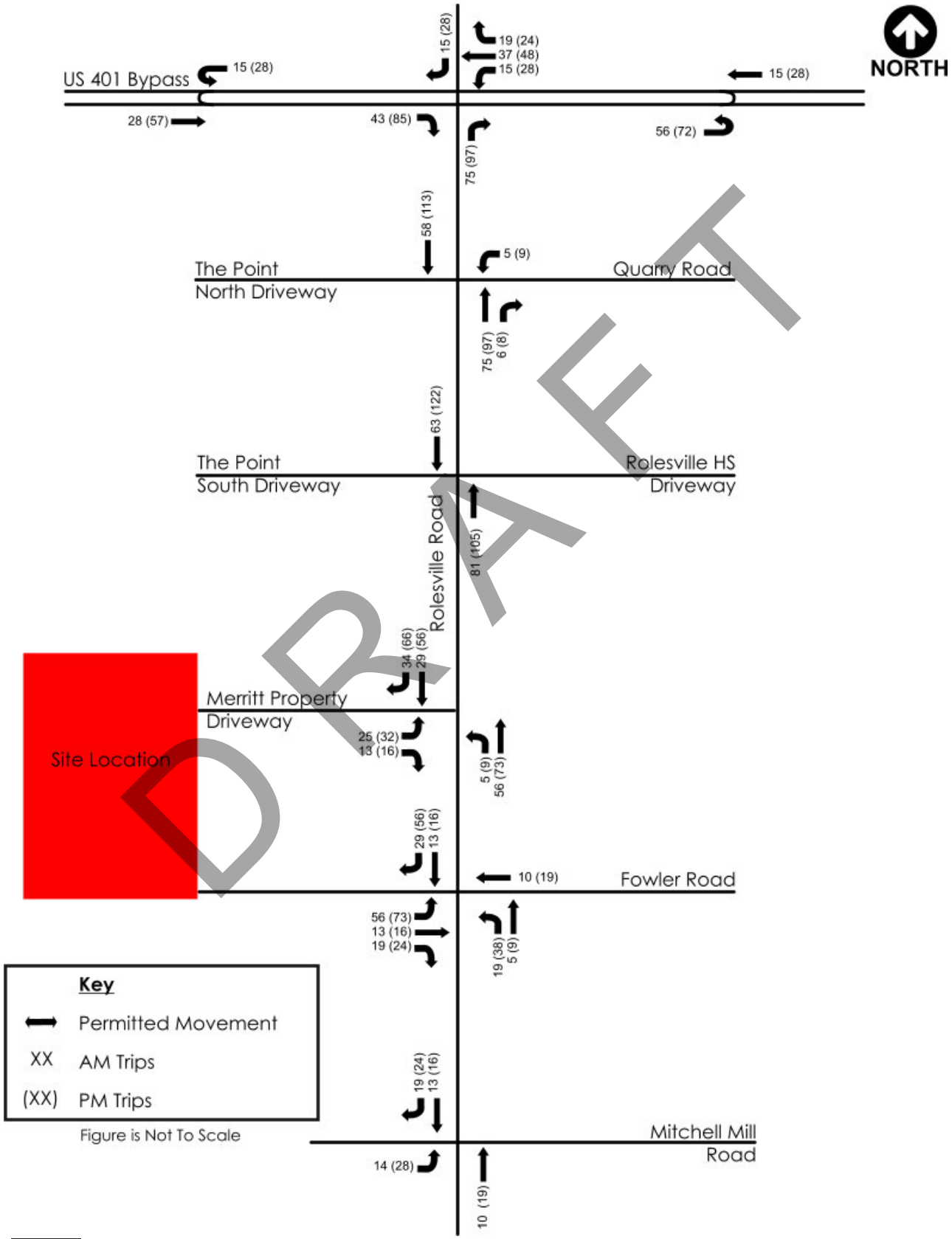


Figure 7: Pass-By Distribution

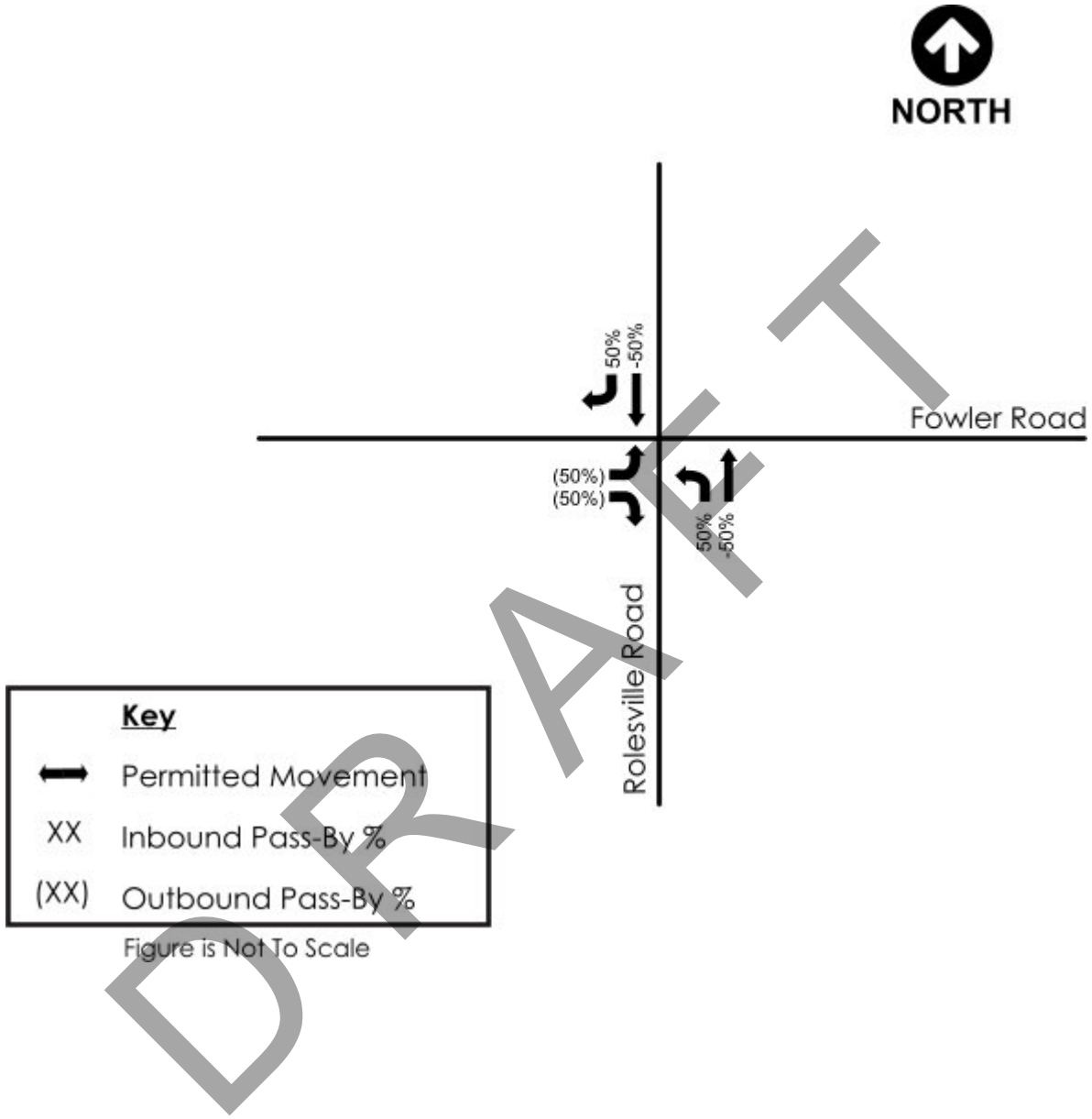
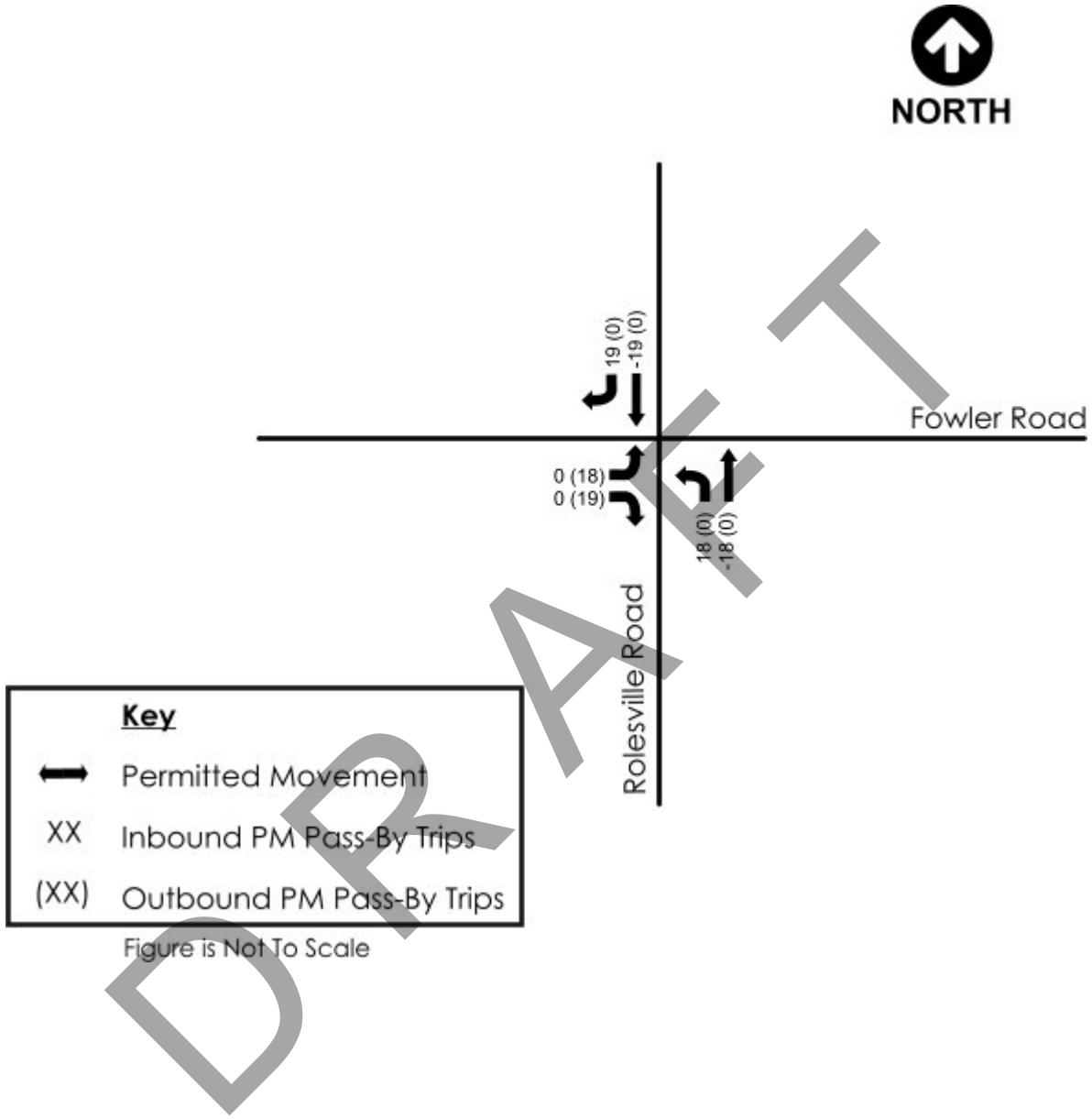


Figure 8: Pass-By Assignment



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 Thursday, June 1, 2023, while schools were in session. Traffic counts were not balanced due to the distance between study intersections and the number of driveways between them. 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 2023 counts were grown by a 2.0 percent annual rate to estimate the 2024 and 2028 volumes. The 2024 existing traffic volumes is shown in Figure 9. The growth in vehicles because of this future traffic growth is shown in Figure 10.

4.3 ADJACENT DEVELOPMENT TRAFFIC

There are seven (7) developments proposed to be constructed within and nearby the study area: 1216 Rolesville Road, Broadmoor, Kalas Falls, Rolesville Crossing, 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 2028. 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 2028. 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

housing and 108 units of low-rise multifamily housing. The development is anticipated to be fully built-out by 2025. A copy of the traffic study prepared by Stantec, can be found in the Appendix.

4.3.4 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.

4.3.5 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 estimated to be fully built-out by 2025. 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.

4.3.6 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.

4.3.7 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 2028 No-Build traffic volumes consist of the sum of the 2024 Existing traffic volumes (Figure 9), the Background traffic growth (Figure 10), and the adjacent development growth (Figure 11). The 2028 No-Build traffic volumes are shown in Figure 12.

4.5 BUILD TRAFFIC VOLUMES

The 2028 Build traffic volumes include the 2028 No-Build traffic and the proposed development traffic discussed in Section 3.0. The 2028 Build traffic volumes are shown in Figure 13.

Figure 9: 2024 Existing Traffic Volumes

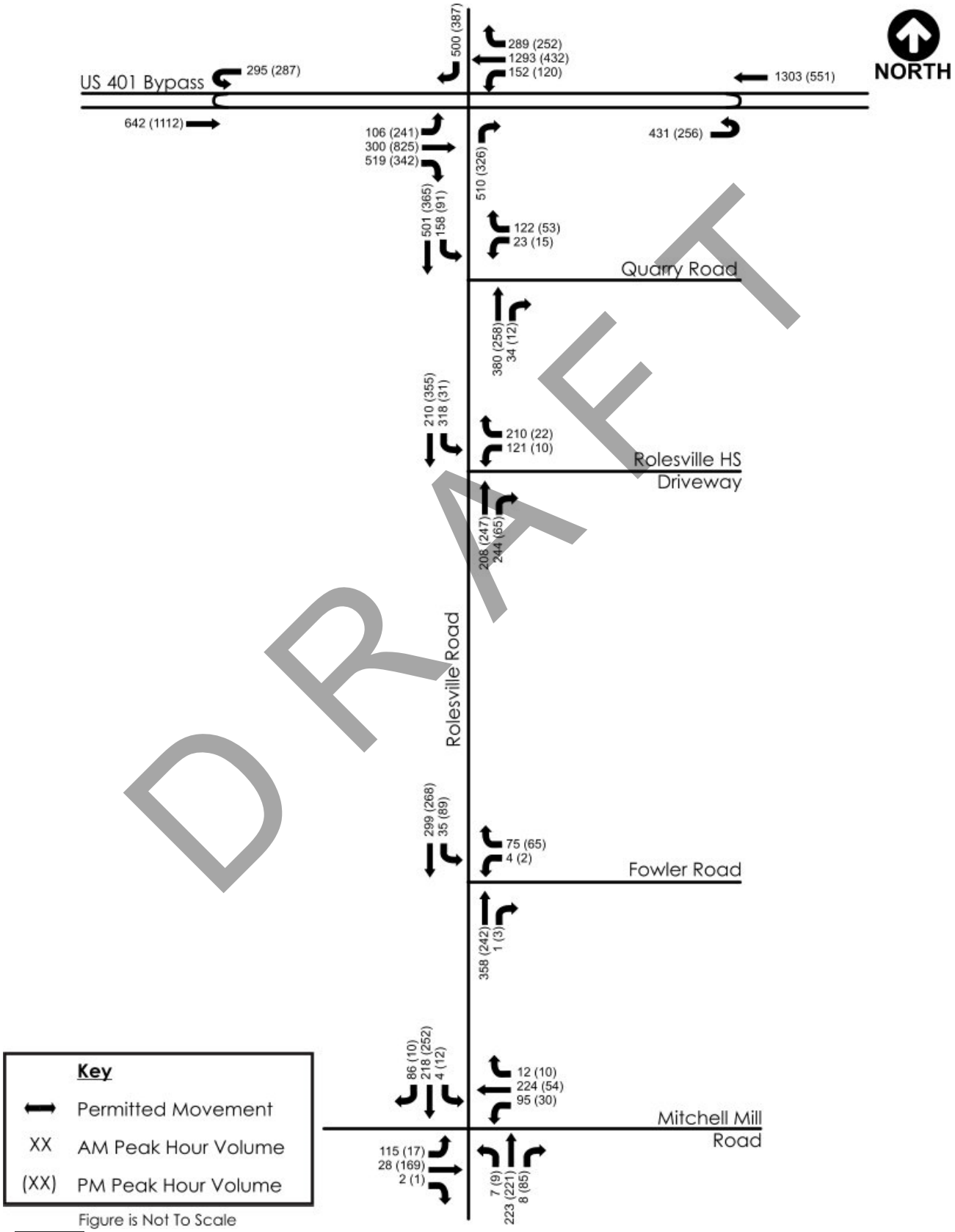


Figure 10: Background Traffic Growth

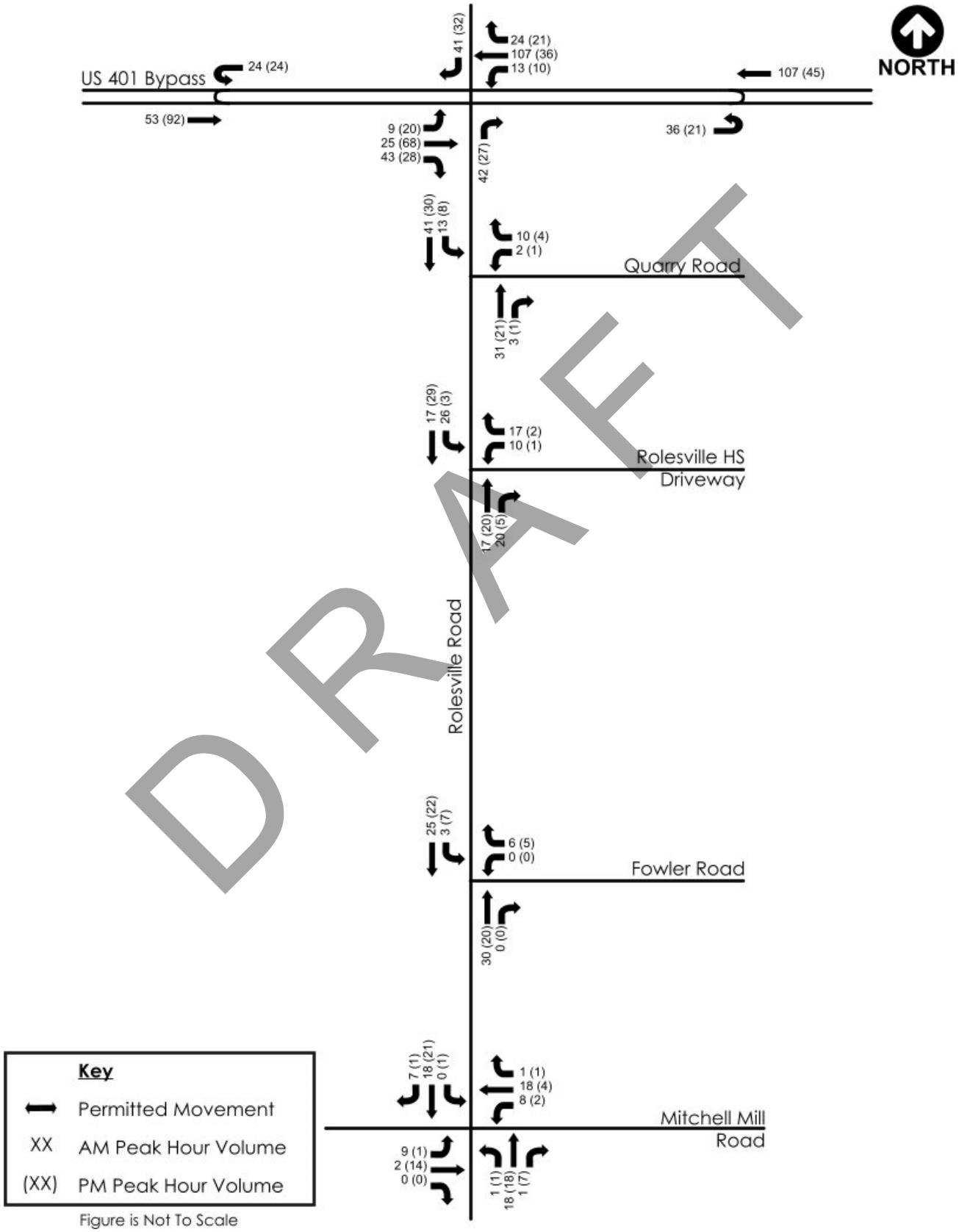


Figure 11: Adjacent Development Traffic Volumes

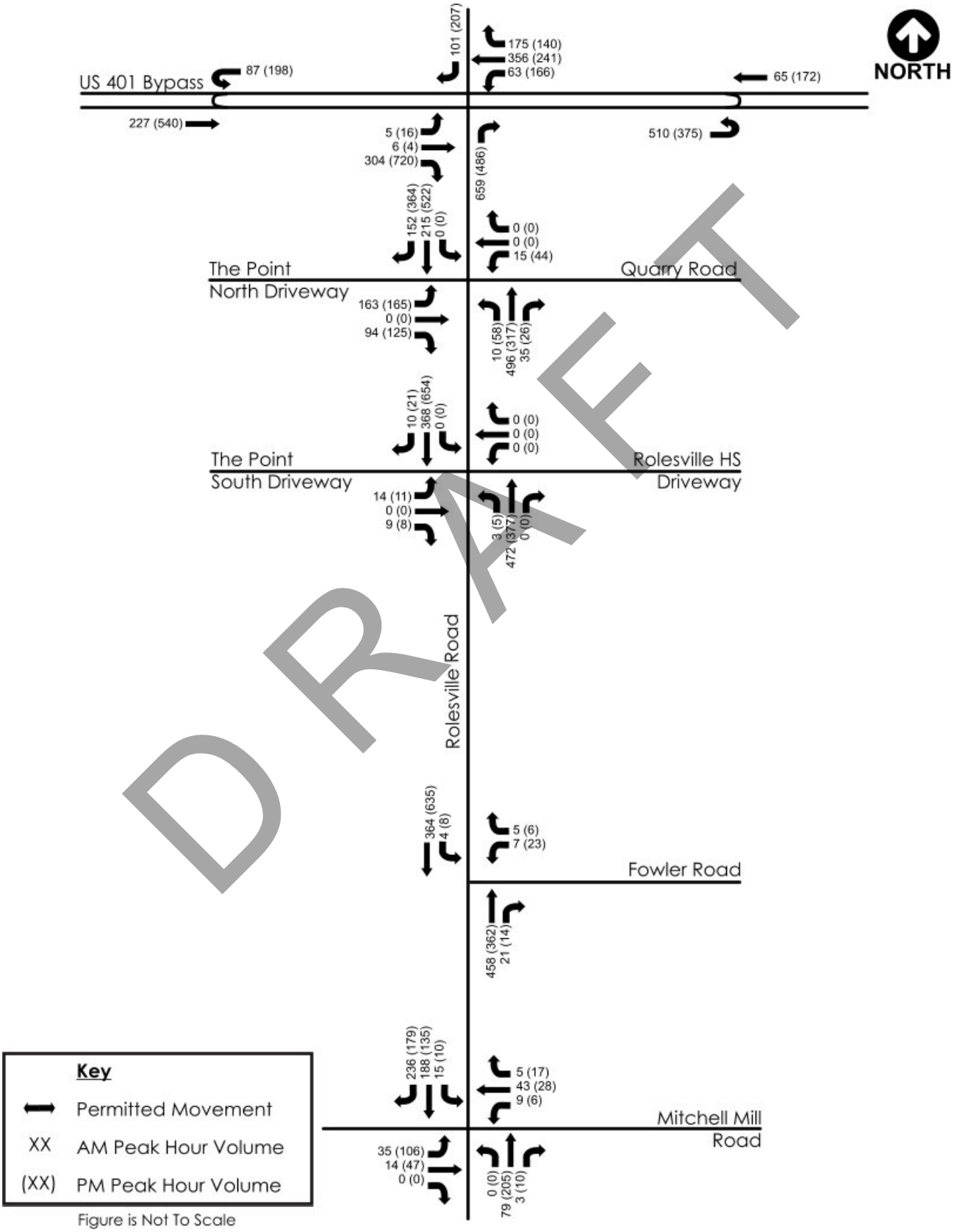


Figure 12: 2028 No-Build Traffic Volumes

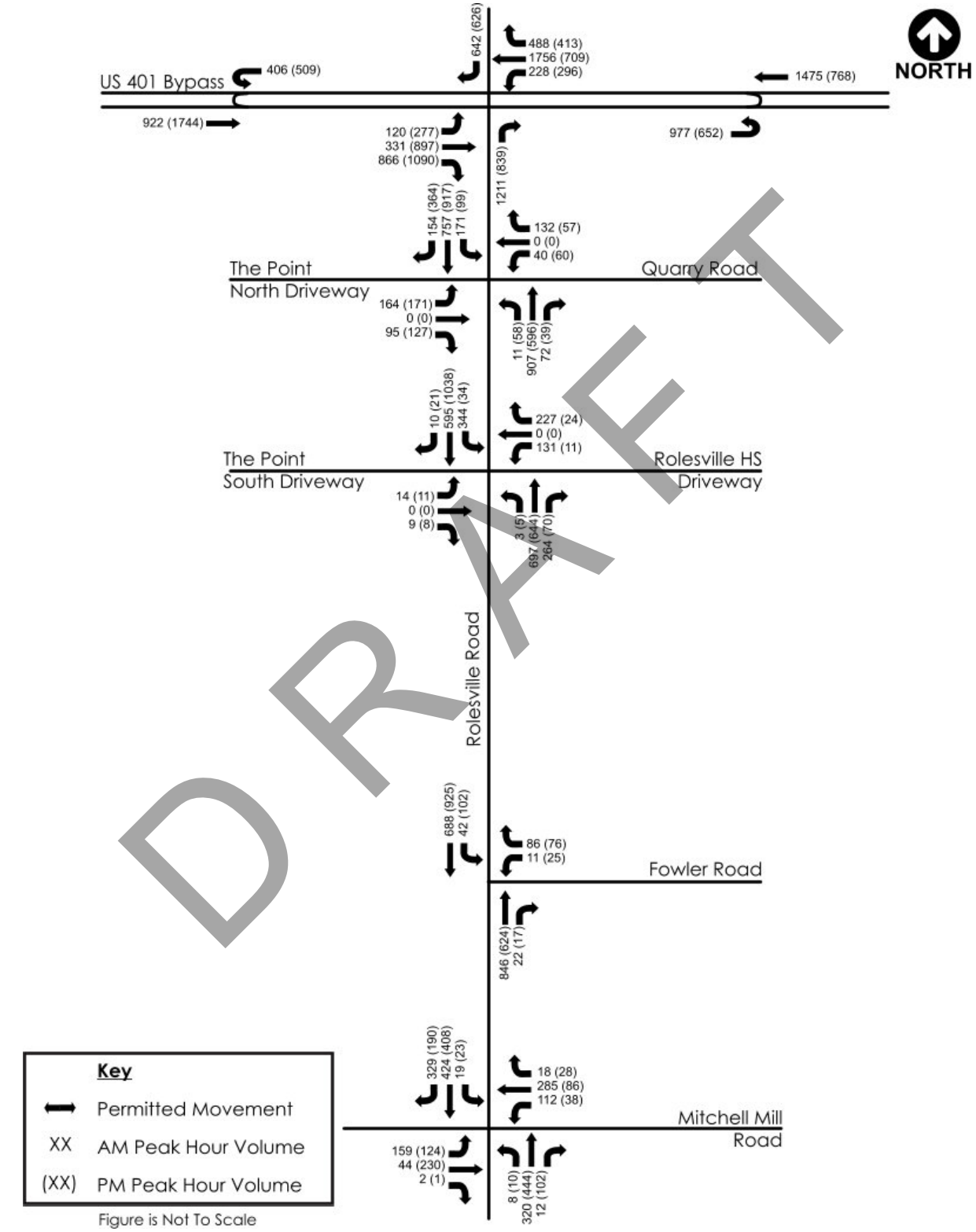
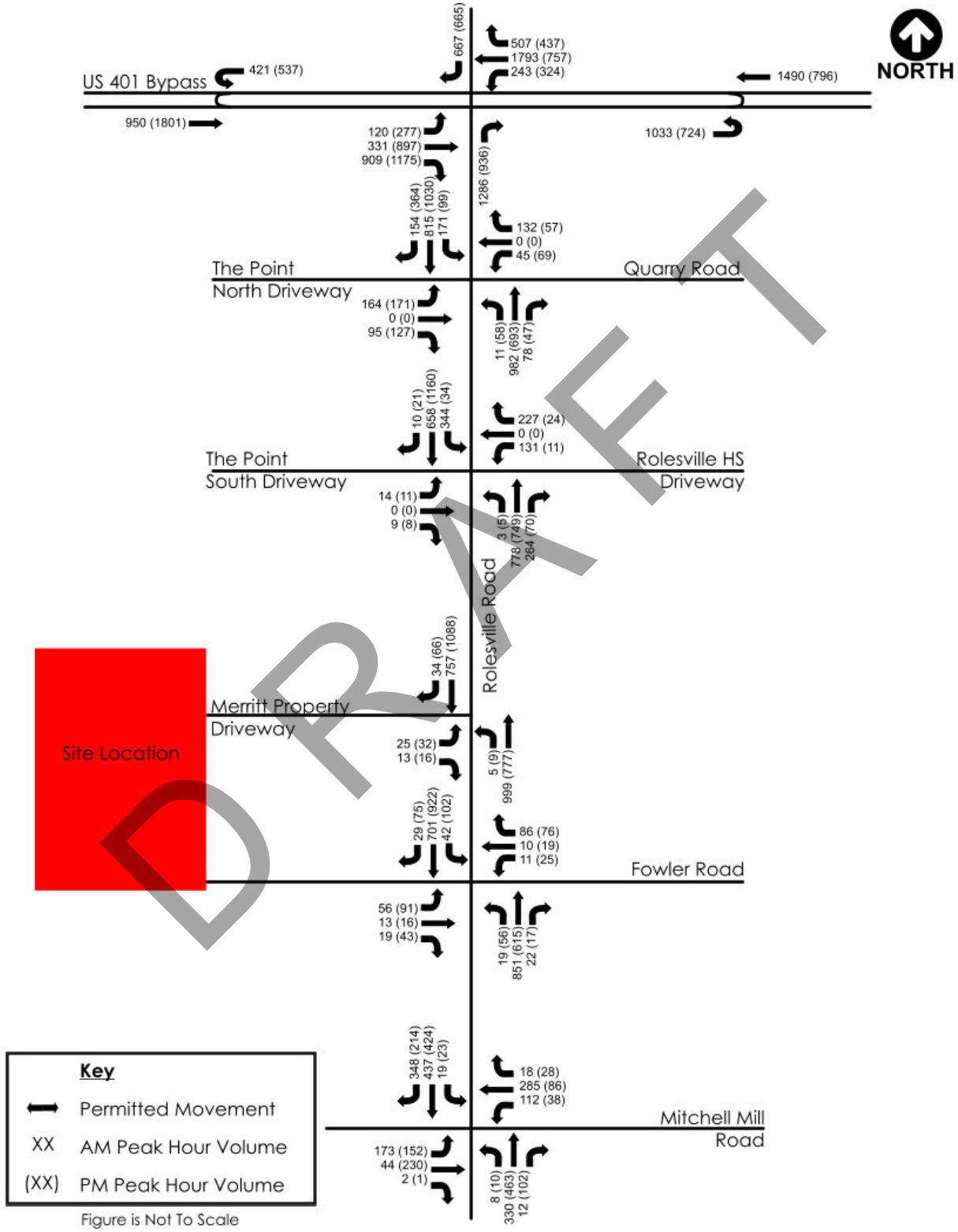


Figure 13: 2028 Build Traffic Volumes



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 Manual[6] (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.*

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 2024 EXISTING

In the base year, under the existing geometric conditions, the westbound left-turn 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 2024 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: 2024 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		9.3	6.9	A	A				
		EB	T	6.8	3.6	A	A	62	147	100	132
			R	1.0	0.3	A	A	3	0	185	45
		NB	R	21.8	24.7	C	C	128	98	322	219
		WB	L	0.1	0.1	A	A	0	0	165	140
	US 401 Bypass Westbound at Young Street	Overall		13.2	7.8	B	A				
		WB	T	9.8	2.3	A	A	314	42	235	127
			R	0.3	0.2	A	A	0	0	0	24
		EB	L	0.1	0.2	A	A	0	0	105	178
		SB	R	32.2	23.4	C	C	182	107	346	252
	US 401 U-Turn East of Young Street	Overall		3.2	2.5	A	A				
		WB	T	4.2	3.2	A	A	137	44	255	68
		EB	U	0.4	0.9	A	A	0	11	391	118
	US 401 U-Turn West of Young Street	Overall		2.3	3.7	A	A				
		EB	T	3.3	4.4	A	A	51	105	64	124
		WB	U	0.2	0.8	A	A	0	11	132	227
STOP	Young Street at Quarry Road	WB	L	51.1	18.7	F	C	23	5	41	20
			R	12.5	10.2	B	B	20	8	42	25
		SB	L	8.9	8.1	A	A	15	8	95	54
STOP	Rolesville Road at Rolesville HS Driveway	WB	L	95	14.9	F	B	145	3	121	35
			R	11.3	9.9	B	A	30	3	107	40
		SB	L	8.7	7.9	A	A	28	3	98	34
STOP	Rolesville Road at Fowler Road	WB	LR	11.8	10.6	B	B	13	10	48	39
		SB	LT	8.2	8.0	A	A	3	5	64	73
STOP	Rolesville Road at Mitchell Mill Road	NB	LTR	15.7	13.8	C	B	65	73	130	104
		EB	LTR	13.6	12.4	B	B	35	40	106	98
		WB	LT	24	11.1	C	B	133	15	264	64
			R	9	8.8	A	A	3	3	45	0
		SB	LTR	18.2	13.2	C	B	98	60	261	145

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

Intersection of Lane Group Operates at LOS F

5.2 2028 NO-BUILD

In the 2028 No-Build conditions, the analysis assumes the improvements associated with the adjacent developments and NCDOT projects are constructed. These improvements, discussed in Section 2.4, are listed below:

US 401 Bypass at Young Street

- Extend the existing eastbound right-turn lane to 400 feet of full-width storage and appropriate taper.
- Extend the northbound right-turn lane from 250 feet of full-width storage to 600 feet of full-width storage and appropriate taper.
- Restripe the 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 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 100 feet of full-width storage and appropriate taper.
- Construct a northbound right-turn lane with 100 feet of full-width storage and appropriate taper.
- Construct a southbound right-turn lane with 100 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 50 feet of full-width storage and appropriate taper.
- Install a traffic signal at this intersection.
- Restripe westbound approach as an exclusive left-turn lane with a shared thru/right-turn storage lane to avoid the use of split-phasing.

Rolesville Road at Mitchell Mill Road

- Install a traffic signal at the intersection.

Synchro LOS and delay results for the 2028 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 2028 without the proposed development in-place, all signalized intersections in the study area operate at acceptable overall LOS.

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. This leads to several side street approaches operating at LOS E or F, such as the westbound Fowler Road approach and the eastbound left turn movement from the Point North Driveway which operates at LOS F in both peak hours.

In addition to the above discussed locations, the following movements also operate at LOS F in the AM and/or PM peak hours:

- Rolesville Road & Rolesville High School Driveway – westbound thru-right (AM Peak)
- Rolesville Road & Mitchell Mill Road – eastbound left-thru-right (AM Peak)

Table 5: 2028 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		9.1	12.0	A	B				
		EB	T	39.3	17.4	D	B	150	247	685	864
			R	3.6	6.3	A	A	211	450	348	348
		NB	R	6.4	17.9	A	B	160	275	880	749
		WB	L	0.1	0.2	A	A	0	0	202	254
	US 401 Bypass Westbound at Young Street	Overall		20.4	9.6	C	A				
		WB	T	17.6	8.7	B	A	518	114	647	410
			R	0.3	0.4	A	A	0	0	272	257
		EB	L	0.1	0.2	A	A	0	0	128	147
		SB	R	47.1	20.7	D	C	328	150	712	1050*
	US 401 U-Turn East of Young Street	Overall		29.9	15.2	C	B				
		WB	T	25.5	11.9	C	B	521	166	697	216
		EB	L	36.6	19.1	D	B	408	141	408	286
	US 401 U-Turn West of Young Street	Overall		3.1	4.1	A	A				
		EB	T	4.3	5.2	A	A	145	244	227	1086*
		WB	U	0.3	0.5	A	A	0	0	318	554
	Young Street at Quarry Road / The Point North Driveway	Overall		23.5	25.9	C	C				
		EB	L	90.3	81.3	F	F	265	244	264	241
			TR	50.2	46.1	D	D	130	153	218	205
		WB	LT	46.7	44.1	D	D	68	82	82	127
			R	30.7	18.3	C	B	134	53	137	52
		NB	L	46.0	50.2	D	D	11	73	112	200
			T	14.8	14.6	B	B	633	101	742	653
			R	1.2	6.7	A	A	4	11	199	200
		SB	L	77.5	31.8	E	C	273	83	536	177
			T	7.0	24.5	A	C	323	800	675	604
			R	3.7	9.0	A	A	52	162	200	200
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway	Overall		37.4	6.2	D	A				
		EB	LTR	41.2	39.7	D	D	47	38	72	53
		WB	L	53.3	38.1	D	D	166	23	180	51
			TR	80.4	39.9	F	D	337	44	291	73
		NB	L	14.8	5.2	B	A	5	2	51	44
			T	40.4	5.9	D	A	718	181	1190	276
			R	18.5	4.4	B	A	161	19	500	0
		SB	L	63.3	45.0	E	D	436	26	431	69
			TR	7.6	3.3	A	A	253	2	641	272
	Rolesville Road at Fowler Road	WB	LR	104.8	##	F	F	130	383	163	176
		SB	LT	10.4	9.6	B	A	5	10	523	378
	Rolesville Road at Mitchell Mill Road	Overall		41.2	21.0	D	C				
		EB	LTR	91.7	41.6	F	D	319	305	406	335
		WB	LT	36.0	23.7	D	C	378	101	346	162
			R	20.4	19.8	C	B	24	30	0	0
		NB	LTR	18.0	16.9	B	B	233	352	976*	715*
		SB	LTR	41.1	12.4	D	B	864	361	1779	976

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

Delay exceeds 300 seconds

Intersection or Lane Group Operates at LOS E

Intersection of Lane Group Operates at LOS F

5.3 2028 BUILD

As part of the 2028 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 remain mostly the same as the 2028 No-Build conditions with significant queues along Young Street & Rolesville Road in the northbound direction during the AM peak hour and southbound direction during 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 yield-controlled eastbound right-turn movement at the US 401 Bypass Eastbound & Young Street intersection. While the movement is yield controlled, the combination of the added development traffic and having to yield to the westbound left-turn movement prevents the movement from operating at its greatest capacity, especially in the PM peak hour. In the 2028 No-Build scenario, the US 401 Bypass Eastbound queue from this movement extended off the network (~1000' west of the Western U-Turn intersection) 31% of the PM peak hour. In the 2028 Build scenario, this spillback queue extended off the network during 67% of the PM peak hour.

The Merritt Property Driveway approach to Rolesville Road operates at LOS F in the AM peak hour. The eastbound and westbound approaches of the Rolesville Road & Fowler Road intersection operate at LOS F in both peak hours.

The westbound shared through-right-turn lane of the Young Street & Rolesville High School driveway intersection now operates at LOS F in the AM peak hour.

Synchro LOS and delay results for the 2028 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: 2028 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		9.0	13.7	A	B				
		EB	T	14.5	21.4	D	C	141	276	774	878
			R	4.3	9.2	A	A	263	512	348	348
		NB	R	5.3	16.7	A	B	152	263	962	777
		WB	L	0.2	0.2	A	A	0	0	232	265
	US 401 Bypass Westbound at Young Street	Overall		22.1	9.7	C	A				
		WB	T	18.8	8.9	B	A	580	115	749	617
			R	0.3	0.4	A	A	0	0	280	257
		EB	L	0.1	0.2	A	A	0	0	129	140
		SB	R	52.0	20.8	D	C	369	159	833	1052*
	US 401 U-Turn East of Young Street	Overall		33.7	15.8	C	B				
		WB	T	28.4	12.7	C	B	590	173	757	352*
		EB	L	41.4	19.2	D	B	473	160	428	326
	US 401 U-Turn West of Young Street	Overall		3.1	4.4	A	A				
		EB	T	4.4	5.5	A	A	150	271	335	1102*
		WB	U	0.4	0.5	A	A	0	0	397	562
	Young Street at Quarry Road / The Point North Driveway	Overall		26.8	32.4	C	C				
		EB	L	113.9	134.4	F	F	274	254	270	268
			TR	53.1	55.1	D	E	132	164	291	278*
		WB	LT	50.2	57.8	D	E	76	109	93	203
			R	32.6	21.5	C	C	138	56	134	45
		NB	L	45.5	56.2	D	E	12	64	109	181
			T	18.2	11.2	B	B	671	93	880	656
			R	1.1	5.3	A	A	4	9	200	185
		SB	L	89.9	36.8	F	D	283	81	530	114
			T	7.6	33.5	A	C	417	947	883	639
			R	3.9	8.5	A	A	60	152	200	200
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway	Overall		42.8	7.0	D	A				
		EB	LTR	42.9	40.1	D	D	48	38	87	82
		WB	L	56.3	38.5	E	D	179	23	239	63
			TR	92.5	40.3	F	D	348	44	338	76
		NB	L	13.2	5.6	B	A	5	2	77	61
			T	47.6	7.1	D	A	804	246	1137	273
			R	16.8	4.4	B	A	153	20	500	0
		SB	L	79.5	46.8	E	D	464	23	417	63
			TR	8.8	4.2	A	A	336	25	1071	468
	Rolesville Road at Merritt Property Driveway	NB	LT	10.4	21.4	B	C	0	3	210	263
		EB	LR	##	33.9	F	D	148	30	153	199
	Rolesville Road at Fowler Road	NB	LTR	10.0	15.2	B	C	3	13	986	1155
		EB	LTR	##	##	F	F	360	N/A	456	1040*
		WB	LTR	##	##	F	F	410	N/A	442	736*
		SB	LTR	10.4	9.6	B	A	5	10	384	426
	Rolesville Road at Mitchell Mill Road	Overall		47.9	23.5	D	C				
		EB	LTR	94.8	45.1	F	D	341	373	339	471
		WB	LT	34.9	23.0	C	C	379	100	348	209
			R	20.4	19.6	C	B	24	30	0	30
		NB	LTR	18.7	18.3	B	B	242	370	992*	924*
		SB	LTR	54.8	15.7	D	B	913	421	1903	1160

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

Delay exceeds 300 seconds

Intersection or Lane Group Operates at LOS E

Intersection of Lane Group Operates at LOS F

5.4 2028 BUILD IMPROVED

5.4.1 Proposed Improvements

The 2028 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 site plan and 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

- Construct a second southbound travel lane from Young Street southward to the intersection of Young Street and Quarry Road, where the lane drops as an exclusive right-turn into the Point development.
- The above recommendation will require the reconfiguration of the eastbound right-turn from the US 401 Bypass that operates under the control of a yield sign. It is recommended that this yield sign be removed and new signing and striping to be installed to provide a free-flowing right-turn from the US 401 Bypass onto Young Street.

In the SimTraffic simulation runs, the traffic from the proposed development causes the eastbound queue from the US 401 Bypass intersection with Young Street to extend greater than 1700' during 67% of the PM peak hour, which is an increase from only 31% of the PM peak hour in the 2028 No-Build scenario. Converting the eastbound right-turn movement to a free-flow right turn instead of the current yield-controlled movement would mitigate this. With this change implemented, the maximum SimTraffic queue of the eastbound queue is 387' in the PM peak hour.

As a result of the eastbound right-turn movement being a free-flow movement, we would recommend that the proposed 100' southbound right-turn lane at the Young Street & Quarry Road intersection be extended back to connect with this free-flow movement.

Young Street at Quarry Road / The Point North Driveway

- No improvements are recommended at this intersection.

Young Street at Rolesville HS Driveway / The Point South Driveway

- No improvements are recommended at this intersection.

Rolesville Road at Merritt Property Driveway

- Construct the northernmost driveway as a right-in / right-out access point with one ingress lane and one egress lane.
- Construct an exclusive southbound right-turn lane with 100 feet of full-width storage and appropriate taper.

In the Build scenario, the Merritt Property Driveway approach operates at LOS F in the AM peak hour with delays exceeding 300 seconds. With the elimination of left turns in and out of the intersection (with vehicles being redirected to the Rolesville Road & Fowler Road signalized intersection) as well as the southbound right-turn lane, the driveway approach operates at LOS B in the AM peak hour and LOS D in the PM peak hour.

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 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 100 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.

With the Fowler Road approaches having delays exceeding 300 seconds in the Build scenario, a signal was analyzed in the Build Improved scenario. With the addition of the signal, the intersection operates at an overall LOS C in the AM peak hour and LOS B in the PM peak hours. It is recommended to monitor this intersection for future signalization.

Rolesville Road at Mitchell Mill Road

- No improvements are recommended at this intersection.

Table 7: 2028 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
	US 401 Bypass Eastbound at Young Street	Overall		8.3	13.7	A	B				
		EB	T	42.3	20.7	D	C	177	276	188	397
			R	4.3	9.2	A	A	263	744	167	348
		NB	R	3.8	17.2	A	B	115	306	956	994
		WB	L	0.2	0.2	A	A	0	0	202	256
	US 401 Bypass Westbound at Young Street	Overall		22.1	9.7	C	A				
		WB	T	18.7	8.9	B	A	580	115	746	187
			R	0.3	0.4	A	A	0	0	268	227
		EB	L	0.1	0.2	A	A	0	0	151	173
		SB	R	52.0	20.8	D	C	369	159	687	447
	US 401 U-Turn East of Young Street	Overall		33.7	15.8	C	B				
		WB	T	28.6	12.7	C	B	590	173	810	256
		EB	L	41.0	19.2	D	B	473	160	423	322
	US 401 U-Turn West of Young Street	Overall		3.1	4.4	A	A				
		EB	T	4.4	5.5	A	A	150	271	240	733
		WB	U	0.4	0.5	A	A	0	0	338	554
	Young Street at Quarry Road / The Point North Driveway	Overall		24.2	25.8	C	C				
		EB	L	92.3	81.4	F	F	274	245	374	243
			TR	50.9	45.7	D	D	132	153	668*	213
		WB	LT	48.8	46.4	D	D	76	98	77	109
			R	30.9	20.1	C	C	135	54	130	56
		NB	L	41.1	62.8	D	E	10	66	66	200
			T	17.3	10.1	B	B	587	73	940	743
			R	1.0	4.0	A	A	2	7	200	199
		SB	L	80.3	35.9	F	D	264	81	577	576
			T	7.1	28.0	A	C	286	902	820	1039
			R	3.1	7.3	A	A	42	134	417	864
	Rolesville Road at Rolesville HS Driveway / The Point South Driveway	Overall		42.0	7.3	D	A				
		EB	LTR	42.9	40.1	D	D	48	38	62	61
		WB	L	56.3	38.5	E	D	179	23	198	55
			TR	92.5	40.3	F	D	348	44	361	61
		NB	L	15.2	2.4	B	A	2	1	66	43
			T	43.4	6.2	D	A	848	452	1272	258
			R	16.6	1.8	B	A	119	10	500	0
		SB	L	78.7	44.6	E	D	468	23	449	112
			TR	11.5	5.6	B	A	420	8	1144	328
STOP	Rolesville Road at Merritt Property Driveway	EB	R	13.0	25.8	B	D	3	8	28	34
	Rolesville Road at Fowler Road	Overall		20.8	19.5	C	B				
		EB	LTR	68.8	53.7	E	D	170	213	169	248
		WB	LTR	49.3	34.2	D	C	137	119	134	140
		NB	L	9.4	20.4	A	C	16	37	152	200
			TR	21.9	18.3	C	B	752	322	849	520
		SB	L	52.5	49.8	D	D	61	77	155	199
			T	6.5	9.6	A	A	143	419	375	422
			R	4.0	2.3	A	A	9	7	90	200
	Rolesville Road at Mitchell Mill Road	Overall		48.1	22.9	D	C				
		EB	LTR	94.8	45.1	F	D	341	373	375	416
		WB	LT	34.9	23.0	C	C	379	100	358	147
			R	20.4	19.6	C	B	24	30	0	0
		NB	LTR	18.7	18.3	B	B	242	370	1000*	1004*
		SB	LTR	55.2	14.1	E	B	901	355	2185	2940

*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

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 not meet the LOS Standards specified in the LDO[8]. These recommendations are shown in Figure 14.

Averette Road, Young Street, and Rolesville Road Corridor Study

It is recommended that the applicant coordinate their site plan and 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

- Construct a second southbound travel lane from Young Street southward to the intersection of Young Street and Quarry Road, where the lane drops as an exclusive right-turn into the Point development.
- The above recommendation will require the reconfiguration of the eastbound right-turn from the US 401 Bypass that operates under the control of a yield sign. It is recommended that this yield sign be removed and new signing and striping to be installed to provide a free-flowing right-turn from the US 401 Bypass onto Young Street.

Young Street at Quarry Road / The Point North Driveway

- No improvements are recommended at this intersection.

Young Street at Rolesville HS Driveway / The Point South Driveway

- No improvements are recommended at this intersection.

Rolesville Road at Merritt Property Driveway

- Construct the northernmost driveway as a right-in / right-out access point with one ingress lane and one egress lane.
- Construct an exclusive southbound right-turn lane with 100 feet of full-width storage and appropriate taper.

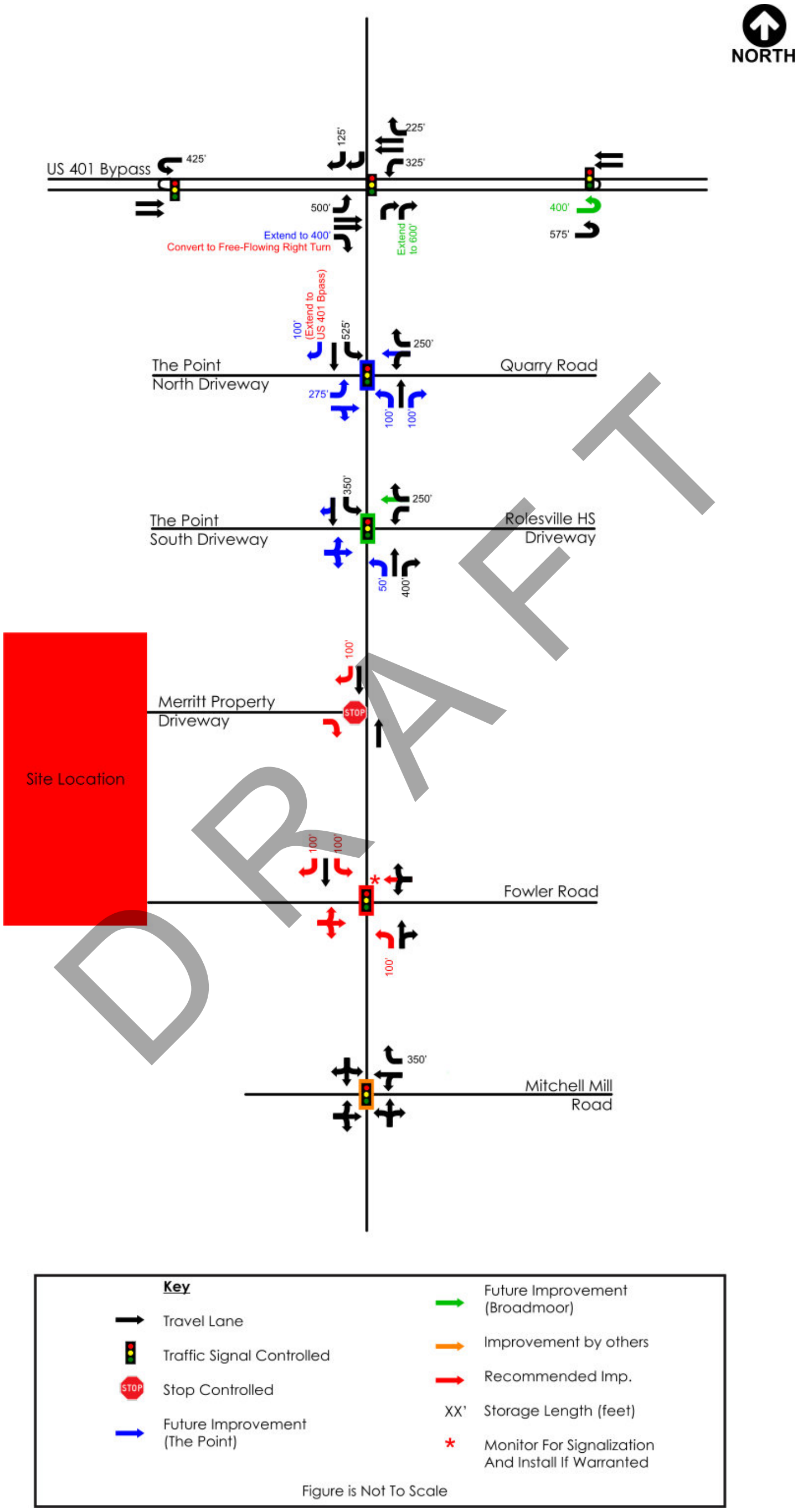
Rolesville Road at Fowler Road

- 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 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 100 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.

Rolesville Road at Mitchell Mill Road

- No improvements are recommended at this intersection.

Figure 14: Recommended Improvements



7.0 REFERENCES

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[8] ***Land Development Ordinance***. Town of Rolesville, June 1, 2021,
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8.0 APPENDIX

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