

Planning Commission Members

District 1: Jason Cavalier
District 2: Yokima Cureton
District 3: Lynette Hinson
District 4: Judianna Tinklenberg
District 5: Shelly Richards, Chair
District 6: Sheila Hinson
District 7: Frances Liu



County Attorney
Ginny L. Merck-Dupont

Secretary to Planning Commission
Mara Mata

Planning Director
April Williams

**February 5, 2026
5:00 PM**

**PLANNING COMMISSION
County Council Chambers, County Administration
Building, 101 North Main Street, Lancaster, SC 29720**

WORKSHOP AGENDA

1. Call to Order Regular Meeting

2. New Business

a. CU-2025-2644: Nechyporuk/Fort Mill Hwy

Application by Volodymyr Nechyporuk and Thomas Frizzi for a Conditional Use Permit for Unit B at 1081 Fort Mill Hwy (p/o TM # 0006-00-068.01) for a proposed Minor Maintenance & Repair (Auto).

b. SD-2023-1869: Barberville Commercial

Application by Moody Group/Jan Ringeling on behalf of Barberville Developers LLC and Martin Senior and Associates LLC for a Preliminary Plat for six parcels totaling 10.92 acres located at the northwest corner of Barberville Road and Fort Mill Highway (TM #s 0006-00-057.00, 0006-00-058.00, 0006-00-058.01, 0006-00-058.02, 0006-00-058.03), in order to create a multi-parcel commercial development with central shared access.

c. NRN-2026-0011: New Road Names- February Group

February Group Submittal, new road names from E911 Addressing via Preliminary Plats and Civil Plans, pursuant to Sec. 6.4.11 of the Unified Development Ordinance.

3. Other

a. Discussion: Proposals for CIP Projects

4. Adjournment

Recommendations made at this meeting are tentatively scheduled for consideration by County Council in the following month. County Council agendas are posted online at <https://lancastercsc.portal.civicclerk.com/>.

Anyone requiring special services to attend this meeting should contact 285-1565 at least 24 hours in advance of this meeting. Lancaster County Council agendas are posted at the Lancaster County Administration Building and are available on the

Website: <https://www.lancastercountysc.gov/>

Meetings are livestreamed and can be found by using the following link:
<https://www.youtube.com/@LancasterCoSCGov/streams>

Agenda Item Summary

Ordinance # / Resolution # :

Contact Person / Sponsor:

Department:

Date Requested to Be on Agenda: 2/5/2026

Council Action Requested:

Refer to Council for one hearing

Strategic Plan Focus Alignment:

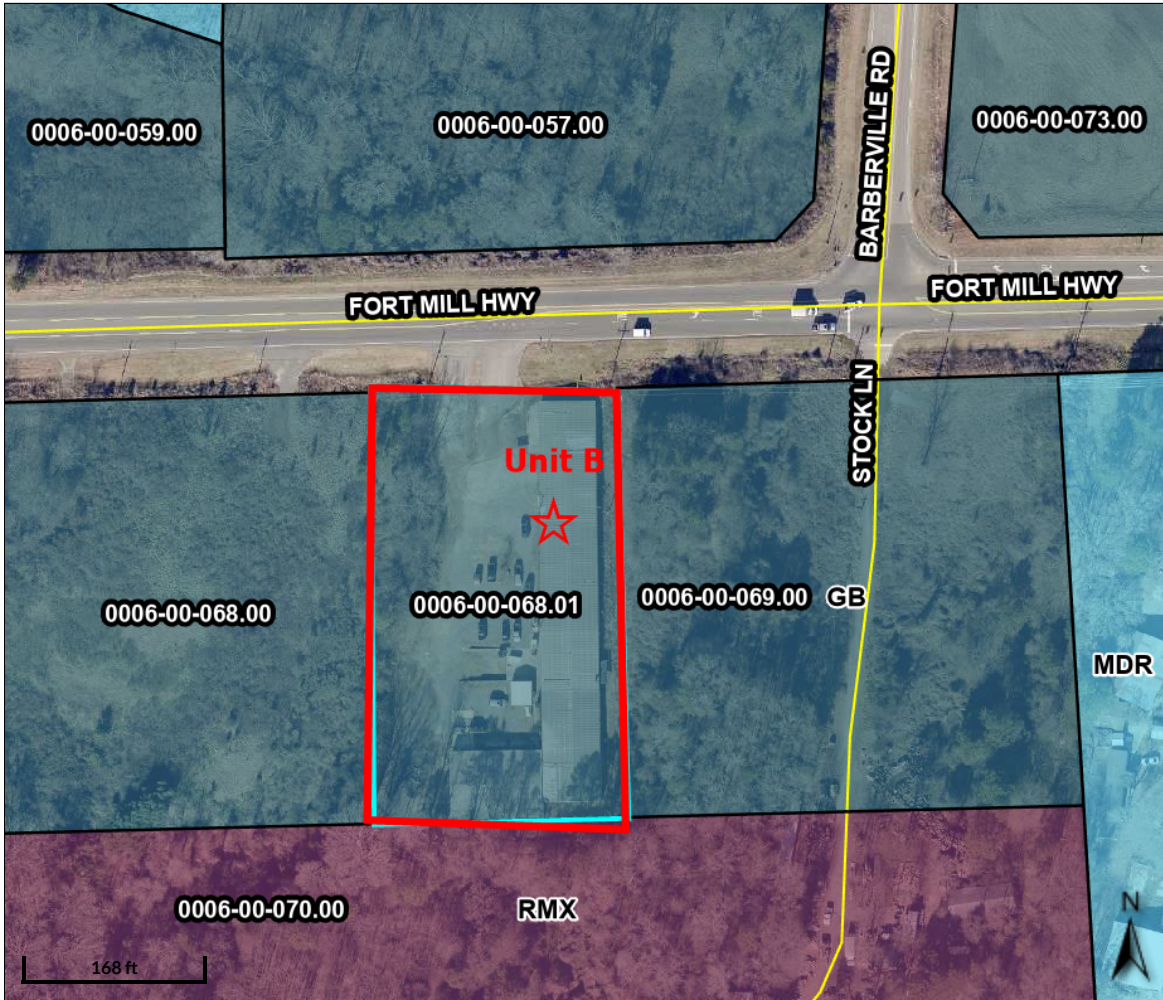
Points to Consider:

Funding and Liability Factors:

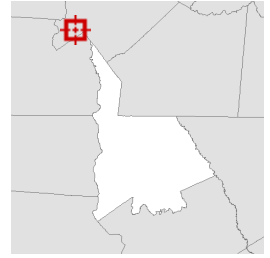
Recommendation:

Attachments:

1. GIS Location Map
2. CU Application
3. ConditionalUsePlan_639045883789854059
4. ConditionalUsePlanpage3_639045883789854059
5. Deed 1824_336



Overview



Legend

Parcels

Roads

Zoning Districts

- AR
- CITY
- GB
- HDR
- HI
- HSPRGS
- IMX
- INS
- KER
- LDR
- LI
- M
- MDR
- MH
- MX
- NB
- OSP
- PB
- PDD
- RB
- RMX
- RN
- RR
- RUB
- UR

Parcel ID	0006-00-068.01	Owner	FORT MILL HIGHWAY LLC	Last 2 Sales				
Class Code	Non Qualified Commercial		PO BOX 481905	Date	8/22/2024	Price	\$1000000	Reason
Taxing District	County INDIAN LAND		CHARLOTTE, NC 28269					TRUE
Land Size	1.91	ACRES	1081 FORT MILL HWY		6/5/2008	0		SALE
			Assessed Value					WILL
								Q
								Q

(Note: Not to be used on legal documents)

CONDITIONAL USE APPLICATION

SUBMITTAL REQUIREMENTS

- Completed Application
- Signatures of Applicant and Property Owner
- All items noted on the Conditional Use Plan Checklist
- Fees associated with review

GENERAL INFORMATION

Property Address 1081 Fort Mill Highway Unit B
City Fort Mill State SC Zip 29707 Tax Parcel ID 000600068.01
Current Zoning Generals/business Current Use office / warehouse
Total Acres 2.1 Surrounding Property Description Wooded area

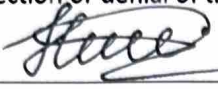
Proposed Conditional Use auto repair services

CONTACT INFORMATION

Applicant Name Volodymyr Nechyporuk
Address 11711 Hawick Valley Ln
City Charlotte State NC Zip 28277 Phone 704-654-0735
Email willtanllc@gmail.com
Property Owner Name Thomas Frizzi Address 10835 Clark st
City Davidson State NC Zip 28036 Phone 980-721-1839
Email toptf21@gmail.com

APPLICATION CERTIFICATIONS

I hereby certify that I have read this application and the information supplied herein is true and correct to the best of my knowledge. I agree to comply with all applicable County ordinances and state laws related to the use and development of the land. I further certify that I am the property owner, or his/her authorized agent, or the subject property. I understand that falsifying any information herein may result in rejection or denial of this request.


Applicant

12/4/25
Date


Property Owner(s)

12/4/25
Date

Additional Owner (s)

Attach owner's notarized written authorization with property information if the applicant is not the owner.

SCHEDULE/PROCESS

1. Submit Application

- The deadline for this application is at least 45 days prior to the Planning Commission meeting, held every third Tuesday of the month.
- Once an application is submitted, it is placed on the Planning Commission agenda for the following month.
- An application withdrawal should be made in writing and received prior to public notice in order to receive a refund.
- Conditional Use Application Fee - \$500.00

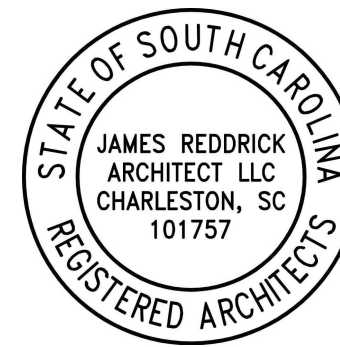
2. Planning Commission

- Conducts a public hearing on the application to receive input from Lancaster County citizens, applicant, and other interested parties.
- Reviews the application to ensure it is consistent with the Lancaster County Unified Development Ordinance, Comprehensive Plan, and all adopted County plans.
- Makes a recommendation to the County Council.

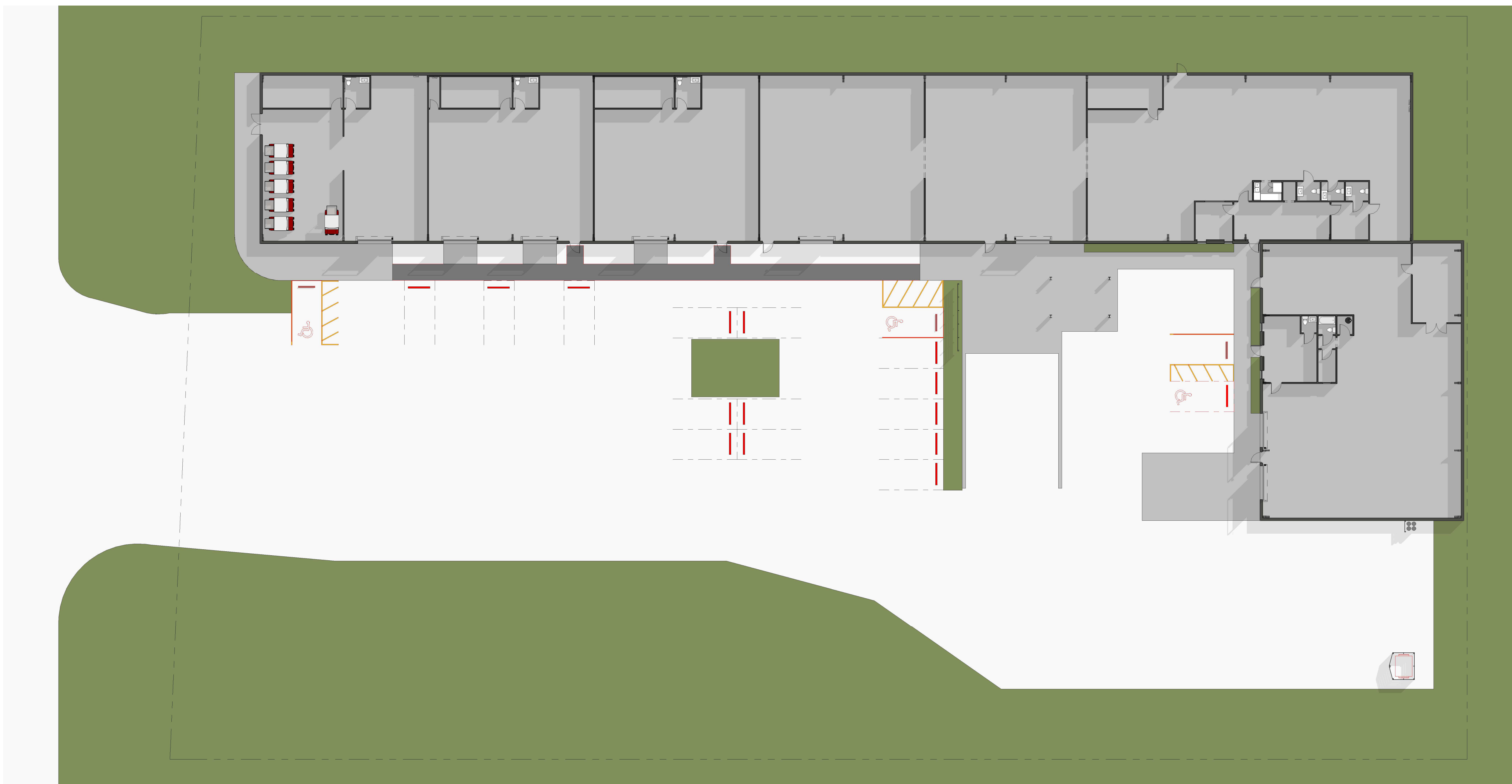
3. County Council

- Approves, denies, or submits application to the Planning Commission for further study.
- Action requires a resolution for approval.
- Subsequent to County Council action, notice of action will be provided to the applicant,

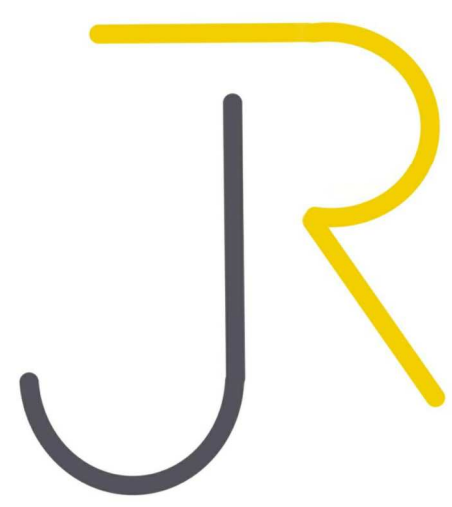
Architectural Seals



WAREHOUSE REPAIRS

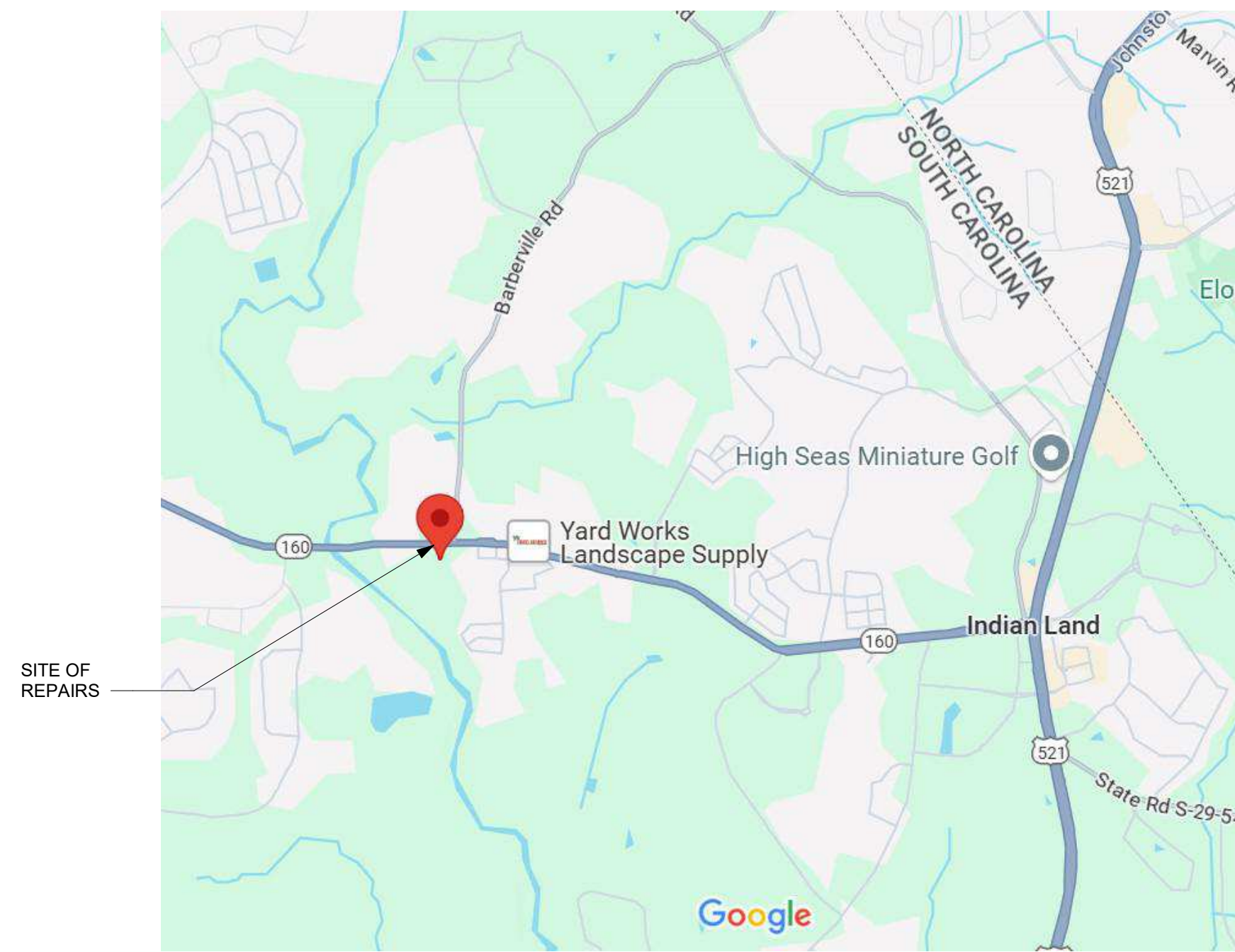


RENDERING IS FOR ILLUSTRATION OF THE EXISTING CONDITIONS ON THE SITE. ALL CONDITIONS ARE EXISTING. EXCEPT AS NOTED IN RED. THE GREEN AREAS ARE EXISTING LANDSCAPING. NO CHANGES ARE REQUIRED. THE WHITE IS EXISTING HARD SURFACE. NO CHANGES ARE REQUIRED. SEE OTHER SHEETS FOR FURTHER DETAILS



ARCHITECTURE

James **Reddick** Architect LLC
www.jr-architect.online
james@jr-architect.online
980.254.5348



1 Vicinity Map
A0.1 12" = 1'-0"



3	Existing Landscaping Island
A0.1	12" = 1'-0"

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Project Name

Warehouse Repair
2025-1081

Digital Plans

Editable electronic files are available for an additional cost. Please contact the architect for those files. Editable electronic files are available for reference only and discrepancy between scaled drawings and editable electronic files shall be reported to the owner and architect for resolution.

Revisions

[illegible]

Sheet Title

Cover Sheet

Drawing Credits

Author	drafter
Author	checker
Author	architect

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5/14/2025 10:12:51 PM

2021 SOUTH CAROLINA BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

PROJECT INFORMATION:

Name of Project: Warehouse Repairs
Address: 1081 Fort Mill Highway, Fort Mill, SC 29707
Owner or Authorized Agent: JAMES REDDICK Phone # (800) 254-6348 E-Mail james@jr-architect.online
Owned By: ☐ City/County ☒ Private ☐ State
Code Enforcement Jurisdiction: ☐ City N/A ☒ County Lancaster ☐ State SC

Buildings descriptions and scope of work:

The existing warehouse repair work was performed prior to issue of permit. The AHJ stopped work and requested the owner hire an architect. The owner hired JR-Architect. JR-Architect evaluated the facility and determined the repair work included replacing broken toilet fixtures, replacing paint, replacing broken doors, and replacing floor finishes. The repair work included Suites A, B, C, D, and E. The facility was evaluated for code compliance and the architectural drawings show compliance for permitting purposes and documentation. Suite D already has permit from 2010 and thus no work required in Suite D.

CONTACT:

DESIGNER:	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	JAMES REDDICK ARCHITECT LLC	James Reddick	8135	(800) 254-6348	jared@jr-architect.net
Civil	N/A	N/A	N/A	N/A	N/A
Electrical	N/A	N/A	N/A	N/A	N/A
Fire Alarm	N/A	N/A	N/A	N/A	N/A
Plumbing	N/A	N/A	N/A	N/A	N/A
Mechanical	N/A	N/A	N/A	N/A	N/A
Sprinkler-Standpipe	N/A	N/A	N/A	N/A	N/A
Structural	N/A	N/A	N/A	N/A	N/A
Retaining Walls >2' High	N/A	N/A	N/A	N/A	N/A
Other	N/A	N/A	N/A	N/A	N/A

2021 SC BUILDING CODE ☐ New Building ☐ Addition ☐ Renovation
☐ First time interior completion (upfit)
☐ Shell/Core-Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core-Contact the local inspection jurisdiction for possible additional procedures and requirements

2021 SC EXISTING BUILDING CODE ☐ Prescriptive ☒ Repair ☐ Chapter 14
☐ Level I ☐ Level II ☐ Level III
☐ Historic Property ☐ Change of Use

DATA	
Constructed (date)	1978
Repaired (date)	2024
Current Occupancy(s) Ch. 3	S-2, S-1, F-2
Proposed Occupancy(s) Ch. 3	S-2, S-1, F-2

RISK CATEGORY (T1604.5) Current: ☐ I ☒ II ☐ III ☐ IV
Proposed: ☐ I ☒ II ☐ III ☐ IV

BASIC BUILDING DATA

Construction Type (Check all that Apply)
☐ I-A ☐ I-A ☐ I-B ☐ I-B ☐ I-C ☐ I-C ☐ I-D ☐ I-D
☐ II-A ☐ II-A ☐ II-B ☐ II-B ☐ II-C ☐ II-C ☐ II-D ☐ II-D
Sprinklers: ☒ No ☐ PARTIAL ☐ Yes NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☐ No ☐ Yes Class: ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Fire District: ☒ Yes
Floor Hazard Area: ☐ No ☐ Yes
Special Inspections: ☐ No ☐ Yes (Contact the local inspection jurisdiction for additional procedures and requirements)

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (SQ. FT.)	NEW (SQ. FT.)	REPAIR (SQ. FT.)
Warehouse	22,102	0	0
-	-	0	0
-	-	0	0
-	-	0	0

ACCESSIBILITY

ALL BUILDINGS ENTRANCES THAT ARE ACCESSIBLE TO AND USABLE BY PHYSICALLY HANDICAPPED PERSONS SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, TO BE VISIBLE TO PERSONS ALONG APPROACHING PEDESTRIAN WAYS.

ALL SIGNAGE SHALL CONFORM WITH ADA ACCESSIBILITY GUIDELINES.

- LETTERS & NUMERALS MUST BE RAISED 1/32" FROM SIGN SURFACE.
- CHARACTER HEIGHT MUST BE AT LEAST 6" BUT NOT EXCEED 2".
- TYPE STYLE FOR LETTERS AND NUMBERS SHALL BE SANS SERIF OR SIMPLE SERIF.
- WORDS AND NUMBERS MUST BE CONVERTED INTO GRADE 2 BRAILLE, AND BE APPLIED TO SIGN.
- PICTOGRAMS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW PICTOGRAM.
- SEE SHEET G-004 FOR MORE DETAILED SIGNAGE INFORMATION.

RESTROOM SIGN

CRYSTAL CLEAR FROSTED ACRYLIC ADA SIGN, 9"x6" MOUNTED ON 1 1/2" BRUSHED ALUMINUM ACRYLIC, 1/32" RAISED BLACK LETTERING

CLEAR BRASS STAINLESS STEEL STANDOFFS

G.C. TO INSTALL AS REQ'D BY GOV. CODES/

COORDINATE WITH TENANT FOR ANY ADDITIONAL SIGNS

TACTILE EXIT SIGN

FROM EDGE OF DOOR FRAME TO CL OF SIGN

4" MIN TO 8" MAX TACTILE CHARACTER

4" MIN TO 8" MAX TACTILE CHARACTER

ALLOWABLE AREA

Primary Occupancy Classification(s):

Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐ B
Educational ☐ E
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4 ☐ I-5
Liquor ☐ L
Mercantile ☐ M
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-piled
Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage

Accessory Occupancy Classifications

BUSINESS (LESS THAN 10% OF FLOOR AREA)

Incidental Uses (T509)

N/A

Special Uses (Ch 4 - List Code)

N/A

Special Provisions (Ch 5 - List Code)

N/A

Mixed Occupancy

☐ No ☒ Yes Separation: 2" Hr. Exemption

* S-1 adjacent to S-2 is 2hr rating. However F-2 adjacent to S-2 does not require a fire rating.

The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.

Separated use (T508.4)

See below for area calculations for each story, the area of the occupancy shall be such that the sum of the ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

Actual Area of Occupancy A + Actual Area of Occupancy B

Allowable Area of Occupancy A + Allowable Area of Occupancy B

14,696 (S-2) + 2,512 (S-1) + 4,898 (F-2) + = 0.97 < 1.00

26,000 (S-2) 17,500 (S-1) 18,000 (F-2)

STORY NO DESCRIPTION AND USE (A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O) (P) (Q) (R) (S) (T) (U) (V) (W) (X) (Y) (Z) (AA) (AB) (AC) (AD) (AE) (AF) (AG) (AH) (AI) (AJ) (AK) (AL) (AM) (AN) (AO) (AP) (AQ) (AR) (AS) (AT) (AU) (AV) (AW) (AX) (AY) (AZ) (BA) (BB) (BC) (BD) (BE) (BF) (BG) (BH) (BI) (BJ) (BK) (BL) (BM) (BN) (BO) (BP) (BQ) (BR) (BS) (BT) (BU) (BV) (BW) (BX) (BY) (BZ) (CA) (CB) (CC) (CD) (CE) (CF) (CG) (CH) (CI) (CJ) (CK) (CL) (CM) (CN) (CO) (CP) (CQ) (CR) (CS) (CT) (CU) (CV) (CW) (CX) (CY) (CZ) (DA) (DB) (DC) (DD) (DE) (DF) (DG) (DH) (DI) (DJ) (DK) (DL) (DM) (DN) (DO) (DP) (DQ) (DR) (DS) (DT) (DU) (DV) (DW) (DX) (DY) (DZ) (EA) (EB) (EC) (ED) (EE) (EF) (EG) (EH) (EI) (EJ) (EK) (EL) (EM) (EN) (EO) (EP) (EQ) (ER) (ES) (ET) (EU) (EV) (EW) (EX) (EY) (EZ) (FA) (FB) (FC) (FD) (FE) (FF) (FG) (FH) (FI) (FJ) (FK) (FL) (FM) (FN) (FO) (FP) (FQ) (FR) (FS) (FT) (FU) (FV) (FW) (FX) (FY) (FZ) (GA) (GB) (GC) (GD) (GE) (GF) (GG) (GH) (GI) (GJ) (GK) (GL) (GM) (GN) (GO) (GP) (GQ) (GR) (GS) (GT) (GU) (GV) (GW) (GX) (GY) (GZ) (HA) (HB) (HC) (HD) (HE) (HF) (HG) (HH) (HI) (HJ) (HK) (HL) (HM) (HN) (HO) (HP) (HQ) (HR) (HS) (HT) (HU) (HV) (HW) (HX) (HY) (HZ) (IA) (IB) (IC) (ID) (IE) (IF) (IG) (IH) (II) (IJ) (IK) (IL) (IM) (IN) (IO) (IP) (IQ) (IR) (IS) (IT) (IU) (IV) (IW) (IX) (IY) (IZ) (JA) (JB) (JC) (JD) (JE) (JF) (JG) (JH) (JI) (JJ) (JK) (JL) (JM) (JN) (JO) (JP) (JQ) (JR) (JS) (JT) (JU) (JV) (JW) (JX) (JY) (JZ) (KA) (KB) (KC) (KD) (KE) (KF) (KG) (KH) (KI) (KJ) (KK) (KL) (KM) (KN) (KO) (KP) (KQ) (KR) (KS) (KT) (KU) (KV) (KW) (KX) (KY) (KZ) (LA) (LB) (LC) (LD) (LE) (LF) (LG) (LH) (LI) (LJ) (LK) (LL) (LM) (LN) (LO) (LP) (LQ) (LR) (LS) (LT) (LU) (LV) (LW) (LX) (LY) (LZ) (MA) (MB) (MC) (MD) (ME) (MF) (MG) (MH) (MI) (MJ) (MK) (ML) (MM) (MN) (MO) (MP) (MQ) (MR) (MS) (MT) (MU) (MV) (MW) (MX) (MY) (MZ) (NA) (NB) (NC) (ND) (NE) (NF) (NG) (NH) (NI) (NJ) (NK) (NL) (NM) (NN) (NO) (NP) (NQ) (NR) (NS) (NT) (NU) (NV) (NW) (NX) (NY) (NZ) (OA) (OB) (OC) (OD) (OE) (OF) (OG) (OH) (OI) (OJ) (OK) (OL) (OM) (ON) (OO) (OP) (OQ) (OR) (OS) (OT) (OU) (OV) (OW) (OX) (OY) (OZ) (PA) (PB) (PC) (PD) (PE) (PF) (PG) (PH) (PI) (PJ) (PK) (PL) (PM) (PN) (PO) (PP) (PQ) (PR) (PS) (PT) (PU) (PV) (PW) (PX) (PY) (PZ) (QA) (QB) (QC) (QD) (QE) (QF) (QG) (QH) (QI) (QJ) (QK) (QL) (QM) (QN) (QO) (QP) (QQ) (QR) (QS) (QT) (QU) (QV) (QW) (QX) (QY) (QZ) (RA) (RB) (RC) (RD) (RE) (RF) (RG) (RH) (RI) (RJ) (RK) (RL) (RM) (RN) (RO) (RP) (RQ) (RR) (RS) (RT) (RU) (RV) (RW) (RX) (RY) (RZ) (SA) (SB) (SC) (SD) (SE) (SF) (SG) (SH) (SI) (SJ) (SK) (SL) (SM) (SN) (SO) (SP) (SQ) (SR) (SS) (ST) (SU) (SV) (SW) (SX) (SY) (SZ) (TA) (TB) (TC) (TD) (TE) (TF) (TG) (TH) (TI) (TJ) (TK) (TL) (TM) (TN) (TO) (TP) (TQ) (TR) (TS) (TT) (TU) (TV) (TW) (TX) (TY) (TZ) (UA) (UB) (UC) (UD) (UE) (UF) (UG) (UH) (UI) (UJ) (UK) (UL) (UM) (UN) (UO) (UP) (UQ) (UR) (US) (UT) (UU) (UV) (UW) (UX) (UY) (UZ) (VA) (VB) (VC) (VD) (VE) (VF) (VG) (VH) (VI) (VJ) (VK) (VL) (VM) (VN) (VO) (VP) (VQ) (VR) (VS) (VT) (VU) (VV) (VW) (VX) (VY) (VZ) (WA) (WB) (WC) (WD) (WE) (WF) (WG) (WH) (WI) (WJ) (WK) (WL) (WM) (WN) (WO) (WP) (WQ) (WR) (WS) (WT) (WU) (WV) (WW) (WX) (WY) (WZ) (XA) (XB) (XC) (XD) (XE) (XF) (XG) (XH) (XI) (XJ) (XK) (XL) (XM) (XN) (XO) (XP) (XQ) (XR) (XS) (XT) (XU) (XV) (XW) (XX) (XY) (XZ) (YA) (YB) (YC) (YD) (YE) (YF) (YG) (YH) (YI) (YJ) (YK) (YL) (YM) (YN) (YO) (YP) (YQ) (YR) (YS) (YT) (YU) (YV) (YW) (YX) (YY) (YZ) (ZA) (ZB) (ZC) (ZD) (ZE) (ZF) (ZG) (ZH) (ZI) (ZJ) (ZK) (ZL) (ZM) (ZN) (ZO) (ZP) (ZQ) (ZR) (ZS) (ZT) (ZU) (ZV) (ZW) (ZX) (ZY) (ZZ)

ACCESSIBLE DWELLING UNITS (SECTION 1107) NOT APPLICABLE

TOTAL ACCESSIBLE UNITS PROVIDED

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TOTAL ACCESSIBLE UNITS PROVIDED

TOTAL UNITS REQUIRED

PERCENTAGE OF WALL OPENING CALCULATIONS (EXISTING-NO CHANGES REQUIRED)

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
Walls >30'-0"	UP: Sprinklered	No limit	48

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ☒ Yes
Exit Signs: ☐ No ☒ Yes
Fire Alarm: ☐ No ☒ Yes
Smoke Detection Systems: ☐ No ☒ Yes
Carbon Monoxide Detection: ☐ No ☒ Yes

LIFE SAFETY PLAN REQUIREMENTS

Fire and/or smoke related wall locations (Chapter 7)

Assumed and real property line locations (if not on the site plan)

Exterior wall opening area with respect to distance to assumed property lines (705.8)

Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)

Occupant loads for each area

Exit access travel distances (1017)

Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))

Dead end lengths (1020.4)

Clear and width for each exit door

Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)

Actual occupant load for each exit door

A separate schematic plan indicating where fire rated fireproofing and/or structural is provided for purposes of occupancy separation

Location of doors with panic hardware (1010.1.10)

Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)

Location of doors with electromagnetic egress locks (1010.1.9.9)

Location of doors equipped with hold-open devices

Location of emergency escape windows (1030)

The square footage of each fire area (202)

The square footage of each smoke compartment (207.5)

Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE PARKING (SECTION 1106)(EXISTING-NO CHANGES REQUIRED)

LOT OR PARKING AREA ZONED OR	TOTAL # OF PARKING SPACES REQUIRED	# OF ACCESSIBLE SPACES PROVIDED	TOTAL # OF ACCESSIBLE SPACES PROVIDED
PARKING: PER ZONING 18	18	3	3

PLUMBING FIXTURE REQUIREMENTS (T2902.1)(EXISTING-NO CHANGES REQUIRED)

OCCUPANCY USE GROUP AND/OR SPACE DESIGNATION	WATERCLOSETS	URINALS	LAVATORIES	SHOWERS	DRINKING FOUNTAINS
Assembly (Existing)	7	0	7	1	1
New Required	7	0	7	1	1

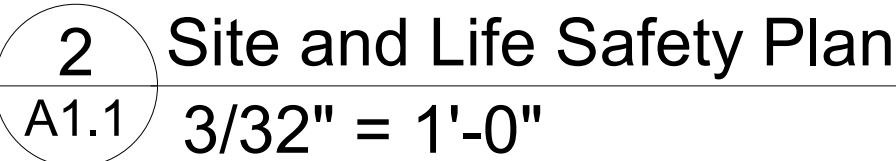
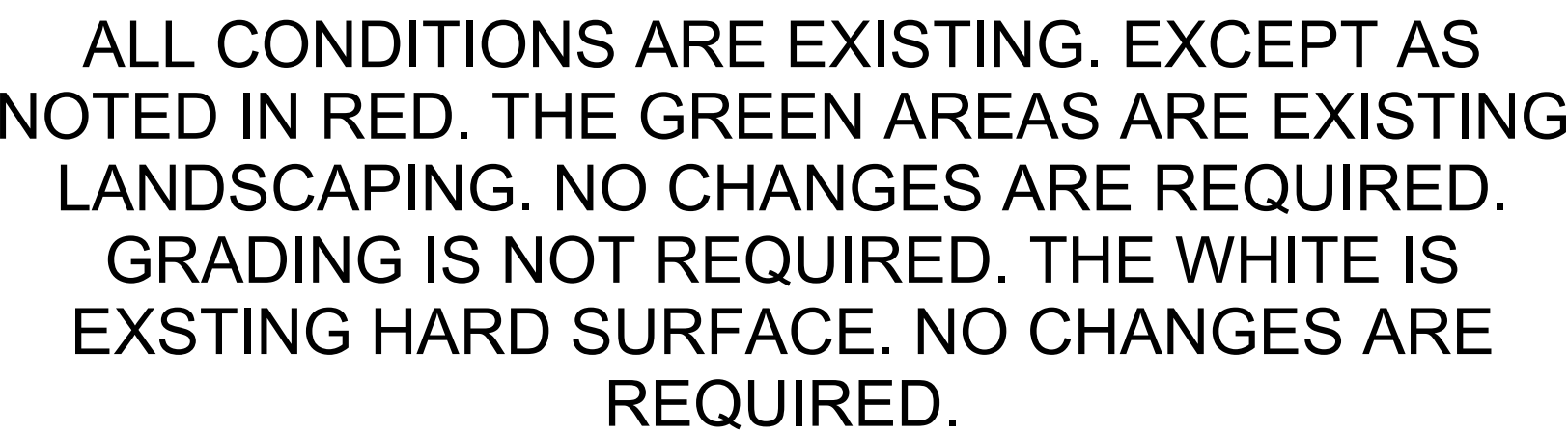
Project Name

Digital Plans

[illegible]

Drawing Credits

Page 10 of 20



A1.1
5/14/2025 10:12:53 PM

Digital Plans
 Editable electronic files are available for an additional costs. Please contact the architect for those files. Editable electronic files are available for reference only and discrepancy between sealed drawings and editable electronic files shall be reported to the owner and architect for resolution.

J Reddick	drafter
J Reddick	checker
J Reddick	architect

Page 11 of 20



2 Site and Life Safety Plan
A1.1 3/32" = 1'-0"

LANCASTER COUNTY ASSESSOR

Tax Map:

0006 00 068 01

STATE OF SOUTH CAROLINA)

)

COUNTY OF LANCASTER)

TITLE TO REAL ESTATE
GENERAL WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS, that **Patsy P. Poole**, a South Carolina resident being widowed and unmarried ("**Grantor**"), in consideration of ONE MILLION AND NO/100 DOLLARS (\$1,000,000.00), the receipt of which is hereby acknowledged, has granted, bargained, sold and released and by these presents does grant, bargain, sell and release unto **Fort Mill Highway, LLC**, a South Carolina limited liability company ("**Grantee**"), its successors and assigns all of Grantor's interest in and to the following:

RECORDED THIS 27th DAY
OF AUGUST, 2024
IN BOOK 00 PAGE 00

LEGAL DESCRIPTION ATTACHED
ON EXHIBIT "A"

August C Murphy

Auditor, Lancaster County, SC

The within conveyance is made subject to any and all rights of way, easements, covenants, conditions, restrictions, rights-of-way and zoning ordinances which may appear of record, on the recorded plat(s) or actually existing on the ground affecting said property.

ADDRESS OF GRANTEE(S): P.O. Box 481905, Charlotte, NC 28269

TOGETHER with all and singular the rights, members, hereditaments and appurtenances to said premises belonging or in any wise incident or appertaining, including, but not limited to, all improvements of any nature located on the premises and all easements and rights-of-way appurtenant to the premises.

TO HAVE AND TO HOLD all and singular the premises unto Grantee, its successors and assigns forever.

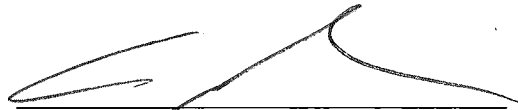
AND Grantor does hereby bind Grantor and Grantor's successors and assigns to warrant and forever defend all and singular the said premises unto the said Grantee, its successors and assigns, against Grantor and Grantor's successor and assigns, and against every person whomsoever lawfully claiming, or to claim the same, or any part thereof.

[Signature Page Follows]

LANCASTER COUNTY, SC	
2024010195	DEED
RECORDING FEES	\$15.00
STATE TAX	\$2600.00
COUNTY TAX	\$1100.00
PRESENTED & RECORDED	
08-26-2024	12:04:56 PM
BRITTANY GRANT	
REGISTER OF DEEDS	
LANCASTER, COUNTY SC	
By: STEPHANIE KNIGHT	
BK:DEED 1824 PG:336-340	

WITNESS the undersigned Grantor's hand and seal this 22nd day of August, 2024.

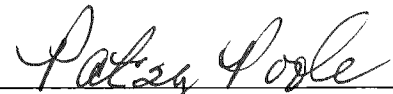
SIGNED, SEALED AND DELIVERED
IN THE PRESENCE OF:



Witness #1



Witness #2

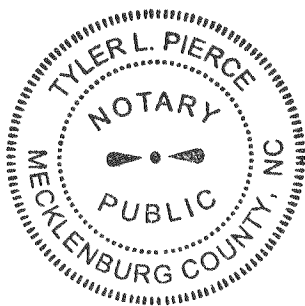
By:  (SEAL)
Name: Patsy P. Poole

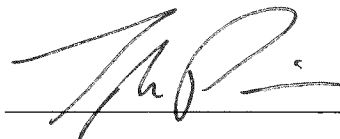
STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

ACKNOWLEDGMENT

I, the undersigned Notary Public in and for the County and State aforesaid, certify that Patsy P. Poole, personally appeared before me this day and acknowledged the execution of the foregoing instrument.

Witness my hand and official stamp or seal this 22nd day of August, 2024.





(SEAL)

Name: Tyler L. Pierce

My Commission Expires: 03/01/2026

EXHIBIT A

LEGAL DESCRIPTION

All that certain piece, parcel or tract of land lying, being and situate in Indian Land Township, Lancaster County, South Carolina and located on the southern edge of SC Highway #160, and being more particularly described as follows: Commencing at an Old Iron Pin located in the Northeast corner of Tax Parcel 0006-00-068.00 belonging to SRAM 1 LLC and running thence N88°33'44"E 13.87 feet to an Iron Pin being the point of first Beginning. BEGINNING at said point of first beginning, and running thence N88°33'44"E 207.50 feet to an Iron Pin; thence S01°26'16"E 389.93 feet to an Iron Pin; thence S88°33'44"W 207.50 feet to an Old Iron Pipe; thence, N01°26'16"W 389.93 feet to an Iron Pin, the point of beginning. Containing 1.857 acres, more or less, and being more specifically shown on that certain Land Title Survey, entitled "Plat of Property of Patsy P. Poole", Job Number 22-06-10, prepared by J.C. Crumpler, P.L.S., dated June 23, 2022.

Being the same property conveyed to Patsy P. Poole by Deed of Distribution from the Estate of Emory D. Pool, Case Number 2007ES2900377 and recorded June 9, 2008 in Deed Book 468 at Page 323, in the Office of the Clerk of Court for Lancaster County, South Carolina and as shown on a Plat of Property of Hoyle H. Home, dated July 5, 1977, prepared by J.B. Fisher, R.L.S., and filed in the Office of the Clerk of Court for Lancaster County, South Carolina, as Plat No. 3062; LESS AND EXEPTING THEREFROM those portions having been conveyed to the South Carolina Department of Transportation from Patsy P. Poole by those deeds recorded in Deed Book 601 at Page 103 and Deed Book 610 at Page 1, in the Office of the Clerk of Court for Lancaster County, South Carolina. .

Tax Map: 0006-00-068.01

Property Address: 1081 Fort Mill Hwy., Indian Land, SC 29707

STATE OF SOUTH CAROLINA)
COUNTY OF LANCASTER)

AFFIDAVIT FOR TAXABLE OR
EXEMPT TRANSFERS

PERSONALLY appeared before me the undersigned, who being duly sworn, deposes and says:

1. I have read the information on this affidavit, and I understand such information.
2. The property being transferred located at *1081 Fort Mill Hwy, Indian Land, SC 29707* bearing County Tax Map Number 0006-00-068.01 was transferred by **Patsy P. Poole**, a South Carolina resident on August 23, 2024 to **Fort Mill Highway, LLC**, a South Carolina limited liability company.

3. Check one of the following: The deed is

- (a) ☒ subject to the deed recording fee as a transfer for consideration paid or to be paid in money or money's worth.
- (b) _____ subject to the deed recording fee as a transfer between a corporation, a partnership, or other entity and a stockholder, partner, or owner of the entity, or is a transfer to a trust or as a distribution to a trust beneficiary.
- (c) _____ exempt from the deed recording fee because (See Information section of affidavit):

(If exempt, please skip items 4 - 7, and go to item 8 of this affidavit.)

If exempt under exemption #14 as described in the Information section of this affidavit, did the agent and principal relationship exist at the time of the original sale and was the purpose of this relationship to purchase the realty?

Check Yes _____ or No _____

4. Check one of the following if either item 3(a) or item 3(b) above has been checked (See Information section of this affidavit.):

- (a) The fee is computed on the consideration paid or to be paid in money or money's worth in the amount of \$1,000,000.00.
- (b) The fee is computed on the fair market value of the realty which is _____.
- (c) The fee is computed on the fair market value of the realty as established for property tax purposes which is \$.

5. Check Yes _____ or No ☒ to the following: A lien or encumbrance existed on the land, tenement, or realty before the transfer and remained on the land, tenement, or realty after the transfer. (This includes, pursuant to Code Section 12-59-140(E)(6), any lien or encumbrance on realty in possession of a forfeited land commission which may subsequently be waived or reduced after the transfer under a signed contract or agreement between the lien holder and the

buyer existing before the transfer.) If "Yes," the amount of the outstanding balance of this lien or encumbrance is: _____.

6. The deed recording fee is computed as follows:

- | | |
|--|----------------|
| (a) Place the amount listed in item 4 above here: | \$1,000,000.00 |
| (b) Place the amount listed in item 5 above here: | -0- |
| (If no amount is listed, place zero here.) | |
| (c) Subtract Line 6(b) from Line 6(a) and place result here: | \$1,000,000.00 |

7. The deed recording fee due is based on the amount listed on Line 6(c) above and the deed recording fee due is: \$ 3,700.00

8. As required by Code Section 12-24-70, I state that I am a responsible person who was connected with the transaction as: Grantor

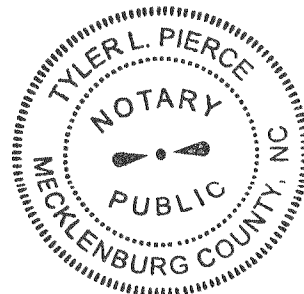
9. I understand that a person required to furnish this affidavit who willfully furnishes a false or fraudulent affidavit is guilty of a misdemeanor and, upon conviction, must be fined not more than one thousand dollars or imprisoned not more than one year, or both.

By: Patsy P. Pogle
Patsy P. Pogle

SWORN to and subscribed before me this
22nd day of August, 2024,

Notary Public for State of North Carolina, Mecklenburg County
My Commission Expires: 03/01/2026

Tyler Pierce
Notary Public (printed name): Tyler Pierce



Agenda Item Summary

Ordinance # / Resolution # :

Contact Person / Sponsor:

Department:

Date Requested to Be on Agenda: 2/5/2026

Council Action Requested:

Strategic Plan Focus Alignment:

Points to Consider:

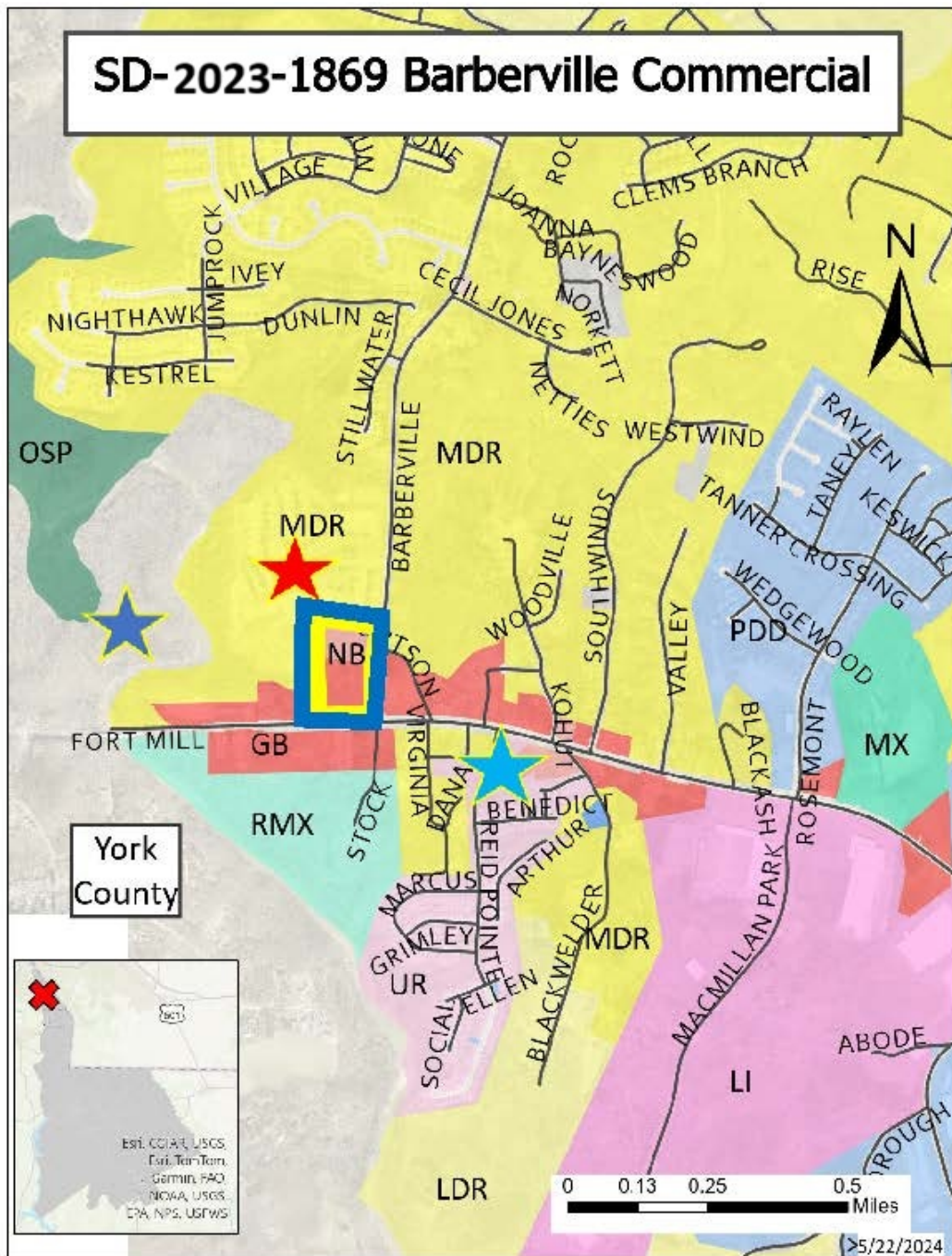
Funding and Liability Factors:

Recommendation:

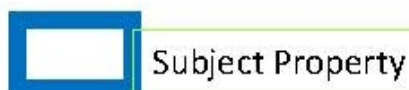
Attachments:

1. notice-map
2. Scanned application_Redacted
3. PreliminaryPlat_2026
4. TRC Not Approved Letter 1-22-2026
5. TrafficImpactAnalysis_2023
6. ICE REview Memo TIA May 2024
7. ApplicantresponsetoTIAComments_November 2024
8. TRC Letter January 2025
9. Deed 1529-361529_36
10. Deed 1715_201

SD-2023-1869 Barberville Commercial



Proposal:
Preliminary Plat (Commercial)



Reid Point Development



Barber Rock Development



York County



Planning Department

P.O. Box 1809, 101 N. Main Street, Lancaster, SC 29721
Phone: 803.285.6005, planning@lanastercountysc.net
www.mylanastercsc.org

MAJOR SUBDIVISION PRELIMINARY PLAT

WHEN TO USE THIS PROCESS:

Use the attached checklist for subdivisions that

- Create 6 or more lots for any type of development; or
- Create new streets or alleys; or
- Increase the number of lots in a major subdivision previously approved by Lancaster County

APPLICATION AND APPROVAL PROCESS

- **Sketch Plan Application:** Complete the Sketch Plan review process prior to submission of a Major Subdivision Preliminary Plat. Sketch Plans are usually a one-sheet conceptual drawing. Refer to the **Sketch Plan Checklist** for additional information.
- **Required Pre-Application Conference:** Please call to schedule a Pre-Application Conference prior to submitting a Preliminary Plat application. The conference will be used to provide an overview of applicable standards and the approval process, as well as additional feedback on your sketch.
- **Traffic Impact Analysis:** Submit a TIA to County and SCDOT for review and Approval. This process is initiated by submitting a scoping request to County and SCDOT for approval prior to TIA preparation. Please note TIAs are reviewed on behalf of the County by consulting traffic engineers. Applicants are responsible for payment of consultant's fees prior to TIA review, based on an estimate prepared by County Engineering staff.

Prepare the Preliminary Plat using the attached checklist (see below) and the current UDO available on our website. Project can be submitted online by creating an account at <https://evolvepublic.infovisionsoftware.com/lanaster/?portal=project>

SUBMIT THE FOLLOWING ITEMS FOR PLAN REVIEW:

- Application with contact and project information (see p. 2)
- Fees: After submitting documents, you will receive an email with fees due and forms of payment accepted, along with a link to online payment portal. Plans will not be routed for review until payment and hard copies are received (if needed- see below).
- Two (2) paper copies of Preliminary Plat and Supporting Data is required for all submittals over 10 pages.

Plans will be reviewed by County staff and a notice of revision, if required, will be sent to the designated contact person. Prior to the Planning Commission meeting, staff will review the plan with the Technical Review Committee. After Planning Commission approves the plat, you will receive a notification that you can print the stamped digital set from Evolve Project Portal. Upon the approval of a Preliminary Plat, detailed plans for street construction, utility line installations, and similar approvals shall be included in detailed **Civil Construction Plans**.

1/2022

1

PROJECT INFORMATIONProject Address/Location: 9831 Barberville Road and Adjacent Property (No Assigned Address)Tax Map ID/Parcel No.: 0006-00-057.00 and 0006-00-058.00Project Description: Commercial Business Park with Private Road and 8 developable lotsApplicant Name: Moody Group (Jan Ringeling)Address: 10700 Sikes Place, Suite 280 Charlotte NC 28277

Phone: [REDACTED] Email: [REDACTED]

Property Owner Name: (1) Barberville Developers LLC / (2) Martin Senior and AssociatesAddress: 3007 Cedric Court | Fort Mill, SC 29715 226 Baldwin Avenue | Charlotte, NC 28204

Phone: [REDACTED] Email: [REDACTED]

Other Project ContactsName: OAK Engineering, PLLC (Greg Welsh, PE)Address: 4929 Monroe Road | Charlotte NC 28205

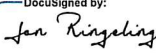
Phone: [REDACTED] Email: [REDACTED]

Name: _____

Address: _____

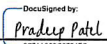
Phone: _____ Email: _____

Applicant Signature: _____

DocuSigned by:

 8AC02FB5E9784A4
 Moody Group

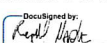
Date: 5/20/2024

(1) Owner Signature: _____

DocuSigned by:

 0273F80C0734E9
 Barberville Developers, LLC

Date: 5/20/2024

(2) Owner Signature: _____

DocuSigned by:

 0044900A4C3E3
 Martin Senior and Associates

Date: 5/20/2024

(For additional owners, attach copies of this page with required signatures)

PRELIMINARY PLAT CHECKLIST

The following identifies information required on Preliminary Plat drawings; however, this checklist should not be used as a substitute to reviewing the UDO.

GENERAL PROJECT INFORMATION:

Please identify the following general information on the site plan drawing either within a notes section or on the plat drawing itself, as appropriate.

1. **Proposed name of project.**
2. **Name, mailing address, email address, and phone number of the owner and/or developer and designer of the site plan.**
3. **Map scale using appropriate engineer's scale, north arrow, and date.**
4. **Vicinity map (1" = 1 mile min. scale).**
5. **Total acreage to be developed.**
6. **Boundaries of the tract to be developed with all bearings and distances. At least two points of the survey must be tied to SC geodetic control points [See State Plane Coordinate Checklist]**
7. **Proposed use of all lots to be used. See "zoning considerations" section above. Be sure to designate any lots proposed to be used for uses other than single-family residential.**
8. **Tax map number.**
9. **Zoning district classification and, if applicable, overlay zone(s).**
10. **Land use, zoning district classification, and tax map number of adjacent properties, names of adjacent developments, and owners of adjoining parcels.**
11. **Total number of lots and layout of all lots, including building setback lines, scaled dimensions, area in square feet, lot numbers (if multiple lots), and utility easements with width and use.**
12. **Location and dimensions of all proposed buildings including number of stories and total square footage by use.**
13. **Building setbacks and proposed impervious surface calculation.**
14. In case of re-subdivision, submit a copy of existing plat. N/A

EXISTING CONDITIONS:

Please identify the following existing conditions on the plan drawing that may be located on the subject property or adjacent areas.

1. **Topography by contours at vertical intervals of not more than five feet. All elevations shall refer to Mean Sea Level Datum (if available).**
2. **Show location and right-of-way of existing streets, curb cuts, and driveways within 300 feet of the site.**
3. **Show location and footprint of existing buildings on adjacent parcels.**
4. **Show location of railroads and utility lines either on or adjacent to the property to be developed. Specify whether utility lines are in easements or rights-of-way and show location of poles/towers.**
5. **Size and location of existing sewers, water mains, storm drains, culverts or other underground facilities within the street or within the right-of-way of streets or roads**

adjoining the tract. Show ditches, swales, and drainage easements adjacent to the proposed project.

6. Location, size, and use of any existing structures on the subject property that will remain on the site
7. Location of city limit lines, if adjacent to subject property. N/A
8. Show location of nearest hydrant. Spacing should be 500 feet single-family residential (this distance is measured in the direction of fire truck travel).
9. The Fire Department will need access to within 150 feet of all points of the building.
10. Location of land subject to flooding and nearest 100-year flood zone and elevation. N/A
11. Location of existing or planned public parks, schools, greenways, trails, or other major public amenity located within ½ mile of the development site.

ENVIRONMENTAL CONSIDERATIONS:

ENVIRONMENTALLY SENSITIVE LANDS

1. Depict any water resources subject to the UDO Chapter 8, Natural Resources Protection, and comply with all requirements laid out in the aforementioned section.
2. Depict any prohibitive/severe steep slope areas (greater than or equal to 3H:1V) and take into account the limitations on disturbance when designing the project.
3. Depict stormwater management areas.

TREE RETENTION

1. Identify tree canopy retention areas. N/A
2. Show trees that require protection. N/A

LANDSCAPING

- Show landscaping for required site landscaping areas.

OPEN SPACE

1. Indicate if all or a portion of the site has been designated as an Open Space. N/A
2. Calculate required common open space acreage. N/A
3. Show any trails and greenways on the Lancaster County Carolina Thread Trail Master Plan that developer is required to construct. N/A
4. Show all existing or planned public parks, schools, greenways, existing trails, or other major public amenities within ½ mile of the site, and pedestrian connections provided by the developer to those areas. N/A

INFRASTRUCTURE CONSIDERATIONS:**GRADING, STORMWATER, AND UTILITY SYSTEM**

Please identify the following proposed grading, stormwater, and utility system improvements.

1. Preliminary plan for sanitary sewers showing the location of manholes and points of discharge. Indicate direction of flow.
2. Preliminary plan for storm sewer system showing the location of outlets and direction of flow.
3. Preliminary plan of water supply system
4. All proposed easements.
5. Submit written verification to serve from all non-county utility service providers (gas, telephone, cable, and water and sewer district).
6. Proposed major contour changes in areas where substantial cut and/or fill is to be done.

Roads, Bridges, and Public Ways (UDO 6.13, pg. 21)

General design criteria are explained in two primary places in the UDO—Chapter 6 and Appendix C. Please refer to both when designing the community. The below is a brief summary of some of the “big picture” points, but those two sections in the Zoning Ordinance have many other requirements to which you will need to refer.

1. Connectivity is required within the neighborhood, and between the neighborhood and adjacent neighborhoods or other lands. Additionally, a second entrance is required for more than 100 units.
2. Traffic calming measures such as minimum street widths, short block lengths, on-street parking, controlled intersections, and roundabouts should be used per the UDO.
3. Sidewalks are required both internally, and in some cases, externally to the development and must be at least five feet wide.
4. Street trees are required to be planted in accordance with the UDO.
5. See Chapter 6: Subdivision and Infrastructure Standards and Appendix C – Manual of Specifications and Standard Details (MSSD), generally for road specifications, cross sections, and other important information. For example:
 - a. Cul-de-sacs should be avoided except as described in the UDO.
 - b. Gated communities have additional requirements as laid out in the UDO.
 - c. Curb and gutter requirements are applicable in some districts as designated in the UDO.
6. Traffic Impact Analysis, refer to Chapter 6, Subdivision and Infrastructure Standards.

LOT DESIGN

Identify a lot configuration that complies with the following standards.

1. Lot designed to comply with the UDO design requirements
 - a. Lots cannot be divided by City limit lines or zoning districts.
 - b. Through lots are prohibited.

- c. **Flag lots are prohibited except where they are necessary to eliminate access onto arterial or collector roadways.**
- d. **Side lot lines must be at right angles to straight street lines and radial to curved sidewalk and street lines.**

USE-SPECIFIC STANDARDS

The UDO has standards associated with specific uses in order to minimize negative impacts and/or to help shape the design of a specific use. Design the proposed site plan in compliance with any applicable use-specific standards.

OVERLAY DISTRICTS

If an overlay district exists, be sure to address the applicable standards for it in the site design.

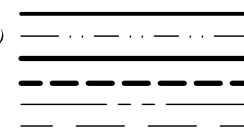
- ☐ **McWhirter Field Aviation Overlay** Please refer to the UDO for allowed uses and associated development criteria.
- ☐ **Carolina Heelsplitter Overlay**
- ☐ **Carolina Thread Trail Overlay**
- ☒ **Highway Corridor Overlay**
- ☐ **Equestrian Oriented Subdivision Overlay**

CURVE TABLE:

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH	DELTA ANGLE
C1	205.00'	116.60'	S14°13'00"E	115.03'	32°35'19"
C2	125.00'	7.12'	S28°52'47"E	7.12'	3°15'44"
C3	125.00'	56.22'	S14°21'47"E	55.75'	25°46'15"
C4	75.00'	38.00'	N15°58'39"W	37.60'	29°01'59"
C5	255.00'	35.14'	N26°33'46"W	35.11'	7°53'46"
C6	255.00'	115.12'	N09°40'53"W	114.15'	25°52'00"
C7	206.00'	13.90'	S14°15'55"E	8.99'	2°30'00"
C8	156.00'	13.90'	S10°27'48"E	13.89'	5°06'15"
C9	206.00'	5.39'	S29°45'39"E	5.39'	1°30'00"
C10	106.00'	9.25'	S03°58'40"E	9.25'	5°00'00"
C11	49.00'	69.40'	S39°05'43"W	63.74'	81°08'46"
C12	25.00'	26.47'	S49°19'51"W	25.25'	60°40'31"
C13	76.00'	12.18'	S14°24'01"W	12.17'	9°11'08"
C14	49.00'	51.88'	N49°20'09"E	49.49'	60°39'55"
C15	25.00'	35.41'	N39°05'43"E	32.52'	81°08'46"
C16	125.00'	37.16'	N76°57'56"W	37.02'	17°01'53"
C17	148.00'	37.69'	N75°44'46"W	37.59'	14°35'32"
C18	25.00'	24.38'	S69°01'10"W	23.43'	55°52'38"
C19	75.00'	73.14'	N69°01'10"E	70.28'	55°52'38"
C20	176.00'	44.82'	S75°44'46"E	44.70'	14°35'32"
C21	75.00'	22.29'	S76°57'56"E	22.21'	17°01'53"
C22	25.00'	14.89'	S24°01'10"W	14.67'	34°07'22"
C23	205.00'	17.64'	S04°32'34"W	17.63'	4°55'48"
C24	255.00'	16.72'	N05°07'47"E	16.71'	3°45'21"
C25	75.00'	44.67'	N24°01'10"E	44.01'	34°07'22"
C26	194.00'	18.95'	N65°39'04"W	18.95'	5°35'51"
C27	142.50'	36.29'	N75°44'46"W	36.19'	14°35'32"
C28	125.00'	37.16'	N76°57'56"W	37.02'	17°01'53"
C29	125.00'	31.84'	N75°44'46"W	31.75'	14°35'32"
C30	175.00'	44.57'	S75°44'46"E	44.45'	14°35'32"
C31	75.00'	22.29'	S76°57'56"E	22.21'	17°01'53"

LEGEND:

D.B. - DEED BOOK
EIP - EXISTING IRON PIPE
EIR - EXISTING IRON ROD
EIM - EXISTING METAL MONUMENT
EN - EXISTING NAIL
M.B. - MAP BOOK
N.G.S. - NATIONAL GEODETIC SURVEY
NIR - NEW IRON ROD
PC - PILE
R/W - RIGHT-OF-WAY
(T) - TOTAL
PROPERTY LINE
PROPERTY LINE (NOT SURVEYED)
RIGHT-OF-WAY
RIGHT-OF-WAY (NOT SURVEYED)
EASEMENT
SETBACK

MAJOR SUBDIVISION PLAT
BARBERVILLE COMMERCIAL MAP 2

BARBERVILLE ROAD
INDIAN LAND TOWNSHIP, LANCASTER COUNTY, S.C.
DEED REFERENCE: 1529-36; 1715-201
MAP REFERENCE: 2025-18

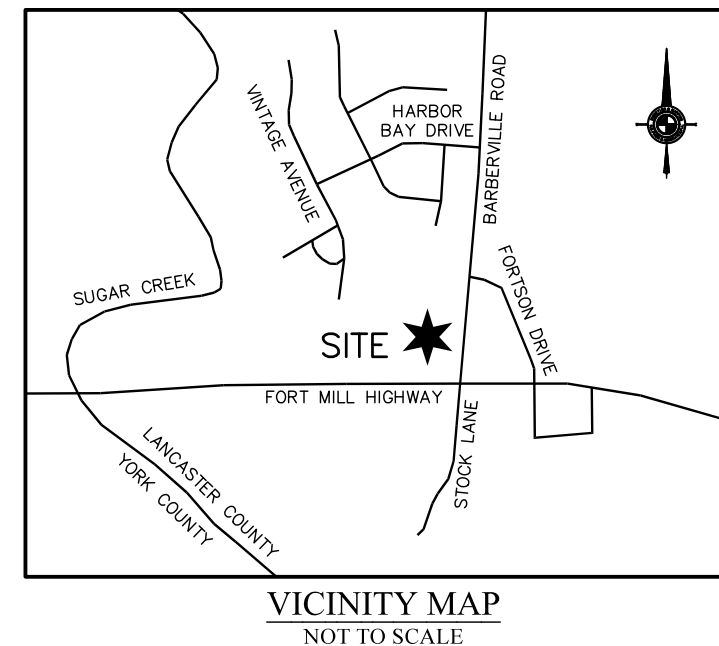
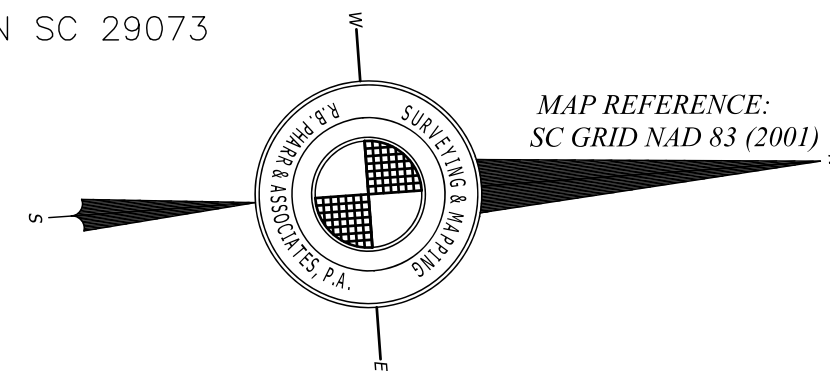
TAX PARCEL NO: 0006-00-057.00; 0006-00-058.00; 058.01; 058.02; 058.03

TOTAL AREA: 475,712 SQ. FT. OR 10.9208 ACRES

PRELIMINARY
FOR REVIEW AND APPROVAL

OWNERS:

MARTIN SR. AND ASSOCIATES LLC
226 BALDWIN AVENUE, CHARLOTTE NC 28204
BARBERVILLE DEVELOPERS, LLC
317 RUTH VISTA ROAD, LEXINGTON SC 29073



OVERLOOK & PRESERVE AT BARBER ROCK
HOMEOWNERS' ASSOCIATION INC.
D.B. 1816, PG. 239
PARCEL ID:
0006-00-053.03

LINE TABLE:

LINE	BEARING	DISTANCE
L1	S01°28'40"E	55.13'
L2	S01°28'38"E	39.08'
L3	S88°31'40"W	6.50'
L4	S88°31'40"W	6.50'
L5	S88°31'40"W	24.00'
L6	S88°31'40"W	13.00'
L7	N01°28'38"W	39.08'
L8	N01°28'40"W	55.13'
L9	S15°30'55"E	23.29'
L10	S29°00'39"E	30.08'
L11	S06°28'40"E	9.23'
L12	S01°28'40"E	7.74'
L13	N88°31'20"E	6.00'
L14	S01°28'40"E	12.00'
L15	S88°31'20"W	6.00'
L16	S43°31'40"W	5.33'
L17	S88°31'40"W	8.00'
L18	N43°31'40"E	14.67'
L19	N01°28'40"W	41.28'
L20	S01°28'40"E	2.70'
L21	S18°59'35"W	34.23'
L22	S88°59'00"W	19.00'
L23	N88°32'09"E	24.24'
L24	N19°00'12"E	39.65'
L25	N01°28'40"W	2.70'
L26	S33°35'50"W	15.38'
L27	S88°28'04"W	14.98'
L28	N07°20'52"W	35.45'
L29	N85°28'52"W	9.73'
L30	N68°27'00"W	48.77'
L31	N48°55'09"W	50.00'
L32	S68°27'00"E	31.10'
L33	N85°21'09"W	1.25'
L34	N62°51'09"W	36.13'
L35	N68°27'00"W	28.51'
L36	S53°29'06"W	21.44'
L37	S15°30'55"E	2.40'
L38	N85°28'52"W	19.46'
L39	N68°27'00"W	21.64'
L40	N83°02'32"W	21.92'
L41	S83°02'32"E	19.10'
L42	S68°27'00"E	21.64'
L43	S85°28'52"E	50.93'

FORT MILL HIGHWAY (SC 160)
D.B. 708, PG. 105, D.B. PROJECT NO. 5429(007)
SCDOT FILE NO. 29.03125A

CERTIFICATE OF APPROVAL:

THE SUBDIVISION PLAT HEREON HAS BEEN FOUND TO COMPLY WITH THE
LANCASTER COUNTY LAND DEVELOPMENT REGULATIONS AND HAS BEEN
APPROVED FOR RECORDING IN THE OFFICE OF THE CLERK OF COURT.

PLANNING DIRECTOR DATE

CERTIFICATION OF OWNERSHIP AND DEDICATION

I HEREBY CERTIFY THAT I AM (WE ARE) THE OWNER(S) OF THE PROPERTY SHOWN AND DESCRIBED
HEREON AND THAT I HEREBY DEDICATE ALL STREETS, ALLEYS, WALKS, PARKS AND OTHER SITES TO
PUBLIC OR PRIVATE USE AS NOTED. I HEREBY CONSENT TO THE SUBDIVISION AND EASEMENTS AS
SHOWN HEREON.

DATE PRINTED OWNER NAME SIGNATURE

DATE PRINTED OWNER NAME SIGNATURE

SURVEYOR'S CERTIFICATE:

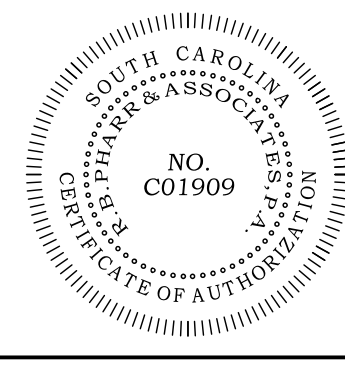
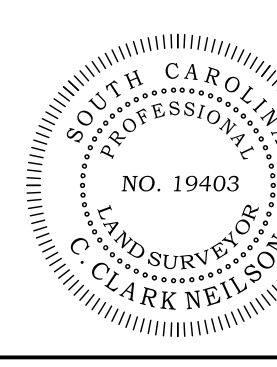
STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG
I, THE UNDERSIGNED SURVEYOR, CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION
FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (MAP BOOK 2025-18); THAT THE
BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION AS
REFERENCED ON THE FACE OF THIS PLAT; THAT THE RATIO OF PRECISION AS CALCULATED
EXCEEDS 1:10,000 LINEAR FEET; THE SURVEY SHOWN HEREON WAS MADE IN ACCORDANCE WITH
THE REQUIREMENTS OF THE STANDARDS OF PRACTICE MANUAL FOR SURVEYING IN SOUTH
CAROLINA, AND MEETS OR EXCEEDS THE REQUIREMENTS FOR A CLASS "A" SURVEY AS SPECIFIED
THEREIN; WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS 19TH DAY OF
DECEMBER, A.D., 2025.

THAT THIS PLAT IS OF A SURVEY THAT CREATES A SUBDIVISION OF LAND WITHIN THE AREA OF A
CORRIDOR OR MINOR DIVISION THAT HAS AN OVERLAP THAT REGULATES PARCELS OF LAND.

PRELIMINARY
FOR REVIEW AND APPROVAL

C. CLARK NELSON DATE

P.L.S. 12-212
UNCLASIFIED@RPHARR.COM



BARBERVILLE ROAD (S24)

VARIABLE WIDTH PUBLIC RIGHT-OF-WAY
SC DOT FILE NO. 29.031125A
D.B. 593, PG. 318

NGS MONUMENT "SCOTTS"
NO. 83(2001) COORDINATES
N1153.18441
E2,043.14285

GRAPHIC SCALE



(IN FEET)

1 inch = 40 ft.

FLOOD CERTIFICATION:

THIS IS TO CERTIFY THAT THE SUBJECT PROPERTY IS NOT LOCATED
IN A SPECIAL FLOOD HAZARD AREA AS SHOWN ON MAPS PREPARED BY
THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FEDERAL
INSURANCE ADMINISTRATION, DATED
MAY 16, 2017.
MAP NUMBER: 45057C0020E, ZONE "X"

CREW:	DRAWN:	REVISED:
RBP	KPM	
R.B. PHARR & ASSOCIATES, P.A. SURVEYING & MAPPING		
969 E. 7TH ST., #100 SCALE:	CHARLOTTE, N.C. 28204 DATE:	(TEL) 376-2186 JOB NO.
1" = 40'	DEC 19, 2025	97128B

PLOTTED: 12/19/2025
G:\971\1\97128\DWG\97128A.JOB.DWG



Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

January 22, 2026

Charles Vander Pleog
R. B. Pharr & Associates, P.A.
969 E. 7th Street, Suite 100
Charlotte, NC 28204

Project Number	20231869
Project Name	Barberville Commercial
Location	9901 & 9831 Barberville Road
Stage	Preliminary Plat
Parcel(s)	0006-00-057.00
Status	Not Approved

Dear: Charles Vander Pleog

We have completed our review of the plan identified above. The comments listed on the attached report must be addressed and revised plans submitted with a response letter.

If the attached comments require changes to the plans, please submit the requisite number of sets, along with a pdf of the plan set on a CD, to the Lancaster County Planning Department.

Once revised plans are received, they will be submitted to staff for review.

Please be aware that plans will not be routed for review without a response letter

Sincerely,

Plan Review Comments

County Engineer - Stephen Blackwelder - 8035482406
sblackwelder@lanastercountysc.gov

Approved

Review Comments:

E911 Address - Sandra Burton - (803) 416-9325
sburton@lanc911.com

Approved

Review Comments:

No issues noted.

Fire Marshal - Mike Magette - 8032838888
jmagette@lanastercountysc.gov

Conditional

Review Comments:

1. Dead end fire apparatus access roads longer than 150 feet in length will require an approved turnaround. Plan shows an easement to Fort Mill Highway which will need to be constructed at the same time as Melanie Lane to avoid a dead end fire apparatus access road.

LC Water & Sewer District - James Hawthorne - (803) 285-6919
jhawthorne@lcwasd.org

Approved

Review Comments:

Planning - Kirsten Willis - 803-285-6005
kwillis@lanastercountysc.gov

Not Approved

Review Comments:

1. Preliminary is missing site analysis. Please provide site analysis that details existing conditions. (Reference Chp. 9.2.5 & 9.2.5.A p. 295-296)
 - a. HCO frontage buffers are depicted on survey but include tree preservation/planting plan whichever is applicable within the site analysis.
2. Plan includes incorrect buffer depiction/notation. Please include in notes that details buffer type and which option chosen. Adjacent parcels, MDR, which requires a Type B. (Reference Chp. 7.1.5.A, p. 211) for requirement, reference Chp. 7.1.5.B.2 p. 212 for options/opacity etc.
3. TIA will require amendment. Proposed build out year will need to be updated as well as how second outlet onto Fort Mill Highway was removed and original TIA doesn't include all 7 parcels submitted via this preliminary.
4. Parcel 3 missing front setback of 25'. (Reference Chp. 2.4, p. 23)
5. Parcel 4 missing front setback of 50', and side setbacks 15'. (Reference Chp. 2.4, p. 23)
6. Parcel 5 missing side setbacks 15'. (Reference Chp. 2.4, p. 23)
7. Parcel 6 missing side setbacks of 15' and has incorrect rear setback depicted, required 15'. (Reference Chp. 2.4, p. 23)
8. Certificate of Approval for Planning Dept. not necessary, please remove.

LC School District - Jonathan Duke - 803-416-8010
john.duke@lcsd.k12.sc.us

No Review Needed

Review Comments:

SCDOT - David Gamble - (803) 385-4280
GambleDD@scdot.org

No Review Done

Review Comments:

Encroachment permits has already been issued for this site.

TRAFFIC IMPACT STUDY

for the

Barberville Road Development

Located in

Lancaster County, South Carolina

Prepared for

Moody Holdings & Development

Prepared by

Ramey Kemp Associates, Inc.

Moving forward.



June 2023
RKA Project #23126

TRAFFIC IMPACT STUDY

for the

Barberville Road Development

Located in

Lancaster County, South Carolina

Prepared for

Moody Holdings & Development
6201 Fairview Rd, Ste 200
Charlotte, North Carolina 28210

Prepared by

Ramey Kemp Associates, Inc.
1411 Gervais Street, Suite 150
Columbia, South Carolina 29201

Moving forward.



June 2023
RKA Project #23126

DRAFT

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- A) Traffic Scoping
- B) Traffic Count Data
- C) Traffic Volume Development Worksheets and ITE Trip Generation Worksheets
- D) Turn-Lane Analysis Worksheets
- E) Capacity Analysis

EXECUTIVE SUMMARY

A traffic impact study was conducted for the proposed Barberville Road development in accordance with SCDOT guidelines. The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should include one ingress and two egress lanes (50' storage) and should be designed to provide proper sight distances and meet SCDOT design criteria.

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately.

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. Raising the level of service on the Fort Mill Highway (SC 160) at Barberville Road to a LOS D would require additional eastbound and westbound through lanes along SC 160, along with signal timing optimization. TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions.

The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

1. INTRODUCTION

The purpose of this report is to document a traffic impact study for the proposed Barberville Road development in accordance with SCDOT guidelines. This report summarizes the procedures and findings of the traffic impact study. Traffic scoping documentation is provided in Appendix A.

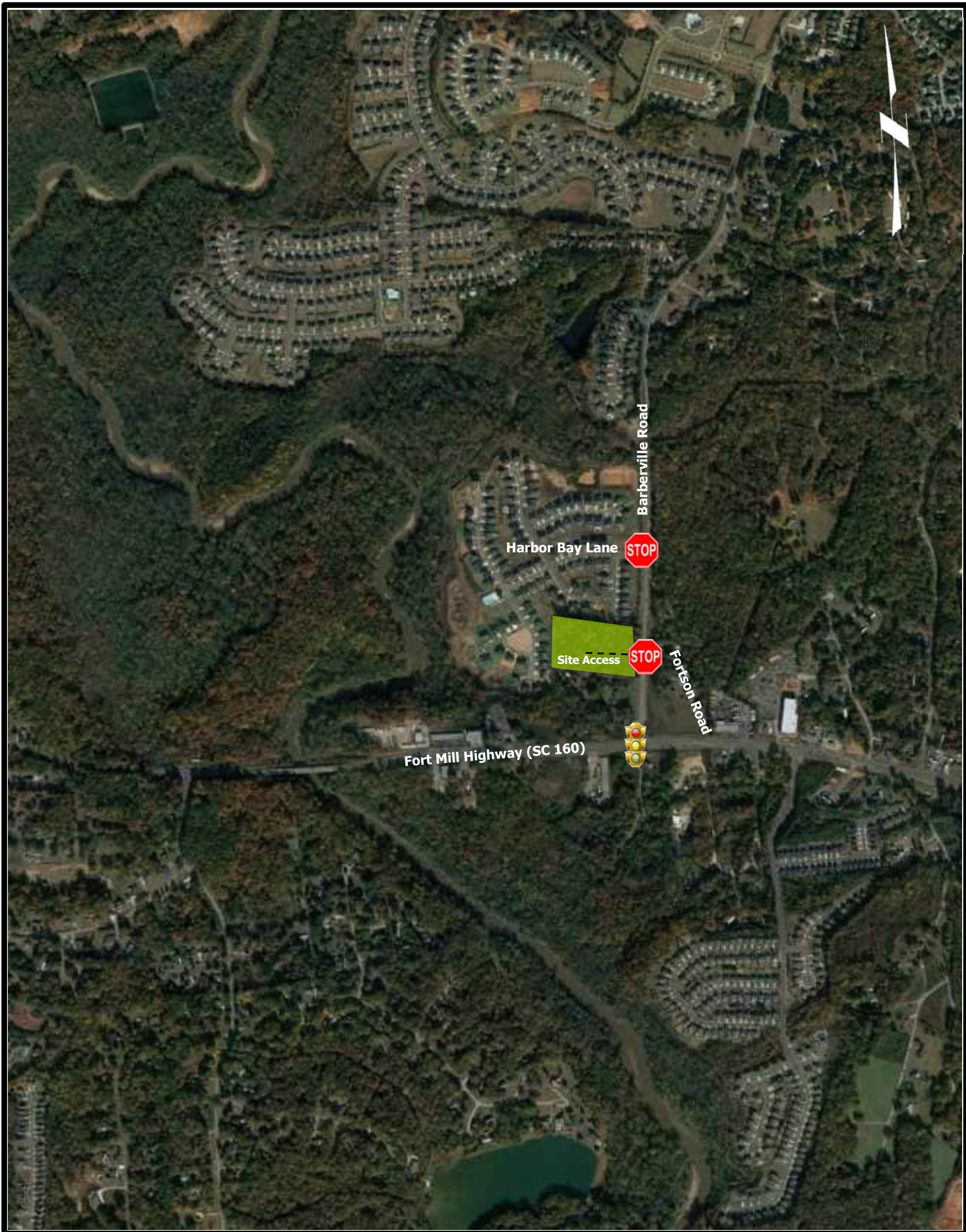
1.1. Project Background

The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/ daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

The traffic impact study considers the weekday AM peak period (between 7:00 AM and 9:00 AM) and the weekday PM peak period (between 4:00 PM and 6:00 PM) as the study time frames. The following intersections are studied:

- Fort Mill Highway (SC 160) & Barberville Road (S-29-42)/ Stock Lane
- Barberville Road (S-29-42) & Harbor Bay Drive
- Barberville Road (S-29-42) & Fortson Road /Site Access

Future-year analyses assume 2026 conditions as the Build scenario. Figure 1 shows the location of the project site, and Figure 2 illustrates the conceptual site plan.



Moving forward.



Dewberry
Engineering Inc.
10000 North Central
Ave., Suite 100
Dallas, TX 75243
(214) 343-7000
www.dewberry.com

CONCEPT DRAWING
BARBERVILLE ROAD
DAYCARE

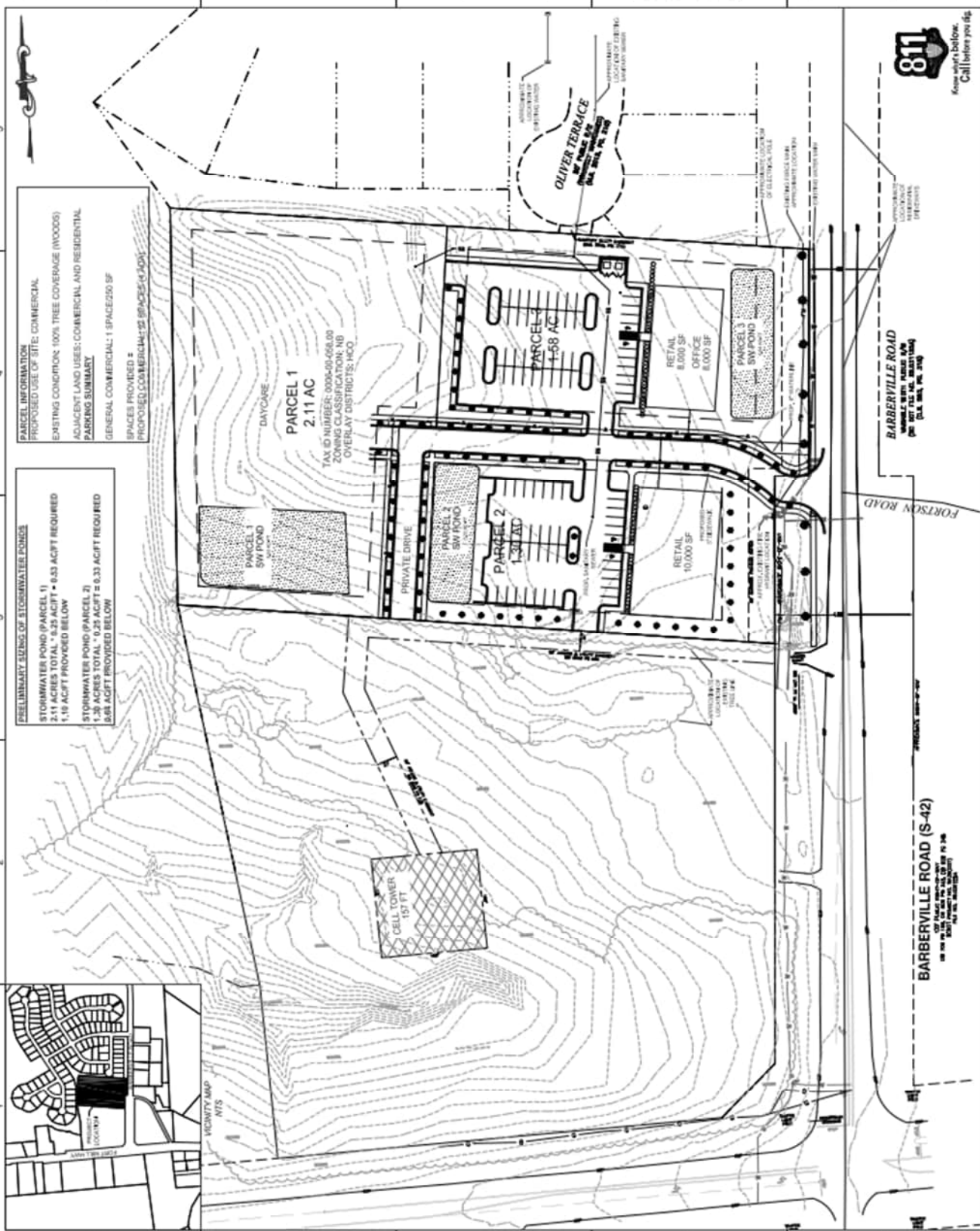
PRELIMINARY NOT
FOR CONSTRUCTION

SCALE: 1" = 40'

NO.	DATE	BY	DESCRIPTION
1	08/11/2011	ADP	ISSUED FOR PERMIT
2	08/11/2011	ADP	REVISED FOR COMMENTS
3	08/11/2011	ADP	REVISED FOR COMMENTS
4	08/11/2011	ADP	REVISED FOR COMMENTS
5	08/11/2011	ADP	REVISED FOR COMMENTS
6	08/11/2011	ADP	REVISED FOR COMMENTS
7	08/11/2011	ADP	REVISED FOR COMMENTS
8	08/11/2011	ADP	REVISED FOR COMMENTS
9	08/11/2011	ADP	REVISED FOR COMMENTS
10	08/11/2011	ADP	REVISED FOR COMMENTS

CONCEPTUAL
SITE PLAN

CSP-01



PARCEL INFORMATION
PROPOSED USE OF SITE: COMMERCIAL
EXISTING CONDITION: 100% TREE COVERAGE (WOODS)
ADJACENT LAND USES: COMMERCIAL AND RESIDENTIAL
PARKING SUMMARY
GENERAL COMMERCIAL: 1 SPACE/250 SF
SPACES PROVIDED: 2
PROPOSED COMMERCIAL: 95 SPACES/10 AC

PRELIMINARY SIZING OF STORMWATER PONDS
STORMWATER POND (PARCEL 1)
2.11 ACRES TOTAL * 0.25 ACFT * 6.33 ACFT REQUIRED
1.19 ACFT PROVIDED BELOW
STORMWATER POND (PARCEL 2)
1.31 ACRES TOTAL * 0.25 ACFT * 6.33 ACFT REQUIRED
0.81 ACFT PROVIDED BELOW



Moving forward.



Barberville Road TIS - Traffic Impact Study

Figure 2 - Conceptual Site Plan

Page 3

1.2. Existing Roadway Conditions

A review of the existing roadway conditions in the study area was conducted and is summarized in Table 1. Figure 3 illustrates the existing lane geometry.

Table 1 – Street Inventory

Facility Name	Route #	Typical Cross Section	Posted Speed Limit	Maintained By	2021 AADT
Fort Mill Highway	SC 160	3-lane undivided (TWLTL)	45 MPH	SCDOT	15,200 ¹
Barberville Road	S-29-42	2-lane undivided	40 MPH	SCDOT	7,900 ²
Stock Lane	N/A	2-lane undivided	N/P	Local	N/A
Harbor Bay Drive	N/A	2-lane undivided	N/P	Local	N/A
Fortson Road	N/A	2-lane undivided	N/P	Local	N/A

¹SCDOT Count Station 29-0163; ²SCDOT Count Station 29-0195

1.3. Existing Traffic Count

Vehicle turning movement counts were collected in May 2023 for the AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) at the following intersections:

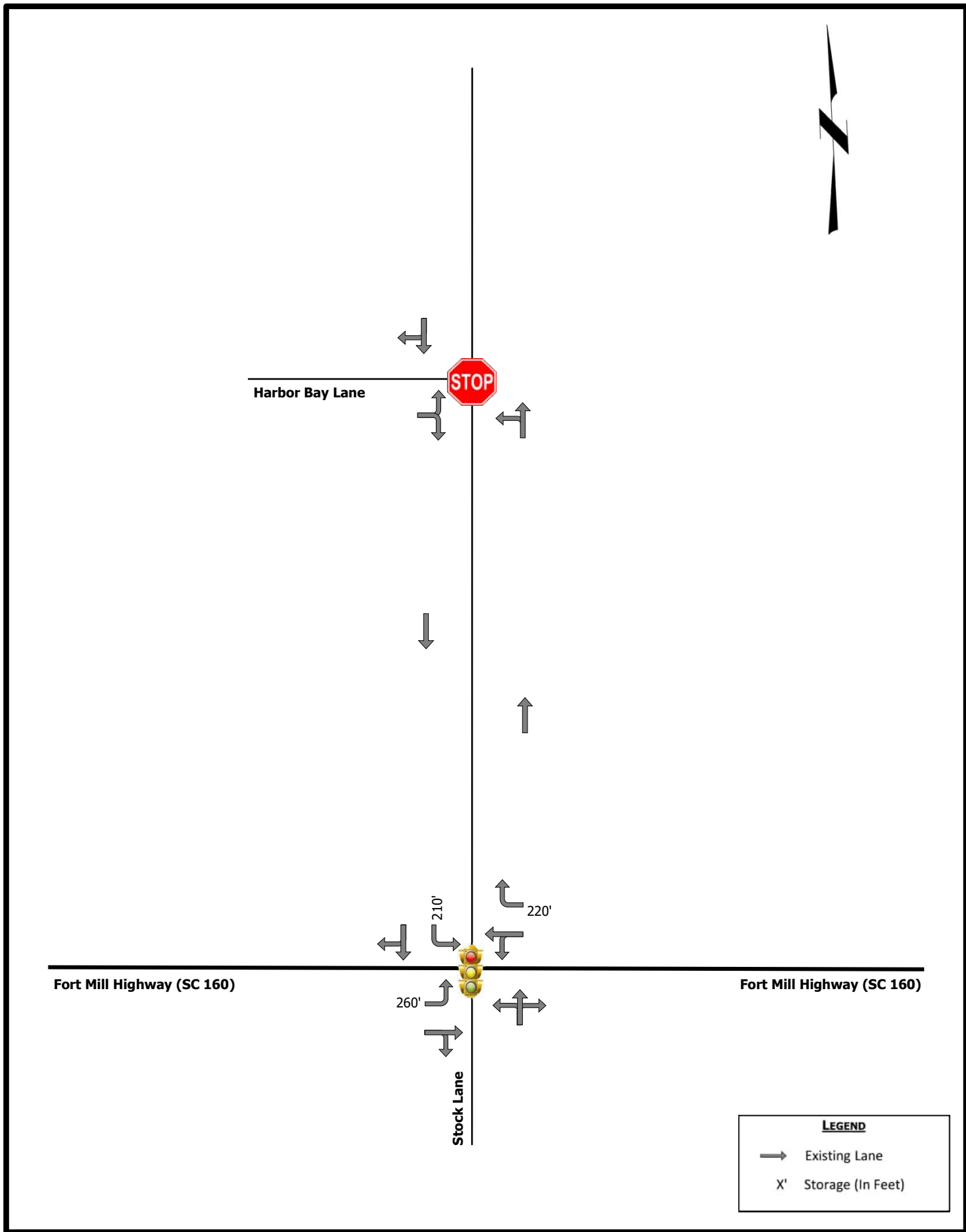
- Fort Mill Highway (SC 160) & Barberville Road (S-29-42)/ Stock Lane
- Barberville Road (S-29-42) & Harbor Bay Drive

All counts were conducted while the local school district was in session. The 2023 raw traffic volumes are provided in Appendix A. Existing traffic volumes are illustrated in Figure 4.

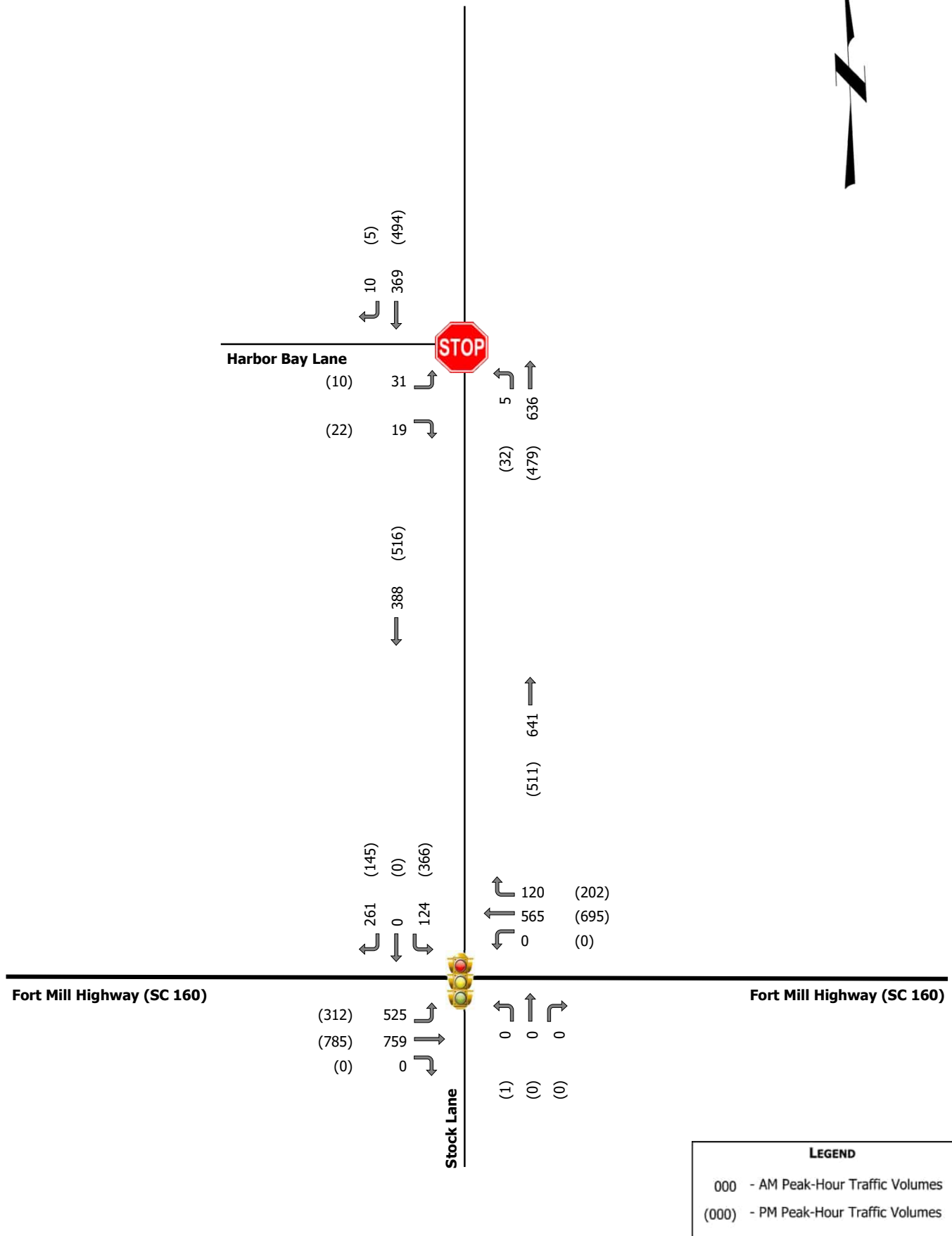
1.4. Driveway Location

The development is expected to provide one (1) full access driveway on Barberville Road. The proposed site Access is located approximately 670 feet north of Fort Mill Highway.

The proposed driveways appear to meet the SCDOT ARMS spacing requirements.



Moving forward.



2. PROJECT TRAFFIC

2.1. Proposed Land Uses

The Barberville Road development is proposed to contain a 120 student school/daycare center, with additional parcels that are envisioned to include approximately 18,000 SF of retail space and 8,000 SF of office space. The project site is currently vacant.

2.2. Trip Generation Estimates

The trip generation potential was estimated using information contained in ITE's *Trip Generation Manual*, 11th Edition (2021) for land use code (LUC) 565 – Day Care Center, (LUC) 822 Strip Retail Plaza and (LUC) 712 – Small Office Building . The trip generation estimates for the weekday daily, the weekday AM peak-hour of the adjacent street, and the weekday PM peak-hour of the adjacent street time periods are shown in Table 2.

Table 2 – Trip Generation Estimates

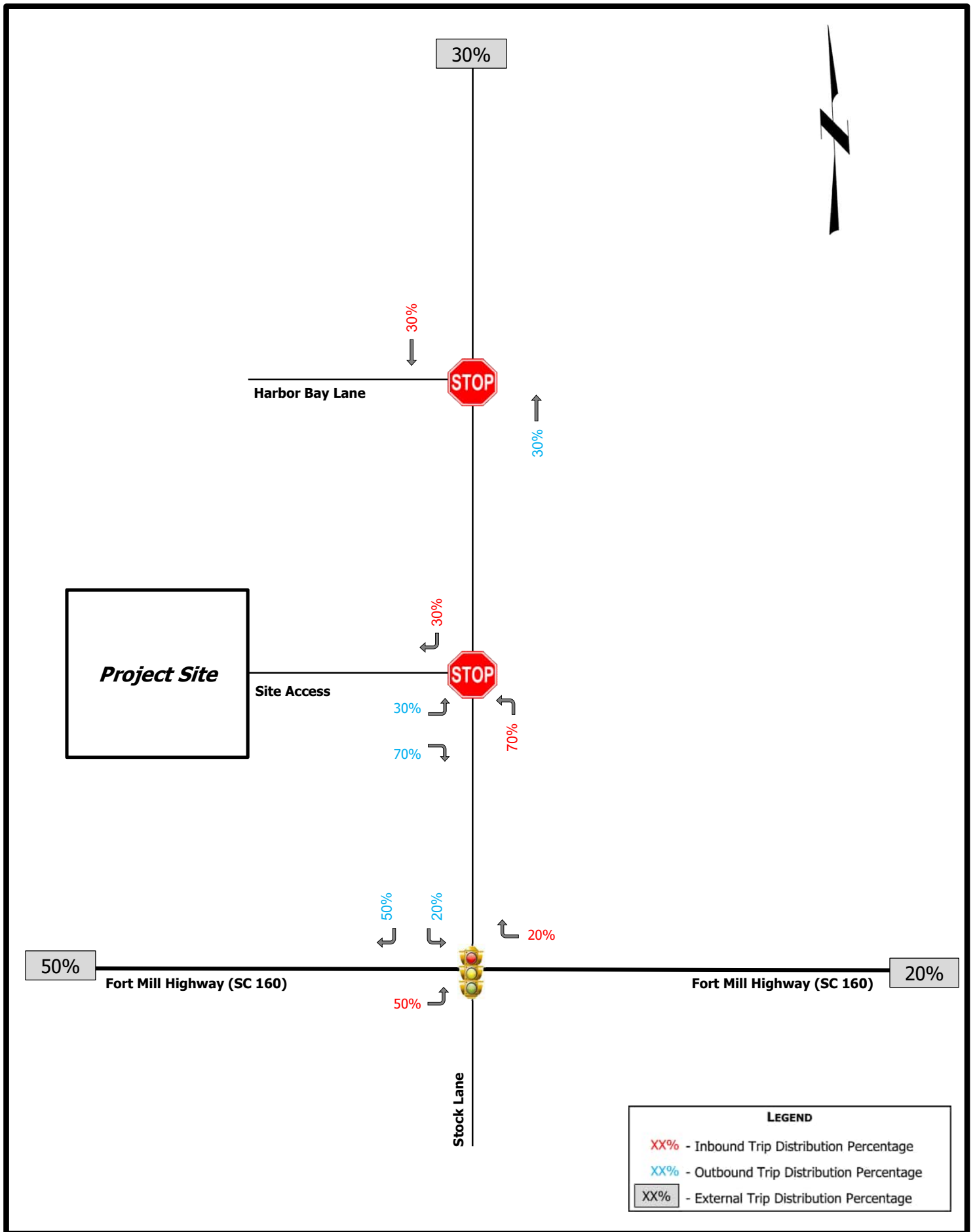
Land Use	ITE LUC	Size	Unit	Daily Traffic	AM Peak			PM Peak		
					Enter	Exit	Total	Enter	Exit	Total
Day Care Center	565	120	Student	474	46	42	88	40	46	86
Strip Retail Plaza	822	18	KSF	989	25	17	42	59	59	118
Small Office Building	712	8	KSF	115	11	2	13	6	11	17
Net New External Trips					82	61	143	105	116	221
LUC-565										
Daily Trips: $T=3.56(X)+47.23$ (50% In; 50% Out)										
AM Peak Hour Trips: $T=0.66(X)+8.42$ (53% In; 47% Out)										
PM Peak Hour Trips: $\ln(T)=0.87 \ln(X)+0.29$ (47% In; 53% Out)										
LUC-822										
Daily Trips: $T=42.20(X)+229.68$ (50% In; 50% Out)										
AM Peak Hour Trips: $\ln(T)=0.66 \ln(X)+1.84$ (60% In; 40% Out)										
PM Peak Hour Trips: $\ln(T)=0.71 \ln(X)+2.72$ (50% In; 50% Out)										
LUC-712										
Daily Trips: $T=14.39(X)$ (50% In; 50% Out)										
AM Peak Hour Trips: $T=1.67(X)$ (82% In; 18% Out)										
PM Peak Hour Trips: $T=2.16(X)$ (34% In; 66% Out)										

2.3. Trip Distribution & Assignment

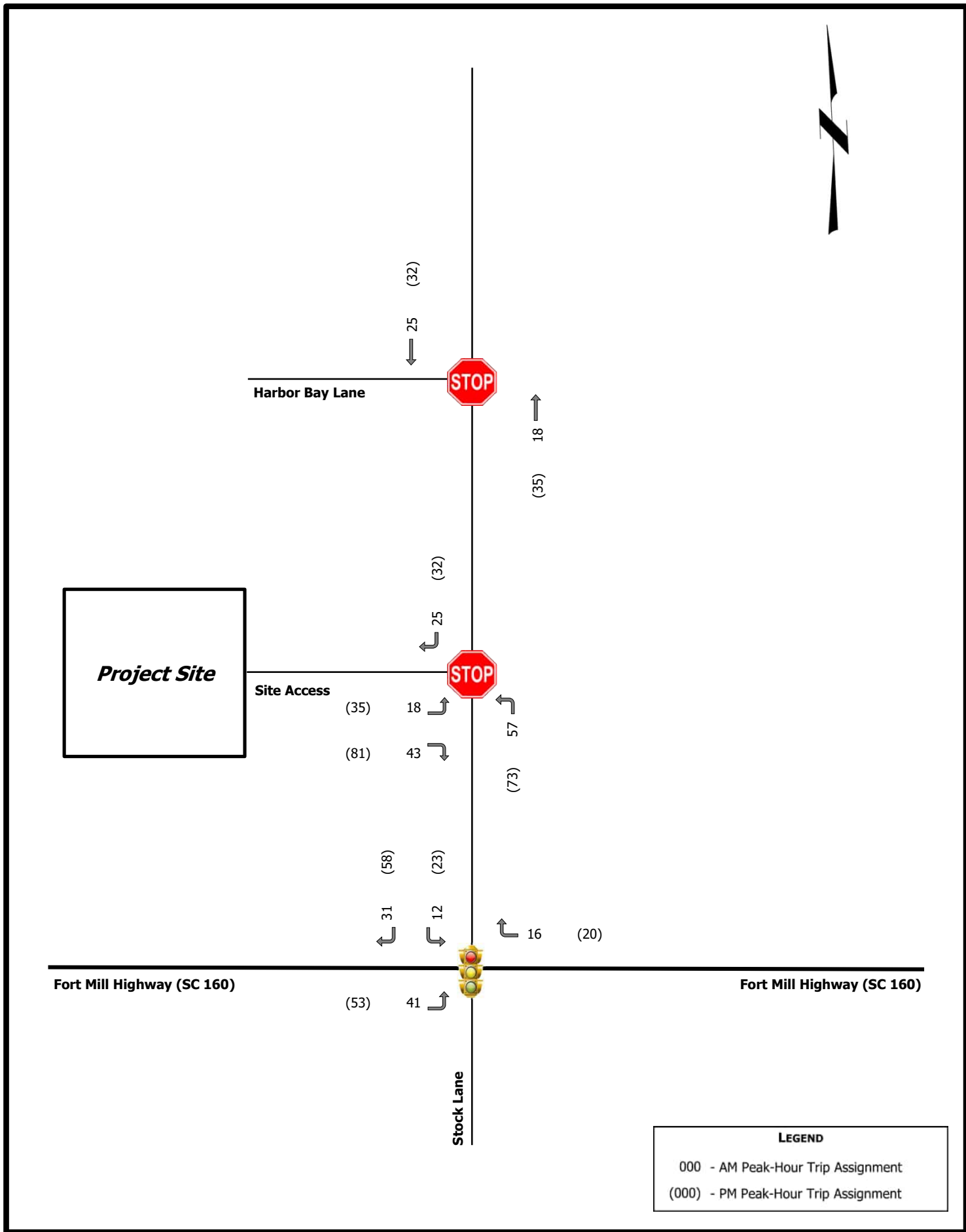
New external traffic expected to be generated was distributed and assigned to the roadway network based on the existing patterns and surrounding land uses. The general distribution of new external project trips was assumed to be:

- 70% to/from the south via Barberville Road and
- 30% to/from the north via Barberville Road

The directional distribution assumptions are shown in Figure 5. The assignment of the project traffic is shown in Figure 6.



Moving forward.



Moving forward.

3. TRAFFIC VOLUME DEVELOPMENT

3.1. Future No-Build Traffic Volumes

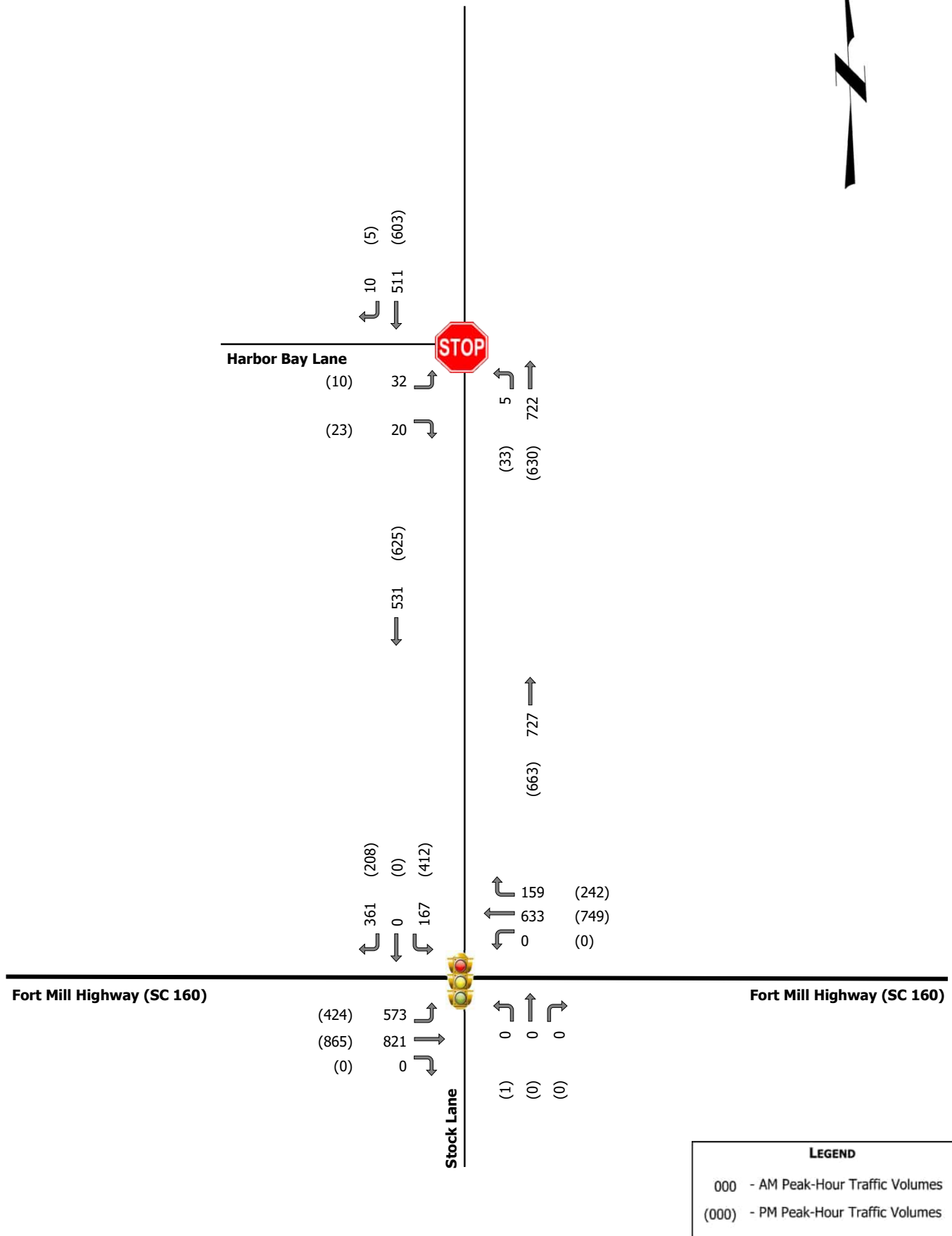
To develop an annual background growth rate for use in the analysis, count data was reviewed from the years 2017 to 2020 at SCDOT Count Station 29-0163 and 29-195. Reviewing the historic growth and observing the growth pattern in the surrounding area, a 1.0% annual growth was adopted for this study. This annual growth rate was utilized to develop the 2026 No-Build traffic volumes.

Several vested developments were considered for the study area. Site traffic from the Lodges at Indian Land, Harrisburg Road Residential (Sugar Creek), Redwood Apartments, Pettus Pond, Patterson Preserve and Patterson Lane Apartments were included in the vested trips. The vested projects include a total of 2,014 residential units expected to be completed before the Barberville Road development build out. None of the Traffic Impact Studies for these developments recommended any improvements to the Fort Mill Highway (SC 160) at Barberville Road.

The site trips from the vested developments are provided in Appendix A. The 2026 No-Build volumes are illustrated in Figure 7.

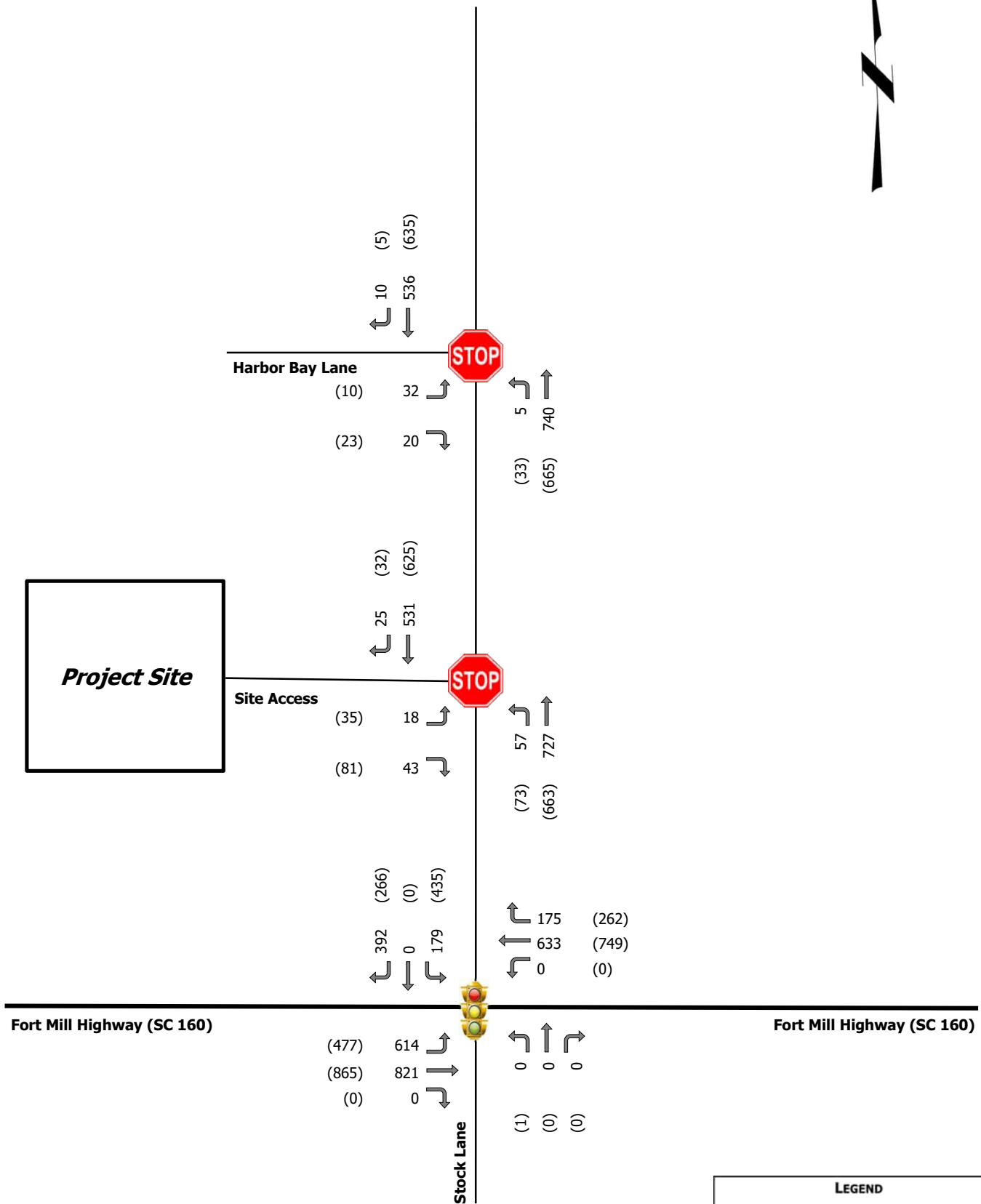
3.2. Build Out Traffic Volumes

The site generated traffic volumes were added to the 2026 No-Build traffic volumes to determine the 2026 Build volumes. The 2026 Build volumes are illustrated in Figure 8. Volume development worksheets are included in Appendix B.



Moving forward.





4. TRAFFIC IMPACT ANALYSIS

4.1. Turn-Lane Analysis

Auxiliary turn-lane analyses were conducted using the 2026 Build volumes. Turn-lane analyses were considered based on the SCDOT Roadway Design Manual (RDM) Section 9.5.1.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should be designed to provide proper sight distances and meet SCDOT design criteria.

Turn-lane analyses are provided in Appendix D.

4.2. Intersection LOS Analysis

Intersection analyses were conducted for the study intersections considering 2023 Existing conditions, 2026 No-Build conditions, and 2026 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 6th Edition (HCM 6th Edition)* methodologies of the *Synchro*, Version 11 software.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays and are generally considered undesirable. Table 3 summarizes the *HCM 6th Edition* control delay thresholds associated with each LOS grade for unsignalized and signalized intersections.

Table 3 – HCM 6th Edition LOS Criteria for Unsignalized and Signalized Intersections

Unsignalized Intersections		Signalized Intersections	
LOS	Control Delay per Vehicle (seconds)	LOS	Control Delay per Vehicle (seconds)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 15	B	> 10 and ≤ 20
C	> 15 and ≤ 25	C	> 20 and ≤ 35
D	> 25 and ≤ 35	D	> 35 and ≤ 55
E	> 35 and ≤ 50	E	> 55 and ≤ 80
F	> 50	F	> 80

As part of the intersection analysis, SCDOT's default *Synchro* parameters were utilized. A constant PHF of 0.92 was applied for future year analysis. Existing heavy vehicle percentages were utilized for all analysis scenarios, with a minimum percentage of 2% considered.

Using the *Synchro* software, intersection analyses were conducted for the weekday AM peak-hour and weekday PM peak-hour time periods. A 150-foot storage northbound left turn lane was analyzed in the build conditions at the site access. The results of the intersection analyses are summarized in Table 4.

Table 4 - Unsignalized and Signalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)					
		2023 Existing Conditions		2026 No-Build Conditions		2026 Build Conditions	
		AM	PM	AM	PM	AM	PM
Fort Mill Highway (SC 160) & Barberville Road (Signalized)	EB	C/34.9	C/19.2	E/66.7	C/34.0	E/76.3	D/39.6
	WB	C/20.3	C/27.4	E/64.6	F/148.5	D/51.9	F/168.0
	NB	A/0.0	E/75.5	A/0.0	F/88.7	A/0.0	F/88.7
	SB	E/70.4	F/198.9	F/84.3	F/86.2	F/105.8	F/99.2
	Overall	D/36.5	E/58.8	E/69.5	F/84.3	E/75.7	F/95.8
Barberville Road & Harbor Bay Drive (Unsignalized)	EB ¹	C/19.4	C/15.9	C/26.5	C/20.1	D/27.8	C/21.5
	NB ²	A/8.2	A/8.6	A/8.6	A/9.0	A/8.7	A/9.2
Barberville Road & Site Access (Unsignalized)	EB	--	--	--	--	C/20.3	D/26.9
	NB ²	--	--	--	--	A/8.9	A/9.5

¹LOS for major street left-turn movement; ²LOS for minor street approach

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately. The site access should include one ingress and two egress lanes (50' storage).

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E, and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. To raise the level of service on the Fort Mill

Highway (SC 160) at Barberville Road to a LOS D, additional eastbound and westbound through lanes along SC 160 would be required, along with signal timing optimization.

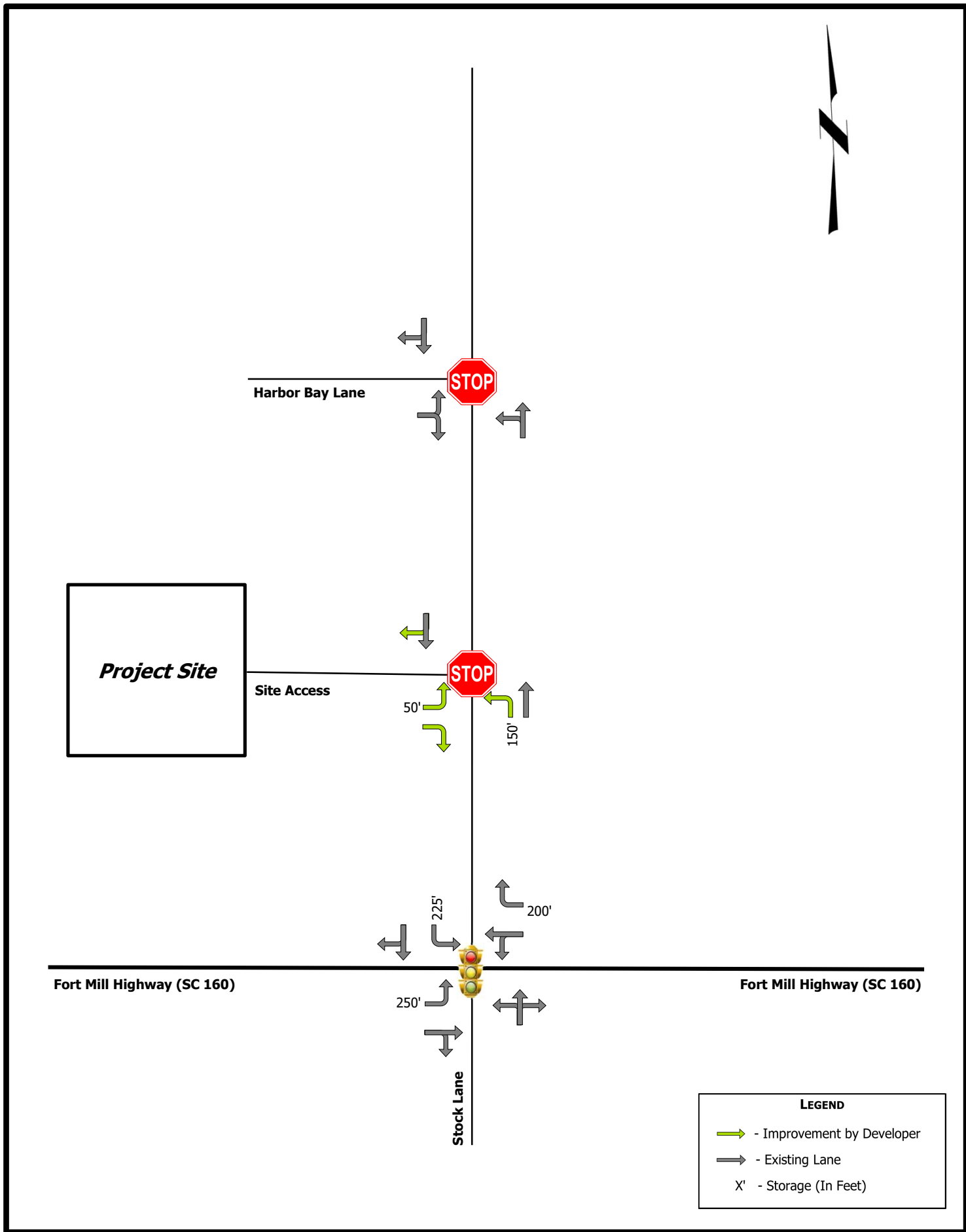
TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions. The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

If SC 160 were widened to provide a four-lane section, the LOS would be as shown in Table 5.

Table 5 - Unsignalized and Signalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)	
		2026 Build Improved Conditions	
		AM	PM
Fort Mill Highway (SC 160) & Barberville Road (Signalized)	EB	C/34.5	C/27.5
	WB	C/28.6	C/33.5
	NB	A/0.0	F/88.7
	SB	E/77.8	E/73.3
	Overall	D/41.6	D/40.0

Figure 9 shows the recommended lane configuration for the Build (2026) condition. A capacity analysis summary is provided in Appendix D.



Moving forward.

5. SUMMARY OF FINDINGS AND RECOMMENDATIONS

A traffic impact study was conducted for the proposed Barberville Road development in accordance with SCDOT guidelines. The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should include one ingress and two egress lanes (50' storage) and should be designed to provide proper sight distances and meet SCDOT design criteria.

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately.

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E. and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. Raising the level of service on the Fort Mill Highway (SC 160) at Barberville Road to a LOS D would require additional eastbound and westbound through lanes along SC 160, along with signal timing optimization. TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions.

The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

APPENDIX A

Traffic Scoping

Tahera Anjuman

From: Love, Allison C. <LoveAC@scdot.org>
Sent: Wednesday, March 29, 2023 12:43 PM
To: Tahera Anjuman
Cc: Gamble, David D.; Stephen Blackwelder
Subject: RE: Traffic Scoping for SC 160 and Barberville Road TIS Development

Good afternoon, Tahera.

I agree with the times for traffic counts. Please make sure they are recorded while school is in regular session, and not while school is out for spring break.

Please include these study intersections:

- Harbor Bay Drive/Barberville Road
- Site Access/Fortson Road
- Barberville Road/SC Highway 160/Stock Lane

Lancaster County staff can tell you about any developments in the area that have received site plan or preliminary plat approval, but have not been built.

It looks like the road into the adjacent subdivision to the north was stubbed as a cul-de-sac for connectivity between the neighborhood and this parcel. If that is the case, then the Department would support that connection, as the proposed commercial uses could be patronized by the residents without adding turn movements onto Barberville Road.

Thank you,
Allison

From: Tahera Anjuman <tanjuman@rameykemp.com>
Sent: Friday, March 24, 2023 9:11 AM
To: Love, Allison C. <LoveAC@scdot.org>
Subject: Traffic Scoping for SC 160 and Barberville Road TIS Development

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Good Morning Allison,

I hope you are doing well. We have a request for a proposal near SC 160 and Barberville Road in Lancaster County. Please see attached site plan. The development is proposed to consist of a roughly 120 student school/daycare Center, with additional parcels that are envisioned to include approximately 18,000 SF of retail space and 8,000 SF of office space. I am assuming the following traffic count for the project between 7-9AM and 4-6PM should be sufficient. Please let me know your thoughts and what vested developments you would like us to consider for this project. If you have any other considerations or concerns, please do let me know. I appreciate your guidance.

- SC 160 & Barberville Road (S-29-42)

Thanks,

Tahera Anjuman

From: Chanda Kirkland <CKirkland@lancastersc.net>
Sent: Friday, May 19, 2023 1:05 PM
To: Tahera Anjuman
Cc: Stephen Blackwelder
Subject: RE: Traffic Scoping for SC 160 and Barberville Road TIS Development

You don't often get email from ckirkland@lancastersc.net. [Learn why this is important](#)

Good Morning Anjuman,

Below are vested projects that may need to be included in the study.

1. The Lodges Development consisting of multi-family apartments, townhomes and cottages.
2. Sugar Creek
3. Redwood
4. Pettus Pond
5. Patterson Preserve
6. Tapestry Patterson Lane Apartments

You can use our online project portal to search the above projects to hopefully get the information you need if no the engineer contact information is also listed. Hope this information helps.

Chanda



Chanda Kirkland, Development Service
Coordinator
Building
Lancaster County Government
PO Box 1809
101 N Main St
Lancaster, SC 29720
P: (803) 416-9390 F: (877) 636-3035
CKirkland@lancastersc.net

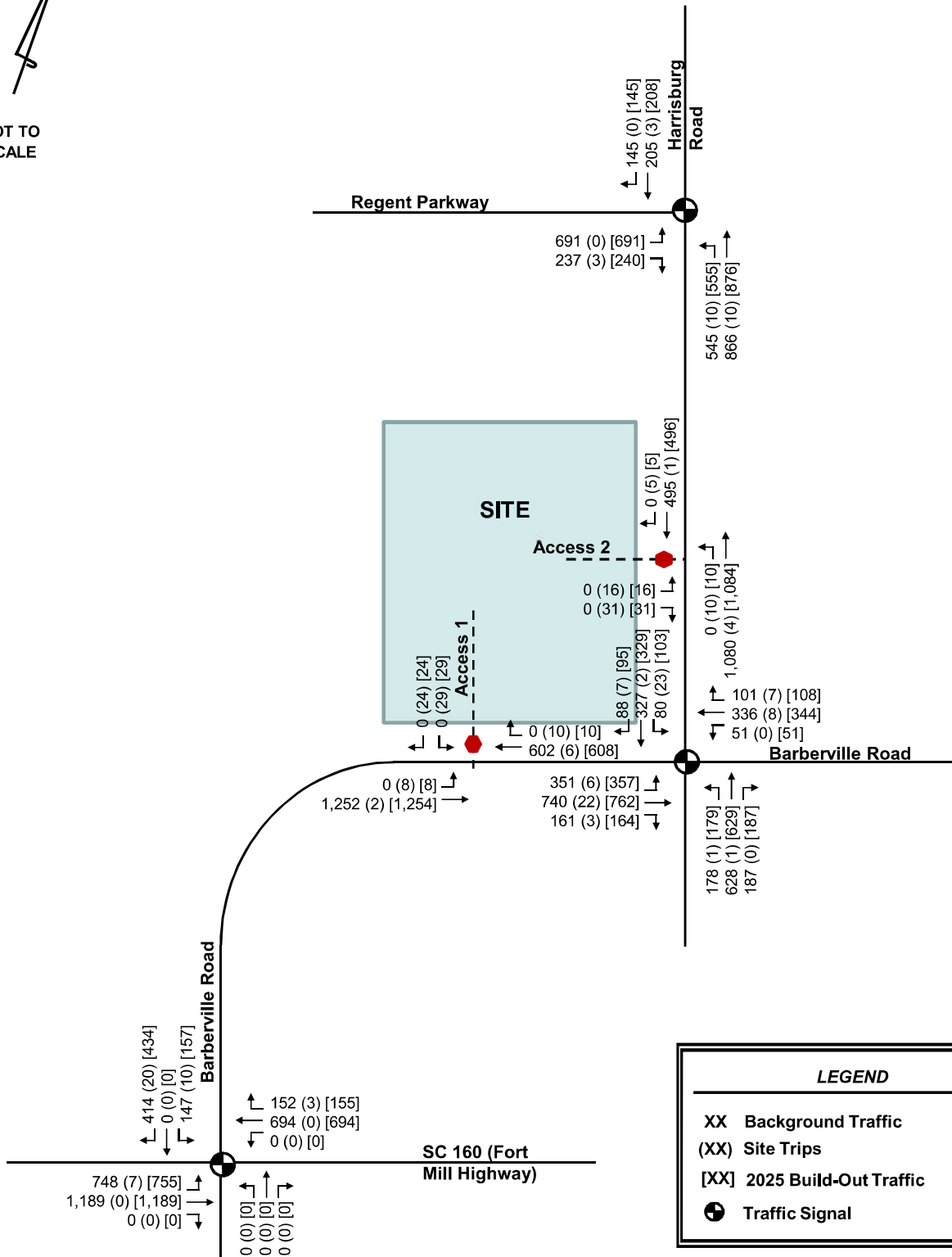
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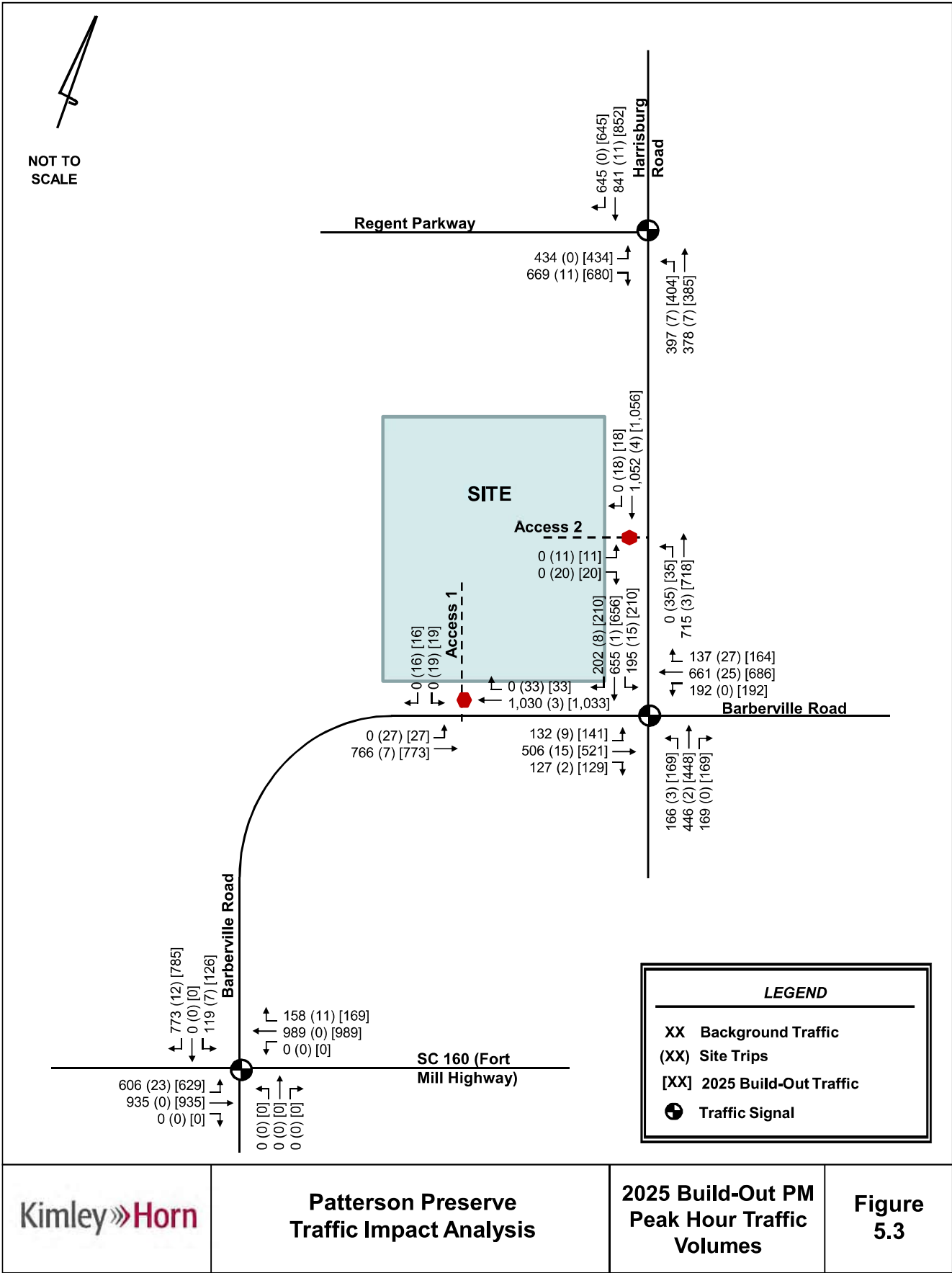
NOTICE: All email correspondence to and from this address may be subject to public disclosure under the SC Freedom of Information Act.

From: Stephen Blackwelder <sblackwelder@lancastersc.net>
Sent: Thursday, May 18, 2023 1:55 PM
To: Chanda Kirkland <CKirkland@lancastersc.net>
Subject: FW: Traffic Scoping for SC 160 and Barberville Road TIS Development



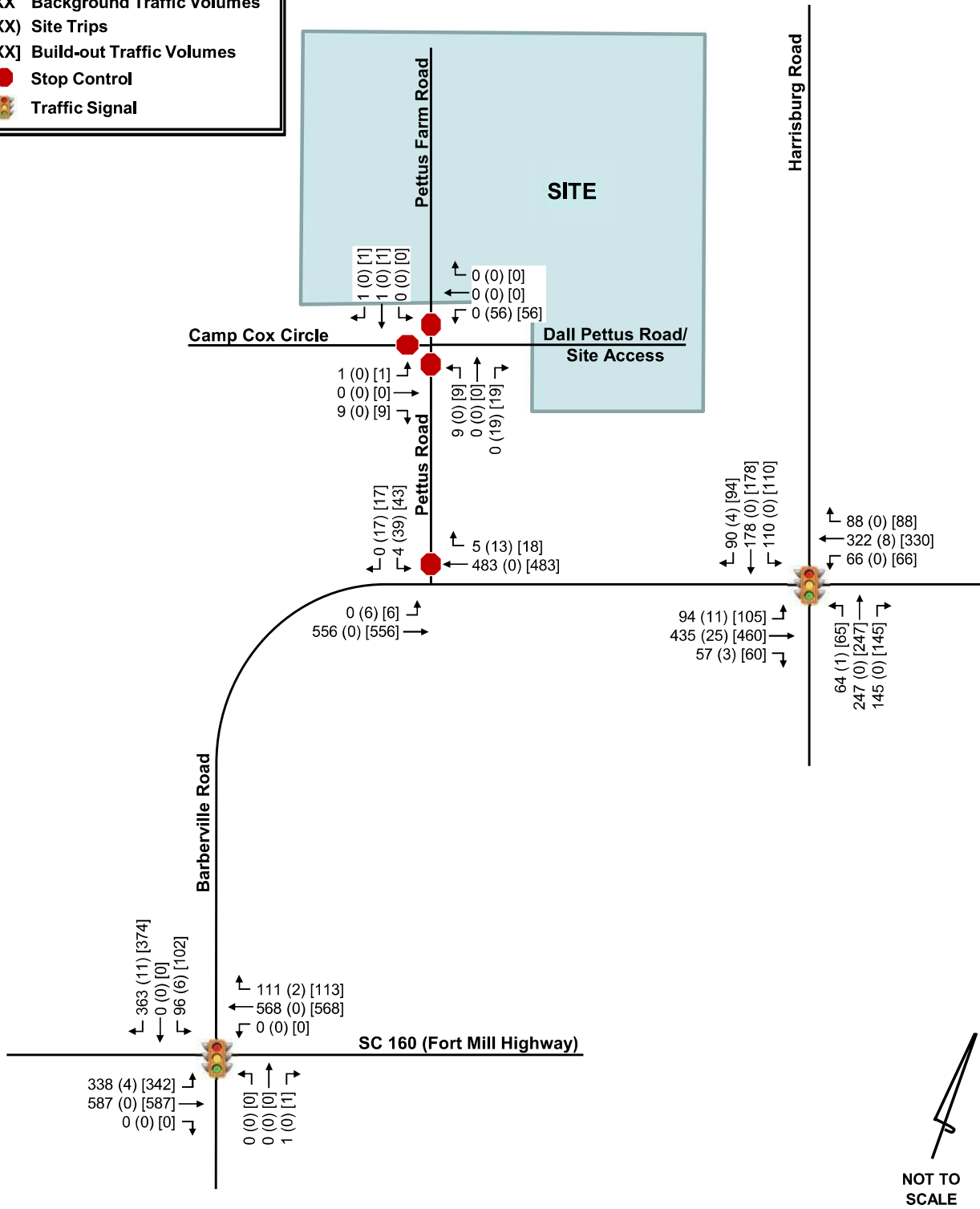
NOT TO
SCALE





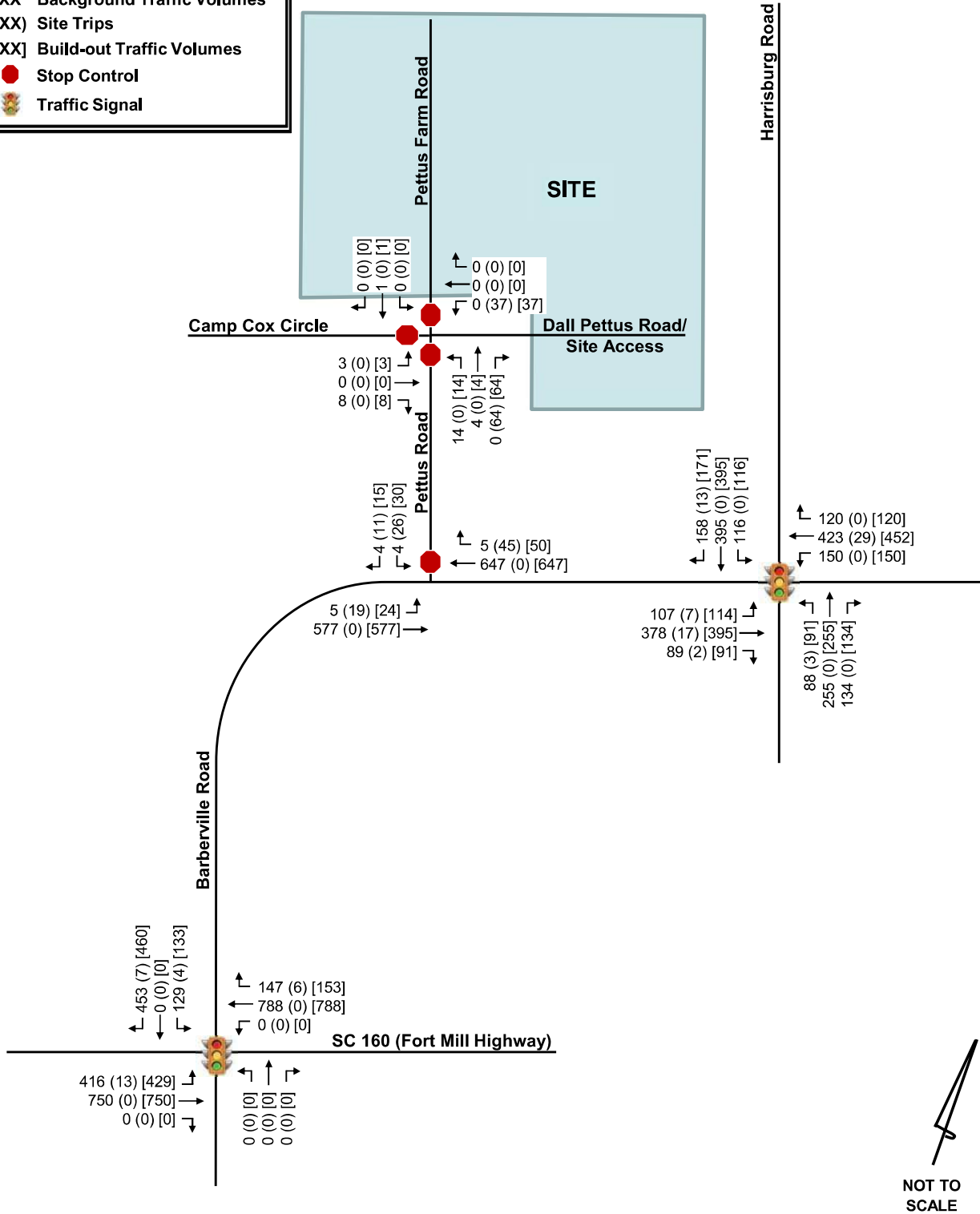
LEGEND

- XX Background Traffic Volumes
- (XX) Site Trips
- [XX] Build-out Traffic Volumes
- Stop Control
- Traffic Signal



LEGEND

- XX Background Traffic Volumes
- (XX) Site Trips
- [XX] Build-out Traffic Volumes
- Stop Control
- 🚦 Traffic Signal



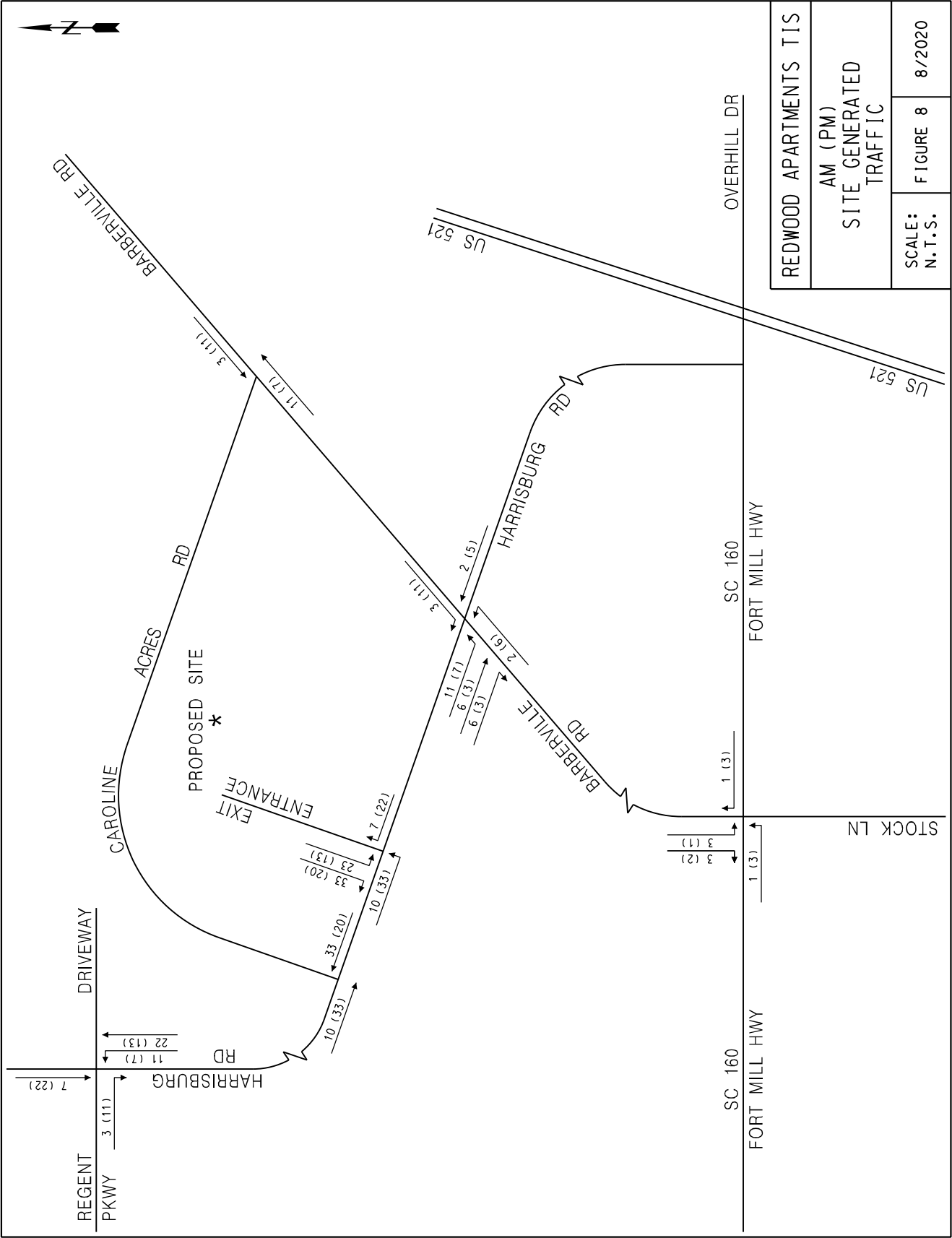
NOT TO SCALE

Kimley»Horn

Pettus Farm Development
Traffic Impact Analysis Update

2028 Build-out
PM Peak Hour
Traffic Volumes

Figure
5.3



G:\2020\2000060_001\Indian_Land_TIS\CAUD\2020\Indian_Land_Volumes_Site.dgn
 Wednesday, August 19, 2020 AT 01:34 PM

LEGEND

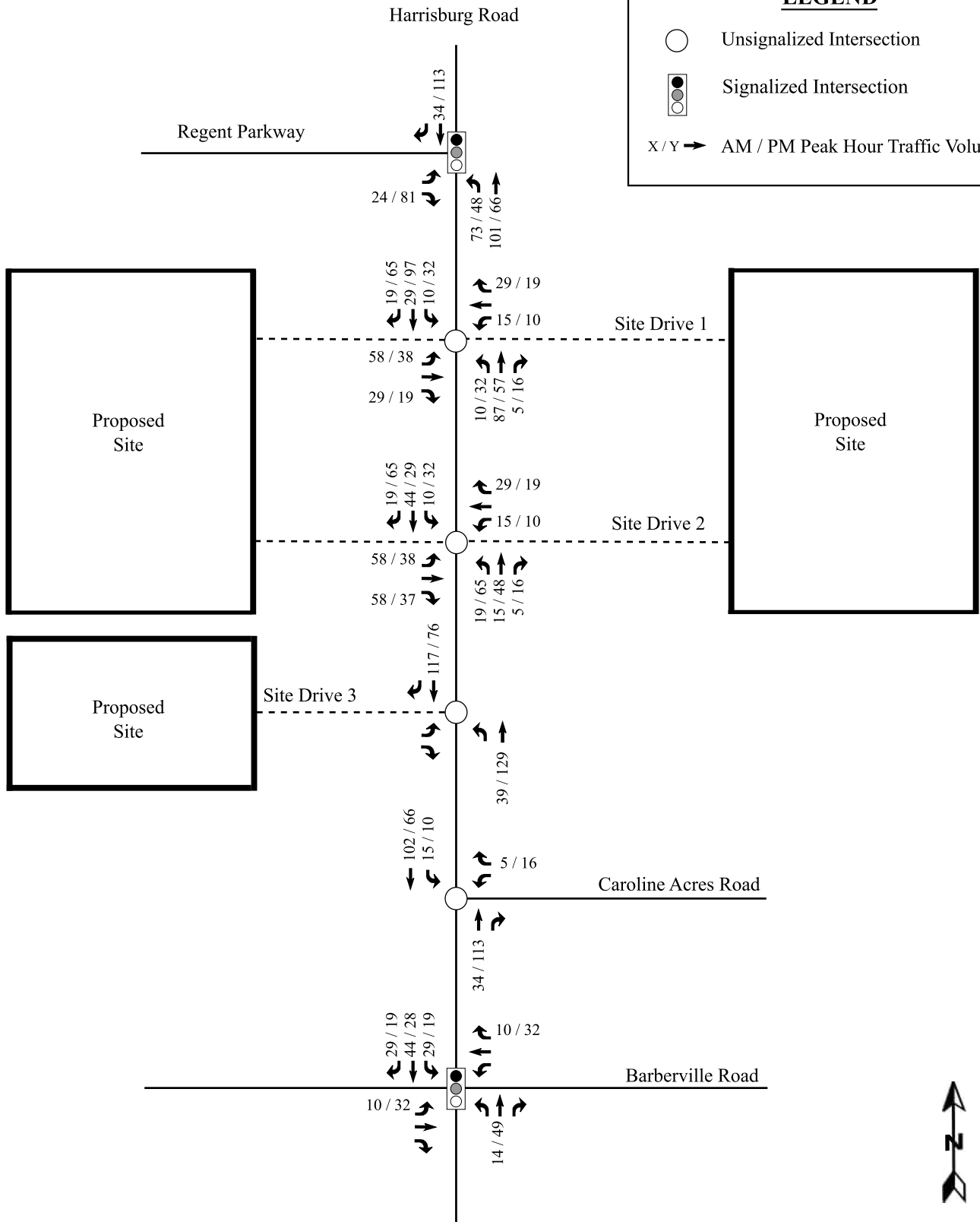


Unsignalized Intersection



Signalized Intersection

X / Y → AM / PM Peak Hour Traffic Volumes

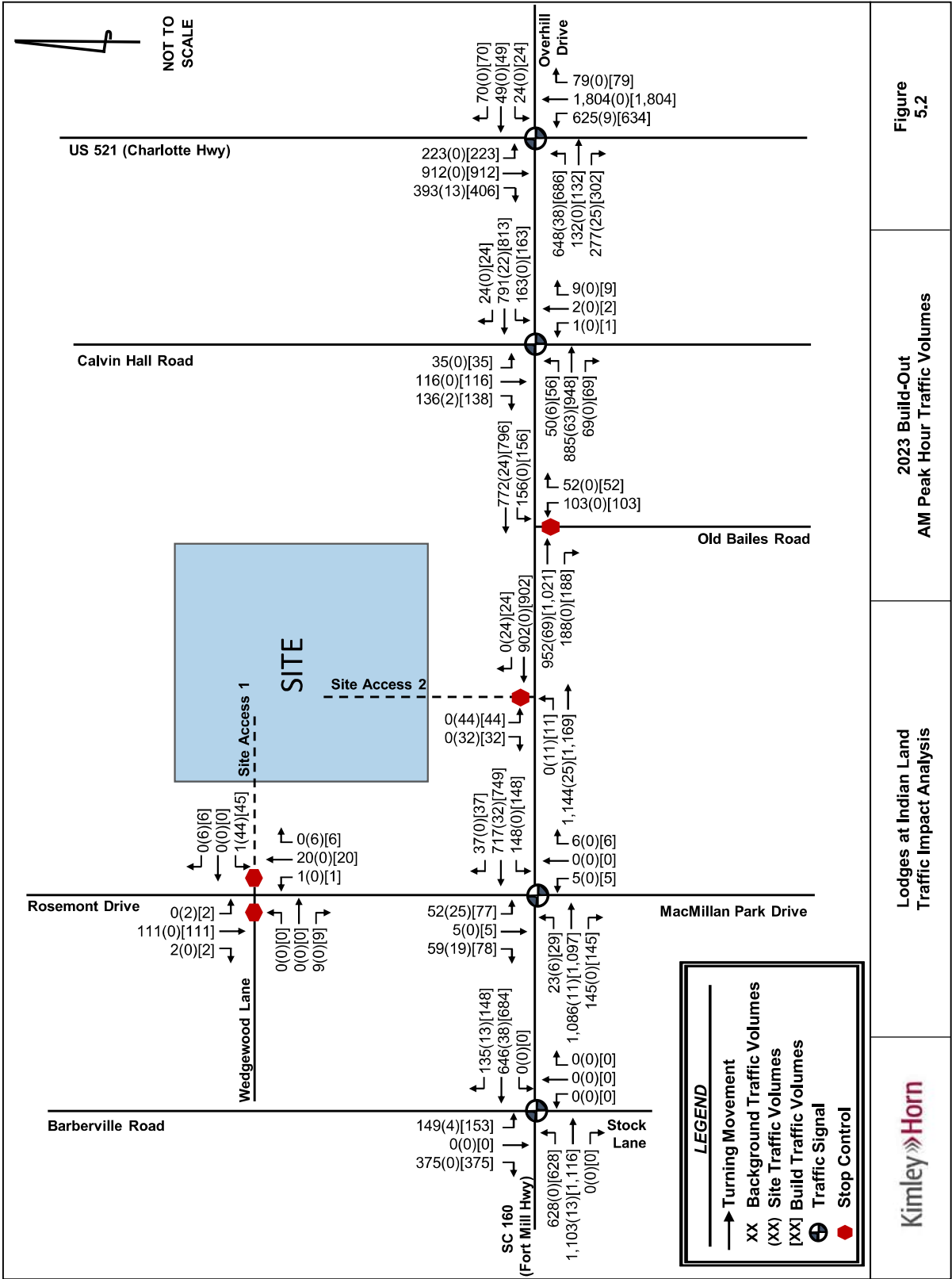


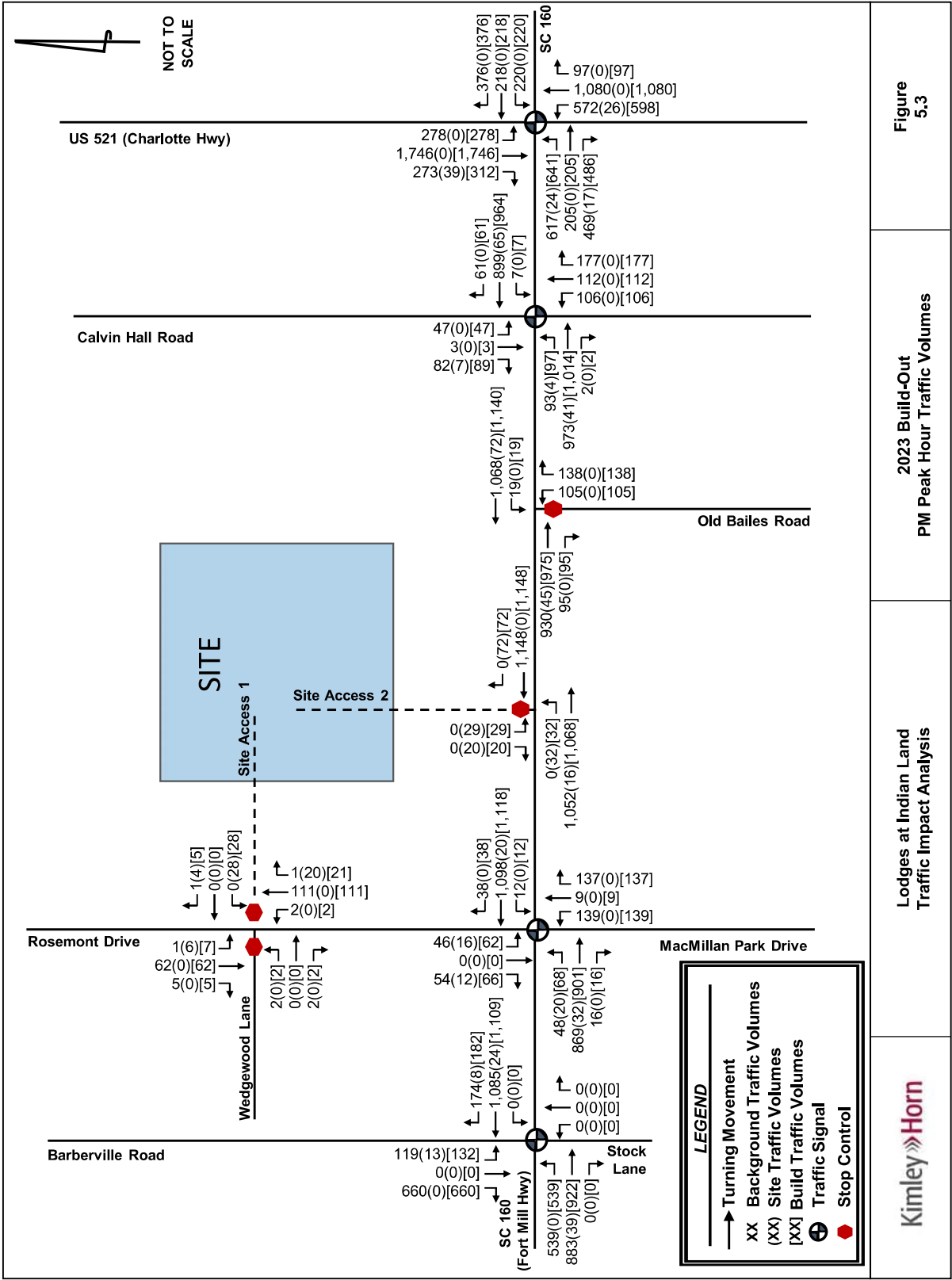
Harrisburg Road Residential
Lancaster County, SC

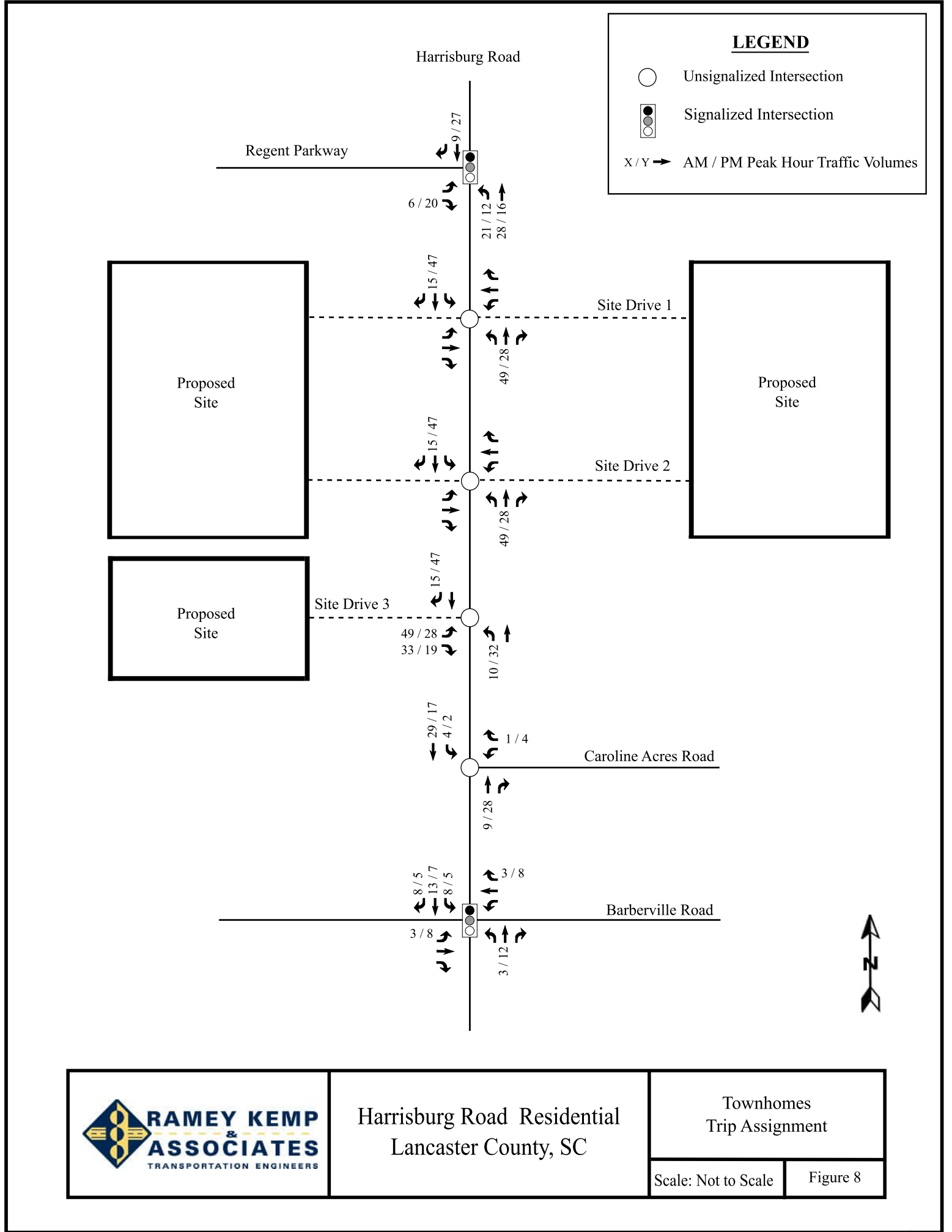
Single-Family Homes
Trip Assignment

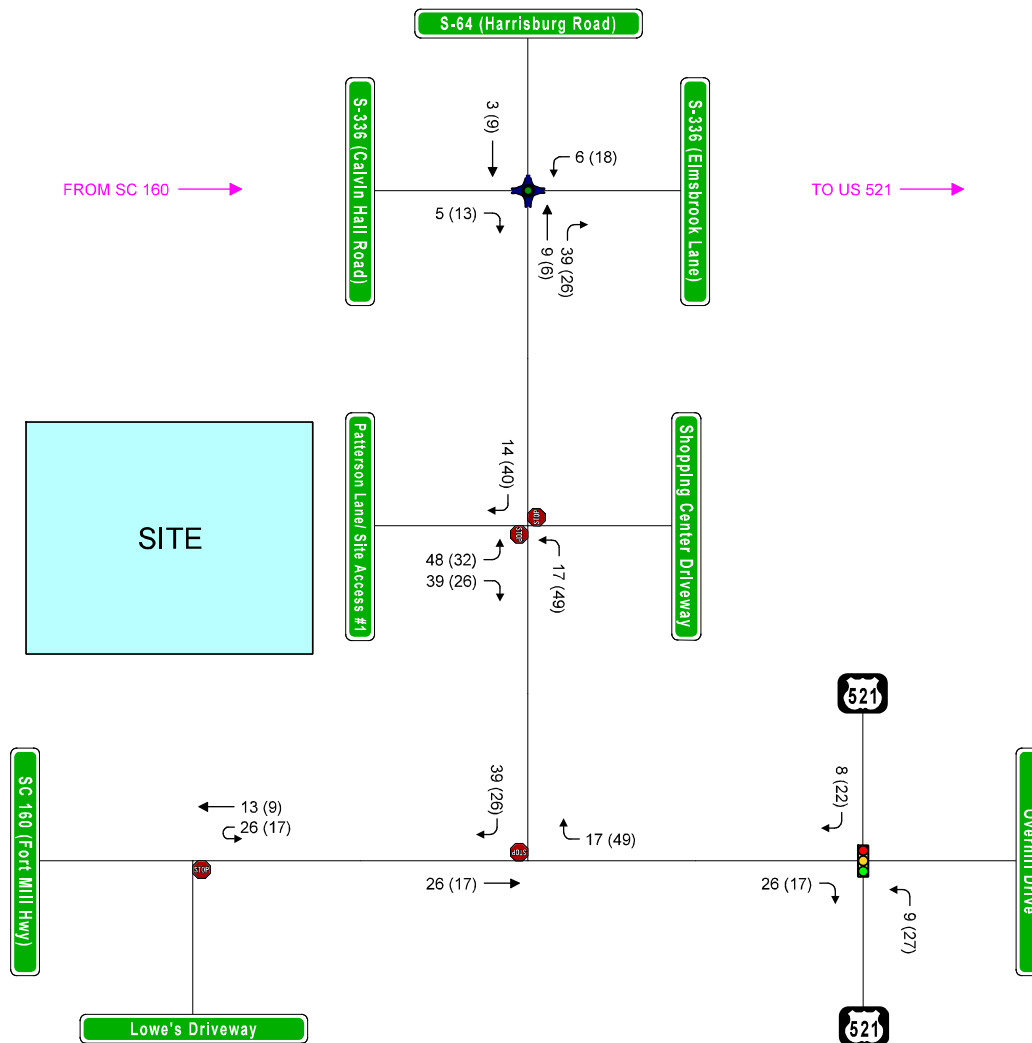
Scale: Not to Scale

Figure 7









**Patterson Lane Apartments
Indian Land, South Carolina**

Site Trips

Figure 8

Legend

X (Y) AM and (PM) Peak Hour Volumes

— Roadway

STOP Stop Sign

← Turning Movement



Traffic Signal



Roundabout

APPENDIX B

Traffic Count Data



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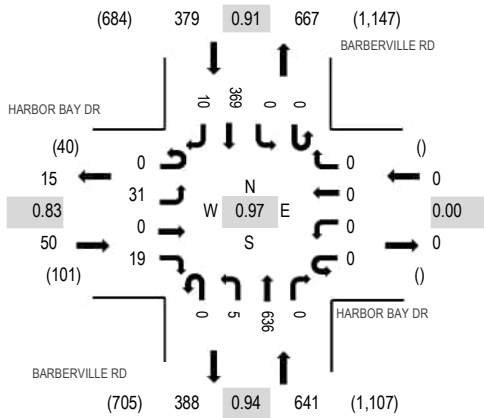
Location: 1 BARBERVILLE RD & HARBOR BAY DR AM

Date: Wednesday, May 3, 2023

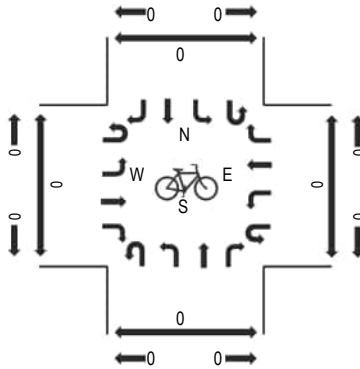
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:00 AM - 08:15 AM

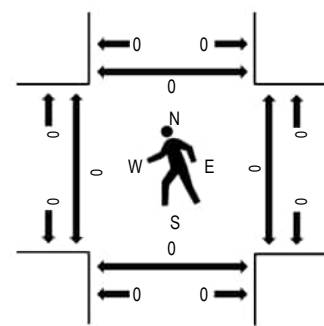
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HARBOR BAY DR Eastbound				HARBOR BAY DR Westbound				BARBERVILLE RD Northbound				BARBERVILLE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	8	0	7	0	0	0	0	0	1	108	0	0	0	50	2	176	920	0	0	0	0
7:15 AM	0	11	0	3	0	0	0	0	0	0	130	0	0	0	73	4	221	1,019	0	0	0	0
7:30 AM	0	13	0	3	0	0	0	0	0	2	164	0	0	0	88	3	273	1,070	0	0	0	0
7:45 AM	0	3	0	5	0	0	0	0	0	1	147	0	0	0	91	3	250	1,019	0	0	0	0
8:00 AM	0	7	0	7	0	0	0	0	0	1	156	0	0	0	103	1	275	972	0	0	0	0
8:15 AM	0	8	0	4	0	0	0	0	0	1	169	0	0	0	87	3	272		0	0	0	0
8:30 AM	0	7	0	7	0	0	0	0	0	7	110	0	0	0	86	5	222		0	0	0	0
8:45 AM	0	0	0	8	0	0	0	0	0	4	106	0	0	0	83	2	203		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	7
Lights	0	31	0	19	0	0	0	0	0	5	621	0	0	0	354	10	1,040
Mediums	0	0	0	0	0	0	0	0	0	0	9	0	0	0	14	0	23
Total	0	31	0	19	0	0	0	0	0	5	636	0	0	0	369	10	1,070

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%
Peak Hour Factor	0.83				0.00				0.94				0.91				0.97
Peak Hour Factor	0.00	0.67	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.46	0.94	0.00	0.00	0.00	0.90	0.60	0.97



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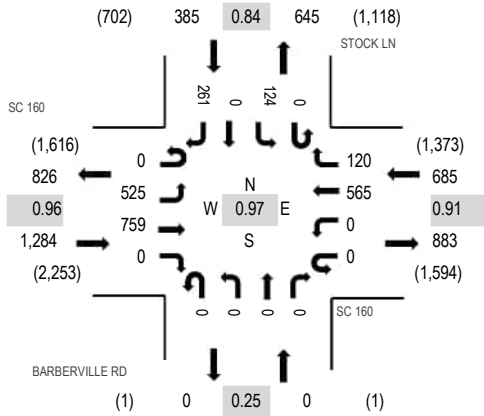
Location: 2 BARBERVILLE RD & SC 160 AM

Date: Wednesday, May 3, 2023

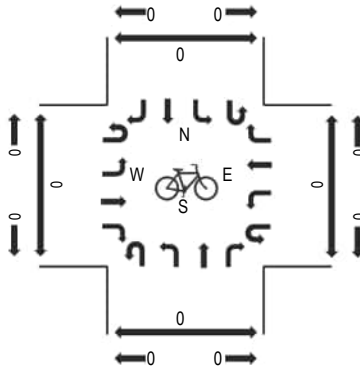
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

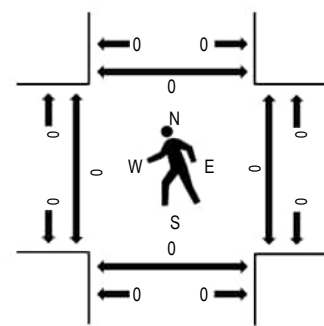
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SC 160 Eastbound				SC 160 Westbound				BARBERVILLE RD Northbound				STOCK LN Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	84	107	1	0	0	126	29	0	0	0	0	0	12	0	39	398	2,066	0	0	0	0
7:15 AM	0	112	137	0	0	0	153	25	0	1	0	0	0	23	0	55	506	2,254	0	0	0	0
7:30 AM	0	141	169	0	0	0	137	31	0	0	0	0	0	29	0	61	568	2,354	0	0	0	0
7:45 AM	0	111	206	0	0	0	156	27	0	0	0	0	0	36	0	58	594	2,307	0	0	0	0
8:00 AM	0	140	183	0	0	0	124	21	0	0	0	0	0	40	0	78	586	2,263	0	0	0	0
8:15 AM	0	133	201	0	0	0	148	41	0	0	0	0	0	19	0	64	606		0	0	0	0
8:30 AM	0	92	161	0	0	0	145	23	0	0	0	0	0	40	0	60	521		0	0	0	0
8:45 AM	0	73	202	0	0	0	152	35	0	0	0	0	0	29	0	59	550		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	5	6	0	0	0	7	0	0	0	0	0	0	0	0	1	19
Lights	0	517	746	0	0	0	543	114	0	0	0	0	0	118	0	252	2,290
Mediums	0	3	7	0	0	0	15	6	0	0	0	0	0	6	0	8	45
Total	0	525	759	0	0	0	565	120	0	0	0	0	0	124	0	261	2,354

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.9%				1.0%				0.0%				0.3%				0.8%
Heavy Vehicle %	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.8%
Peak Hour Factor	0.96				0.91				0.25				0.84				0.97
Peak Hour Factor	0.00	0.93	0.92	0.25	0.00	0.00	0.92	0.73	0.00	0.25	0.00	0.00	0.00	0.84	0.00	0.84	0.97



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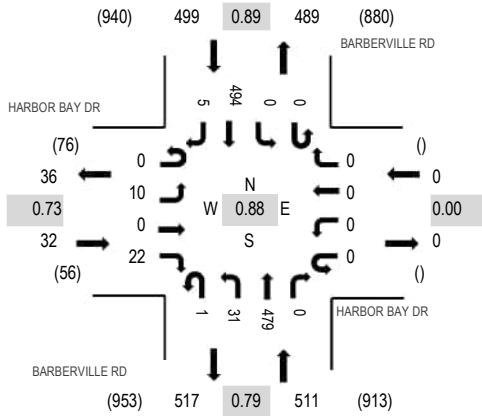
Location: 1 BARBERVILLE RD & HARBOR BAY DR PM

Date: Wednesday, May 3, 2023

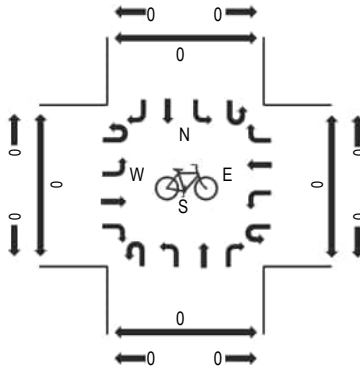
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:45 PM - 06:00 PM

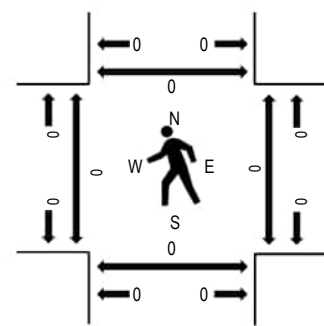
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HARBOR BAY DR Eastbound				HARBOR BAY DR Westbound				BARBERVILLE RD Northbound				BARBERVILLE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	1	0	4	0	0	0	0	0	4	83	0	0	0	83	4	179	867	0	0	0	0
4:15 PM	0	3	0	7	0	0	0	0	0	10	103	0	0	0	114	2	239	939	0	0	0	0
4:30 PM	0	4	0	2	0	0	0	0	0	4	98	0	0	0	84	8	200	943	0	0	0	0
4:45 PM	0	1	0	2	0	0	0	0	0	2	98	0	0	0	140	6	249	996	0	0	0	0
5:00 PM	0	3	0	6	0	0	0	0	0	7	96	0	0	0	137	2	251	1,042	0	0	0	0
5:15 PM	0	2	0	9	0	0	0	0	0	8	115	0	0	0	108	1	243		0	0	0	0
5:30 PM	0	4	0	1	0	0	0	0	1	7	116	0	0	0	123	1	253		0	0	0	0
5:45 PM	0	1	0	6	0	0	0	0	0	9	152	0	0	0	126	1	295		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
Lights	0	10	0	20	0	0	0	0	1	31	472	0	0	0	483	5	1,022
Mediums	0	0	0	2	0	0	0	0	0	0	6	0	0	0	9	0	17
Total	0	10	0	22	0	0	0	0	1	31	479	0	0	0	494	5	1,042

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%				0.0%				0.2%				0.4%				0.3%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.3%
Peak Hour Factor	0.73				0.00				0.79				0.89				0.88
Peak Hour Factor	0.00	0.69	0.00	0.61	0.00	0.00	0.00	0.00	0.25	0.86	0.79	0.00	0.00	0.00	0.91	0.63	0.88



(303) 216-2439
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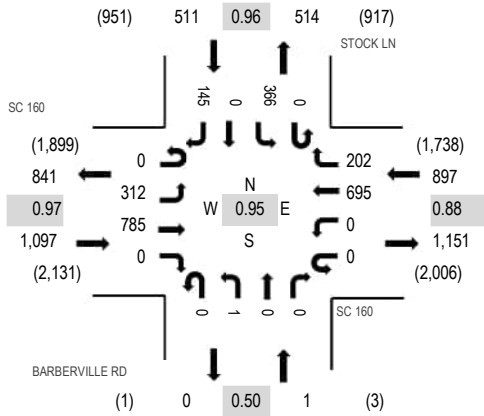
Location: 2 BARBERVILLE RD & SC 160 PM

Date: Wednesday, May 3, 2023

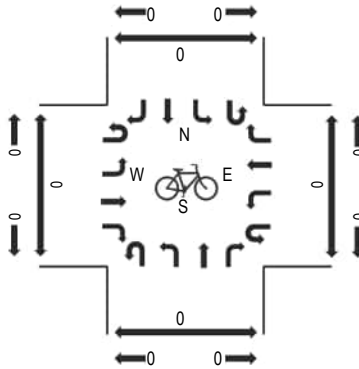
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:45 PM - 06:00 PM

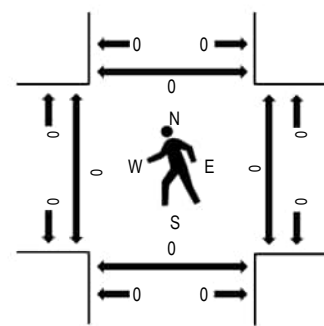
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SC 160 Eastbound				SC 160 Westbound				BARBERVILLE RD Northbound				STOCK LN Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	71	178	1	0	0	166	24	0	1	0	0	0	23	0	71	535	2,317	0	0	0	0
4:15 PM	0	70	193	0	0	0	196	32	0	0	1	0	0	22	0	83	597	2,366	0	0	0	0
4:30 PM	0	78	180	0	0	0	157	31	0	0	0	0	0	30	0	75	551	2,413	0	0	0	0
4:45 PM	0	65	198	0	0	0	204	31	0	0	0	0	0	31	0	105	634	2,478	0	0	0	0
5:00 PM	0	75	183	0	0	0	166	35	0	0	0	0	0	71	0	54	584	2,506	0	0	0	0
5:15 PM	0	70	209	0	0	0	190	48	0	0	0	0	0	96	0	31	644		0	0	0	0
5:30 PM	0	84	194	0	0	0	158	45	0	1	0	0	0	104	0	30	616		0	0	0	0
5:45 PM	0	83	199	0	0	0	181	74	0	0	0	0	0	95	0	30	662		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	3	0	0	0	4	0	0	0	0	0	0	1	0	1	10
Lights	0	308	775	0	0	0	687	200	0	1	0	0	0	358	0	143	2,472
Mediums	0	3	7	0	0	0	4	2	0	0	0	0	0	7	0	1	24
Total	0	312	785	0	0	0	695	202	0	1	0	0	0	366	0	145	2,506

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.4%				0.4%				0.0%				0.4%			0.4%
Heavy Vehicle %	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%	0.4%
Peak Hour Factor		0.97				0.88				0.50				0.96			0.95
Peak Hour Factor	0.00	0.93	0.94	0.25	0.00	0.00	0.89	0.68	0.00	0.25	0.25	0.00	0.00	0.88	0.00	0.80	0.95

APPENDIX C

Traffic Volume Development Worksheets and ITE Trip Generation Worksheets

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Fort Mill Highway & Barberville Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: Wednesday, May 3, 2023

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	525	759	0	0	565	120	0	0	0	124	0	261
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	16	23	0	0	17	4	0	0	0	4	0	8
Vested Trips (The Lodges)	0	13			38	13				4		0
Vested Trips (Sugar Creek)	10					8				8		29
Vested Trips (Redwood)	1					1				3		3
Vested Trips (Pettus Pond)	4					2				6		11
Vested Trips (Patterson Preserve)	7					3				10		20
Vested Trips (Patterson Lane Apartments)		26			13							
Vested Traffic Volumes	22	39			51	27				31		63
2026 NO-BUILD TRAFFIC VOLUMES	573	821	0	0	633	159	0	0	0	167	0	361
Inbound Trip Distribution Percentage	50%					20%						
Outbound Trip Distribution Percentage										20%		50%
Inbound New Project Traffic	41					16						
Outbound New Project Traffic										12		31
Pass-By Project Traffic												
Total New Project Traffic	41					16				12		31
2026 BUILD TRAFFIC VOLUMES	614	821	0	0	633	175	0	0	0	179	0	392

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	312	785	0	0	695	202	1	0	0	366	0	145
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	9	24	0	0	21	6	0	0	0	11	0	4
Vested Trips (The Lodges)	0	39			24	8				13		0
Vested Trips (Sugar Creek)	32					3				5		19
Vested Trips (Redwood)	3					3				1		2
Vested Trips (Pettus Pond)	13					6				4		7
Vested Trips (Patterson Preserve)	23					11				7		12
Vested Trips (Patterson Lane Apartments)		17			9							
Vested Traffic Volumes	71	56			33	31				30		40
2026 NO-BUILD TRAFFIC VOLUMES	424	865	0	0	749	242	1	0	0	412	0	208
Inbound Trip Distribution Percentage	50%					20%						
Outbound Trip Distribution Percentage										20%		50%
Inbound New Project Traffic	53					20						
Outbound New Project Traffic										23		58
Pass-by Project Traffic												
Total New Project Traffic	53					20				23		58
2026 BUILD TRAFFIC VOLUMES	477	865	0	0	749	262	1	0	0	435	0	266

Moving forward.

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Barberville Road & Harbor Bay Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Wednesday, May 3, 2023

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	31	0	19	0	0	0	5	636	0	0	369	10
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	1	0	1	0	0	0	0	19	0	0	11	0
Vested Trips (The Lodges)								13			4	
Vested Trips (Sugar Creek)								18			37	
Vested Trips (Redwood)								2			6	
Vested Trips (Pettus Pond)								6			17	
Vested Trips (Patterson Preserve)								10			30	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								49			94	
2026 NO-BUILD TRAFFIC VOLUMES	32	0	20	0	0	0	5	722	0	0	511	10
Inbound Trip Distribution Percentage											30%	
Outbound Trip Distribution Percentage								30%				
Inbound New Project Traffic											25	
Outbound New Project Traffic								18				
Pass-By Project Traffic												
Total New Project Traffic								18			25	
2026 BUILD TRAFFIC VOLUMES	32	0	20	0	0	0	5	740	0	0	536	10

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	10	0	22	0	0	0	32	479	0	0	494	5
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	1	0	0	0	1	14	0	0	15	0
Vested Trips (The Lodges)								8			13	
Vested Trips (Sugar Creek)								35			24	
Vested Trips (Redwood)								6			3	
Vested Trips (Pettus Pond)								19			11	
Vested Trips (Patterson Preserve)								34			19	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								102			70	
2026 NO-BUILD TRAFFIC VOLUMES	10	0	23	0	0	0	33	630	0	0	603	5
Inbound Trip Distribution Percentage											30%	
Outbound Trip Distribution Percentage								30%				
Inbound New Project Traffic											32	
Outbound New Project Traffic								35				
Pass-by Project Traffic												
Total New Project Traffic								35			32	
2026 BUILD TRAFFIC VOLUMES	10	0	23	0	0	0	33	665	0	0	635	5

Moving forward.

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Barberville Road & Fortson Road/ Site Access

TRAFFIC CONTROL: Unsignalized

DATE COUNTED:

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	0	0	0	0	0	0	0	641	0	0	388	0
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	19	0	0	12	0
Vested Trips (The Lodges)								13			4	
Vested Trips (Sugar Creek)								18			37	
Vested Trips (Redwood)								2			6	
Vested Trips (Pettus Pond)								6			17	
Vested Trips (Patterson Preserve)								10			30	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								49			94	
2026 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	0	0	727	0	0	531	0
Inbound Trip Distribution Percentage							70%					30%
Outbound Trip Distribution Percentage	30%		70%									
Inbound New Project Traffic							57					25
Outbound New Project Traffic	18		43									
Pass-By Project Traffic												
Total New Project Traffic	18		43				57					25
2026 BUILD TRAFFIC VOLUMES	18	0	43	0	0	0	57	727	0	0	531	25

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	0	0	0	0	0	0	0	511	0	0	516	0
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	15	0	0	15	0
Vested Trips (The Lodges)								8			13	
Vested Trips (Sugar Creek)								35			24	
Vested Trips (Redwood)								6			3	
Vested Trips (Pettus Pond)								19			11	
Vested Trips (Patterson Preserve)								34			19	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								102			70	
2026 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	0	0	663	0	0	625	0
Inbound Trip Distribution Percentage							70%					30%
Outbound Trip Distribution Percentage	30%		70%									
Inbound New Project Traffic							73					32
Outbound New Project Traffic	35		81									
Pass-by Project Traffic												
Total New Project Traffic	35		81				73					32
2026 BUILD TRAFFIC VOLUMES	35	0	81	0	0	0	73	663	0	0	625	32

Moving forward.

Day Care Center (565)

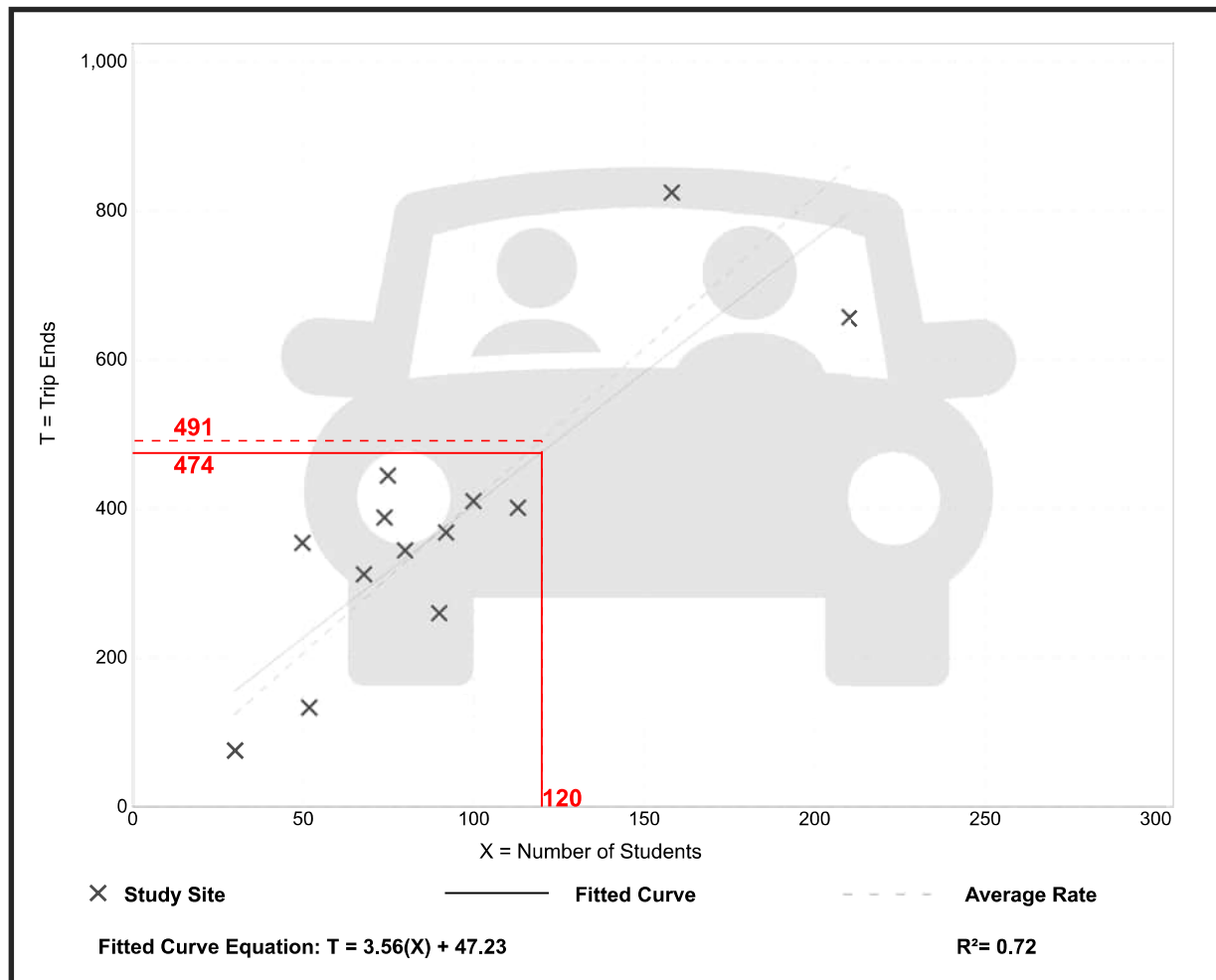
Vehicle Trip Ends vs: **Students**
On a: **Weekday**

Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Students: 89
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



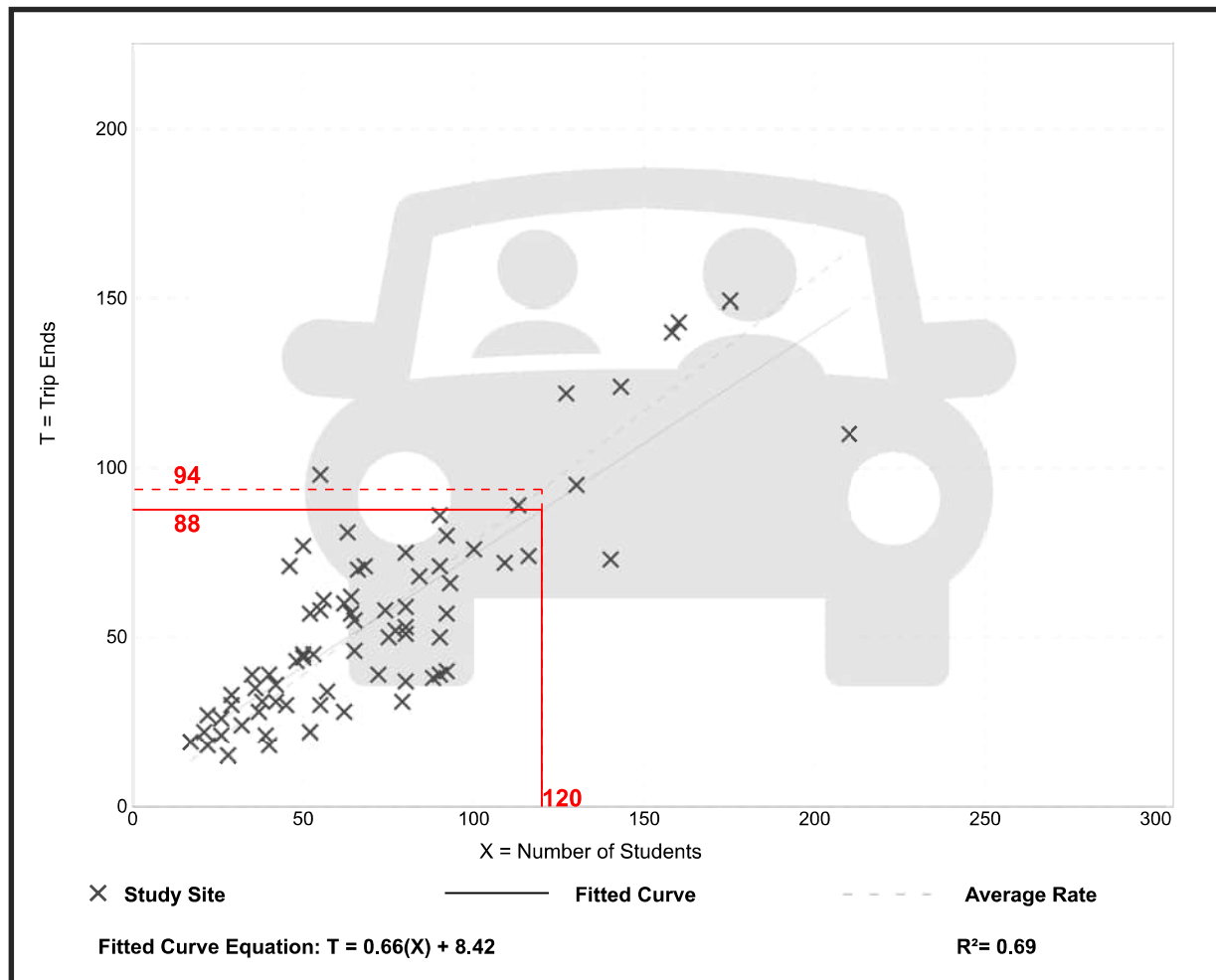
Day Care Center (565)

Vehicle Trip Ends vs: Students
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 75
 Avg. Num. of Students: 71
 Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



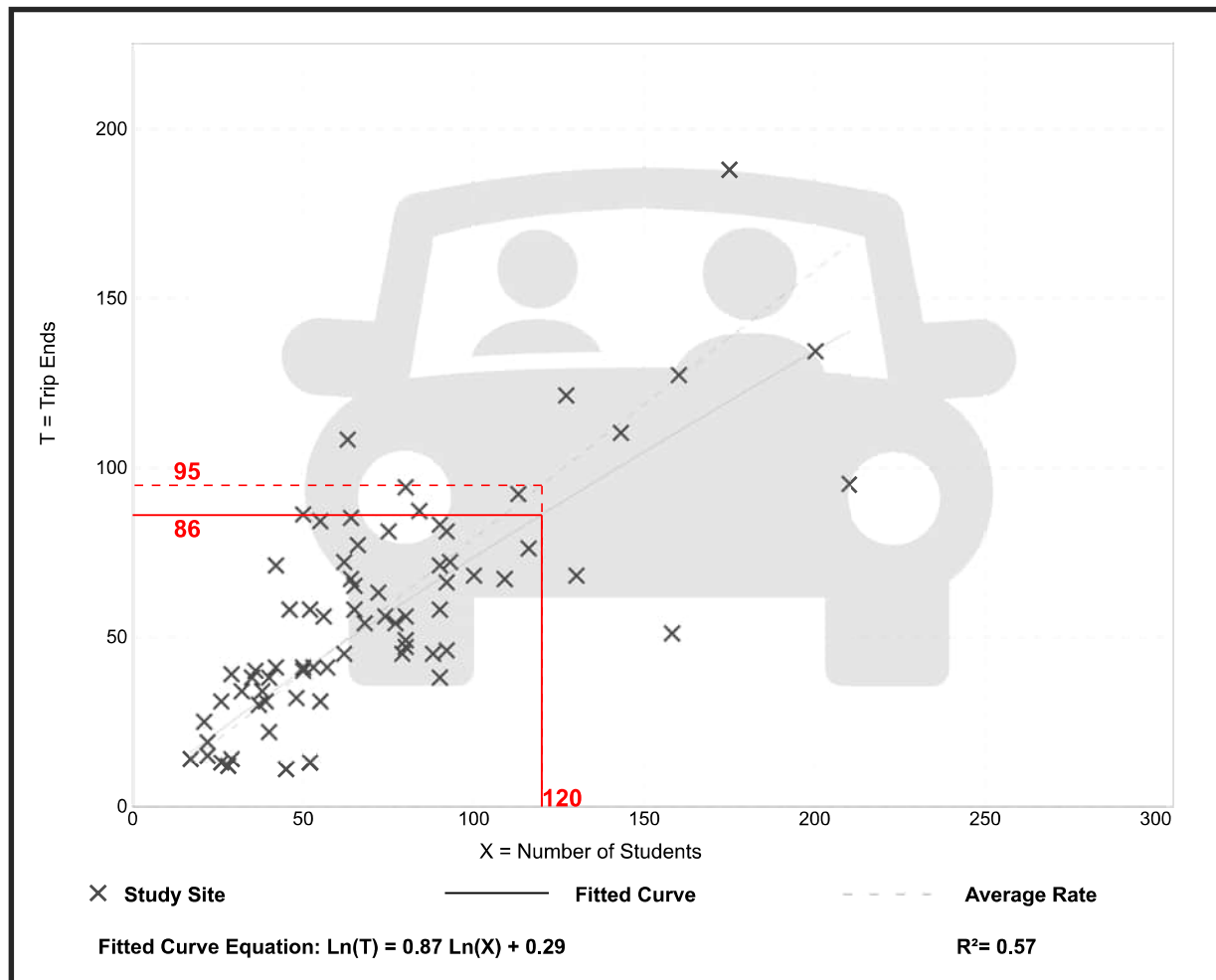
Day Care Center (565)

Vehicle Trip Ends vs: **Students**
 On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
 Setting/Location: **General Urban/Suburban**
 Number of Studies: 75
 Avg. Num. of Students: 72
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

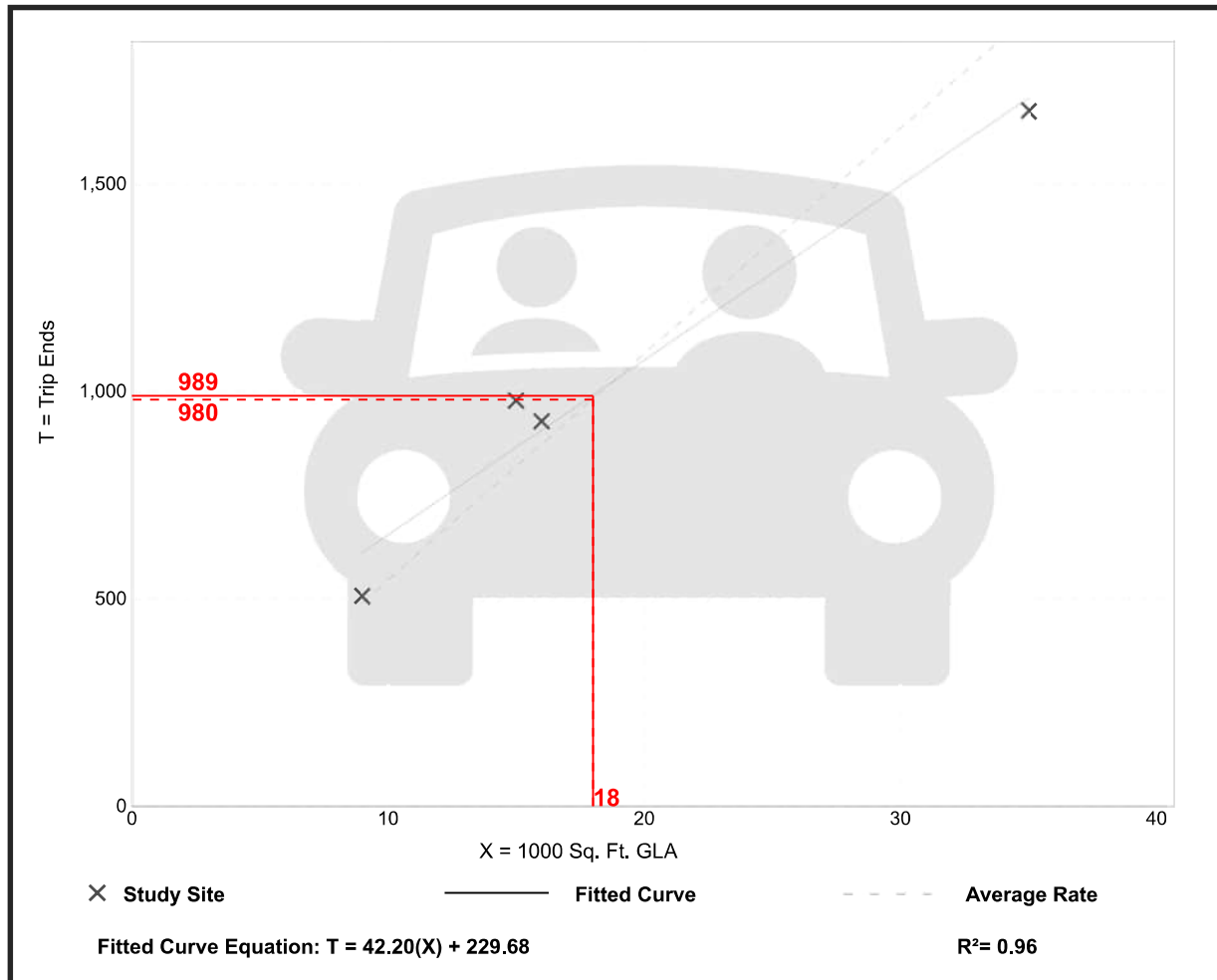
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Strip Retail Plaza (<40k) (822)

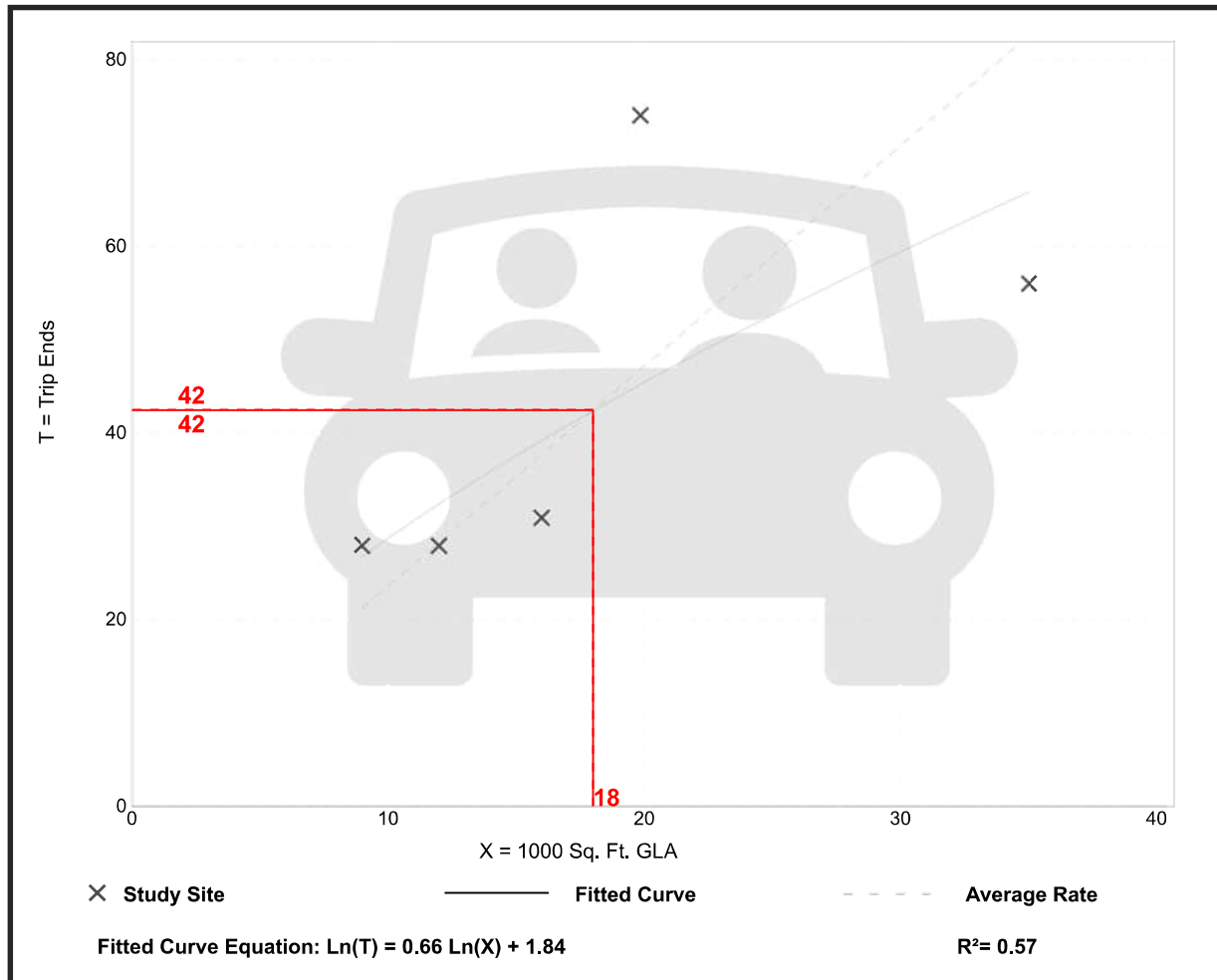
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



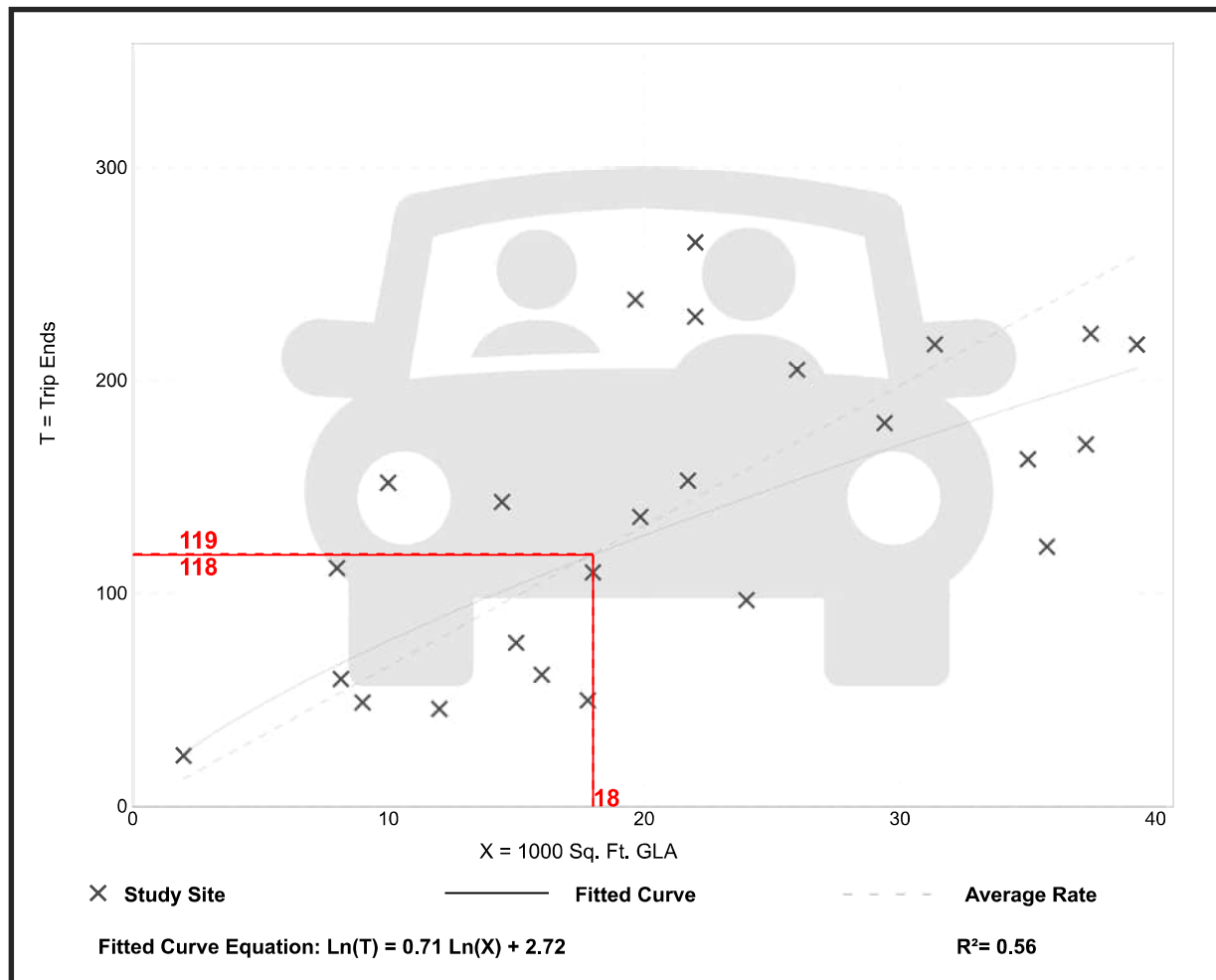
Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 25
 Avg. 1000 Sq. Ft. GLA: 21
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Small Office Building (712)

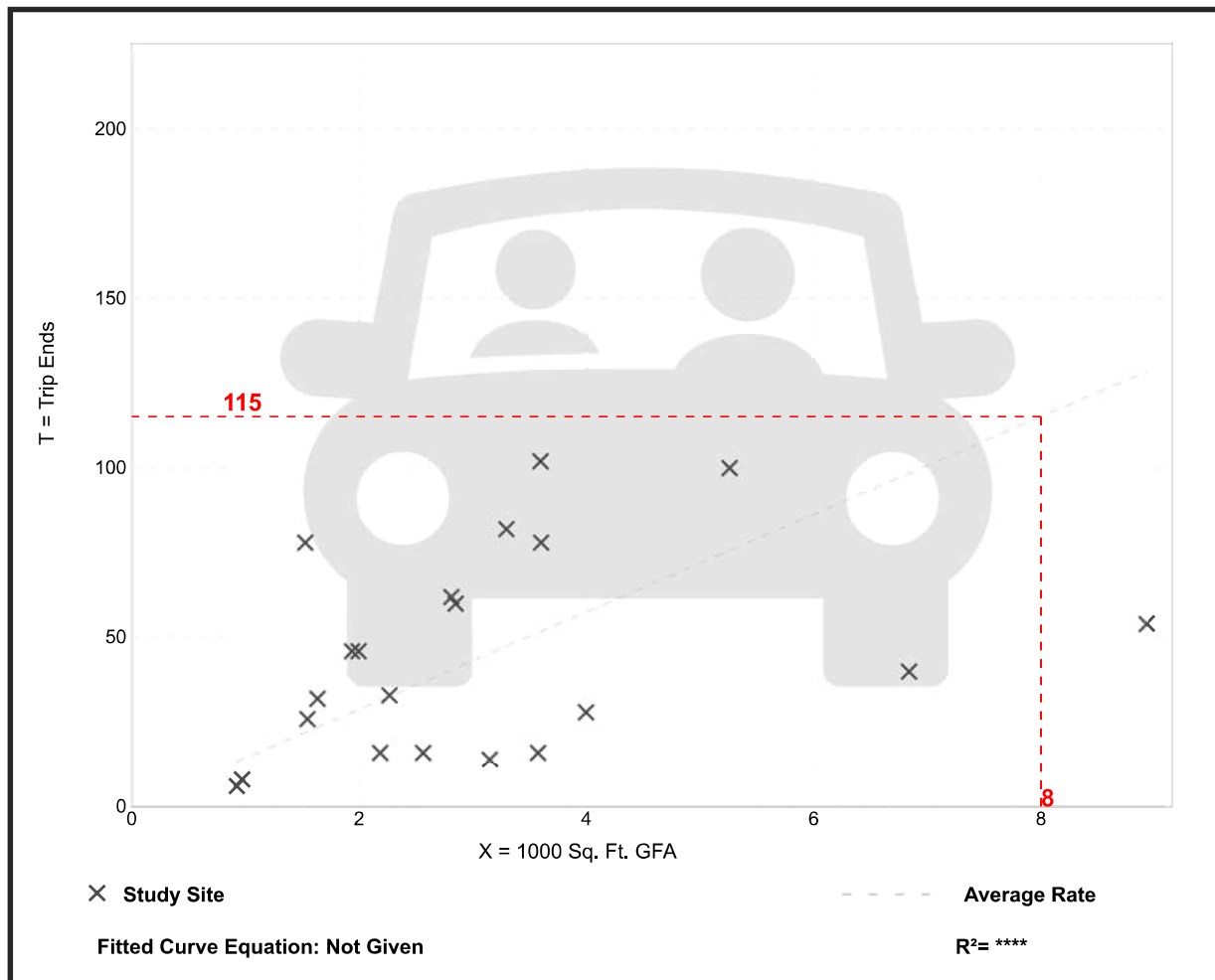
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
14.39	4.44 - 50.91	10.16

Data Plot and Equation



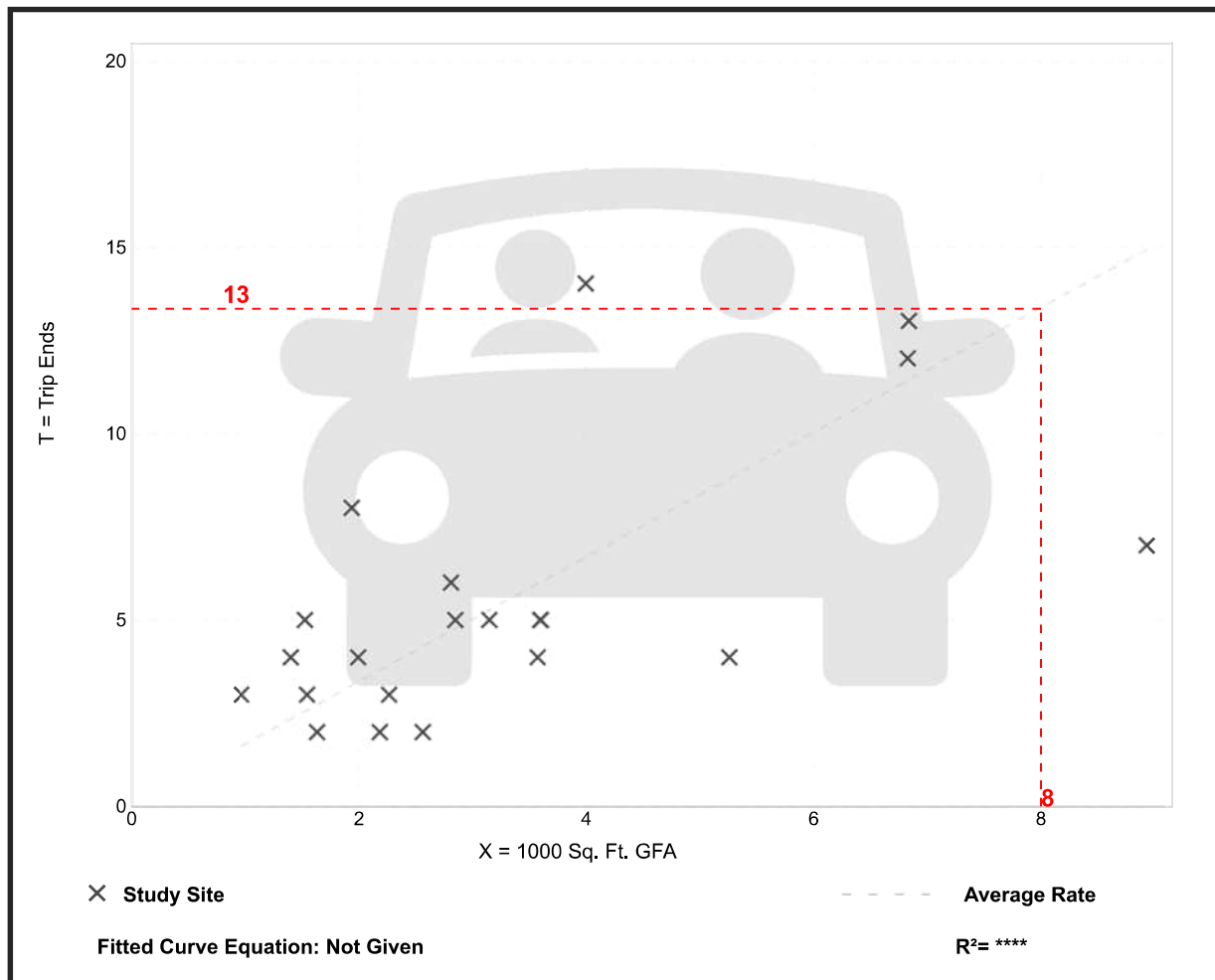
Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 21
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 82% entering, 18% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.67	0.76 - 4.12	0.88

Data Plot and Equation



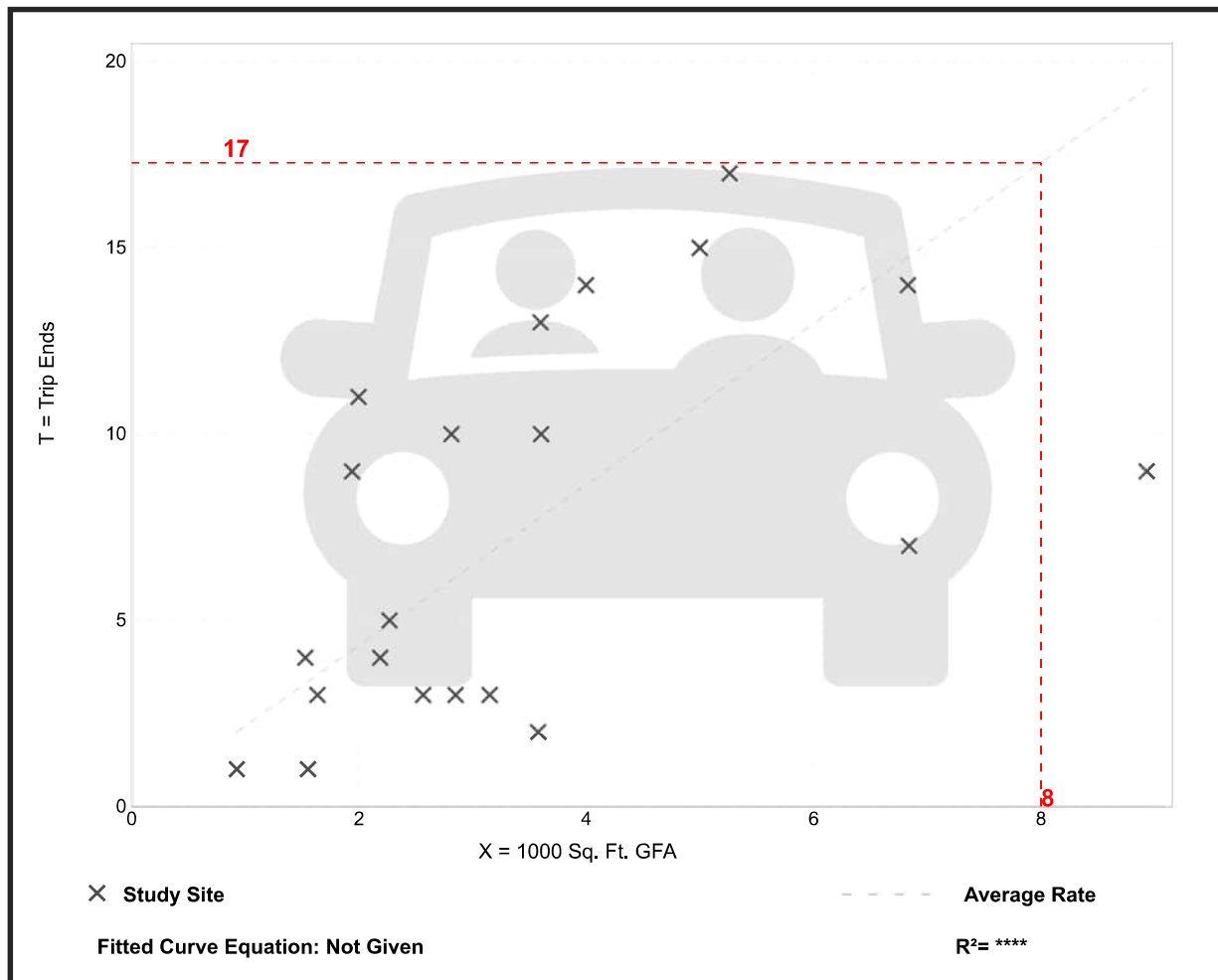
Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 21
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.16	0.56 - 5.50	1.26

Data Plot and Equation



APPENDIX D

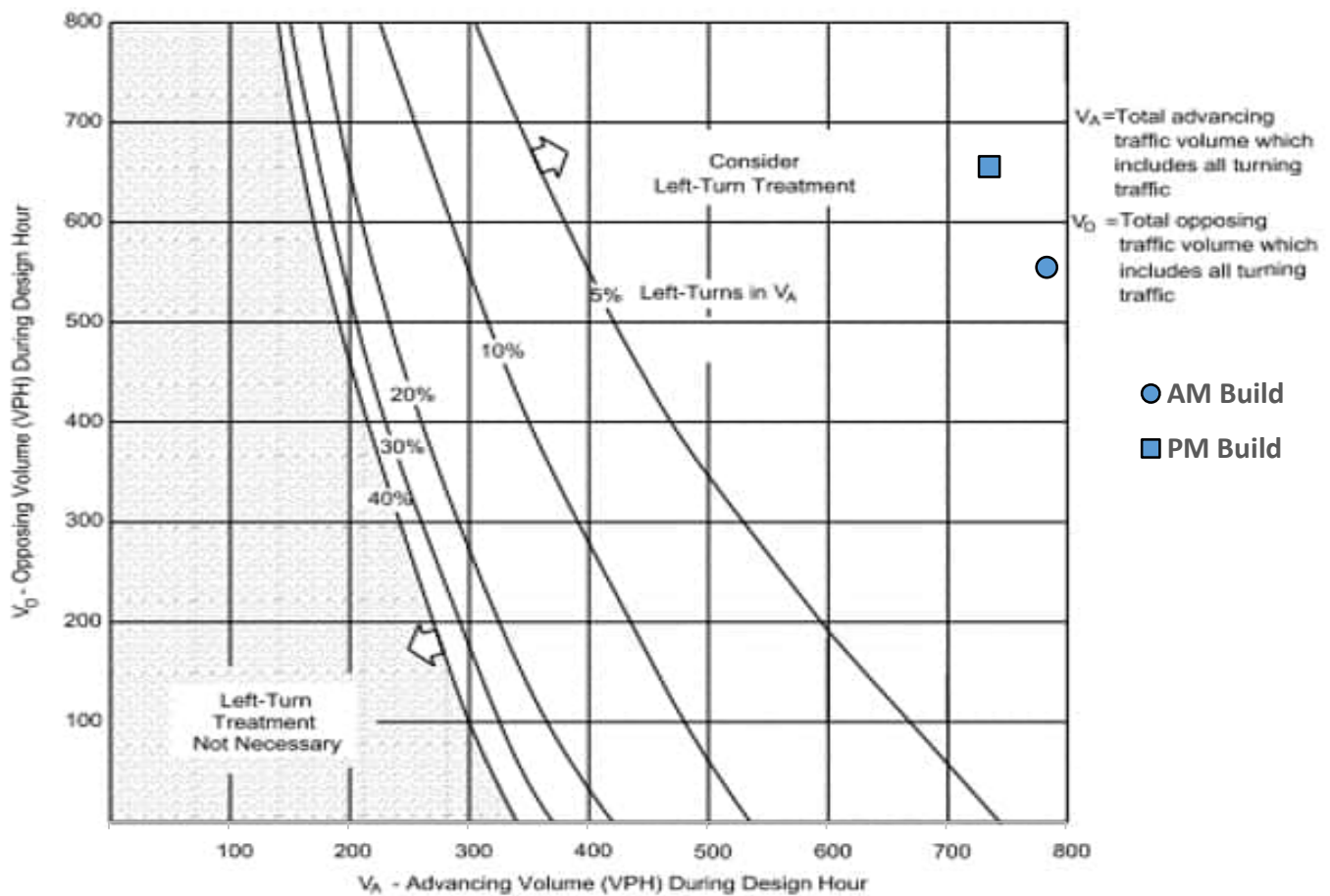
Turn Lane Analysis Worksheets

Barberville Road TIS
LEFT-TURN LANE WARRANT REVIEW

9.5-8

INTERSECTIONS

March 2017



VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (45 mph)
Figure 9.5-F

INTERSECTION: Barberville Road & Site Access

MOVEMENT: Northbound left turn

SCENARIO	Advancing Volume (V_a)	Northbound left turn	Opposing Volume (V_o)	Left Turn % of V_a	Symbol
AM Build	784	57	556	7.3%	●
PM Build	736	73	657	9.9%	■

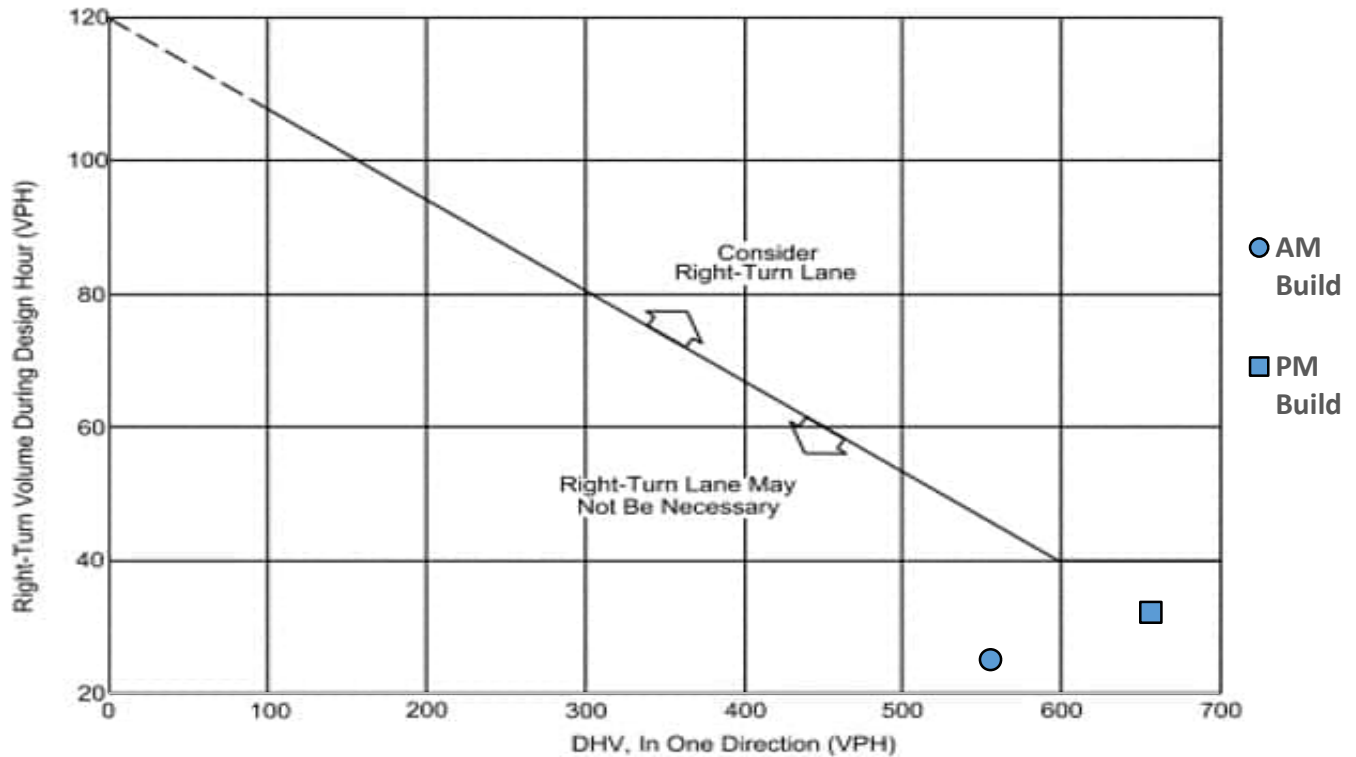
Moving forward.

Barberville Road TIS
RIGHT-TURN LANE WARRANT REVIEW

9.5-2

INTERSECTIONS

March 2017



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS
ON TWO-LANE HIGHWAYS**

Figure 9.5-A

INTERSECTION: Barberville Road & Site Access

MOVEMENT: Southbound right turn

SCENARIO	Design Hour Volume	Right Turn Volume	Symbol
AM Build	556	25	●
PM Build	657	32	■

Moving forward.

APPENDIX E

Capacity Analysis

2023 Existing Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2023 Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	525	759	0	0	565	120	0	0	0	124	0	261
Future Volume (veh/h)	525	759	0	0	565	120	0	0	0	124	0	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	571	825	0	0	614	130	0	0	0	135	0	284
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	540	1367	0	0	763	918	0	2	0	316	0	282
Arrive On Green	0.18	0.67	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.18	0.00	0.18
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Grp Volume(v), veh/h	571	825	0	0	614	130	0	0	0	135	0	284
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Q Serve(g_s), s	14.9	18.3	0.0	0.0	24.6	3.0	0.0	0.0	0.0	5.6	0.0	14.7
Cycle Q Clear(g_c), s	14.9	18.3	0.0	0.0	24.6	3.0	0.0	0.0	0.0	5.6	0.0	14.7
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	540	1367	0	0	763	918	0	2	0	316	0	282
V/C Ratio(X)	1.06	0.60	0.00	0.00	0.80	0.14	0.00	0.00	0.00	0.43	0.00	1.01
Avail Cap(c_a), veh/h	540	1697	0	0	1052	1162	0	470	0	316	0	282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.5	7.3	0.0	0.0	20.3	6.8	0.0	0.0	0.0	29.8	0.0	33.5
Incr Delay (d2), s/veh	54.9	0.3	0.0	0.0	2.8	0.1	0.0	0.0	0.0	0.9	0.0	55.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	5.4	0.0	0.0	9.4	1.3	0.0	0.0	0.0	2.3	0.0	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	7.6	0.0	0.0	23.1	6.9	0.0	0.0	0.0	30.7	0.0	89.3
LnGrp LOS	F	A	A	A	C	A	A	A	A	C	A	F
Approach Vol, veh/h	1396		744			0			419			
Approach Delay, s/veh	34.9		20.3			0.0			70.4			
Approach LOS	C		C			E						
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	61.7		0.0		20.0	41.7	20.0					
Change Period (Y+Rc), s	* 6.6		* 5.3		5.1	* 6.6	5.3					
Max Green Setting (Gmax), s	* 68		* 20		14.9	* 48	14.7					
Max Q Clear Time (g_c+l1), s	20.3		0.0		16.9	26.6	16.7					
Green Ext Time (p_c), s	21.2		0.0		0.0	8.5	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	36.5											
HCM 6th LOS	D											
Notes												

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	19	5	636	369	10
Future Vol, veh/h	31	19	5	636	369	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	21	5	691	401	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1108	407	412	0	-	0
Stage 1	407	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	232	644	1147	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	230	644	1147	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.4	0.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1147	-	304	-	-	
HCM Lane V/C Ratio	0.005	-	0.179	-	-	
HCM Control Delay (s)	8.2	0	19.4	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.6	-	-	

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2023 Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	785	0	0	695	202	1	0	0	366	0	145
Future Volume (veh/h)	312	785	0	0	695	202	1	0	0	366	0	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	339	853	0	0	755	220	1	0	0	398	0	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1335	0	0	843	950	4	0	0	275	0	245
Arrive On Green	0.13	0.66	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	339	853	0	0	755	220	1	0	0	398	0	158
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	9.7	23.3	0.0	0.0	36.5	5.9	0.1	0.0	0.0	14.7	0.0	8.9
Cycle Q Clear(g_c), s	9.7	23.3	0.0	0.0	36.5	5.9	0.1	0.0	0.0	14.7	0.0	8.9
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1335	0	0	843	950	4	0	0	275	0	245
V/C Ratio(X)	0.89	0.64	0.00	0.00	0.90	0.23	0.25	0.00	0.00	1.45	0.00	0.65
Avail Cap(c_a), veh/h	436	1474	0	0	914	1009	389	0	0	275	0	245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	9.5	0.0	0.0	22.6	7.5	46.9	0.0	0.0	39.7	0.0	37.3
Incr Delay (d2), s/veh	18.1	0.7	0.0	0.0	10.6	0.1	28.7	0.0	0.0	221.0	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	8.2	0.0	0.0	15.9	2.6	0.1	0.0	0.0	23.0	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	10.2	0.0	0.0	33.2	7.6	75.5	0.0	0.0	260.7	0.0	43.0
LnGrp LOS	D	B	A	A	C	A	E	A	A	F	A	D
Approach Vol, veh/h	1192			975			1			556		
Approach Delay, s/veh	19.2			27.4			75.5			198.9		
Approach LOS	B			C			E			F		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	68.6			5.5		17.3	51.3	20.0				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 68			* 20		14.9	* 48	14.7				
Max Q Clear Time (g_c+I1), s	25.3			2.1		11.7	38.5	16.7				
Green Ext Time (p_c), s	21.2			0.0		0.5	6.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	58.8											
HCM 6th LOS	E											
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	22	32	479	494	5
Future Vol, veh/h	10	22	32	479	494	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	24	35	521	537	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1131	540	542	0	-	0
Stage 1	540	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	225	542	1027	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	214	542	1027	-	-	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.9	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1027	-	366	-	-	
HCM Lane V/C Ratio	0.034	-	0.095	-	-	
HCM Control Delay (s)	8.6	0	15.9	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-	

2026 No-Build Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 No- Build AM

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Volume (veh/h)	573	821	0	0	633	159	0	0	0	167	0	361			
Future Volume (veh/h)	573	821	0	0	633	159	0	0	0	167	0	361			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No			No					
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847			
Adj Flow Rate, veh/h	623	892	0	0	688	173	0	0	0	182	0	392			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2			
Cap, veh/h	525	1341	0	0	672	929	0	2	0	421	0	374			
Arrive On Green	0.24	0.66	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.24	0.00	0.24			
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Grp Volume(v), veh/h	623	892	0	0	688	173	0	0	0	182	0	392			
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Q Serve(g_s), s	28.9	31.9	0.0	0.0	45.4	6.0	0.0	0.0	0.0	10.5	0.0	28.7			
Cycle Q Clear(g_c), s	28.9	31.9	0.0	0.0	45.4	6.0	0.0	0.0	0.0	10.5	0.0	28.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	525	1341	0	0	672	929	0	2	0	421	0	374			
V/C Ratio(X)	1.19	0.66	0.00	0.00	1.02	0.19	0.00	0.00	0.00	0.43	0.00	1.05			
Avail Cap(c_a), veh/h	525	1341	0	0	672	929	0	141	0	421	0	374			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.9	12.3	0.0	0.0	37.3	9.9	0.0	0.0	0.0	38.7	0.0	45.7			
Incr Delay (d2), s/veh	102.0	2.6	0.0	0.0	40.9	0.4	0.0	0.0	0.0	0.7	0.0	59.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	29.0	13.3	0.0	0.0	26.2	3.5	0.0	0.0	0.0	4.5	0.0	17.0			
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh	140.9	14.9	0.0	0.0	78.2	10.4	0.0	0.0	0.0	39.4	0.0	105.1			
LnGrp LOS	F	B	A	A	F	B	A	A	A	D	A	F			
Approach Vol, veh/h	1515			861			0			574					
Approach Delay, s/veh	66.7			64.6			0.0			84.3					
Approach LOS	E			E						F					
Timer - Assigned Phs	2			4		5	6	8							
Phs Duration (G+Y+Rc), s	86.0			34.0		34.0	52.0	0.0							
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3							
Max Green Setting (Gmax), s	* 65			* 29		28.9	* 31	8.7							
Max Q Clear Time (g_c+I1), s	33.9			30.7		30.9	47.4	0.0							
Green Ext Time (p_c), s	18.7			0.0		0.0	0.0	0.0							
Intersection Summary															
HCM 6th Ctrl Delay	69.5														
HCM 6th LOS	E														
Notes															

Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	5	722	511	10
Future Vol, veh/h	32	20	5	722	511	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	22	5	785	555	11

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1356	561	566
Stage 1	561	-	-
Stage 2	795	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	165	527	1006
Stage 1	571	-	-
Stage 2	445	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	164	527	1006
Mov Cap-2 Maneuver	164	-	-
Stage 1	566	-	-
Stage 2	445	-	-

Approach	EB	NB	SB
HCM Control Delay, s	26.5	0.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1006	-	223	-	-
HCM Lane V/C Ratio	0.005	-	0.253	-	-
HCM Control Delay (s)	8.6	0	26.5	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	1	-	-

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 No- Build PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	424	865	0	0	749	242	1	0	0	412	0	208
Future Volume (veh/h)	424	865	0	0	749	242	1	0	0	412	0	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	461	940	0	0	814	263	1	0	0	448	0	226
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1247	0	0	619	885	4	0	0	421	0	374
Arrive On Green	0.22	0.62	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	461	940	0	0	814	263	1	0	0	448	0	226
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	24.3	39.9	0.0	0.0	41.8	10.5	0.1	0.0	0.0	28.7	0.0	15.4
Cycle Q Clear(g_c), s	24.3	39.9	0.0	0.0	41.8	10.5	0.1	0.0	0.0	28.7	0.0	15.4
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	1247	0	0	619	885	4	0	0	421	0	374
V/C Ratio(X)	0.93	0.75	0.00	0.00	1.32	0.30	0.25	0.00	0.00	1.06	0.00	0.60
Avail Cap(c_a), veh/h	525	1247	0	0	619	885	135	0	0	421	0	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.5	16.6	0.0	0.0	39.1	12.4	59.8	0.0	0.0	45.7	0.0	40.6
Incr Delay (d2), s/veh	23.5	4.2	0.0	0.0	153.1	0.9	28.9	0.0	0.0	62.2	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	17.7	0.0	0.0	43.5	6.0	0.1	0.0	0.0	19.4	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	20.8	0.0	0.0	192.1	13.2	88.7	0.0	0.0	107.9	0.0	43.3
LnGrp LOS	E	C	A	A	F	B	F	A	A	F	A	D
Approach Vol, veh/h	1401					1077	1			674		
Approach Delay, s/veh	34.0					148.5	88.7			86.2		
Approach LOS	C					F	F			F		
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	80.4		34.0		32.0	48.4	5.6					
Change Period (Y+Rc), s	* 6.6		* 5.3		5.1	* 6.6	5.3					
Max Green Setting (Gmax), s	* 65		* 29		28.9	* 31	8.7					
Max Q Clear Time (g_c+I1), s	41.9		30.7		26.3	43.8	2.1					
Green Ext Time (p_c), s	16.2		0.0		0.6	0.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	84.3											
HCM 6th LOS	F											
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	33	630	603	5
Future Vol, veh/h	10	23	33	630	603	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	36	685	655	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1415	658	660	0	-	0
Stage 1	658	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	151	464	928	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	464	928	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.1	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	928	-	274	-	-	
HCM Lane V/C Ratio	0.039	-	0.131	-	-	
HCM Control Delay (s)	9	0	20.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	

2026 Build Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	582	782	0	0	582	140	0	0	0	140	0	300
Future Volume (veh/h)	582	782	0	0	582	140	0	0	0	140	0	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	633	850	0	0	633	152	0	0	0	152	0	326
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	520	1324	0	0	691	586	0	439	0	469	0	353
Arrive On Green	0.21	0.65	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.23	0.00	0.23
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Grp Volume(v), veh/h	633	850	0	0	633	152	0	0	0	152	0	326
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Q Serve(g_s), s	20.9	24.7	0.0	0.0	33.3	6.8	0.0	0.0	0.0	7.2	0.0	20.1
Cycle Q Clear(g_c), s	20.9	24.7	0.0	0.0	33.3	6.8	0.0	0.0	0.0	7.2	0.0	20.1
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	520	1324	0	0	691	586	0	439	0	469	0	353
V/C Ratio(X)	1.22	0.64	0.00	0.00	0.92	0.26	0.00	0.00	0.00	0.32	0.00	0.92
Avail Cap(c_a), veh/h	520	1366	0	0	728	617	0	439	0	478	0	360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.5	10.2	0.0	0.0	28.6	20.5	0.0	0.0	0.0	32.4	0.0	37.4
Incr Delay (d2), s/veh	114.0	0.9	0.0	0.0	15.7	0.2	0.0	0.0	0.0	0.4	0.0	28.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	28.2	9.1	0.0	0.0	16.0	2.3	0.0	0.0	0.0	3.0	0.0	10.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	142.4	11.1	0.0	0.0	44.2	20.6	0.0	0.0	0.0	32.8	0.0	66.1
LnGrp LOS	F	B	A	A	D	C	A	A	A	C	A	E
Approach Vol, veh/h	1483		785			0			478			
Approach Delay, s/veh	67.2		39.7			0.0			55.5			
Approach LOS	E		D			E						
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	71.0		27.6		26.0	45.0	27.6					
Change Period (Y+Rc), s	* 6.6		* 5.4		5.1	* 6.6	5.4					
Max Green Setting (Gmax), s	* 66		* 23		20.9	* 40	8.6					
Max Q Clear Time (g_c+I1), s	26.7		22.1		22.9	35.3	0.0					
Green Ext Time (p_c), s	20.2		0.1		0.0	3.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay			57.3									
HCM 6th LOS			E									
Notes												

Intersection

Int Delay, s/veh 1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	5	673	405	10
Future Vol, veh/h	32	20	5	673	405	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	22	5	732	440	11

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	1188	446	451
Stage 1	446	-	-
Stage 2	742	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	208	612	1109
Stage 1	645	-	-
Stage 2	471	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	206	612	1109
Mov Cap-2 Maneuver	206	-	-
Stage 1	640	-	-
Stage 2	471	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	0.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1109	-	277	-	-
HCM Lane V/C Ratio	0.005	-	0.204	-	-
HCM Control Delay (s)	8.3	0	21.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.7	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	43	57	714	527	25
Future Vol, veh/h	18	43	57	714	527	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	47	62	776	573	27
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1487	587	600	0	-	0
Stage 1	587	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	137	510	977	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	510	977	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.3	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	977	-	128	510	-	-
HCM Lane V/C Ratio	0.063	-	0.153	0.092	-	-
HCM Control Delay (s)	8.9	-	38.1	12.8	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	0.3	-	-

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Future Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	525	1247	0	0	590	860	4	0	0	421	0	374
Arrive On Green	0.24	0.62	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	28.3	39.9	0.0	0.0	39.8	12.0	0.1	0.0	0.0	28.7	0.0	20.7
Cycle Q Clear(g_c), s	28.3	39.9	0.0	0.0	39.8	12.0	0.1	0.0	0.0	28.7	0.0	20.7
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	525	1247	0	0	590	860	4	0	0	421	0	374
V/C Ratio(X)	0.99	0.75	0.00	0.00	1.38	0.33	0.25	0.00	0.00	1.12	0.00	0.77
Avail Cap(c_a), veh/h	525	1247	0	0	590	860	135	0	0	421	0	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	16.6	0.0	0.0	40.1	13.6	59.8	0.0	0.0	45.7	0.0	42.6
Incr Delay (d2), s/veh	35.7	4.2	0.0	0.0	181.7	1.0	28.9	0.0	0.0	82.3	0.0	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	17.7	0.0	0.0	46.2	6.8	0.1	0.0	0.0	21.8	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	20.8	0.0	0.0	221.7	14.6	88.7	0.0	0.0	127.9	0.0	52.2
LnGrp LOS	E	C	A	A	F	B	F	A	A	F	A	D
Approach Vol, veh/h	1458			1099			1			762		
Approach Delay, s/veh	39.6			168.0			88.7			99.2		
Approach LOS	D			F			F			F		
Timer - Assigned Phs	2			4			5			6		
Phs Duration (G+Y+Rc), s	80.4			34.0			34.0			46.4		
Change Period (Y+Rc), s	* 6.6			* 5.3			5.1			* 6.6		
Max Green Setting (Gmax), s	* 65			* 29			28.9			* 31		
Max Q Clear Time (g_c+I1), s	41.9			30.7			30.3			41.8		
Green Ext Time (p_c), s	16.2			0.0			0.0			0.0		
Intersection Summary												
HCM 6th Ctrl Delay			95.8									
HCM 6th LOS			F									
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	33	665	635	5
Future Vol, veh/h	10	23	33	665	635	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	36	723	690	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1488	693	695	0	-	0
Stage 1	693	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	137	443	901	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	443	901	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.5	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	901	-	254	-	-	
HCM Lane V/C Ratio	0.04	-	0.141	-	-	
HCM Control Delay (s)	9.2	0	21.5	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-	

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	81	73	663	625	32
Future Vol, veh/h	35	81	73	663	625	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	88	79	721	679	35
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1576	697	714	0	-	0
Stage 1	697	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	121	441	886	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	110	441	886	-	-	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	450	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	26.9	0.9		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	886	-	110	441	-	-
HCM Lane V/C Ratio	0.09	-	0.346	0.2	-	-
HCM Control Delay (s)	9.5	-	54.1	15.2	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.4	0.7	-	-

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build Improved AM

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Volume (veh/h)	614	821	0	0	633	175	0	0	0	179	0	392			
Future Volume (veh/h)	614	821	0	0	633	175	0	0	0	179	0	392			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No			No					
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847			
Adj Flow Rate, veh/h	667	892	0	0	688	190	0	0	0	195	0	426			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2			
Cap, veh/h	654	2452	0	0	1192	929	0	2	0	465	0	413			
Arrive On Green	0.24	0.64	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.26	0.00	0.26			
Sat Flow, veh/h	1931	3953	0	0	3463	1505	0	1949	0	1759	0	1565			
Grp Volume(v), veh/h	667	892	0	0	688	190	0	0	0	195	0	426			
Grp Sat Flow(s),veh/h/ln	1931	1926	0	0	1687	1505	0	1949	0	1759	0	1565			
Q Serve(g_s), s	28.9	13.1	0.0	0.0	19.9	6.6	0.0	0.0	0.0	11.0	0.0	31.7			
Cycle Q Clear(g_c), s	28.9	13.1	0.0	0.0	19.9	6.6	0.0	0.0	0.0	11.0	0.0	31.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	654	2452	0	0	1192	929	0	2	0	465	0	413			
V/C Ratio(X)	1.02	0.36	0.00	0.00	0.58	0.20	0.00	0.00	0.00	0.42	0.00	1.03			
Avail Cap(c_a), veh/h	654	2452	0	0	1192	929	0	141	0	465	0	413			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	25.7	10.3	0.0	0.0	31.5	10.0	0.0	0.0	0.0	36.5	0.0	44.2			
Incr Delay (d2), s/veh	40.5	0.4	0.0	0.0	2.0	0.5	0.0	0.0	0.0	0.6	0.0	52.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	16.6	5.1	0.0	0.0	8.1	4.0	0.0	0.0	0.0	4.7	0.0	17.9			
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh	66.2	10.7	0.0	0.0	33.6	10.5	0.0	0.0	0.0	37.1	0.0	96.4			
LnGrp LOS	F	B	A	A	C	B	A	A	A	D	A	F			
Approach Vol, veh/h	1559			878			0			621					
Approach Delay, s/veh	34.5			28.6			0.0			77.8					
Approach LOS	C			C						E					
Timer - Assigned Phs	2			4		5	6	8							
Phs Duration (G+Y+Rc), s	83.0			37.0		34.0	49.0	0.0							
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3							
Max Green Setting (Gmax), s	* 62			* 32		28.9	* 28	8.7							
Max Q Clear Time (g_c+I1), s	15.1			33.7		30.9	21.9	0.0							
Green Ext Time (p_c), s	20.1			0.0		0.0	3.8	0.0							
Intersection Summary															
HCM 6th Ctrl Delay	41.6														
HCM 6th LOS	D														
Notes															

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build Improved PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Future Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	551	2274	0	0	1098	887	4	0	0	465	0	413
Arrive On Green	0.22	0.59	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.26	0.00	0.26
Sat Flow, veh/h	1931	3953	0	0	3463	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Grp Sat Flow(s),veh/h/ln	1931	1926	0	0	1687	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	23.9	15.9	0.0	0.0	25.7	11.5	0.1	0.0	0.0	31.7	0.0	20.0
Cycle Q Clear(g_c), s	23.9	15.9	0.0	0.0	25.7	11.5	0.1	0.0	0.0	31.7	0.0	20.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	551	2274	0	0	1098	887	4	0	0	465	0	413
V/C Ratio(X)	0.94	0.41	0.00	0.00	0.74	0.32	0.25	0.00	0.00	1.02	0.00	0.70
Avail Cap(c_a), veh/h	587	2274	0	0	1098	887	135	0	0	465	0	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	13.3	0.0	0.0	36.0	12.5	59.8	0.0	0.0	44.2	0.0	39.8
Incr Delay (d2), s/veh	22.7	0.6	0.0	0.0	4.5	1.0	28.9	0.0	0.0	46.4	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.8	6.5	0.0	0.0	10.8	6.9	0.1	0.0	0.0	19.3	0.0	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	13.9	0.0	0.0	40.5	13.4	88.7	0.0	0.0	90.5	0.0	45.0
LnGrp LOS	D	B	A	A	D	B	F	A	A	F	A	D
Approach Vol, veh/h	1458				1099				1		762	
Approach Delay, s/veh	27.5				33.5				88.7		73.3	
Approach LOS	C				C				F		E	
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	77.4			37.0		31.8	45.6	5.6				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 62			* 32		28.9	* 28	8.7				
Max Q Clear Time (g_c+I1), s	17.9			33.7		25.9	27.7	2.1				
Green Ext Time (p_c), s	21.0			0.0		0.8	0.5	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			40.0									
HCM 6th LOS			D									
Notes												

Traffic Impact Analysis Review – Barberville Road Development

Technical Memorandum

1. Overview of Traffic Impact Analysis (TIA) Report

Ramey Kemp submitted a traffic impact analysis report for a mixed-use development fronting Barberville Road at SC 150 in Lancaster County. The report was labeled draft and not signed, and no Engineer on Record (EOR) was verified for this traffic study. Fort Mill Highway (SC 160) at Barberville Road/Stock Lane and Barberville Road at Harbor Bay Drive and one site access across from Fortson Road was analyzed in this report. The proposed access is approximately 670' north of Fort Mill Highway that lines up with Fortson Road. The site plan in the report showed a mixed use of three parcels that included a day care, strip retail, and small office building. However, there was a plat that was not included in the traffic study that showed eight parcels in addition to the existing cell tower on the property. The report contained existing, no-build, and build traffic volumes for all study locations and with good distribution among all points. There was background development traffic added to the final build models from other approved developments in the area. The analysis final year was determined to be 2026 in the report which is assumed build +1 year for Lancaster County UDO compliance since this is a small development.

2. Items of Interest in the TIA Report

The TIA document was redlined with marks highlighting discrepancies/interest items below (pages noted below reflect pdf pages and not report pages):

- Cover Page – No PE signature and no EOR labeled.
- Page 6 – Analysis year 2026 does not state that the build year is 2025 which could be assumed due to the small size of the development which could be completed next year.
- Page 8 – Site plan in study shows 3 parcels with existing cell tower which the analysis was done for. A plat received by Lancaster County shows 8 parcels.
- Page 9 – Traffic counts are a year old – study must have been delayed in submitting.
- Page 16 – Growth rate showed only 1% based on 3 years of SCDOT count station data. Should use 5 – 10 years to get a more accurate rate. However, a significant amount of background traffic was established based on previous approved developments.
- Page 70 – Should utilize Peak Hour Factor (PHF) from traffic counts and not Synchro defaults at PHF = .92. SCDOT default is PHF = .90.
- Page 70 - Volumes utilized in AM Build Synchro do not match AM Build volumes in Figure 8 in the report. Need to show additional reports to reflect Queuing southbound on Barberville Road at Fort Mill Highway. Micro analysis would be good to determine if queues could possibly reach the proposed access at build out.
- Page 73 – Major delay for WB traffic on Fort Mill Highway during PM peak which is also shown in the No-Build scenario.

3. Checklist Comments

An accompanying TIA checklist that reviews all submitted information for proper TIA submittal. Main items are the site plan and separate plat discrepancies. Site engineer needs to verify sight distance for access.

4. Recommendations/Action Items

Action items are as follows:

- If future development causes additional parcels to be developed other than those presented in this study; a new traffic impact study will be required.
- Verify sight distance for the access point.
- Traffic study needs to be reviewed and corrected by EOR and signed and stamped by the EOR.
- Conduct a queue analysis for the Barberville Road SB movement at Fort Hill Highway to determine any impediment to the proposed access.
- Install left turn lane on Barberville Road as recommended by extending the 3-lane section from Fort Mill Highway.

November 21, 2024

**Reference: Barberville Road Development – Lancaster County
Response to TIA Comments**

The following provides a response to TIA review comments received from the County on November 18, 2024, for the Barberville Road Development.

- 1. Analysis year 2026 does not state the build year is 2025. Which could be assumed due to the small size of the development which could be completed next year.**
 - The anticipated build year is 2025. Analysis year 2026 represents a 2025 build year +1, consistent with Lancaster UDO.
- 2. The site plan in study shows 3 parcels with existing cell tower which the analysis was done for. A plat received by Lancaster County shows 8 parcels.**
 - The updated site plan shows Parcels 1, 2, 3, and 8, with one (1) access point from Barberville Road serving the site. Additional parcels or modifications to access would warrant further discussion and potentially require an update to the traffic study.
- 3. Traffic counts are a year old.**
 - Acknowledged, the traffic counts were conducted when the study was originally completed. A series of delays in processing the application have led to a longer review period.
- 4. Should utilize Peak Hour Factor (PHF) from traffic counts and not Synchro defaults at PHF = .92. SCDOT default is PHF = .90.**
 - The peak hour factors were conservatively updated to the SCDOT default of 0.90.
- 5. Volumes utilized in AM build Synchro do not match AM Build volumes in figure 8 in the report. Need to show additional reports to reflect queueing southbound on Barberville Road at Fort Mill Highway.**
 - Volumes were corrected to match Figure 8 in the AM Build scenario. The queueing reports have been provided in the updated study for reference.
- 6. Major delay for the westbound traffic on Fort Mill Highway during PM peak which is also shown in the No-Build scenario.**
 - Acknowledged, the delays occur under future conditions both with and without the subject site. SCDOT has accepted the proposed left-turn lane improvement mitigates the subject properties potential future impacts at the site driveway and would not require further analysis.



Lancaster County
Planning Department
P. O. Box 1809
Lancaster, SC 29721
803.285.6005
planning@lancastercountysc.net

January 08, 2025

Greg Welsh
Oak Engineering
4929 Monroe Road
Charlotte, NC 28205

Project Number	20231869
Project Name	Barberville Commercial
Location	9901 & 9831 Barberville Road
Stage	Traffic Impact Analysis
Parcel(s)	0006-00-057.00
Status	Approved

Dear: Greg Welsh

We have completed our review. The comments listed on the attached report must be addressed with a response letter.

Once revised plans are received, they will be submitted to staff for review.

Please be aware that plans will not be routed for review without a response letter

Sincerely,

A handwritten signature in black ink that reads "Chanda Kirkland".

Chanda Kirkland, Development Service Coordinator
Lancaster County Government
101 N Main St
Lancaster, SC 29720
P: (803) 416-9390

Plan Review Comments

County Engineer - Stephen Blackwelder - 8035482406
sblackwelder@lanastercountysc.gov

Approved

Review Comments:

Lancaster County is approving this as proposed without the connection to Overlook at Barber Rock. The potential connection to Overlook at Barber Rock mentioned in the SCDOT comments is a concern for Lancaster County. This would require approval by the Planning Commission and has potential to cause a great deal of complaints from the residents there. If SCDOT is going to require this as a part of their encroachment permit process, we will need to have discussions with them and the development team.

Planning - Matthew Blaszyk - 803-285-6005
mblaszyk@lanastercountysc.gov

No Review Done

Review Comments:

Traffic Impact Analysis Review – Barberville Road Development

Technical Memorandum

1. Overview of Traffic Impact Analysis (TIA) Report

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Action items are as follows:

- If future development causes additional parcels to be developed other than those presented in this study; a new traffic impact study will be required.
- Verify sight distance for the access point.
- Traffic study needs to be reviewed and corrected by EOR and signed and stamped by the EOR.
- Conduct a queue analysis for the Barberville Road SB movement at Fort Hill Highway to determine any impediment to the proposed access.
- Install left turn lane on Barberville Road as recommended by extending the 3-lane section from Fort Mill Highway.

Project Name:

Barberville Road Mixed-Use Development

TIA Checklist

N/A	Yes	No	
☐	☐	☒	South Carolina PE Stamp and Signature on TIA/Plans
☐	☒	☐	Introduction and Executive Summary
☐	☒	☐	Study Area Descriptions and Roadway Classifications
☐	☒	☒	Analysis Period Correct
☐	☒	☐	Existing Traffic Operations
☐	☒	☐	Other projected transportation improvements in the study area
☐	☒	☐	Trip Generation Summary
☐	☒	☐	Trip Distribution and traffic assignment
☐	☒	☐	LOS Analysis: Background traffic growth and site build out
☐	☐	☒	Analysis of Sight Distance at Access Points *
☐	☒	☐	Identify need for Turn Lanes, Capacity and Storage Length
☒	☐	☐	Identify need for Signalization
☐	☒	☐	Identify Measures to Mitigate LOS deficiencies
☐	☒	☐	Vicinity Map
☐	☒	☒	Site Plan and Proposed Land Use**
☐	☒	☐	Existing Peak hour volumes (counts conducted within the last 12 months)
☐	☒	☐	Projected Background Peak Hour Volumes -
☐	☒	☐	Trip Distribution % Including Added Project Peak Hour Volumes
☐	☒	☒	Project Build-Out Volumes***
☐	☒	☐	Existing and Recommended Lane Configurations
☐	☒	☐	Intersection LOS (existing, background, build, mitigated)
☐	☒	☐	Unified Development Ordinance Section 6.8

Comments:

- * **Sight distance was noted to be verified by site engineer for access**
- ** **Site plan in study shows 3 parcels, a separate plat shows 8 parcels**
- *** **Discrepancy in Build Volumes between the Figure 8 and Synchro for AM Peak**

TRAFFIC IMPACT STUDY

for the

Barberville Road Development

Located in

Lancaster County, South Carolina

Prepared for

Moody Holdings & Development

Prepared by

Ramey Kemp Associates, Inc.

Moving forward.



June 2023
RKA Project #23126

TRAFFIC IMPACT STUDY

for the

Barberville Road Development

Located in

Lancaster County, South Carolina

Prepared for

Moody Holdings & Development
6201 Fairview Rd, Ste 200
Charlotte, North Carolina 28210

Prepared by

Ramey Kemp Associates, Inc.
1411 Gervais Street, Suite 150
Columbia, South Carolina 29201

Moving forward.



June 2023
RKA Project #23126

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- A) Traffic Scoping
- B) Traffic Count Data
- C) Traffic Volume Development Worksheets and ITE Trip Generation Worksheets
- D) Turn-Lane Analysis Worksheets
- E) Capacity Analysis

EXECUTIVE SUMMARY

A traffic impact study was conducted for the proposed Barberville Road development in accordance with SCDOT guidelines. The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should include one ingress and two egress lanes (50' storage) and should be designed to provide proper sight distances and meet SCDOT design criteria.

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately.

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. Raising the level of service on the Fort Mill Highway (SC 160) at Barberville Road to a LOS D would require additional eastbound and westbound through lanes along SC 160, along with signal timing optimization. TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions.

The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

1. INTRODUCTION

The purpose of this report is to document a traffic impact study for the proposed Barberville Road development in accordance with SCDOT guidelines. This report summarizes the procedures and findings of the traffic impact study. Traffic scoping documentation is provided in Appendix A.

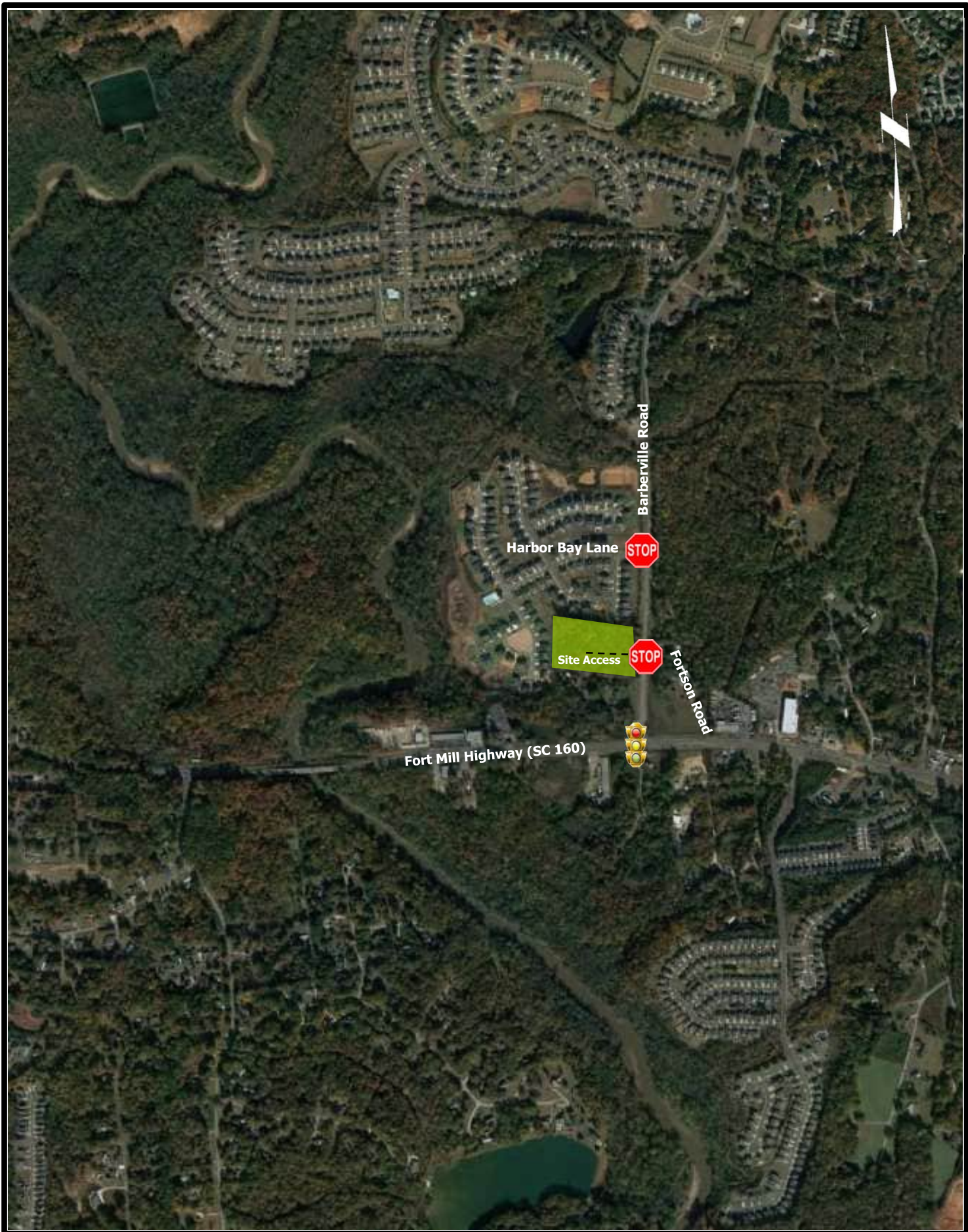
1.1. Project Background

The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/ daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

The traffic impact study considers the weekday AM peak period (between 7:00 AM and 9:00 AM) and the weekday PM peak period (between 4:00 PM and 6:00 PM) as the study time frames. The following intersections are studied:

- Fort Mill Highway (SC 160) & Barberville Road (S-29-42)/ Stock Lane
- Barberville Road (S-29-42) & Harbor Bay Drive
- Barberville Road (S-29-42) & Fortson Road /Site Access

Future-year analyses assume 2026 conditions as the Build scenario. Figure 1 shows the location of the project site, and Figure 2 illustrates the conceptual site plan.



Moving forward.



Barberville Road TIS - Traffic Impact Study

Figure 1 - Project Location Map



Dewberry
Engineering Inc.
10000
10000
10000
10000
10000

CONCEPT DRAWING
BARBERVILLE ROAD
DAYCARE

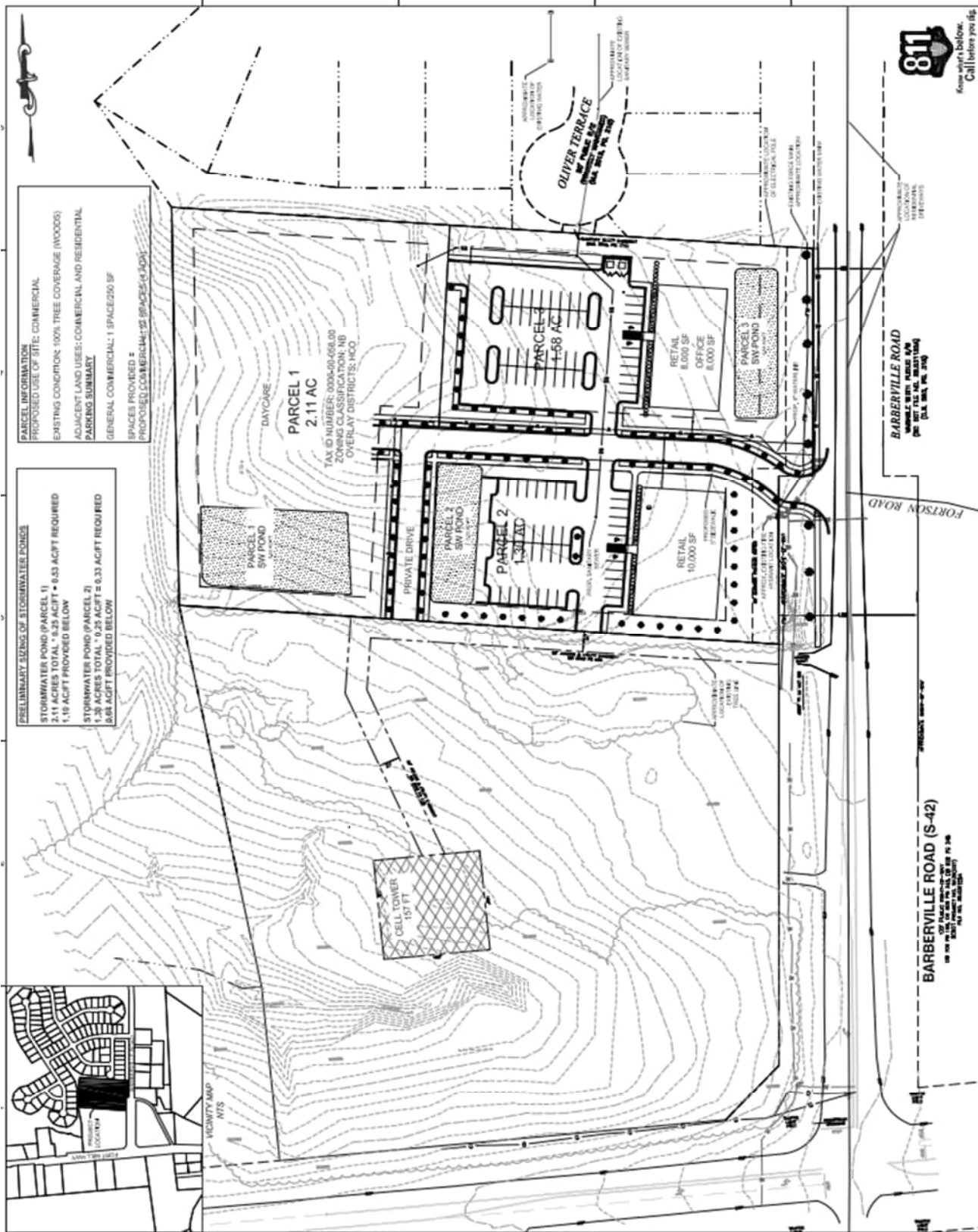
PRELIMINARY NOT
FOR CONSTRUCTION

SCALE: 1" = 40'

NO.	DATE	BY	DESCRIPTION
1	01/11/2011	ADP	ISSUED FOR PERMIT
2	01/11/2011	ADP	ISSUED FOR PERMIT
3	01/11/2011	ADP	ISSUED FOR PERMIT
4	01/11/2011	ADP	ISSUED FOR PERMIT
5	01/11/2011	ADP	ISSUED FOR PERMIT
6	01/11/2011	ADP	ISSUED FOR PERMIT
7	01/11/2011	ADP	ISSUED FOR PERMIT
8	01/11/2011	ADP	ISSUED FOR PERMIT
9	01/11/2011	ADP	ISSUED FOR PERMIT
10	01/11/2011	ADP	ISSUED FOR PERMIT

CONCEPTUAL
SITE PLAN

CSP-01



PARCEL INFORMATION
PROPOSED USE OF SITE: COMMERCIAL
EXISTING CONDITION: 100% TREE COVERAGE (WOODS)
ADJACENT LAND USES: COMMERCIAL AND RESIDENTIAL
PARKING SUMMARY
GENERAL COMMERCIAL: 1 SPACE/250 SF
SPACES PROVIDED: 2
PROPOSED COMMERCIAL: 55 SPACES/10 AC

PRELIMINARY SIZING OF STORMWATER PONDS
STORMWATER POND (PARCEL 1)
2.11 ACRES TOTAL * 0.25 ACFT * 6.33 ACFT REQUIRED
1.19 ACFT PROVIDED BELOW
STORMWATER POND (PARCEL 2)
1.31 ACRES TOTAL * 0.25 ACFT * 6.33 ACFT REQUIRED
0.81 ACFT PROVIDED BELOW



Barberville Road TIS - Traffic Impact Study

Figure 2 - Conceptual Site Plan

1.2. Existing Roadway Conditions

A review of the existing roadway conditions in the study area was conducted and is summarized in Table 1. Figure 3 illustrates the existing lane geometry.

Table 1 – Street Inventory

Facility Name	Route #	Typical Cross Section	Posted Speed Limit	Maintained By	2021 AADT
Fort Mill Highway	SC 160	3-lane undivided (TWLTL)	45 MPH	SCDOT	15,200 ¹
Barberville Road	S-29-42	2-lane undivided	40 MPH	SCDOT	7,900 ²
Stock Lane	N/A	2-lane undivided	N/P	Local	N/A
Harbor Bay Drive	N/A	2-lane undivided	N/P	Local	N/A
Fortson Road	N/A	2-lane undivided	N/P	Local	N/A

¹SCDOT Count Station 29-0163; ²SCDOT Count Station 29-0195

1.3. Existing Traffic Count

Vehicle turning movement counts were collected in May 2023 for the AM peak period (7:00 AM to 9:00 AM) and PM peak period (4:00 PM to 6:00 PM) at the following intersections:

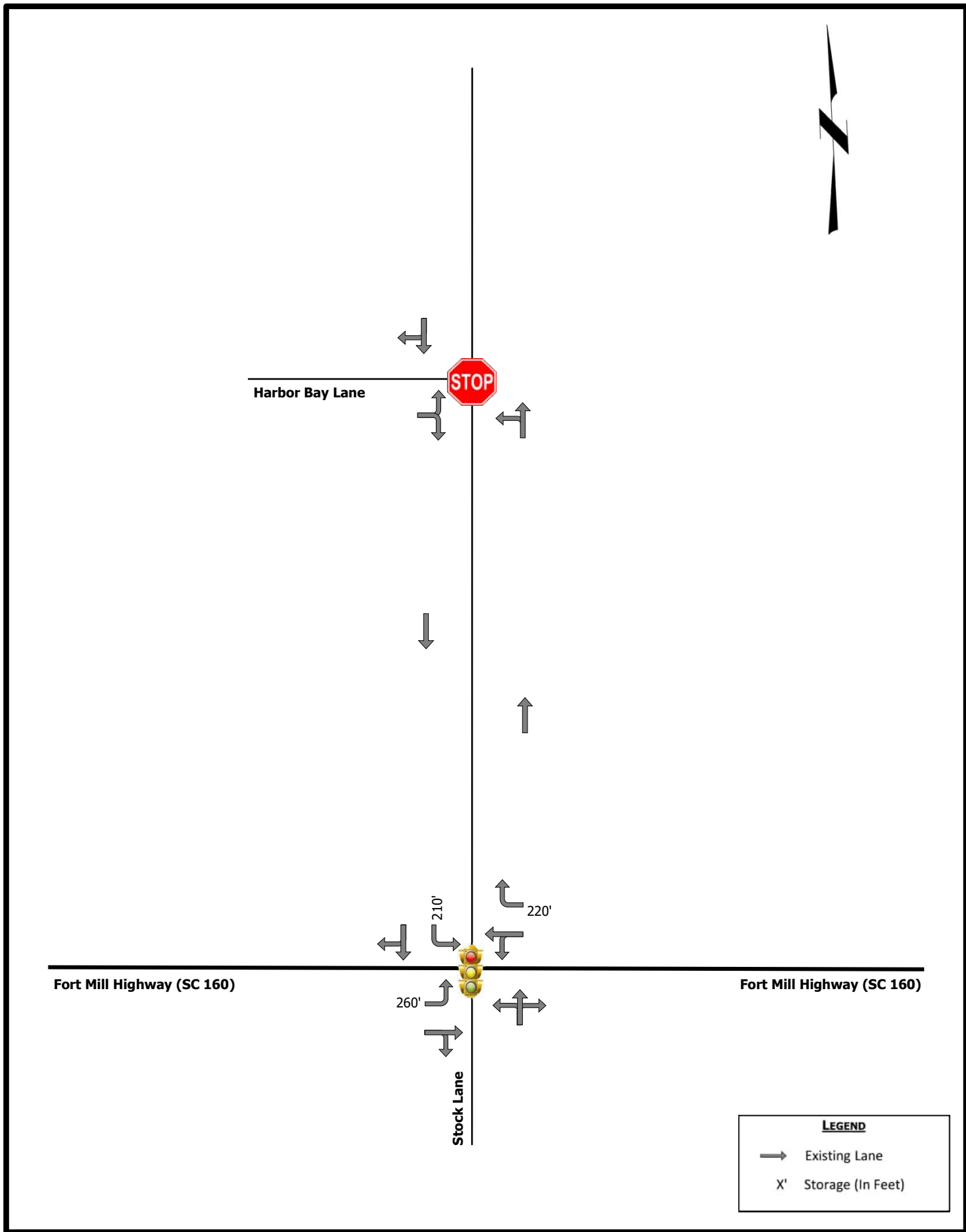
- Fort Mill Highway (SC 160) & Barberville Road (S-29-42)/ Stock Lane
- Barberville Road (S-29-42) & Harbor Bay Drive

All counts were conducted while the local school district was in session. The 2023 raw traffic volumes are provided in Appendix A. Existing traffic volumes are illustrated in Figure 4.

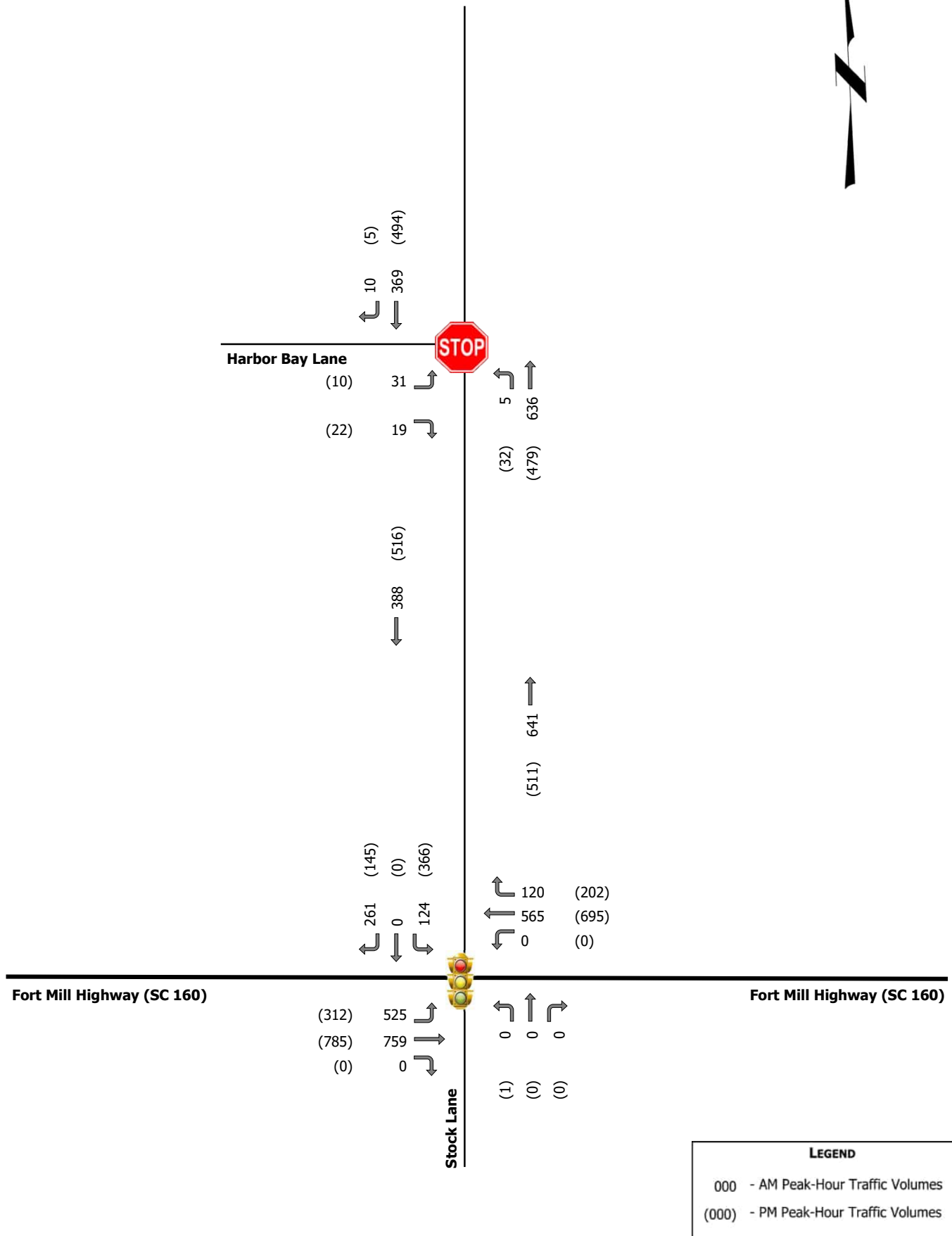
1.4. Driveway Location

The development is expected to provide one (1) full access driveway on Barberville Road. The proposed site Access is located approximately 670 feet north of Fort Mill Highway.

The proposed driveways appear to meet the SCDOT ARMS spacing requirements.



Moving forward.



2. PROJECT TRAFFIC

2.1. Proposed Land Uses

The Barberville Road development is proposed to contain a 120 student school/daycare center, with additional parcels that are envisioned to include approximately 18,000 SF of retail space and 8,000 SF of office space. The project site is currently vacant.

2.2. Trip Generation Estimates

The trip generation potential was estimated using information contained in ITE's *Trip Generation Manual*, 11th Edition (2021) for land use code (LUC) 565 – Day Care Center, (LUC) 822 Strip Retail Plaza and (LUC) 712 – Small Office Building . The trip generation estimates for the weekday daily, the weekday AM peak-hour of the adjacent street, and the weekday PM peak-hour of the adjacent street time periods are shown in Table 2.

Table 2 – Trip Generation Estimates

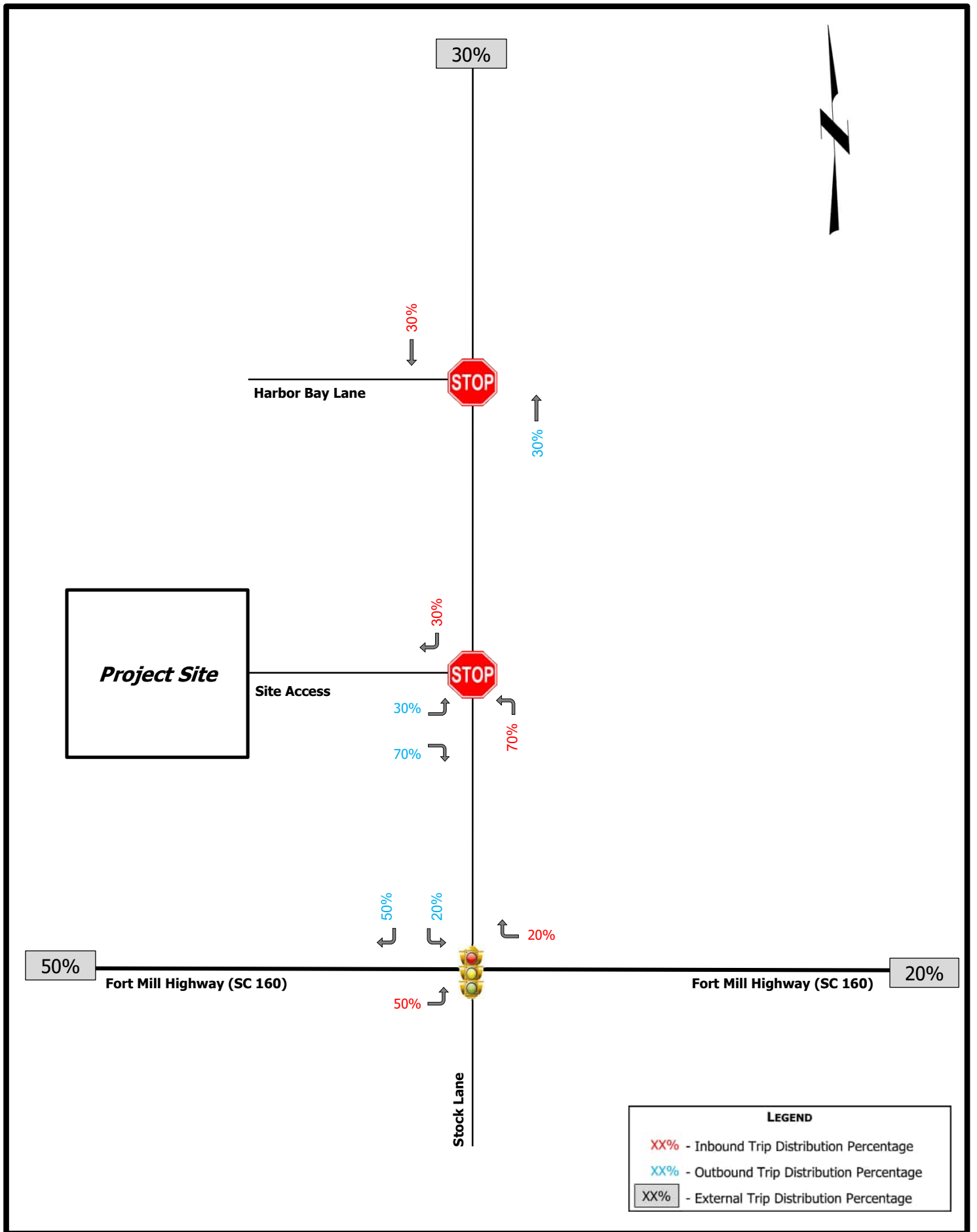
Land Use	ITE LUC	Size	Unit	Daily Traffic	AM Peak			PM Peak		
					Enter	Exit	Total	Enter	Exit	Total
Day Care Center	565	120	Student	474	46	42	88	40	46	86
Strip Retail Plaza	822	18	KSF	989	25	17	42	59	59	118
Small Office Building	712	8	KSF	115	11	2	13	6	11	17
Net New External Trips					82	61	143	105	116	221
LUC-565 Daily Trips: $T=3.56(X)+47.23$ (50% In; 50% Out) AM Peak Hour Trips: $T=0.66(X)+8.42$ (53% In; 47% Out) PM Peak Hour Trips: $\ln(T)=0.87 \ln(X)+0.29$ (47% In; 53% Out)										
LUC-822 Daily Trips: $T=42.20(X)+229.68$ (50% In; 50% Out) AM Peak Hour Trips: $\ln(T)=0.66 \ln(X)+1.84$ (60 In; 40% Out) PM Peak Hour Trips: $\ln(T)=0.71 \ln(X)+2.72$ (50% In; 50% Out)										
LUC-712 Daily Trips: $T=14.39(X)$ (50% In; 50% Out) AM Peak Hour Trips: $T=1.67(X)$ (82% In; 18% Out) PM Peak Hour Trips: $T=2.16(X)$ (34% In; 66% Out)										

2.3. Trip Distribution & Assignment

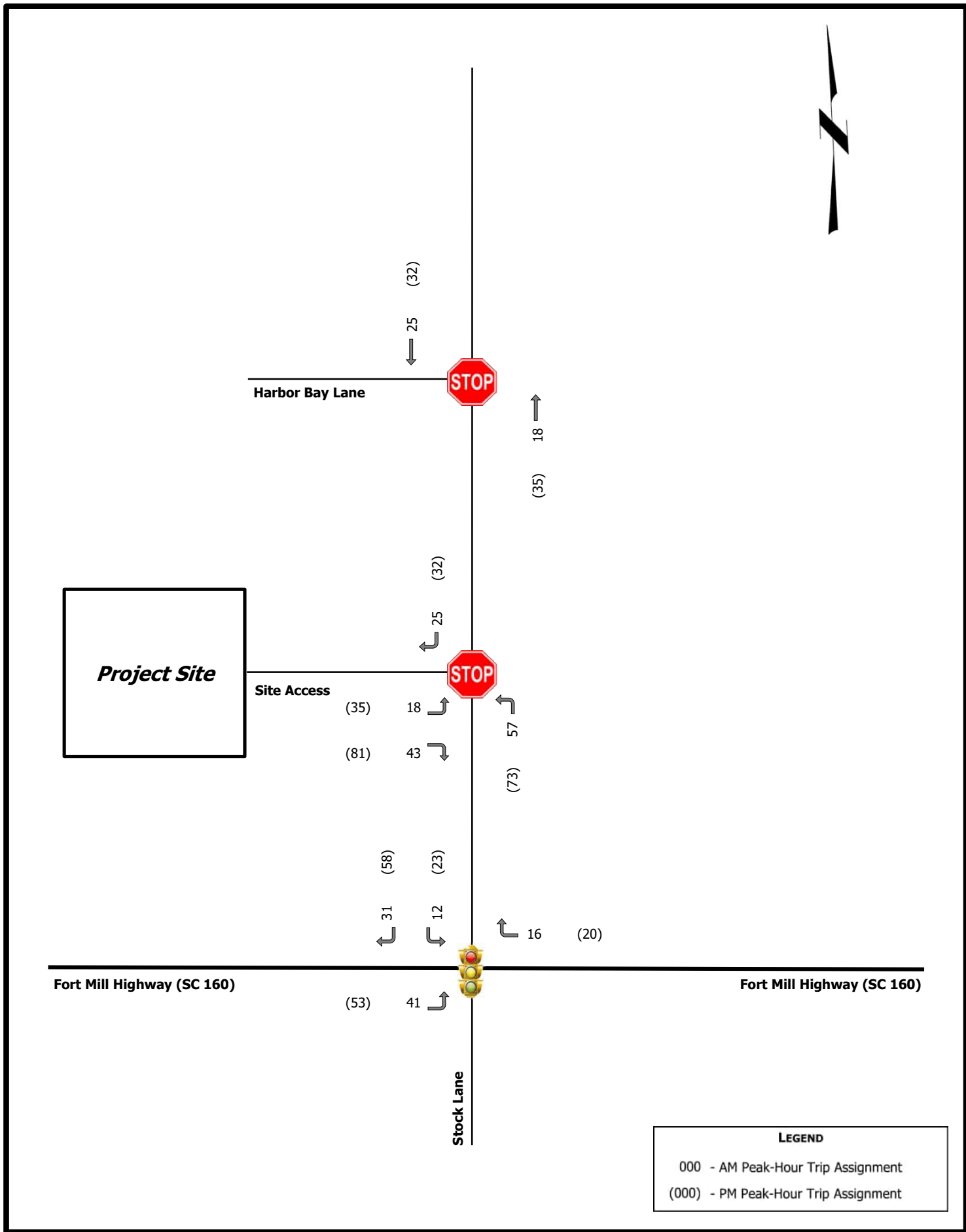
New external traffic expected to be generated was distributed and assigned to the roadway network based on the existing patterns and surrounding land uses. The general distribution of new external project trips was assumed to be:

- 70% to/from the south via Barberville Road and
- 30% to/from the north via Barberville Road

The directional distribution assumptions are shown in Figure 5. The assignment of the project traffic is shown in Figure 6.



Moving forward.



Moving forward.

3. TRAFFIC VOLUME DEVELOPMENT

3.1. Future No-Build Traffic Volumes

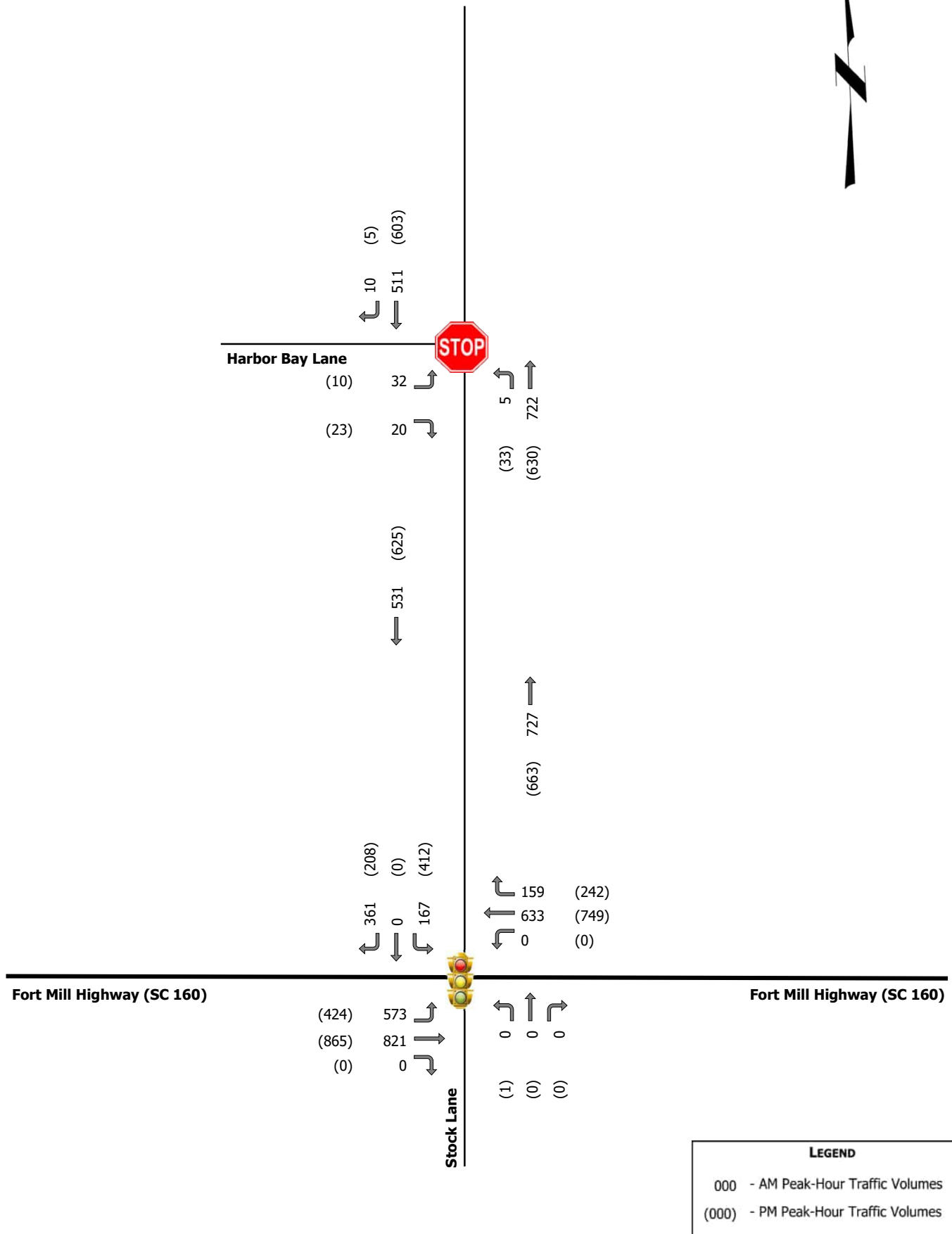
To develop an annual background growth rate for use in the analysis, count data was reviewed from the years 2017 to 2020 at SCDOT Count Station 29-0163 and 29-195. Reviewing the historic growth and observing the growth pattern in the surrounding area, a 1.0% annual growth was adopted for this study. This annual growth rate was utilized to develop the 2026 No-Build traffic volumes.

Several vested developments were considered for the study area. Site traffic from the Lodges at Indian Land, Harrisburg Road Residential (Sugar Creek), Redwood Apartments, Pettus Pond, Patterson Preserve and Patterson Lane Apartments were included in the vested trips. The vested projects include a total of 2,014 residential units expected to be completed before the Barberville Road development build out. None of the Traffic Impact Studies for these developments recommended any improvements to the Fort Mill Highway (SC 160) at Barberville Road.

The site trips from the vested developments are provided in Appendix A. The 2026 No-Build volumes are illustrated in Figure 7.

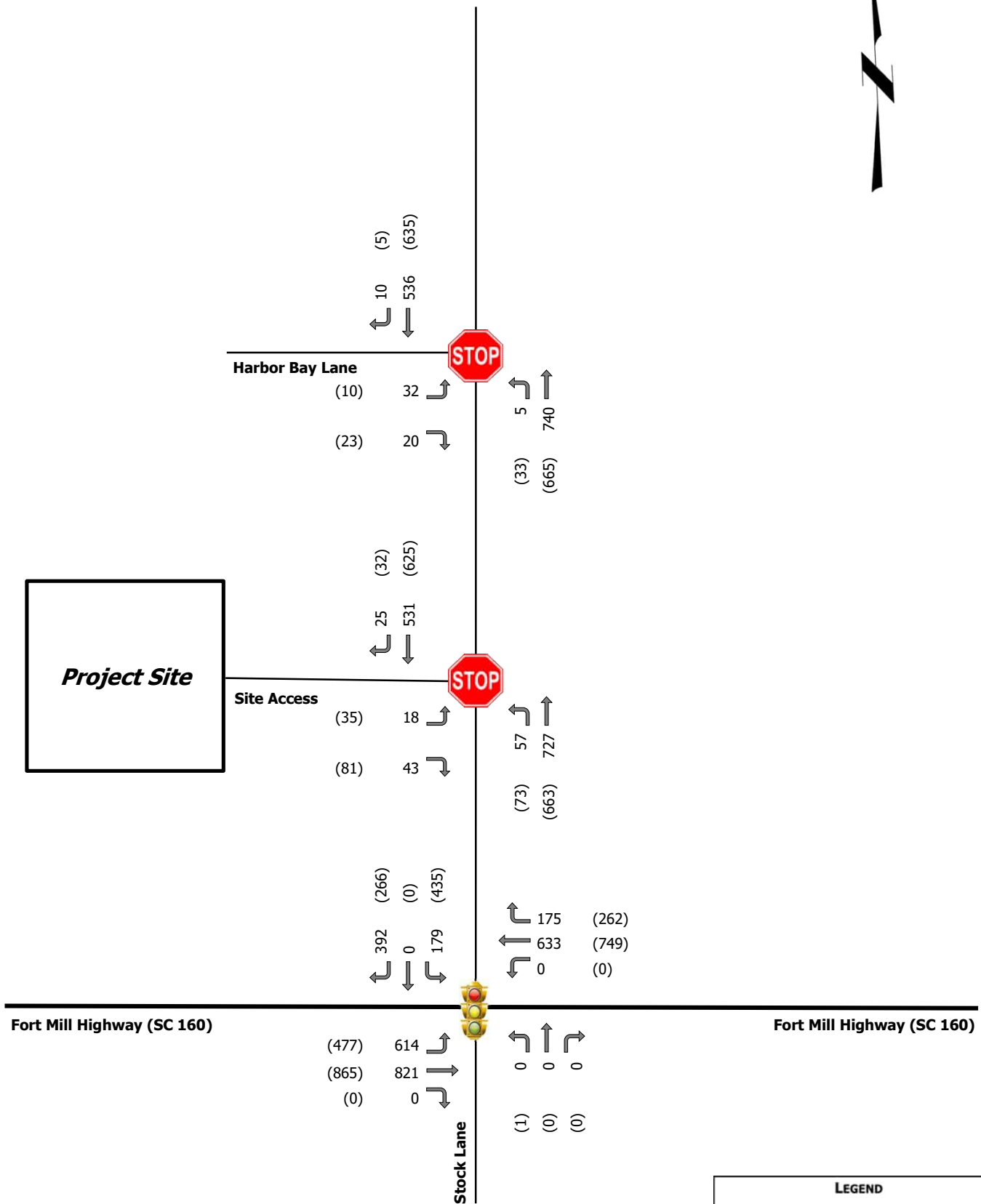
3.2. Build Out Traffic Volumes

The site generated traffic volumes were added to the 2026 No-Build traffic volumes to determine the 2026 Build volumes. The 2026 Build volumes are illustrated in Figure 8. Volume development worksheets are included in Appendix B.



Moving forward.





4. TRAFFIC IMPACT ANALYSIS

4.1. Turn-Lane Analysis

Auxiliary turn-lane analyses were conducted using the 2026 Build volumes. Turn-lane analyses were considered based on the SCDOT Roadway Design Manual (RDM) Section 9.5.1.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should be designed to provide proper sight distances and meet SCDOT design criteria.

Turn-lane analyses are provided in Appendix D.

4.2. Intersection LOS Analysis

Intersection analyses were conducted for the study intersections considering 2023 Existing conditions, 2026 No-Build conditions, and 2026 Build conditions. This analysis was conducted using the Transportation Research Board's *Highway Capacity Manual 6th Edition (HCM 6th Edition)* methodologies of the *Synchro*, Version 11 software.

Intersection level of service (LOS) grades range from LOS A to LOS F, which are directly related to the level of control delay at the intersection and characterize the operational conditions of the intersection traffic flow. LOS A operations typically represent ideal, free-flow conditions where vehicles experience little to no delays, and LOS F operations typically represent poor, forced-flow (bumper-to-bumper) conditions with high vehicular delays and are generally considered undesirable. Table 3 summarizes the *HCM 6th Edition* control delay thresholds associated with each LOS grade for unsignalized and signalized intersections.

Table 3 – HCM 6th Edition LOS Criteria for Unsignalized and Signalized Intersections

Unsignalized Intersections		Signalized Intersections	
LOS	Control Delay per Vehicle (seconds)	LOS	Control Delay per Vehicle (seconds)
A	≤ 10	A	≤ 10
B	> 10 and ≤ 15	B	> 10 and ≤ 20
C	> 15 and ≤ 25	C	> 20 and ≤ 35
D	> 25 and ≤ 35	D	> 35 and ≤ 55
E	> 35 and ≤ 50	E	> 55 and ≤ 80
F	> 50	F	> 80

As part of the intersection analysis, SCDOT's default *Synchro* parameters were utilized. A constant PHF of 0.92 was applied for future year analysis. Existing heavy vehicle percentages were utilized for all analysis scenarios, with a minimum percentage of 2% considered.

Using the *Synchro* software, intersection analyses were conducted for the weekday AM peak-hour and weekday PM peak-hour time periods. A 150-foot storage northbound left turn lane was analyzed in the build conditions at the site access. The results of the intersection analyses are summarized in Table 4.

Table 4 - Unsignalized and Signalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)					
		2023 Existing Conditions		2026 No-Build Conditions		2026 Build Conditions	
		AM	PM	AM	PM	AM	PM
Fort Mill Highway (SC 160) & Barberville Road (Signalized)	EB	C/34.9	C/19.2	E/66.7	C/34.0	E/76.3	D/39.6
	WB	C/20.3	C/27.4	E/64.6	F/148.5	D/51.9	F/168.0
	NB	A/0.0	E/75.5	A/0.0	F/88.7	A/0.0	F/88.7
	SB	E/70.4	F/198.9	F/84.3	F/86.2	F/105.8	F/99.2
	Overall	D/36.5	E/58.8	E/69.5	F/84.3	E/75.7	F/95.8
Barberville Road & Harbor Bay Drive (Unsignalized)	EB ¹	C/19.4	C/15.9	C/26.5	C/20.1	D/27.8	C/21.5
	NB ²	A/8.2	A/8.6	A/8.6	A/9.0	A/8.7	A/9.2
Barberville Road & Site Access (Unsignalized)	EB	--	--	--	--	C/20.3	D/26.9
	NB ²	--	--	--	--	A/8.9	A/9.5

¹LOS for major street left-turn movement; ²LOS for minor street approach

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately. The site access should include one ingress and two egress lanes (50' storage).

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E, and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. To raise the level of service on the Fort Mill

Highway (SC 160) at Barberville Road to a LOS D, additional eastbound and westbound through lanes along SC 160 would be required, along with signal timing optimization.

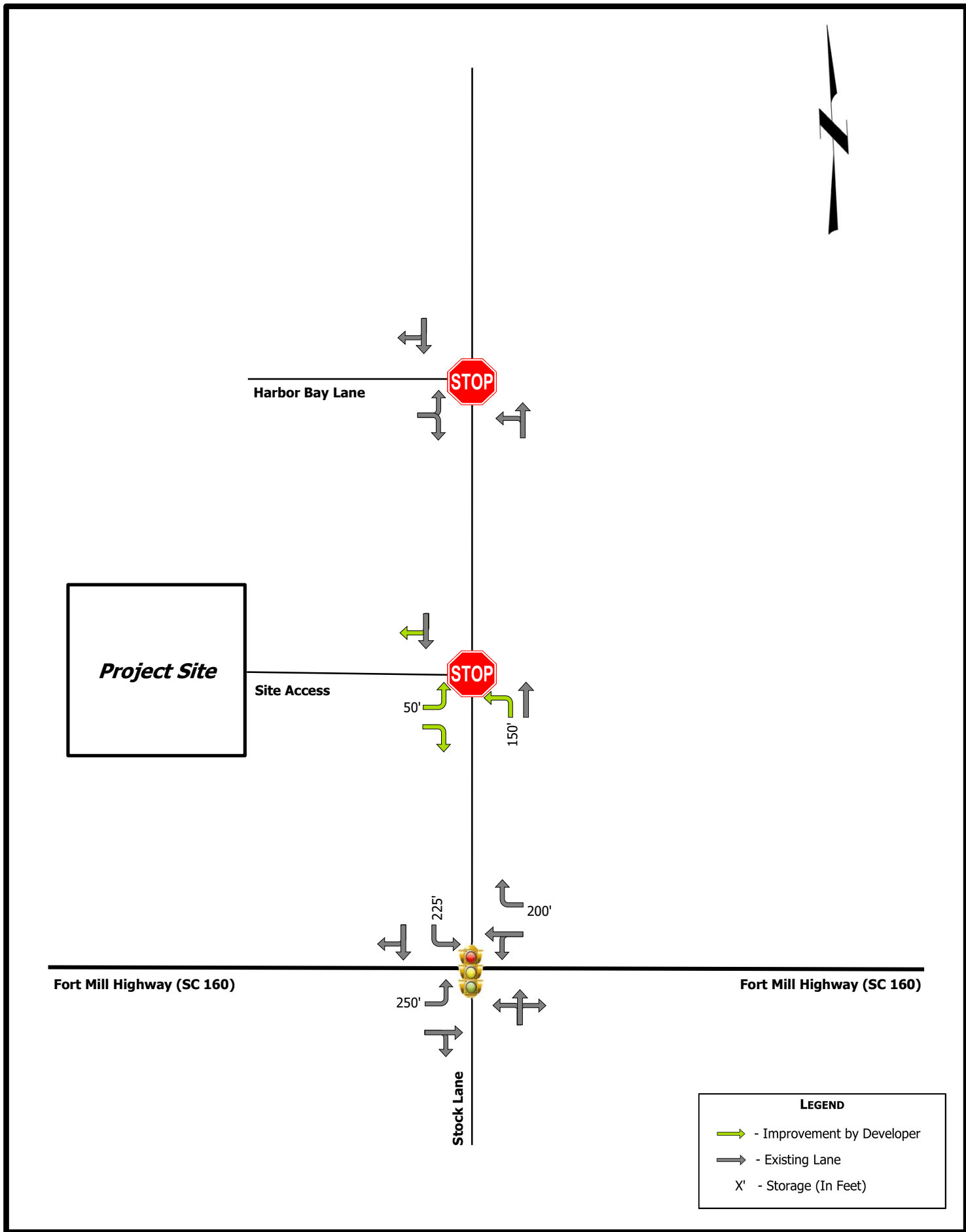
TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions. The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

If SC 160 were widened to provide a four-lane section, the LOS would be as shown in Table 5.

Table 5 - Unsignalized and Signalized Intersection Analysis Results

Intersection	Approach	LOS/Delay (seconds)	
		2026 Build Improved Conditions	
		AM	PM
Fort Mill Highway (SC 160) & Barberville Road (Signalized)	EB	C/34.5	C/27.5
	WB	C/28.6	C/33.5
	NB	A/0.0	F/88.7
	SB	E/77.8	E/73.3
	<i>Overall</i>	<i>D/41.6</i>	<i>D/40.0</i>

Figure 9 shows the recommended lane configuration for the Build (2026) condition. A capacity analysis summary is provided in Appendix D.



Moving forward.

5. SUMMARY OF FINDINGS AND RECOMMENDATIONS

A traffic impact study was conducted for the proposed Barberville Road development in accordance with SCDOT guidelines. The development is located west of Barberville Road (S-29-42) and north of SC 160 in Lancaster County, South Carolina. The development is proposed to consist of a roughly 120 student school/daycare center, 18,000 SF of retail space and 8,000 SF of office space. The site will have one access on Barberville Road, with internal connections to adjacent parcels.

Based on the anticipated build out volumes, a northbound left turn lane is warranted and recommended on Barberville Road at the access point. An auxiliary southbound right turn lane is not warranted. The site access should include one ingress and two egress lanes (50' storage) and should be designed to provide proper sight distances and meet SCDOT design criteria.

With construction of the project, Barberville Road & Harbor Bay Drive should continue to function adequately.

The intersection of Fort Mill Highway (SC 160) at Barberville Road expected to experience delays with or without the development. Lancaster County guidelines specify that if the LOS on a principal arterial is below LOS D, then the TIS "shall identify those improvements required to ensure that development related traffic demands result in no net reduction in LOS, and identify additional improvements needed to raise the level of service on the applicable street to the adopted LOS standard."

The signalized Fort Mill Highway & Barberville Road intersection currently operates as an LOS E. and is expected to reach LOS F in the No Build conditions. Auxiliary turn lanes are already present on SC 160 and on southbound Barberville Road. Raising the level of service on the Fort Mill Highway (SC 160) at Barberville Road to a LOS D would require additional eastbound and westbound through lanes along SC 160, along with signal timing optimization. TIS's for the background developments (2,000+ residential units) did not recommend widening SC 160 as part of the background conditions.

The proposed development should not add significant amounts of traffic to the area. No additional improvements to the area roadways are recommended as part of this development.

APPENDIX A

Traffic Scoping

Tahera Anjuman

From: Love, Allison C. <LoveAC@scdot.org>
Sent: Wednesday, March 29, 2023 12:43 PM
To: Tahera Anjuman
Cc: Gamble, David D.; Stephen Blackwelder
Subject: RE: Traffic Scoping for SC 160 and Barberville Road TIS Development

Good afternoon, Tahera.

I agree with the times for traffic counts. Please make sure they are recorded while school is in regular session, and not while school is out for spring break.

Please include these study intersections:

- Harbor Bay Drive/Barberville Road
- Site Access/Fortson Road
- Barberville Road/SC Highway 160/Stock Lane

Lancaster County staff can tell you about any developments in the area that have received site plan or preliminary plat approval, but have not been built.

It looks like the road into the adjacent subdivision to the north was stubbed as a cul-de-sac for connectivity between the neighborhood and this parcel. If that is the case, then the Department would support that connection, as the proposed commercial uses could be patronized by the residents without adding turn movements onto Barberville Road.

Thank you,
Allison

From: Tahera Anjuman <tanjuman@rameykemp.com>
Sent: Friday, March 24, 2023 9:11 AM
To: Love, Allison C. <LoveAC@scdot.org>
Subject: Traffic Scoping for SC 160 and Barberville Road TIS Development

*** This is an EXTERNAL email. Please do not click on a link or open any attachments unless you are confident it is from a trusted source. ***

Good Morning Allison,

I hope you are doing well. We have a request for a proposal near SC 160 and Barberville Road in Lancaster County. Please see attached site plan. The development is proposed to consist of a roughly 120 student school/daycare Center, with additional parcels that are envisioned to include approximately 18,000 SF of retail space and 8,000 SF of office space. I am assuming the following traffic count for the project between 7-9AM and 4-6PM should be sufficient. Please let me know your thoughts and what vested developments you would like us to consider for this project. If you have any other considerations or concerns, please do let me know. I appreciate your guidance.

- SC 160 & Barberville Road (S-29-42)

Thanks,

Tahera Anjuman

From: Chanda Kirkland <CKirkland@lancastersc.net>
Sent: Friday, May 19, 2023 1:05 PM
To: Tahera Anjuman
Cc: Stephen Blackwelder
Subject: RE: Traffic Scoping for SC 160 and Barberville Road TIS Development

You don't often get email from ckirkland@lancastersc.net. [Learn why this is important](#)

Good Morning Anjuman,

Below are vested projects that may need to be included in the study.

1. The Lodges Development consisting of multi-family apartments, townhomes and cottages.
2. Sugar Creek
3. Redwood
4. Pettus Pond
5. Patterson Preserve
6. Tapestry Patterson Lane Apartments

You can use our online project portal to search the above projects to hopefully get the information you need if no the engineer contact information is also listed. Hope this information helps.

Chanda



Chanda Kirkland, Development Service
Coordinator
Building
Lancaster County Government
PO Box 1809
101 N Main St
Lancaster, SC 29720
P: (803) 416-9390 F: (877) 636-3035
CKirkland@lancastersc.net

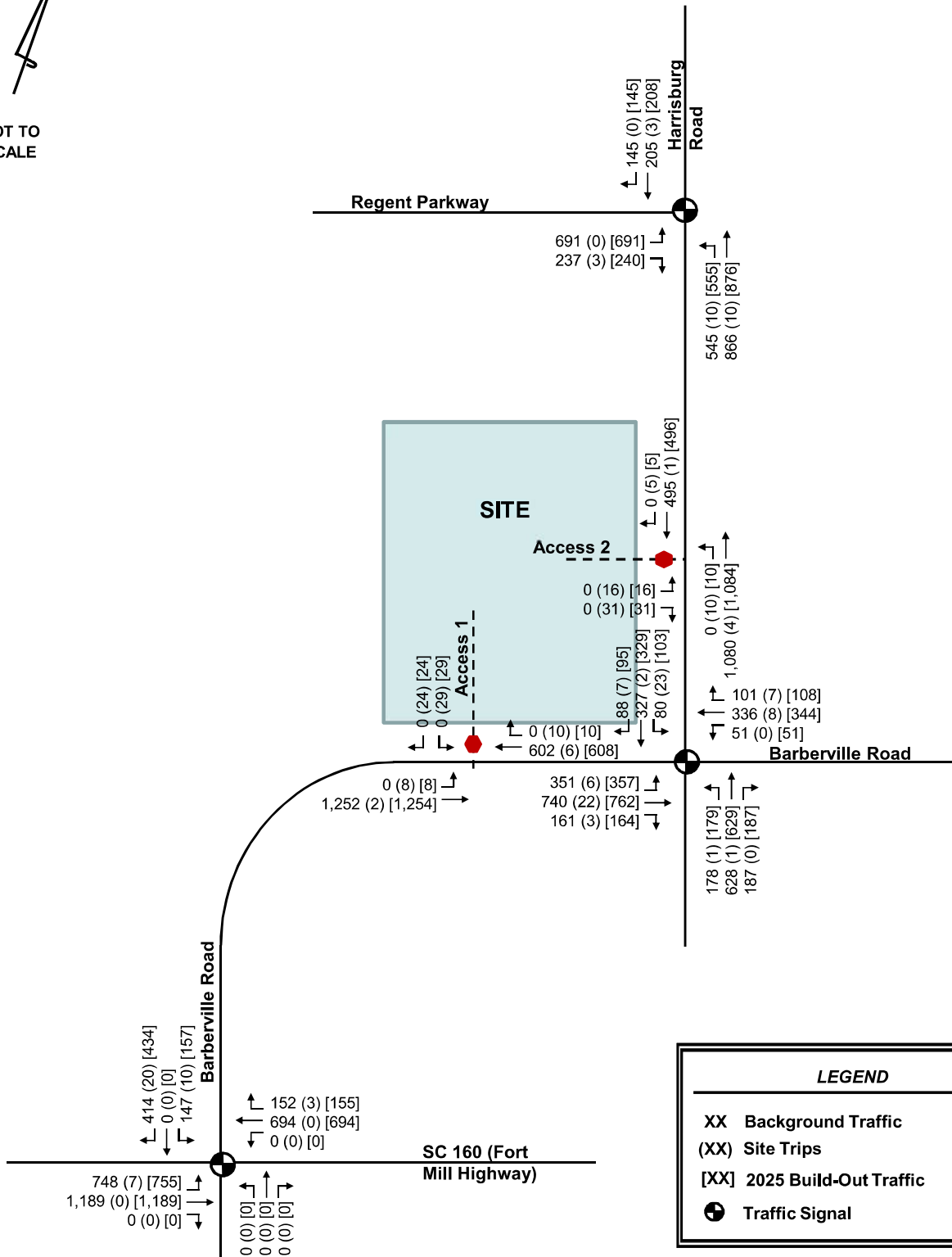
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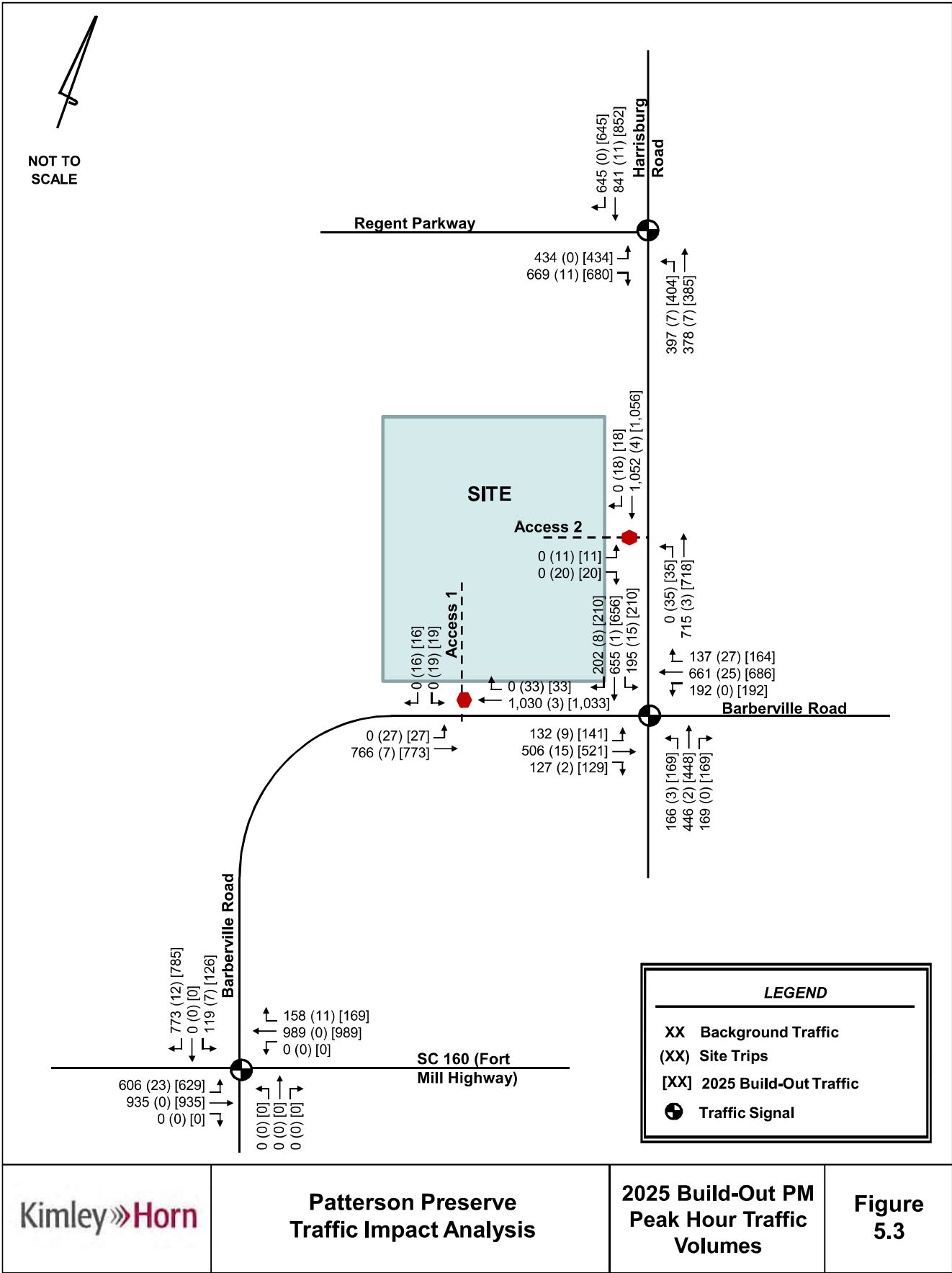
NOTICE: All email correspondence to and from this address may be subject to public disclosure under the SC Freedom of Information Act.

From: Stephen Blackwelder <sblackwelder@lancastersc.net>
Sent: Thursday, May 18, 2023 1:55 PM
To: Chanda Kirkland <CKirkland@lancastersc.net>
Subject: FW: Traffic Scoping for SC 160 and Barberville Road TIS Development



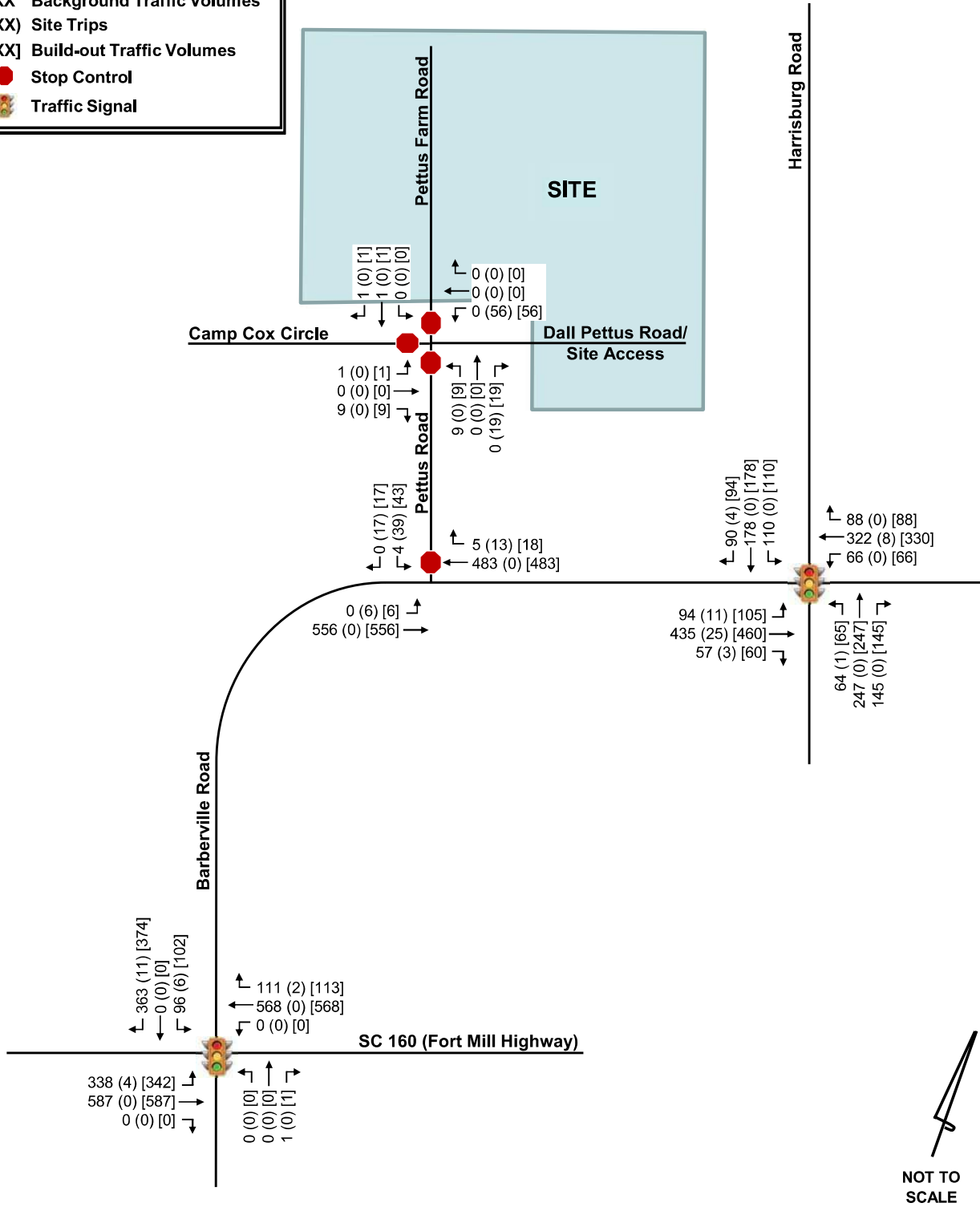
NOT TO
SCALE





LEGEND

- XX Background Traffic Volumes
- (XX) Site Trips
- [XX] Build-out Traffic Volumes
- Stop Control
- Traffic Signal



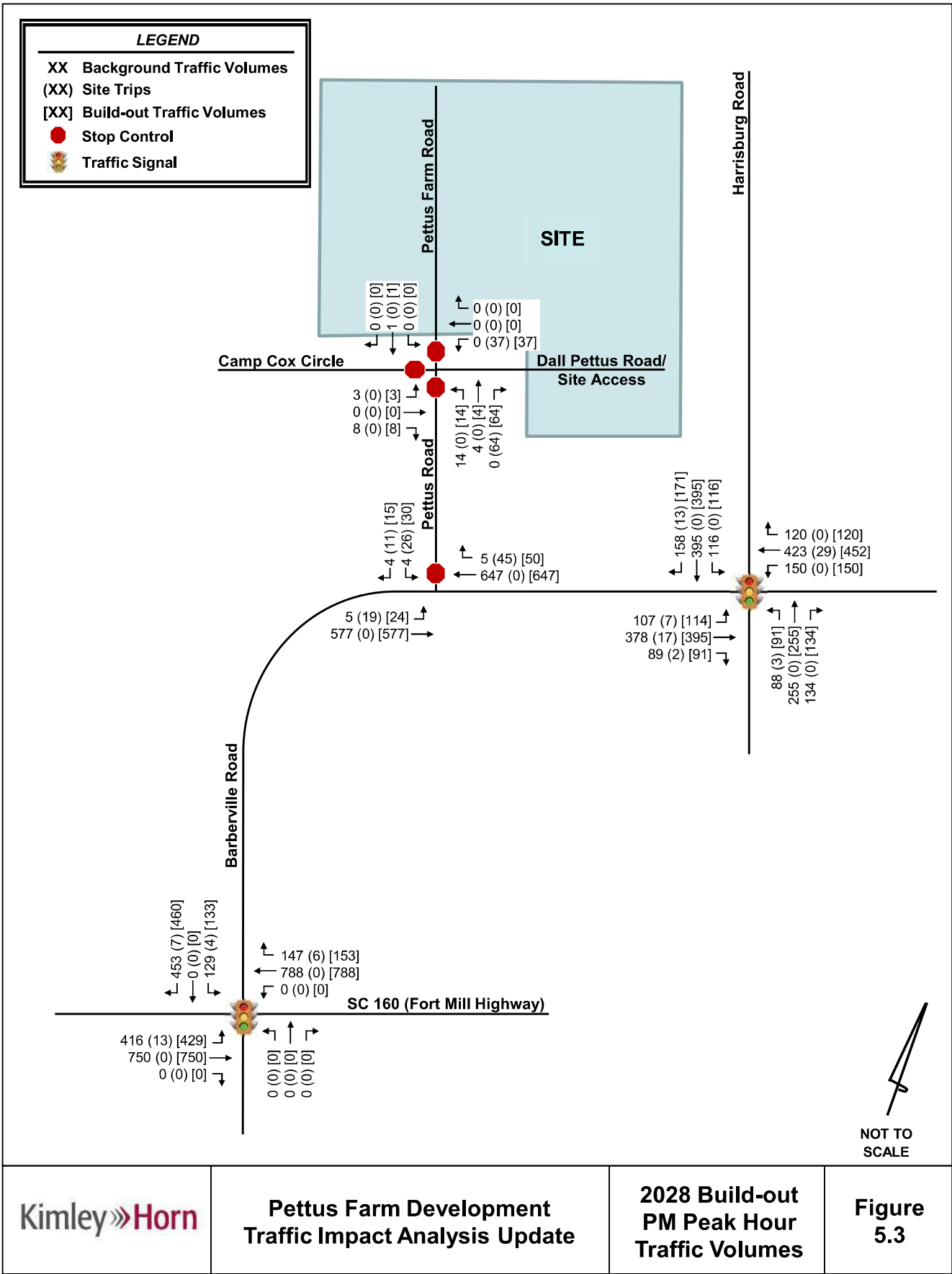
NOT TO SCALE

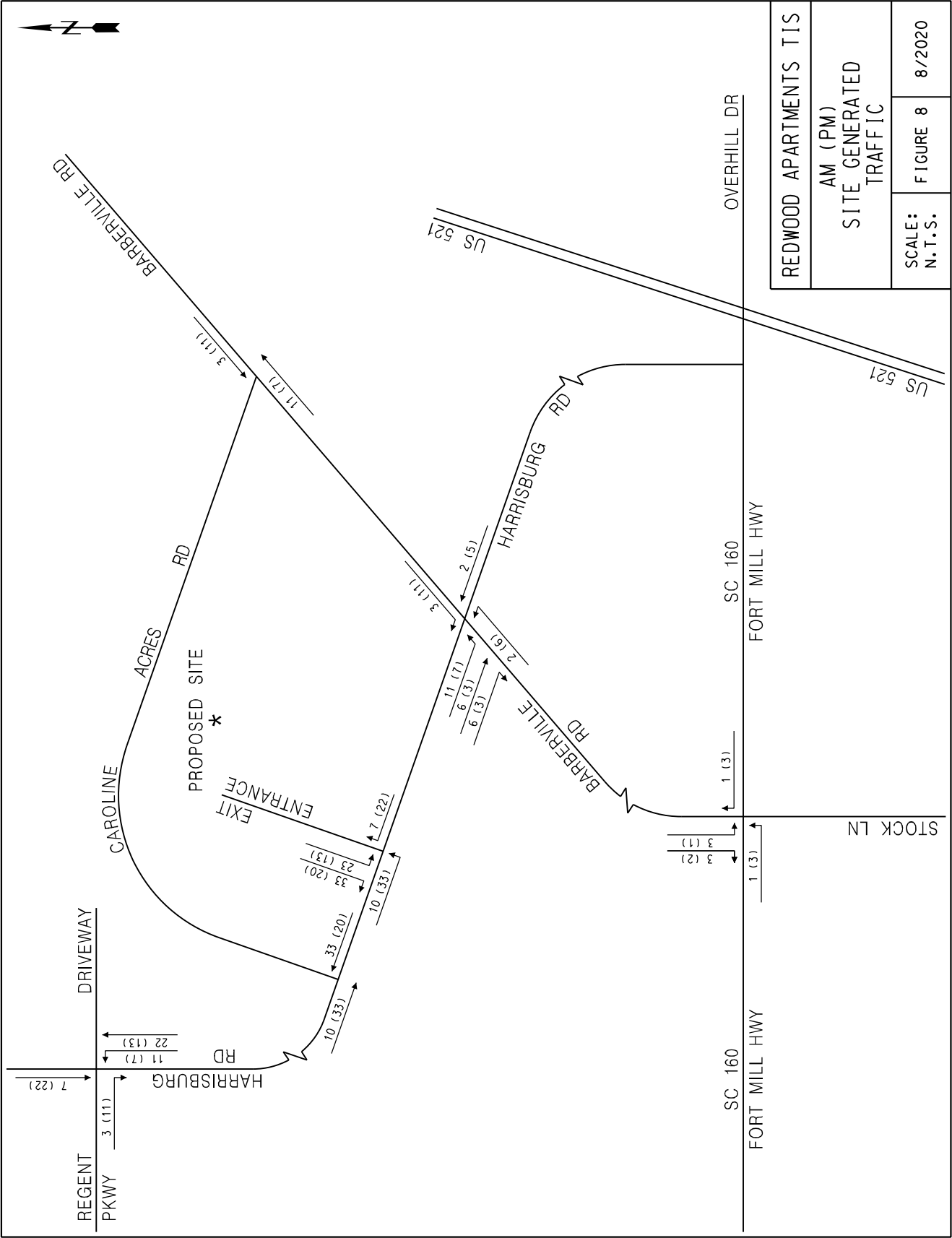
Kimley»Horn

Pettus Farm Development
Traffic Impact Analysis Update

2028 Build-out
AM Peak Hour
Traffic Volumes

Figure
5.2





G:\2020\2000060_001\Indian_Land_TIS\CAUD\2020\Indian_Land_Volumes_Site.dgn
 Wednesday, August 19, 2020 AT 01:34 PM

LEGEND

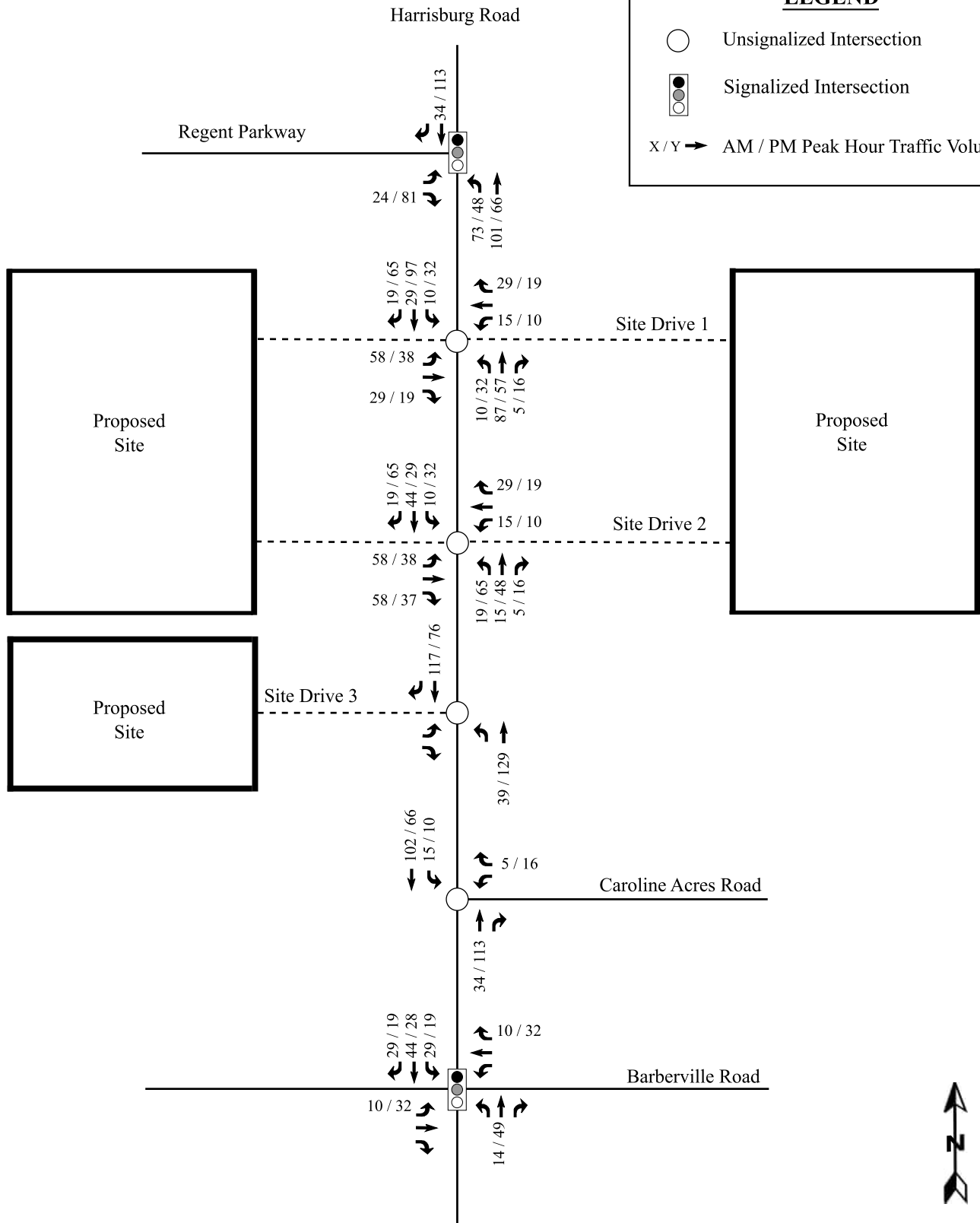


Unsignalized Intersection



Signalized Intersection

X / Y → AM / PM Peak Hour Traffic Volumes

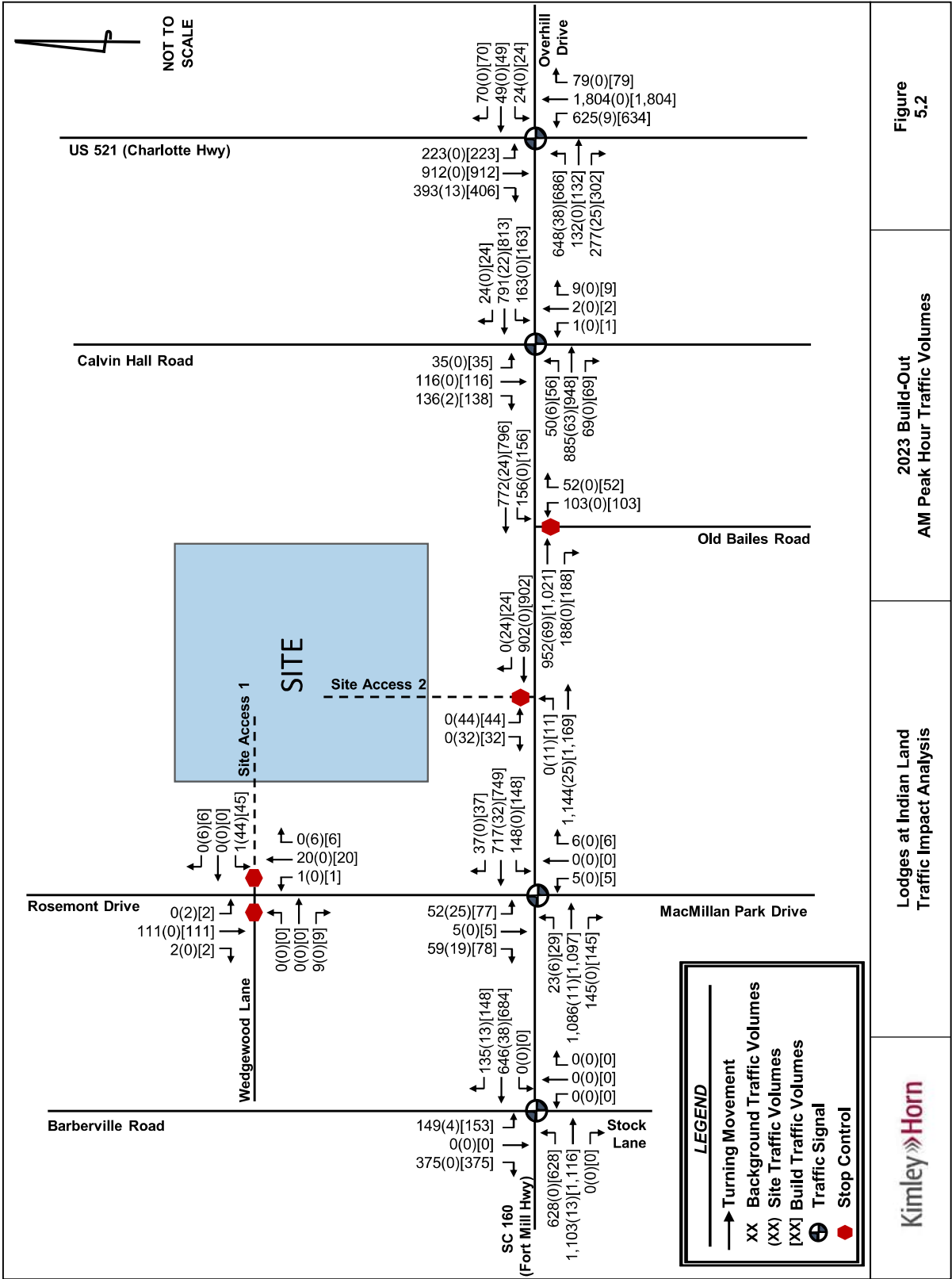


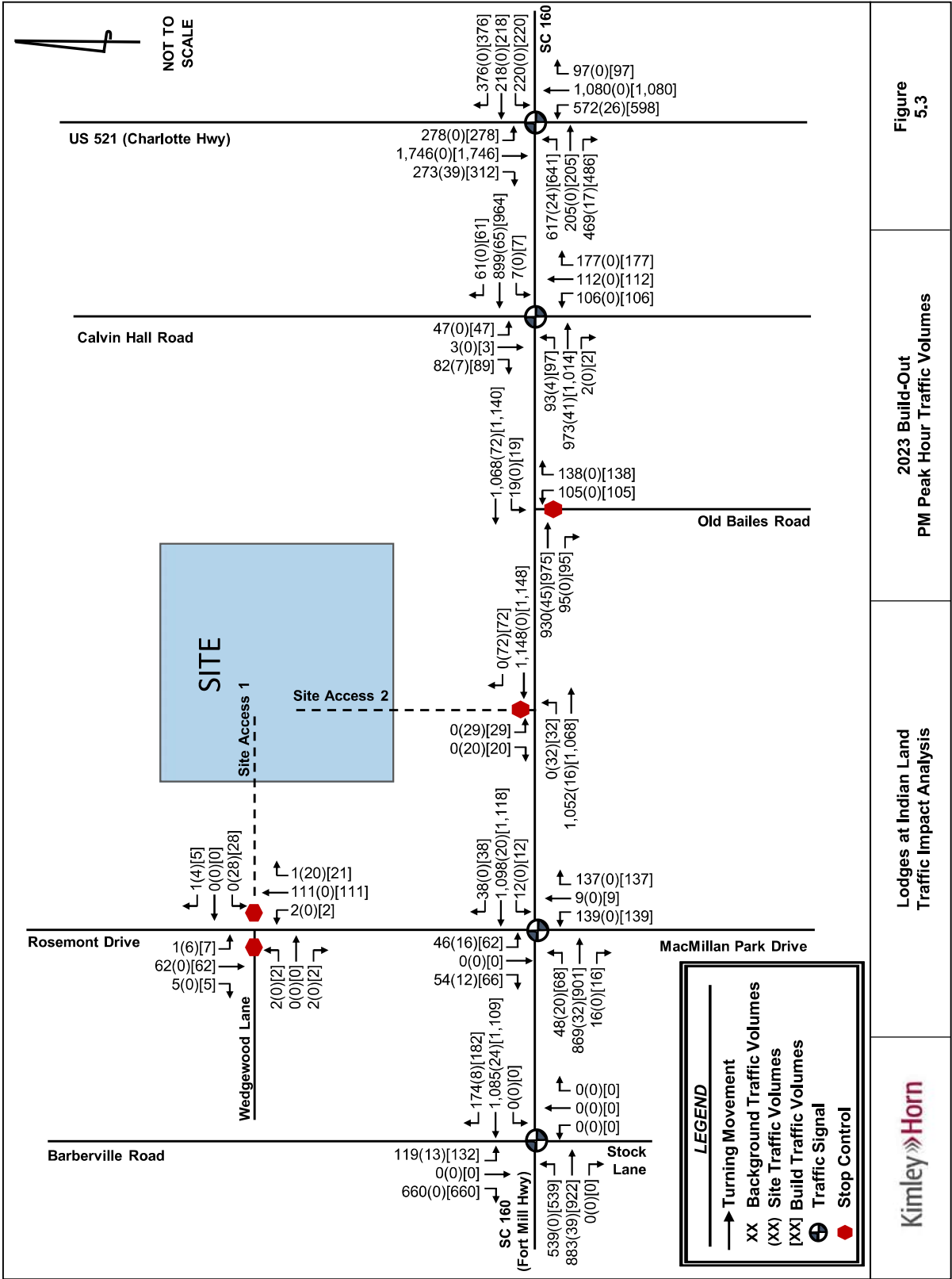
Harrisburg Road Residential
Lancaster County, SC

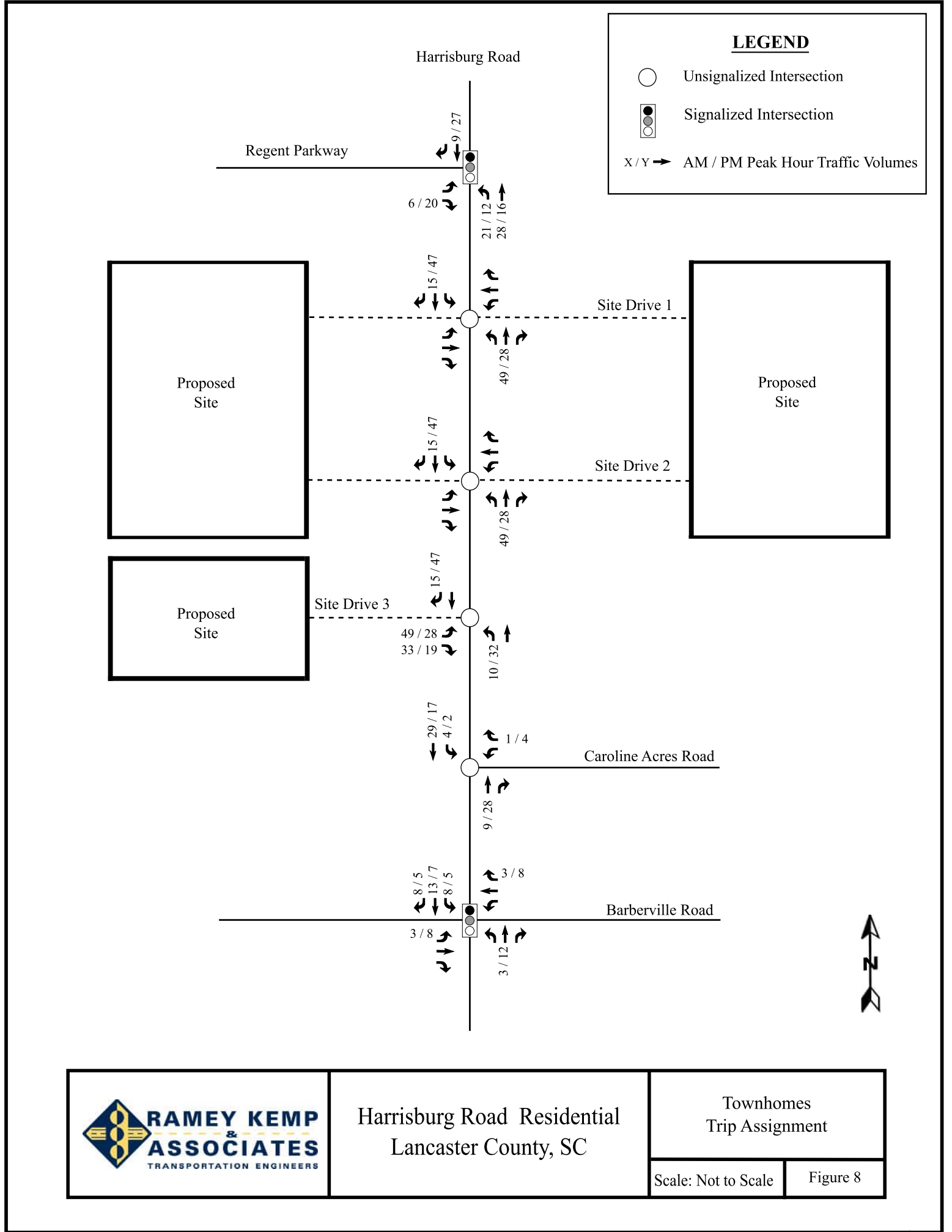
Single-Family Homes
Trip Assignment

Scale: Not to Scale

Figure 7





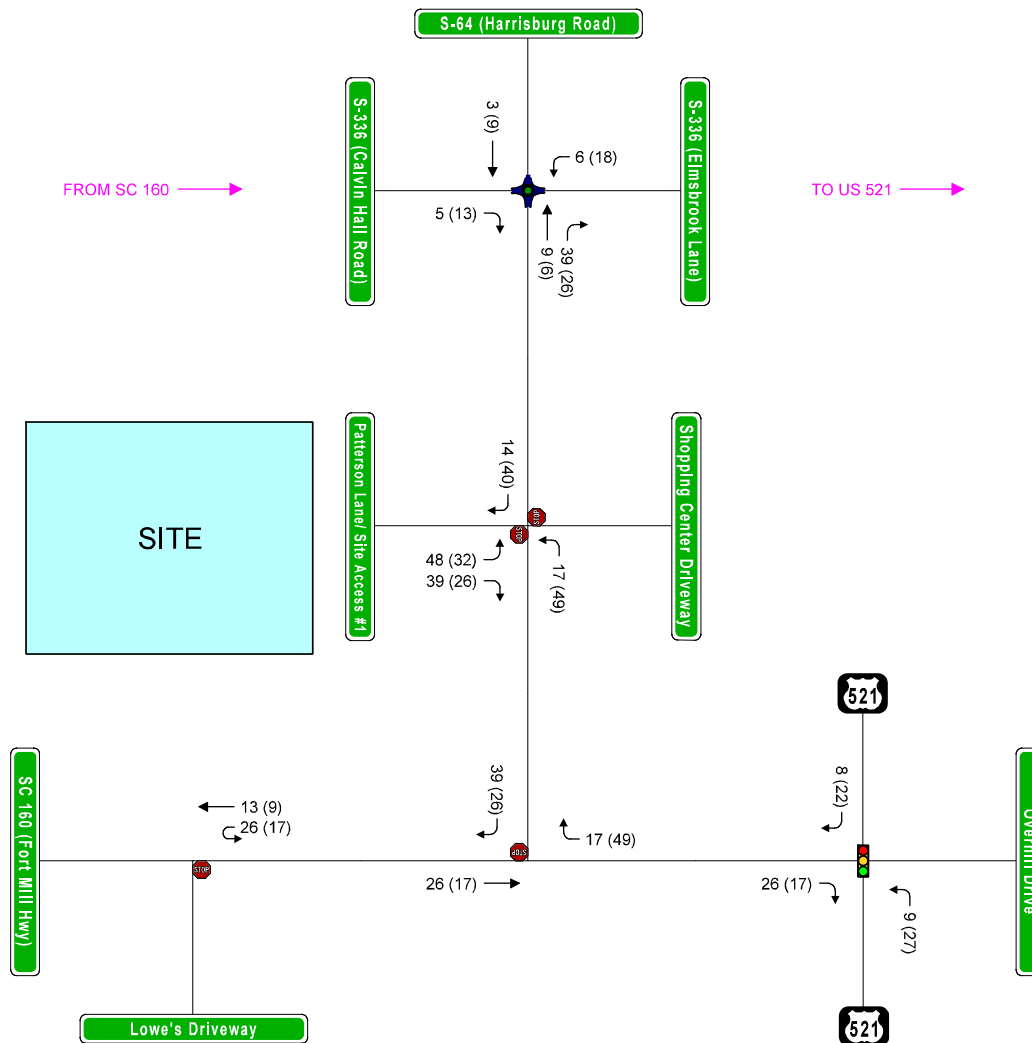


Harrisburg Road Residential
Lancaster County, SC

Townhomes
Trip Assignment

Scale: Not to Scale

Figure 8



**Patterson Lane Apartments
Indian Land, South Carolina**

Site Trips

Figure 8

Legend

X (Y) AM and (PM) Peak Hour Volumes

— Roadway

STOP Stop Sign

← Turning Movement



Traffic Signal



Roundabout

APPENDIX B

Traffic Count Data



(303) 216-2439
www.alltrafficdata.net

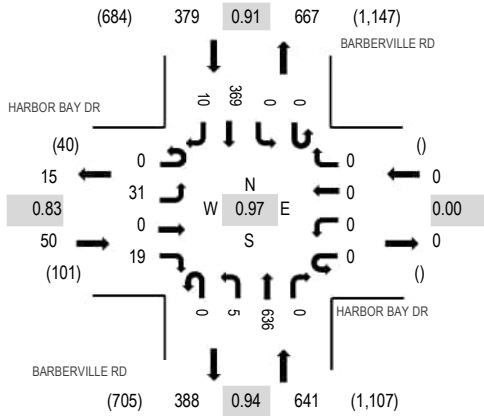
Location: 1 BARBERVILLE RD & HARBOR BAY DR AM

Date: Wednesday, May 3, 2023

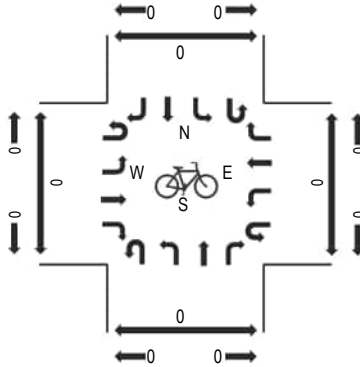
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:00 AM - 08:15 AM

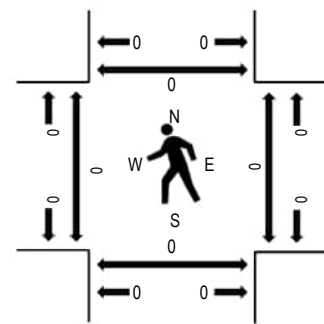
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HARBOR BAY DR Eastbound				HARBOR BAY DR Westbound				BARBERVILLE RD Northbound				BARBERVILLE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	8	0	7	0	0	0	0	0	1	108	0	0	0	50	2	176	920	0	0	0	0
7:15 AM	0	11	0	3	0	0	0	0	0	0	130	0	0	0	73	4	221	1,019	0	0	0	0
7:30 AM	0	13	0	3	0	0	0	0	0	2	164	0	0	0	88	3	273	1,070	0	0	0	0
7:45 AM	0	3	0	5	0	0	0	0	0	1	147	0	0	0	91	3	250	1,019	0	0	0	0
8:00 AM	0	7	0	7	0	0	0	0	0	1	156	0	0	0	103	1	275	972	0	0	0	0
8:15 AM	0	8	0	4	0	0	0	0	0	1	169	0	0	0	87	3	272		0	0	0	0
8:30 AM	0	7	0	7	0	0	0	0	0	7	110	0	0	0	86	5	222		0	0	0	0
8:45 AM	0	0	0	8	0	0	0	0	0	4	106	0	0	0	83	2	203		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	6	0	0	0	1	0	7
Lights	0	31	0	19	0	0	0	0	0	5	621	0	0	0	354	10	1,040
Mediums	0	0	0	0	0	0	0	0	0	0	9	0	0	0	14	0	23
Total	0	31	0	19	0	0	0	0	0	5	636	0	0	0	369	10	1,070

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%
Peak Hour Factor	0.83				0.00				0.94				0.91				0.97
Peak Hour Factor	0.00	0.67	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.46	0.94	0.00	0.00	0.00	0.90	0.60	0.97



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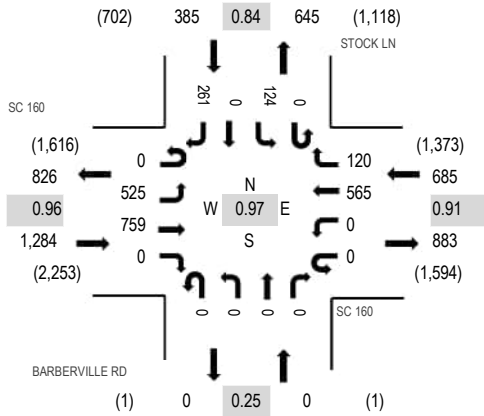
Location: 2 BARBERVILLE RD & SC 160 AM

Date: Wednesday, May 3, 2023

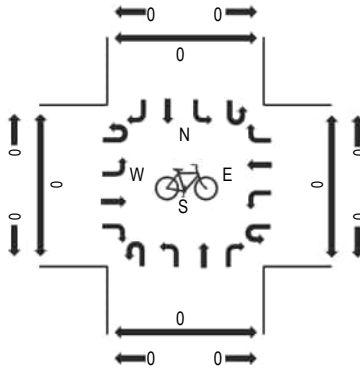
Peak Hour: 07:30 AM - 08:30 AM

Peak 15-Minutes: 08:15 AM - 08:30 AM

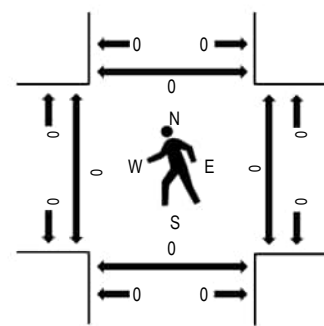
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SC 160 Eastbound				SC 160 Westbound				BARBERVILLE RD Northbound				STOCK LN Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
7:00 AM	0	84	107	1	0	0	126	29	0	0	0	0	0	12	0	39	398	2,066	0	0	0	0
7:15 AM	0	112	137	0	0	0	153	25	0	1	0	0	0	23	0	55	506	2,254	0	0	0	0
7:30 AM	0	141	169	0	0	0	137	31	0	0	0	0	0	29	0	61	568	2,354	0	0	0	0
7:45 AM	0	111	206	0	0	0	156	27	0	0	0	0	0	36	0	58	594	2,307	0	0	0	0
8:00 AM	0	140	183	0	0	0	124	21	0	0	0	0	0	40	0	78	586	2,263	0	0	0	0
8:15 AM	0	133	201	0	0	0	148	41	0	0	0	0	0	19	0	64	606		0	0	0	0
8:30 AM	0	92	161	0	0	0	145	23	0	0	0	0	0	40	0	60	521		0	0	0	0
8:45 AM	0	73	202	0	0	0	152	35	0	0	0	0	0	29	0	59	550		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	5	6	0	0	0	7	0	0	0	0	0	0	0	0	1	19
Lights	0	517	746	0	0	0	543	114	0	0	0	0	0	118	0	252	2,290
Mediums	0	3	7	0	0	0	15	6	0	0	0	0	0	6	0	8	45
Total	0	525	759	0	0	0	565	120	0	0	0	0	0	124	0	261	2,354

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.9%				1.0%				0.0%				0.3%				0.8%
Heavy Vehicle %	0.0%	1.0%	0.8%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.8%
Peak Hour Factor	0.96				0.91				0.25				0.84				0.97
Peak Hour Factor	0.00	0.93	0.92	0.25	0.00	0.00	0.92	0.73	0.00	0.25	0.00	0.00	0.00	0.84	0.00	0.84	0.97



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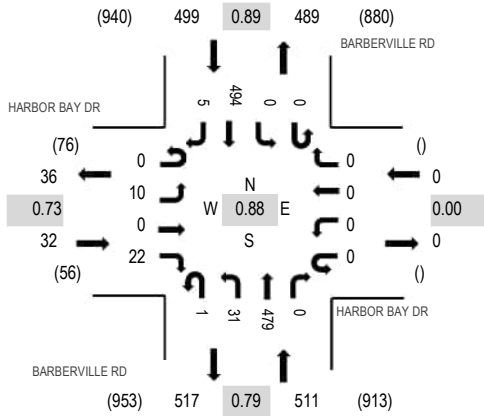
Location: 1 BARBERVILLE RD & HARBOR BAY DR PM

Date: Wednesday, May 3, 2023

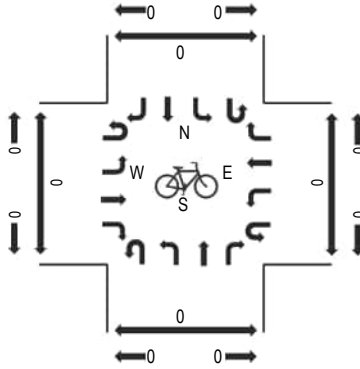
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:45 PM - 06:00 PM

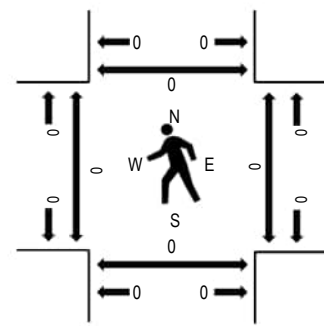
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	HARBOR BAY DR Eastbound				HARBOR BAY DR Westbound				BARBERVILLE RD Northbound				BARBERVILLE RD Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	1	0	4	0	0	0	0	0	4	83	0	0	0	83	4	179	867	0	0	0	0
4:15 PM	0	3	0	7	0	0	0	0	0	10	103	0	0	0	114	2	239	939	0	0	0	0
4:30 PM	0	4	0	2	0	0	0	0	0	4	98	0	0	0	84	8	200	943	0	0	0	0
4:45 PM	0	1	0	2	0	0	0	0	0	2	98	0	0	0	140	6	249	996	0	0	0	0
5:00 PM	0	3	0	6	0	0	0	0	0	7	96	0	0	0	137	2	251	1,042	0	0	0	0
5:15 PM	0	2	0	9	0	0	0	0	0	8	115	0	0	0	108	1	243		0	0	0	0
5:30 PM	0	4	0	1	0	0	0	0	1	7	116	0	0	0	123	1	253		0	0	0	0
5:45 PM	0	1	0	6	0	0	0	0	0	9	152	0	0	0	126	1	295		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3
Lights	0	10	0	20	0	0	0	0	1	31	472	0	0	0	483	5	1,022
Mediums	0	0	0	2	0	0	0	0	0	0	6	0	0	0	9	0	17
Total	0	10	0	22	0	0	0	0	1	31	479	0	0	0	494	5	1,042

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.3%
Heavy Vehicle %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.4%	0.0%	0.3%
Peak Hour Factor	0.73				0.00				0.79				0.89				0.88
Peak Hour Factor	0.00	0.69	0.00	0.61	0.00	0.00	0.00	0.00	0.25	0.86	0.79	0.00	0.00	0.00	0.91	0.63	0.88



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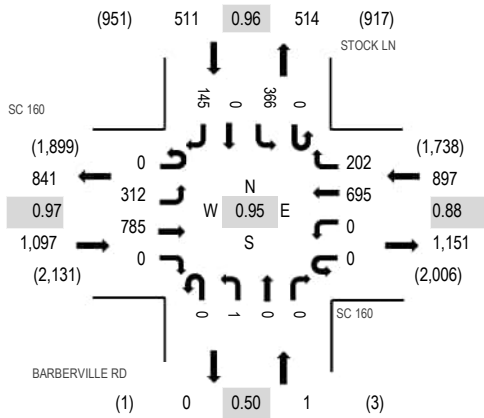
Location: 2 BARBERVILLE RD & SC 160 PM

Date: Wednesday, May 3, 2023

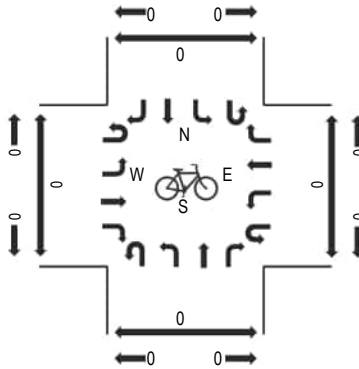
Peak Hour: 05:00 PM - 06:00 PM

Peak 15-Minutes: 05:45 PM - 06:00 PM

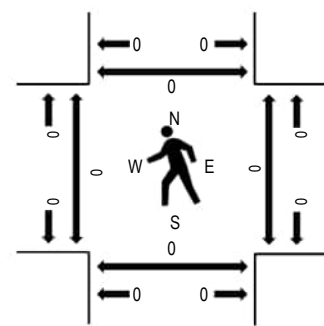
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	SC 160 Eastbound				SC 160 Westbound				BARBERVILLE RD Northbound				STOCK LN Southbound				Total	Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right			West	East	South	North
4:00 PM	0	71	178	1	0	0	166	24	0	1	0	0	0	23	0	71	535	2,317	0	0	0	0
4:15 PM	0	70	193	0	0	0	196	32	0	0	1	0	0	22	0	83	597	2,366	0	0	0	0
4:30 PM	0	78	180	0	0	0	157	31	0	0	0	0	0	30	0	75	551	2,413	0	0	0	0
4:45 PM	0	65	198	0	0	0	204	31	0	0	0	0	0	31	0	105	634	2,478	0	0	0	0
5:00 PM	0	75	183	0	0	0	166	35	0	0	0	0	0	71	0	54	584	2,506	0	0	0	0
5:15 PM	0	70	209	0	0	0	190	48	0	0	0	0	0	96	0	31	644		0	0	0	0
5:30 PM	0	84	194	0	0	0	158	45	0	1	0	0	0	104	0	30	616		0	0	0	0
5:45 PM	0	83	199	0	0	0	181	74	0	0	0	0	0	95	0	30	662		0	0	0	0

Peak Rolling Hour Flow Rates

Vehicle Type	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Articulated Trucks	0	1	3	0	0	0	4	0	0	0	0	0	0	1	0	1	10
Lights	0	308	775	0	0	0	687	200	0	1	0	0	0	358	0	143	2,472
Mediums	0	3	7	0	0	0	4	2	0	0	0	0	0	7	0	1	24
Total	0	312	785	0	0	0	695	202	0	1	0	0	0	366	0	145	2,506

Heavy Vehicle Percentage and Peak Hour Factor

	Eastbound				Westbound				Northbound				Southbound				Total
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	
Heavy Vehicle %		0.4%				0.4%				0.0%				0.4%			0.4%
Heavy Vehicle %	0.0%	0.3%	0.4%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	0.7%	0.4%
Peak Hour Factor		0.97				0.88				0.50				0.96			0.95
Peak Hour Factor	0.00	0.93	0.94	0.25	0.00	0.00	0.89	0.68	0.00	0.25	0.25	0.00	0.00	0.88	0.00	0.80	0.95

APPENDIX C

Traffic Volume Development Worksheets and ITE Trip Generation Worksheets

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Fort Mill Highway & Barberville Road

TRAFFIC CONTROL: Signalized

DATE COUNTED: Wednesday, May 3, 2023

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	525	759	0	0	565	120	0	0	0	124	0	261
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	16	23	0	0	17	4	0	0	0	4	0	8
Vested Trips (The Lodges)	0	13			38	13				4		0
Vested Trips (Sugar Creek)	10					8				8		29
Vested Trips (Redwood)	1					1				3		3
Vested Trips (Pettus Pond)	4					2				6		11
Vested Trips (Patterson Preserve)	7					3				10		20
Vested Trips (Patterson Lane Apartments)		26			13							
Vested Traffic Volumes	22	39			51	27				31		63
2026 NO-BUILD TRAFFIC VOLUMES	573	821	0	0	633	159	0	0	0	167	0	361
Inbound Trip Distribution Percentage	50%					20%						
Outbound Trip Distribution Percentage										20%		50%
Inbound New Project Traffic	41					16						
Outbound New Project Traffic										12		31
Pass-By Project Traffic												
Total New Project Traffic	41					16				12		31
2026 BUILD TRAFFIC VOLUMES	614	821	0	0	633	175	0	0	0	179	0	392

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	312	785	0	0	695	202	1	0	0	366	0	145
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	9	24	0	0	21	6	0	0	0	11	0	4
Vested Trips (The Lodges)	0	39			24	8				13		0
Vested Trips (Sugar Creek)	32					3				5		19
Vested Trips (Redwood)	3					3				1		2
Vested Trips (Pettus Pond)	13					6				4		7
Vested Trips (Patterson Preserve)	23					11				7		12
Vested Trips (Patterson Lane Apartments)		17			9							
Vested Traffic Volumes	71	56			33	31				30		40
2026 NO-BUILD TRAFFIC VOLUMES	424	865	0	0	749	242	1	0	0	412	0	208
Inbound Trip Distribution Percentage	50%					20%						
Outbound Trip Distribution Percentage										20%		50%
Inbound New Project Traffic	53					20						
Outbound New Project Traffic										23		58
Pass-by Project Traffic												
Total New Project Traffic	53					20				23		58
2026 BUILD TRAFFIC VOLUMES	477	865	0	0	749	262	1	0	0	435	0	266

Moving forward.

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Barberville Road & Harbor Bay Drive

TRAFFIC CONTROL: Unsignalized

DATE COUNTED: Wednesday, May 3, 2023

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	31	0	19	0	0	0	5	636	0	0	369	10
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	1	0	1	0	0	0	0	19	0	0	11	0
Vested Trips (The Lodges)								13			4	
Vested Trips (Sugar Creek)								18			37	
Vested Trips (Redwood)								2			6	
Vested Trips (Pettus Pond)								6			17	
Vested Trips (Patterson Preserve)								10			30	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								49			94	
2026 NO-BUILD TRAFFIC VOLUMES	32	0	20	0	0	0	5	722	0	0	511	10
Inbound Trip Distribution Percentage											30%	
Outbound Trip Distribution Percentage								30%				
Inbound New Project Traffic											25	
Outbound New Project Traffic								18				
Pass-By Project Traffic												
Total New Project Traffic								18			25	
2026 BUILD TRAFFIC VOLUMES	32	0	20	0	0	0	5	740	0	0	536	10

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	10	0	22	0	0	0	32	479	0	0	494	5
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	1	0	0	0	1	14	0	0	15	0
Vested Trips (The Lodges)								8			13	
Vested Trips (Sugar Creek)								35			24	
Vested Trips (Redwood)								6			3	
Vested Trips (Pettus Pond)								19			11	
Vested Trips (Patterson Preserve)								34			19	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								102			70	
2026 NO-BUILD TRAFFIC VOLUMES	10	0	23	0	0	0	33	630	0	0	603	5
Inbound Trip Distribution Percentage											30%	
Outbound Trip Distribution Percentage								30%				
Inbound New Project Traffic											32	
Outbound New Project Traffic								35				
Pass-by Project Traffic												
Total New Project Traffic								35			32	
2026 BUILD TRAFFIC VOLUMES	10	0	23	0	0	0	33	665	0	0	635	5

Moving forward.

INTERSECTION TRAFFIC VOLUME DEVELOPMENT

Barberville Road & Fortson Road/ Site Access

TRAFFIC CONTROL: Unsignalized

DATE COUNTED:

AM PEAK HOUR (7:30-8:30 AM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	0	0	0	0	0	0	0	641	0	0	388	0
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	19	0	0	12	0
Vested Trips (The Lodges)								13			4	
Vested Trips (Sugar Creek)								18			37	
Vested Trips (Redwood)								2			6	
Vested Trips (Pettus Pond)								6			17	
Vested Trips (Patterson Preserve)								10			30	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								49			94	
2026 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	0	0	727	0	0	531	0
Inbound Trip Distribution Percentage							70%					30%
Outbound Trip Distribution Percentage	30%		70%									
Inbound New Project Traffic							57					25
Outbound New Project Traffic	18		43									
Pass-By Project Traffic												
Total New Project Traffic	18		43				57					25
2026 BUILD TRAFFIC VOLUMES	18	0	43	0	0	0	57	727	0	0	531	25

PM PEAK HOUR (5:00-6:00 PM)	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
2023 TRAFFIC VOLUMES	0	0	0	0	0	0	0	511	0	0	516	0
Heavy Vehicle Percentage	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Years To Buildout (2026)	3	3	3	3	3	3	3	3	3	3	3	3
Yearly Growth Rate	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Background Traffic Growth	0	0	0	0	0	0	0	15	0	0	15	0
Vested Trips (The Lodges)								8			13	
Vested Trips (Sugar Creek)								35			24	
Vested Trips (Redwood)								6			3	
Vested Trips (Pettus Pond)								19			11	
Vested Trips (Patterson Preserve)								34			19	
Vested Trips (Patterson Lane Apartments)								0			0	
Vested Traffic Volumes								102			70	
2026 NO-BUILD TRAFFIC VOLUMES	0	0	0	0	0	0	0	663	0	0	625	0
Inbound Trip Distribution Percentage							70%					30%
Outbound Trip Distribution Percentage	30%		70%									
Inbound New Project Traffic							73					32
Outbound New Project Traffic	35		81									
Pass-by Project Traffic												
Total New Project Traffic	35		81				73					32
2026 BUILD TRAFFIC VOLUMES	35	0	81	0	0	0	73	663	0	0	625	32

Moving forward.

Day Care Center (565)

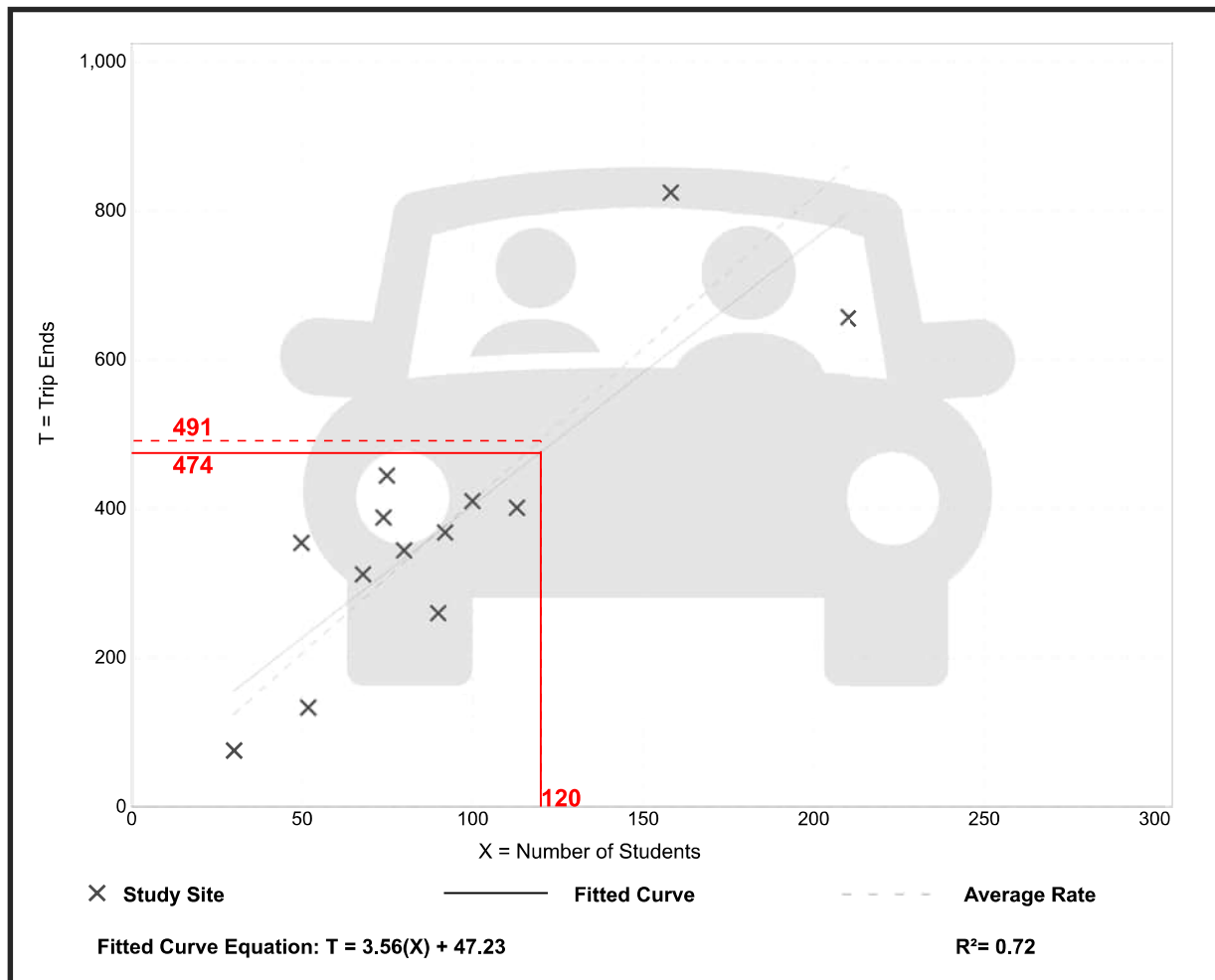
Vehicle Trip Ends vs: **Students**
On a: **Weekday**

Setting/Location: General Urban/Suburban
Number of Studies: 14
Avg. Num. of Students: 89
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



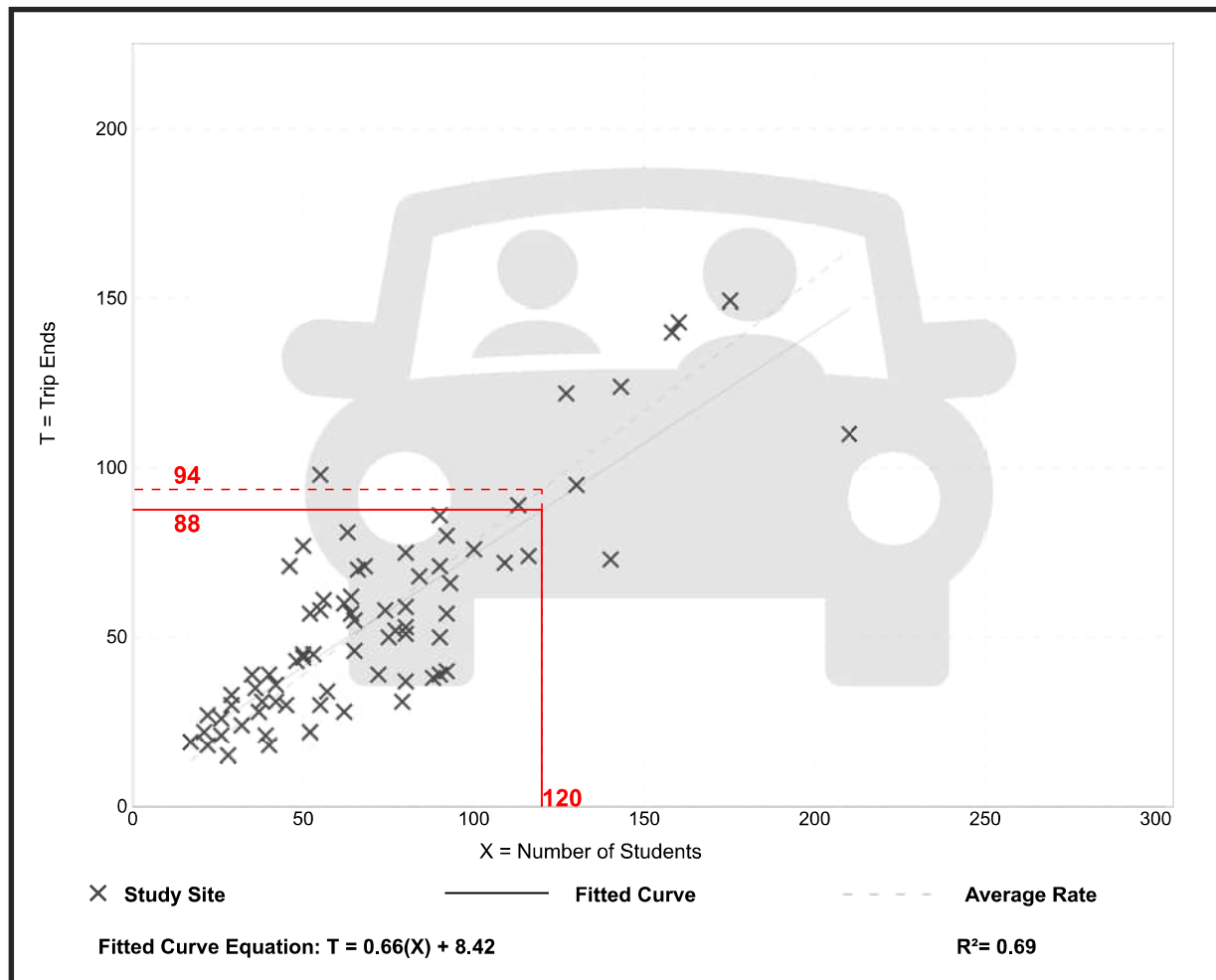
Day Care Center (565)

Vehicle Trip Ends vs: Students
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 75
 Avg. Num. of Students: 71
 Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



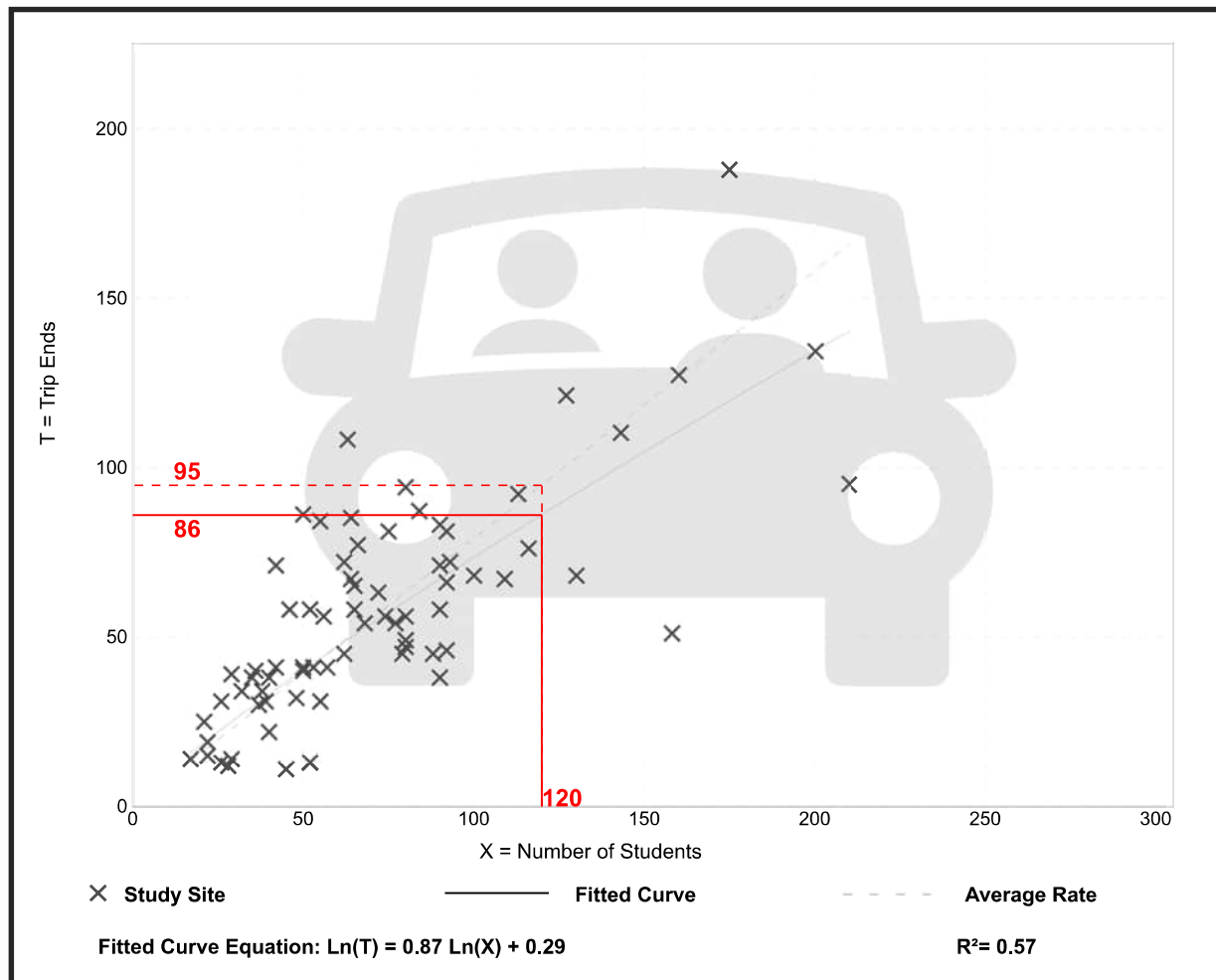
Day Care Center (565)

Vehicle Trip Ends vs: Students
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 75
 Avg. Num. of Students: 72
 Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

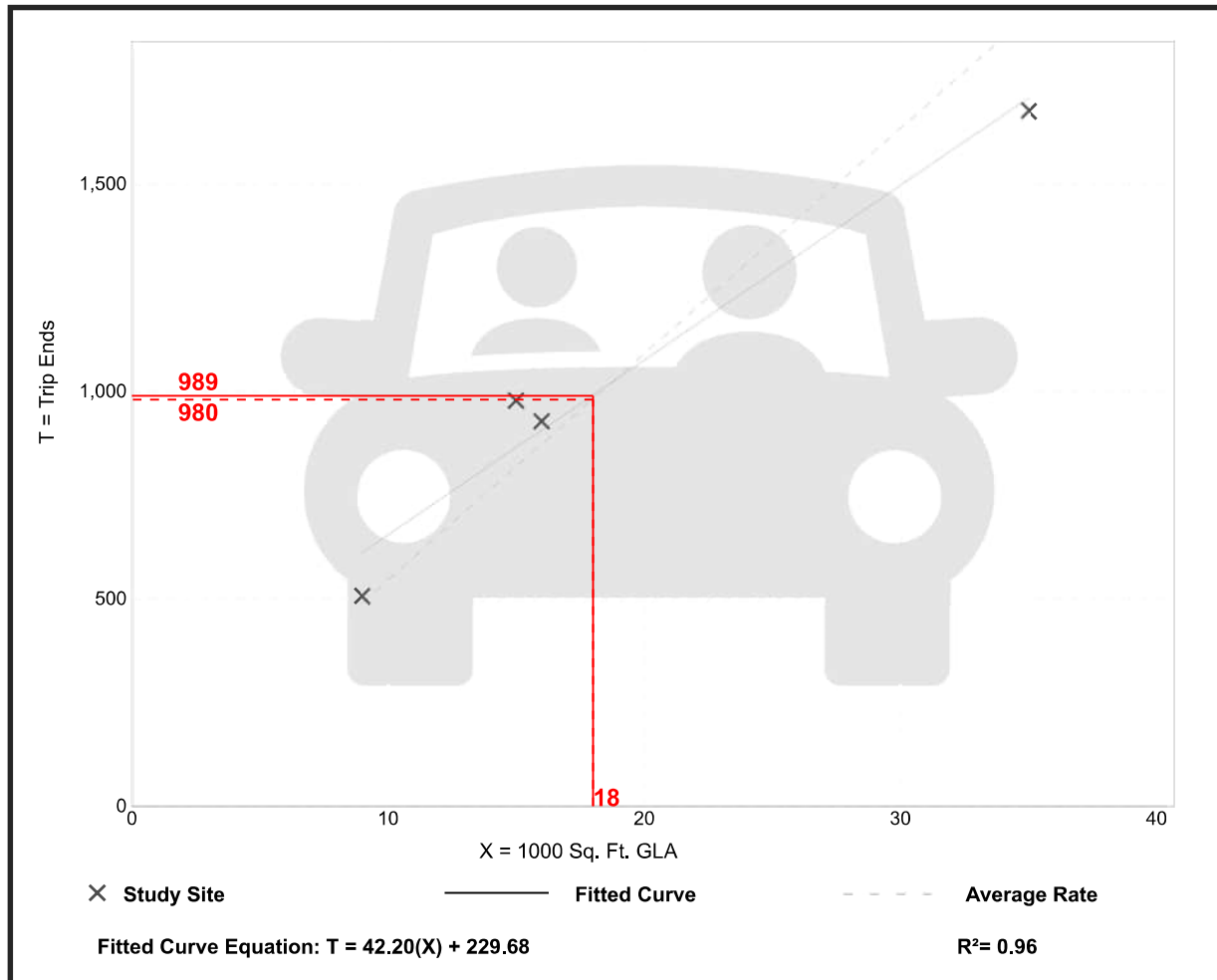
Setting/Location: General Urban/Suburban
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Strip Retail Plaza (<40k) (822)

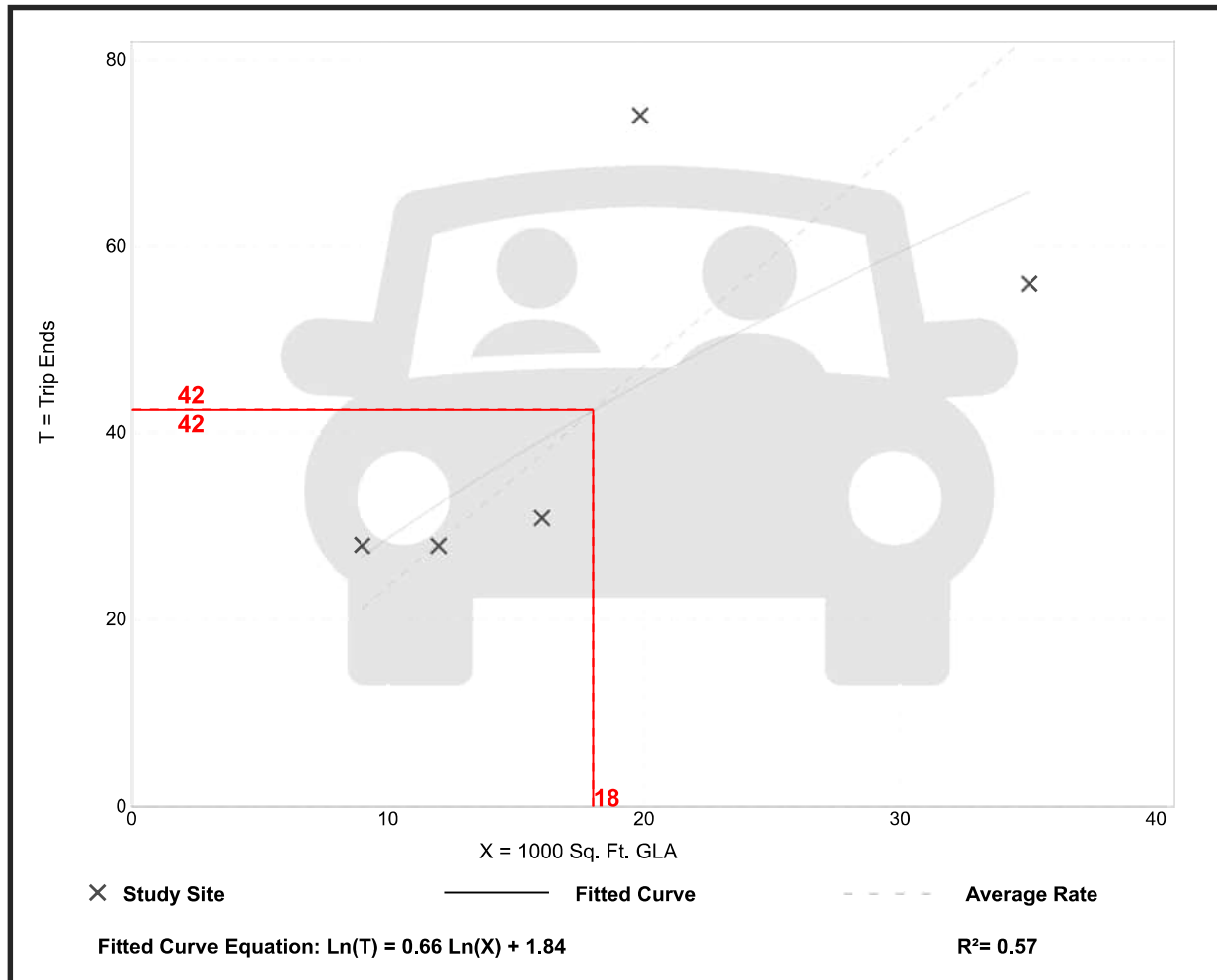
Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 5
 Avg. 1000 Sq. Ft. GLA: 18
 Directional Distribution: 60% entering, 40% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
2.36	1.60 - 3.73	0.94

Data Plot and Equation

Caution – Small Sample Size



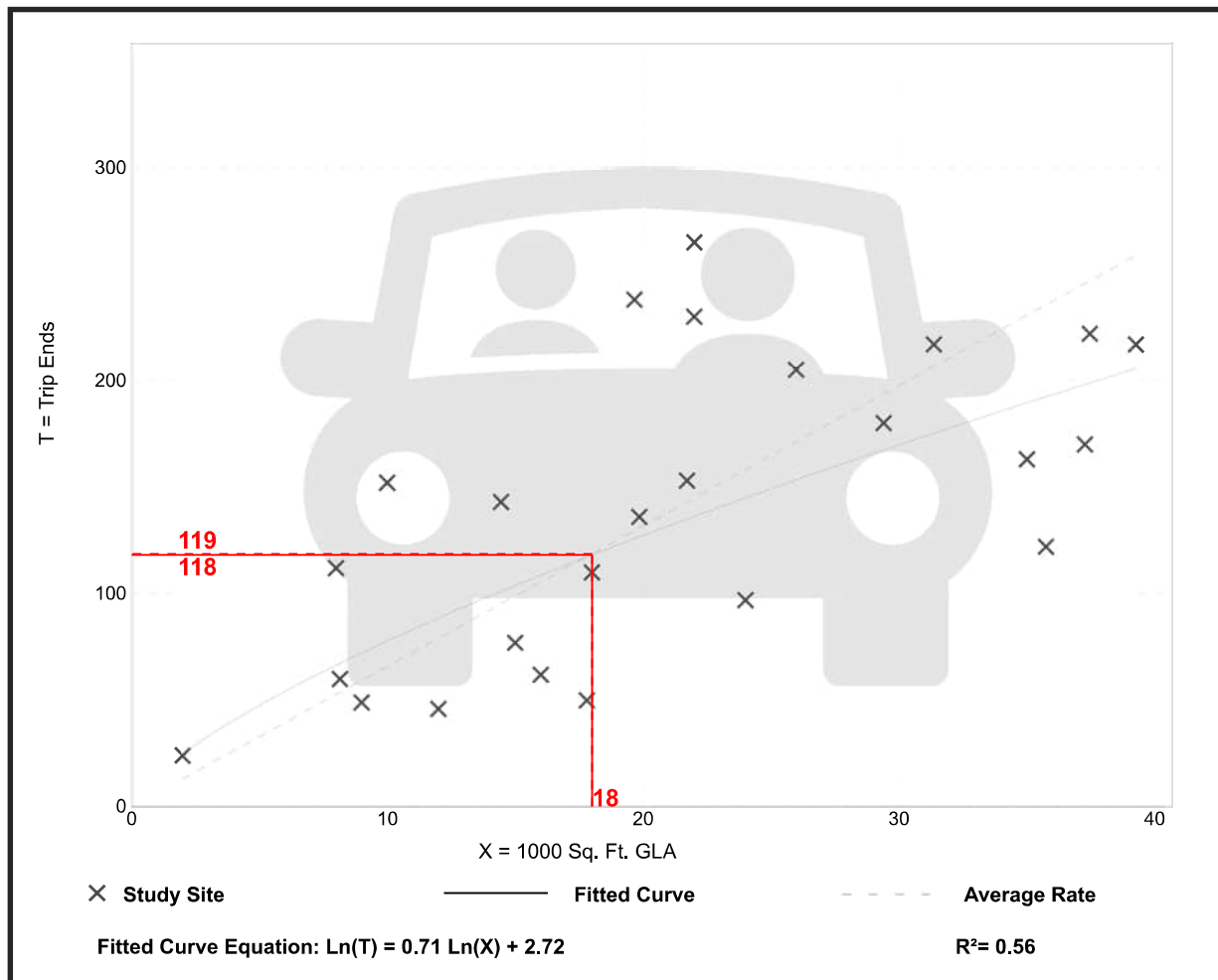
Strip Retail Plaza (<40k) (822)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 25
 Avg. 1000 Sq. Ft. GLA: 21
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.59	2.81 - 15.20	2.94

Data Plot and Equation



Small Office Building (712)

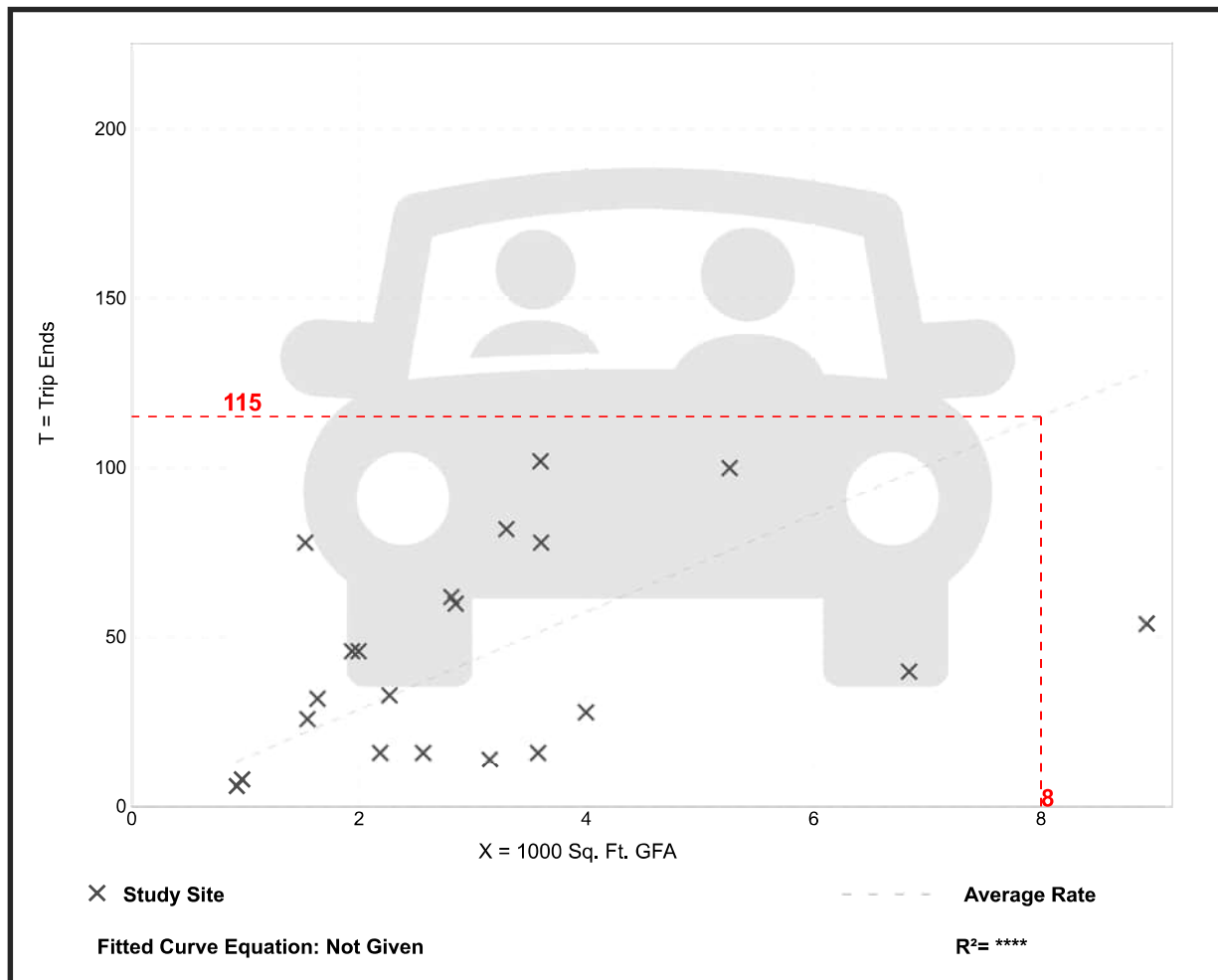
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 21
Avg. 1000 Sq. Ft. GFA: 3
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
14.39	4.44 - 50.91	10.16

Data Plot and Equation



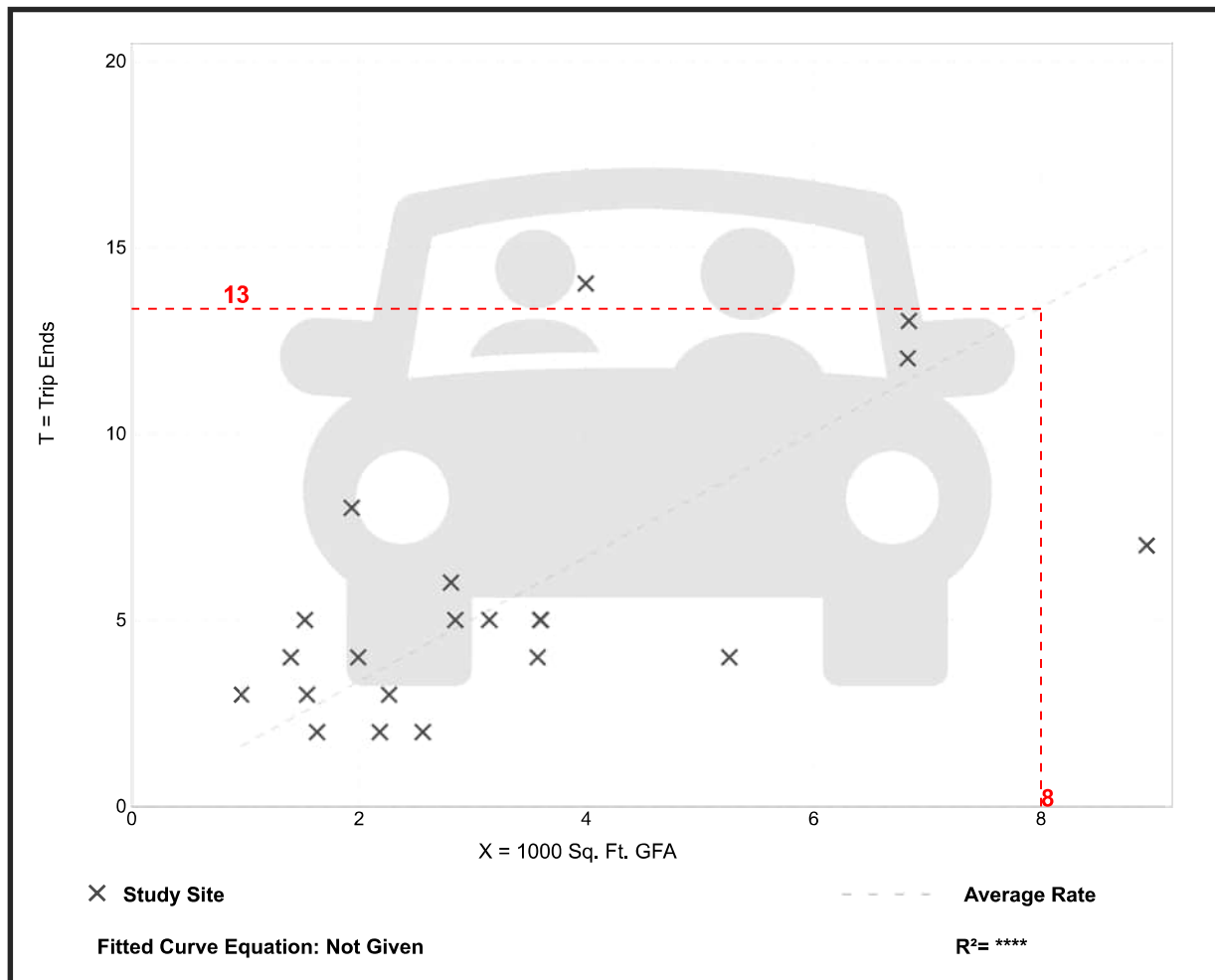
Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 21
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 82% entering, 18% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.67	0.76 - 4.12	0.88

Data Plot and Equation



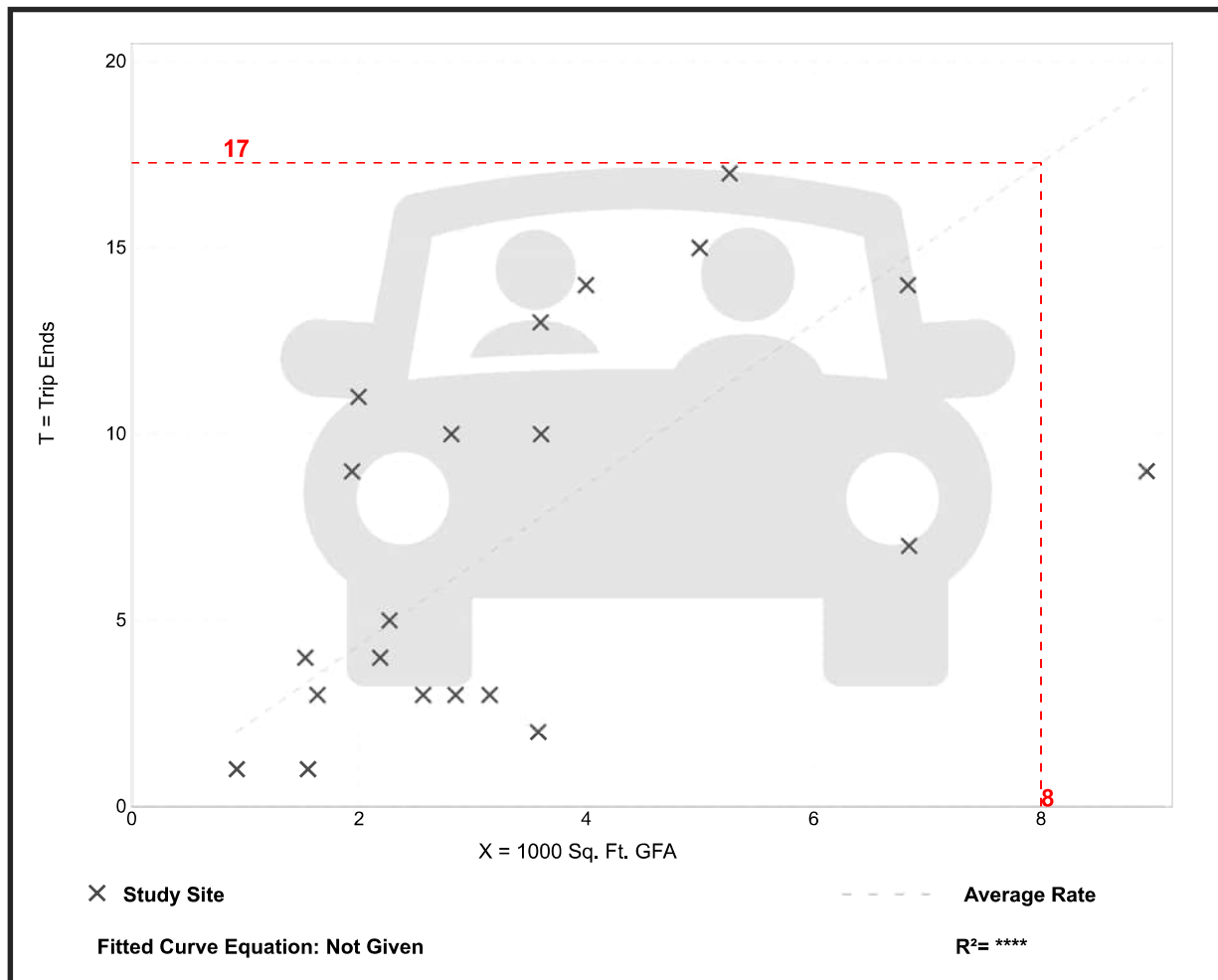
Small Office Building (712)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 4 and 6 p.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 21
 Avg. 1000 Sq. Ft. GFA: 3
 Directional Distribution: 34% entering, 66% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
2.16	0.56 - 5.50	1.26

Data Plot and Equation



APPENDIX D

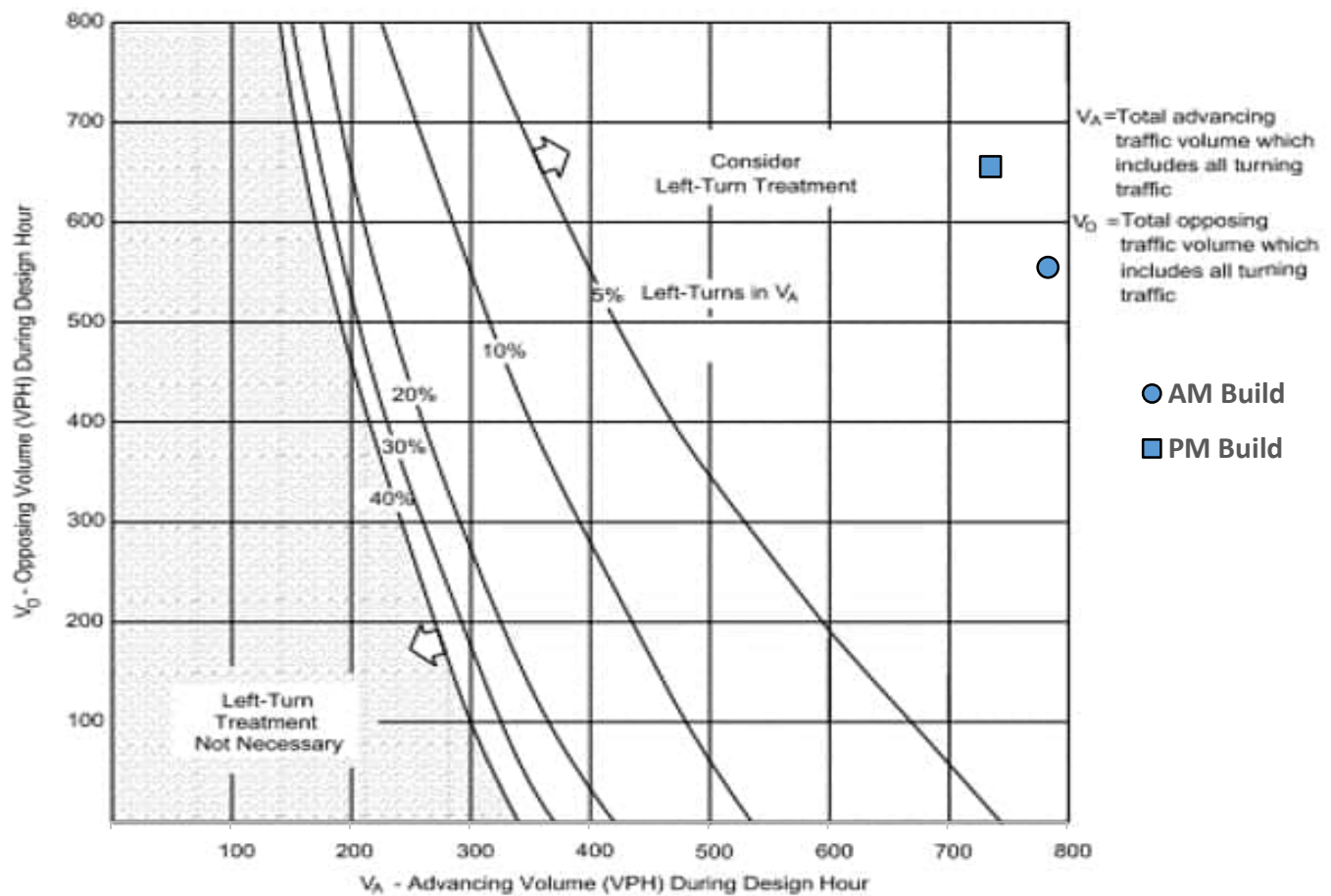
Turn Lane Analysis Worksheets

Barberville Road TIS
LEFT-TURN LANE WARRANT REVIEW

9.5-8

INTERSECTIONS

March 2017



VOLUME GUIDELINES FOR LEFT-TURN LANES AT UNSIGNALIZED INTERSECTIONS ON TWO-LANE HIGHWAYS (45 mph)
Figure 9.5-F

INTERSECTION: Barberville Road & Site Access

MOVEMENT: Northbound left turn

SCENARIO	Advancing Volume (V_a)	Northbound left turn	Opposing Volume (V_o)	Left Turn % of V_a	Symbol
AM Build	784	57	556	7.3%	●
PM Build	736	73	657	9.9%	■

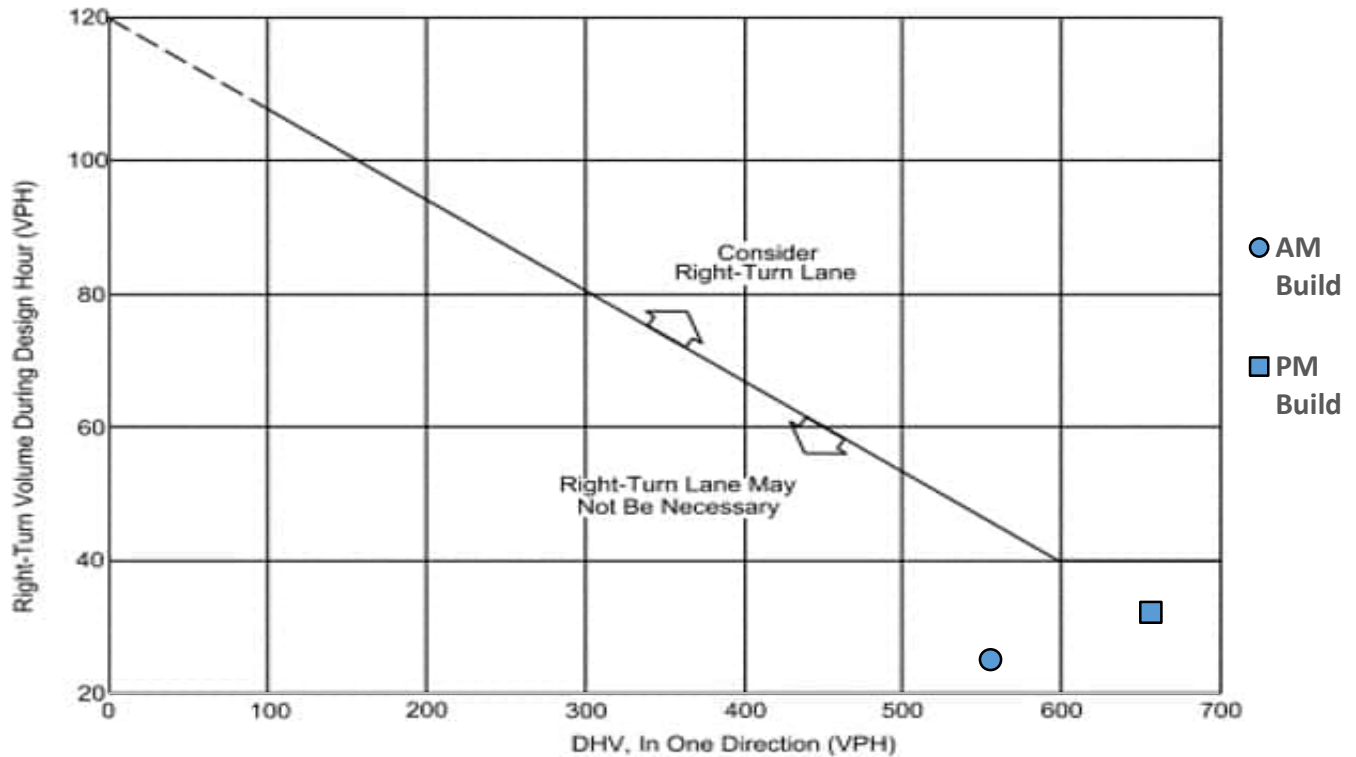
Moving forward.

Barberville Road TIS
RIGHT-TURN LANE WARRANT REVIEW

9.5-2

INTERSECTIONS

March 2017



Note: For highways with a design speed below 50 miles per hour with a DHV < 300 and where right turns > 40, an adjustment should be used. To read the vertical axis of the chart, subtract 20 from the actual number of right turns.

**GUIDELINES FOR RIGHT-TURN LANES AT UNSIGNALIZED INTERSECTIONS
ON TWO-LANE HIGHWAYS**

Figure 9.5-A

INTERSECTION: Barberville Road & Site Access

MOVEMENT: Southbound right turn

SCENARIO	Design Hour Volume	Right Turn Volume	Symbol
AM Build	556	25	●
PM Build	657	32	■

Moving forward.

APPENDIX E

Capacity Analysis

2023 Existing Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2023 Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	525	759	0	0	565	120	0	0	0	124	0	261
Future Volume (veh/h)	525	759	0	0	565	120	0	0	0	124	0	261
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	571	825	0	0	614	130	0	0	0	135	0	284
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	540	1367	0	0	763	918	0	2	0	316	0	282
Arrive On Green	0.18	0.67	0.00	0.00	0.43	0.43	0.00	0.00	0.00	0.18	0.00	0.18
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Grp Volume(v), veh/h	571	825	0	0	614	130	0	0	0	135	0	284
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565
Q Serve(g_s), s	14.9	18.3	0.0	0.0	24.6	3.0	0.0	0.0	0.0	5.6	0.0	14.7
Cycle Q Clear(g_c), s	14.9	18.3	0.0	0.0	24.6	3.0	0.0	0.0	0.0	5.6	0.0	14.7
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	540	1367	0	0	763	918	0	2	0	316	0	282
V/C Ratio(X)	1.06	0.60	0.00	0.00	0.80	0.14	0.00	0.00	0.00	0.43	0.00	1.01
Avail Cap(c_a), veh/h	540	1697	0	0	1052	1162	0	470	0	316	0	282
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.5	7.3	0.0	0.0	20.3	6.8	0.0	0.0	0.0	29.8	0.0	33.5
Incr Delay (d2), s/veh	54.9	0.3	0.0	0.0	2.8	0.1	0.0	0.0	0.0	0.9	0.0	55.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.6	5.4	0.0	0.0	9.4	1.3	0.0	0.0	0.0	2.3	0.0	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.4	7.6	0.0	0.0	23.1	6.9	0.0	0.0	0.0	30.7	0.0	89.3
LnGrp LOS	F	A	A	A	C	A	A	A	A	C	A	F
Approach Vol, veh/h	1396			744			0			419		
Approach Delay, s/veh	34.9			20.3			0.0			70.4		
Approach LOS	C			C						E		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	61.7			0.0		20.0	41.7	20.0				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 68			* 20		14.9	* 48	14.7				
Max Q Clear Time (g_c+l1), s	20.3			0.0		16.9	26.6	16.7				
Green Ext Time (p_c), s	21.2			0.0		0.0	8.5	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			36.5									
HCM 6th LOS			D									
Notes												

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	19	5	636	369	10
Future Vol, veh/h	31	19	5	636	369	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	21	5	691	401	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1108	407	412	0	-	0
Stage 1	407	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	232	644	1147	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	230	644	1147	-	-	-
Mov Cap-2 Maneuver	230	-	-	-	-	-
Stage 1	667	-	-	-	-	-
Stage 2	492	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	19.4	0.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1147	-	304	-	-	
HCM Lane V/C Ratio	0.005	-	0.179	-	-	
HCM Control Delay (s)	8.2	0	19.4	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.6	-	-	

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2023 Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	312	785	0	0	695	202	1	0	0	366	0	145
Future Volume (veh/h)	312	785	0	0	695	202	1	0	0	366	0	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	339	853	0	0	755	220	1	0	0	398	0	158
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1335	0	0	843	950	4	0	0	275	0	245
Arrive On Green	0.13	0.66	0.00	0.00	0.47	0.47	0.00	0.00	0.00	0.16	0.00	0.16
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	339	853	0	0	755	220	1	0	0	398	0	158
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	9.7	23.3	0.0	0.0	36.5	5.9	0.1	0.0	0.0	14.7	0.0	8.9
Cycle Q Clear(g_c), s	9.7	23.3	0.0	0.0	36.5	5.9	0.1	0.0	0.0	14.7	0.0	8.9
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1335	0	0	843	950	4	0	0	275	0	245
V/C Ratio(X)	0.89	0.64	0.00	0.00	0.90	0.23	0.25	0.00	0.00	1.45	0.00	0.65
Avail Cap(c_a), veh/h	436	1474	0	0	914	1009	389	0	0	275	0	245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	23.8	9.5	0.0	0.0	22.6	7.5	46.9	0.0	0.0	39.7	0.0	37.3
Incr Delay (d2), s/veh	18.1	0.7	0.0	0.0	10.6	0.1	28.7	0.0	0.0	221.0	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	8.2	0.0	0.0	15.9	2.6	0.1	0.0	0.0	23.0	0.0	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.9	10.2	0.0	0.0	33.2	7.6	75.5	0.0	0.0	260.7	0.0	43.0
LnGrp LOS	D	B	A	A	C	A	E	A	A	F	A	D
Approach Vol, veh/h	1192			975			1			556		
Approach Delay, s/veh	19.2			27.4			75.5			198.9		
Approach LOS	B			C			E			F		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	68.6			5.5		17.3	51.3	20.0				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 68			* 20		14.9	* 48	14.7				
Max Q Clear Time (g_c+I1), s	25.3			2.1		11.7	38.5	16.7				
Green Ext Time (p_c), s	21.2			0.0		0.5	6.1	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			58.8									
HCM 6th LOS			E									
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	22	32	479	494	5
Future Vol, veh/h	10	22	32	479	494	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	24	35	521	537	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1131	540	542	0	-	0
Stage 1	540	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	225	542	1027	-	-	-
Stage 1	584	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	214	542	1027	-	-	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	553	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	15.9	0.5		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1027	-	366	-	-	
HCM Lane V/C Ratio	0.034	-	0.095	-	-	
HCM Control Delay (s)	8.6	0	15.9	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-	

2026 No-Build Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 No- Build AM

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Volume (veh/h)	573	821	0	0	633	159	0	0	0	167	0	361			
Future Volume (veh/h)	573	821	0	0	633	159	0	0	0	167	0	361			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No			No					
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847			
Adj Flow Rate, veh/h	623	892	0	0	688	173	0	0	0	182	0	392			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2			
Cap, veh/h	525	1341	0	0	672	929	0	2	0	421	0	374			
Arrive On Green	0.24	0.66	0.00	0.00	0.38	0.38	0.00	0.00	0.00	0.24	0.00	0.24			
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Grp Volume(v), veh/h	623	892	0	0	688	173	0	0	0	182	0	392			
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Q Serve(g_s), s	28.9	31.9	0.0	0.0	45.4	6.0	0.0	0.0	0.0	10.5	0.0	28.7			
Cycle Q Clear(g_c), s	28.9	31.9	0.0	0.0	45.4	6.0	0.0	0.0	0.0	10.5	0.0	28.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	525	1341	0	0	672	929	0	2	0	421	0	374			
V/C Ratio(X)	1.19	0.66	0.00	0.00	1.02	0.19	0.00	0.00	0.00	0.43	0.00	1.05			
Avail Cap(c_a), veh/h	525	1341	0	0	672	929	0	141	0	421	0	374			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	38.9	12.3	0.0	0.0	37.3	9.9	0.0	0.0	0.0	38.7	0.0	45.7			
Incr Delay (d2), s/veh	102.0	2.6	0.0	0.0	40.9	0.4	0.0	0.0	0.0	0.7	0.0	59.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	29.0	13.3	0.0	0.0	26.2	3.5	0.0	0.0	0.0	4.5	0.0	17.0			
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh	140.9	14.9	0.0	0.0	78.2	10.4	0.0	0.0	0.0	39.4	0.0	105.1			
LnGrp LOS	F	B	A	A	F	B	A	A	A	D	A	F			
Approach Vol, veh/h	1515			861			0			574					
Approach Delay, s/veh	66.7			64.6			0.0			84.3					
Approach LOS	E			E						F					
Timer - Assigned Phs	2			4		5	6	8							
Phs Duration (G+Y+Rc), s	86.0			34.0		34.0	52.0	0.0							
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3							
Max Green Setting (Gmax), s	* 65			* 29		28.9	* 31	8.7							
Max Q Clear Time (g_c+I1), s	33.9			30.7		30.9	47.4	0.0							
Green Ext Time (p_c), s	18.7			0.0		0.0	0.0	0.0							
Intersection Summary															
HCM 6th Ctrl Delay	69.5														
HCM 6th LOS	E														
Notes															

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	5	722	511	10
Future Vol, veh/h	32	20	5	722	511	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	22	5	785	555	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1356	561	566	0	-	0
Stage 1	561	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	165	527	1006	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	164	527	1006	-	-	-
Mov Cap-2 Maneuver	164	-	-	-	-	-
Stage 1	566	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	26.5	0.1		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1006	-	223	-	-	
HCM Lane V/C Ratio	0.005	-	0.253	-	-	
HCM Control Delay (s)	8.6	0	26.5	-	-	
HCM Lane LOS	A	A	D	-	-	
HCM 95th %tile Q(veh)	0	-	1	-	-	

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 No- Build PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	424	865	0	0	749	242	1	0	0	412	0	208
Future Volume (veh/h)	424	865	0	0	749	242	1	0	0	412	0	208
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	461	940	0	0	814	263	1	0	0	448	0	226
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	493	1247	0	0	619	885	4	0	0	421	0	374
Arrive On Green	0.22	0.62	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	461	940	0	0	814	263	1	0	0	448	0	226
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	24.3	39.9	0.0	0.0	41.8	10.5	0.1	0.0	0.0	28.7	0.0	15.4
Cycle Q Clear(g_c), s	24.3	39.9	0.0	0.0	41.8	10.5	0.1	0.0	0.0	28.7	0.0	15.4
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	493	1247	0	0	619	885	4	0	0	421	0	374
V/C Ratio(X)	0.93	0.75	0.00	0.00	1.32	0.30	0.25	0.00	0.00	1.06	0.00	0.60
Avail Cap(c_a), veh/h	525	1247	0	0	619	885	135	0	0	421	0	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.5	16.6	0.0	0.0	39.1	12.4	59.8	0.0	0.0	45.7	0.0	40.6
Incr Delay (d2), s/veh	23.5	4.2	0.0	0.0	153.1	0.9	28.9	0.0	0.0	62.2	0.0	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	17.7	0.0	0.0	43.5	6.0	0.1	0.0	0.0	19.4	0.0	6.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.0	20.8	0.0	0.0	192.1	13.2	88.7	0.0	0.0	107.9	0.0	43.3
LnGrp LOS	E	C	A	A	F	B	F	A	A	F	A	D
Approach Vol, veh/h	1401		1077			1			674			
Approach Delay, s/veh	34.0		148.5			88.7			86.2			
Approach LOS	C		F			F			F			
Timer - Assigned Phs	2		4		5	6	8					
Phs Duration (G+Y+Rc), s	80.4		34.0		32.0	48.4	5.6					
Change Period (Y+Rc), s	* 6.6		* 5.3		5.1	* 6.6	5.3					
Max Green Setting (Gmax), s	* 65		* 29		28.9	* 31	8.7					
Max Q Clear Time (g_c+I1), s	41.9		30.7		26.3	43.8	2.1					
Green Ext Time (p_c), s	16.2		0.0		0.6	0.0	0.0					
Intersection Summary												
HCM 6th Ctrl Delay	84.3											
HCM 6th LOS	F											
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	33	630	603	5
Future Vol, veh/h	10	23	33	630	603	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	36	685	655	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1415	658	660	0	-	0
Stage 1	658	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	151	464	928	-	-	-
Stage 1	515	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	464	928	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	463	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.1	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	928	-	274	-	-	
HCM Lane V/C Ratio	0.039	-	0.131	-	-	
HCM Control Delay (s)	9	0	20.1	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-	

2026 Build Conditions

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build AM

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR			
Lane Configurations															
Traffic Volume (veh/h)	582	782	0	0	582	140	0	0	0	140	0	300			
Future Volume (veh/h)	582	782	0	0	582	140	0	0	0	140	0	300			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach	No			No			No			No					
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847			
Adj Flow Rate, veh/h	633	850	0	0	633	152	0	0	0	152	0	326			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2			
Cap, veh/h	520	1324	0	0	691	586	0	439	0	469	0	353			
Arrive On Green	0.21	0.65	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.23	0.00	0.23			
Sat Flow, veh/h	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Grp Volume(v), veh/h	633	850	0	0	633	152	0	0	0	152	0	326			
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	0	1949	0	1759	0	1565			
Q Serve(g_s), s	20.9	24.7	0.0	0.0	33.3	6.8	0.0	0.0	0.0	7.2	0.0	20.1			
Cycle Q Clear(g_c), s	20.9	24.7	0.0	0.0	33.3	6.8	0.0	0.0	0.0	7.2	0.0	20.1			
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	520	1324	0	0	691	586	0	439	0	469	0	353			
V/C Ratio(X)	1.22	0.64	0.00	0.00	0.92	0.26	0.00	0.00	0.00	0.32	0.00	0.92			
Avail Cap(c_a), veh/h	520	1366	0	0	728	617	0	439	0	478	0	360			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	28.5	10.2	0.0	0.0	28.6	20.5	0.0	0.0	0.0	32.4	0.0	37.4			
Incr Delay (d2), s/veh	114.0	0.9	0.0	0.0	15.7	0.2	0.0	0.0	0.0	0.4	0.0	28.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	28.2	9.1	0.0	0.0	16.0	2.3	0.0	0.0	0.0	3.0	0.0	10.2			
Unsig. Movement Delay, s/veh															
LnGrp Delay(d),s/veh	142.4	11.1	0.0	0.0	44.2	20.6	0.0	0.0	0.0	32.8	0.0	66.1			
LnGrp LOS	F	B	A	A	D	C	A	A	A	C	A	E			
Approach Vol, veh/h	1483			785			0			478					
Approach Delay, s/veh	67.2			39.7			0.0			55.5					
Approach LOS	E			D						E					
Timer - Assigned Phs	2			4		5	6	8							
Phs Duration (G+Y+Rc), s	71.0			27.6		26.0	45.0	27.6							
Change Period (Y+Rc), s	* 6.6			* 5.4		5.1	* 6.6	5.4							
Max Green Setting (Gmax), s	* 66			* 23		20.9	* 40	8.6							
Max Q Clear Time (g_c+I1), s	26.7			22.1		22.9	35.3	0.0							
Green Ext Time (p_c), s	20.2			0.1		0.0	3.0	0.0							
Intersection Summary															
HCM 6th Ctrl Delay	57.3														
HCM 6th LOS	E														
Notes															

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	32	20	5	673	405	10
Future Vol, veh/h	32	20	5	673	405	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	22	5	732	440	11
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1188	446	451	0	-	0
Stage 1	446	-	-	-	-	-
Stage 2	742	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	208	612	1109	-	-	-
Stage 1	645	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	206	612	1109	-	-	-
Mov Cap-2 Maneuver	206	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.3	0.1		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1109	-	277	-	-	
HCM Lane V/C Ratio	0.005	-	0.204	-	-	
HCM Control Delay (s)	8.3	0	21.3	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0	-	0.7	-	-	

Intersection						
Int Delay, s/veh	1.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	43	57	714	527	25
Future Vol, veh/h	18	43	57	714	527	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	20	47	62	776	573	27
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1487	587	600	0	-	0
Stage 1	587	-	-	-	-	-
Stage 2	900	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	137	510	977	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	510	977	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	521	-	-	-	-	-
Stage 2	397	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	20.3	0.7		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	977	-	128	510	-	-
HCM Lane V/C Ratio	0.063	-	0.153	0.092	-	-
HCM Control Delay (s)	8.9	-	38.1	12.8	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.5	0.3	-	-

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Future Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	525	1247	0	0	590	860	4	0	0	421	0	374
Arrive On Green	0.24	0.62	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.24	0.00	0.24
Sat Flow, veh/h	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Grp Sat Flow(s),veh/h/ln	1931	2027	0	0	1776	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	28.3	39.9	0.0	0.0	39.8	12.0	0.1	0.0	0.0	28.7	0.0	20.7
Cycle Q Clear(g_c), s	28.3	39.9	0.0	0.0	39.8	12.0	0.1	0.0	0.0	28.7	0.0	20.7
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	525	1247	0	0	590	860	4	0	0	421	0	374
V/C Ratio(X)	0.99	0.75	0.00	0.00	1.38	0.33	0.25	0.00	0.00	1.12	0.00	0.77
Avail Cap(c_a), veh/h	525	1247	0	0	590	860	135	0	0	421	0	374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.0	16.6	0.0	0.0	40.1	13.6	59.8	0.0	0.0	45.7	0.0	42.6
Incr Delay (d2), s/veh	35.7	4.2	0.0	0.0	181.7	1.0	28.9	0.0	0.0	82.3	0.0	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	17.7	0.0	0.0	46.2	6.8	0.1	0.0	0.0	21.8	0.0	8.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.7	20.8	0.0	0.0	221.7	14.6	88.7	0.0	0.0	127.9	0.0	52.2
LnGrp LOS	E	C	A	A	F	B	F	A	A	F	A	D
Approach Vol, veh/h	1458			1099			1			762		
Approach Delay, s/veh	39.6			168.0			88.7			99.2		
Approach LOS	D			F			F			F		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	80.4			34.0		34.0	46.4	5.6				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 65			* 29		28.9	* 31	8.7				
Max Q Clear Time (g_c+I1), s	41.9			30.7		30.3	41.8	2.1				
Green Ext Time (p_c), s	16.2			0.0		0.0	0.0	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	95.8											
HCM 6th LOS	F											
Notes												

Intersection						
Int Delay, s/veh	0.7					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	23	33	665	635	5
Future Vol, veh/h	10	23	33	665	635	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	25	36	723	690	5
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1488	693	695	0	-	0
Stage 1	693	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	137	443	901	-	-	-
Stage 1	496	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	128	443	901	-	-	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	463	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	21.5	0.4		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	901	-	254	-	-	
HCM Lane V/C Ratio	0.04	-	0.141	-	-	
HCM Control Delay (s)	9.2	0	21.5	-	-	
HCM Lane LOS	A	A	C	-	-	
HCM 95th %tile Q(veh)	0.1	-	0.5	-	-	

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	81	73	663	625	32
Future Vol, veh/h	35	81	73	663	625	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	50	0	150	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	88	79	721	679	35
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	1576	697	714	0	-	0
Stage 1	697	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	121	441	886	-	-	-
Stage 1	494	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	110	441	886	-	-	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	450	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	26.9	0.9		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	886	-	110	441	-	-
HCM Lane V/C Ratio	0.09	-	0.346	0.2	-	-
HCM Control Delay (s)	9.5	-	54.1	15.2	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.4	0.7	-	-

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build Improved AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	821	0	0	633	175	0	0	0	179	0	392
Future Volume (veh/h)	614	821	0	0	633	175	0	0	0	179	0	392
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	667	892	0	0	688	190	0	0	0	195	0	426
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	654	2452	0	0	1192	929	0	2	0	465	0	413
Arrive On Green	0.24	0.64	0.00	0.00	0.35	0.35	0.00	0.00	0.00	0.26	0.00	0.26
Sat Flow, veh/h	1931	3953	0	0	3463	1505	0	1949	0	1759	0	1565
Grp Volume(v), veh/h	667	892	0	0	688	190	0	0	0	195	0	426
Grp Sat Flow(s),veh/h/ln	1931	1926	0	0	1687	1505	0	1949	0	1759	0	1565
Q Serve(g_s), s	28.9	13.1	0.0	0.0	19.9	6.6	0.0	0.0	0.0	11.0	0.0	31.7
Cycle Q Clear(g_c), s	28.9	13.1	0.0	0.0	19.9	6.6	0.0	0.0	0.0	11.0	0.0	31.7
Prop In Lane	1.00		0.00	0.00		1.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	654	2452	0	0	1192	929	0	2	0	465	0	413
V/C Ratio(X)	1.02	0.36	0.00	0.00	0.58	0.20	0.00	0.00	0.00	0.42	0.00	1.03
Avail Cap(c_a), veh/h	654	2452	0	0	1192	929	0	141	0	465	0	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.7	10.3	0.0	0.0	31.5	10.0	0.0	0.0	0.0	36.5	0.0	44.2
Incr Delay (d2), s/veh	40.5	0.4	0.0	0.0	2.0	0.5	0.0	0.0	0.0	0.6	0.0	52.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	5.1	0.0	0.0	8.1	4.0	0.0	0.0	0.0	4.7	0.0	17.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.2	10.7	0.0	0.0	33.6	10.5	0.0	0.0	0.0	37.1	0.0	96.4
LnGrp LOS	F	B	A	A	C	B	A	A	A	D	A	F
Approach Vol, veh/h	1559			878			0			621		
Approach Delay, s/veh	34.5			28.6			0.0			77.8		
Approach LOS	C			C						E		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	83.0			37.0		34.0	49.0	0.0				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 62			* 32		28.9	* 28	8.7				
Max Q Clear Time (g_c+I1), s	15.1			33.7		30.9	21.9	0.0				
Green Ext Time (p_c), s	20.1			0.0		0.0	3.8	0.0				
Intersection Summary												
HCM 6th Ctrl Delay	41.6											
HCM 6th LOS	D											
Notes												

HCM 6th Signalized Intersection Summary

100: Fort Mill Highway & Barberville Road

Barberville Road TIS
2026 Build Improved PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Future Volume (veh/h)	477	865	0	0	749	262	1	0	0	435	0	266
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	2027	2027	2027	1776	1776	1776	1949	1949	1949	1847	1847	1847
Adj Flow Rate, veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	551	2274	0	0	1098	887	4	0	0	465	0	413
Arrive On Green	0.22	0.59	0.00	0.00	0.33	0.33	0.00	0.00	0.00	0.26	0.00	0.26
Sat Flow, veh/h	1931	3953	0	0	3463	1505	1856	0	0	1759	0	1565
Grp Volume(v), veh/h	518	940	0	0	814	285	1	0	0	473	0	289
Grp Sat Flow(s),veh/h/ln	1931	1926	0	0	1687	1505	1856	0	0	1759	0	1565
Q Serve(g_s), s	23.9	15.9	0.0	0.0	25.7	11.5	0.1	0.0	0.0	31.7	0.0	20.0
Cycle Q Clear(g_c), s	23.9	15.9	0.0	0.0	25.7	11.5	0.1	0.0	0.0	31.7	0.0	20.0
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	551	2274	0	0	1098	887	4	0	0	465	0	413
V/C Ratio(X)	0.94	0.41	0.00	0.00	0.74	0.32	0.25	0.00	0.00	1.02	0.00	0.70
Avail Cap(c_a), veh/h	587	2274	0	0	1098	887	135	0	0	465	0	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	13.3	0.0	0.0	36.0	12.5	59.8	0.0	0.0	44.2	0.0	39.8
Incr Delay (d2), s/veh	22.7	0.6	0.0	0.0	4.5	1.0	28.9	0.0	0.0	46.4	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.8	6.5	0.0	0.0	10.8	6.9	0.1	0.0	0.0	19.3	0.0	8.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.3	13.9	0.0	0.0	40.5	13.4	88.7	0.0	0.0	90.5	0.0	45.0
LnGrp LOS	D	B	A	A	D	B	F	A	A	F	A	D
Approach Vol, veh/h	1458			1099			1			762		
Approach Delay, s/veh	27.5			33.5			88.7			73.3		
Approach LOS	C			C			F			E		
Timer - Assigned Phs	2			4		5	6	8				
Phs Duration (G+Y+Rc), s	77.4			37.0		31.8	45.6	5.6				
Change Period (Y+Rc), s	* 6.6			* 5.3		5.1	* 6.6	5.3				
Max Green Setting (Gmax), s	* 62			* 32		28.9	* 28	8.7				
Max Q Clear Time (g_c+l1), s	17.9			33.7		25.9	27.7	2.1				
Green Ext Time (p_c), s	21.0			0.0		0.8	0.5	0.0				
Intersection Summary												
HCM 6th Ctrl Delay			40.0									
HCM 6th LOS			D									
Notes												

Signature C Mung

Return to: **Auditor, Lancaster County, SC**
Law Offices of Katharine S. Walker, PC
319 S. Sharon Amity Rd., Ste. 230 **LANCASTER COUNTY ASSESSOR**
Charlotte, NC 28211 **Tax Map:**
(704) 548-7900 **0006 00 058 00**

LANCASTER COUNTY, SC	
2022004397	DEED
RECORDING FEES	\$15.00
STATE TAX	\$4192.50
COUNTY TAX	\$1773.75
PRESENTED & RECORDED	
03-15-2022	04:31:52 PM
BRITTANY GRANT	
REGISTER OF DEEDS	
LANCASTER, COUNTY SC	
By: PAM FAULKENBERRY	
BK:DEED 1529	PG:36-42

Space above this line for recording information

STATE OF SOUTH CAROLINA)
)
COUNTY OF LANCASTER) **TITLE TO REAL ESTATE**

KNOW ALL MEN BY THESE PRESENTS that **BARBERVILLE INVESTMENTS LLC**, a South Carolina limited liability company, herein referred to as Grantor, for and in consideration of the sum of **ONE MILLION SIX HUNDRED TWELVE THOUSAND FIVE HUNDRED AND 00/100 DOLLARS (\$1,612,500.00)** to it paid by **MARTIN SR. AND ASSOCIATES, LLC**, a North Carolina limited liability company duly authorized to do business in South Carolina, herein referred to as Grantee, in the State aforesaid, the receipt of which is hereby acknowledged, has granted, bargained, sold and released, and by these presents does grant, bargain, sell and release unto said Grantee, their heirs, successors, and assigns forever:

All that certain piece, parcel or tract of land lying, being and situated in Indian Land Township, Lancaster County, South Carolina and being more particularly described as follows: Beginning at a stake on Barber Road at a point 529 feet from the middle of S. 89 Highway and 160 (where Barber enters said S.C. Highway 160) and running thence N 8 - 41 E 400 feet along Barber Road to a stake; thence N 77 - 30 W 600 feet to a stake; thence S 8 - 41 W 400 feet to a stake; thence S 77 - 30 W 600 feet to a stake on Barber Road, the point of beginning. Said tract herein conveyed contains 5.5 acres, more or less and being more specifically shown on a plat prepared to L.E. Carothers, Surveyor, and recorded in the Office of the Clerk of Court for Lancaster County, South Carolina in Plat Book 6, at Page 32.

LESS AND EXCEPT that 0.125 acre portion of the property deeded to the South Carolina Department of Transportation in Deed Book 593, Page 318 of the Lancaster County Registry.

DERIVATION: BARBERVILLE INVESTMENTS LLC, a South Carolina limited liability company acquired the above-described property under Deed from ANNE B. GASPER dated 11-25-2020, recorded 11-30-2020 in Record Book 1387 at Page 99.

This conveyance is made subject to Easements, Restrictions, Covenants, and Conditions of record, including matters shown on recorded plats.

Grantee's Address: c/o M3 Real Estate Group
226 Baldwin Avenue
Charlotte NC 28204

Tax/Map No. 0006-00-058.00

TOGETHER with all and singular, the rights, members, hereditaments and appurtenances to the said premises belonging or in anywise incident of appertaining.

TO HAVE AND TO HOLD all and singular the premises before mentioned unto the said Grantee, its heirs and assigns forever.

AND THE GRANTOR does hereby bind Grantor's successors, executors and the administrators, to warrant and forever defend all and singular the said premises unto the said Grantee, its heirs and assigns, against Grantor and Grantor's successors and against every person whomsoever lawfully claiming or to claim the same or any part thereof.

[Remainder of Page Intentionally Left Blank – Signature Page Follows]

WITNESS our Hand and Seal this 15th day of March 2022.

Signed, Sealed and Delivered in the Presence of:

#1 Kimberly Dixon
Witness (may be notary)

#2 Kathleen
Witness

#1 Kimberly Dixon
Witness (may be notary)

#2 Kathleen
Witness

#1 Kimberly Dixon
Witness (may be notary)

#2 Kathleen
Witness

#1 Kimberly Dixon
Witness (may be notary)

#2 Kathleen
Witness

P. Pradeep (SEAL)

Pradeep Reddy Patel,
Member/Manager of Barberville
Investments LLC

Swamyathan (SEAL)

Swamyathan Kuppuswamy,
Member/Manager of Barberville
Investments LLC

Venkateswara Rao (SEAL)

Venkateswara Rao Suryadevara,
Member/Manager of Barberville
Investments LLC

Vishnu Keesara (SEAL)

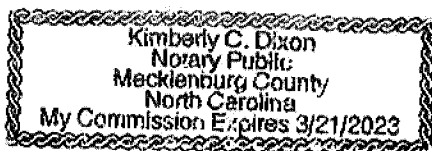
Vishnu Keesara,
Member/Manager of Barberville
Investment LLC

[Remainder of Page Intentionally Left Blank – Notary Acknowledgement Follows]

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

On this the 15th day of March, 2022, before me, the undersigned Notary Public, personally appeared Pradeep Reddy Patel, Member/Manager of Barberville Investments LLC, who acknowledged that he executed the foregoing Title To Real Estate for the uses and purposes stated therein.

(SEAL)

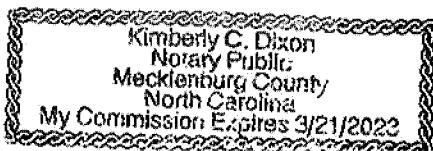


Kimberly C. Dixon
Notary Public for North Carolina
My Commission Expires: 3/21/23

STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

On this the 15th day of March, 2022, before me, the undersigned Notary Public, personally appeared Swamynathan Kuppaswamy, Member/Manager of Barberville Investments LLC, who acknowledged that he executed the foregoing Title To Real Estate for the uses and purposes stated therein.

(SEAL)



Kimberly C. Dixon
Notary Public for North Carolina
My Commission Expires: 3/21/23

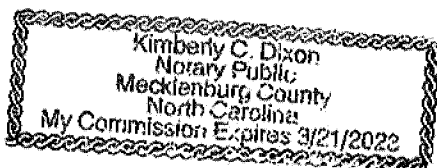
STATE OF NORTH CAROLINA)

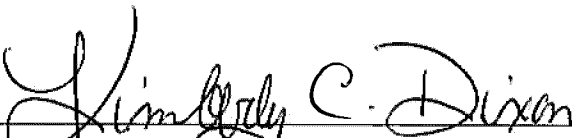
)

COUNTY OF MECKLENBURG)

On this the 15th day of March, 2022, before me, the undersigned Notary Public, personally appeared Venkateswara Rao Suryadevara, Member/Manager of Barberville Investments LLC, who acknowledged that he executed the foregoing Title To Real Estate for the uses and purposes stated therein.

(SEAL)




Notary Public for North Carolina
My Commission Expires: 3/21/23

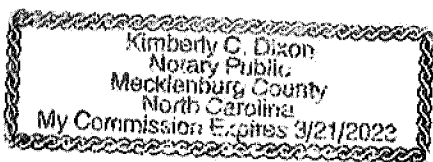
STATE OF NORTH CAROLINA)

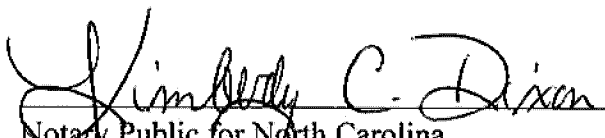
)

COUNTY OF MECKLENBURG)

On this the 15th day of March, 2022, before me, the undersigned Notary Public, personally appeared Vishnu Keesara, Member/Manager of Barberville Investment LLC, who acknowledged that he executed the foregoing Title To Real Estate for the uses and purposes stated therein.

(SEAL)




Notary Public for North Carolina
My Commission Expires: 3/21/23

STATE OF SOUTH CAROLINA)
COUNTY OF LANCASTER)

AFFIDAVIT

PERSONALLY appeared before me the undersigned, who being duly sworn, deposes and says:

1. I have read the information on this affidavit and I understand such information.
2. The property being transferred is 9901 Barberville Rd, Indian Land, SC 29707 in Lancaster County, South Carolina, Tax Map Number is 0006-00-058.00 and was transferred by Barberville Investments LLC, to Martin Sr. and Associates, LLC, a North Carolina limited liability company duly authorized to do business in South Carolina, on March 15, 2022.
3. The deed is subject to the deed recording fee as a transfer for consideration paid or to be paid in money or money's worth.
4. The fee is computed on the consideration paid or to be paid in money or money's worth in the amount of \$1,612,500.00.
5. Check Yes___or No X to the following: A lien or encumbrance existed on the land, tenement, or realty before the transfer and remained on the land, tenement, or realty after the transfer. If "Yes," the amount of the outstanding balance of this lien or encumbrance is: _____.
6. The deed recording fee is computed as follows:

(a) Place the amount listed in item 4 above here:	<u>\$ 1,612,500.00</u>
(b) Place the amount listed in item 5 above here: (If no amount is listed, place zero here.)	<u>-0-</u>
(c) Subtract Line 6(b) from Line 6(a) and place result here:	<u>\$ 1,612,500.00</u>
7. The deed recording fee due is based on the amount listed on Line 6(c) above and the deed recording fee due is: \$ 5,966.25.
8. As required by Code Section 12-24-70, we state that we are the responsible people who were connected with the transaction as: Authorized Member Managers of Barberville Investments LLC.
9. I understand that a person required to furnish this affidavit who willfully furnishes a false or fraudulent affidavit is guilty of a misdemeanor and, upon conviction, must be fined not more than one thousand dollars or imprisoned not more than one year, or both.

[Remainder of Page Intentionally Left Blank – Signatures and Notary follow]

P. Pradeep

Pradeep Reddy Patel, Member/Manager of
Barberville Investments LLC
Responsible Person Connected with the Transaction

Swamy

Swamy Nathan Kuppuswamy, Member/Manager
of Barberville Investments LLC
Responsible Person Connected with the Transaction

Venkateswara Rao

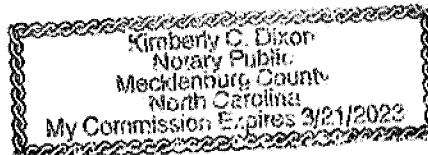
Venkateswara Rao Suryadevara, Member/Manager
of Barberville Investments LLC
Responsible Person Connected with the Transaction

Vishnu Keesara

Vishnu Keesara, Member/Manager of
Barberville Investment LLC
Responsible Person Connected with the Transaction

SWORN to before me this 15
day of March, 2022.

Kimberly C. Dixon
Notary Public for North Carolina
My Commission Expires: 3/21/23



Stephanie C. Knight

Auditor, Lancaster County, SC

Katharine S. Walker
K.S. Walker Law Group
319 S. Sharon Amity Rd Ste 230
Charlotte, NC 28211

LANCASTER COUNTY ASSESSOR

Tax Map:

0006 00 057 00

LANCASTER COUNTY, SC	
2023012500	DEED
RECORDING FEES	\$15.00
EXEMPT	
PRESENTED & RECORDED	
10-03-2023	12:18:47 PM
BRITTANY GRANT	
REGISTER OF DEEDS	
LANCASTER, COUNTY SC	
By: STEPHANIE KNIGHT	
BK:DEED 1715	PG:201-205

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STATE OF SOUTH CAROLINA

QUITCLAIM DEED

COUNTY OF LANCASTER

KNOW ALL MEN BY THESE PRESENTS, that **LEWIS JAMES PLYLER, JR.** ("Grantor"), for Zero consideration, does hereby remise, release and forever quitclaim unto **BARBERVILLE DEVELOPERS, LLC**, a South Carolina limited liability company ("Grantee"), all of Grantor's right, title and interest, if any, in and to the following described property ("Premises"):

See Exhibit A attached hereto for legal description

DEREVATION: Being a portion or all the real property conveyed to Lewis J. Plyler, Jr. by Deed of Distribution from the Estate of Lewis James Plyler, Sr., which estate was administered in the Probate Court for Lancaster County, SC in File #2018ES2900516, dated August 28, 2019, and recorded on August 30, 2019 in Deed Book 1265 at Page 233 in the Lancaster County Clerk of Court. Being a portion of all the real property conveyed to Lewis J. Plyler, Jr. by Deed of Distribution from the Estate of Madreth Carnes Plyler, which estate was administered in the Probate Court for Lancaster County, SC in File #2013ES2900070, dated January 5, 2013 and recorded on May 13, 2014 in Deed Book 796 at Page 59 in the Lancaster County Clerk of Court.

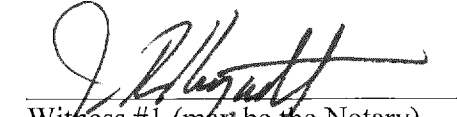
Tax Parcel No: 0006-00-057.00

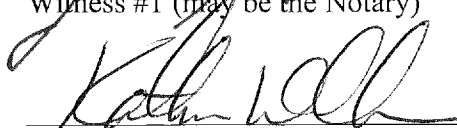
Address of Grantee: 317 Ruth Vista Road
Lexington, SC 29073

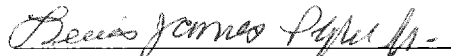
TO HAVE AND TO HOLD, all and singular the said premises abovementioned, unto the said **BARBERVILLE DEVELOPERS, LLC**, a South Carolina limited liability company, their heirs and assigns, forever.

IN WITNESS WHEREOF, **LEWIS JAMES PLYLER, JR.** has hereunto set his hand and seal on this the 2 day of October, 2023.

Signed, sealed and delivered
in the presence of:


Witness #1 (may be the Notary)


Witness #2

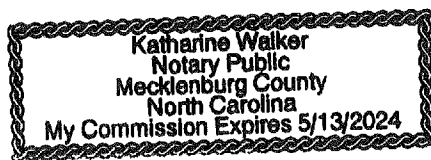
 (SEAL)
LEWIS JAMES PLYLER, JR.

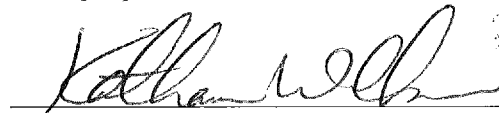
STATE OF NORTH CAROLINA)
)
COUNTY OF MECKLENBURG)

ACKNOWLEDGMENT

On this the 2 day of October, 2023, before me, the undersigned Notary Public, personally appeared **LEWIS JAMES PLYLER, JR.**, he executed the foregoing Quitclaim Deed for the uses and purposes stated therein.

(SEAL)




Notary Public for Mecklenburg County NC

My Commission Expires: 5/13/2024

EXHIBIT A

Being all of that certain tract or parcel of land located in the Town of Fort Mill, Indian Land Township, Lancaster County, South Carolina, and being more particularly described as follows:

BEGINNING at a new 1/2" iron rod set on the western margin of Barberville Road, (S-42), (a 130-foot public right-of-way), said iron being located at the southeastern corner of the Martin Sr. and Associates property as described in Deed Book 1529, Page 36 of the Lancaster County Public Registry;

thence with the margin of Barberville Road, South 04°05'52" West, 422.25 feet to a new 1/2" iron rod set at the intersection of the right-of-way of Barberville Road and the northern margin of Fort Mill Highway (SC 160),

(a 130-foot public right-of-way);

thence with the margin of Fort Mill Highway, the following two (2) bearings and distances:

- 1) South 46°13'06" West, 73.99 feet to a new 1/2" iron rod set;
- 2) South 88°31'40" West, 420.28 feet to a new 1/2" iron rod set at the southeast corner of the Dennis G. Pistolis property as described in Deed Book 393, Page 342 and being depicted on Map Book 2007, page 399 of said registry;

thence with the line of Dennis G. Pistolis, North 01°27'51" West, 174.99 feet to a new 1/2" iron rod set at the southeast corner of the Bonterra Builders, LLC property as described in Deed Book 894, Page 258 and being depicted on Map Book 2015, page 230 of said registry;

thence with the line of Bonterra Builders, LLC, North 07°20'51" West, passing an existing 1" iron pipe at 116.25 feet, a total distance of 390.21 feet to an existing iron rod found at the southwest corner of the property of Martin Sr. and Associates property as described in Deed Book 1529, Page 36 of said registry;

thence with the line of Martin Sr. and Associates, South 81°57'56" East, 563.64 feet to the **POINT AND PLACE OF BEGINNING**, having an area of 260,423 square feet or 5.9785 acres, as shown on a survey by R. B. Pharr & Associates, P. A., dated May 17, 2022, Job No. 94151.

STATE OF SOUTH CAROLINA }
COUNTY OF LANCASTER }

AFFIDAVIT FOR TAXABLE OR EXEMPT TRANSFERS

PERSONALLY appeared before me the undersigned, who being duly sworn, deposes and says:

1. I have read the information on this affidavit and I understand such information.
2. The property was transferred by Lewis James Plyler, Jr.
to Barberville Developers, LLC on October 2, 2023.

3. Check one of the following: The deed is

- (A) ☐ subject to the deed recording fee as a transfer for consideration paid or to be paid in money or money's worth.
- (B) ☐ subject to the deed recording fee as a transfer between a corporation, a partnership, or other entity and a stockholder, partner, or owner of the entity, or is a transfer to a trust or as distribution to a trust beneficiary.
- (C) ☒ exempt from the deed recording fee because (See Information section of affidavit): #12 (Explanation required)
(If exempt, please skip items 4-7, and go to item 8 of this affidavit.)

If exempt under exemption #14 as described in the Information section of this affidavit, did the agent and principal relationship exist at the time of the original sale and was the purpose of this relationship to purchase the realty?

Check Yes ☐ or No ☐

4. Check one of the following if either item 3(a) or item 3(b) above has been checked. (See Information section of this affidavit):

- (A) ☒ The fee is computed on the consideration paid or to be paid in money or money's worth in the amount of -\$0.00-.
- (B) ☐ The fee is computed on the fair market value of the realty which is _____.
- (C) ☐ The fee is computed on the fair market value of the realty as established for property tax purposes which is _____.

5. Check YES ☐ or NO ☒ to the following: A lien or encumbrance existed on the land, tenement, or realty before the transfer and remained on the land, tenement, or realty after the transfer. If "YES," the amount of the outstanding balance of this lien or encumbrance is _____.

6. The deed recording fee is computed as follows:

- (A) Place the amount listed in item 4 above here: \$0.00
- (B) Place the amount listed in item 5 above here: _____
(If no amount is listed, place zero here.)
- (C) Subtract Line 6(b) from Line 6(a) and place the result here: \$0.00

7. The deed recording fee is based on the amount listed on Line 6(c) above and the deed recording fee due is:
\$0.00

8. As required by Code Section '12-24-70, I state that I am a responsible person who was connected with the transaction as:

Grantor

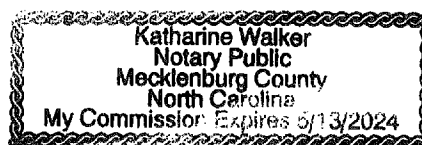
9. I understand that a person required to furnish this affidavit who wilfully furnishes a false or fraudulent affidavit is guilty of a misdemeanor and, upon conviction, must be fined not more than one thousand dollars or imprisoned not more than one year, or both.

Lewis James Plyler Jr.
Responsible Person Connected with the Transaction

Lewis James Plyler Jr.
Print or Type Name Here

Sworn this 2 day of October 2023

Katharine Walker
Notary Public for MECKLENBURG NC
My Commission Expires: May 13, 2024



INFORMATION

Except as provided in this paragraph, the term “value” means “the consideration paid or to be paid in money or money’s worth for the realty.” Consideration paid or to be paid in money’s worth includes, but is not limited to, other realty, personal property, stocks, bonds, partnership, interest and other intangible property, the forgiveness or cancellation of a debt, the assumption of a debt, and the surrendering of any right. The fair market value of the consideration must be used in calculating the consideration paid in money’s worth. Taxpayers may elect to use the fair market value of the realty being transferred in determining fair market value of the consideration. In the case of realty transferred between a corporation, a partnership, or other entity and a stockholder, partner, or owner of the entity, and in the case of realty transferred to a trust or as a distribution to a trust beneficiary, “value” means the realty’s fair market value. A deduction from value is allowed for the amount of any lien or encumbrance existing on the land, tenement, or realty before the transfer and remaining on the land, tenement, or realty after the transfer. Taxpayers may elect to use the fair market value for property tax purposes in determining fair market value under the provisions of the law.

Exempted from the fee are deeds:

- (1) transferring realty in which the value of the realty, as defined in Code Section 12-24-30, is equal to or less than one hundred dollars;
- (2) transferring realty to the federal government or to a state, its agencies and departments, and its political subdivisions, including school districts;
- (3) that are otherwise exempted under the laws and Constitution of this State or of the United States;
- (4) transferring realty in which no gain or loss is recognized by reason of Section 1041 of the Internal Revenue Code as defined in Section 12-6-40(A);
- (5) transferring realty in order to partition realty as long as no consideration is paid for the transfer other than the interests in the realty that are being exchanged in order to partition the realty;
- (6) transferring an individual grave space at a cemetery owned by a cemetery company licensed under Chapter 55 of Title 39;
- (7) that constitute a contract for the sale of timber to be cut;
- (8) transferring realty to a corporation, a partnership, or a trust in order to become, or as, a stockholder, partner, or trust beneficiary of the entity provided no consideration is paid for the transfer other than stock in the corporation, interest in the partnership, beneficiary interest in the trust, or the increase in value in such stock or interest held by the grantor. However, the transfer of realty from a corporation, a partnership, or a trust to a stockholder, partner, or trust beneficiary of the entity is subject to the fee even if the realty is transferred to another corporation, a partnership, or trust;
- (9) transferring realty from a family partnership to a partner or from a family trust to a beneficiary, provided no consideration is paid for the transfer other than a reduction in the grantee’s interest in the partnership or trust. A “family partnership” is a partnership whose partners are all members of the same family. A “family trust” is a trust, in which the beneficiaries are all members of the same family. The beneficiaries of a family trust may also include charitable entities. “Family” means the grantor and the grantor’s spouse, parents, grandparents, sisters, brothers, children, stepchildren, grandchildren, and the spouses and lineal descendants of any of the above. A “charitable entity” means an entity which may receive deductible contributions under section 170 of the Internal revenue Code as defined in Section 12-6-40(A);
- (10) transferring realty in a statutory merger or consolidation from a constituent corporation to the continuing or new corporation;
- (11) transferring realty in a merger or consolidation from a constituent partnership to the continuing or new partnership; and
- (12) that constitute a corrective deed or a quitclaim deed used to confirm title already vested in the grantee, provided that no consideration of any kind is paid or is to be paid under the corrective or quitclaim deed;
- (13) transferring realty subject to a mortgage to the mortgagee whether by a deed in lieu of foreclosure executed by the mortgagor or deed executed pursuant to foreclosure proceedings;
- (14) transferring realty from an agent to the agent’s principal in which the realty was purchased with funds of the principal, provided that a notarized document is also filed with the deed that establishes the fact that the agent and principal relationship existed at the time of the original purchase as well as for the purpose of purchasing the realty;
- (15) transferring title to facilities for transmitting electricity that is transferred, sold, or exchanged by electrical utilities, municipalities, electric cooperatives, or political subdivisions to a limited liability company which is subject to regulation under the Federal Power Act (16 U.S.C. Section 791(a)) and which is formed to operate or to take functional control of electric transmission assets as defined in the Federal Power Act.



PLANNING DEPARTMENT
PO BOX 1809
Lancaster, SC 29721
Phone: (803) 285-6005

******NEW ROAD NAME/CHANGE APPLICATION******

Please note: A fee of \$250.00 must be submitted with this application before it will be processed. Incomplete applications will be returned. The \$250.00 fee includes the cost of one road sign. New roads requiring more than one sign will require the \$250.00 fee plus \$50.00 for each additional sign.

Please provide the following **applicant** information as completely and accurately as possible.

Date of Application: 1/5/2026

Name: LC Planning Dept Address: 101 N. Main St

City, State, Zip Code: Lancaster SC 29720

Telephone (H): _____ Telephone (W) or (Cell): 803-285-6005

Please provide the following **new road name** information as completely and accurately as possible.

Location of new road: see attached list of road names submitted to
E911 Addressing via Preliminary Plats and Civil plans

Road name as it exists now (if applicable): N/A

Proposed new road name (1st choice): see attached list

Proposed new road name (2nd choice): _____

Will this be a private road? Yes X NO _____

If applicable, do you plan on deeding this new road to the county in the future?

Yes _____ NO _____

Please attach the following items to this application:

*A map to approximate scale depicting the location of the new road.

*A petition signed by at least 75% of the property owners with parcels having **frontage** on the affected road.

Signature of Applicant: April Williams

Digitally signed by April Williams
Date: 2026.01.05 11:44:19 -05'00'

NEW ROAD NAMES: FEBRUARY 2026 GROUP SUBMITTAL

The following road names have been submitted via Preliminary Plat and Civil Construction plans. All will be privately maintained.

<u>Road Name</u>	<u>Development</u>
Redwood Dr	Asbury
Narrowleaf Dr	Asbury
Field Daisy Ln	Asbury
Silver Canoe Way	Asbury
Twinleaf Cir	Asbury
Alderwood Dr	Asbury
Blue Violet Ct	Asbury

Agenda Item Summary

Ordinance # / Resolution # :

Contact Person / Sponsor:

Department:

Date Requested to Be on Agenda: 2/5/2026

Council Action Requested:

Strategic Plan Focus Alignment:

Points to Consider:

Funding and Liability Factors:

Recommendation:

Attachments:

None